

2013 Explanatory Notes  
Animal and Plant Health Inspection Service

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## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Purpose Statement

The Secretary of Agriculture established the Animal and Plant Health Inspection Service (APHIS) on April 2, 1972, under the authority of Reorganization Plan No. 2 of 1953 and other authorities. The mission of the Agency is to protect the health and value of American agriculture and natural resources.

Together with its stakeholders, APHIS promotes the health of animal and plant resources to facilitate their movement in the global marketplace and to ensure abundant agricultural products and services for U.S. customers. APHIS strives to assure its stakeholders that it is on guard against the introduction or re-emergence of animal and plant pests and diseases that could limit agricultural production and damage export markets. At the same time, APHIS also monitors and responds to potential acts of agricultural bio-terrorism, invasive species, diseases of wildlife and livestock, and conflicts between humans and wildlife. The Agency also manages and resolves sanitary (animal) and phytosanitary (plant) trade barriers and addresses certain issues relating to the humane treatment of animals. Finally, APHIS ensures that biotechnology-derived agricultural products are safe for release in the environment.

APHIS' mission is carried out using three major areas of activity, as follows:

*Safeguarding and Emergency Preparedness/Response*

In addition to APHIS' domestic monitoring, APHIS monitors plant and animal health throughout the world and uses the information to set effective agricultural import policies to prevent the introduction of foreign plant and animal pests and diseases. APHIS and the Department of Homeland Security cooperate to ensure that these policies are enforced at U.S. ports of entry. APHIS also develops and conducts pre-clearance programs to ensure that foreign agricultural products destined for the United States do not present a risk to U.S. agriculture. The Agency engages in cooperative programs to control pests of imminent concern to the United States and to strengthen foreign plant protection and quarantine organizations. APHIS certifies plants and plant products for export to the United States and regulates imports and exports of designated endangered plant species. APHIS assists U.S. exporters and the Foreign Agricultural Service in revising foreign plant and animal import regulations to encourage and increase U.S. agricultural exports.

Should a pest or disease enter the United States, APHIS works cooperatively with other Federal, State, and industry partners to conduct plant and animal health monitoring programs to rapidly diagnose them and determine if there is a need to establish new pest or disease management programs. APHIS, in conjunction with States, industry, and other stakeholders, protects American agriculture by eradicating harmful pests and diseases or, where eradication is not feasible, by minimizing their economic impact. The Agency monitors endemic pests and diseases through surveys to detect their location and through inspection to prevent their spread into non-infested parts of the country.

The Agency maintains a cadre of trained professionals prepared to respond immediately to potential animal and plant health emergencies. Program personnel investigate reports of suspected exotic pests and diseases and take emergency action if necessary. To facilitate these efforts, APHIS develops pathway studies and thoroughly investigates the progression of outbreaks to determine the origin of plant and animal pests and diseases. APHIS also actively engages State, Tribal, and local governments, and industries to advance their emergency preparedness and response capabilities.

Through its Wildlife Services program, APHIS protects agriculture from detrimental animal predators through identification, demonstration, and application of the most appropriate methods of control. APHIS also develops methods to control animals and pests that are detrimental to agriculture, wildlife, and public safety. The Agency's regulatory structure brings the benefits of genetic research to the marketplace, while protecting against the release of potentially harmful organisms into the environment. APHIS also conducts diagnostic laboratory activities that support the Agency's veterinary disease prevention, detection, control, and eradication programs. The Agency also

provides and directs technology development in coordination with other groups in APHIS to support plant protection programs of the Agency and its cooperators at the State, national, and international levels.

#### Safe Trade and International Technical Assistance

Sanitary (animal) and phytosanitary (plant) (SPS) regulations can have a significant impact on market access for the United States as an exporter of agricultural products. APHIS plays a central role in resolving technical trade issues to ensure the smooth and safe movement of agricultural commodities into and out of the United States. This is done through negotiating access to new markets, preserving existing markets, and expanding existing markets. APHIS' role is to negotiate animal and plant health certification requirements, assist U.S. exporters in meeting foreign regulatory requirements, ensure requirements are proportional to risk without being excessively restrictive, and provide any necessary technical information to support the safety of U.S. agricultural products destined for foreign markets.

APHIS helps to protect the United States from emerging plant and animal pests and diseases while meeting obligations under the World Trade Organizations SPS agreement by assisting developing countries in improving their safeguarding systems. APHIS collaborates with other Federal agencies including the Foreign Agricultural Service, the U.S. Agency for International Development, the State Department, and the Office of the U.S. Trade Representative, to implement technical and regulatory capacity building projects with shared resources. APHIS develops and implements programs designed to identify and reduce agricultural pest and disease threats while still outside of U.S. borders, to enhance safe agricultural trade, and to strengthen emergency response preparedness.

#### Animal Welfare

The Agency conducts regulatory activities to ensure the humane care and treatment of certain animals and horses as required by the Animal Welfare Act of 1966 as amended (7 U.S.C. 2131-2159), and the Horse Protection Act of 1970 as amended (15 U.S.C. 1821-1831). These activities include inspection of certain establishments that handle animals intended for research, exhibition, and sale as pets, and monitoring of certain horse shows.

#### Statutory Authorities

APHIS operates under the following authorities:

##### General:

7 U.S.C. 450	Talmadge-Aiken Act (cooperation with States)
21 U.S.C. 136-136a	User Fees
31 U.S.C. 9701	User Fees
7 U.S.C. 3291a(3)	Authority to provide technical assistance and training
7 U.S.C. 5680	Farm Security and Rural Investment Act of 2002-reporting on SPS issues and trade barriers
7 U.S.C. 5925	Food, Agriculture, Conservation, and Trade Act of 1990-authorizes funding for national honeybee pest survey
7 U.S.C. 2279g	Marketing Services; cooperative agreements

##### Animal Health

7 U.S.C. 8301-8317	The Animal Health Protection Act
49 U.S.C. 80502	28-Hour Law (feed, water, and rest for animals)
19 U.S.C. 1202, Part I, Item 100.01	Purebred animal duty-free entry

Animal Health - continued

7 U.S.C. 1622	Section 203 of the Agricultural Marketing Act of 1946
7 U.S.C. 1624	Section 205 of the Agricultural Marketing Act of 1946
7 U.S.C. 430	Section 101(d) of the Organic Act of 1944
7 U.S.C. 3801-3813	Swine Health Protection Act
7 U.S.C. 851-855	Anti-hog cholera serum and hog cholera virus
7 U.S.C. 2274	Firearms (tick inspectors)
7 U.S.C. 1901 note	Transportation of Equines to Slaughter
21 U.S.C. 151-159	Virus-Serum-Toxin Act
21 U.S.C. 113a	Authority to establish research facilities for FMD and other diseases
21 U.S.C. 618	Section 18 of the Federal Meat Inspection Act, as amended, as it pertains to the issuance of certificates of condition of live animals for export
7 U.S.C. 8401	Title II, Subtitles B and C of the Agricultural Bioterrorism Act of 2002
7 U.S.C. 8318	Section 10504 of the Farm Security and Rural Investment Act of 2002 (training of accredited veterinarians)

Plant Health:

7 U.S.C. 7701-7772; and 7781-7786	Plant Protection Act
7 U.S.C. 1581-1611	Title III, Federal Seed Act
7 U.S.C. 2801 note; 2814	Federal Noxious Weed Act
7 U.S.C. 281-286	Honeybee Act
7 U.S.C. 2279e and 2279f	Title V of the Agricultural Risk Protection Act of 2000 (penalties for interfering with inspection animals)
16 U.S.C. 1531-1544	Endangered Species Act (plants)
16 U.S.C. 3371-3378	Lacey Act (importation or shipment of injurious mammals, birds, fish)
7 U.S.C. 8401 and 8411	Title II, Subtitle B, of the Agricultural Bioterrorism Protection Act of 2002
39 U.S.C. 3015	Alien Species Prevention and Enforcement Act of 1992

Wildlife Services:

7 U.S.C. 426-426d	Control of predatory and other wild animals
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Animal Welfare:

7 U.S.C. 2131-2159	Animal Welfare Act
15 U.S.C. 1821-1831	Horse Protection Act

There were 5,923 permanent full-time employees and 2,006 other than permanent full-time employees as of September 30, 2011. Of the total, 1,310 full-time employees were located at headquarters. APHIS manages programs on a national basis through 2 regional offices and 455 field offices, including area offices, work stations, technical centers, and animal import centers. APHIS conducts much of its work in cooperation with State and local agencies, private groups, and foreign governments. APHIS performs work in the 50 States, Washington, D.C., Guam, Puerto Rico, Virgin Islands, Mexico, Central America, South America, the Caribbean, Western Europe, Australia, Asia, and Africa.

Each year, the Office of Inspector General (OIG) and the Government Accountability Office (GAO) audits selected programs to examine the efficiency of the programs and operations including program results, compliance with applicable laws and regulations, and fair presentation of financial reports. Audits in which APHIS has been involved during 2011 – 2012 include those listed below.

**OIG Audits Completed**

33099-08-KC 12/03/2010 Controls over APHIS Pilot Certifications: OIG issued final report September 2009 with four Recommendations. All Recommendations have been implemented, as of December 3, 2010.

**OIG Audits Completed**

33099-08-KC 12/03/2011 Controls over APHIS Pilot Certifications: OIG report issued September 2009 with four Recommendations. All Recommendations have been implemented, as of December 3, 2010.

33501-01-CH 08/05/2010 Review of Application Controls for the Import Tracking System: all Recommendations implemented as of August 5, 2010.

33601-02-AT 03/04/2010 APHIS Evaluation of the Implementation of the Select Agent or Toxin Regulations (Phase I); all Recommendations implemented as of March 4, 2010.

50018-01-AT 08/16/2010 Puerto Rico Department of Agriculture A-128 audit (for 1994 and 1995), all Recommendations implemented as of August 16, 2010.

50018-18-HY 08/16/2010 Puerto Rico Department of Agriculture A-128 audit (for 1992), all Recommendations implemented as of August 16, 2010.

50018-02-AT 08/16/2010 Puerto Rico Department of Agriculture A-128 audit (for 1993), all Recommendations implemented as of August 16, 2010.

50099-13-AT 10/15/2010 Oversight and Security of Biological Agents at Laboratories Operated by the U.S. Department of Agriculture: Policies and Inventories are Needed to Manage Biosecurity; all Recommendations implemented as of October 15, 2010.

**OIG Audits in Progress and/or Still Open**

05099-29-AT Citrus Crop Indemnity Payments Resulting from Hurricane Wilma in Florida: audit still in progress.

24601-09-KC Food and Safety Inspection Service N60 Testing of E-Coli: audit still in progress.

33002-04-SF Animal Care Inspection of Problematic Dealers: Audit report issued May 14, 2010 with 14 Recommendations. 13 Recommendations have been implemented.

33601-01-41 APHIS Oversight of Research Facilities: audit started July 6, 2011; audit still in process.

33601-02-KC Oversight of Designated Qualified Persons Enforcing the Horse Protection Act: audit report issued September 3, 2010 with 13 Recommendations. 6 Recommendations have been implemented; 7 are in process of being implemented.

33601-12-CH Effectiveness of the Smuggling, Interdiction and Trade Compliance Unit: audit still in progress.

33701-01-AT Follow-up APHIS Implementation of the Select Agent or Toxin Regulations: audit started May 13, 2010; still in progress.

50099-46-AT USDA Payments for 2005 Citrus Canker Tree Losses: audit report issued March 23, 2011 with 3 Recommendations; APHIS in process of implementing Recommendations.

50099-84-HY	USDA Response to Colony Collapse Disorder: audit started May 28, 2010; still in progress.
50401-01-01	Department of Agriculture's Consolidated Financial Statement for 2011 and 2011: audit started January 4, 2011; still in progress.
50601-01-16	Section 632(a) Transfer of Funds from the U.S. Agency for International Development to the U.S. Department of Agriculture for Pakistan: audit started July 15, 2011; audit still in process.
50601-01-ER	USDA Controls Over Shell Egg Inspections: audit started October 18, 2010; still in progress.
50601-02-ER	Effectiveness of the Department's Recent Efforts to Enhance Agricultural Trade audit started October 29, 2010; still in progress.
50601-12-CH	USDA's Controls over the Importation and Movement of Live Animals: audit report issued March 31, 2008 with 21 Recommendations. 18 Recommendations implemented; 3 Recommendations in process of implementing.
50601-13-AT	Department of Agriculture's Progress in Enhancing Agriculture Biosecurity Through Diagnostic and Reporting Networks.
50601-13-CH	Compliance with OIG Renewable Energy Program Audit Recommendations: audit report issued August 2008; no Recommendations for APHIS.
50601-16-TE	Controls over Genetically Engineered Animal and Insect Research (Discussion Draft audit report issued November 2010: audit report issued May 2011 with 8 Recommendations; only 5 of the 8 Recommendations are for APHIS.
50601-17-TE	Controls over Genetically Engineered Food and Agricultural Imports: audit report issued December 2008 with 3 Recommendations for USDA and APHIS; 2 of the 3 Recommendations have been implemented.

### **GAO Audits Closed**

None

### **GAO Audits in Progress and/or Still Open**

Job Code 120759	Review of Cost-Reimbursement Contracts in Federal Agencies: audit started February 26, 2009; audit still in progress.
Job Code 120956	Agency Acquisition Savings Strategies: audit started December 17, 2010; audit still in process.
Job Code 131046	Potential Overlap, Duplication and Fragmentation of Federal Service, Technology, Engineering, and Mathematics (STEM) Education Programs: audit started December 21, 2010; audit still in process.
Job Code 290824	FDA Overseas Offices: Collaboration with other U.S.A. Agencies: audit started January 5, 2010; audit still in progress.
Job Code 320664	Global Food Security: audit report issued March 2010; report requires the Secretary of State to work with the Secretary of USDA to implement Recommendations.

Job Code 360871 Coordinated Framework for Regulation of Genetically Modified Agriculture: audit report issued November 2008. APHIS and/or USDA have provided GAO with signed Statement of Action detailing the corrective actions to implement the Recommendations.

Job Code 361087 USDA Oversight of Random Source Dog and Cat Procurement by Class B Dealers: audit report issued September 2010. APHIS and/or USDA have provided GAO with signed Statement of Action detailing the corrective actions to implement the Recommendations.

Job Code 361116 Live Animal Imports: audit report issued November 2010. APHIS has provided GAO with signed Statement of Action detailing the corrective actions to implement the Recommendations .

Job Code 361161 Horse Welfare: audit report issued July 2011; agency has drafted a Statement of Action.

Job Code 361185 Renewable Energy Initiatives; audit started May 5, 2010; audit still in process.

Job Code 361204 Agro-terrorism Response and Recovery Efforts: audit started May 19, 2010; Agency awaits GAO final report (draft report issued July 2011).

Job Code 361290 Food and Drug Administration's Mandatory Food Recall Authority: audit started June 2, 2011; audit still in progress.

Job Code 361223 Antibiotic Use in Food Animals: audit started August 10, 2010; Agency awaits GAO final report (draft report issued August 2011).

Job Code 361249 USDA Administrative PAYGO: audit started November 30, 2010; audit still in progress.

Job Code 361330 Agricultural Quarantine Inspections, audit started September 2011; audit still in progress.

Job Code 361356 Overlap and Duplication in Federal Invasive Species Programs, audit started December 2011; audit still in progress.

Job Code 361964 Irradiation of Food Products: audit report issued February 2010. No significant Recommendations for APHIS.

Job Code 440936 Training of Customs of CBP Officers: audit started November 24, 2010; audit still in progress.

Job Code 440979 Equal Access to Justice Act: audit started May 26, 2011; audit still in process.

Job Code 450540 User Fee Design Agriculture: audit report issued February 2008. APHIS has provided GAO with signed Statement of Action detailing corrective actions to implement the Recommendations.

Job Code 460599 Safety Reporting Options for BioSafety Laboratories: audit report issued September 2010 with joint Recommendations for APHIS and CDC. APHIS has provided GAO with signed Statement of Action detailing the corrective actions to implement the Recommendations.

Job Code 460617 High Containment Labs: Duplication of Federal Oversight Activities: audit started August 17, 2010; audit canceled.

Job Code 460619 Duplication of Federal Inspection of High Containment Labs: audit started May 23, 2011; audit still in progress.

Job Code 540179 Aviation Safety Oversight: audit report issued May 2010; no Recommendations for APHIS.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Available Funds and Staff Years  
(Dollars in thousands)

Item	2010 Actual		2011 Actual		2012 Estimate		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b>Salaries and Expenses:</b>								
Discretionary Appropriations.....	\$904,953	4,854	\$865,000	4,757	\$816,534	4,679	\$762,418	4,528
Agriculture Pest Facility in the State of Hawaii...a/..	2,600	0	0	0	0	0	0	0
	907,553	4,854	865,000	4,757	816,534	4,679	762,418	4,528
Mandatory Appropriations.....	50,000	15	55,000	15	55,000	15	50,000	15
Agricultural Quarantine Inspection User Fees:								
Total Collections.....	512,568	1,504	534,730	1,350	540,077	1,350	545,448	1,350
Supplemental Appropriations.....	0	0	0	0	0	0	0	0
<b>Buildings and Facilities:</b>								
Discretionary Appropriations.....	4,712	0	3,536	0	3,200	0	3,175	0
<b>Trust Funds:</b>								
Mandatory Funding.....	18,392	150	9,418	150	12,000	150	12,000	150
Rescission.....	0	0	-1,737	0	0	0	0	0
Transfers In.....	62,010	81	11,052	0	0	0	0	0
Transfers Out.....	-312,227	0	-319,116	0	-325,471	0	-328,726	0
Adjusted Appropriations.....	1,243,008	6,604	1,157,883	6,272	1,101,340	6,194	1,044,315	6,043
Balance Available, SOY.....	243,912	339	244,692	45	224,547	15	199,263	12
Other Adjustments (NET).....	25,701	0	11,034	0	0	0	0	0
Total Available.....	1,512,621	6,943	1,413,609	6,317	1,325,887	6,209	1,243,578	6,055
Lapsing Balances.....	-913		-5,192		0		0	
Balance Available, EOY.....	-244,662	0	-224,547	-15	-199,264	-12	-174,354	-10
Subtotal Obligations, APHIS.....	1,267,046	6,943	1,183,871	6,302	1,126,623	6,197	1,069,225	6,045
<u>Obligations under other USDA appropriations:</u>								
Agricultural Marketing Service:								
for administrative and technical support.....	6,386	0	7,270	0	7,306	0	7,328	0
Agricultural Research Service:								
for administrative and technical support.....	2,591	0	4,443	0	4,466	0	4,479	0
Farm Service Agency:								
for administrative and technical support.....	120	0	0	0	0	0	0	0
Food & Nutrition Service:								
for administrative and technical support.....	0	0	6	0	6	0	6	0
Foreign Agricultural Service:								
for administrative and technical support.....	3,282	0	2,321	0	2,332	0	2,339	0
Forest Service:								
for administrative and technical support.....	459	0	523	0	526	0	527	0
Grain Inspection Service:								
for administrative and technical support.....	1,141	0	1,058	0	1,063	0	1,066	0
National Appeals Division:								
for administrative and technical support.....	27	0	7	0	7	0	7	0
Natural Resource Conservation Service								
for administrative and technical support.....	0	0	76	0	77	0	77	0
Office of Departmental Management								
for administrative and technical support.....	982	0	730	0	734	0	736	0
Office of Operations								
administrative and technical support.....	1	0	0	0	0	0	0	0
Office of the Chief Information Officer:								
administrative and technical support.....	23	0	39	0	39	0	39	0
Office of the Chief Financial Officer:								
administrative and technical support.....	0	0	40	0	40	0	40	0

Item	2010 Actual		2011 Actual		2012 Estimate		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Office of Human Resources Management:					0			
administrative and technical support.....	0	0	411	0	413	0	414	0
Office of the Secretary:								
administrative and technical support.....	448	0	0	0	0	0	0	0
Total, Agriculture Appropriations.....	15,460	0	16,924	0	17,008	0	17,059	0
<u>Other Federal Funds:</u>								
DOD: for Information Technology								
and other services and support.....	606	0	556	0	558	0	560	0
DOD, U.S. Air Force.....	4,362	0	6,955	0	6,990	0	7,011	0
DOD, U.S. Coast Guard.....	1,556	0	13	0	13	0	13	0
DOD, Air National Guard.....	1,847	0	1,893	0	1,902	0	1,908	0
DOD, U.S. Navy.....	4,149	0	3,542	0	3,560	0	3,570	0
DOD, U.S. Marine Corps.....	778	0	737	0	741	0	743	0
DOD, U.S. Army.....	1,499	0	2,080	0	2,090	0	2,096	0
Department of Energy.....	160	0	224	0	225	0	225	0
Dept of Health and Human Services.....	0	0	535		538		540	
DHS: for AQI and other services and support.....	2,168	0	1,424	0	1,431	0	1,435	0
Federal Emergency Management Agency.....	415	0	0	0	0	0	0	0
NASA, National Aeronautics and Space Administration...	323	0	339	0	341	0	342	0
U.S. Environmental Protection Agency.....	1,929	0	0	0	0	0	0	0
USDOJ, Geological Survey, National Park Service,								
Office of Insular Affairs.....	1,046	0	1,489	0	1,496	0	1,501	0
USDOJ, Bureau of Land Management & Reclamation:								
for administrative and technical support.....	574	0	552	0	555	0	556	0
USDOJ, Fish and Wildlife Services:								
for natural resources and endangered species.....	2,140	0	2,273	0	2,284	0	2,291	0
USDOT, Federal Aviation Administration	2,023	0	1,513	0	1,520	0	1,525	0
Department of State:								
for miscellaneous services.....	0	0	16	0	16	0	16	0
EPA, IACB:								
for miscellaneous services.....	0	0	441	0	443	0	444	0
GSA: for miscellaneous services.....	3	0	9	0	9	0	9	0
Other Federal Funds.....	864	309	1,328	459	1,334	459	1,338	459
Total, Other Federal Funds.....	26,443	309	25,917	459	26,046	459	26,124	459
<u>Non-Federal Funds:</u>								
Funds from States and local entities for								
wildlife services support.....	34,158	418	39,773	545	39,972	545	40,091	545
Import-Export User Fees.....	31,690	234	35,362	325	35,539	325	35,646	325
NVSL Testing Fees.....	403	0	395	4	397	4	398	4
Phytosanitary Certificate User Fees.....	18,532	85	23,166	165	23,282	165	23,352	165
Reimbursable Overtime.....	6,794	0	8,374	90	8,416	90	8,441	90
Product Certificates.....	809	0	68	0	69	0	69	0
Veterinary Diagnostics User Fees.....	3,342	0	5,780	39	5,809	39	5,826	39
Other User Fees.....	305	0	2,804	0	2,818	0	2,826	0
Non-Federal.....	534	15	73	0	73	0	73	0
Subtotal, Reimbursable Salaries and Expenses.....	138,470	1,061	158,635	1,627	159,428	1,627	159,906	1,627
Total Obligations,								
Animal and Plant Health Inspection Service.....	\$1,405,516	8,004	\$1,342,506	7,929	\$1,286,051	7,824	\$1,229,131	7,672

a/General Provision 723 in Fiscal Year 2010 for Fruit Fly rearing facility in Hawaii.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Permanent Positions by Grade and Staff Year Summary

Grade	2010 Actual			2011 Actual			2012 Estimate			2013 Estimate		
	Hdqts	Field	Total	Hdqts	Field	Total	Hdqts	Field	Total	Hdqts	Field	Total
Senior Executive Service.....	26	12	38	24	10	34	24	10	34	24	10	34
GS-15.....	69	62	131	78	62	140	76	62	138	76	62	138
GS-14.....	325	263	588	318	262	580	315	266	581	315	266	581
GS-13.....	267	506	773	266	501	767	259	492	751	257	487	744
GS-12.....	212	924	1,136	219	899	1,118	211	892	1,103	210	888	1,098
GS-11.....	106	903	1,009	101	852	953	98	861	959	97	860	957
GS-10.....	2	10	12	2	10	12	2	10	12	2	10	12
GS-09.....	112	478	590	102	461	563	97	453	550	95	449	544
GS-08.....	9	285	294	8	272	280	8	274	282	8	274	282
GS-07.....	107	537	644	95	507	602	94	484	578	93	480	573
GS-06.....	34	298	332	20	286	306	17	270	287	17	270	287
GS-05.....	18	248	266	17	207	224	16	202	218	16	197	213
GS-04.....	8	49	57	5	42	47	5	46	51	5	46	51
GS-03.....	2	8	10	2	5	7	2	6	8	2	6	8
GS-02.....	4	3	7	6	2	8	6	2	8	6	2	8
Other Graded Positions.....	32	178	210	19	138	157	19	149	168	19	149	168
Total Perm. Employment EOY.....	1,333	4,764	6,097	1,282	4,516	5,798	1,249	4,479	5,728	1,242	4,456	5,698
Unfilled Positions EOY.....	19	70	89	28	97	125	32	114	146	32	114	146
Total Permanent Positions.....	1,352	4,834	6,186	1,310	4,613	5,923	1,281	4,593	5,874	1,274	4,570	5,844
Staff Year Estimate.....	1,558	6,446	8,004	1,543	6,386	7,929	1,525	6,311	7,836	1,472	6,210	7,682

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Size, Composition and Cost of Motor Vehicle Fleet

The FY 2013 Budget Estimate proposes the disposal and replacement of 536 passenger motor vehicles.

APHIS' veterinarians, animal health technicians, inspectors, plant protection and quarantine officers, wildlife biologists and other technical personnel rely upon motor vehicles to assist in their daily job activities, which entail travel between inspection sites, farms, ranches, ports, nurseries and other commercial firms. The use of Government-owned vehicles has shown to be more cost effective than having personnel use privately-owned vehicles.

To maintain the life span of the vehicle, operators are required to keep historical maintenance records and to submit the vehicle's operational data. Periodic maintenance surveys and consolidation of the vehicle fleet ensure the full use of each vehicle in the fleet.

Replacement criteria: Vehicle replacement is done in accordance with Title 41, CFR, § 102-34.280. Replacement/retirement decisions are conducted at the program level, based upon utilization, age, condition and availability of funds. Normally, passenger vehicles are not replaced unless they either have mileage of 60,000 or more, or are three years or more in age. There continues to be an effort to purchase alternative fuel vehicles.

Changes to the motor vehicle fleet. There is a planned decrease of 1 sedans/station wagons, 2 vans and 13 medium duty vehicles. There is a planned increase of 4 sport utility vehicles and 23 light duty trucks. There is no planned change in the number of buses and heavy duty trucks. The total planned net increase to the APHIS motor vehicle fleet is 11.

Replacement of motor vehicles. The Agency proposes replacing 536 of the 5,433 vehicles currently in the Agency fleet. The vehicles replacement will be utilized in the field by APHIS' technical personnel. Vehicles designated for disposal meet the General Service Administration's standards by having mileage of 60,000 or more, or by being three years of age or more.

Impediments to managing the motor vehicle fleet. There are no impediments in managing the motor vehicle fleet.

The size, composition, and cost of Agency motor vehicle fleet as of September 30, 2011 are as follows:

Fiscal Year	Number of Vehicle Type*									Annual Operating Costs (\$ in 000) **
	Sedans & Station Wagons	Light Duty Vehicles				Medium Duty Vehicles		Heavy Duty Vehicles	Total Number of Vehicles	
		Vans	SUVs	Trucks		Buses	Trucks, Vans and SUVs			
				4x2	4x4					
FY 2010	428	300	1,173	611	2,375	2	315	4	5,208	\$11,331
Change from 2010	-8	-15	-47	-49	190	-2	144	12	225	\$7,038
FY 2011	420	285	1,126	562	2,565	0	459	16	5,433	\$18,369
Change from 2011	-13	-9	-19	-11	1	0	-40	1	-90	\$7
FY 2012	407	276	1,107	551	2,566	0	419	17	5,343	\$18,376
Change from 2012	-1	-2	4	-2	25	0	-13	0	11	\$375
FY 2013	406	274	1,111	549	2,591	0	406	17	5,354	\$18,751

\* Numbers include vehicles owned by the agency and leased from commercial sources or GSA.

\*\* Excludes acquisition costs and gains from sale of vehicles as shown in FAST.

The APHIS aircraft fleet consists of 7 operable aircraft for domestic plant pest and disease management programs and, 71 for the Wildlife Services (WS) programs. Of the 71 WS aircraft: 61 are owned, 22 of which are non-operational, 5 are borrowed, and 5 are rented. In FY 2011, APHIS acquired 37 aircraft in a no cost transfer from the Department of Homeland Security, Customs and Border Protection.

APHIS aircraft are used for aerial resource and surveillance surveys, aerial application tests, methods development and testing, and equipment demonstration and testing; to control and/or eradicate destructive plant pests from attacking agricultural crops; and, to alleviate or control wildlife damage to agricultural products. Some are also used to monitor contract aircraft.

Aircraft purchases are made primarily to replace aging or inoperable aircraft. Aircraft replacement authority is provided in the Appropriations Act; however, the Agency only replaces when necessary to maintain fleet safety and efficient operating conditions. The Agency replaced two aircraft for the WS programs in FY 2011.



## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses - Current LawLead-off Tabular

Appropriations Act, 2012 .....	\$816,534,000
Budget Estimate, 2013.....	<u>762,418,000</u>
Change from 2012 Appropriation.....	<u><u>-54,116,000</u></u>

Summary Of Increases and Decreases - Current Law

(Dollars in thousands)

	2010	2011	2012	2013		2013
	<u>Actual</u>	<u>Change</u>	<u>Change</u>	<u>Change</u>		<u>Estimated</u>
Discretionary Appropriations:						
<u>Safeguarding and Emergency Preparedness/Response</u>						
Animal Health Technical Services.....	\$32,360	-\$2,810	\$2,950	\$5,358	1a	\$37,858
Aquatic Animal Health.....	6,021	-599	-3,161	403	1b	2,664
Avian Health.....	66,568	-16,478	1,910	-2,259	1c	49,741
Cattle Health.....	114,530	-4,936	-10,594	-8,697	1d	90,303
Equine and Cervid Health <sup>a/</sup> .....	20,342	-2,461	-12,831	-1,324	1e	3,726
National Veterinary Stockpile.....	3,568	-7	-811	-485	1f	2,265
Sheep and Goat Health <sup>a/</sup> .....	19,085	-140	-1,995	-2,743	1g	14,207
Swine Health.....	25,733	-186	-2,547	-2,658	1h	20,342
Veterinary Biologics.....	16,457	-33	33	-697	1i	15,760
Veterinary Diagnostics.....	30,006	2,303	-698	-156	1j	31,455
Zoonotic Disease Management.....	10,468	-21	-1,447	1,374	1k	10,374
Subtotal, Animal Health.....	<u>345,138</u>	<u>-25,368</u>	<u>-29,191</u>	<u>-11,884</u>		<u>278,695</u>
Agricultural Quarantine Inspection (Appropriated).....	29,000	-3,052	1,552	-2,375	1l	25,125
Cotton Pests.....	23,390	-2,432	-3,110	-8,933	1m	8,915
Field Crop & Rangeland Ecosystems Pests.....	13,138	-1,842	-2,228	-201	1n	8,867
Pest Detection.....	28,113	-1,411	798	-1,883	1o	25,617
Plant Protection Methods Development.....	21,773	-543	-630	-893	1p	19,707
Specialty Crop Pests.....	150,849	-770	3,871	-2,895	1q	151,055
Tree & Wood Pests.....	77,146	-2,152	-19,356	-11,719	1r	43,919
Subtotal, Plant Health .....	<u>343,409</u>	<u>-12,202</u>	<u>-19,103</u>	<u>-28,899</u>		<u>283,205</u>
Wildlife Damage Management.....	78,937	-6,879	442	-4,788	1s	67,712
Wildlife Services Methods Development.....	18,902	-1,824	922	-1,249	1t	16,751
Subtotal, Wildlife Services .....	<u>97,839</u>	<u>-8,703</u>	<u>1,364</u>	<u>-6,037</u>		<u>84,463</u>
Animal & Plant Health Regulatory Enforcement.....	15,483	-28	820	-499	1u	15,776
Biotechnology Regulatory Services.....	13,322	-285	5,098	-1,384	1v	16,751
Subtotal, Regulatory Services .....	<u>28,805</u>	<u>-313</u>	<u>5,918</u>	<u>-1,883</u>		<u>32,527</u>

	2010 <u>Actual</u>	2011 <u>Change</u>	2012 <u>Change</u>	2013 <u>Change</u>		2013 <u>Estimated</u>
Contingency Fund.....	2,058	-4	-1,054	984	1w	1,984
Emergency Preparedness & Response.....	19,746	-39	-2,707	-257	1x	16,743
Subtotal, Emergency Management .....	<u>21,804</u>	<u>-43</u>	<u>-3,761</u>	<u>727</u>		<u>18,727</u>
Subtotal Safeguarding and Emergency Preparedness/Response.....	<u>836,995</u>	<u>-46,629</u>	<u>-44,773</u>	<u>-47,976</u>		<u>697,617</u>
<u>Safe Trade and International Technical Assistance</u>						
Agriculture Import/Export.....	12,604	-25	775	-45	2a	13,309
Overseas Technical & Trade Operations.....	20,176	-40	-32	-2,357	2b	17,747
Subtotal Safe Trade and International Technical Assistance.....	<u>32,780</u>	<u>-65</u>	<u>743</u>	<u>-2,402</u>		<u>31,056</u>
<u>Animal Welfare</u>						
Animal Welfare.....	24,479	-44	2,652	-2,928	3a	24,159
Horse Protection.....	500	-1	197	-203	3b	493
Subtotal, Animal Welfare.....	<u>24,979</u>	<u>-45</u>	<u>2,849</u>	<u>-3,131</u>		<u>24,652</u>
<u>Agency Management</u>						
APHIS Information Technology Infrastructure.....	4,474	-9	-130	-168	4a	4,167
Physical/Operational Security.....	5,725	-11	-349	-439	4b	4,926
Subtotal, Agency Management.....	<u>10,199</u>	<u>-20</u>	<u>-479</u>	<u>-607</u>		<u>9,093</u>
Congressional Unidentified Funding.....	0	5,076	-5,076	0		0
Total, Appropriation or Change <sup>b/</sup> .....	<u>\$904,953</u>	<u>-\$41,683</u>	<u>-\$46,736</u>	<u>-\$54,116</u>		<u>\$762,418</u>

a/ In 2013 APHIS is requesting to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. The figures used above in this exhibit in 2010 – 2012 are for comparability purposes only. The appropriations for the Equine, Cervid and Small Ruminant Health line item in 2010 was \$39,427,000, in 2011 it was \$36,826,000 and in 2012 it is \$22,000,000.

b/ 2010 excludes the 2010 General Provision 723, which provides \$2,600,000 to remain available until expended for the construction, interim operations, and necessary demolition needs for establishment of an agricultural pest facility in the State of Hawaii.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

Project Statement  
(On basis of appropriation)  
(Dollars in thousands)

	2010 Actual		2011 Actual		2012 Estimate		Change		2013 Estimate	
	Amount	Staff Years								
Discretionary Appropriations:										
<u>Safeguarding and Emergency Preparedness/Response</u>										
Animal Health Technical Services.....	\$32,360	64	\$29,550	64	\$32,500	64	\$5,358	0	\$37,858	64
Aquatic Animal Health.....	6,021	22	5,422	22	2,261	22	403	0	2,664	22
Avian Health.....	66,568	238	50,090	191	52,000	196	-2,259	0	49,741	196
Cattle Health.....	114,530	585	109,594	585	99,000	570	-8,697	-24	90,303	546
Equine and Cervid Health <sup>av</sup> .....	20,342	38	17,881	38	5,050	24	-1,324	-7	3,726	17
National Veterinary Stockpile.....	3,568	1	3,561	1	2,750	1	-485	0	2,265	1
Sheep and Goat Health <sup>av</sup> .....	19,085	109	18,945	109	16,950	109	-2,743	-6	14,207	103
Swine Health.....	25,733	156	25,547	156	23,000	127	-2,658	-21	20,342	106
Veterinary Biologics.....	16,457	108	16,424	108	16,457	108	-697	-2	15,760	106
Veterinary Diagnostics.....	30,006	190	32,309	190	31,611	190	-156	0	31,455	190
Zoonotic Disease Management.....	10,468	45	10,447	45	9,000	45	1,374	0	10,374	45
Subtotal, Animal Health.....	<u>345,138</u>	<u>1,556</u>	<u>319,770</u>	<u>1,509</u>	<u>290,579</u>	<u>1,456</u>	<u>-11,884</u>	<u>-60</u>	<u>278,695</u>	<u>1,396</u>
Agricultural Quarantine Inspection (Appropriated).....	29,000	364	25,948	364	27,500	364	-2,375	-19	25,125	345
Cotton Pests.....	23,390	61	20,958	61	17,848	61	-8,933	-5	8,915	56
Field Crop & Rangeland Ecosystems Pests.....	13,138	60	11,296	60	9,068	60	-201	0	8,867	60
Pest Detection.....	28,113	145	26,702	145	27,500	145	-1,883	0	25,617	145
Plant Protection Methods Development.....	21,773	140	21,230	140	20,600	140	-893	-2	19,707	138
Specialty Crop Pests.....	150,849	700	150,079	700	153,950	700	-2,895	-9	151,055	691
Tree & Wood Pests.....	77,146	376	74,994	376	55,638	321	-11,719	-19	43,919	302
Subtotal, Plant Health.....	<u>343,409</u>	<u>1,846</u>	<u>331,207</u>	<u>1,846</u>	<u>312,104</u>	<u>1,791</u>	<u>-28,899</u>	<u>-54</u>	<u>283,205</u>	<u>1,737</u>
Wildlife Damage Management.....	78,937	534	72,058	534	72,500	534	-4,788	-7	67,712	527
Wildlife Services Methods Development.....	18,902	164	17,078	164	18,000	164	-1,249	-5	16,751	159
Subtotal, Wildlife Services.....	<u>97,839</u>	<u>698</u>	<u>89,136</u>	<u>698</u>	<u>90,500</u>	<u>698</u>	<u>-6,037</u>	<u>-12</u>	<u>84,463</u>	<u>686</u>
Animal & Plant Health Regulatory Enforcement.....	15,483	154	15,455	142	16,275	142	-499	-4	15,776	138
Biotechnology Regulatory Services.....	13,322	81	13,037	81	18,135	92	-1,384	0	16,751	92
Subtotal, Regulatory Services.....	<u>28,805</u>	<u>235</u>	<u>28,492</u>	<u>223</u>	<u>34,410</u>	<u>234</u>	<u>-1,883</u>	<u>-4</u>	<u>32,527</u>	<u>230</u>
Contingency Fund.....	2,058	15	2,054	0	1,000	15	984	0	1,984	15
Emergency Preparedness & Response.....	19,746	92	19,707	92	17,000	91	-257	0	16,743	91
Subtotal, Emergency Management.....	<u>21,804</u>	<u>107</u>	<u>21,761</u>	<u>92</u>	<u>18,000</u>	<u>106</u>	<u>727</u>	<u>0</u>	<u>18,727</u>	<u>106</u>
Subtotal Safeguarding and Emergency Preparedness/Response.....	<u>836,995</u>	<u>4,442</u>	<u>790,366</u>	<u>4,368</u>	<u>745,593</u>	<u>4,285</u>	<u>-47,976</u>	<u>-130</u>	<u>697,617</u>	<u>4,155</u>
<u>Safe Trade and International Technical Assistance</u>										
Agriculture Import/Export.....	12,604	92	12,579	92	13,354	92	-45	0	13,309	92
Overseas Technical & Trade Operations.....	20,176	73	20,136	73	20,104	73	-2,357	-1	17,747	72
Subtotal Safe Trade and International Technical Assistance.....	<u>32,780</u>	<u>165</u>	<u>32,715</u>	<u>165</u>	<u>33,458</u>	<u>165</u>	<u>-2,402</u>	<u>-1</u>	<u>31,056</u>	<u>164</u>
<u>Animal Welfare</u>										
Animal Welfare.....	24,479	242	24,435	219	27,087	224	-2,928	-20	24,159	204
Horse Protection.....	500	5	499	5	696	5	-203	0	493	5
Subtotal, Animal Welfare.....	<u>24,979</u>	<u>247</u>	<u>24,934</u>	<u>224</u>	<u>27,783</u>	<u>229</u>	<u>-3,131</u>	<u>-20</u>	<u>24,652</u>	<u>209</u>
<u>Agency Management</u>										
APHIS Information Technology Infrastructure.....	4,474	0	4,465	0	4,335	0	-168	0	4,167	0
Physical/Operational Security.....	5,725	0	5,714	0	5,365	0	-439	0	4,926	0
Subtotal, Agency Management.....	<u>10,199</u>	<u>0</u>	<u>10,179</u>	<u>0</u>	<u>9,700</u>	<u>0</u>	<u>-607</u>	<u>0</u>	<u>9,093</u>	<u>0</u>
Congressional Unidentified Funding.....	0	0	5,076	0	0	0	0	0	0	0
Subtotal, Adjusted Appropriated.....	<u>904,953</u>	<u>4,854</u>	<u>863,270</u>	<u>4,757</u>	<u>816,534</u>	<u>4,679</u>	<u>-54,116</u>	<u>-151</u>	<u>762,418</u>	<u>4,528</u>
Rescission P.L. 112-10.....	0	0	1,730	0	0	0	0	0	0	0
Subtotal, Discretionary Appropriated.....	<u>904,953</u>	<u>4,854</u>	<u>865,000</u>	<u>4,757</u>	<u>816,534</u>	<u>4,679</u>	<u>-54,116</u>	<u>-151</u>	<u>762,418</u>	<u>4,528</u>

	2010 Actual		2011 Actual		2012 Estimate		Change		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Authority from Offsetting collections.....	139,826	1,061	210,092	1,627	153,478	1,627	768	0	154,246	1,627
ARRA.....	680	0	0	0	0	0	0	0	0	0
<b>Mandatory Funding:</b>										
Farm Bill, Section 10201 .....	45,000	15	50,000	15	50,000	15	0	0	50,000	15
Farm Bill, Section 10202 .....	5,000	0	5,000	0	5,000	0	-5,000	0	0	0
Subtotal, Farm Bill.....	<u>50,000</u>	<u>15</u>	<u>55,000</u>	<u>15</u>	<u>55,000</u>	<u>15</u>	<u>-5,000</u>	<u>0</u>	<u>50,000</u>	<u>15</u>
<b>Trust Funds.....</b>	<b>18,392</b>	<b>150</b>	<b>9,418</b>	<b>150</b>	<b>12,000</b>	<b>150</b>	<b>0</b>	<b>0</b>	<b>12,000</b>	<b>150</b>
<b>Agricultural Quarantine Inspection User Fees:</b>										
Total Collections.....	512,568	1,504	534,730	1,350	540,077	1,350	5,371	0	545,448	1,350
Less: Transfer to DHS .....	-312,227	0	-319,116	0	-325,471	0	-3,255	0	-328,726	0
AQI User Fees (APHIS).....	200,341	1,504	215,614	1,350	214,606	1,350	2,116	0	216,722	1,350
Subtotal, Mandatory Funding.....	<u>268,733</u>	<u>1,669</u>	<u>280,032</u>	<u>1,515</u>	<u>281,606</u>	<u>1,515</u>	<u>-2,884</u>	<u>0</u>	<u>278,722</u>	<u>1,515</u>
<b>Total Appropriations .....</b>	<b><u>1,314,192</u></b>	<b><u>7,584</u></b>	<b><u>1,353,394</u></b>	<b><u>7,899</u></b>	<b><u>1,251,618</u></b>	<b><u>7,821</u></b>	<b><u>-56,232</u></b>	<b><u>-151</u></b>	<b><u>1,195,386</u></b>	<b><u>7,670</u></b>
<b>Transfers In:</b>										
CCC.....	36,116	56	10,922	0	0	0	0	0	0	0
H1N1.....	25,750	25	0	0	0	0	0	0	0	0
Departmental .....	144	0	130	0	0	0	0	0	0	0
Subtotal, Transfers.....	<u>62,010</u>	<u>81</u>	<u>11,052</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Balance Available, SOY.....	254,815	339	258,774	45	292,014	15	-29,964	-3	262,050	12
Balance Available, SOY rescission.....	0	0	-10,887	0	0	0	0	0	0	0
Recoveries Trust Funds.....	1,969	0	960	0	0	0	0	0	0	0
Recoveries.....	23,163	0	23,489	0	0	0	0	0	0	0
<b>Total Available .....</b>	<b><u>1,656,149</u></b>	<b><u>8,004</u></b>	<b><u>1,636,782</u></b>	<b><u>7,944</u></b>	<b><u>1,543,632</u></b>	<b><u>7,836</u></b>	<b><u>-86,196</u></b>	<b><u>-154</u></b>	<b><u>1,457,436</u></b>	<b><u>7,682</u></b>
Lapsing Balances.....	-1,581	0	-10,480	0	0	0	0	0	0	0
Balance Available, EOY.....	<u>-258,774</u>	<u>0</u>	<u>-292,014</u>	<u>-15</u>	<u>-262,050</u>	<u>-12</u>	<u>0</u>	<u>0</u>	<u>-231,480</u>	<u>-10</u>
<b>Total Obligations .....</b>	<b><u>1,395,794</u></b>	<b><u>8,004</u></b>	<b><u>1,334,288</u></b>	<b><u>7,929</u></b>	<b><u>1,281,582</u></b>	<b><u>7,824</u></b>	<b><u>-86,196</u></b>	<b><u>-154</u></b>	<b><u>1,225,956</u></b>	<b><u>7,672</u></b>

a/ In 2013 APHIS is requesting to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. The figures used above in this exhibit are for comparability purposes only. The appropriations for the Equine, Cervid and Small Ruminant Health line item in 2010 was \$39,427,000, in 2011 it was \$36,826,000 and in 2012 it is \$22,000,000.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

Project Statement  
(On basis of obligations)  
(Dollars in thousands)

	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Estimate</u>		<u>Change</u>		<u>2013 Estimate</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>
<u>Discretionary Obligations:</u>										
<u>Safeguarding and Emergency Preparedness/Response</u>										
Animal Health Technical Services.....	\$40,056	112	\$32,216	64	\$33,847	64	\$3,653	0	\$37,500	64
Aquatic Animal Health.....	6,011	3	5,401	22	2,261	22	403	0	2,664	22
Avian Health.....	67,998	190	53,649	191	58,165	196	-4,165	0	54,000	196
Cattle Health.....	117,873	738	110,759	585	99,091	561	-8,788	-25	90,303	536
Equine and Cervid Health <sup>av</sup> .....	20,342	38	17,881	38	5,050	24	-1,324	-7	3,726	17
National Veterinary Stockpile.....	5,177	12	4,342	1	4,934	1	-1,934	0	3,000	1
Sheep and Goat Health <sup>av</sup> .....	18,451	100	19,197	109	21,353	109	-7,146	-6	14,207	103
Swine Health.....	25,723	219	25,543	156	23,000	127	-2,658	-21	20,342	106
Veterinary Biologics.....	16,457	184	16,416	108	16,457	108	-697	-2	15,760	106
Veterinary Diagnostics.....	29,985	282	32,303	190	31,611	190	-156	0	31,455	190
Zoonotic Disease Management.....	10,468	96	10,447	45	9,000	45	1,374	0	10,374	45
Subtotal, Animal Health.....	<u>358,542</u>	<u>1,974</u>	<u>328,154</u>	<u>1,509</u>	<u>304,769</u>	<u>1,447</u>	<u>-21,438</u>	<u>-61</u>	<u>283,331</u>	<u>1,386</u>
Agricultural Quarantine Inspection (Appropriated)....	28,948	303	25,907	364	27,500	364	-2,375	-19	25,125	345
Cotton Pests.....	23,238	44	20,979	63	17,736	63	-7,021	-5	10,715	58
Field Crop & Rangeland Ecosystems Pests.....	12,854	55	11,259	62	8,490	62	2,867	0	11,357	62
Pest Detection.....	28,071	116	26,697	145	27,500	145	-1,883	0	25,617	145
Plant Protection Methods Development.....	21,704	223	21,066	140	20,600	140	-893	-2	19,707	138
Specialty Crop Pests.....	171,383	729	153,959	704	154,554	704	5,446	-9	160,000	695
Tree & Wood Pests.....	70,966	270	76,399	380	65,462	325	-2,367	-19	63,095	306
Subtotal, Plant Health.....	<u>357,163</u>	<u>1,740</u>	<u>336,265</u>	<u>1,858</u>	<u>321,842</u>	<u>1,803</u>	<u>-6,226</u>	<u>-54</u>	<u>315,617</u>	<u>1,749</u>
Wildlife Damage Management <sup>bw</sup> .....	79,132	538	75,366	534	73,107	534	-5,395	-7	67,712	527
Wildlife Services Methods Development <sup>bw</sup> .....	19,110	166	18,782	164	18,217	164	-1,466	-5	16,751	159
Subtotal, Wildlife Services.....	<u>98,242</u>	<u>704</u>	<u>94,148</u>	<u>698</u>	<u>91,324</u>	<u>698</u>	<u>-6,861</u>	<u>-12</u>	<u>84,463</u>	<u>686</u>
Animal & Plant Health Regulatory Enforcement.....	15,445	154	15,011	142	16,275	142	-499	-4	15,776	138
Biotechnology Regulatory Services.....	13,285	81	13,019	81	18,135	92	-1,384	0	16,751	92
Subtotal, Regulatory Services.....	<u>28,730</u>	<u>235</u>	<u>28,030</u>	<u>223</u>	<u>34,410</u>	<u>234</u>	<u>-1,883</u>	<u>-4</u>	<u>32,527</u>	<u>230</u>
Contingency Fund.....	3,206	26	0	0	3,543	15	-1,059	0	2,484	15
Emergency Preparedness & Response.....	19,622	102	19,428	92	17,000	91	-257	0	16,743	91
Subtotal, Emergency Management.....	<u>22,828</u>	<u>128</u>	<u>19,428</u>	<u>92</u>	<u>20,543</u>	<u>106</u>	<u>-1,316</u>	<u>0</u>	<u>19,227</u>	<u>106</u>
Subtotal Safeguarding and Emergency Preparedness/Response.....	<u>865,504</u>	<u>4,781</u>	<u>806,025</u>	<u>4,380</u>	<u>772,888</u>	<u>4,288</u>	<u>-37,724</u>	<u>-131</u>	<u>735,165</u>	<u>4,157</u>
<u>Safe Trade and International Technical Assistance</u>										
Agriculture Import/Export.....	12,587	153	12,573	92	13,354	92	-45	0	13,309	92
Overseas Technical & Trade Operations.....	20,156	73	20,002	73	20,104	73	-2,357	-1	17,747	72
Subtotal Safe Trade and International Technical Assistance.....	<u>32,744</u>	<u>226</u>	<u>32,575</u>	<u>165</u>	<u>33,458</u>	<u>165</u>	<u>-2,402</u>	<u>-1</u>	<u>31,056</u>	<u>164</u>
<u>Animal Welfare</u>										
Animal Welfare.....	24,445	242	23,895	219	27,087	224	-2,928	-20	24,159	204
Horse Protection.....	498	5	497	5	696	5	-203	0	493	5
Subtotal, Animal Welfare.....	<u>24,943</u>	<u>247</u>	<u>24,392</u>	<u>224</u>	<u>27,783</u>	<u>229</u>	<u>-3,131</u>	<u>-20</u>	<u>24,652</u>	<u>209</u>
<u>Agency Management</u>										
APHIS Information Technology Infrastructure.....	4,414	0	4,610	0	4,339	0	-172	0	4,167	0
Physical/Operational Security.....	5,669	0	5,540	0	5,365	0	-439	0	4,926	0
Subtotal, Agency Management.....	<u>10,083</u>	<u>0</u>	<u>10,150</u>	<u>0</u>	<u>9,704</u>	<u>0</u>	<u>-611</u>	<u>0</u>	<u>9,093</u>	<u>0</u>
Subtotal, Discretionary.....	<u>933,274</u>	<u>5,254</u>	<u>873,142</u>	<u>4,769</u>	<u>843,834</u>	<u>4,682</u>	<u>-43,868</u>	<u>-152</u>	<u>799,966</u>	<u>4,530</u>
<u>Mandatory Obligations:</u>										
Agricultural Quarantine Inspection User Fees.....	189,373	1,350	190,738	1,350	191,691	1,350	958	0	192,649	1,350
Farm Bill, Section 10201 and 10202.....	51,152	18	52,378	17	55,628	15	-5,628	0	50,000	15
Trust Funds.....	18,649	150	14,641	150	16,000	150	0	0	16,000	150
Subtotal, Mandatory.....	<u>259,174</u>	<u>1,518</u>	<u>257,757</u>	<u>1,517</u>	<u>263,319</u>	<u>1,515</u>	<u>-4,670</u>	<u>0</u>	<u>258,649</u>	<u>1,515</u>

	2010 Actual		2011 Actual		2012 Estimate		Change		2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Other Obligations:										
CCC.....	54,678	59	40,954	16	4,651	0	-4,651	0	0	0
Obligations from Offsetting collections.....	138,369	1,158	158,636	1,627	159,458	1,627	440	0	159,898	1,627
ARRA.....	670	0	0	0	0	0	0	0	0	0
Homeland Security, HUB Relo, & Department.....	831	0	885	0	0	0	0	0	0	0
H1N1.....	3,909	5	2,914	0	10,320	0	-2,876	0	7,444	0
VHS.....	4,889	10	0	0	0	0	0	0	0	0
Subtotal, Other.....	203,346	1,232	203,389	1,643	174,429	1,627	-7,087	0	167,342	1,627
Total, Obligations.....	1,395,794	8,004	1,334,288	7,929	1,281,582	7,824	-55,626	-152	1,225,956	7,672
Lapsing Balances.....	1,581	0	10,480	0	0	0	0	0	0	0
Balance Available, EOY.....	258,774	0	292,014	15	262,050	12	-30,570	-2	231,480	10
Total, Available.....	1,656,149	8,004	1,636,782	7,944	1,543,632	7,836	-86,196	-154	1,457,436	7,682
Transfers In:										
CCC.....	-36,116	-56	-10,922	0	0	0	0	0	0	0
H1N1.....	-25,750	-25	0	0	0	0	0	0	0	0
Departmental.....	-144	0	-130	0	0	0	0	0	0	0
Rescission P.L. 112-10.....	0	0	1,730	0	0	0	0	0	0	0
Balance Available, SOY.....	-254,815	-339	-258,774	-45	-292,014	-15	29,964	3	-262,050	-12
Balance Available, SOY rescission.....	0	0	10,887	0	0	0	0	0	0	0
Recoveries: Other (Net).....	-25,132		-24,449	0	0	0	0	0	0	0
Total, Appropriation.....	\$1,314,192	7,584	\$1,353,394	7,899	\$1,251,618	7,821	-\$56,232	-151	\$1,195,386	7,670

a/ In 2013 APHIS is requesting to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. The figures used above in this exhibit are for comparability purposes only. The appropriations for the Equine, Cervid and Small Ruminant Health line item in 2010 was \$39,427,000, in 2011 it was \$36,826,000 and in 2012 it is \$22,000,000.

b/ The 2012 appropriation included \$7 million in funding not associated with a particular Agency line item. Of the amount, \$2 million was reprogrammed to address animal welfare enforcement and the remaining \$5 million was used to cover the removal of earmark funding, primarily impacting the Agency's Wildlife Services programs.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Justification of Increases and Decreases  
Salaries and Expenses

An offset of \$1,709,000 to fund an increase in pay costs.

Each line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

A decrease of \$5,300,000 throughout APHIS for operating efficiencies:

APHIS has identified areas that will result in cost savings of \$5.3 million for 2013. These initiatives include eliminating development funding for low priority information technology (IT) investments, further consolidating IT customer service support, switching telecommunications technology, and centralizing the authorization to purchase vehicles.

APHIS will continue its efforts to manage IT resources in a more efficient way while continuing to support mission critical priorities. Based on an Agency-wide ranking process, APHIS will reduce the development spending on the lowest priority IT investments. In addition, the Agency is currently piloting an effort to consolidate IT customer support at its headquarters facility. Based on current activities, the Agency anticipates savings through reduced spending on staffing and contract support.

In 2013, APHIS also intends to further centralize several services that have previously been carried out in various locations or by organizational units throughout the Agency. Although the current structure allows for individualized and tailored service, it has created redundancies. APHIS can achieve tangible cost savings through greater centralization and standardization. The estimated cost savings are not associated with a particular line item as they are services included in the base funding for each program.

(1) A net decrease of \$47,976,000 and 130 staff years for Safeguarding and Emergency Preparedness/Response:

A net decrease of \$11,884,000 and a decrease of 60 staff years for Safeguarding and Emergency Preparedness/Response - Animal Health.

(a) A net increase of \$5,358,000 for the Animal Health Technical Services program (\$32,500,000 and 64 staff years available in 2012).

Animal Health Technical Services enhance the provision of veterinary medical services by Federal, State, Tribal, and private animal health professionals. Tools made available by the Agency for acquiring and managing information, such as mobile devices equipped with surveillance applications and standardized data management systems, improve the availability of health information vital for maintaining and improving global market access. Traceability components work together to allow producers and practitioners to find animal diseases quickly, trace their origin, and prevent their spread. Private veterinarians trained and accredited by the Agency assist producers in meeting both export requirements and disease program standards allowing U.S. animals and animal products to compete in the global economy. Disease transmission and spread models developed and shared by the Agency allow improved planning for animal health incidents. APHIS will use \$37.858 million in 2013 to conduct program activities.

Animal disease traceability (+\$5.623 million)

APHIS introduced the National Animal Identification System (NAIS) in 2004 to enhance the United States' capability to minimize the spread of foreign and domestic animal diseases of concern. In 2009, USDA collected stakeholder views regarding the program from a variety of sources (e.g., *Federal Register-*

announced comment periods, listening sessions, and stakeholder input). This input enabled APHIS to develop a new traceability approach.

The new approach addresses many producer concerns about previous efforts to implement a national animal identification system by directing more responsibility to the State and Tribal level. Additionally, it offers basic, low-cost animal identification options that are well supported by most sectors of the industry as a starting point to increase the number of animals officially identified, particularly cattle. As a result, USDA has gained support for advancing animal disease traceability.

The improved disease traceability framework will focus attention where the impact of disease spread is the greatest—animals moving interstate. Rulemaking requiring official identification of livestock along with certificates that document the health of the animals (unless otherwise exempt) brings assurance that necessary levels of participation will be achieved. This rulemaking, as its primary benefit, will enhance the ability of the United States to regionalize and compartmentalize animal health issues more quickly, minimizing losses and enabling reestablishment of foreign and domestic market access with minimum delay in the wake of an animal disease event. Therefore, the Agency's animal disease traceability activities are crucial to minimizing and preventing economic damages to the U.S. livestock industry. The value of U.S. beef exports totaled \$2.8 billion in 2010. Protecting a half of a percent of these exports would justify the requested funding.

Unlike the previous system, this mandatory approach establishes regulations where current traceability efforts have had the greatest void, primarily in the cattle sector. While other species are included, current practices for those species result in adequate traceability. Those practices are being maintained.

The vast diversity of U.S. animal agriculture has made it difficult to deploy a "single, one-size-fits-all" solution similar to that of other countries. For example, the United Kingdom and Japan have a one-size-fits-all system for traceability since there is limited diversity in the ways that animal agriculture production is handled. The refocused framework for the United States relies on common standards to ensure compatibility of systems while supporting local flexibility. Tracing capability is the "end product," and the new framework establishes traceability performance standards to ensure progress is made. APHIS' objective is to decrease the amount of time needed to complete tracing animals, and the performance-based approach directs our efforts accordingly.

The new traceability approach also addresses many concerns that Congress identified with the NAIS. Included in those concerns were the ability to identify meaningful performance standards that can measure the value of the system and that are linked to cooperator funding, developing a mandatory system, and a reliable system that has reasonable operational costs. Traceability continues to be an important issue with trading partners. The new approach, while advancing traceability for disease response, will also help the U.S. animal and animal product exports to remain competitive in the global market place as trade requirements increasingly require such a system to allow access to markets.

APHIS proposes an increase of \$5.62 million for the refocused animal disease traceability program, which will provide about \$14 million for the effort in 2013. APHIS will use approximately \$1.5 million of the total requested budget to support information technology systems to administer animal identification devices, allocate location identifiers, and manage the animal disease traceability information systems. APHIS will continue to provide the premises identification systems to States and Tribes that wish to use these systems. Planned expenditures include the contract with the National Information Technology Center to operate and maintain these tracing systems. Approximately \$9.6 million of the total requested budget will be used to fund cooperative agreements with States and Tribes to implement the revised traceability plan and contracts allowing USDA to obtain additional low-cost identification tags. The remaining budget will be used to support policy and program administration.

The requested increase will enable APHIS to maintain the current level of infrastructure, and to maintain the progress in premises registration and data collection and management that the program has made thus far. The proposed funding level more accurately reflects how much the program needs to carry out essential activities and retain the advances made to date.

Other reduction (-\$265,000)

A decrease of \$265,000 is requested for this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$24,000)

The Animal Health Technical Services line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (b) A net increase of \$403,000 for the Aquatic Animal Health program (\$2,261,000 and 22 staff years available in 2012).

APHIS supports efforts to protect the health and thereby improve the quality and productivity of aquatic animal industries. APHIS conducts activities that prevent the introduction or spread of reportable aquatic animal pathogens into farmed populations. The Agency also collaborates with other relevant agencies and stakeholders to prevent the spread of aquatic animal pathogens into wild aquatic animal populations. APHIS maintains regulations and program standards that guide aquatic animal health activities at both the Federal and State/Tribal level. APHIS will use \$2.664 million in 2013 to conduct program activities.

Increase aquatic animal health surveillance (+\$422,000)

In 2012, APHIS and the National Aquatic Animal Health Task Force developed and began implementing a surveillance plan to determine whether or not the infectious salmon anemia virus (ISAV) was present in the Pacific Northwest. The ISAV surveillance plan required APHIS to conduct two years of targeted surveillance. The additional funding requested in 2013 will allow APHIS to continue to work with State and Federal partners to carry out these efforts. This will include sampling and testing of wild, farmed, and hatchery-reared salmonids.

Other reduction (-\$19,000)

A \$19,000 decrease is requested for this line related to the Agency-level operating efficiencies.

Pay increase – redirect (\$8,000)

The Aquatic Animal Health line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (c) A decrease of \$2,259,000 for the Avian Health program (\$52,000,000 and 196 staff years available in 2012).

The Agency conducts monitoring and surveillance activities to quickly identify, eliminate, prevent and control the spread of poultry diseases in the commercial poultry industry and live bird marketing systems of the United States. APHIS also has safeguards in place to protect against the introduction of avian influenza and other poultry diseases of concern into the United States such as import restrictions, anti-smuggling activities, and international capacity building activities related to highly pathogenic avian influenza detection, response, and control. These activities ensure compliance with State and Federal regulations and program standards, promote and improve safe trade in poultry and poultry products, and serve as an early warning system to rapidly detect and prevent spread of avian diseases in the United States. APHIS will use \$49.741 million in 2013 to conduct program activities.

Reduce operations based on knowledge gained in recent years (-\$1.91 million)

USDA has both an international and domestic role in controlling the spread of avian influenza (AI) and reducing its effects to the economy and public health. Internationally, USDA is working closely with organizations such as the World Organization for Animal Health (OIE), the United Nations' Food and Agriculture Organization, and the World Health Organization to assist highly pathogenic avian influenza H5N1-affected regions with disease prevention, management, and eradication activities. By helping these countries prepare for, manage, or eradicate highly pathogenic avian influenza H5N1 outbreaks, USDA has reduced the risk of the disease spreading from overseas to the United States. Domestically, USDA protects against the introduction of highly pathogenic avian influenza H5N1 in the United States. Surveillance of both wild and commercial bird populations serves as an early warning system to rapidly detect and take measures to prevent the spread of the disease in the United States. In the event of a detection of highly pathogenic avian influenza, State personnel will be the primary responders with additional assistance from their Federal counterparts in APHIS. APHIS and State animal health officials work cooperatively with the poultry industry to conduct continued surveillance of breeding flocks, and at slaughter plants, live-bird markets, livestock auctions, and poultry dealers. The Agency strives to prevent and control H5 and H7 AI from entering and spreading in commercial and backyard poultry flocks and causing significant economic damage.

The improving global AI situation and the completion of significant preparedness projects will allow APHIS to decrease spending on these activities. In addition, with knowledge gained regarding AI in wild bird populations, APHIS can reduce levels of testing and investigations conducted of mortality events in wild birds, primarily conducted through cooperative agreements. At the requested funding level, APHIS will be able to maintain program activities designed to protect domestic poultry (e.g., commercial production and live bird markets) and detect disease introduction into U.S. poultry.

Other reduction (-\$349,000)

An additional decrease of \$349,000 is requested for this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$73,000)

The Avian Health line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (d) A decrease of \$8,697,000 and 24 staff years for the Cattle Health program (\$99,000,000 and 570 staff years available in 2012).

The Cattle Health program is designed to rapidly detect certain devastating diseases that could affect our nation's livestock population and harm the economy, and prevent the spread of any endemic cattle diseases of concern. Through partnerships with a variety of cooperators, including State animal health and wildlife agencies, other governmental agencies, universities, Native American Tribes, and related livestock industries, the program protects the U.S. cattle population against significant losses by quickly locating foreign, emerging, and domestic animal diseases and limiting their spread. This minimizes production losses and helps to maintain market viability. Additionally, by conducting surveillance to find animal diseases, the system also verifies and documents for our international trading partners that certain diseases do not exist in the U.S. animal population, thus facilitating trade. All of the surveillance plans are measured against World Organization for Animal Health (OIE) standards. Other countries use these standards to conduct evaluations of the USDA's animal health programs to set import requirements. APHIS also works cooperatively with Mexico, Panama, and other countries in Central America, to maintain a barrier to screwworm, a parasite that can cause great damage to domestic livestock and other warm-blooded animals. APHIS will use \$90.303 million in 2013 to conduct program activities.

Reduce lower priority program activities (-\$1.542 million)

APHIS has identified two areas related to cattle health that can be reduced or eliminated in 2013. The Agency proposes to modify the level of surveillance for brucellosis and eliminate Federal contributions towards managing Johne's disease to focus on higher priorities related to cattle health.

Johne's disease is a chronic, infectious, and usually fatal intestinal disease of cattle that also occurs in sheep, goats, and deer. The disease is widely distributed throughout the world. First discovered domestically in 1908, it is now found in all regions of the United States. APHIS significantly reduced the Federal role in the disease surveillance program in 2012 and is requesting the elimination of all Johne's disease funding in 2013, which means no longer providing support and funding to the Agency's program cooperators. Analysis of the National Johne's Demonstration Herd data was completed in 2010 and the Federal government's primary role in the project concluded in 2011. APHIS published uniform program standards for the Voluntary Bovine Johne's Disease Cooperative Program in September 2010. States can use these standards to develop their own programs. Since Johne's disease is endemic in the United States (highly endemic in the case of the dairy industry, with more than 68 percent of herds infected), truly effective control measures can only be implemented on individual premises by educated producers. This type of case-by-case intervention is already happening on the part of informed producers. The 2007 National Animal Health Monitoring System Dairy Study and the 2008 Johne's Disease Integrated Programs Producer Survey indicated that approximately 35 percent of producers have Johne's disease control measures in place. In another survey that the Dairy Farmers of America recently conducted, 65 percent of the 9,853 member producers surveyed stated that they had control practices in place. These statistics support the belief that, if given the proper information about disease management tools, industry is willing to work towards disease control.

APHIS will reassign impacted staff to other cattle health activities as practical and reduce overall staff years by eliminating positions when vacancies arise. At the requested funding level, APHIS will continue to work on disease detection, management, and where possible eradication of diseases that significantly threaten cattle health in the United States.

Amend cattle epidemiology methods (-\$6.522 million)

APHIS has been working on several statistical and epidemiological methods to increase the efficiency of animal health surveillance without sacrificing confidence of industry and trading partners in our surveillance system. These efficiency methods include: using statistics to determine the surveillance levels needed to achieve the objectives of disease detection for each animal species and given disease; using targeted surveillance focusing on animals with a higher probability of disease; leveraging historical data; combining surveillance streams; integrating disease testing where one sample is tested for multiple diseases; and applying benefit-cost analysis to measure the value of the information received from the dollars spent. By applying these efficiency methods, APHIS can significantly reduce sample collection needed for surveillance in cattle. APHIS intends to apply some or all of these to the current brucellosis surveillance plan. With the prevalence of brucellosis virtually zero in most States, surveillance levels can be modified to focus on detecting brucellosis if it re-occurs. APHIS will reassign staff to other cattle health activities as practical and reduce overall staff years by eliminating positions when vacancies arise.

Other reduction (-\$633,000)

An additional decrease of \$633,000 is requested for this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$207,000)

The Cattle Health line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

(e) A decrease of \$1,324,000 and 7 staff years for the Equine and Cervid Health program.

APHIS is requesting to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. Of the \$22 million appropriated in 2012, APHIS requests \$5.05 million and 24 staff years be designated for the Equine and Cervid Health program.

APHIS supports efforts to protect, and thereby improve, the quality and productivity of the equine and cervid industries. Activities of the Equine and Cervid Health program range from monitoring and surveillance for disease, to investigation and response actions when health issues relevant to the industries are identified. APHIS also maintains regulations and program standards that guide equine and cervid activities at the Federal, State and Tribal levels, and it provides planning, outreach, and education to these sectors of agriculture. APHIS will use \$3.726 million in 2013 to conduct program activities.

Reduce lower priority program activities (-\$1.295 million)

APHIS will reduce lower priority equine and cervid program activities in 2013, including eliminating funding to address chronic wasting disease (CWD). CWD is a degenerative neurological illness affecting elk and deer (cervids) in North America. APHIS has determined that continued efforts to manage CWD are not practical and therefore considers this to be a low priority for the Agency.

APHIS is requesting to eliminate Federal contributions for addressing CWD. In 2012, APHIS will publish uniform standards for a voluntary Federal-State cooperative CWD Herd Certification Program (HCP) and interstate movement requirements. Many States have herd certification programs in place, and the incidence of CWD detections in farmed cervids is decreasing. With the regulatory framework in place, continued APHIS activity, while useful, is no longer essential. Stakeholders can continue to carry on program activities. The success of the voluntary HCP is based upon cooperation and shared responsibility among the Federal government and State and local interests. However, since these are local or regional disease spread issues, State and local governments are better positioned to take a more active role and to better anticipate and plan for local or regional needs. APHIS will continue to conduct higher priority equine and cervid health activities and address concerns when identified.

APHIS will reassign staff years to other Equine and Cervid Health activities as practical and reduce the overall staff years by eliminating the positions when vacancies arise.

Other reduction (-\$29,000)

An additional \$29,000 decrease is requested for this line item related to the Agency-level operating efficiencies.

Pay increase – redirect (\$6,000)

The Equine and Cervid Health line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

(f) A decrease of \$485,000 for the National Veterinary Stockpile program (\$2,750,000 and 1 staff year available in 2012).

The National Veterinary Stockpile (NVS) supports prevention, control, and eradication efforts related to animal diseases. APHIS founded the program to comply with the requirements of Homeland Security Directive 9 (HSPD-9), which establishes a national policy to protect against terrorist attacks on agricultural and food systems. When it commenced operations, the NVS program established policies and procedures, analyzed and acquired logistical capabilities, and leveraged lessons learned by the Strategic National Stockpile at the Centers for Disease Control and Prevention. NVS established procedures to deliver initial inventory to incident sites within 24 hours (a requirement of HSPD-9). The NVS has also created stock

rotation, extension, and acquisition processes to minimize costs while achieving program readiness. This approach ensures that the NVS delivers critical veterinary supplies that are safe and ready to use by responders. The NVS multi-agency Strategic Steering Committee further ensures that the program addresses, in a prioritized manner, animal disease agents that pose a threat to the Nation. APHIS will use \$2.265 million in 2013 to conduct program activities.

Reduced operational spending (-\$469,000)

The NVS program has been successful in obtaining countermeasures for the 17 most significant disease threats (3 with full countermeasures and 14 with partial countermeasures). APHIS proposes to scale back spending on replenishing expiring equipment, acquiring and staging additional countermeasures, and conducting training and exercises to test deployment of Agency resources. At the requested funding level, APHIS will maintain its ability to respond within 24 hours to an emergency, and will only maintain countermeasures currently in place.

Other reduction (-\$16,000)

An additional decrease of \$16,000 is requested for this line item related to the Agency-level operating efficiencies.

Pay increase – redirect (\$1,000)

The National Veterinary Stockpile line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

(g) A decrease of \$2,743,000 and 6 staff years for the Sheep and Goat Health program.

APHIS is requesting to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. Of the \$22 million appropriated in 2012, APHIS is requesting \$16.95 million be designated for the Sheep and Goat Health program.

APHIS supports efforts to protect, and thereby improve, the quality and productivity of the sheep and goat industries. Activities of the sheep and goat health program range from monitoring and surveillance for disease, to investigation and response actions when health issues relevant to the industries are identified. APHIS also maintains regulations and program standards that guide sheep and goat activities at both the Federal, State and Tribal levels. APHIS also provides planning, outreach, and education to these sectors of agriculture. APHIS will use \$14.207 million in 2013 to conduct program activities.

Modify program activities that address scrapie (-\$2.587 million)

Scrapie is a fatal, degenerative, infectious disease affecting the central nervous system of sheep and goats. The purpose of the Agency's national scrapie effort is to eradicate classical scrapie from the United States. The goal is to do so quickly and efficiently in order to open up export markets for both live animals and animal products, prevent losses in productivity, and protect the U.S. sheep and goat industry from the risk that the disease will be perceived as a human health risk or a threat to wildlife.

Cooperative efforts with States, allied industry, accredited veterinarians, and sheep and goat producers have reduced the prevalence of classical scrapie in the U.S. sheep population by 85 percent from 2003 to 2010. Achieving eradication requires maintaining many program activities at current levels; however, there are some flock certification activities that can be reduced. Specifically, APHIS can reduce the costs associated with the Scrapie Flock Certification Program (SFCP), a voluntary program within the National Scrapie Eradication Program. There are currently three categories in the SFCP. One category, *Complete Monitored*, is being considered for elimination because while popular, the standards developed and implemented through this category are not entirely effective in detecting infected flocks prior to certification. The majority of producers currently participating in this category are expected to either

withdraw from the SFCP, or join another category that would be revised to be less costly to APHIS and have greater flexibility for participants. In addition to changes in the SFCP, APHIS also anticipates reduced costs due to the declining need for disease response that has resulted from the reduction in scrapie prevalence. At the proposed funding level, APHIS projects that the percent of black-faced sheep sampled at slaughter that test positive for classical scrapie will be less than 0.13 percent, equivalent to the anticipated program performance in 2012.

Other reductions (-\$156,000)

A \$59,000 decrease in this line is due to other minor programmatic changes.

A \$97,000 decrease is requested for this line item related to the Agency-level operating efficiencies.

Pay increase – redirect (\$39,000)

The Sheep and Goat Health line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (h) A decrease of \$2,658,000 and 21 staff years from the Swine Health program (\$23,000,000 and 127 staff years available in 2012).

APHIS protects the Nation's commercial swine herd through surveillance activities, rapid identification of disease events, and quick response to those events, APHIS assists in disease prevention by educating stakeholders on how diseases are spread and how to protect herds from that spread. APHIS' activities strengthen animal agriculture and trade by providing the information necessary to ensure trading partners and U.S. swine producers that the commercial swine herd is free of diseases of concern. APHIS will use \$20.342 million in 2013 to conduct program activities.

Modify swine surveillance efforts (-\$2.515 million)

APHIS has been working on several statistical and epidemiological methods to increase the efficiency of animal health surveillance without sacrificing confidence of industry and trading partners in our surveillance system. These efficiency methods include: using statistics to determine the surveillance levels needed to achieve the objectives of disease detection for each animal species and given disease; utilizing targeted surveillance focusing on animals with a higher probability of disease; leveraging historical data; combining surveillance streams; integrating disease testing where one sample is tested for multiple diseases; and applying benefit cost analysis to measure the value of the information received from the dollars spent. By applying these efficiency methods, APHIS can significantly reduce sample collection needed for surveillance in swine. APHIS will continue to conduct surveillance for major diseases of concern. APHIS will reassign staff to other swine health activities as practical and reduce overall staff years through the elimination of positions when vacancies arise.

At the proposed level of funding, the U.S. surveillance efforts will be aligned with many of our major trading partners. APHIS will retain the ability to modify surveillance to increase the levels of detection in the event of a disease outbreak or other circumstances that warrant such an action to protect the health of the U.S. swine population.

Other reduction (-\$143,000)

An additional \$143,000 decrease is requested for this line item related to the Agency-level operating efficiencies.

Pay increase – redirect (\$43,000)

The Swine Health line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (i) A decrease of \$697,000 and 2 staff years for the Veterinary Biologics program (\$16,457,000 and 108 staff years available in 2012).

APHIS' Center for Veterinary Biologics (CVB) regulates veterinary biological products (vaccines, bacterins, antisera, diagnostic test kits, and analogous products) available for the diagnosis, prevention, and treatment of animal diseases, to ensure that these products are pure, safe, potent and effective in accordance with the Virus Serum Toxin Act. The CVB accomplishes its mission through the thorough evaluation of prelicensing dossiers, testing of products submitted pre- and post-licensure, inspection of facilities and products, investigations of non-compliance, issuance of export certificates, and post-marketing surveillance. This comprehensive regulatory approach is the most efficient and effective way to ensure that only quality, Federally licensed veterinary biological products are available to U.S. consumers. APHIS will use \$15.760 million in 2013 to conduct program activities.

Reduce operational spending (-\$587,000)

APHIS initiated a business process improvement plan in 2011 under the Department's Lean Six Sigma initiative with the objective of decreasing turnaround times for license submissions. Some of these process improvements, including the electronic workflow of documents, are projected to increase program efficiency. APHIS projects additional savings from reductions in reagent/reference production, laboratory testing, and animal use. APHIS will continue working with industry partners to develop, manufacture, and maintain more than 2,000 APHIS-licensed biologics products. Due to these process improvements, this reduction is not expected to negatively impact the licensing of veterinary biologics.

APHIS will reassign staff to other activities as practical and reduce overall staff years through the elimination of positions when vacancies arise.

Other reduction (-\$110,000)

An additional \$110,000 decrease is requested for this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$40,000)

The Veterinary Biologics line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (j) A net decrease of \$156,000 for the Veterinary Diagnostics program (\$31,611,000 and 190 staff years available in 2012).

APHIS is requesting a net decrease of \$156,000 consisting of a \$64,000 increase related to minor program changes and a decrease of \$220,000 related to the Agency-level operating efficiencies. APHIS will use \$31.455 million in 2013 to conduct program activities.

Pay increase – redirect (\$71,000)

The Veterinary Diagnostics line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (k) A net increase of \$1,374,000 for the Zoonotic Disease Management program (\$9,000,000 and 45 staff years available in 2012).

The convergence of people, animals, plants and the ecosystem has created a dynamic that links the well-being of all into a shared "One Health" (OH) approach. The Zoonotic Disease Management line item funds APHIS efforts to provide expertise, infrastructure, networks, and systems to partner effectively in a multi-

disciplinary, multi-level (local, State, national, and international) collaborative approach to promote healthy animals, people, plants ecosystems, and socio-economic well-being.

The Zoonotic Disease Management line item funds APHIS operations, communications, and training efforts to create an infrastructure to support allied Federal, State, Tribal and local governments in responding to high-consequence public health events having an animal health component. Zoonotic Disease management resources allow APHIS to leverage existing knowledge, skills, and abilities, while building new competencies to proactively provide OH services. APHIS uses Zoonotic Disease Management funding to support five strategic OH goals: (1) Align APHIS policy, programs, and infrastructure with the Agency OH vision; (2) Build new collaborations and partnerships, and sustain existing relationships in the OH community; (3) Spearhead outreach and communication to build credibility, trust, and respect in the OH community, while enhancing visibility for the veterinarian's role in the control of zoonotic diseases; (4) Transform the APHIS culture and workforce, and build new skill sets to support and integrate the Agency's OH principle; and (5) Apply APHIS' unique competencies to support the OH community. APHIS will use \$10.374 million in 2013 to conduct program activities.

*Increase zoonotic disease management efforts (+\$1.447 million)*

APHIS requests an increase of \$1.447 million for zoonotic disease management efforts. At the requested funding level, APHIS proposes to support increased investigations and response actions for health events at the human-animal-ecosystem interface. APHIS will fund cooperative agreements with States and Tribes and university partners to support surveillance, tracebacks, and data analysis. APHIS will also support diagnostic sample collection and testing contracts in support of such emerging issues as novel influenza viruses in non-traditional species such as cats, dogs and horses. Additionally, preparedness activities in association with the Department of Health and Human Services' Office of Force Readiness and Deployment on Tribal lands will be expanded to provide coordinated deployment opportunities and joint humanitarian missions across the human, animal and environmental interface. Also, the European experience with Q-Fever has demonstrated the need for a greater role for the Federal Government to apply national coordination in association with industry and our public health counterparts to surveillance, development of guidance for at risk farm communities as well as developing training and educational programs on Q-Fever. Over the last twenty years several outbreaks of Q-fever have been described worldwide, including Europe. Other European countries such as Belgium, Denmark, Ireland, Portugal, and Scotland have also experienced cases during this time period. During 2007 and 2008 the Netherlands experienced 190 and 1,000 cases respectively with six deaths occurring in 2009. In 2010, the Netherlands experienced 247 cases. Each of these is a significant increase over the average of 17 cases per year recorded from 1970 to 2006.

*Other reduction (-\$73,000)*

A \$73,000 reduction is requested for this line item related to the Agency-level operating efficiencies.

*Pay increase – redirect (\$17,000)*

The Zoonotic Disease Management line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

A net decrease of \$28,899,000 and 54 staff years for Safeguarding and Emergency Preparedness/Response – Plant Health.

- (1) A decrease of \$2,375,000 and 19 staff years for the Agriculture Quarantine Inspection program (\$27,500,000 and 364 staff years available in 2012).

The Agriculture Quarantine Inspection (AQI) program protects the United States from the risks associated with the introduction of invasive agricultural pests and diseases. APHIS and the Department of Homeland Security's Customs and Border Protection cooperate to carry out this program, and fund the programs

through a combination of appropriations and user fees. APHIS receives appropriated funding to conduct pre-departure agricultural inspections of passengers and cargo traveling from Hawaii, Puerto Rico, and other islands to the mainland United States. APHIS will use \$25.125 million in 2013 to conduct program activities.

Reduce operational spending (-\$2.199 million)

In Hawaii, APHIS inspectors conduct pre-departure inspections on all Hawaiian Islands of passengers on flights en route to the mainland. In 2011, APHIS conducted a portion of the pre-departure activities through a reimbursable agreement funded by the Hawaii Department of Transportation. Should the State cooperator continue to fund the operations at the current level, there will be no negative impacts resulting from the requested decrease. However, if the overall program funding is reduced, the requested reduction will be achieved primarily through reducing or closing operations in certain locations, and reducing staffing through attrition and the expiration of term appointments. Travelers and airlines may experience delays or inconveniences associated with changes in the inspection process resulting from the reduced operations; however, the program will work to mitigate these delays and maintain focus on ensuring that products will reach the mainland without introducing invasive pests and diseases. The program projects the effectiveness of the pre-departure inspection program (the percentage of prohibited items that are intercepted) to decrease slightly from the 2011 and the estimated 2012 rate of 97.4 percent as the program adjusts operations.

Other reduction (-\$176,000)

An additional \$176,000 decrease is requested for this line item related to the Agency-level operating efficiencies.

Pay increase – redirect (\$131,000)

The AQI line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (m) A decrease of \$8,933,000 and 5 staff years for the Cotton Pests program (\$17,848,000 and 61 staff years available in 2012).

The goal of the Cotton Pests program is to eradicate the boll weevil and pink bollworm from all cotton-producing areas of the United States and northern Mexico in cooperation with States, the cotton industry, and Mexico. For decades, these two pests have cost cotton growers tens of millions of dollars each year in control costs and losses to cotton crops. APHIS provides national coordination, operational oversight, technology development (such as sterile moths for pink bollworm eradication), and a portion of the funding for the effort. Program partners (States and industry) have provided more than two-thirds of the funding for the boll weevil eradication effort and most of the operational funds for pink bollworm eradication. APHIS will use \$8.915 million in 2013 to conduct program activities.

Cotton Pests eradication efforts (-\$8.871 million)

The Cotton Pests program has eradicated the boll weevil from 98 percent of 16 million acres of U.S. cotton and pink bollworm from 99 percent of infested cotton acreage. Eradication progress has been delayed by weather (tropical storms and high winds that hinder treatments and move the insects around) and drug violence along the Texas/Mexico border. APHIS expects to eradicate the boll weevil in 2013, with the possible exception of the lower half of the Lower Rio Grande Valley of Texas. That area is most affected by both high winds and security concerns. To enhance the probability of success in this area, the program is collaborating with its counterparts in Mexico on a technical working group to develop optimal eradication strategies. APHIS and cooperators are also making progress towards pink bollworm eradication. With the proposed decrease, APHIS would focus on sterile moth production and release for pink bollworm eradication, but eradication could be delayed by a few years. APHIS would expect increased cost share from cotton growers and State partners for trapping and regulatory activities in areas where eradication activities are recently completed. When eradication concludes, the program will

transition to long-term surveillance to check for re-infestation of U.S. cotton acreage and protect the investment made in this eradication effort.

Other reduction (-\$62,000)

An additional \$62,000 decrease is requested for this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$21,000)

The Cotton Pests line item will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (n) A decrease of \$201,000 for the Field Crop and Rangeland Ecosystems Pests program (\$9,068,000 and 60 staff years available in 2012).

APHIS is requesting a \$139,000 decrease for the Field Crop and Rangeland Ecosystems Pests program related to minor program changes. An additional decrease of \$62,000 is also requested for this line item related to the Agency-level operating efficiencies. APHIS will use \$8.867 million in 2013 to conduct program activities.

Pay increase – redirect (\$22,000)

The Field Crop and Rangeland Ecosystems Pests program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (o) A decrease of \$1,883,000 for the Pest Detection program (\$27,500,000 and 145 staff years available in 2012).

The Pest Detection program strengthens APHIS' emergency preparedness efforts through the early detection of exotic, harmful, or economically significant plant pests, pathogens, and noxious weeds. Discovering these pests before they spread will prevent small outbreaks from becoming emergencies. APHIS and its State cooperators carry out surveys for pests of regulatory significance through the Cooperative Agricultural Pest Survey (CAPS) program. The CAPS program enables APHIS to maintain a comprehensive network of cooperators and stakeholders to facilitate its mission of safeguarding America's plant resources. APHIS will use \$25.617 million in 2013 to conduct program activities.

Reduce low-risk survey efforts (-\$1.703 million)

APHIS provides national coordination for the program and develops policies and procedures for commodity-based and resource-based surveys. These surveys enable APHIS and cooperators to target high-risk hosts and commodities, gather data about pests specific to a commodity, and establish better baseline data about pests that were recently introduced in the United States. In 2011, the program and its cooperators conducted 130 commodity- and taxon-based surveys that included priority pests of national concern, with an average of 7 pests per survey and 3 surveys per state. Using this bundled approach, where multiple pests are surveyed per site, the program increased its survey capacity and greatly exceeded its performance target of 38 for the number of exotic pests surveyed with an actual of 295 for 2011.

APHIS is requesting a decrease of \$1.703 million in 2013 for the CAPS program. With this decrease, the program would reduce cooperative funding provided to State partners or potentially eliminate agreements with low-risk States for survey efforts while maintaining focus on high priority pests and diseases. The ongoing effort to develop commodity and resource-based surveys will help the program continue to survey for high-risk pests efficiently. The program plans to survey at least 200 target pests on the CAPS Priority Pest List in 2013.

The program will maintain its focus on high priority efforts.

Other reduction (-\$180,000)

An additional \$180,000 decrease is requested in this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$54,000)

The Pest Detection program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (p) A decrease of \$893,000 and 2 staff years for the Plant Protection Methods Development program (\$20,600,000 and 140 staff years available in 2012).

The Plant Protection Methods Development program supports APHIS' plant health programs by developing and/or validating advanced scientific and technical tools to detect, diagnose, and control plant pests and diseases. The program plays an important role in APHIS' pest exclusion efforts by developing methods to detect pests in commodities of trade, to ensure that pest mitigation measures used on imported products are effective, and, verify that they are applied correctly. Program employees also develop and implement biological control technologies targeting pests that affect U.S. agricultural production and natural areas. APHIS will use \$19.707 million in 2013 to conduct program activities.

Reduce investments in lower priority initiatives (-\$755,000)

APHIS is requesting a decrease of \$755,000 in 2013 related to the biological control initiatives and other methods development activities. With the requested decrease, the program would reduce investments in biological control initiatives and other methods development activities, while maintaining focus on the Agency's highest priority pests. Primary emphasis will be on pests of national/regional concern that are present and causing significant damage in the United States. As a result, the program will reduce its performance target for the total number of species identified, studied, or imported as potential biological control agents from the current target of 35 to 30. The program will also reduce the target number of new or improved regulatory treatments for commodities of trade from five to four. Along with these reductions in workload, the program will reduce staff years by 2 through attrition.

Other reduction (-\$138,000)

An additional \$138,000 decrease is requested for this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$52,000)

The Plant Protection Methods Development program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (q) A decrease of \$2,895,000 and 9 staff years for the Specialty Crops Pests program (\$153,950,000 and 700 staff years available in 2012).

This program protects the production of U.S. specialty crops (such as fruits and vegetables, tree nuts, horticulture, and nursery crops) from agricultural pest and disease threats. If a pest or disease is detected, the Agency prevents spread while minimizing losses within affected areas. This allows USDA and stakeholders time to develop new tools to combat the agricultural threats if none currently exist, and also allows for the continued availability of specialty crop products to U.S. consumers and for international trade. Among the pests and diseases the program will continue to address are exotic fruit flies, the light brown apple moth, the glassy-winged sharpshooter (GWSS), the European grapevine moth (EGVM), pale

cyst nematodes (PCN), and a variety of citrus diseases. APHIS will use \$151.055 million in 2013 to conduct program activities.

The Specialty Crops Pests program prevents the establishment and spread of exotic fruit flies in the United States through three strategies: 1) detecting, responding to, and controlling introductions of fruit flies, and preventing outbreaks through sterile fly release programs; 2) ensuring that Mediterranean fruit fly (Medfly) does not move north of the State of Chiapas, Mexico; and 3) eradicating the Mexican fruit fly (Mexfly) from Texas and northern Mexico along the Lower Rio Grande Valley (LRGV).

Light Brown Apple Moth (LBAM) is an invasive pest that reproduces rapidly and can attack more than 2,000 types of plants and trees throughout the United States. The pest has been detected in 22 California counties, 16 of which are Federally regulated. APHIS and the California Department of Food and Agriculture (CDFA) conduct LBAM control and regulatory activities to maintain trade and interstate commerce and protect numerous industries and jobs associated with the agricultural sector.

The GWSS is a vector for Pierce's Disease (PD), which significantly threatens many California crops, including grapes, citrus, stone fruits, almonds, and alfalfa. APHIS and CDFA conduct control activities to reduce GWSS populations and minimize the negative impact of PD and the GWSS, facilitating movement of nursery products and bulk citrus without undue regulatory restrictions.

APHIS and CDFA are also addressing another pest that threatens grape and other crops in California, EGVM. The program and its partners conduct an intensive survey and regulatory effort, complemented by industry-led treatments in commercial production areas, aimed at controlling and eliminating this pest.

APHIS' goal with regard to citrus pests and diseases is to sustain the United States' citrus industry, maintain growers' access to export markets, and safeguard citrus-growing States from a variety of citrus diseases and pests. APHIS works with citrus-producing States, industry stakeholders, universities, and USDA's Agricultural Research Service to develop and promote best practices for fruit and nursery stock to prevent or reduce disease spread. In addition, APHIS provides for early detection and rapid response to new citrus pest and disease threats.

PCN is a major pest of potato crops in cool-temperate areas and is one of the most difficult potato pests to control. APHIS, the Idaho State Department of Agriculture, and the Idaho potato industry are working to control PCN in Idaho through extensive soil survey and fumigation of infested fields.

*Reduction related to adjusted cost share (-\$1.836 million)*

APHIS is requesting a \$1.836 million decrease for the program in 2013. This reduction will allow APHIS to pursue opportunities for industry partners to cover costs of treatments needed on commercial properties. Most of the Specialty Crops Pests programs are cooperative in nature, and APHIS will continue to work closely with partners while piloting this initiative for commercial growers to assume more financial responsibility for treatments on their properties.

*Other reduction (-\$1.059 million)*

An additional \$1.059 million decrease is requested for this line related to the Agency-level operating efficiencies.

*Pay increase – redirect (\$263,000)*

The Specialty Crop Pests program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (r) A decrease of \$11,719,000 and 19 staff years for the Tree and Wood Pests program (\$55,638,000 and 321 staff years available in 2012).

The Tree and Wood Pests program protects forests, private working lands, and natural resources from devastating pests such as the Asian longhorned beetle (ALB) and the emerald ash borer (EAB). Numerous native hardwood tree species that are common throughout U.S. forests and urban landscapes are hosts to these pests. Conserving forests enhances the economic vitality of rural communities by supporting forest-related industries, recreation, and the overall livability of communities. APHIS cooperates with State and local agencies and organizations to conduct regulatory and outreach activities as part of the tree and wood pest control and eradication efforts. APHIS will use \$43.919 million in 2013 to conduct program activities.

*Reduce activities to focus on areas where we can achieve success (-\$11.411 million)*

APHIS continues to face challenges in addressing tree and wood pests such as EAB, and seeks to efficiently use resources to address pests where success is achievable, such as eradicating the ALB. The EAB is an exotic forest pest that has killed millions of ash trees in the United States. First found in Michigan in 2002, it has spread to 14 additional States (Illinois, Indiana, Iowa, Kentucky, Maryland, Minnesota, Missouri, New York, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin) and continues to spread. Due to the lack of tools available, the Agency changed focus from an eradication strategy to preventing the human assisted spread and minimizing the impacts of natural spread of the pest through early detection and quarantine regulations.

With the requested decrease, the Agency would further reduce its role in addressing the EAB and scale back activities to manage an outreach program, provide national coordination and oversight, and continue developing biological control agents. Biological control is the most promising option for managing EAB populations over the long term. In 2013, APHIS proposes to release biological control agents in all States that request releases. Affected States would be responsible for conducting the regulatory activities that APHIS now manages, and all cooperative agreements would be cancelled. APHIS would also continue to significantly reduce staffing. This reduction would be achieved through attrition, allowing term appointments to expire, and shifting employees to other programs where possible. The program will use available carryover to help transition to the lower funding level.

Another tree and wood pest the program addresses is the ALB. ALB eradication activities prevent potential multi-billion dollar losses to the maple syrup, timber, tree nursery, trade, and tourism industries. The annual contribution of forest-based manufacturing and forest-related tourism and recreation to the economies of Ohio, New York and New England is approximately \$35 billion.

The program has eradicated ALB from Chicago, Illinois; Islip, New York; and Jersey City, New Jersey. Eradication activities are ongoing in Massachusetts, other areas of New York and New Jersey, and Ohio. In Massachusetts, tree removal in the Worcester area is reducing ALB population levels. The New York program is continuing eradication confirmation surveys in Manhattan, and survey activities in Brooklyn, Queens, and Nassau-Suffolk County on Long Island. The New Jersey program is continuing eradication confirmation surveys in parts of Middlesex and Union Counties, as well as on Staten Island in New York City. In Ohio, the program is continuing regulatory activities, delimitation surveys, and tree removal activities.

With the proposed funding level for Tree and Wood Pests in 2013, APHIS would also reduce operational spending for the ALB program. The program would discontinue chemical treatments in the Worcester area and focus on surveys and tree removal. It may be more practical and cost-efficient to delay treatments until the infested area around Worcester is fully delimited, which will likely be in late 2013. Delaying the treatments would prevent a scenario where resources may be expended to treat trees that may later be found to be infested and, therefore, require removal. Any new trees that are found to be infested in 2013 would be removed.

Regulatory activities will continue to be a priority in all infested areas to ensure the containment of the infestation to the current regulated areas. The program will continue progressing toward national

eradication of ALB, but the time frame may be extended by 3 to 5 years for Ohio and Massachusetts. The programs in Queens and Central Long Island may also face delays. Nevertheless, the program expects to make progress in Staten Island and declare eradication in New Jersey and Manhattan by the end of 2013.

APHIS will continue to address the most devastating tree and wood pests in 2013, while maximizing the use of available resources.

Other reduction (-\$308,000)

An additional \$308,000 decrease is requested in this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$113,000)

The Tree and Wood Pests program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

A decrease of \$6,037,000 and 12 staff year for Safeguarding and Emergency Preparedness/Response –Wildlife Services

- (s) A decrease of \$4,788,000 and 7 staff years for the Wildlife Damage Management program (\$72,500,000 and 534 staff years available in 2012).

APHIS provides Federal leadership in managing problems caused by wildlife. The Wildlife Damage Management program prevents or reduces conflicts between people and wildlife. State agencies, county and municipal governments, private homeowners, farmers, ranchers, and other property owners rely on the Agency's expertise to help prevent, minimize, or manage wildlife damage that can impact agriculture, property, natural resources, and even threaten public health and safety. APHIS develops and uses wildlife damage management strategies that are biologically sound, environmentally safe, and socially acceptable. The Agency also reduces damage caused by wildlife to the lowest possible levels while at the same time reducing wildlife mortality. Agency biologists apply the integrated wildlife damage management approach to provide technical assistance and direct management operations in response to requests for assistance in addressing wildlife issues. APHIS will use \$67.712 million in 2013 to conduct program activities.

Reduce selected program activities and increase cooperator cost share (-\$4.313 million)

In 2013, APHIS proposes to reduce lower priority program activities, while maintaining focus on higher priorities related to wildlife damage management. The Agency would continue to provide certain services; however, it will require cooperators to increase their share of the costs. These activities include assistance to aquaculture producers, rabies bait disbursements, and non-critical aviation safety services.

APHIS will achieve savings by eliminating wildlife damage management assistance to aquaculture producers in approximately 14 States. This includes assistance to anglers, baitfish and crawfish producers, catfish farmers, fish hatcheries, sport fish producers for pond stocking, and tropical fish producers. APHIS will continue supporting the aquaculture industry by offering these services to cooperators on a reimbursable basis. Cooperators may also contract with private vendors who provide wildlife damage services. With the proposed decrease, APHIS will reduce the staff years by reassigning employees to other wildlife management activities and through attrition.

APHIS also proposes to reduce funding for rabies activities in States outside of the barrier zone for the Oral Rabies Vaccination program. APHIS will work with the impacted States to provide service on a reimbursable basis. APHIS will continue to focus on maintaining the current rabies barrier zones.

APHIS is also proposing to postpone equipment purchases and reduce non-critical activities at the Wildlife Services' Aviation Training Center (ATOC) in Cedar City, Utah. APHIS employees located at the Center coordinate aviation safety training for Agency aerial operations activities. With the requested decrease,

other less urgent expenditures, such as some new equipment purchases (e.g., new simulator and/or new helicopters), non-ATOC employee sponsored travel, pilot salary offsets, and state aircraft operating costs offsets will be postponed or reduced. Some non-critical services provided by the Training Center may continue to be offered if cooperators are willing to incur the direct costs associated with providing them. Safety is important to the APHIS, therefore employee training will continue to be provided as it is a core mission of the Center. The program will maintain its focus on critical, high priority efforts. APHIS will continue to help resolve wildlife damage to a wide variety of resources and reduce threats to health and human safety.

Other reduction (-\$475,000)

An additional \$475,000 decrease is requested for this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$198,000)

The Wildlife Damage Management program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (t) A decrease of \$1,249,000 and 5 staff years for the Wildlife Services Methods Development (\$18,000,000 and 164 staff years available in 2012).

APHIS' Wildlife Services' Methods Development conducts research and develops selective, effective, and socially responsible methods for the prevention and mitigation of damage caused by wildlife on agricultural production, and for the detection and prevention of wildlife diseases that may impact animal health and agricultural biosafety. Together with other agencies, producers, and industry, APHIS carries out research and methods development to prevent, control, and eliminate threats including reducing damage to timber resources caused by deer and black bears; removing beaver dams that block waterways and flood standing timber; developing environmentally safe pesticides to prevent crop depredations by birds and rodents; developing methods to prevent transmission of wildlife diseases to animal agriculture and humans; preventing property damage by wildlife; preventing damage to agriculture by invasive species; and reducing predation on livestock and wild game species. APHIS will use \$16.751 million in 2013 to conduct program activities.

Reduce selected program activities (-\$1.132 million)

In 2013, APHIS is proposing to reduce funding for long-term research and development activities on wildlife-aircraft strikes, while maintaining high priority public safety work. APHIS will focus its research and development activities on short-term projects to reduce wildlife-aircraft strikes by developing habitat management recommendations near and around airports. The Agency will reduce funding for its Sandusky, Ohio, field station and eliminate outdoor animal housing and testing that have conducted longer term exploratory research and development of on-board aircraft lighting systems that would alert birds early of approaching aircraft during take-offs and landings until extramural funding can be secured. Field and analytical research on evaluations of avian radar systems for bird-strike risk assessments (cooperator funded research) would continue.

APHIS also proposes to reduce funding for some invasive species research, while maintaining essential work to protect agriculture and natural resources. At the requested funding level, the Agency will reduce funding for the Hilo, Hawaii, field station's work on methods to prevent rodent damage to agricultural crops, island nesting seabirds and wildlife, and human and agricultural diseases originating from the Pacific Rim.

The Agency is also proposing to reduce staffing at the Hilo field station's building structure. The facility is not in compliance with current standards, including the requirements set forth in the Americans with Disability Act. APHIS will redirect staff within Hawaii to continue work on invasive species research. The program will maintain its focus on high priority efforts.

Other reduction (-\$117,000)

An additional \$117,000 decrease is requested for this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$59,000)

The Wildlife Services Methods Development program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

A decrease of \$1,883,000 and 4 staff years for Safeguarding and Emergency Preparedness/Response – Regulatory Services

- (u) A decrease of \$499,000 and 4 staff years for the Animal and Plant Health Regulatory Enforcement program (\$16,275,000 and 142 staff years available in 2012).

APHIS' Animal and Plant Health Regulatory Enforcement program ensures compliance with animal and plant health related regulations, and animal welfare and horse protection regulations, through comprehensive investigations, sound enforcement actions, and strong educational efforts. Professionally trained field investigators stationed throughout the United States conduct investigations, track unresolved violation cases, and coordinate investigative efforts within APHIS and with other Federal and State agencies. A small headquarters staff coordinates enforcement actions on a national basis, reviews and processes cases for formal administrative action or civil or criminal prosecution, develops uniform penalty guidelines, collects civil penalties, and coordinates activity between APHIS and USDA's Office of General Counsel. APHIS will use \$15.776 million in 2013 to conduct program activities.

Animal welfare enforcement efforts (-\$388,000)

APHIS requests a reduction of \$388,000 for the Animal and Plant Health Regulatory Enforcement program. APHIS' ability to effectively support inspection and education efforts with timely investigations and enforcement actions is critical to the success of the overall effort to address problematic dog dealers and other animal welfare violators. At the requested funding level, the Agency will reduce the impact of 4 staff years through the elimination of unfilled positions and attrition. The program projects conducting fewer investigations than in previous years, but recent business process improvement efforts will allow quicker and more effective action after investigation and enforcement actions occur. APHIS proposes to continue to implement changes in 2013 to make enforcement processes more efficient and effective. APHIS will continue its effective efforts against individuals who violate the Animal Welfare Act, which provides basic standards for the care and treatment of regulated animals, at the requested funding level.

Other reduction (-\$111,000)

An additional \$111,000 decrease is requested for this line item related to the Agency-level operating efficiencies.

Pay increase – redirect (\$51,000)

The Animal and Plant Health Regulatory Enforcement program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (v) A decrease of \$1,384,000 for the Biotechnology Regulatory Services program (\$18,135,000 and 92 staff years available in the 2012).

APHIS oversees a science-based regulatory framework for the safe development and use of genetically engineered (GE) organisms. APHIS is responsible for regulating the importation, interstate movement, and

field release of GE organisms that may pose a pest risk to plant health. Over the past two decades, APHIS has evaluated and determined nonregulated status for 87 petitions consisting of 151 plant lines. These approved GE organisms account for more than 90 percent of soybean, 80 percent of corn, and 80 percent of cotton adopted and grown by farmers in the United States. One of USDA's strategic goals is to "Help America promote agricultural production and biotechnology exports as America works to increase food security." APHIS will use \$16.751 million in 2013 to conduct program activities.

Modified program operations (-\$1.267 million)

USDA's APHIS is committed to maintaining an effective biotechnology compliance program for GE organisms and improving the GE crop deregulation process. After a GE organism has been tested and a developer can demonstrate that it does not pose a plant pest risk, the developer may petition APHIS for a determination of nonregulated status for that organism. When a GE organism is no longer regulated by the Agency, the developer is free to sell the product, making it available to growers. As of September 2011, APHIS was reviewing 22 pending petitions to request non-regulated status for GE crops, including 7 new petitions submitted in 2011. The petition review process involves multiple steps, including an environmental analysis required by the National Environmental Protection Act (NEPA), and currently takes an average of 3 years to complete. After conducting a business process improvement review using the Lean Six Sigma tool, APHIS has identified several changes that will reduce average timelines for reviewing deregulation petitions by 13 to 6 months to just over a year.

In 2012, the Agency faces one-time legal expenses that will use up most of the increase received this year, thus making this proposed decrease manageable. In 2013, APHIS will continue implementing process improvements. Specifically, APHIS will concentrate on further improving the petition process and strengthening NEPA documentation as well as enhancing its compliance program for crops still being field tested through increased education and outreach to GE developers. APHIS published 87 petitions in the *Federal Register* by the end of 2011 and projects this to increase to 93 at the end of 2012 and 99 at the end of 2013.

Other reduction (-\$117,000)

An additional \$117,000 decrease is requested in this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$35,000)

The Biotechnology Regulatory Services program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

A net increase of \$727,000 for Safeguarding and Emergency Preparedness/Response - Emergency Management

- (w) An increase of \$984,000 for the Contingency Funds program (\$1,000,000 and 15 staff years available in 2012).

APHIS' appropriation includes a contingency fund available for the control of outbreaks of insect, plant diseases, animal diseases, and for control of pest animals and birds to the extent necessary to meet emergency conditions. The Agency has utilized the funding to control such emergencies before they can spread and cause significant economic damage. In recent years, the Agency was able to conduct activities to address outbreaks of European grapevine moth, rabies, contagious equine metritis, and most recently the giant African land snail. APHIS requests an increase of \$984,000 to restore the line item to its previous funding level to ensure sufficient funds are available to implement emergency short term activities not otherwise provided for in the appropriation. With the full amount of funding, APHIS will be better able to promptly address outbreaks, decreasing the likelihood of pest and disease spread. APHIS will use \$1.984 million in 2013 to conduct program activities.

Pay increase – redirect (\$6,000)

Funds will be redirected internally, from program operations to cover this increase in pay for associated employees.

- (x) A decrease of \$257,000 for the Emergency Preparedness and Response program (\$17,000,000 and 91 staff years available in 2012).

APHIS requests a decrease of \$140,000 related to minor changes in program operations. An additional decrease of \$117,000 is requested for this line item related to the Agency-level operating efficiencies. APHIS will use \$16.743 million in 2013 to conduct program activities.

Pay increase – redirect (\$34,000)

The Emergency Preparedness and Response program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (2) A decrease of \$2,402,000 and 1 staff year for Safe Trade and International Technical Assistance

- (a) A net decrease of \$45,000 for the Agriculture Import/Export program (\$13,354,000 and 92 staff years available in 2012).

APHIS facilitates safe trade while protecting the country's agricultural and natural resources from plant and animal pests and diseases. The Agency protects these resources through various safeguarding measures including regulating imports through a managed-risk approach, engaging in the development of international standards, participating in international standard setting organizations, and resolving technical or scientific issues if a country refuses entry to agricultural exports. APHIS will use \$13.309 million in 2013 to conduct program activities.

Shifting priorities related to agricultural trade (+\$48,000)

APHIS requests a net increase of \$48,000 consisting of a \$725,000 increase for Lacey Act activities and a \$677,000 decrease for general import and export operations.

As amended in the 2008 Farm Bill, the Lacey Act prohibits the importation of any plant—with limited exceptions—taken or traded in violation of domestic or international laws. The amendments were designed to address illegal logging in other countries. Illegal logging is environmentally destructive and undermines markets for wood products produced in the United States. The Lacey Act amendments have strong support from a broad coalition of forest industry groups, labor unions, and environmental advocacy organizations. Among other things, the Lacey Act requires a declaration for imported shipments of regulated products. This declaration must contain the scientific name of the plant, the importation value, the quantity of the plant, and name of the country where the plant was taken. The declaration requirement covers a broad range of products from lumber and wood pulp to sporting goods, pharmaceuticals, and planes. APHIS is working within an interagency group representing the U.S. Forest Service, U.S. Department of Homeland Security's Customs and Border Protection, U.S. Trade Representative, U.S. Department of Justice, U.S. Department of State, U.S. Fish and Wildlife Service, the Council on Environmental Quality, and the U.S. Department of Commerce, to implement the provisions. APHIS and cooperating Agencies developed an implementation plan for a phased-in enforcement process with the most complex products being added in later phases.

APHIS began phased-in enforcement of the Lacey Act in May 2009 and currently collects about 10,000 declarations per week. Approximately 10 percent of these are submitted on paper forms that require significant resources to analyze and store. Currently, electronic declarations can only be made through licensed Customs brokers. In 2012, APHIS has \$775,000 available for activities conducted under the amendments to the Lacey Act. The Agency is using these funds for personnel costs associated with

funding a dedicated staff, secure document storage, and outreach activities to educate the various industries and importers affected by the Lacey Act amendments. The program will be selecting one percent of the declarations at random for a cursory review. The remaining declarations will be stored. For 2013, the Agency is requesting an additional \$725,000 for a total funding level of \$1.5 million. With these additional dollars, the program will work to implement a web-based system for collecting and maintaining declarations to help eliminate the need for paper-based declarations. In addition, APHIS plans to reassign staff from other areas to assist with Lacey Act activities and expand the outreach effort. With the requested increase in 2013, the program anticipates selecting 2-3 percent of the declarations for a cursory review. The remaining declarations will be stored.

APHIS requests a decrease of \$677,000 for general operations regarding the review of animal and animal product import and export requests. APHIS continues to look for ways to improve its import and export activities and estimates that the cost of business processes can be reduced, in particular through the potential increased use of electronic document submission and review. At the requested funding level, we project the number of foreign animal disease outbreaks associated with imports allowed by the recognition of animal health status within foreign regions will remain at zero, and the number of export markets opened, expanded, or retained by domestic regionalization will be two.

Other reductions (-\$93,000)

An additional \$93,000 decrease is requested in this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$35,000)

The Agriculture Import and Export program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (b) A decrease of \$2,357,000 and 1 staff year for the Overseas Technical and Trade Operations program (\$20,104,000 and 73 staff years available in 2012).

The Overseas Technical and Trade Operations program supports U.S. agricultural trade; monitors the sanitary (animal) and phytosanitary (plant) conditions of agricultural products traded with partner countries; ensures the smooth and safe movements of agricultural commodities into and from the United States; resolves technical trade issues; and prevents the introduction of foreign animal and plant pests and diseases into the United States. APHIS will use \$17.747 million in 2013 to conduct program activities.

Reduce funding provided to cooperating international partners related to foreign animal disease surveillance (-\$2.233 million)

The program protects U.S. agricultural health and the economy by improving early detection, reporting, and control of foreign animal diseases overseas and allowing APHIS to have eyes and ears around the globe to investigate and help control emerging disease threats to U.S. livestock and poultry. The program works with foreign governments and international nongovernmental organizations, such as the Inter-American Institute for Cooperation on Agriculture and the Food and Agricultural Organization of the United Nations to address high-risk diseases that have potential pathways into the United States through trade or natural spread. Strategically controlling these diseases overseas reduces the chances of accidental introduction into the United States.

APHIS is proposing a \$2.233 million decrease for this program. With the decrease, APHIS would reduce funding provided directly to cooperating governments and international organizations while maintaining personnel and resources to provide technical assistance to partners on the highest risk diseases, such as foot-and-mouth disease (FMD) and classical swine fever. Providing such technical assistance will make efficient use of available funds, and will allow APHIS to achieve program goals in a cost-effective manner. APHIS aims to maintain the free status of the United States, Mexico, and Central America and to have no significant FMD outbreaks in Columbia. Having infrastructure overseas gives the United States access for early investigation of outbreaks of emerging threats to U.S. livestock and the poultry industry. APHIS will

continue to work with international partners and leverage its relationships with other organizations focused on international agricultural health to continue priority animal disease programs. APHIS will also reallocate 1 staff year from the surveillance activities to other program activities.

Other reduction (-\$124,000)

An additional \$124,000 decrease is requested in this line item related to Agency-level operating efficiencies.

Pay increase – redirect (\$27,000)

The Overseas Technical and Trade Operations program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

(3) A decrease of \$3,131,000 and 20 staff years for Safeguarding and Emergency Preparedness/Response – Animal Welfare

(a) A decrease of \$2,928,000 and 20 staff years for the Animal Welfare program (\$27,087,000 and 224 staff years available in 2012).

APHIS' Animal Welfare program carries out activities designed to ensure the humane care and treatment of animals covered under the Animal Welfare Act (AWA). These activities include inspection of certain establishments that handle animals intended for biomedical research, sold as pets at the wholesale level, transported in commerce, or used for exhibition purposes. Program personnel inspect licensed establishments to ensure compliance with the AWA. The program places primary emphasis on the inspection of facilities, records management, review of third-party complaints, re-inspection of problem facilities using the Risk-Based Inspection System, voluntary compliance through education, and technical training of inspectors. When inspections uncover violations for which civil or criminal penalties may be appropriate, cases are investigated by APHIS' Animal and Plant Health Regulatory Enforcement program. APHIS will use \$24.159 million in 2013 to conduct program activities.

Animal welfare enforcement efforts (-\$2.759 million)

APHIS proposes a reduction of \$2.759 million and 20 staff years for the Animal Welfare program. At the proposed funding level, the program will maintain its focus on high priority efforts while requesting a decrease in support of the Agency's cost saving efforts. APHIS has implemented measures to enhance its animal welfare inspection and enforcement efforts in recent years. These measures include strengthening regulations related to commercial dog breeders and dealers, re-evaluating the current methodology for calculating the frequency of inspection, and developing and sponsoring meetings and trainings aimed at increasing compliance with the AWA. In 2013, APHIS will continue to prioritize its inspection through risk-based determination and seek opportunities to gain efficiencies. This will allow APHIS to effectively direct its resources in a manner that maximizes its ability to enforce the AWA. Due to the program's focus on educating newly licensed entities and serious violators, APHIS expects a 6 percent decrease in the number of licensees and registrants in compliance with the AWA in 2013. APHIS will reduce 20 staff years through the elimination of unfilled positions and attrition.

Other reduction (-\$169,000)

An additional \$169,000 decrease is requested for this line item related to the Agency-level operating efficiencies.

Pay increase – redirect (\$77,000)

The Animal Welfare program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (b) A decrease of \$203,000 for the Horse Protection program (\$696,000 and 5 staff years available in 2012).

Oversight of the Horse Protection Act (HPA) (-\$200,000)

To enhance enforcement efforts, APHIS established the Designated Qualified Person (DQP) program, which was authorized by the 1976 amendment to the HPA. The program enables USDA-accredited veterinarians with equine experience, farriers, horse trainers, and others knowledgeable about horses who have been formally trained and licensed by USDA-certified Horse Industry Organizations or associations, to inspect horses for soring. There usually are approximately 600 horse shows a year that need to be inspected by DQPs. At the current funding level, APHIS is able to attend approximately 80 horse shows each year to oversee the DQP inspections.

APHIS requests a reduction of \$200,000 for the Horse Protection Program. APHIS has identified program efficiencies in recent years, such as using a more cost-effective mix of employees to attend shows and increasing the use of technology where possible. With the requested decrease, APHIS will monitor shows that present the highest potential for exposing the largest numbers of horses to mistreatment and continue to seek opportunities for improving business processes. However, APHIS will need to reduce sampling for foreign substances used in the practice of soring, focusing on sampling horses that have been frequently found to have foreign substances detected. The foreign substance testing program identifies foreign substances that are applied to the legs of the horses to accentuate their gait. APHIS will effectively continue its efforts against persons who violate the HPA at the requested funding level. APHIS will attend approximately 80 events in 2013. APHIS will use \$493,000 in 2013 to conduct program activities.

Other reduction (-\$3,000)

An additional \$3,000 decrease is requested for this line item related to the Agency-level operating efficiencies.

Pay increase – redirect (\$2,000)

The Horse Protection program will redirect funds, internally, from program operations to cover this increase in pay for associated employees.

- (4) A decrease of \$607,000 for Agency Management

- (a) A decrease of \$168,000 for the APHIS Information Technology Infrastructure program (\$4,335,000 available in 2012).

APHIS' information technology infrastructure program is requesting a \$168,000 decrease to aid in the Agency's effort to achieve cost savings. APHIS will achieve this reduction by reducing telecommunications costs and extending the life cycle replacement of workstations. APHIS will continue to maintain current levels of systems availability and customer support. APHIS will use \$4.167 million in 2013 to conduct program activities.

- (b) A decrease of \$439,000 for the Physical and Operational Security program (\$5,365,000 available in 2012).

APHIS oversees and implements precautionary measures to ensure continued, efficient mission operations, and protection from disruption, degradation, or destruction of its facilities through the Physical and Operational Security program. APHIS works with the Department of Justice, the Federal Protective Service, the Department of Homeland Security, the Department of State, and local law enforcement agencies to share costs and integrate security measures in APHIS facilities and where APHIS is co-located with other agencies. APHIS will use \$4.926 million in 2013 to conduct program activities.

Reduced spending (-\$404,000)

The Department of State is continuing implementation of the Capital Security Cost Sharing program, which is designed to provide secure and safe workplaces for all U.S. Government employees located overseas as outlined in the Secure Embassy Construction and Counterterrorism Act of 1999. All agencies with an overseas presence in U.S. diplomatic facilities pay a proportionate share for the accelerated construction of new, secure, safe, and functional diplomatic facilities. The costs are based on the number of authorized positions. Based on plans to reduce the number of APHIS personnel overseas, APHIS anticipates that its 2013 costs will decrease.

Other reduction (-\$35,000)

An additional \$35,000 decrease is requested for this line item related to the Agency-level operating efficiencies.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Summary of Increases and Decreases - Proposed Legislation  
(Dollars in thousands)

<u>Item of Change</u>	2013		
	<u>Current Law</u>	<u>Program Changes</u>	<u>President's Request</u>
Safeguarding and Emergency Preparedness/Response.....	\$697,617	(\$10,500)	\$697,617
Safe Trade and International Technical Assistance.....	31,056	0	31,056
Animal Welfare.....	24,652	(9,000)	24,652
Agency Management.....	9,093	0	9,093
Total Available.....	<u>\$762,418</u>	<u>(\$19,500)</u>	<u>\$762,418</u>

Explanation of Proposed Legislation:

APHIS proposes legislation authorizing the Secretary of Agriculture to prescribe, adjust, and collect fees to cover the costs incurred for activities related to the review, maintenance, and inspections connected to licensing activity associated with the Animal Welfare Act, Virus Serum Toxin Act, and the Plant Protection Act to the accounts that incur the costs and to remain available until expended without fiscal year limitation. Once given the authority to implement user fees for these purposes, APHIS will initiate rulemaking with a full opportunity for interested parties and the general public to offer comments before the new fees take effect.

The user fees related to the Plant Protection Act would cover the cost of providing services in connection with the regulation of organisms and products derived through biotechnology and would be paid by entities conducting regulated activities (such as field testing genetically engineered crops) or petitioning APHIS to deregulate a genetically engineered crop. Federal government agencies, accredited institutions of higher education, and nonprofit organizations would be exempted from the fees.

APHIS reviews license applications for production facilities and veterinary biological products and operates a compliance and inspection program to ensure that its regulations governing veterinary biologics as stated in the Virus-Serum-Toxin Act and related Federal regulations are met.

The proposed user fee would cover the costs of licensing and registration services for entities regulated under the Animal Welfare Act. Facilities and establishments required to be registered under the Animal Welfare Act but which are not currently subject to a fee, such as research facilities, carriers, and in-transit handlers of animals, would also be subject to the fee. The money would be collected from licensees and registrants regulated under the Animal Welfare Act for licensing and registration services provided by APHIS.

The Budget request assumes a three-month delay in the receipt of fees, which would result in collections of \$19.5 million in FY 2013.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and ExpensesGeographic Breakdown of Obligations and Staff Years  
(Dollars in thousands)

	<u>FY 2010 Actuals</u>		<u>FY 2011 Actuals</u>		<u>FY 2012 Estimate</u>		<u>FY 2013 Estimate</u>	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b><u>UNITED STATES:</u></b>								
Alabama.....	\$4,644	29	\$4,345	26	\$4,113	24	\$3,704	21
Alaska.....	1,285	3	712	2	677	2	439	2
Arizona.....	14,538	93	13,184	82	16,982	82	16,599	81
Arkansas.....	3,613	25	3,374	28	3,051	27	2,581	26
California.....	91,075	203	92,941	157	80,522	149	77,881	143
Colorado.....	72,467	401	59,100	306	57,863	300	55,899	288
Connecticut.....	1,492	8	1,636	8	1,509	8	1,420	8
Delaware.....	892	4	731	2	642	2	619	2
Florida.....	47,461	274	44,553	226	43,195	226	40,389	221
Georgia.....	5,959	35	5,765	35	5,060	35	3,626	31
Hawaii.....	35,810	319	20,803	218	22,114	218	19,915	215
Idaho.....	13,702	91	11,743	83	11,330	83	11,155	83
Illinois.....	9,558	37	7,020	37	6,859	37	6,644	36
Indiana.....	7,022	46	5,683	38	5,479	38	5,186	38
Iowa.....	66,193	407	68,502	409	65,032	397	58,513	388
Kansas.....	4,219	31	4,063	30	3,762	29	3,400	29
Kentucky.....	6,203	43	5,406	37	5,034	37	4,600	37
Louisiana.....	3,771	32	3,026	31	2,838	31	2,571	31
Maine.....	8,978	60	1,330	10	1,285	10	1,129	10
Maryland.....	212,622	1,093	194,565	1,008	175,642	962	162,802	897
Massachusetts.....	34,494	72	37,105	74	22,989	62	22,010	62
Michigan.....	15,211	87	10,295	74	10,131	74	9,787	70
Minnesota.....	16,678	125	18,713	128	18,254	128	16,630	124
Mississippi.....	9,060	65	7,781	58	7,160	58	6,768	57
Missouri.....	6,118	51	6,592	54	6,158	54	4,835	51
Montana.....	7,742	47	4,878	25	4,681	25	4,437	25
Nebraska.....	4,671	34	3,875	25	3,550	25	3,175	25
Nevada.....	3,310	20	2,314	16	2,235	16	882	6
New Hampshire.....	13,585	9	13,508	8	13,419	8	13,402	8
New Jersey.....	9,295	51	8,547	44	8,432	44	8,276	44
New Mexico.....	5,154	53	4,888	48	4,648	48	4,363	49
New York.....	20,874	106	25,382	136	24,261	132	22,685	132
North Carolina.....	27,713	168	29,312	175	28,131	169	26,133	169
North Dakota.....	4,487	35	4,044	30	3,913	30	3,295	30
Ohio.....	8,137	50	11,492	60	11,266	60	10,986	60
Oklahoma.....	4,752	37	4,301	31	4,017	31	3,682	29
Oregon.....	6,091	28	5,766	22	5,518	22	5,041	21
Pennsylvania.....	8,753	55	7,316	48	7,037	48	6,737	47
Rhode Island.....	452	2	417	2	323	2	282	2
South Carolina.....	3,672	27	3,194	24	2,969	24	2,568	24
South Dakota.....	3,489	19	2,613	13	2,458	13	2,270	13
Tennessee.....	4,945	33	5,184	34	4,929	34	4,606	33
Texas.....	58,745	385	55,372	332	59,255	332	55,174	326
Utah.....	5,341	41	4,998	31	4,790	31	4,609	31
Vermont.....	1,263	11	931	5	902	5	870	5
Virginia.....	4,788	26	5,491	27	5,236	27	4,882	26
Washington.....	7,425	36	7,402	32	7,127	32	5,519	31
West Virginia.....	3,332	23	2,350	19	2,268	19	2,163	19
Wisconsin.....	10,516	45	6,659	31	6,381	31	6,052	29
Wyoming.....	6,063	66	4,587	46	4,063	46	3,936	46

	FY 2010 Actuals		FY 2011 Actuals		FY 2012 Estimate		FY 2013 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b>U.S. TERRITORIES:</b>								
District of Columbia.....	38,540	131	39,649	126	38,149	119	37,766	113
Guam.....	133	2	431	2	405	2	400	2
Puerto Rico.....	8,513	128	8,105	119	8,091	119	7,609	119
Virgin Islands.....	65	0	63	0	63	0	58	0
<b>INTERNATIONAL REGIONS</b>								
<b>AFRICA:</b>								
South Africa.....	787	2	331	2	331	2	331	2
Senegal.....	1,161	3	1,015	3	1,015	3	1,015	3
Other.....	93	0	30	0	30	0	30	0
<b>ASIA/PACIFIC:</b>								
China.....	493	2	763	2	763	2	763	2
Japan.....	572	2	839	2	839	2	839	2
South Korea.....	406	1	430	1	430	1	430	1
Other.....	3,409	16	2,091	12	2,091	12	2,091	12
<b>CARIBBEAN:</b>								
Dominican Republic.....	1,426	1	1,251	1	1,251	1	1,251	1
Other.....	959	1	0	0	0	0	0	0
<b>CENTRAL AMERICA:</b>								
Guatemala.....	23,999	20	23,231	19	23,231	19	21,631	19
Nicaragua.....	745	2	457	1	457	1	457	1
Panama.....	21,845	5	19,624	5	19,624	5	19,624	5
Other.....	2,043	4	1,215	2	1,215	2	1,215	2
<b>EUROPE/NEAR EAST:</b>								
Austria.....	678	2	651	2	651	2	651	2
Belgium.....	748	2	1,321	2	1,321	2	1,321	2
Egypt.....	675	2	387	2	387	2	387	2
Other.....	892	3	944	4	944	4	944	4
<b>NORTH AMERICA:</b>								
Canada.....	326	3	263	3	263	3	263	3
Mexico.....	10,830	45	9,763	40	9,763	40	9,763	40
<b>SOUTH AMERICA:</b>								
Brazil.....	641	5	1,102	8	1,102	8	1,102	8
Chile.....	802	5	848	5	848	5	848	5
Other.....	2,093	13	1,679	13	1,679	13	1,493	13
<b>Total direct obligations:</b>	<b>\$1,050,537</b>	<b>5,443</b>	<b>\$970,275</b>	<b>4,802</b>	<b>\$914,433</b>	<b>4,697</b>	<b>\$857,410</b>	<b>4,545</b>

Note: Total direct obligations; does not include advances and reimbursements or Agricultural Quarantine Inspection User Fees.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and ExpensesClassification by Objects

(Dollars in thousands)

Personnel Compensation:	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Washington, DC.....	\$89,260	\$86,448	\$85,065	\$82,009
Field.....	267,781	259,345	255,195	246,027
11 Total personnel compensation.....	357,041	345,793	340,260	328,036
12 Personnel benefits.....	107,116	116,974	115,570	111,490
13 Benefits for former personnel.....	769	1,958	4,177	2,056
Total, pers. comp. & benefits.....	<u>464,927</u>	<u>464,725</u>	<u>460,007</u>	<u>441,582</u>
Other Objects:				
21 Travel & transportation of personnel.....	30,267	21,488	23,171	23,171
22 Transportation of things.....	1,256	1,657	1,519	1,469
23 Rent, Communications, and Utilities.....	29,573	27,450	27,221	27,113
24 Printing and reproduction.....	1,581	924	924	924
25.0 Other Services.....	28,490	26,251	26,607	30,549
25.1 Contractual Services Performed by Other				
Federal Agencies.....	58,906	58,380	45,327	44,085
25.2 Related Expenditures.....	3,785	3,934	2,802	2,772
25.3 Repair, Alteration or Maintenance of				
Equipment, Furniture or Structure.....	6,717	7,334	5,280	5,399
25.4 Contractual Services - Other.....	29,677	25,556	16,651	7,474
25.5 Agreements.....	241,954	241,048	207,044	184,582
25.6 ADP Services and Supplies.....	6,892	9,112	7,090	6,959
25.7 Miscellaneous Services.....	10,288	11,187	9,858	10,177
25.8 Fees.....	1,157	1,338	1,033	973
26 Supplies and materials.....	56,102	44,829	49,152	45,475
31 Equipment.....	28,189	17,146	15,521	11,900
32 Land & Structure.....	1,237	0	36	36
41 Grants, Subsidies & Contributions.....	45,779	5,141	14,390	12,219
42 Indemnity/Compensation.....	3,281	2,456	484	234
43 Int. & Div.....	182	20	20	20
45 Special Payments.....	299	299	297	297
Total, other objects.....	<u>585,610</u>	<u>505,550</u>	<u>454,426</u>	<u>415,828</u>
Total direct obligations.....	<u>\$1,050,537</u>	<u>\$970,275</u>	<u>\$914,433</u>	<u>\$857,410</u>
<u>Position Data:</u>				
Average Salary, ES positions.....	\$163,397	\$163,797	\$163,872	\$163,957
Average Salary, GS positions.....	\$85,915	\$86,866	\$87,124	\$87,175
Average Grade, GS positions.....	10.40	10.50	10.53	10.53

Note: Total direct obligations does not include advances and reimbursements or Agricultural Quarantine Inspection User Fees.

## Physicians' Comparability Allowance (PCA) Worksheet

### USDA, APHIS Table 1

		PY 2011 (Actual)	CY 2012 (Estimates)	BY 2013* (Estimates)
1) Number of Physicians Receiving PCAs		1	1	1
2) Number of Physicians with One-Year PCA Agreements		0	0	0
3) Number of Physicians with Multi-Year PCA Agreements		1	1	1
4) Average Annual PCA Physician Pay (without PCA payment)		\$122,744	\$122,744	\$122,744
5) Average Annual PCA Payment		\$30k	\$30k	\$30k
6) Number of Physicians Receiving PCAs by Category (non-add)	Category I Clinical Position			
	Category II Research Position			
	Category III Occupational Health	1	1	1
	Category IV-A Disability Evaluation			
	Category IV-B Health and Medical Admin.			

\*FY 2013 data will be approved during the FY 2014 Budget cycle.

- 7) If applicable, list and explain the necessity of any additional physician categories designated by your agency (for categories other than I through IV-B). Provide the number of PCA agreements per additional category for the PY, CY and BY.

Not applicable

- 8) Provide the maximum annual PCA amount paid to each category of physician in your agency and explain the reasoning for these amounts by category.

Thirty thousand (\$30k) per annum is paid to the category III physician currently employed by APHIS. A physician was needed who had both category III and IV-B experience due to the nature of APHIS' mission. APHIS is responsible for protecting the health and value of American agriculture and natural resources. The incumbent is instrumental in protecting the Agency's employees from zoonotic pathogens in addition to other hazards in the workplace. The incumbent has expert knowledge of the workplace infrastructure and is able to expertly interface at all levels in addition to being instrumental in developing policies and practices to protect workers.

- 9) Explain the recruitment and retention problem(s) for each category of physician in your agency (this should demonstrate that a current need continues to persist). *(Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*

As this is a singular position; staffing difficulties, per se, are not an issue at this time. However, should the incumbent opt to leave, it is anticipated without a PCA to move the salary closer to parity with private sector physician salaries, staffing difficulties would clearly ensue. It is inherently difficult to recruit physicians for Federal service within the DC area due to the area's high cost of living and the discrepancy in salary levels offered between private industry and the Federal service. Salary data from 2002 – 2006 indicates that physicians salaries in occupational medicine and family practice range from \$145,000 to \$204,000. Offering a PCA brings closer parity with these figures to ensure retention of the physician currently employed.

- 10) Explain the degree to which recruitment and retention problems were alleviated in your agency through the use of PCAs in the prior fiscal year. *(Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*

As this is a singular position; staffing difficulties, per se, are not an issue at this time. However, should the incumbent opt to leave, it is anticipated without a PCA to move the salary closer to parity with private sector physician salaries, staffing difficulties would clearly ensue. The PCA has ensured the retention of the current incumbent.

- 11) Provide any additional information that may be useful in planning PCA staffing levels and amounts in your agency.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## SALARIES AND EXPENSES

## STATUS OF PROGRAM

PEST AND DISEASE EXCLUSION

Current Activities: Through the programs in this component, APHIS works to safeguard U.S. animal and plant resources against the introduction of foreign disease and pests, while allowing the United States to meet its international trade obligations. These activities include monitoring animal and plant health throughout the world and using this information to set effective agricultural import policy. In addition, APHIS conducts offshore risk reduction activities, such as eradication of certain high-risk pests and diseases in foreign countries. APHIS uses predictive analysis to determine changes in risk to U.S. agriculture. APHIS also conducts pre-departure inspections of passenger baggage destined for the U.S. mainland and foreign commodity pre-clearance programs for specific products. In conducting these programs, APHIS works closely with multilateral organizations, such as the International Office of Epizootics, the Inter-American Institute for Cooperation in Agriculture, and the International Atomic Energy Agency. Through these organizations, we promote effective disease surveillance overseas and gain access to information on animal health issues worldwide.

Selected Examples of Recent Progress:1. Agricultural Quarantine Inspection

Through the Agricultural Quarantine Inspection (AQI) program, APHIS and the Department of Homeland Security's (DHS) Bureau of Customs and Border Protection (CBP) safeguard U.S. agricultural and natural resources from the introduction of invasive pests and diseases. The AQI program encompasses various activities to address the pest risks posed by international travel and trade. APHIS conducts the following activities to exclude foreign pests and diseases: assesses the risks associated with international trade and specific imported agricultural products and develops regulatory import policies to protect agricultural health; conducts off-shore risk reduction activities including pre-departure inspections of passenger baggage destined for the U.S. mainland from Hawaii and Puerto Rico and foreign commodity pre-clearance programs for specific products; trains agricultural inspectors and detector dog teams to work at U.S. ports of entry; fumigates arriving containers and cargo; inspects and quarantines imported plant propagative materials; conducts trade compliance activities to prevent smuggling; and provides the scientific support necessary to carry out these activities and those carried out by CBP.

APHIS receives appropriated funding for pre-departure inspections of passenger baggage and cargo from Hawaii and Puerto Rico to the continental United States while maintaining the highest level of agricultural security. When inspectors identify a commodity that poses a specific risk, they take immediate action to prevent the entry of materials that could harbor the pest or disease in question. This action could prevent significant damage to the country's agricultural industry and negate the need for costly control and eradication programs. APHIS collects AQI User Fees under the authority of The Food, Agriculture, Conservation, and Trade Act of 1990 to recover costs for services provided by APHIS and CBP associated with preclearance or the port-of-entry arrival of commercial vessels, trucks, loaded railroad cars, and aircraft, as well as international passengers entering the United States from a foreign destination.

Pre-Departure Inspections

In 2011, APHIS inspected the baggage of 14.4 million passengers before they left Hawaii and Puerto Rico and intercepted 337,000 prohibited items and 5,530 reportable pests (i.e., quarantine-significant pests that must be reported to Federal or State authorities). APHIS tracks the effectiveness of its pre-departure program by measuring the percentage of passengers destined for the U.S. mainland from Hawaii and Puerto Rico that comply with

agriculture quarantine regulations. In 2011, the target was 97.3 percent and the actual compliance rate was 97.6 percent.

### Plant Germplasm Quarantine

APHIS' Plant Germplasm Quarantine Program (PGQP) is the largest plant quarantine program in the United States. The program provides quarantine screening of imported plant germplasm to prevent pathogens from entering our environment and food supply. In 2011, the PGQP released from quarantine 57 bamboo clones, 125 grass clones, 48 pome fruits, 65 potato clones, 20 lots of potato true seed, 121 rice seed accessions, 6 *Ribes* (currants, gooseberries), 50 stone fruit clones, 196 stone fruit seedlings, 47 sugarcanes, 18 sweet potatoes, and 4 woody ornamentals. For nine of these 12 crops, the number of releases increased over the number of releases for the previous year. Also in 2011, APHIS processed the first newly imported rice seed accessions after eliminating the backlog of thousands of rice introductions stored by USDA's Agricultural Research Service in Colorado since the 1990s. New crops included bamboo seeds and a rose. The program added new pathogen detection procedures for closteroviruses (a group of plant viruses that includes citrus tristeza, an exotic citrus disease), mastreviruses (which can affect corn and sugarcane), and the east African strain of sweet potato chlorotic stunt virus. In addition, the program detected new pathogens in Pennisetum grasses and sweet potato.

### Cooperative Program Management

APHIS works with CBP to protect America's agricultural resources and food supply, through inspections of international passenger baggage, cargo, and conveyances. To ensure the effectiveness of inspection policies, APHIS and the CBP developed the Joint Agency Quality Assurance Plan, which includes port reviews. In 2011, APHIS and CBP conducted 12 quality assurance reviews at seven ports of entry with one preclearance review in Vancouver British Columbia, Canada, and a follow-up review in Long Beach, California. Follow-up reviews are conducted at ports of entry that have been selected from the previous year's reviews to verify the completion and implementation of tasks and recommendations issued to the port. These reviews revealed a need to place more emphasis on referring passengers for secondary inspections for agricultural items at airports and for motor vehicles at land border ports. The reviews have found that with increasing experience among CBP Agriculture Specialists the program has improved cargo clearances and inspections. The reviews identified discrepancies in the collection and reporting of operational data that resulted in the port being tasked to make improvements. In addition, the program improved on-the-job training for canine teams by using additional scents for the dog to react to that are specific to its port's operations.

### Inspections and Pest Interceptions

In 2011, approximately 150 million passengers and pedestrians entered the United States by air, bus, ship, train, or on foot. Agricultural inspectors inspected the baggage of approximately 26 million (17 percent) of these travelers. This baggage is inspected with x-ray technology or with detector dogs. In addition, the program inspected approximately 877,000 (1 percent) of the 86 million passenger vehicles entering the United States from Canada and Mexico in 2011. Inspectors also cleared approximately 50,000 ships and two million cargo, mail, and express carrier shipments, intercepting approximately 108,000 pests (approximately the same as in 2010). Of the travelers inspected, 97 percent of international air passengers, 97.5 percent of southern border vehicles, and 91 percent of northern border vehicles were found to be in compliance with agriculture quarantine regulations.

### Pre-Clearance Inspections

APHIS conducts commodity pre-clearance programs in 28 countries to minimize pest and disease risks outside the United States and allow perishable products to reach markets with minimal delay. In 2011, irradiation treatments continued attracting interest as a significant phytosanitary treatment for pre-cleared fruits and vegetables. Irradiation allows for the treatment of delicate tropical fruits and increases the variety of these fruits available in the United States. It can also replace treatments that may have harmful effects on the environment, such as methyl bromide.

APHIS cooperates with the U.S. Department of Defense to inspect military passenger baggage and equipment before it returns from overseas. This equipment can harbor various agricultural pests. In 2011, APHIS participated in

military pre-clearance operations in 16 locations: Azores, Djibouti, El Salvador, England, Germany, Greece, Haiti, Jamaica, Jordan, Luxemburg, the Netherlands, Nicaragua, Norway, Spain, Turkey, and the United Kingdom. In addition, APHIS greatly increased preclearance capacity within the U.S. Central Command by conducting training and providing technical advice to military inspectors and trainers for the inspection of returning cargo, vehicles, and passengers from Afghanistan, Iraq, Kuwait, Kyrgyzstan, and Qatar.

#### Smuggling Interdiction and Trade Compliance (SITC)

The SITC efforts aim to prevent the entry and distribution of prohibited and noncompliant products that may harbor exotic plant and animal pests and diseases. Its officials analyze and identify potential smuggling pathways, conduct product traces, and coordinate with investigative organizations to increase compliance with APHIS' regulatory requirements. APHIS also notifies CBP about potential agricultural risks at the ports of entry. In 2011, APHIS made 2,035 seizures in commerce locations. Those seizures totaled 163,808 pounds of prohibited and/or restricted plants and plant products, meat and meat products valued at approximately \$1.38 million. Of these products, 110,777 pounds, worth \$1.2 million, were directly linked to 59 Agency recalls. Items seized through these recalls included animal products from countries affected with avian influenza, exotic Newcastle disease, and bovine spongiform encephalopathy. APHIS continues to seek methods to enhance its ability to protect U.S. agricultural resources by preventing smuggling. In conjunction with inspections done with CBP, APHIS made an additional 2,123 agricultural seizures that involved 92,261 pounds of prohibited plants and plant products, meat and meat products, and dairy products.

#### Plant Inspection Stations

Importations of nursery stock and other propagative plant materials can serve as significant pathways for invasive pests and diseases. To reduce the risks associated with such imports, the Agency requires that certain imported plant materials enter the United States through plant inspection stations, located at ports of entry throughout the country at major international airports and seaports and at major crossings along the U.S.-Mexican border. APHIS inspectors at these stations inspect shipments to ensure that imported plants do not harbor pests and diseases of regulatory significance. In addition, they enforce the rules and regulations that apply to the import and export of plant species protected by the Endangered Species Act and the Convention on International Trade in Endangered Species of Wild Fauna and Flora. In 2011, Agency inspectors at plant inspection stations cleared 28,000 imported shipments containing 1.1 billion plant units (cuttings, whole plants, or other propagative materials) and approximately 1 million kilograms of seeds. Through these inspections, they intercepted almost 3,000 reportable pests (i.e., those that are quarantine significant pests that must be reported to local, State, and national agencies).

#### Risk Analysis and Scientific Support

APHIS' Plant Epidemiology and Risk Analysis Laboratory (PERAL) develops pest risk analyses and epidemiological approaches to pest exclusion. In 2011, PERAL completed 221 risk analyses associated with imports, exports, invasive pest threats, and programmatic requirements. Highlights of this work include analyses to open, expand, or maintain export markets for 39 U.S. commodities. PERAL also evaluated 66 new pests for potential risk to U.S. agriculture, and completed 26 risk analyses for imports covering 75 country-commodity combinations.

#### Phytosanitary Export Certification

APHIS facilitates the export of agricultural shipments through tracking plant health import requirements for more than 200 countries and provides certifications to U.S. exporters to help ensure that U.S. products meet other countries' requirements. More than 2,700 authorized certification officials (at the Federal, State, and county levels) can access countries' certification requirements on-line and conduct inspections to issue phytosanitary certificates. These certificates facilitate the entry of commodities into foreign markets and represent approximately \$25 billion in trade annually. In September 2010, APHIS finished migrating to a new web-based database, which is available to exporters, without a subscription fee and enables them to research requirements at any point in time and better prepare for shipping.

In 2011, APHIS also continued implementing its Phytosanitary Certificate Issuance and Tracking (PCIT) database, which allows exporters to apply for certificates, schedule inspections, and pay the applicable certification fees online. APHIS estimates that 95 percent of all certificates issued in 2011, went through the PCIT system. APHIS also enabled PCIT to collect State and county cooperator fees in addition to the USDA fees for phytosanitary certificates. Participating States/Counties reported that they save up to a week of staff hours each month by allowing APHIS to handle collection and remittance of the fees for certificates issued by the States/Counties on APHIS' behalf. Currently, 28 States and 14 counties are taking advantage of this feature in PCIT. PCIT also enables APHIS to capture export application information, document inspection and certification information, print an original phytosanitary certificate on secure paper, and generate export reports. In addition, the reaccreditation training required for certifying officials to maintain their ability to issue certificates was incorporated as an online module through PCIT in 2011. This initiative saves APHIS approximately \$1 million per year. Discussions are ongoing with international counterparts regarding the possibility of exchanging phytosanitary certificates electronically. In 2011, APHIS, State, and county officials issued more than 530,000 Federal export certificates for agricultural shipments. APHIS is now working to establish an interface between PCIT and the new import requirement database, which will allow certificates to be generated faster.

## 2. Cattle Fever Ticks

The Agency's Cattle Fever Tick Eradication Program was established to eliminate bovine babesiosis from the nation's cattle population. Babesiosis is a severe and often fatal disease of cattle that was responsible for losses to the cattle industry in 1906, equal to more than \$1 billion in today's dollars. The cattle fever ticks and the southern cattle ticks are vectors of the causal agents of babesiosis. The United States was declared free of babesiosis in 1943 after eliminating the tick vectors; however, bordering Mexican states harbor both tick species and the disease. To prevent the spread and re-establishment of the tick vectors, a permanent quarantine area was designated along a 500-mile border with Mexico from the Gulf of Mexico to Del Rio, Texas, and a cooperative Federal-State program was established.

The total number of tick outbreaks increased from 90 in 2010 to 108 in 2011. However, this represents a reduction from the second highest recorded number of tick outbreaks in 2009 totaling 146. The number of infested premises in the free areas of South Texas decreased from 85 in 2009 to 22 in 2011 because of the coordinated surveillance and systematic treatment procedures implemented by APHIS and the Texas Animal Health Commission (TAHC). It is important to note that the number of infected premises represents a snapshot of infested premises during each month only, and premises are continually added or removed from quarantine as they are identified or released from quarantine.

On-going cooperative efforts by APHIS and the TAHC during 2010 and 2011 have continued to decrease the prevalence of ticks and have allowed Texas to fully release all acreage under quarantine for two of the three temporary preventive quarantine areas. TAHC establishes these zones in areas outside of the APHIS-monitored permanent tick quarantine zones. To release a quarantine area, every infested premise must have all cattle treated for at least nine months. This represented a release of 749,689 acres (roughly the size of Rhode Island) from quarantine with 144,580 acres remaining under quarantine in the free area. Free-ranging and tick-infested white-tailed deer populations in the remaining temporary quarantine area, including the buffer zone, continue to challenge tick eradication efforts. The number of new tick-infested premises in the buffer zone increased slightly from 68 premises in 2010 to 71 premises in 2011 because eradication efforts have primarily focused on the infested free areas of Texas.

## 3. Foreign Animal Diseases and Foot-and-Mouth Disease

The Foreign Animal Diseases (FADs) and Foot-and-Mouth Disease (FMD) program supports APHIS' mission of protecting U.S. agricultural health by increasing the capacity of developing countries to manage animal health issues within and along their borders. The program detects and controls outbreaks of global FADs by participating in cooperative animal disease eradication programs and conducting animal health capacity building activities to enhance diagnostic capabilities in developing trading partners. These activities address disease threats at the source

and prevent the diseases from spreading while helping improve developing trading partners' responses to outbreaks and efforts to eradicate emerging endemic diseases – all of which ultimately protect the health of U.S. livestock.

### South America

The vast livestock populations and diverse wildlife species of South America are a potential reservoir of FADs, most notably FMD. The ability of FMD to spread quickly through live animals or via contaminated products poses a risk of sizeable economic loss if transmitted to the United States. In 2011, APHIS worked with cooperators in Bolivia, Colombia, Ecuador, Paraguay, and Venezuela to control and eradicate FMD. APHIS also provided technical support to international organizations working to eradicate FMD from the Western Hemisphere, including the Inter-American Group for FMD Eradication (GIEFA), the Pan-American FMD Center (PANAFTOSA) and the Food and Agriculture Organization (FAO).

In the Andean region, APHIS continued to prioritize Ecuador and Venezuela, where there is a high probability of movement of infected animals or product into disease-free areas, and Colombia, where recent gains in its animal health status are threatened by borders with high-risk countries. APHIS provided direct technical support through a team of foreign service nationals in the affected countries, cooperative agreements that strengthened infrastructure, and development of educational outreach campaigns and training opportunities. In Colombia, APHIS supported activities to exclude FMD from the high-risk borders with Ecuador and Venezuela and to quickly diagnose the disease if it does occur. In Venezuela, APHIS supported studies about transmission of FMD between cattle and wild animals and the development of an educational booklet for small farmers to improve their participation in the program, as well as specific outreach campaigns on FMD control and eradication in two states of Venezuela. In Ecuador, APHIS supported two vaccination campaigns, which improved coverage rates from 91 to 95.7 percent. The pilot project area that included the vulnerable border with Colombia reached a coverage rate of 100 percent. APHIS also supported diagnostic testing of FMD via samples sent to the Plum Island Animal Disease Center in New York, as well as the development of a system to issue electronic livestock movement certificates that Colombia implemented in 2011.

APHIS also supported FMD control measures in the Chaco region (parts of Paraguay and Bolivia), where large populations of animals and porous borders contribute to illegal trans-boundary movement of livestock. In Bolivia, APHIS supported an FMD surveillance study that found no virus circulation indicators in the country. In the Chaco region, APHIS assisted with FMD control activities in high-risk areas by working with stakeholders in the official services, the private sector, and international organizations. In 2011, activities included updating livestock databases, controlling animal movements, maintaining laboratory and surveillance capabilities, and monitoring herd immunity levels.

### Central America

In Central America, APHIS focused on maintaining the region free of screwworm (SW) and conducted surveillance for highly contagious diseases such as FMD. In Panama, APHIS cooperates with the Ministry of Agriculture to conduct both FMD and SW prevention activities. As part of the 2011 outreach campaign, APHIS supported 25,274 visits to farms, ranches and contact points, and training for 14,994 agricultural students, community leaders, and producers. APHIS collaborated in inspecting 110,407 animals, 40,345 vehicles, and 353 boats at control points, resulting in the decommissioning and destruction of 122 illegal shipments of animal products. Surveillance activities resulted in 158 cases of suspected SW infestations, 13 of which were positive (these 13 cases were within Panama's barrier zone, which protects Central America from the spread of SW). APHIS and Panama's Ministry of Agriculture maintain an animal health laboratory to analyze samples from Central America for vesicular diseases and avian and porcine influenzas. In 2011, the laboratory tested 721 samples for vesicular diseases from Central America and Panama, none of which were positive for FMD, but 520 were positive for vesicular stomatitis, a disease clinically indistinguishable from FMD. The lab also processed 2,039 samples from Central America and Caribbean countries for avian and porcine influenza.

APHIS also collaborated with the ministries of agriculture in Costa Rica and Nicaragua to prevent FADs in those countries by participating in cooperative foreign animal disease prevention and surveillance programs. During 2011, inspectors from the cooperative programs conducted surveillance on approximately 20,000 farms and

investigated more than 750 suspicious animal disease outbreaks. The investigations were all negative for FMD and screwworm, but there were 356 positive cases of vesicular stomatitis. Additionally, APHIS program inspectors investigated 35 cases of suspected SW infestation; all were negative. The program also collected samples to monitor for classical swine fever (CSF), bovine spongiform encephalopathy (BSE) in cattle, and highly pathogenic avian influenza (AI) and Newcastle disease in poultry. These tests were negative for CSF, BSE, and AI, and program employees assisted the Nicaraguan government in collecting samples during an outbreak of Newcastle disease.

#### North America

APHIS continued to work with Canada and Mexico to standardize FAD diagnostic procedures for FMD and other vesicular diseases, AI, and bovine tuberculosis. In addition, APHIS continued its partnership in the Mexico-U.S. Commission for the Prevention of FMD and other FADs. This Commission supports an animal health laboratory in Palo Alto, Mexico, that provides overflow capacity in case of a domestic FAD outbreak. In 2011, this laboratory, along with 7 regional laboratories and 13 other laboratories tested 223,108 samples for diseases such as vesicular stomatitis, bovine papular stomatitis, contagious ecthyma, blue tongue, AI, Newcastle disease, West Nile virus, equine encephalitis, CSF, swine influenza, equine influenza, and others. Of these, 126 were FMD suspect samples. This number is lower than previous years because vesicular stomatitis is a cyclical disease and this was a “low” year. All samples for FMD and highly pathogenic AI tested negative. Also in 2011, the Mexican BSE Surveillance Program tested 12,673 samples with no positive cases detected. The laboratory processed samples from 32 states for swine influenza surveillance due to the H1N1 pandemic influenza incident in Mexico. Of the 211 samples collected, 30 tested positive for low pathogenic AI.

#### Caribbean

APHIS continued to support the control and eradication of CSF on Hispaniola, which includes the Dominican Republic (DR) and Haiti. In 2011, the program vaccinated the swine population in the DR, maintaining vaccination coverage of 85 percent in backyard swine and 90 percent in commercial farms, reaching a total of 785,941 pigs. In 2011, no CSF outbreaks were reported and only one positive sample was found, which was identified as a vaccine virus strain. To better prepare the field staff for more sensitive surveillance, the program designed and conducted the last of six simulation exercises on disease investigation trace-backs and trace-outs with the participation of field veterinarians and regional epidemiologists. APHIS also supported the installation of advanced laboratory diagnostics for CSF in the Dominican National Veterinary Laboratory, which in turn, advised and reviewed similar infrastructure installation in the Haiti national lab. Over the past three years, APHIS has been working to increase cooperation between the Dominican Republic Ministry of Agriculture, and the swine industry, and the general public to make the CSF eradication program more effective and increase the chances for long-term success. In 2011, the private sector in the DR shared information on the vaccination of swine, allowing for a consolidated and transparent database on vaccination. In 2011, the swine industry also began contributing funds for the national CSF program and worked with the Ministry of Agriculture on movement permits to control swine movement.

In Haiti, the CSF program was complicated by the aftermath of the earthquake, political turmoil, and an ongoing outbreak of Teschen swine disease, that impacted the delivery of the CSF vaccination program. As a result, vaccination of the swine population dropped significantly to 40 percent of the swine population, down from 60 percent of the swine population the year before. The number of field swine diseases investigations also dropped from 65 in 2010 to 55 in 2011. Therefore, to make progress against CSF, the program is working with international partners (the Interamerican Institute for Cooperation on Agriculture, FAO, the World Organization for Animal Health, and others) to develop strategies to combat this second swine disease as well. The program is developing two pilot field trials: one testing a vaccine for porcine circovirus (another swine disease) as a way of reducing the expression of Teschen disease, and one developing a new Teschen disease vaccine to be tested and possibly implemented in Haiti. APHIS is partnering with the international organizations and other U.S. government agencies to leverage the international presence in Haiti to support CSF eradication in the country.

#### 4. Fruit Fly Exclusion and Detection

The APHIS Fruit Fly Exclusion and Detection (FFED) program and its domestic and international partners conduct a wide range of activities to protect the health and value of American agricultural resources threatened by the establishment of exotic fruit fly populations. The program prevents the establishment and spread of exotic fruit flies in the United States through three strategies: 1) detecting, responding to, and controlling introductions of fruit flies,

and, preventing outbreaks through sterile fly release programs; 2) ensuring that Mediterranean fruit fly (Medfly) does not move north of the State of Chiapas, Mexico; and 3) eradicating the Mexican fruit fly (Mexfly) from Texas and northern Mexico along the Lower Rio Grande Valley (LRGV).

In 2011, the program met its long-term performance measure target of no more than two severe outbreaks per year of exotic fruit flies in the United States (a severe outbreak is one that spreads beyond its initial square mile of detection). One of the outbreaks occurred in California in San Joaquin County (Oriental fruit fly), and the other occurred in Florida in Broward County (Medfly). The program eradicated the outbreak in Florida and expects to eradicate the Oriental fruit fly outbreak in California in 2012.

##### Enhance detection, response, and control capabilities, and, strengthen preventive release programs

The program's rapid response to detections has strengthened the ability of impacted growers to maintain international and interstate trade of host commodities, while avoiding costly treatments. For some species of fruit fly, the program uses the environmentally friendly eradication and preventive management tool, sterile insect technique (SIT). The technique involves releasing sterile flies to disrupt normal fruit fly population growth to prevent any exotic fruit fly populations from becoming permanently established in the United States. In addition to the two severe outbreaks mentioned above, the program detected and eradicated a Mexfly outbreak in Texas in 2011 (this outbreak did not spread beyond an initial square mile). The program also completed eradication of three outbreaks that were detected in 2010 – 2 outbreaks of Oriental fruit fly in California and 1 outbreak of melon fruit fly in California. In 2011, the program placed a total of 270 square miles under quarantine in the United States as a result of fruit fly outbreaks. This was reduced to 118 square miles by the end of the fiscal year. In 2011, the program met its performance target of zero fruit fly detections in areas under a preventive release program that resulted in an outbreak.

APHIS and its cooperators also detected other exotic fruit flies in 2011 in California that did not require regulatory action (because the number of flies detected did not indicate that a population was present). This includes 4 detections of the Old World guava fruit fly in 4 different areas, 1 melon fruit fly detection, 22 detections of Oriental fruit fly in 13 different areas, and 1 detection of the South American fruit fly. In Florida, APHIS and its cooperators detected one peach fruit fly and one Old World guava fruit fly that did not require regulatory actions. APHIS also cooperated with other State and territorial plant regulatory agencies to maintain fruit fly surveillance programs in 11 additional States and territories: Alabama, Arizona, Georgia, Hawaii, Louisiana, Mississippi, New Mexico, Puerto Rico, South Carolina, Guam, and the U.S. Virgin Islands. The program detected no new exotic fruit flies in any of these States or Territories in 2011.

##### Ensure Medfly does not move north of the State of Chiapas, Mexico

APHIS works cooperatively with Mexico, Guatemala, and Belize in the Medfly (Moscamed) program in Central America, which has protected United States agriculture for the past 30 years by preventing the northward spread of Medfly populations out of Central America. In 2011, the Moscamed Program strengthened and widened the Medfly-free barrier zone in Central America, which is a crucial part of the APHIS strategy to reduce the risk of Medfly outbreaks in the United States.

The Moscamed program expanded the Medfly-free area by an additional 5,300 square kilometers in the last year (for a total of 138,365 square kilometers), eradicating Medfly from areas previously considered infested. In 2011, there were 37 fertile Medflies captured in Chiapas, Mexico, compared to 72 in 2010, 73 in 2009 and 328 in 2008. Of these, the program has controlled all outbreaks in Chiapas, with 2 outbreaks still under active mitigation.

The program's success since 2008 is attributed to the implementation of the Gradual Advance Plan (GAP), which includes new field control strategies based on an enhanced understanding of the biology and ecology of the Medfly and use of geographic information system analysis to make decisions. Implementation of the GAP resulted in significant reduction of wild fly populations in the Guatemala coffee production areas (coffee is a preferred host of Medfly) limiting natural spread into Chiapas, Mexico. This year, the program is moving into the Antigua area, where coffee and temperate fruit production creates a continuous population of Medfly that endangers the progress made to date. Eradicating this area will secure the status of the program and allow it to move into areas in the north of Guatemala that cause the yearly spread into northeastern Chiapas.

*Eradicate Mexfly from Texas and northern Mexico along the LRGV and prevent the natural spread of Mexfly into the United States*

In 2011, APHIS continued to cooperate with the Texas Department of Agriculture, the Texas citrus industry, and Mexico to eradicate Mexfly in the LRGV. APHIS uses SIT to release millions of sterile Mexflies in the LRGV in both Texas and Mexico in this eradication effort. In 2011, APHIS and its partners increased capacity for sterile Mexfly production and release from 121 million flies per week to 130 million flies per week by renovating an older Medfly production facility to produce Mexflies. In Mexico, APHIS maintained sterile Mexfly emergence and release centers in Tamaulipas and Baja. This enabled the program to release sterile Mexflies on the Mexican side of the border and protect citrus production in Texas and a variety of specialty crops in California. The program also maintains a trap line along the border of both California and Texas to provide an early detection tool for the northward movement of exotic fruit flies from Mexico. This trap line allows APHIS to respond to any detection quickly. However, these actions have been limited in the past year due to high security precautions related to drug violence within the State of Tamaulipas and along the international border of the United States. A total of 2 out of 10 counties and municipalities in the LRGV are free of Mexfly (8 counties remain under quarantine).

5. Import/Export

The goal of the National Center for Import and Export (NCIE) is to protect U.S. agriculture while facilitating safe global trade of animals and animal products. The NCIE works closely with other Federal agencies, States, foreign governments, industry, and academia in carrying out the program's dual mission. APHIS animal health experts negotiate import and export animal health requirements that are founded on sound scientific principles and fair trading practices for animals and animal products. Moreover, APHIS sets specific quarantine, testing, and other requirements under which animals and animal products can be imported or exported. This helps to ensure that global markets can be accessed, expanded, or maintained with little risk to U.S. agriculture.

Imports

APHIS conducts import risk analyses that evaluate the animal health status of countries and/or regions requesting approval to export animals and/or animal products into the United States. In 2011 APHIS evaluated the animal health status of multiple countries and regions, including assessments of the risk of foot-and-mouth disease, rinderpest, classical swine fever, African swine fever, and swine vesicular disease in the Brazilian State of Santa Catarina, and foot-and-mouth disease in Japan. APHIS also evaluated the risk of importation of sheep meat from Uruguay and fresh beef from a region comprised of 14 States in Brazil. Uruguay and the 14 Brazilian States are regions that are free of foot-and-mouth disease but continue to vaccinate against the disease.

APHIS issued 14,607 import permit applications for live animals, animal products, organisms and vectors, and select agents during 2011.

Exports

During 2011, APHIS developed extensive information packages and/or responded to questionnaires from various countries in an effort to maintain or reopen export markets or expand market access. The issues and countries include: bovine spongiform encephalopathy for Mexico, Japan, Hong Kong, Australia, and China; avian influenza for Singapore, China, India, Argentina, Cuba, Mexico, Hong Kong, and Japan; U.S. swine health for Jamaica; U.S. sanitary controls and animal health for Australia; swine influenza virus for Russia; U.S. sheep and

goat health for Jamaica and the Andean countries; classical swine fever surveillance for Mexico; U.S. veterinary infrastructure for Mexico; regionalization for highly pathogenic avian influenza and egg movement control for Japan; pseudorabies, brucellosis and bovine tuberculosis for Canada; equine health and equine semen certification for the European Union; and, primate health and certification information related to potential export of primates from the United States to Peru.

#### 6. Overseas Technical and Trade Operations

The Overseas and Technical Trade Operations (OTTO) program manages foreign pest and disease threats to U.S. agriculture at the points of origin. OTTO places technical experts in key overseas locations to work closely with foreign governments. These experts monitor and respond to pest and disease risks and prevent their spread to the United States. This international program also supports exports of U.S. agricultural products by resolving technical barriers to trade while continuing to safeguard domestic agriculture and natural resources. To support U.S. producers' access to export markets, APHIS negotiates animal and plant health certification requirements, assists U.S. exporters in meeting foreign regulatory requirements, ensures requirements are proportional to risk without being excessively restrictive, and provides any necessary technical information to support the safety of U.S. agricultural products destined for foreign markets.

In 2011, APHIS retained markets for U.S. products including alfalfa hay to China worth \$2 million, milk and dairy products to Mexico worth \$10 million, and worked with other USDA agencies on the lifting of Russia's avian influenza ban on poultry worth \$40 million. In 2011, APHIS also expanded export markets. Some of these expanded markets include seed potatoes to Thailand worth \$1 million, beef and beef products to Chile worth \$8 million, and an updated health certificate for pets to the European Union worth \$100,000. New market opportunities for U.S. producers included porcine semen to the Ukraine worth \$4.5 million and treated hides to the European Union worth \$10 million.

Trade support activities ensure both economic and marketing opportunities for farmers, ranchers, and other agricultural food producers. Through the resolution of sanitary and phytosanitary (SPS) issues, APHIS successfully negotiated trade issues that contributed to the opening of new markets, and retention and expansion of existing markets valued at a total of approximately \$2.75 billion (estimated) in 2011.

#### Trade Facilitation

APHIS attachés posted overseas resolve urgent problems involving U.S. shipments detained at foreign ports of entry. Shipments of U.S. commodities can be detained in foreign ports for a variety of reasons including questions about a phytosanitary or veterinary certificate, confusion over entry requirements, or concerns about recent media reports of pest or disease detections in the United States. APHIS attachés intercede to clarify, assist, and negotiate the release of these shipments. In 2011, APHIS attachés successfully obtained the release of more than 300 shipments of U.S. agricultural products worth more than \$60 million. Examples of these shipments include several shipments of cattle to Turkey worth more than \$10 million, poultry products to Argentina worth \$1.9 million, and wheat to Taiwan worth \$314,000.

#### World Trade Organization (WTO) Notification Process

Under the Transparency provisions of the WTO SPS agreement, regulatory agencies of member countries must notify the WTO about proposed changes to existing regulations that may significantly affect international trade. These notifications are circulated by the WTO to other countries for comments. This process allows trading partners to work together to maintain or achieve market access. APHIS is actively involved in the WTO's SPS notification process in two ways. First, APHIS notifies the WTO of relevant regulatory changes that it makes via the U.S. Government's National Notification Authority, managed by USDA's Foreign Agricultural Service. APHIS also provides comments on plant and animal health regulations published by foreign governments. Through this notification process, APHIS promotes a transparent and science-based set of rules for the international trade of agricultural and livestock products.

During 2011, APHIS presented 64 U.S. notifications to the WTO. These include proposed and final rules, notices, interim rules, and emergency measures. Examples include the notifications of APHIS' final rules on the importation of Hass avocados from Mexico and Shepherd's purse with roots from Korea, in addition to final notices of decisions to issue permits for the importation of wall rocket leaves from the United Kingdom and fresh strawberries from Jordan. APHIS also reviewed and commented on 46 foreign government SPS regulations reported to the WTO. These comments focused on foreign regulations that appeared to be inconsistent with WTO SPS provisions and could potentially affect U.S. exports. Examples include comments on notifications of Chile's requirements for the issuing of health certificates for the importation of animals and products of animal origin, and China's registration of overseas food manufacturers.

Science-based standards set by the World Organization for Animal Health (OIE) and the International Plant Protection Convention (IPPC) provide an important foundation for making global agricultural trade safe, predictable, and fair. The WTO formally recognizes the OIE and the IPPC as the international organizations responsible for setting animal and plant health standards to guide agricultural trade. Because of its regulatory expertise, APHIS is the lead U.S. agency for negotiating international standards on animal and plant health being developed by the IPPC and OIE. The governing body of the IPPC held its 6<sup>th</sup> session in March 2011 to consider the adoption of new international phytosanitary standards and other decisions. In 2011, the APHIS delegation to the IPPC worked successfully with 140 member countries to adopt standards including: guidelines for export phytosanitary certification systems, phytosanitary certificates, fruit fly trapping guidelines, and irradiation treatments for fruits and vegetables for three specific pests (*Ceratitidis capitata*, *Cylas formicarius elegantulus*, and *Eusepeps postfasciatus*). In addition, the APHIS team successfully worked with other governments to adopt a new IPPC Strategic Framework through 2019 that includes overarching strategic objectives to enhance food security, environmental protection, economic and trade development, and capacity building for developing countries. APHIS also worked with the OIE to amend, rewrite, propose, and present more than 50 Code chapters (OIE guidelines for managing specific animal diseases and export certification issues related to the specific disease) at the General Session in May 2011, including ones focusing on vesicular stomatitis, avian influenza, and Newcastle disease.

#### *Capacity Building and the APHIS International Visitor Center*

APHIS provides capacity building assistance overseas in several ways. In 2011, APHIS formally responded to 104 requests for international technical assistance, including requests for technical specialists, formal training, and funding or material. APHIS also cooperates with outside sources to meet the needs of developing countries if the Agency's resources are not available. The most common areas of interest for capacity building were the latest technologies and methods in animal and plant health and biotechnology, such as risk analysis procedures, laboratory techniques, veterinary epidemiology, geo-spatial information systems, and bio-security.

APHIS' International Visitor Center arranged 95 distinct programs for 622 participants from 45 countries in 2011. International visitors observed procedures at ports of entry, APHIS' diagnostic laboratories, and APHIS' domestic pest and disease surveillance and eradication programs. Officials from counterpart government ministries overseas exchanged information on biotechnology, avian influenza, disease surveillance, and risk analysis, among other topics.

Addressing issues in plant health, APHIS provided entomology training for European border inspectors, training for plant quarantine officers in the West Indies, and exotic mollusk detection, and control training for South American plant health officials. APHIS also responded to a variety of requests for animal health expertise. For example, APHIS provided classical swine fever diagnostic training for Haitian and Dominican Republic animal health officials and veterinary epidemiology training for officials in Peru and Turkey. APHIS also implemented multiple regional and country specific workshops on avian influenza and poultry health in West Africa and Southeast Asia. In particular, APHIS contributed to the development and implementation of the National Poultry Health Improvement Plan in Indonesia.

One of the most efficient means to build capacity and respond to requests is through combining multiple countries in training courses. In 2011, APHIS' International Technical and Regulatory Capacity Building (ITRCB) center implemented eight training courses for international plant and animal health officials, including the development of two entirely new courses, the Diagnostic Laboratory Network Course and the United States Animal Health System Overview for Managers. The ITRCB courses focus on core functions and best practices for animal and plant health

officials such as veterinary epidemiology, pest risk assessment, plant health systems analysis, laboratory quality control, and diagnosis of international transboundary animal diseases. In 2011, ITRCB trained 138 plant and animal health officials from 43 countries at the 8 training courses.

During 2011, APHIS developed partnerships with other Federal agencies in support of national security policy. APHIS initiated activities with the Department of Defense and Department of State in the area of bio-engagement. Specifically, APHIS subject matter experts designed and implemented customized veterinary epidemiology courses for animal health officials in Kazakhstan and Ukraine, and designed and implemented a training course on diagnostic laboratory network systems for animal health officials from Kazakhstan, Russia, and Ukraine. The APHIS ITRCB team also contributed to long-term planning for building the capacity of the Ministries of Agriculture in Afghanistan and Pakistan. For example, APHIS is working with the United Nations Food and Agriculture Organization to assist Pakistan's livestock sector in the control of foot-and-mouth disease. In Afghanistan, APHIS personnel developed a sanitary and phyto-sanitary improvement strategy for the Ministry of Agriculture, Irrigation, and Livestock. Additionally, ITRCB managed the recruitment and deployment of one animal health advisor and one plant health advisor to the U.S. Embassy in Islamabad to assist Pakistan in the development of their agricultural regulatory policy.

#### 7. Screwworm

The New World screwworm (*Cochliomyia hominivorax*) is an external parasite that can cause damage to livestock and other warm-blooded animals, including humans. Animals with the screwworm parasite may die within one to two weeks from the infestation or from secondary bacterial infection. Before it was eradicated from the United States in 1972, this parasite caused significant losses to the livestock industries of the Americas through veterinary expenses, insecticide costs, and livestock death.

APHIS and cooperators have eradicated screwworm from the United States, Mexico, Belize, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama. APHIS' Screwworm program prevents infestation in the United States by working with Panama, Mexico and countries in Central America to maintain a screwworm-free buffer zone within Panama north of the Darien Gap, a narrow 102 mile stretch of jungle along the border of Colombia and Panama. The program maintains the barrier through field eradication operations and prevention, surveillance, diagnosis of vesicular diseases, and continued release of sterile flies. The artificially reared sterile male flies mate with wild fertile female flies. The eggs that are subsequently laid do not hatch, and as a result, the wild population of flies crashes. In 2011, the program was able to reduce the number of flies released in the barrier zone based on a model developed by the Agricultural Research Service that better predicted the screwworm pressure on the barrier from South America. APHIS produces approximately 25 million sterile flies per week at its facility in Pacora, Panama, for release over the Darien Gap, to prevent fertile screwworms in South America from moving north. It maintains a backup facility in Tuxtla Gutierrez, Mexico, in case of a catastrophic failure at the production facility in Panama. The barrier is maintained in the Darien Province of Panama. Cases are expected within the barrier as infected animals move in from Colombia. The screwworm program aims to detect and treat infected animals as they move into Panama, but before they can move north out of the Darien Province. In 2011 there were no outbreaks or detections of screwworm infestations in Panama north of the barrier zone in Darien Province.

#### 8. Tropical Bont Tick

The presence of tropical bont tick (TBT) and its associated diseases, heart water and dermatophilosis, in the Caribbean pose a risk to U.S. livestock production. Climatic and ecological conditions in the southern United States are favorable for TBT, and the tick could easily be introduced accidentally as a hitchhiker on a traveler returning to the country. Heart water is fatal to livestock, and unexposed populations, including that of the United States, are highly susceptible to infection. Death losses can reach more than 50 percent in cattle and 90 percent in sheep and goats. Knowing where the disease is found allows APHIS to mitigate any potential risk via trade or transportation, and limiting the spread of the disease decreases the risk to the United States by keeping TBT and its associated animal diseases farther away from our border. In 2011, APHIS continued to work with representatives from ten Caribbean countries including Barbados, Grenada, Dominica, St. Vincent, St. Lucia, St. Kitts, Nevis, Antigua, Haiti, and the Dominican Republic with the goal of strengthening animal disease surveillance, emergency response capabilities, and local expertise in the region. The work included public information campaigns, assisting the

governments in the development of emergency response organizations, and collection of surveillance data in an efficient manner. All ten countries have developed TBT plans with objectives for surveillance and control of the *Amblyomma* tick to be carried out by local Caribbean nations. The plans intend to reduce the risk of spread within their countries, to other islands, and to the continental United States. These plans will allow for a smooth transition as APHIS closes its TBT program in 2012. APHIS will maintain a presence in the Caribbean through the Overseas Technical and Trade Operations program to monitor emerging animal health threats that could ultimately affect the United States and help the island nations address their animal health concerns in the process.

### ANIMAL AND PLANT HEALTH MONITORING

Current Activities: The program activities under this component minimize agricultural production losses and export market disruptions by quickly detecting and responding to new invasive agricultural pests and diseases or other emerging agricultural health situations. The Agency updates and maintains endemic pest and disease information and monitors and conducts surveys in cooperation with States, Tribes and industry. Early detection reduces the spread of exotic pests and diseases, helps eliminate significant losses, and helps maintain pest-free status for export certification of agricultural commodities. APHIS will continue to enhance and expand monitoring and surveillance activities, including the identification of potential pathways for animal disease transmission and increasing the number and intensity of plant pest surveys throughout the United States.

Regulatory enforcement activities prevent the spread of animal and plant pests and diseases in interstate trade. These activities include inspection, surveillance, animal disease traceability, prosecution, education, and outreach. This investigative arm of APHIS strives to achieve voluntary or enforced compliance with our regulations and significantly reduces the likelihood of a foreign disease or pest introduction and the associated costs of an eradication program. The Agency also investigates alleged violations of Federal animal welfare and horse protection laws and regulations. The Agency coordinates subsequent prosecution of violators through appropriate civil or criminal procedures.

The Agency maintains a cadre of trained professionals prepared to respond immediately to potential animal and plant health emergencies. Program personnel investigate reports of suspected exotic pests and diseases and take emergency action if necessary. To facilitate these efforts, the Agency develops pathway studies and thoroughly investigates the progression of outbreaks to determine the origin of plant and animal pests and diseases.

#### Selected Examples of Recent Progress:

##### 1. Animal Health and Monitoring and Surveillance

APHIS conducts a series of programs to monitor and collect information on a variety of animal health issues. The Animal Health Monitoring and Surveillance (AHMS) program incorporates the areas of disease surveillance, data collection, animal traceability, and evaluation from livestock and animal handling/movement through partnerships with State animal health agencies, other governmental agencies, universities, Tribes, and related livestock industries. The AHMS program uses new technologies to provide more rapid detection, analysis, reporting of, and response to foreign and domestic diseases, including significant zoonotic diseases. In 2011 APHIS continued to enhance animal disease surveillance and the delivery of epidemiologic services.

##### Animal Disease Traceability

On February 5, 2010, the Secretary set a new course for the Department's approach to animal disease traceability to strengthen the ability to successfully respond to animal diseases. The Secretary established four basic tenets for animal disease traceability, based on extensive input the Department received from States, Tribes, and other regulated entities that: (1) the new approach direct more responsibility to States and Tribal Nations for its administration; (2) the approach only apply to livestock moved interstate; (3) it encourage the use of low-cost technologies; and, (4) it be implemented transparently.

Based on this extensive input, APHIS convened a State, Tribal, and Federal Traceability Regulation Working Group to develop the content of the proposed rule and draft traceability performance standards. This group developed recommendations for the content of the proposed rule and the process that supports the Secretary's direction of developing a performance-based regulation. USDA gave updates on the progress of the Traceability Regulation Working Group through its Web site, meetings, and communications with State animal health officials and Tribal authorities. Recommendations from the Working Group include requiring animals moving interstate to be officially identified, unless otherwise exempt. Additionally, all livestock moved interstate will be accompanied by an interstate certificate of veterinary inspection or similar documentation. The Working Group also recommended traceability performance standards align with the objective of an outcome-based regulation. The proposed rule was published in the *Federal Register* on August 11, 2011.

### Comprehensive Surveillance System

The APHIS comprehensive surveillance system's goal is to move away from disease-specific surveillance programs to a comprehensive commodity-based system that creates flexibility to actively monitor a broader list of species-focused diseases including emerging syndromes and zoonotic diseases. In other words, rather than building a separate bovine TB surveillance system, and also a separate bovine brucellosis system, there will simply be a single surveillance system focusing on a collection of cattle diseases. APHIS has focused its first species-specific surveillance system on swine. For 2011 APHIS continued to conduct surveillance for classical swine fever (CSF) and pseudorabies virus (PRV), with the system, using multiple sample streams to target samples. This approach allows APHIS to gain the same information as a nationwide random sampling approach, but at a lower cost. All samples for CSF tested negative and all commercial swine herds remained PRV-Free.

In a related effort to protect swine health, APHIS has the responsibility, under the *Swine Health Protection Act*, to license facilities that feed cooked garbage to swine (feeders) and to conduct searches for unlicensed facilities that feed raw garbage to swine which is a primary risk factor for spreading infectious swine diseases. APHIS proactively inspects licensed facilities to ensure they meet regulatory standards. It also searches out unlicensed facilities that do not cook their garbage. In 2011, APHIS conducted 6,159 inspections of licensed premises, finding 75 violations. Of these 75, only 10 of the violations involved enforcement actions. The other 65 were corrected without enforcement action. APHIS also performed 27,896 search efforts for non-licensed garbage feeders in 2011. These searches resulted in finding 62 non-licensed feeders, and all but one of them were subsequently licensed or otherwise resolved. By using these integrated surveillance and inspection strategies, APHIS has strengthened its capacity to conduct surveillance and monitor its producers for risky behavior.

The next species-specific surveillance system that APHIS intends to build is cattle. In fact, bovine TB and brucellosis are currently proposed to be merged under one regulatory framework to begin this process.

### Foreign Animal Disease Investigations

To prevent foreign animal disease (FAD) incursions, APHIS veterinarians and privately practicing accredited veterinarians trained by APHIS are continually observing animals for signs of FADs while conducting their daily activities. Any animals showing signs of an FAD are immediately referred to a veterinarian specifically trained by APHIS as a foreign animal disease diagnostician. In 2011, APHIS investigated 328 cases of animals presenting signs indicating possible FADs. APHIS' subsequent investigations of these 328 cases resulted in the discovery of contagious equine metritis in a young domestic Arabian stallion in Arizona. APHIS' National Veterinary Services Laboratories confirmed the stallion as positive for *Taylorella equigenitalis* and determined that the isolate is almost identical to a strain previously detected in Europe. The ongoing investigation has identified 30 horses in 6 States that have been exposed to the positive stallion, but no additional positive horses have been detected to date.

## 2. Animal and Plant Health Regulatory Enforcement

APHIS' Investigative and Enforcement Services (IES) unit provides investigative and enforcement support to the Agency's four regulatory programs and Customs and Border Protection (CBP) at the Department of Homeland Security. APHIS investigates alleged violations of Federal statutes and regulations under its jurisdiction and pursues appropriate enforcement actions through administrative, civil, or criminal procedures. During 2011 APHIS initiated

a total of 5,692 cases, compared to 6,361 cases initiated during 2010. This decreased case activity is the result of APHIS' efforts to reduce its overall case inventory, focus its resources on the highest priority issues, and improve processing times for investigations and enforcement actions. To this end, the Agency reduced its inventory of open investigations by nearly twenty percent in 2011. Also during 2011, APHIS conducted a Lean Six Sigma business process improvement analysis of its enforcement activities. After identifying more than eighty recommendations for streamlining its processes and improving timeliness, APHIS pilot tested several significant recommendations with considerable success in the fall of 2011.

For APHIS overall in 2011, IES issued 1,709 Official Warnings, collected \$1,806,513 in stipulated penalties, and obtained administrative orders assessing an additional \$1,806,762 in civil penalties (more than double the amount of administratively assessed penalties in 2010). Specific highlights from each program unit are described below:

In support of APHIS' Plant Protection and Quarantine and Biotechnology Regulatory Services programs and CBP, APHIS initiated 4,626 cases involving violations of agricultural quarantine inspection and domestic plant health regulations, issued 1,022 Official Warnings, collected \$1,472,015 in stipulated penalties, and obtained administrative orders assessing an additional \$1,030,000 in civil penalties.

APHIS and a major agrochemical and biotechnology products company entered into a pre-litigation settlement agreement to resolve alleged violations of the Plant Protection Act (PPA) in which the company paid a \$192,500 stipulated penalty. Based on hundreds of referrals from CBP in recent years, APHIS conducted extensive investigations involving two prominent international express courier companies with histories of chronic non-compliance with agricultural quarantine inspection requirements. During 2011, both couriers entered into administrative consent decisions with APHIS, with each company paying a \$500,000 civil penalty to settle numerous violations of the PPA and the Animal Health Protection Act. APHIS also supported the Department of Justice (DOJ) in its successful prosecution and conviction of a cargo handler that pleaded guilty to two felony violations of the PPA for knowingly importing plants and plant pests in violation of the PPA. In this case, a U.S. District Judge fined the cargo handler \$1,000,000. Finally, APHIS' investigative efforts significantly contributed to DOJ's successful prosecution of two individuals who unlawfully imported seventy-two undeclared pigeon eggs from Cuba, in violation of the Lacey Act.

In collaboration with APHIS' Veterinary Services program, IES initiated action on 227 cases involving animal health violations, issued 108 Official Warnings, collected \$28,625 in stipulated penalties, and obtained administrative orders assessing an additional \$282,100 in civil penalties. Additionally, a U.S. District Judge enforced an outstanding administrative order – which had been assessed in a prior year -- of \$21,000 in civil penalties for violations of the Commercial Transportation of Equine for Slaughter Act, including a serious violation involving the shipment of a horse that could not bear weight on all four limbs.

On behalf of the APHIS' Animal Care program, IES initiated action on 839 cases involving animal welfare and horse protection violations, issued 579 Official Warnings, collected \$305,873 in stipulated penalties, and assessed an additional \$494,662 in civil penalties after obtaining administrative orders. For example, a zoo paid a \$35,340 stipulated penalty to resolve Animal Welfare Act (AWA) violations involving animal husbandry and handling, including a violation that resulted in the death of a black rhinoceros while in transport. Another individual paid a \$47,429 stipulated penalty for selling forty puppies without the required AWA license. In addition, APHIS successfully oversaw the relinquishment and placement of 93 dogs by a former AWA-licensee under the terms of an administrative consent decision. Finally, numerous individuals entered into administrative consent decisions with APHIS to resolve alleged violations involving the Horse Protection Act.

### 3. Avian Influenza

APHIS' Avian Influenza (AI) program activities aim to protect the health, quality, and productivity of the U.S. poultry industry. Activities range from monitoring and surveillance to investigation and appropriate response actions in the event that an avian health issue is identified. Developing and refining regulations and program standards in consultation with States and Tribal Nations allows all parties to have greater flexibility responding to new and emerging avian health concerns. APHIS' current AI activities include the Notifiable Avian Influenza Program and the National Poultry Improvement Plan.

APHIS has both an international and domestic role in controlling the spread of AI. A primary concern with AI is the H5N1 virus that has mutated into highly pathogenic varieties that can infect humans. The AI virus changes rapidly in nature by mixing its genetic components to form slightly different virus subtypes. Prevention and control of H5 and H7 AI will help avert the possible mutations and reassortment of the low pathogenic virus to its highly pathogenic form; reduce the likelihood of the virus becoming a zoonotic agent; and preserve international trade in poultry and poultry products. APHIS has taken action to prevent the accidental or intentional introduction of AI into the United States and ensure preparedness in the event of an outbreak of the disease. Domestically, APHIS is working with other Federal agencies, States, and industry to prevent the introduction of AI in U.S. commercial broilers, layers and turkeys, their respective breeders, and the Live Bird Marketing System (LBMS). Internationally APHIS is collaborating with organizations such as the World Organization for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO), and the OIE/FAO Network of Expertise on Avian Influenza to rapidly identify and respond to AI.

#### DOMESTIC EFFORTS

APHIS' major domestic activities include: (1) active surveillance of commercial establishments, live bird markets, and upland game birds; (2) active surveillance of wild bird populations and surveillance and management of AI regulated facilities; (3) passive surveillance systems that include foreign animal disease investigations, clinical disease investigations, and mortality event testing for wild birds; (4) preparedness and communications; and, (5) outreach and education.

##### Domestic Bird Surveillance and Diagnostics

APHIS is involved in five areas of commercial poultry operation surveillance: meat-type chickens, meat-type turkeys, meat-type waterfowl and game birds, egg-type chickens, and raise-for-release waterfowl and game birds. Through the National Poultry Improvement Plan and the LBMS, APHIS has 43 States participating in the prevention and control of AI.

In 2011, APHIS tested 4,397 specimens for AI surveillance in the LBMS. The number of LBMS premises that tested positive for LPAI decreased from 4 in 2009 to 3 in 2011. The positive premises were depopulated, cleaned, and disinfected according to established standards.

In support of AI detection and exclusion efforts, the Agency's Investigative and Enforcement Services staff initiated more than 3,700 cases involving alleged illegal activities at U.S. ports of entry; obtained administrative consent decisions on two prominent international express courier companies with histories of chronic non-compliance with agricultural quarantine inspection requirements; collected \$1,156,665 in stipulated penalties; and, obtained administrative orders assessing an additional \$1,020,000 in civil penalties.

##### Wild Bird Surveillance

APHIS implemented wild bird surveillance for highly pathogenic avian influenza (HPAI) viruses shortly after HPAI H5N1 emerged and spread to multiple continents in 2005 and early 2006. In the United States, APHIS has collected approximately 471,000 samples over the last 5 years. In addition, Canada has collected approximately 46,000 samples, for a total of over 516,000 samples from wild migratory waterfowl and shorebirds. The large number of live birds sampled with negative results has given APHIS officials confidence that transmission of HPAI into North America by wild migratory birds is unlikely. For this reason, and due to funding reductions to the AI program, APHIS decided to shift the focus of the National Wild Bird Surveillance Program from live bird sampling to sampling of specific mortality events. This operational shift is seen as the most efficient way to detect HPAI in wild birds. This has been a gradual shift in APHIS' surveillance strategy since 2006.

##### Preparedness and Communication

To address outbreaks of AI in the United States, the Egg Sector Working Group, which includes representatives of the egg industry, APHIS, the University of Minnesota, and Iowa State University, developed a Secure Egg Supply

plan (SES) to avoid unnecessary destruction of eggs from healthy flocks. The SES plan is a science-based preparedness plan designed to safely move eggs and egg products from, into, or within an AI control area without endangering the health of uninfected flocks. The plan also supports a continuous supply of eggs for the U.S. public, facilitates business continuity for the egg industry and their retail and food service customers, and fosters a high level of government, industry, and consumer confidence. APHIS is using the SES plan as a model to develop plans for other agricultural commodities. In 2011, APHIS completed risk assessments for layer-type hatching eggs and day-old chicks. Proactive risk assessments for broiler and turkey industries were started in 2011. Proactive risk assessments based on disease transmission models are conducted prior to an outbreak to estimate the risks of AI virus spread given surveillance protocols, testing, and other risk mitigation steps enacted during an outbreak. This helps APHIS place restrictions that reduce risk without placing an undue burden on the affected industries.

Disease spread modeling is a tool used to evaluate disease outbreak scenarios, planning, and assessment of disease control strategies when real-world information and experience are scarce or unavailable. Because highly pathogenic avian influenza (HPAI) H5N1 has not been detected in the United States, the use of a model is valuable for studying outbreak scenarios and to assess possible control strategies. In 2011, the North American Animal Disease Spread Model was used to evaluate the effectiveness of various control strategies that could be used in the event of an outbreak of HPAI H5N1 among commercial and backyard poultry in South Carolina. The model was also used to simulate an outbreak to support APHIS' National Veterinary Services Laboratories to examine capacity, explore roles and responsibilities, and practice coordination and communication.

### Outreach and Education

The Biosecurity for Birds (BSB) outreach effort is now called "Healthy Birds." The program continues to engage key audiences with its messages to raise awareness about biosecurity measures to prevent the introduction and spread of AI and other infectious poultry diseases. The program has allowed APHIS to reach targeted segments of the avian marketplace, including backyard poultry producers and pet bird owners, to educate them on AI and practices to reduce the threat of an HPAI introduction. In 2011, the program launched Bird Health Awareness Week, which featured a variety of outreach activities including a highly successful educational webinar. The webinar attracted more than 100 live participants and was recorded for playback on the APHIS website. APHIS released a series of educational and informative YouTube videos featuring an APHIS veterinarian and the newly updated and named biosecurity "spokesbird" Healthy Harry. These videos have garnered approximately 30,000 views to date. The BSB campaign continues to distribute highly sought after educational materials, including a bilingual calendar, fair packages, and biosecurity information in numerous languages.

### INTERNATIONAL EFFORTS

APHIS employees overseas have responsibilities for monitoring the HPAI situation in their host countries. Many also build capacity of their host governments to detect and respond to outbreaks of AI, either through training, mentoring, or collaboration with other international entities. The Agency scaled back international efforts in 2011 but continues to focus on the three pillars of the original strategy: 1) preparedness and communication; 2) surveillance and detection; and, 3) response and containment.

### Preparedness and Communication

APHIS, in adherence to international guidelines, continues to advise the public and private sector on the risks of AI and raise awareness on the potential consequences in the social, political, economic, and public health arenas. In support of these objectives, APHIS conducted several seminars, workshops, and conferences.

In 2011, APHIS, OIE, and FAO collaborated to deliver seminars to increase awareness of the importance of maintaining biosecurity and quality assurance within the animal laboratories. Additionally, APHIS provided workshops relating biosecurity efforts and their economic benefits to the poultry sector in South East Asia and West Africa. APHIS held live bird market biosecurity workshops in the Western Hemisphere, Middle East, and Africa. APHIS, in partnership with the West Africa Poultry Association, hosted a conference for veterinary leaders and policymakers, poultry industry officials, academics, and other interested parties in Bamako, Mali and Accra, Ghana.

### Surveillance and Detection

To improve the global capacity to detect HPAI and other significant animal diseases, APHIS provides training in partnership with universities in the United States and on their respective foreign campuses. In 2011, APHIS trained 39 developing countries worldwide in epidemiology, risk analysis, and geo-spatial analysis.

### Response and Containment

APHIS helped establish, and continues to sponsor, the Crisis Management Center (CMC) for Animal Health at FAO. The CMC is an emergency response branch of FAO's Emergency Center for Trans-boundary Animal Diseases whose strategic goal is to respond and contain the threats of disease outbreaks. The CMC provides resources to quickly respond to outbreaks such as HPAI in countries where the United States cannot place personnel or respond bilaterally. This approach reduces the threat of disease outbreaks such as HPAI from becoming a pandemic.

#### 4. Emergency Management Systems

The Emergency Preparedness and Response program strives to enhance APHIS' emergency preparedness efforts by providing leadership, strategies, and resources for effective and expedient emergency response and continued emergency management activities.

### Preparedness

APHIS is developing a new Foot-and-Mouth Disease (FMD) response strategy that includes the use of FMD vaccine as a viable alternative to depopulation. Formerly, APHIS' strategy was to depopulate entire herds – a technique that is economically unfeasible and environmentally damaging due to wasted protein and disposal issues. APHIS presented this new vaccine strategy, which will reduce the number of animals euthanized, to the Chief Veterinary Officers from Mexico and Canada as well as a large number of stakeholders and State animal health officials who agreed with the fundamentals of the strategy. APHIS will continue to engage stakeholders while it identifies a transparent process to decide when and how to use vaccine.

Additionally, APHIS worked with the Centers for Disease Control and Prevention and the Food and Drug Administration (FDA), and coordinated several novel influenza investigations involving humans and animals. These investigations help scientists understand the ecology of influenza, and will help develop early detection methods and procedures that will mitigate potential influenza pandemics.

### Response Planning and Test Exercises

In 2011, APHIS used its 26 area emergency coordinators to actively engage State, Tribal, local governments, and industries in efforts to advance their emergency preparedness and response capabilities. APHIS also participated in 40 animal health or all-hazards test exercises in various States and developed several documents, guidelines, and standard operating procedures to aid stakeholders in improving their planning and responses capabilities for response to foreign animal disease incidents.

Throughout 2011, APHIS worked collaboratively with other Federal government partners as well. APHIS held a series of exercises with the Department of Homeland Security and the Federal Bureau of Investigation to develop and test processes for working with, or getting support from, other Federal agencies during an animal health incident. Working with the FDA, APHIS helped develop and release the Food Related Emergency Exercise Boxed Set. The set is a compilation of scenarios based on both intentional and unintentional food contamination events. It is designed with the intention of assisting government regulatory and public health agencies in assessing existing food emergency response plans, protocols, and procedures that may be in place, or that they are in the process of revising or developing. APHIS also worked with USDA's Agricultural Research Service scientists and National Institute of Food and Agriculture grantees to develop a set of brochures that educate the public about safeguarding animals during an emergency similar to the Fukushima incident, or if fall-out from this incident were to reach the United States.

### Capacity Building

The National Animal Health Emergency Response Corps (NAHERC) was formed in 2001 to provide an emergency reserve of veterinary professionals to assist State and Federal responders during an animal health emergency. NAHERC volunteers become temporary Federal employees when activated. As of September 2011, a total of 1,640 qualified members were enrolled--678 veterinarians, and 962 animal health technicians. Ongoing recruitment efforts include online advertising, direct mail campaigns, Agency attendance at veterinary conferences/seminars, and networking with animal health professionals.

### Foreign Animal Disease Investigations

During 2011, APHIS and State animal health partners conducted 328 foreign animal disease investigations. Some of the highlights are as follows:

- On December 15, 2008, Kentucky confirmed that a quarter horse stallion on a central Kentucky premises was positive for *Taylorella equigenitalis*, the bacterium that causes contagious equine metritis (CEM). The subsequent outbreak investigation found 21 additional stallions, 1 gelding, and 5 mares to be positive for *T. equigenitalis* out of over 1,000 horses exposed. One of the 28 positive horses, a Fjord stallion imported from Denmark in 2000 was identified as the likely source of the outbreak. The outbreak investigation is complete, although some horses remain under quarantine due to lack of testing compliance. In 2011, APHIS implemented a national testing effort to evaluate the CEM status of breeding stallions across the United States. APHIS tested approximately 300 stallions from 28 States with negative results.
- On July 21, 2011, APHIS confirmed that a young domestic Arabian stallion in central Arizona was positive for CEM. APHIS further determined that the isolate was not the same as any seen in recent cases of CEM in the United States, but it was almost identical to a strain previously detected in Europe. The ongoing investigation has identified 30 horses in 6 States that have been exposed to the positive stallion, but no additional positive horses have been detected to date.
- In October 2009, APHIS confirmed that a clinically ill mare on a large ranch in southern Texas tested positive for *Theileria* (formerly *Babesia*) *equi*. APHIS discovered that a total of 413 horses in 17 States were positive for *T. equi* out of 2,500 horses tested due to an association with the incident. In an unrelated event, APHIS tested an additional 131,000 horses from November 2009 through 2011 due to equine piroplasmiasis (EP) testing requirements imposed by certain events, venues, or State animal health officials. Through these tests, APHIS officials identified 176 horses as positive for EP (167 for *T. equi*, 9 for *B. cavalli*) in 19 States. Since October 2009, APHIS has confirmed a total of 589 horses in 24 States to be positive for EP.

### Biosecurity

In an effort to obtain more information about plant pests, APHIS Exotic Pest Information Collection and Analysis (EPICA) continuously collects, analyses, distributes, and archives newly emerging information about plant pests. EPICA's subject matter experts gathered new pest information and produced notifications containing 50 individual pest articles in 2011. APHIS also participated in an initial workshop exercise to prepare and respond to program emergencies that would require activity such as large-scale confiscations of animals covered by the Animal Welfare Act.

### 5. National Veterinary Stockpile

The National Veterinary Stockpile (NVS) serves as a critical component of USDA's emergency preparedness and response efforts because it serves as the primary source of materials or supplies and equipment required to respond to, control, and contain foreign animal and other significant animal disease outbreaks.

The two primary goals of the NVS are to deploy countermeasures against the 17 most significant animal disease threats within 24 hours of detection, and to assist States, Tribes, and Territories in the rapid acquisition, processing,

and distribution of these countermeasures during an event. This involves working with these partners on their operational plans, training events, and test exercises. Currently, the NVS is fully prepared to respond to an outbreak of foot-and-mouth disease, classical swine fever, and avian influenza (the three diseases for which we have vaccines) and has countermeasures for use against all 17 disease threats.

The NVS business plan uses a variety of strategies to increase the program's efficiency and maximize its effectiveness. For example, the program uses strategic locations throughout the country to store its supplies. Using these multiple strategic locations to store countermeasures cuts cost, reduces delivery times, and prevents weather, sabotage, or other events from delaying deployment. The NVS currently has the capability to: protect a team of responders for 10 days in a high-risk environment, protect up to 1,500 responders for 365 days, and, maintain anti-virals to support 3,000 responders for 6 weeks. The program also has contracts with companies to provide personal protective equipment, animal handling equipment, and prequalified universal temperature protection packaging solutions for indefinite delivery and quantity in the event of a protracted emergency. This provides a cost savings as the limited shelf life materials are not acquired until needed in an emergency. The NVS established transportation and delivery contracts to ensure the materials can be delivered to an animal health event location within 24 hours. All of these strategies help produce major economic savings associated with protecting human health as well as livestock or poultry depopulation, decontamination, and animal disposal, thus reducing losses to the animal industry. This, in turn, helps avoid higher consumer costs.

In 2011, APHIS developed plans to support vaccine deployment from the North American Foot-and-Mouth Disease Vaccine Bank and NVS vaccine manufacturers. The NVS evaluated its current supply and replaced expired materials in the NVS 24-hour Push Packs as well as the remainder of its general inventory. Push Packs contain personal protective equipment and decontamination supplies that are needed to precede other items needed to support an on-going emergency response effort. APHIS also participated in the Department of Defense and the Food and Drug Administration shelf-life extension program for *Tamiflu*, and conducted site visits of NVS storage locations.

NVS has successfully deployed countermeasures within 24 hours, meeting its goal, for all test exercises and other responses. Examples include a foot-and-mouth disease tabletop exercise held to evaluate standard operating procedures for the emergency deployment of vaccine antigen concentrate and a deployment exercise conducted with the Navajo Nation. APHIS develops "Lessons Learned" reports from all exercises and deployments in order to continuously improve State, Tribal, and Federal NVS plans.

## 6. Pest Detection

The Pest Detection program strengthens APHIS' emergency preparedness efforts through the early detection of exotic, harmful, or economically significant plant pests, pathogens, and noxious weeds. Discovering these pests before they spread will prevent small outbreaks from becoming emergencies. APHIS and its State cooperators carry out surveys for pests of regulatory significance through the Cooperative Agricultural Pest Survey (CAPS) program. The CAPS program enables APHIS to maintain a comprehensive network of cooperators and stakeholders to facilitate its mission of safeguarding America's plant resources.

In 2011, APHIS and its State cooperators targeted 294 individual pests, pathogens, and noxious weeds in surveys nationally. A total of 18 pests and pathogens were detected (either through CAPS surveys or reported to APHIS) and recorded in an APHIS database as new or re-introduced to the United States. All 18 of these pests (100 percent) were significant and listed as reportable/actionable and as quarantine pests. Examples include *Rhynchophorus ferrugineus* and *R. palmarum* (Red palm weevil and South American palm weevil, respectively) in California, *Planococcus minor* (passionvine mealybug) in Florida, and *Melampsorium hiratsukanum* (Alder rust) in California. Overall, the program detected 89 percent of the known significant introductions of plant pests or diseases before they spread from the original colonization area and caused significant economic or environmental damage, nearly meeting its target of 90 percent.

APHIS develops commodity-based and resource-based surveys. These surveys enable the program to target high-risk hosts and commodities, gather data about pests specific to a commodity, and establish better baseline data about pests that were recently introduced in the United States. In 2011, the program and its cooperators conducted 130

commodity- and taxon-based surveys that included priority pests of national concern, with an average of 7 pests per survey and 3 surveys per state. Overall, the surveys targeted 122 high-risk pests of national concern in citrus, corn, grape, oak, pine, small grains, and soybean commodities, as well as exotic wood boring bark beetles and cyst nematodes. Using this bundled approach, where multiple pests are surveyed per site, enabled the program to increase its survey capacity and greatly exceed its performance target of 38 for the number of exotic pests surveyed with an actual of 295 for 2011. The cost of each individual survey was estimated at \$19,174.93, \$3,825 below the targeted costs. With the funding available for 2012, the program plans to survey at least 200 target pests on the CAPS Priority Pest List.

In 2011, the program made available guidelines for commodity surveys for corn pests, and five States (Idaho, Kentucky, Ohio, Oregon, and Texas) participated in the survey. The program is planning to complete guidelines for commodity surveys for cotton, potatoes, and stone fruit and make them available in 2012.

## 7. Select Agents

The goal of the Select Agents program is to implement and oversee compliance with the *Public Health Security and Bioterrorism Preparedness Response Act of 2002*. This Act enables APHIS to regulate agents or toxins deemed a threat to animals, plants, or animal and plant products (known as select agents and toxins), thereby safeguarding the health and value of U.S. agriculture.

The *Public Health Security and Bioterrorism Preparedness Response Act of 2002* requires individuals or entities possessing, using, or transferring select agents or toxins to register with one of two Federal entities: the Department of Health and Human Services' Centers for Disease Control and Prevention (CDC) or the USDA. Those entities that work primarily with organisms and toxins affecting only humans register with CDC; those entities that work primarily with organisms and toxins affecting animals or plants register with USDA. Those entities or organisms that overlap all three categories (humans, animals, and plants) may register with either USDA or CDC. APHIS is the USDA Agency with the expertise and authority to review the biosafety and biocontainment restrictions of these toxins and organisms. It monitors and tracks their movement by identifying and registering the entities or facilities that use them.

### Entity Registration and Issuing of Permits

In 2011, there were 50 registered entities on record with APHIS' Select Agents Program, and 2 new applications for certificates of registration. APHIS also received 177 requests for amendments and changes to certificates of registration made through CDC. Many of these requests came to the Agency through CDC since APHIS has expertise in reviewing these select agents (either the agents or toxins overlapped all three categories or the facility improperly registered with CDC, rather than the USDA). APHIS processed 88 percent of these "pass-through" requests in 2011. APHIS also received 623 requests for amendments from entities registered directly with APHIS regarding registrations, amendments, and renewals, and processed 80 percent of these requests. Lastly, the Agency issued 920 select agent import permits during 2011, of which, 74 were new applications, 178 were amended applications, and 668 were renewed permit applications.

### Collaborative Efforts

In 2011, APHIS continued to collaborate with CDC on several fronts. Work continued on assessing and developing options to improve the National Select Agent Registry data system. The Agency also conducted 7 renewal inspections, 23 unannounced compliance inspections, 27 joint inspections and 3 inspections involving amendments with either APHIS or CDC. APHIS conducted one inspection for a new applicant and one inspection related to an investigation of potential wrongdoing. During inspections, when APHIS found minor deficiencies, the Agency issued a letter to the responsible official discussing the identified noncompliance and the necessary correction. With more serious noncompliance issues, APHIS conducted joint inspections or investigations with CDC. If an entity had a significant history of non-compliance, APHIS placed the entity on a program improvement plan (PIP) in order to more fully engage the senior management officials of the entity and obtain a speedy resolution to the problems. Two PIPs were issued in collaboration with CDC in 2011.

APHIS and CDC developed and delivered one workshop in June 2011, in Ames, Iowa, specifically tailored to responsible officials within registered entities. These workshops provided additional details and guidance on the select agent regulatory requirements and provided a forum for more face-to-face interaction with the regulated community. APHIS also collaborated with CDC to respond to inquiries from the General Accountability Office on the program.

### PEST AND DISEASE MANAGEMENT PROGRAMS

Current Activities: The programs within this component minimize risks to agricultural production, natural resources, and human health and safety by effectively managing agricultural pests and diseases, and wildlife damage in the United States. APHIS cooperates with States and industry to protect American agriculture by eradicating harmful pests and diseases or, where eradication is not feasible, by minimizing their economic impact. The Agency monitors endemic pests and diseases through surveys to detect their location and through inspection to prevent their spread into non-infested parts of the country.

APHIS coordinates several programs that control or eradicate plant pests and diseases, conducts risk-based management activities to prevent the spread of pests such as the glassy-winged sharpshooter, golden nematode, and gypsy moth. In both eradication and control programs, APHIS develops and enforces quarantines to restrict the movement of hazardous pests and diseases. The Agency conducts a biological control program, using natural enemies of pests, diseases, or weeds to provide cost-effective, environmentally friendly pest control for use in our programs. APHIS also conducts animal disease control and eradication programs involving testing, quarantine, treatment, and depopulation of infected animals. Examples of recent activities include continued efforts to reduce the introduction of avian influenza in live bird markets and contain tuberculosis outbreaks. APHIS' Emergency Management Systems provides plan development for foreign animal disease response, coordination of animal disease outbreaks, and maintains a national corps of emergency responders for animal disease events. The Wildlife Services program protects American agriculture from predators through identification, demonstration, and application of wildlife management measures.

#### Selected Examples of Recent Progress:

##### 1. Aquaculture

APHIS protects domestic aquaculture resources by conducting activities that prevent the introduction or spread of aquatic animal pathogens into farmed and wild aquaculture populations. These activities are conducted in collaboration with other agencies and stakeholders to safeguard agricultural resources that are worth more than \$1 billion annually in the United States. Further, APHIS reduces aquaculture losses due to damage caused by wildlife to aquaculture resources.

##### *Aquatic Animal Health*

During 2011, APHIS continued its efforts to control viral hemorrhagic septicemia (VHS), especially in the Great Lakes Region. VHS has caused mass mortalities in U.S. wild fish populations, and the virus strain can also infect farm-raised fish such as catfish, the most valuable aquaculture species in the United States, as well as salmonids. APHIS implemented cooperative agreements with 30 State agencies and 8 Tribal Nations to conduct surveillance on wild fish populations. APHIS provided hands-on training to field veterinary medical officers on VHS testing and reporting, and continued to develop three aquatic animal health-focused modules for the National Veterinary Accreditation Program. APHIS collaborated with the National Oceanic and Atmospheric Administration, United States Fish and Wildlife Service (FWS), Illinois Department of Natural Resources, and Shedd Aquarium to film several episodes on VHS and aquatic animal health for the television series *Aquakids*. Additionally, APHIS continued development of its aquaculture-related laboratory infrastructure at the National Veterinary Services Laboratories in Ames, Iowa. This investment has allowed the Agency to perform confirmatory testing for VHS and other activities related to the aquaculture program. APHIS has established an advisory subcommittee on aquatic animal health under the newly formed Secretary's Advisory Committee on Animal Health. The subcommittee will make recommendations to the agency on implementing the National Aquatic Animal Health Plan.

### *Wildlife Management*

APHIS prevents wildlife damage to the aquaculture industry, particularly damage caused by fish-eating birds. Some of the Agency's activities include recommending or providing wildlife exclusion or scaring devices; conducting surveys of fish-eating birds to determine population distribution and movements that affect damage to fish resources; conducting wildlife food-habits studies; working onsite with producers to set up integrated control programs to reduce fish losses from birds and other wildlife; and working with the FWS and State wildlife agencies to jointly develop bird damage management plans to protect aquaculture resources and conserve bird populations. In 2011, APHIS provided wildlife damage management assistance to anglers, baitfish and crawfish producers, catfish farmers, fish hatcheries, sport fish producers for pond stocking, tribal entities, state wildlife agencies, and tropical fish producers in 24 states.

The Agency also managed wildlife predation and damage to aquaculture facility levees and dikes from beaver, nutria, muskrat, and river otter.

One of APHIS' major aquaculture activities is preventing cormorant damage to the catfish industry. The Agency's National Wildlife Research Center (NWRC) showed that the impact of the double crested cormorant to the industry was between \$9.8 and \$13 million annually. During 2011, NWRC conducted 24 aquaculture research projects in 15 states and Canada, collaborating with five universities, six Federal and State agencies and three Native American Tribal agencies. Results related to cormorant movement, predation rates on catfish, and their environmental impact were used to refine Agency management approaches. To reduce damage at aquaculture facilities in 2011, the Agency dispersed 237,231 cormorants and moved 12 cormorant roosts from nearby aquaculture facilities. In addition, the Agency provided training and technical assistance to catfish producers in Mississippi. Based on APHIS training, Mississippi producers were able to disperse an additional 85,150 cormorants and move 12 roosts themselves, to protect their catfish production areas. APHIS provided Federal leadership in this collaborative multiple-partner effort.

## 2. Biological Control

The biological control program safeguards U.S. agricultural production and natural areas from economic losses and negative impacts caused by insects, other arthropods, nematodes, weeds, and diseases of concern to the Federal government, State departments of agriculture, Tribal governments, and cooperators within the United States and on American territories. The program works with States, university and other partners to develop biological control programs for domestic programs and offshore programs targeting pests that could potentially be introduced into the United States and cause damage.

The program partners with institutions in 27 states and territories and one Native American Tribe to evaluate and establish biological control agents of invasive plants, pests and diseases through more than 70 cooperative agreements. Additionally, APHIS partners with State departments of agriculture in Colorado, Florida, and New Jersey and the Nez Perce Tribe of Idaho to produce and distribute biological control agents to others on behalf of the Agency. This shared approach minimizes APHIS' resource input and develops the capacity of external partners to provide land managers with natural enemies to control pests.

In 2011, the program exceeded its performance measure target of 73 for the cumulative number of biological control projects that are developed, implemented, or transferred to States or others and is currently at 74. The program also exceeded its performance measure target of 18 for the cumulative number of released biological control agents that have become established and sustainable, with 21 biological control agents. Selected 2011 projects are highlighted below.

### *Citrus Greening/Asian Citrus Psyllid*

Citrus greening, which is spread by the Asian Citrus Psyllid (ACP) (both present in various parts of the United States), is considered one of the most serious citrus diseases in the world. APHIS completed host-range testing and developed mass-production protocols for a new strain of a parasitoid (*Tamarix radiata*) to target ACP, the primary

vector of the bacterium that causes Huanglongbing, or citrus greening disease. This agent has been approved for use but is not ready for release. Once the agent is ready for field release the program will begin mass-rearing.

#### *Passionvine Mealybug*

Passionvine mealybug, recently detected in Florida, has more than 250 host plants. While cocoa and coffee are its preferred hosts, it will attack citrus, corn, grapes, mangos, potatoes and soybeans. In 2011, the program and cooperators at Florida A&M University in Trinidad confirmed that the parasitoids used to control a related mealybug species (pink hibiscus mealybug) also control the passionvine mealybug. This pest can be effectively managed with biological control methods.

#### *Russian Knapweed*

APHIS initiated rearing biological control agents for Russian knapweed (*Acroptilon repens*) and yellow toadflax (*Linaria vulgaris*). These perennial plants are native to Asia and have become widespread in North America. Both weeds reduce crop yields and rangeland and pasture grazing capacity. In 2011, the program distributed biological control agents to cooperators in California, Colorado, Indiana, Oregon, Washington and Wyoming, where they have become established. These agents are now reducing the impact of these weeds.

#### *Tropical Soda Apple*

APHIS initiated a biological control program for tropical soda apple, a noxious weed species that invades pasture and makes it unfit for livestock, in the state of Florida. Due to the successful spread of the South American leaf-feeding beetle (*Gratiana boliviana*) in south and central Florida, control costs for tropical soda apple (*Solanum viarum*), have decreased considerably, and ranchers no longer consider the weed a major pest. However, the beetle has not become established in northern Florida areas affected by tropical soda apple. APHIS is working to identify factors that may be limiting the beetles' spread in north Florida.

### 3. Brucellosis

Bovine brucellosis, caused by the bacteria *Brucella abortus*, is a serious infectious and contagious disease affecting both animals and humans. The main threat of brucellosis is to domestic cattle, bison, and swine herds. People may become infected by contact with infected animal tissues or ingestion of dairy foods made from unpasteurized milk from infected animals. The ultimate goal of the national Brucellosis Eradication Program is to establish a national disease-free designation for the United States domestic cattle and bison population and describe any areas where disease risks exist and are subsequently mitigated.

During 2011, APHIS identified a total of 6 brucellosis-affected cattle herds after testing approximately 5.3 million head of cattle under the Market Cattle Identification (MCI) surveillance program and conducting approximately 260 epidemiologic investigations on suspicious MCI surveillance tests. APHIS also tested an additional 506,000 head of cattle and domestic bison on farms or ranches. Five of the six herds discovered were located in the Greater Yellowstone Area (GYA) with a final herd located in Texas. (In the GYA, brucellosis is endemic in bison and elk, which presents a risk to livestock.) APHIS discovered three of the herds through suspicious MCI tests and the remainder with testing on-farm for movement and sale. Despite the finding of six brucellosis-affected herds in 2011, all 50 States remain classified as brucellosis *Class Free* and there is no indication that brucellosis has spread outside the GYA. The GYA remains the primary area of concern for brucellosis in livestock because brucellosis is endemic in wild elk and bison populations in this area. In 2011, APHIS vaccinated approximately 3.9 million calves and approximately 6,500 adult cattle for brucellosis and certified approximately 2,180 herds as brucellosis free cattle herds.

In 2011, APHIS published an interim rule that provides for a national brucellosis surveillance plan and includes implementation of a risk-based disease management area concept rather than loss-of-State status. APHIS published the interim rule in the *Federal Register* on December 27, 2010. Based on the comments received, APHIS drafted a final rule, which is currently under review. Since the publication of the interim rule, APHIS has been working with States to transition to the new national bovine brucellosis slaughter surveillance plan. The goal of the plan is to

conduct slaughter surveillance that represents the national cattle herd and demonstrates to our trading partners the disease-free status of the U.S. domestic cattle and bison herd. The sample collection strategy provides a statistical sampling of approximately 3 million slaughter surveillance samples and provides a 95 percent confidence that brucellosis would be detected in as few as one infected animal per one million animals. Program efficiencies realized under this new plan include: 1) focusing surveillance sample collection at 15 slaughter establishments in 13 States, providing the highest probability of detecting brucellosis and maintaining geographical representation for our national cattle herd and, 2) consolidating laboratory testing of surveillance samples to 6 laboratories, minimizing sample shipping and testing costs and maximizing laboratory capacity.

To further efforts for risk-based disease management in 2011, APHIS developed a Brucellosis Management Area Model (B-MAM) based on the 11 risk factors outlined in the Federal animal importation regulations (9 CFR 92.2). APHIS developed the B-MAM to standardize the evaluation of regions in the United States where the presence of *Brucella abortus* is a risk to cattle and privately owned bison herds. The model evaluation is consistent with the World Health Organization's international standards for defining zones for regionalization.

Also during 2011, APHIS initiated a broader effort to streamline its regulatory processes for various cattle diseases. The bovine tuberculosis (TB) program is undergoing similar changes and has several common objectives. Thus, APHIS formed a joint working group with State animal health and wildlife officials to discuss overarching regulatory concepts for both the TB and brucellosis programs. The joint TB and Brucellosis Regulatory Working Group met weekly from September 2010 through April 2011, and developed a regulatory framework that was published in the *Federal Register* on May 6, 2011. This framework described a single rule for both the TB and brucellosis programs that ensures consistency and flexibility, while reducing administrative burdens. Based on the comments received from the *Federal Register* notice, during the public meetings, and through other outreach efforts, APHIS is developing new regulations and supporting standards for the TB and brucellosis programs. The *Code of Federal Regulations* will provide the legal authority for the programs while the details of the programs will be described in a program standards document. The proposed rule is targeted for publication in 2012.

Idaho, Montana, and Wyoming continued working on brucellosis issues throughout 2011. All three States are in the process of defining the boundaries and policies of their brucellosis Designated Surveillance Areas (DSAs). Each State held several public meetings to advise stakeholders of the DSA policies, and they continue to use herd plans as a basis for increased surveillance activities and vaccination of cattle herds in the endemic area.

#### 4. Chronic Wasting Disease

Chronic wasting disease (CWD) is a transmissible spongiform encephalopathy that affects deer, elk, and moose. The disease is typified by behavioral changes and chronic weight loss leading to death in susceptible animals. The goal of APHIS' CWD efforts has been to prevent and control the disease in farmed/captive cervid herds and to assist the States and Tribes in addressing CWD in free-ranging cervids.

APHIS has worked closely with States, Tribes, other Federal agencies, and industry stakeholders to maintain a coordinated approach to CWD. State and Federal agriculture agencies are primarily responsible for safeguarding the health of domestic livestock, while State and Tribal wildlife agencies are primarily responsible for the management of free-ranging cervids. When alternative livestock, such as deer and elk, are farmed, the jurisdictional lines become more complex. Regulatory authority for captive cervids may lie with the State agriculture agency, the State game or wildlife agency, or both. In anticipation of a national CWD herd certification program (HCP), many States established CWD surveillance and/or HCPs and import requirements for captive cervids.

In March 2009, APHIS published a proposal for public comment to amend the CWD rule first proposed in 2006 and later challenge. APHIS considered all comments received and prepared an amended final rule, which is currently in the clearance process. Under the proposed amended CWD rule, farmed cervids moved interstate will have to be an enrolled cervid herd that achieved certified status in the national CWD-HCP. They also need to meet all Federal CWD interstate movement requirements. The amended rule will include a process to review and approve existing State HCPs that meet the minimum standards of the national CWD-HCP for surveillance, inventory, identification, and fencing.

### Farmed cervids

In 2011, APHIS conducted CWD surveillance testing on approximately 18,900 farmed and captive cervids. This level of surveillance by State regulatory programs has been consistent over the years since CWD testing for farmed and captive cervids began. Since 1998, 53 CWD positive farmed or captive herds have been identified in 11 States. All have been depopulated except six elk herds in Colorado and two elk herds in Nebraska, which remain under State quarantine. No CWD-positive cervid herds were reported in 2011. The CWD-positive white-tailed deer herd in Missouri, reported in February 2010, was depopulated and APHIS paid Federal indemnity in June 2011.

### Wild cervids

In 2011, APHIS provided approximately \$4.5 million in cooperative agreement funding to 45 State wildlife agencies and approximately \$320,000 to 32 Native American Tribes for CWD surveillance activities. An additional \$175,000 in cooperative agreement funds was awarded to the Native American Fish and Wildlife Society for CWD related activities. Annual cooperative agreement funding to States and Tribes has supported CWD surveillance in approximately 95,000 wild cervids (2008-09) and more than 74,000 wild cervids (2009-10).

APHIS' National Wildlife Research Center (NWRC) was provided approximately \$1.2 million to support ongoing CWD studies with emphasis on the interface between free-ranging and captive cervids. NWRC is increasing our scientific knowledge and understanding to improve our ability to prevent and control CWD in both farmed and wild cervids. The focus of NWRC's research is on the development of prion detection methods, live-animal diagnostic procedures, such as the rectal biopsy test, prion decontamination methods, and management techniques to improve the separation of wild and captive cervids to prevent disease transmission.

## 5. Cotton Pests

The boll weevil (BW) and pink bollworm (PBW) damage cotton crops by feeding on cotton squares, flowers, and young cotton bolls. The cotton pest eradication program works with States, the cotton industry, and Mexico to eradicate these pests from cotton-producing areas of the United States and northern Mexico. The BW eradication effort is based on mapping cotton fields, evaluating weevil presence in each field with pheromone traps, and applying pesticide control treatments. The program eradicates PBW through the use of PBW-resistant cotton, mating disruption, and sterile moth releases. The program has eradicated BW from 98 percent of the 16 million acres of U.S. cotton and PBW from 99 percent of infested cotton acreage. APHIS expects to eradicate these pests in 2013 with the exception of the Lower Rio Grande Valley (LRGV) in Texas. Once these pests are eradicated, the programs will transition into long-term surveillance to ensure that U.S. cotton has not been reinfested – and to take action if it is reinfested to protect the investment made in this eradication effort.

The Texas BW program made progress toward eradication in all three active zones in 2011. Two of these zones will likely be BW-free by the spring of 2012. However, the LRGV zone south of a line that extends from McAllen, Texas, to Brownsville, Texas, will require additional time because of persistent BW populations. BW captures have been low above this line but heavy below it. The same situation exists across the river in Tamaulipas State in Mexico. Until BW is eradicated in Tamaulipas, the LRGV will be subject to BW re-infestation due to migration from Mexico. BW migration is largely dependent on wind direction and speed. They have been known to travel 170 miles and can hitchhike on cars, trains, and trucks. Both the LRGV and Tamaulipas experience spring winds, which limit aerial treatments, hinder timely applications, and lessen trapping effectiveness. The area is also vulnerable to tropical weather events, which can delay trapping and treatment during and following the storms, allowing BW populations to expand unabated. In Mexico, this is compounded by drug cartel activity in the region. By 2013, the program expects to eradicate BW from all areas except the LRGV, which will require continued treatment until BW is eradicated from Tamaulipas.

The PBW program is evaluating the unexpected detection of the pest in two areas where sterile PBW are released. In El Paso, Texas, and Safford, Arizona, the program captured 526 suspect native moths in cotton that had received high applications of sterile moths. The program trapped moths in areas with high elevation and cooler temperatures, which may have allowed sterile moths to survive longer than they would have at a lower elevation. The moths could be dye-depleted sterile moths (the presence of dye indicates a sterile moth), but the program is considering them – as

well as similar moths captured in 2010 – to be native moths because there is no definitive means to determine if they were sterile or otherwise unable to reproduce. This problem has delayed the program. However, APHIS is developing a definitive marker to identify sterile moths. Currently, the program is testing strontium chloride in the diet as a longer-lasting marker. Until this problem is resolved, the program will be unable to determine that PBW has been eradicated.

In 2011, APHIS met its performance target of 98 percent of cotton acreage being free of boll weevil. However, the program failed to meet its target of 99 percent of infested cotton acreage from which PBW has been eradicated. The actual percentage is 95 percent because of the suspect native moths.

## 6. Emerging Plant Pests

The Emerging Plant Pests (EPP) line item provides APHIS with the infrastructure to carry out urgent plant pest and disease programs, some of which currently are or have been partially funded through emergency funding transfers from the Commodity Credit Corporation (CCC).

For 2011, the EPP program's performance targets included no more than 266 square miles infested with Asian Longhorned beetle (ALB), and the pale cyst nematode (PCN) program would maintain the cumulative PCN population reduction at 99 percent. The ALB program did not meet its target as 275 square miles were infested with the pest in 2011. This result was primarily due to the infestation in Ohio, where the program had projected to find only 16 square miles infested but actually found 29 square miles. Although the infested area was larger than expected, the trees in the further reaches of the infested areas are far less infested than those in the core. This indicates that the program is approaching the fringes of the infestation. The PCN program met its target.

### Citrus Health Response Program

The goal of the Citrus Health Response Program (CHRP) is to sustain the United States' citrus industry, maintain growers' access to export markets, and safeguard citrus-growing States from a variety of citrus diseases and pests. APHIS works with citrus-producing States, industry stakeholders, universities, and USDA's Agricultural Research Service to develop and promote best practices for fruit and nursery stock to prevent or reduce disease spread. In addition, CHRP provides for early detection and rapid response to new citrus pest and disease threats. The program is currently addressing citrus canker and citrus black spot in Florida, citrus greening and its vector, the Asian citrus psyllid (ACP) in a variety of States, and sweet orange scab (SOS) in Arizona, Florida, Louisiana, Mississippi and Texas.

In 2011, APHIS continued to enforce regulations governing the movement of fresh citrus fruit, nursery stock, and other citrus products to prevent the spread of citrus canker, citrus greening, ACP, citrus black spot and SOS outside quarantined areas. The States of Florida and Georgia, as well as Puerto Rico, the U.S. Virgin Islands, two parishes in Louisiana, and two counties in South Carolina are quarantined due to the presence of citrus greening. APHIS also regulates Alabama, Florida, Georgia, Guam, Hawaii, Louisiana, Mississippi, Texas, Puerto Rico, the U.S. Virgin Islands, three counties in South Carolina, portions of one county in Arizona, and four counties (as well as portions of another four counties) in California due to the presence of ACP.

Citrus canker has not been detected outside of Florida, supporting the effectiveness of the current citrus canker regulations that allow for the interstate movement of fresh fruit to all States when it is commercially packed and treated with a disinfectant. All packinghouses shipping fruit interstate must operate under a compliance agreement with APHIS to ensure that the fruit is properly treated. In 2011, Florida shippers moved 17 million cartons of fresh citrus fruit in interstate trade and 11 million cartons in international trade. Inspections found all certified shipments were free of canker and other pathogens at destination. In 2011, APHIS and its cooperators increased surveillance and regulatory measures to reduce further spread of ACP. Citrus farmers in Florida and Texas expanded citrus health management areas aimed at controlling ACP. In addition to achieving more effective ACP suppression, growers are also rotating different pesticides to minimize the possibility of developing pesticide resistance or disrupting control of other pests. APHIS assisted these efforts by conducting grove surveys.

APHIS continued its cooperative efforts with Mexico to suppress ACP populations along the U.S.-Mexico border. The Agency supported outreach in each citrus State and continued a national awareness campaign to reduce the sale

and illegal interstate movement of citrus plants. APHIS' monitoring of internet citrus sales led to thousands of seizures of citrus plants and seeds moved illegally from quarantined areas.

Since APHIS detected two new citrus fungal diseases in 2010, citrus black spot (CBS) and SOS, the program has surveyed more than 48,000 acres of commercial groves as well as along transit corridors leading to packing and processing facilities for CBS in 2011. Although the quarantine boundaries were slightly expanded due to new finds, the disease remains confined to the Collier and Hendry counties in Florida. SOS is present in Texas and Louisiana. APHIS successfully cultured the SOS pathogen and scientific studies are underway to develop better treatment methods that allow safe movement of organically grown citrus fruit from quarantined areas. APHIS also validated improved diagnostic methods for CBS and SOS. APHIS and its partners are conducting surveys in other commercial citrus-producing States for early detection of new pest threats.

APHIS published new regulations in April 2011 that allow for the safe interstate movement of citrus nursery stock from areas quarantined for citrus greening, Asian citrus psyllid and citrus canker. This requires plants to be grown within protected enclosures under Federal compliance. Plants are tested and inspected in accordance with protocols prior to certification for interstate movement. In some instances, treatments also are required as a condition for movement.

#### Asian Longhorned Beetle

The Asian Longhorned Beetle (ALB) is a devastating pest of hardwood trees. It is a serious threat to forest resources nationwide, as roughly 30 percent of U.S. trees are potential ALB hosts. First detected in Brooklyn, New York, in August 1996, ALB was later found in other areas of New York, Illinois, New Jersey, Massachusetts, and Ohio. APHIS has eradicated outbreaks in Illinois; Jersey City, New Jersey; and Islip, New York. Currently, the program is addressing outbreaks in New York, New Jersey, Massachusetts, and Ohio with funding from the EPP line item. In 2011, APHIS used emergency funding to address the Massachusetts outbreak and Farm Bill funding to address the Ohio outbreak.

The New York program covers most of Manhattan, parts of Brooklyn and Queens, and an area along the Nassau-Suffolk County line on Long Island. The program eradicated the Islip infestation in August 2011. APHIS has ended activities in Manhattan except for regulatory activities and a final confirmation survey, which will conclude in 2013. The program continued treatments in Brooklyn and Queens, and conducted ground surveys and regulatory activities throughout the infested areas of New York. The New Jersey outbreak covers parts of Middlesex and Union Counties, as well as Staten Island in New York City. In 2011, the program addressed this outbreak by conducting surveys, regulatory activities, and using preventative treatments on Staten Island. Treatments have concluded in New Jersey and on Staten Island. APHIS initiated a final confirmation survey in New Jersey and Staten Island in 2011 that will conclude by 2014. In Massachusetts, the program is continuing to delimit the infested area in Worcester, Norfolk, and Suffolk Counties. Infested trees continue to be detected, but at much reduced numbers and lower infestation levels. This indicates that the program is approaching the fringes of the infestation. In Ohio, the program is continuing to delimit the infested area in Clermont County. Since the initial detection in June 2011, APHIS has detected more than 4,300 infested trees that require removal. APHIS is working with Federal, State, and local cooperators to remove host trees, and conduct survey, regulatory and outreach activities.

This program measures performance by tracking progress toward eradication. Through 2011, the program has completed 89 percent of the New Jersey program, 74 percent of the New York program, and 6 percent of the Massachusetts program. The Ohio program is still in the early stages, and will not likely show notable progress with this measure until 2014. The results from New Jersey and New York are consistent with the targets projected for 2011, while the Massachusetts results exceeded the target of four percent.

#### Emerald Ash Borer

Emerald Ash Borer (EAB) is an exotic forest pest that has killed millions of ash trees in the United States. First found in Michigan in 2002, it has spread to 14 additional States (Illinois, Indiana, Iowa, Kentucky, Maryland, Minnesota, Missouri, New York, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin). The EAB program goal is to prevent the human assisted spread and minimize the natural spread of EAB.

In 2011, surveys revealed EAB infestations in unregulated areas of previously affected States. APHIS expanded the quarantine area based on these detections, and it covered 294,031 square miles at the end of 2011. To prevent further artificial spread, the program regulates EAB host materials such as logs, firewood, and nursery stock. In 2011, APHIS maintained approximately 1,000 compliance agreements with businesses that handle EAB host materials. These agreements enable the program to regulate the treatment and movement of these host materials from quarantined areas. Regulatory personnel conducted numerous special operations, primarily associated with non-commercial firewood and logging activities. The program inspected firewood at large public venues and ferry operations, which provided opportunities for public outreach and education on the risks associated with moving items like firewood. In addition, the program held EAB workshops to educate State, tribal, municipal, and industry cooperators on reducing the spread of the pest.

The program continues to develop and deploy biological control agents for this pest, specifically focusing on three parasitic wasps that could reduce EAB populations. In 2011, the program conducted trial releases of the wasps in Illinois, Indiana, Kentucky, Maryland, Michigan, Minnesota, New York, Ohio, and Pennsylvania, Virginia, Wisconsin, and West Virginia, and increased production of the wasps from 150,000 in 2010 to more than 244,000 in 2011. This was the rearing facility's third year of production. The program also updated and distributed a set of EAB biological control release guidelines to cooperating States. The program is continuing to refine rearing and release protocols for the wasps.

In 2011, the generally infested area grew by nine percent (the program had projected growth of ten percent for the year). However, the program did not meet its target for the number of detections outside regulated areas. The program projected 4 detections outside regulated areas and recorded an actual number of 7 detections (down from the 17 detected in 2010). This was likely the result of improvements in survey and detection tools available, greater familiarity with trap deployment protocols by program staff and cooperators, and increased public awareness of EAB signs and symptoms and reporting procedures for suspect trees. As improvements in survey and detection tools allow the program to delimit the distribution of EAB in the United States, APHIS expects these detections to decrease.

#### *Glassy-Winged Sharpshooter*

The Glassy-Winged Sharpshooter (GWSS) is a vector for Pierce's Disease (PD), which significantly threatens many California crops, including grapes, citrus, stone fruits, almonds, and alfalfa. APHIS and the California Department of Food and Agriculture (CDFA) conduct control activities to reduce GWSS populations and minimize the negative impact of PD and the GWSS, facilitating movement of nursery products and bulk citrus without undue regulatory restrictions. The program strategy is to slow or stop the spread of the GWSS while developing short- and long-term solutions to PD. This strategy relies on preventing GWSS spread to new areas, conducting State-wide survey and detection activities, responding quickly to GWSS detections in new areas, conducting outreach efforts, and developing solutions to PD and its vectors.

GWSS is currently established in 12 California counties, and CDFA eradication efforts are ongoing in two others. Since this program began in 2000, CDFA – with State funding - has eradicated 15 isolated GWSS infestations. In 2011, APHIS and CDFA conducted area-wide management programs in major citrus-producing areas of Fresno, Kern, Riverside, and Tulare Counties. These programs suppressed GWSS populations and maintained rejections of bulk citrus at low levels. (Bulk citrus is moved from fields to packing houses in bins. The packing houses reject citrus shipments if GWSS is found either on the fruit, the bins, or - more often - in sweat rooms where they heat citrus to make sure no pests are present.) The low rejection levels enabled citrus growers to comply with State regulations and move their products to packing houses for export. Overall in 2011, the program applied area-wide treatments to more than 20,000 citrus acres in Fresno, Kern, Riverside, and Tulare Counties. State officials continued to inspect nursery stock for GWSS life stages at origination and destination counties. Also in 2011, four GWSS interceptions occurred on nursery shipments, with four egg masses found among the shipments. This data compares to six interceptions in 2010 with five egg masses, one nymph, and one adult found. These interceptions prevent the establishment of GWSS in non-infested areas, where mitigation efforts would be costly and time-consuming. The slight decrease in interceptions in 2011 is likely due to nurseries continuing to be proactive in

reducing their pest populations. Many nurseries in GWSS infested areas treat their establishments to remain below State GWSS trapping thresholds.

#### Pale Cyst Nematode

Pale Cyst Nematode (PCN) is a major pest of potato crops in cool-temperate areas and is one of the most difficult potato pests to control. APHIS, the Idaho State Department of Agriculture, and the Idaho potato industry are working to control and eradicate PCN in Idaho through extensive soil survey and fumigation of infested fields. Since the pest was first detected in 2006, APHIS has quarantined infested and associated fields to prevent it from spreading. In 2011, the PCN program applied fumigants in the spring and fall to the infested fields to eradicate PCN, treating 688 acres with methyl bromide and Telone. The program also conducted surveys (testing more than 50,000 soil samples) in Idaho to support detection, delimiting, and eradication efforts. Of the samples, four tested positive in three fields, resulting in an additional 367 infested acres and an increase in the size of the regulated area by an additional 14,233 acres. However, based on the survey and release protocol, the program also deregulated 14,956 acres (leading to an overall decrease in the number of acres under regulation). The program is delimiting the additional regulated acres to determine if these acres are infested. As of November 1, 2011, 15,333 acres are under quarantine or regulation, of which 1,467 are infested. In 2011, APHIS also continued the national PCN detection survey in Idaho and in 17 other States focusing on seed potato acreage. None of the 14,000 soil samples tested showed signs of PCN. PCN has not been detected outside of the current eradication area in Idaho or within any other State. Since the initial detections, the program has used field treatments to reduce the tested viability of detected PCNs by 99 percent.

#### Phytophthora ramorum

*Phytophthora ramorum* (*P. ramorum*) is a plant pathogen that causes Sudden Oak Death and several other plant diseases. Since 2002, this program has protected the nation's landscape and safeguarded the nursery industry and several other industries from enormous potential losses. APHIS conducts a regulatory and control program to prevent the artificial spread of *P. ramorum* through the interstate shipment of host plants from regulated States (California, Oregon, and Washington) and to reduce nursery infection levels. To achieve this goal, APHIS works with officials in these States to establish quarantines and require nursery inspections before host plants are shipped interstate. These activities minimize the artificial spread of *P. ramorum* through nursery shipments, while allowing the movement of healthy plants.

In 2011, the program detected 22 infested nurseries in California, Oregon, and Washington, the same number as in 2010. Of these detections, 14 were in interstate shippers and 8 were in retail establishments. When *P. ramorum* is detected in a nursery, the operator must destroy all infected plants and stop shipping until the nursery passes inspection. This requirement minimizes the probability that infected plants will be shipped to new areas. To further reduce the risk of *P. ramorum* spreading through the shipment of nursery stock, APHIS issued a Federal Order in 2011 requiring certain interstate shippers in regulated States to provide advance notification when shipping high-risk host plants. APHIS plans to review this requirement in the spring of 2012. When *P. ramorum* is found in a nursery outside the regulated States, the nursery is placed under quarantine and all infected plant material is destroyed. In one instance in 2011, a sole infected plant was found in Connecticut and was traced back to an interstate shipper in Oregon that had not provided advanced notification. APHIS issued a fine for this violation; repeat offenders are subject to stiffer penalties. In another instance, *P. ramorum* was detected in the soil of a retail nursery in South Carolina, but not on any plants. In this case, the program will work to eradicate the disease with fumigants or will have the infested area paved over. If the area is fumigated, State officials will re-check the area until the disease is no longer detected. In 2011, APHIS continued to support the development, communication, and implementation of best management practices in nurseries in the regulated States. This effort will help nurseries reduce the risk of *P. ramorum* introduction and establishment and, thus, artificial movement of the disease. The program measures performance by tracking the percentage of certified nurseries shipping from California, Oregon and Washington that pass inspection. In 2011, the program met its target of 99 percent.

### Karnal Bunt

The goal of the Karnal Bunt (KB) program is to retain U.S. wheat export markets while protecting U.S. wheat production areas that are free of KB and facilitating wheat movement into domestic and international markets. This program provides survey and treatment options that lessen the impact of KB on affected parties and promote the flow of pertinent disease information to reassure trading partners about the safety of U.S. wheat exports. APHIS works with State cooperators to collect wheat samples at harvest or from wheat storage facilities. As of September 30, 2011, 27 of 39 States that participated in the 2011 KB national survey had completed their survey. All national survey samples, to date, have been negative for KB. The program also monitors the cleaning and disinfection of the equipment used to harvest, transport, or process wheat within a regulated area. The program released the remaining 17,827 acres quarantined in California in early 2011, thereby ending the KB program in California. In Arizona, the regulatory and eradication program is ongoing and 232,807 acres are still under quarantine.

### Sirex

APHIS continued efforts to develop a biological control program targeting *Sirex noctilio*, an exotic wood-boring wasp that attacks a variety of pine species. Since controlling *Sirex* is not feasible due to the rapid spread of the pest, APHIS is discontinuing its program. The U.S. Forest Service will take over long-term management efforts in forested areas. In 2011, APHIS and Forest Service officials developed a plan to transfer components of the program (including the biological control initiative) to the Forest Service, with APHIS support during 2012. In 2011, the *Sirex* program continued ongoing field and laboratory studies to evaluate the nematode *Beddingia siricidicola*, as a biological control agent of *Sirex noctilio* and potential non-target effects from the biocontrol agent. APHIS and the Forest Service also co-hosted a meeting to review research on the pest with university partners and develop a post environmental release monitoring plan for the biological control agents.

### Light Brown Apple Moth

Light Brown Apple Moth (LBAM) is an invasive pest that reproduces rapidly and can attack more than 2,000 types of plants and trees throughout the United States. Potential national production losses in areas susceptible to LBAM range from \$700 million to \$1.6 billion annually. The pest has been detected in 22 California counties, 16 of which are Federally regulated. In 2011, APHIS and the CDFA conducted LBAM suppression and control activities to maintain trade and interstate commerce, and protect numerous industries and jobs associated with the agricultural sector. The program has mostly been supported through carryover funds from an emergency transfer from the CCC, but the approximately \$1 million appropriation has covered a portion of the costs incurred to enforce the Federal quarantine. These quarantine activities are designed to prevent the spread of LBAM on regulated host articles where LBAM exists. APHIS and the CDFA began transitioning the program into a State-managed, Federally recognized control program. Under this program, the State and industry would ultimately assume more financial responsibility for regulatory operations (with some assistance from APHIS), and APHIS would focus on developing treatments for commodities of trade and national surveillance for the pest. During the transition period, APHIS will continue to support regulatory operations in California. APHIS has also been working with CDFA, industry groups, and State regulators from all 50 States to develop a national harmonization plan for interstate trade to avoid the development of different entry requirements for each State. This program measures performance by tracking LBAM spread beyond the generally infested area. In 2011, the program found just one new isolated population, compared to three in 2010.

### Critical Invasive Pest Response

The EPP line item also includes approximately \$2 million to control or eradicate plant pests, diseases, and weeds that are not specifically identified or addressed elsewhere in the APHIS budget. The Critical Invasive Pest Response program funding covered approximately 25 pests in 2011. The program can also provide vital start-up funds to promptly address an emergency or potential emergency in the early stages when eradication can be accomplished quickly and in a cost-efficient manner. In 2011, some of the pests addressed were Japanese beetle and the pine shoot beetle (PSB). The Japanese beetle is the most devastating pest of urban landscape plants in the eastern United States, feeding on more than 300 species of plants. Because of this wide host range and the absence of an effective natural enemy, the beetle has been able to spread throughout most States east of the Mississippi River. APHIS and

State cooperators protect the agriculture of the western United States by preventing the artificial spread of the pest from infested States and eradicate infestations in non-infested States. During the 2011 Japanese beetle season, APHIS monitored nine airports in Eastern and Midwestern States to determine which airports should be regulated for high beetle populations. APHIS monitors aircraft at regulated airports to ensure that the beetle is not moving to a protected State (i.e. Arizona, California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, and Washington). The PSB is a serious, invasive pest of pine trees that has been detected in 19 States. It can cause severe decline in the health of the trees, and in some cases, kill the trees. The goal of APHIS' program is to define the extent of the infestation and limit its artificial spread through quarantine and a regulatory program. In addition, the program aims to reduce the economic impact on plant industries through pest management and improved regulatory protocols for movement of articles at risk. During the 2011 PSB season, APHIS surveyed in eight States to detect new incursions. The quarantine area was expanded in three states in response to new detections.

## 7. Golden Nematode

The golden nematode (GN) is one of the world's most damaging potato pests. Damaging populations of the nematode develop when susceptible crops are planted in a monoculture or rotation. Since the 1940s, APHIS and the New York State Department of Agriculture and Markets have been working on an aggressive survey, quarantine, and control program. This program has confined the pest to nine New York counties. Once the GN is established, potato production is impractical except in long crop rotations or when planting GN-resistant potato varieties. If GN were to become widely established in U.S. potato, tomato, and eggplant production areas, annual crop losses could exceed \$5 billion. The cooperative State-Federal program has protected the United States and most of New York State from trade restrictions. Annually, potato, tomato, and eggplant crops contribute \$80 million to New York's economy and \$6 billion to the nation's economy.

This program's strategy consists of crop rotation, the growing of GN-resistant potato varieties, and best management practices. The program also fumigates the area affected by Ro2, a second race of GN. The program is working to increase the number of potato varieties that are resistant to both races, Ro1 and Ro2. APHIS, USDA's Agricultural Research Service, New York State, and Cornell University, fund the development of new potato varieties. Growers can now choose from approximately 50 of these varieties. In 2011, the potato breeding project at Cornell University released a new variety that is resistant to the Ro2 GN strain (this race was more recently detected, and there are fewer potato varieties with resistance to it). These activities enable the program to control the Ro1 race and eradicate the Ro2 race. In 2011, the program treated the six acres of potatoes for the Ro2 race; subsequent surveys have not indicated any evidence of the pest.

To facilitate international and interstate agricultural shipments, APHIS and State cooperators enforce quarantine requirements to prevent GN movement, and conduct regulatory treatments and State-wide soil surveys in production areas to prevent the GN from infesting potatoes and control the pest in known infested areas. In addition, the program works with growers and the State to ensure farm equipment, potato shipments, and regulated articles are treated and certified to prevent nematode spread while allowing production to continue with minimal interruption. No new GN detections had been reported in 2011 as of November 1, 2011. However, the sample collection and processing results will not be completed until approximately February 1, 2012.

In late 2010 and 2011, the golden nematode program released 263,000 acres from regulation following the protocols in the "U.S.-Canada Guidelines on Surveillance and Phytosanitary Action for Pale Cyst Nematodes". This bilateral agreement establishes science-based survey methods and criteria for determining whether an area is free of nematodes, outlines phytosanitary and survey requirements for the safe trade of seed potatoes, and addresses deregulation protocols to be followed including special intensive soil surveys for the purpose of deregulation. The program plans to deregulate additional areas in upstate New York by January 2012. APHIS now has the science-based methods and criteria it needs to safely remove up to 90 percent of the land currently regulated for golden nematode in New York by January 2015. As a result, potato farmers and other growers in deregulated areas will no longer be required to steam clean their equipment before leaving their fields to remove soil that may carry the pest. In addition, potatoes and other commodities will no longer need to be inspected and certified for interstate movement. This will directly reduce production costs, freeing those resources for other priorities. Removing these restrictions will also open additional opportunities for exports of these commodities.

## 8. Grasshopper and Mormon Cricket

This program helps Federal, State, and private landowners in 17 western States manage grasshopper and Mormon cricket damage on rangeland by providing information about population levels, conducting treatments where possible, and providing technical assistance. Although grasshoppers and Mormon crickets are natural components of the rangeland ecosystem, their populations can reach outbreak levels and cause serious economic losses to U.S. agricultural resources, especially when accompanied by a drought. Grasshoppers feed on grass, and can also devastate crops such as alfalfa, wheat, barley, and corn, which are already under stress during a drought. The value of these losses is based on many factors, including the economic use of available forage or crops; grasshopper species; age and density present; rangeland productivity and composition; accessibility and cost of alternate forage; and weather patterns. Despite the best land management efforts, grasshopper infestations often cover vast acreage, and landowners may need Federal support to control them. The Plant Protection Act requires that APHIS pay for the full cost of treatments on Federal lands, 50 percent of treatment costs on State lands, and one-third of treatment costs on private lands.

The program conducts surveys to determine the extent of grasshopper infestations and the need for suppression treatments. These surveys are conducted in the spring to identify possible treatment areas and in the fall to determine which areas may have high populations the next year. Based on the large number of grasshoppers present at the end of the summer of 2010, APHIS and cooperators expected outbreaks to occur in 2011, especially in the Great Plain States of Montana, North Dakota, South Dakota, and Wyoming. However, record-setting rainfall and severe flooding reduced grasshopper outbreaks in many areas in Montana, North Dakota, and South Dakota. In 2011, APHIS treated 83,000 acres of rangeland, which protected forage on 155,000 acres. The majority of treatments were in Wyoming, with smaller treatments in North Dakota, Oregon, Montana, and Arizona. Only spot treatments were needed to reduce Mormon cricket outbreaks in Utah, Idaho and Washington. The program met its performance target for 2011 of conducting surveys in all 17 States affected by these rangeland pests.

## 9. Gypsy Moth

Gypsy moth is a significant and destructive pest to some of North America's most beautiful and popular deciduous trees, including maples, oaks, and elms. The gypsy moth program protects natural forest and landscape resources by preventing the human-assisted movement and establishment of gypsy moth populations in non-quarantine areas through regulatory activities.

The European gypsy moth (EGM) is established in all or parts of 19 northeastern, mid-Atlantic, and Midwestern States, as well as the District of Columbia. APHIS and State cooperators conduct regulatory activities within the quarantine area to prevent the human-assisted spread of the pest. These efforts include inspection, treatment, and certification of regulated articles such as logs, nursery stock, and mobile homes for movement from quarantine to non-quarantine (non-infested) areas. The EGM also spreads naturally into areas bordering the quarantined zone. APHIS monitors the transition zone along the 1,200 mile-long border of the quarantine area to ensure that newly infested areas are added to the quarantined zone and regulated effectively. In 2011, APHIS and State cooperators continued to conduct EGM surveys to detect and delimit any isolated populations. During the year, the program added three new counties to the quarantine area (LaPorte County in Indiana, and Jackson and Price Counties in Wisconsin). Additional townships were also added to the quarantine within Penobscot, Piscataquis, and Somerset Counties in Maine. This action allows APHIS and State cooperators to ensure that businesses and residents in infested areas comply with regulations to prevent long-distance spread of the pest.

In 2011, APHIS and State cooperators continued Asian gypsy moth (AGM) surveys to detect and delimit any isolated populations. The AGM is not established in the United States, and, as of November 1, 2011, the results of 2011 surveys indicate no new detections of this pest. To address a particularly high-risk pathway for AGM, the program continued to support a cooperative offshore risk-reduction port survey project with the All-Russian Plant Quarantine Center. In addition, vessels departing for the United States from Russia, South Korea, China, and Japan are inspected for gypsy moth by representatives of foreign governments as part of the offshore AGM vessel certification program. Any vessels that are found to have egg masses are cleaned before they leave the port. China began issuing AGM certifications for the 2011 shipping season. The program's goal is that all vessels from high-risk countries in Asia are inspected and certified when they depart during the 2012 shipping season. APHIS

monitors the effectiveness of those efforts through DNA analysis of all suspected AGM egg masses detected on ships and on land in the United States. DNA testing is used to determine whether an egg mass is or is not AGM. DNA sequencing is the only definitive way to determine whether an egg mass is AGM or EGM.

#### 10. Imported Fire Ant

Imported Fire Ants (IFA) are a major public nuisance because of their ferocious sting and aggressive behavior and the damage they can inflict on several agricultural commodities (such as corn and soybean seedlings). The IFA program works to prevent the human-assisted spread of IFA by enforcing the Federal quarantine and working with infested States to regulate host materials such as nursery stock and soil-moving equipment. APHIS evaluates the efficacy of regulatory treatments for preventing IFA spread and works with States, industry, and other Federal agencies to develop insecticides and biological control agents. The IFA infests more than 320 million acres in Puerto Rico and the following 14 States: Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. Each of these States/territories is under Federal quarantine.

In 2011, the program conducted 44 regulatory blitzes (concentrated efforts to inspect host materials in a certain area over a short period of time) to ensure that regulated articles leaving the quarantine area had been properly treated according to APHIS regulations. These regulations, which require that host materials from infested areas be certified free of IFA, are the primary method of preventing the pest's spread. In 2011, APHIS coordinated the blitzes with North Carolina, Oklahoma, New Mexico and Arizona (States on the leading edge of the infestation). In addition, APHIS and its cooperators continued a biological control project using several species of phorid flies, which lay eggs in IFA; the larvae eventually kill the ants. With the successful establishment of multiple species of these flies, it is expected that they should reduce IFA populations and allow native ants to compete for resources, thus helping to restore ecological balance. USDA's Agricultural Research Service continued exploration for additional fly species and development of rearing and release techniques. Since the spring of 2002, the program and cooperators have conducted 125 releases involving four species of phorid flies, with several releases in each of the 14 States/territory under Federal quarantine. Two species of flies are established in the southeastern States and have spread over more than 60 percent of the fire ant regulated area. Based on the successful establishment of the two species, releases of these species will cease in 2012.

In 2011, APHIS met the performance target of no IFA infestations outside of regulated areas that could be attributed to the movement of regulated articles infested with fire ants. APHIS expects to maintain this level of performance.

#### 11. Johne's Disease

Johne's disease is a chronic, infectious, and usually fatal intestinal disease of cattle that also occurs in sheep, goats, and deer. It is widely distributed throughout the world. First discovered domestically in 1908, it is now found in all regions of the United States. Based on a survey of environmental samples, the 2007 National Animal Health Monitoring System (NAHMS) Dairy study found that approximately 68 percent of U.S. dairy farms are affected by Johne's disease. The goal of the Johne's Disease program, through the Voluntary Bovine Johne's Disease Control Program (VBJDCP), has been to contain and reduce the prevalence of Johne's disease in the United States through voluntary certification of test-negative herds and disease management to help herds achieve disease freedom.

There is no effective treatment for Johne's disease. Cattle in infected herds usually belong in one of four categories: (1) infected animals that are clinically sick and shedding large numbers of bacteria; (2) infected animals with no signs of disease, but shedding bacteria; (3) infected animals that are not shedding bacteria; and (4) non-infected animals. Nationally, the cost of Johne's disease to dairy producers has been estimated at \$200 million per year in lost milk production, veterinary costs, and early culling of livestock. Johne's disease costs in beef herds are undetermined.

APHIS initiated its Johne's Disease program in 2002 and received its first line-item funding in 2003. Initially APHIS' goal was to enroll herds in the program and, through assistance with risk assessments and management plans, to increase the number of certified herds in the program. Over time, however, it became clear that control of

Johne's disease needed to focus on management practices at the producer level and that many progressive producers were adjusting management practices to address the disease without participation in the Federal program. As Federal resources decline, a new approach is needed.

In 2008 APHIS worked with States, affected industries and producers to update the National Johne's Disease Strategic Plan in order to emphasize more effective ways to reduce the prevalence of the disease in the United States. The revised strategic plan proposed to continue the VBJDCP, which provides testing guidelines for States to use to identify cattle herds at low risk for Johne's disease infection. However, it also recommended that APHIS shift its focus to nationally coordinated education efforts, research and field study projects. By adjusting its focus from field support to education and research priorities, APHIS can leverage minimal resources to provide maximum benefit to cooperators.

The APHIS Johne's Disease program focuses on three priorities: (1) maintenance of program standards; (2) approval of testing laboratories, vaccines and test kits; and (3) education and outreach. APHIS conducts outreach primarily through collaboration with the National Johne's (disease) Education Initiative (NJEI) of the National Institute for Animal Agriculture. NJEI produces brochures, quarterly newsletters and other outreach materials and has recently revised and reissued handbooks for risk assessments and management plans.

APHIS revised the Uniform Program Standards for the VBJDCP in 2010, which changed how herds are classified and made compliance with the herd management portion of the program easier. The NAHMS 2007 study showed that 32 percent of dairy herds either participated in a custom Johne's disease control program or participated in the VBJDCP. In 2011, VBJDCP enrollment numbers continued to decline, reflecting the termination of Federal funding for field level support. However, producer interest in educational materials on Johne's disease continues to be strong.

## 12. Noxious Weeds

The Noxious Weed program works with State cooperators to prevent the introduction and spread of non-native invasive plants. It provides these cooperators with national guidance on weed management policy by developing control methods and conducting environmental assessments of treatment options. APHIS also evaluates weeds for potential addition to the Federal Noxious Weeds (FNW) list (APHIS prohibits the entry of plants on the list and regulates the movement of those already present). The list currently covers 111 taxa, 63 of which are present in the United States. In addition, APHIS works with various groups to perform weed survey, public education, permitting, eradication, and management of introduced weeds.

In 2011, APHIS responded to new infestations of South American spongeplant (*Limnobium laevigatum*) in California, sea buckthorn (*Hippophae rhamnoides*) in Wyoming, giant hogweed (*Heracleum mantegazzianum*) in North Carolina, hydrilla (*Hydrilla verticillata*) in New York, Chilean needle grass, (*Nassella neesiana*) in Alabama, Santa Maria feverfew (*Parthenium hysterophorus*) in Texas, and red root floater (*Phyllanthus fluitans*) in Florida. APHIS targeted these infestations because they were new detections of already regulated weeds or new weeds to be evaluated as possible FNW.

In addition, APHIS revised the weed regulations to clarify the process by which weeds are added to the list of regulated species, adding a treatment requirement for niger and cumin seeds, and adding nine new species to FNW list. The newly listed weeds are: prickly acacia (*Acacia nilotica*), found in the Caribbean; mistflower (*Ageratina riparia*), found in Hawaii; capeweed (*Arctotheca calendula*), found in California; false caper (*Euphorbia terracina*), found in California; British yellowhead (*Inula britannica*), found in Michigan; stemless thistle (*Onopordum acaulon*) and Illyrian thistle (*Onopordum Illyricum*), found in California; maidenhair creeper (*Lygodium flexuosum*), which is not known to exist in the United States; and old world climbing fern (*L. microphyllum*), found in Florida. In addition, the program is testing a Pest Risk Analysis tool used to evaluate weed invasiveness to support decision-making and rulemaking.

APHIS continued participating on the Federal Interagency Committee for the Management of Noxious and Exotic Weeds to create partnerships to address invasive weeds. This Committee coordinates the Federal management of invasive species by developing and sharing scientific information, fostering collaborative efforts, sponsoring

conferences and workshops, and providing recommendations for national and regional invasive plant management. In 2011, APHIS supported 47 weed projects in 33 States, mainly through cooperative agreements. APHIS continued assisting the Smithsonian Institute's National Museum of Natural History on the Consortium for the Barcode of Life, an international initiative to develop DNA barcoding as a global standard for identifying species. The 2012 appropriation eliminated the Noxious Weeds line item. While APHIS will no longer have dedicated funding for weed eradication projects, APHIS will continue port inspection activities, permit evaluations, and enforcement actions related to regulated species, as well as continue to review proposals for additions to the FNW list.

### 13. Plum Pox

Plum Pox Virus (PPV) is a disease that attacks several Prunus species, including peaches, apricots, plums, and nectarines, and seriously threatens the nation's stone fruit industry, which was valued at \$1.5 billion in 2010. PPV significantly reduces fruit production and quality in infected trees, and international trading partners refuse fruit from infected regions. The program seeks to mitigate and eradicate PPV outbreaks in the United States by regulating nursery materials, conducting field surveys, and eliminating infected trees in nurseries and orchards. In 2011, the program continued addressing an outbreak in New York (first detected in 2006) that affects three counties. The program also continued monitoring in Pennsylvania and Michigan, after declaring eradication in both States in 2009.

In New York, the program has removed the majority of infected and exposed trees and is continuing surveys to find remaining pockets of infection. In 2011, crews collected and processed 171,400 samples from orchard and homeowner surveys. APHIS collected the majority of samples in the three counties involved in the eradication effort (Niagara, Orleans, and Wayne Counties) and conducted additional orchard surveys in the Hudson Valley. The surveys resulted in one positive PPV detection in New York State, located on a previously positive farm in Niagara County. In response to this find, the program has removed the infected tree and most of the exposed trees within in a 500 meter radius of the infected tree. Intensive survey in all areas where PPV positive trees were found within the last 3 years will continue in Niagara, Orleans, and Wayne Counties. The program is also planning a Statewide survey, with emphasis near areas close to a PPV outbreak in Canada, to ensure that it can find and address any additional infected areas.

In Pennsylvania, crews collected and processed 61,025 samples with no positive results from orchards or nurseries within 25 miles of the last known infected sites. In Michigan, the program collected and processed 5,220 samples with no positive results. In 2011, these surveys mark the second year of post-eradication monitoring after eradication was declared in both States in the fall of 2009. Scientific protocol requires 3 consecutive years of a reduced monitoring survey before nursery stock production can resume. This monitoring survey is required to ensure that latent virus is not lurking in the area to provide a source of re-infection or spread to other areas through nursery stock produced from the area. The final year of post-eradication monitoring will occur in both Pennsylvania and Michigan in 2012.

### 14. Pseudorabies

Pseudorabies Virus (PRV) is a herpes virus that causes reproductive, respiratory and neurological disease in swine. Depending on the age of the swine at time of infection, disease symptoms vary. Swine that survive PRV become lifelong virus carriers. Other species including dogs, cats, cattle and sheep can also become infected with PRV. Species other than swine usually die shortly after infection. The virus does not affect humans.

To combat the disease, the USDA, States and industry established an eradication program. Due to the success of the eradication efforts, in 2004 the U.S. commercial swine herd was declared PRV free. The virus continues to exist in feral swine. As the number of feral swine in the United States continues to expand, the potential for spread continues to exist.

By the beginning of 2012, all States had maintained PRV-free status for eight years. As a result of the Agency no longer requiring an eradication program, APHIS' 2012 appropriation eliminated funding specific to the effort from the budget. The number of feral swine in the United States continues to expand causing increased disease threats to commercial swine herds so surveillance is still required in the commercial industry. APHIS' Swine Health program

will continue surveillance to ensure the absence of PRV to trading partners in commercial swine herds in the United States. APHIS is also moving away from disease-specific surveillance programs to a comprehensive commodity-based system that creates flexibility to actively monitor a broader list of species-focused diseases. This approach allows APHIS to gain information from a nationwide random sampling approach to swine disease at a lower cost.

#### 15. Scrapie

Scrapie is a fatal, degenerative, infectious disease affecting the central nervous system of sheep and goats. The purpose of the National Scrapie Eradication Program is to eradicate classical scrapie from the United States quickly and efficiently. Eradication will allow the United States to open up export markets for both live animals and animal products, prevent losses in productivity, and protect the U.S. sheep and goat industries from the risk that scrapie will be perceived as either a human health risk or a threat to wildlife. The industry loss due to classical scrapie is estimated to be \$10 to \$20 million annually, not including lost market opportunities due to export restrictions.

During 2011, 15 new infected or source flocks in 10 States were identified. This represents a 38 percent reduction in the number of new infected and source flocks identified compared to 2010. Seventeen new or previously existing infected or source flocks completed flock cleanup plans. Three infected or source flocks located in three States remained on cleanup plans at the end of 2011. Upon completion of the cleanup plan, flocks are placed on post-exposure management and monitoring plans for five years.

In 2011, the percent of cull sheep found positive at slaughter, adjusted for face color, continued to decrease to 0.0058 percent. This measure of prevalence has decreased 96 percent since slaughter surveillance started in 2003 and 47 percent since 2010.

During 2011, the Agency sampled 40,150 sheep and goats for scrapie. This total was less than the targeted number of 44,000. APHIS sampled fewer sheep – less than the target -- due to changes made in the animal selection criteria to increase efficiency in identifying infected animals. Despite the overall sampling reduction, sample collection was increased at low volume slaughter plants because of APHIS' Small Plants Initiative. As a result of this initiative, APHIS collected samples at 42 new slaughter plants in 2011. These efforts have enabled collection of samples from a larger geographic area and allowed APHIS to sample new sheep populations. As a result of the Agency's success in reducing the prevalence of scrapie in sheep, it is likely that the prevalence in sheep is now similar to the prevalence in goats. In 2011, for the first time, there were more classical scrapie field cases in goats than in sheep. Field cases are positive animals found through testing suspect and exposed sheep and goats. To address this shift, APHIS is increasing slaughter surveillance in goats, and as a result, the overall number of animals sampled in 2012 likely will be higher due to increased surveillance in goats.

The scrapie program requires official identification of certain classes of sheep and goats in order to move in interstate commerce. As of September 30, 2011, the program had issued official ear tags to 150,253 sheep and goat producers, an increase of 22 percent from 2010.

The Scrapie "free" Flock Certification Program (SFCP), which began in 1992, is a voluntary program. The program provides participating producers the opportunity to protect their animals from scrapie and to enhance the marketability of their animals by certifying their origin in scrapie-free flocks. The program was modified in July 2007 to add an export monitored category that meets the current World Organization for Animal Health standards for export. There are currently 1,512 flocks enrolled in the SFCP, and of these 615 are certified as scrapie-free and 6 are export certified. Although the total number of producers enrolled in the SFCP has decreased, the number enrolled in the export monitored category continues to increase. In 2011, APHIS solicited input from stakeholders on options for improving the efficiency and effectiveness of the program.

## 16. Tuberculosis

Bovine tuberculosis (TB) is a contagious and infectious disease. Although cattle are considered to be the true hosts of the disease, it has been reported in several other species of both domestic and non-domestic animals, as well as in humans. The TB eradication program continues to make significant progress, markedly decreasing the prevalence of the disease in U.S. livestock. However, the goal of eradication remains elusive as animal health officials continue to detect TB sporadically in U.S. livestock herds.

The TB program has five State classifications, which are, in descending order: accredited free (AF), modified accredited advanced (MAA), modified accredited (MA), accreditation preparatory (AP), and non-accredited (NA). A lower ranking translates into a higher rate of TB prevalence within the State and, therefore, more restrictive movement requirements. At the end of 2011, 46 States, 2 Territories, and 3 zones were AF, including Puerto Rico and the U.S. Virgin Islands. California was MAA and three States had split-State status. Michigan continues to have AF, MAA, and MA status. Interim rules that advanced the MAA zones and reclassified the entire States of both Minnesota and New Mexico as AF were published in the *Federal Register* on October 4, 2011. All States and territories have MA status for captive cervids.

During 2011, APHIS continued to revise the existing bovine TB regulations to construct a program that protects the health of U.S. livestock and is responsive, timely, and cost-effective. Since the bovine brucellosis program was undergoing similar changes with several common objectives, APHIS formed a joint working group to discuss overarching regulatory concepts for both the TB and brucellosis programs. The joint TB and Brucellosis Regulatory Working Group, comprised of State and Tribal partners, developed a regulatory framework that was published in the *Federal Register* on May 6, 2011. This framework described a single rule for both the TB and brucellosis programs that ensures consistency and flexibility while reducing administrative burdens. Based on the comments received from the *Federal Register* notice, during public meetings, and through other outreach efforts, APHIS is developing new regulations and supporting standards for the TB and brucellosis programs. The *Code of Federal Regulations* will provide the legal authority for the programs while the operational details of the programs will be described in a program standards document. The proposed rule is targeted for publication in 2012.

Nine TB-affected herds were detected during 2011, including seven beef and two dairy herds. These herds were located in Arizona (1 beef), California (1 dairy), Colorado (1 dairy, 3 beef), Indiana (1 beef), and Michigan (2 beef). Herds detected in previous years also remain in certain States. One Michigan dairy is continuing under a test-and-remove herd plan from 2004. The herd was scheduled for quarantine release in 2009 but an infected animal was detected during routine testing. One Michigan beef herd, detected in 2010, remains under a test-and-remove herd plan in the MA zone; and two captive cervid herds, detected in 2009, remain under quarantine in the MA (bovine) zone of Michigan.

## 17. Wildlife Services Operations

APHIS prevents or reduces conflicts between people and wildlife in order to protect human health and public safety, and reduce negative impacts to agriculture, property, and natural resources. State agencies, county and municipal governments, private homeowners, farmers, ranchers, and other property owners rely on the Agency's expertise to help prevent, minimize, and manage wildlife damage.

### *Livestock Predation*

According to the latest National Agricultural Statistics Service surveys, predators kill more than \$137 million worth of livestock annually. APHIS continues to provide leadership to protect livestock while respecting the role predators play in the ecosystem. APHIS operates to prevent and reduce wildlife predation to livestock through education, technical assistance to producers, and direct predation damage management. Each State needs different activities and expertise from APHIS based on the type of predators and their livestock populations. In Texas, the nation's largest cattle-producing State, the Agency protected more than 1.9 million head of livestock by managing predation, and saved producers approximately \$83 million. In the eastern states, coyote and vulture depredation conflicts have increased over the past few years and the Agency has provided management assistance in Florida, Minnesota, Pennsylvania, Virginia, West Virginia, and Wisconsin.

APHIS predation management also serves a conservation objective in the restoration of threatened or endangered predators. Wolf populations in the Great Lakes and Rocky Mountain regions have surpassed conservation goals for their recoveries, and the species is no longer listed under the Endangered Species Act in the Rocky Mountain region (except Wyoming) and is expected to be delisted in the western Great Lakes region and in Wyoming during 2012. The Agency's work to reduce wolf predation increases the public's overall tolerance of wolves, thereby enhancing broader wolf conservation efforts. APHIS also partners with the State wildlife agencies and the U.S. Fish and Wildlife Service to conduct wolf damage management programs and to capture and radio collar wolves to gather scientific information. In 2011, Agency personnel worked to protect livestock from wolves in nine states.

In Idaho, for example, the Agency provided wolf damage management and program information to more than 120 individuals, and continued working with the Idaho Department of Fish and Game to implement operational wolf damage management strategies throughout the State. Wolf depredations in Idaho were down 8 percent from 2010, which is a result of collaborative efforts between sheep producers, Idaho Department of Fish and Game, and APHIS.

### *Rabies*

Rabies remains a significant wildlife management and public health challenge. More than 90 percent of animal rabies cases in the U.S. reported to the Centers for Disease Control and Prevention (CDC) each year occurs in wildlife. Since 1997, APHIS has been the lead Federal agency for conducting coordinated oral rabies vaccination (ORV) campaigns to prevent the spread of specific variants of the rabies virus in raccoons, coyotes and gray foxes to new areas of the United States, while working toward elimination where practical. ORV alone, or integrated with trap-vaccinate-release and other methods, has proven to be an effective, socially acceptable strategy to achieve rabies control in wild carnivore reservoir species.

In 2011, the National Rabies Management Program (NRMP) distributed more than 8 million ORV baits over a total of 187,531 square kilometers in Alabama, Arizona, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Texas, Vermont, Virginia, and West Virginia. APHIS also conducted contingency actions to manage raccoon rabies epizootics within or near established ORV zones in Ohio, New York and Vermont. APHIS used ORV strategically to continue to prevent raccoon rabies from spreading to new areas in the United States. In addition, APHIS used ORV along the Texas-Mexico border in the Lower Rio Grande Valley to prevent reemergence of canine rabies in coyotes, allowing the United States to continue to maintain canine rabies-free status. In west Texas, ORV has been used to control rabies in gray foxes that has resulted in a 50 percent reduction in the area once infected by this rabies virus variant.

APHIS has also begun a field trial to test a second, potentially more effective, oral rabies vaccine for U.S. licensure. In September 2011, the program distributed approximately 80,000 baits of the trial vaccine within a 559-square mile area spanning portions of southeastern West Virginia. APHIS anticipates expanding trials in 2012 to strategic areas for further evaluation toward broader geographic use of this vaccine.

Also in 2011, the NRMP, in cooperation with the CDC and State agricultural and health agencies, expanded its use of the direct Rapid Immunohistochemistry Test (dRIT). This test can confirm rabies in 50 minutes in the field, allowing for real-time information and sound wildlife management decisions. From 2005 through September 2011, APHIS collected 63,323 animals (from 25 States) to enhance rabies surveillance. APHIS tested 48,623 samples using the dRIT, while the remaining animals were submitted to local public health laboratories (as per rabies exposure protocol); 897 of the dRIT-tested animals were confirmed rabid.

### *Airport Safety*

Wildlife strikes cost commercial aviation nearly \$700 million in the United States and approximately \$1.2 billion worldwide, annually. In 2011, with cooperator funding, APHIS provided 196 staff years of effort at 838 airports and airbases nationwide to mitigate wildlife hazards. In addition, APHIS assists the Federal Aviation Administration (FAA) by training nearly 3,000 U.S. airport employees in basic awareness of wildlife hazard management issues. APHIS conducted wildlife hazard management programs at 107 Department of Defense airbases across the nation. APHIS continued operational management of birdstrikes at bases in Iraq and Afghanistan, as requested by the

United States Air Force (USAF). The USAF extended and provided necessary funds to continue this effective collaborative program into 2012. Additionally, APHIS continues to collaborate with the U.S. Navy to provide full-time wildlife hazard mitigation at 17 naval air stations in the United States. The Agency continued to manage the National Wildlife Strike Database under an interagency agreement with the FAA. The database, first developed in 1990, now holds approximately 110,000 reports on civil aircraft collisions with birds and other wildlife and it provides a scientific foundation for managing wildlife hazards to aviation and forming policy.

### *Beaver Damage*

Beavers cause millions of dollars in damage to infrastructure such as bridges, dams, irrigation systems, levees, roadways, sewers, and water treatment facilities, as well as to fisheries, plants, and timber. In Mississippi, North Carolina, Wisconsin, South Carolina and Virginia, APHIS conducts statewide beaver damage management programs that also receive major funding from State agencies. APHIS also partnered with individual tribes for wild rice and coldwater ecosystem protection. Overall, APHIS conducted beaver damage management activities in 39 states.

### *Invasive Species*

Nonnative invasive animals can be devastating to specific ecosystems and their native wildlife populations. APHIS conducts management actions to protect resources from damage associated with many invasive species, including brown treesnakes (BTS), feral swine, and nutria.

BTS have eliminated 10 of the 12 native bird species and most lizard and bat species on the island of Guam. These snakes also damage electrical substations and cause power outages, and pose hazards to human safety from bites. APHIS continued to prevent the unintentional introduction of the BTS from Guam to other Pacific Islands, Hawaii, and the continental United States in 2011. The Agency intercepted approximately 12,000 BTS on Guam at or near ports of exit. APHIS' work with the Department of Defense has improved access, tracking, and inspection procedures of outbound cargo and vessels.

Feral swine are an invasive species of growing concern in the United States. Their increasing numbers (current estimates are between 4 and 5 million animals) and their expanding distribution in this country (35 states, Puerto Rico, the U.S. Virgin Islands, and Guam), make them a growing nuisance and danger to communities and the public. Feral swine damage includes consumption and physical damage of crops and cropland, competition with native wildlife, predation on rare species, destruction of fragile ecosystems, and property damage. During 2011 APHIS personnel removed more than 32,000 feral swine in 31 states. Management strategies and activities included lethal removal via trapping, shooting, and aerial operations. Removing feral swine can also reduce disease threats to domestic swine herds, which, in the long run, positively impacts the nation's international trade of swine products.

Nutria are large, semi-aquatic rodents native to South America and are found in at least 17 states. They cause extensive damage to wetlands, agricultural crops, and structural foundations such as dykes and roads. They may also threaten human health and safety by serving as a reservoir for tularemia and other diseases. APHIS is leading the first large-scale North American effort to eradicate a mainland nutria population on the Delmarva Peninsula in Maryland, where the rodents have devastated coastal Chesapeake Bay marshes.

### *Disease Surveillance*

APHIS' wildlife disease biologists provided technical assistance, conducted surveillance, and maintained control of over 70 wildlife diseases, pathogens, and syndromes. For example, APHIS conducted domestic disease surveillance activities for: avian influenza (AI) in wild birds (12,036 samples collected nationwide); plague and tularemia surveillance (6,641 samples collected in 45 states); pseudorabies, swine brucellosis, classical swine fever, and swine influenza (35 states); rabies (19 states); chronic wasting disease and bovine tuberculosis (17 states); and *E. coli* and Hepatitis E virus surveillance in feral swine (13 states). Additionally, APHIS coordinated the investigation of virulent Newcastle disease in wild birds in two states, and incorporated Native American lands in plague sampling.

Collaborative border programs led to the implementation of a U.S./Mexico Wildlife Disease Border Surveillance Plan, allowing cross-border surveillance for rabies, plague, tularemia, AI, and other diseases. APHIS participated in the *North American Trilateral Working Group on Highly Pathogenic Avian Influenza (HPAI) Early Detection in Wild Birds*, and coordinated international leadership by chairing the *U.S. Interagency HPAI Steering Committee*. APHIS implemented a Memorandum of Understanding with the Chinese Academy of Sciences to improve communication between the United States and China on wildlife disease issues, established the Asian-Pacific Wildlife Disease Network, and collaborated on surveillance for emerging diseases in Asia. APHIS also participated in the OIE's (World Organization for Animal Health) *Global Conference on Wildlife Health and Biodiversity*; served as a national associate on Food and Agriculture Organization of the United Nation's *Scientific Task Force on Wildlife Diseases*; collaborated with the USA Medical Research Unit in Kenya on emerging diseases, including African swine fever, in Kenya and Uganda; and collaborated with Foreign Agricultural Service on wildlife disease projects in more than 20 other countries.

### *Emergency Response*

All hazards emergency response is an important APHIS mission, and the Agency assists States and industries recovering from foreign animal disease introductions and issues. The Agency helped develop and implement the Employee Qualification System, revised the Continuity of Operations document, and maintained first responder readiness of 41 Wildlife Disease Biologists by ensuring compliance with Federal Occupational Health medical and respirator fit-test requirements. Emergency response events included chronic wasting disease surveillance in Minnesota and Wisconsin, and bovine tuberculosis surveillance in Minnesota and Nebraska.

### 18. Witchweed

Witchweed is a parasitic plant that threatens the \$50 billion corn and sorghum crop in the United States. If it were to spread throughout the Corn Belt, crop yields for corn and sorghum would decrease by 10 percent. Since 1957, APHIS has worked with cooperators in North and South Carolina to eradicate witchweed and eliminate its threat. This program also prevents U.S. commodities impacted by witchweed from facing restrictions in the global marketplace. The program has eradicated witchweed from 99 percent of the infested land. Once all visible signs of witchweed in a field are removed, the program places the field in a "release category" for ten years because witchweed seeds can remain in the soil long after the plant has been removed. If no additional witchweed plants are found in that field within those ten years, that field will be removed from the program.

In 2011, APHIS continued providing financial and technological support to the North Carolina Department of Agriculture and Consumer Services to help eradicate infested acres, conduct post-eradication surveys, and treat any new infestations when detected. The program projects that 1,700 acres will be infested at the conclusion of the 2011 growing season. This would represent a 10 percent decrease from the 1,893 infested acres in 2010. Infested acreage is expected to gradually decrease over the coming years. In South Carolina, APHIS maintained primary responsibility for these activities. An increase in corn acreage led to increased detections of witchweed in new fields that had been idle for several years after being released from the program. The program detected witchweed at six sites in South Carolina, bringing an additional 53 acres back under quarantine. These fields will receive two applications of ethylene and other herbicide treatments in 2012 and beyond to eradicate the witchweed. At the end of 2011, only 884 acres remain in the release category in two counties in South Carolina. Surveys conducted in areas with a history of witchweed (six South Carolina counties and five North Carolina counties) found no witchweed detections. The program will discontinue the use of contract methyl bromide (MB) soil fumigation treatments due to new Environmental Protection Agency regulations. The regulations require such large buffers around the area where MB would be used that most use in the infested areas would be impractical. The program will now use conventional herbicide treatments, which will add three to five years to the eradication timeframe (but still allow the program to continue with eradication).

## ANIMAL WELFARE

Current Activities: The program activities under this component ensure the humane care and treatment of animals covered under the Animal Welfare Act (AWA) and the Horse Protection Act (HPA). APHIS carries out activities designed to ensure the humane care and handling of animals used in research, exhibition, the wholesale pet trade, or transported in commerce. APHIS places primary emphasis on inspection of facilities, records, investigation of complaints, inspection of problem facilities, and training of inspectors. Regulations supporting the AWA, which appear in Title 9 *Code of Federal Regulations*, Chapter 1, Subchapter A, Parts 1-3, provide minimum standards for the handling, housing, feeding, transportation, sanitation, ventilation, shelter from inclement weather, and veterinary care of regulated animals.

APHIS performs pre-licensing inspections because, according to statute, applicants must be in full compliance with AWA regulations and standards prior to an issuance of license. After APHIS issues a license, program personnel perform unannounced compliance inspections and inspections to verify continued compliance. All registered research facilities, by law, are inspected at least once a year. If APHIS discovers violations during a compliance inspection, the Agency takes additional actions that include an increased frequency of unannounced inspections, and possible revocation of the facility's license.

APHIS also administers the HPA, as amended, which prohibits the showing, sale, auction, exhibition, or transport of sore horses. Sponsors and/or management of shows, sales, auctions and exhibitions have statutory responsibility under the HPA to prevent unfair competition, and must identify and disqualify sore horses.

### Selected Examples of Recent Progress:

#### 1. Animal Welfare

APHIS' Animal Welfare program carries out activities designed to ensure the humane care and treatment of animals covered under the Animal Welfare Act (AWA) through inspections, enforcement, education, and collaboration with others. Animals covered under the AWA include those intended for use in biomedical research, animals sold as pets at the wholesale level, animals transported in commerce, and those used for exhibition purposes. The AWA, enforced by APHIS' Animal Care program, establishes Federal standards of humane care and treatment that must be provided for these animals. The program places emphasis on the inspection of facilities, records management, review of third-party complaints, re-inspection of problem facilities using the Risk-Based Inspection System, voluntary compliance through education, and technical training of inspectors.

During 2011, APHIS dedicated resources to improving many of its processes and procedures, thereby improving the Agency's ability to effectively and efficiently carry out its mission. Some of the highlights of these process and procedural improvements include the following.

#### *Public Search Engine:*

APHIS developed and implemented an expanded and improved search engine that provides greater access to information about USDA licensees and registrants regulated under the AWA. The search engine is user-friendly and allows the public unprecedented access to information that used to be available only through Freedom of Information Act requests. With greater public access to high-value, machine-readable datasets (a recent goal set for the Executive Branch), the public is better able to monitor the Agency's efforts to uphold this important mission work.

For example, APHIS ensures the welfare of the animals it regulates by conducting unannounced inspections of USDA licensees and registrants. For the past several years, it has posted its inspection reports as public information on a searchable, online database accessible from the APHIS website. Now the program has upgraded the search tool for their database, known as the Animal Care Information System, so the public can search for licensing data, inspection data, and information contained in the annual reports submitted by USDA-registered research facilities.

The search engine has substantial capacity to link various data sources to one another more easily, including facility data and interactive map interfaces. These links significantly enhance APHIS' ability to strategically schedule inspections, streamline travel requirements, and keep costs down. It also provides critical information about affected facilities with animals that might be adversely affected in the event of a natural or man-made disaster.

*Risk-Based Inspection System:*

APHIS completed work during 2011 to re-evaluate the current methodology for calculating the frequency of inspections at facilities with more egregious violations. The Agency believes this change in approach will allow it to make better use of its limited resources and ultimately increase overall compliance.

*Focused Training:*

A series of webinars were specifically designed and presented to APHIS' Animal Care employees throughout 2011. These webinars promoted a higher level of consistency in the inspection process. Also, to better prepare APHIS for eventual implementation of avian welfare regulations, APHIS funded members of its *Bird Team*, a group of inspectors from each region with a background in avian care, to complete an online training certification program in aviculture.

APHIS also made progress in several other areas.

*Regulatory Efforts:*

APHIS published, in the *Federal Register* on September 1, 2011, a proposed rule to strengthen regulations related to commercial dog breeders and dealers. The proposed rule addresses the importation of dogs for purposes of resale, research, or veterinary treatment. Additionally, APHIS submitted for clearance a proposed rule to change the definition of retail pet store to assure the public that animals sold at retail as pets over the internet are monitored for their health and receive humane treatment. The Agency has also submitted into clearance a final rule requiring facilities regulated under the AWA to develop and follow a contingency plan in the event of an emergency or natural disaster to ensure that licensees and registrants will take timely and appropriate actions to protect animals, staff, first responders, and the public should an emergency or disaster occur.

APHIS also submitted into clearance a proposed rule to include rats, mice, and birds, not bred for use in research, under coverage of the AWA. Throughout 2011, APHIS continued far-reaching outreach efforts relating to the regulation to inform the public and stakeholders on the status of the rule and to gain a better understanding of the industries that will be regulated under it. In all, APHIS provided 18 public discussion forums, throughout the United States. These forums included question and answer sessions and allowed for extensive public opportunity to provide APHIS valuable input about the regulations. APHIS also drafted a plan for State and Tribal outreach and collaboration for this regulation. Through this outreach effort, APHIS gained a greater understanding of the challenges to implementing the regulation. Based on this valuable input, the Agency chose to pull the regulation from clearance in late 2011. This decision will allow APHIS to further evaluate its implementation strategy so that it best serves to enhance the welfare of the animals it is meant to protect. APHIS expects to release the proposed regulation back into clearance in early 2012 and is developing an implementation plan that will promote widespread compliance through innovative approaches to enforcement, training, and education.

*Outreach Activities:*

Animal Care supports compliance through education, training, and outreach. This includes developing and sponsoring customer-focused information meetings and training to include our stakeholders, States, Tribes and the general public. In 2011, APHIS held four Canine Care workshops to provide up-to-date information for dog breeders, whether regulated by APHIS or not. These seminars were free to the public and held at multiple locations for better access. These seminars were well-attended, with between 50 to 100 interested parties attending each one. Animal Care also provided a veterinary care seminar for dog kennel owners in Pennsylvania, and attended major stakeholder meetings throughout the year. At these stakeholder meetings APHIS always provided updates on

progress being made with regard to dog dealers and was always open to receiving input from these groups about ways to improve its efforts.

*Placement Efforts for At-Risk Animals:*

In cooperation with U.S. Fish and Wildlife Services, APHIS worked with Canadian authorities to accommodate the emergency import and placement of 3 Masai giraffes from a failing Canadian facility. In order to save animals that were starving and in poor health, APHIS acted to place them in a clean, safe, suitable facility in the United States. One animal succumbed during the transport but, after a period of treatment and rehabilitation at the U.S. facility, the animals were transferred to another facility in San Diego. APHIS also served an important role in the rescue of a number of big cats from a defunct circus in South America to a U.S. facility.

APHIS also worked with the Wild Animal Orphanage (WAO) and the Texas State Attorney General's office, with the relocation of more than 330 animals housed at the WAO facility in San Antonio, Texas. Approximately 300 of the animals have been successfully placed to date. APHIS has helped mediate the placement for a large number of nonhuman primates previously used in biomedical research, including some infected with HIV and other zoonotic diseases. This transfer of approximately 115 animals will be completed after the correct holding equipment can be built. APHIS expects the transfer of the remaining animals to take place by April 2012.

*Addressing Issues for Big Cats:*

Large carnivores can present a danger to the public if contact is allowed (intentionally or unintentionally). During 2011, APHIS developed guidance principles for the housing of big cats. This guidance for our inspectors, and therefore for our licensees, is under final review at legal counsel. APHIS has used its field specialists and inspectors to begin evaluation of individual facilities to ensure that housing and perimeter fencing meets proven minimum requirements for containment of dangerous carnivores (big cats). In addition, APHIS developed an internal mechanism to assure that all inspectors are aware of any incidences of animal escapes or attacks, as recommended in the Office of Inspector General (OIG) exhibitor audit. Also subsequent to the OIG audit on exhibitors, APHIS pursued the regulatory solution to assure that big cat or other dangerous carnivore owners do not circumvent State or local laws by claiming exhibitor status under the AWA when they are, in fact, private pet owners. This docket should be published in calendar year 2012.

*Elephants and Tuberculosis:*

Another longstanding public health issue tied to exhibition under the AWA is tuberculosis in elephants. APHIS provided facilities and administrative support for a scientific seminar on the most recent information on tuberculosis in elephants, including the science of detecting the pathogen, treatment options, pathology of the disease, and history of monitoring under the AWA. The seminar, which took place at the APHIS' Center for Animal Welfare in Kansas City, was open to the public. In a related move, APHIS determined that it would implement (after consultation and input from stakeholders) the 2010 Guidelines for testing and treating tuberculosis in elephants. The Guidelines had been approved by the U.S. Animal Health Association. APHIS conducted training for 23 veterinarians (18 U.S. veterinarians) on the use of the Chembio Elephant TB Stat-Pak®. These accredited veterinarians will be allowed to use the test kits for unofficial TB testing in elephants. The kit has beneficial uses, such as monitoring treatment and providing unofficial information on exposure/disease status of regulated elephants, as well as documented use of the kit for testing other exotic hoofstock. These uses benefit the health and welfare of all these regulated species. This allows for broader-based use of the test, and potentially decreases the overall costs of the test kit due to higher demand (economies of scale). It also provides the opportunity for the veterinarians and licensees to become more familiar with this test kit, fulfilling a promise the Agency made to stakeholders.

To further aid in the timely and uniform inspection of traveling elephants, APHIS created a small but highly trained and qualified team of inspectors to inspect all traveling units and ensure that exhibitors addressed all previously noted non-compliance issues. This helped assure compliance with all AWA requirements even while traveling, which minimizes public health and welfare issues in these public-contact venues.

*Problem Dog Dealers:*

A 2010 audit from the USDA's OIG raised several issues regarding problematic dog dealers. The review included 14 recommendations that focused on ensuring dealer compliance and preventing large breeders from circumventing AWA requirements. APHIS took action in 2011 to address many of the recommendations made by OIG. First, the Agency developed and implemented an Animal Welfare Enforcement Plan. Second, it filled 35 new positions, which are primarily dedicated to inspecting these dog dealers. It also created a special compliance unit that focused on improving many of the processes used to collect evidence and provide documentation. This compliance unit also provided additional training to inspectors and reanalyzed its program data to support targeted enforcement activities. Overall, the consistency and quality of internal inspection procedures has increased, and the number of enforcement actions against Class A licensed dog dealers climbed 92 percent between 2010 and 2011 (from 336 actions to 650 actions).

## 2. Horse Protection

APHIS enforces the Horse Protection Act (HPA) of 1970 by prohibiting horses subjected to a cruel and abusive practice called soring from participating in shows, sales, exhibitions or auctions. Soring is a technique in which a trainer irritates or blisters a horse's forelegs through the injection or application of chemicals or mechanical irritants. The technique is used by horse owners and trainers to change the gait of their horses to a desired, yet exaggerated, high-stepping one that allows riders to gain a competitive edge and improve their chances to win at shows.

In 2009, APHIS implemented protocols for assessing penalties for foreign substance violations. Through the use of gas chromatography/mass spectrometry (GC/MS), inspectors are able to identify the chemical composition of numbing mixtures that are sometimes applied to horses' legs when these horses have been subjected to chemical and/or mechanical means of soring. Using this GC/MS technique in 2011, APHIS issued more than 300 penalties for foreign substance violations detected by its inspectors. While APHIS analyzed fewer samples in 2011 than in 2010 (500 samples, about 50 percent less than 2010) the number of penalties issued actually increased by 50 percent. This increase was due to APHIS' more targeted surveillance approach when conducting foreign substance sampling at events.

In 2011, APHIS personnel attended more horse shows, exhibitions, auctions and sales than in previous years. In all, they attended 79 horse-related events nationwide to ensure enforcement of the HPA, which included the World Equestrian Games held in Lexington, Kentucky, from September 25 through October 6, 2010. This is in comparison to 60 horse-related events attended in 2010, 40 in 2009, 38 in 2008, and 31 in 2007.

An increased APHIS presence appears to be having the desired impact on compliance. For example, in August 2011, APHIS personnel attended the Tennessee Walking Horse breed's biggest show, the Tennessee Walking Horse National Celebration. Due to heightened concerns of soring and the increased use of new technology such as thermography and GC/MS, APHIS enhanced its enforcement at this major event. Out of 2,143 horses entered, there were 203 horses disqualified from competition due to violations of the HPA and regulations. This violation rate (about 9.5 percent) was down from the violation rate noted in 2010 (about 13.7 percent). APHIS views this declining violation rate as an indicator that its enhanced enforcement efforts and increased attendance at horse shows may have been partially responsible for more compliant horses being entered in the show in 2011 than in previous years.

In 2011, APHIS began implementing the recommendations made in the 2010 Office of Inspector General audit "Animal and Plant Health Inspection Service Administration of the Horse Protection Program and the Slaughter Horse Transport Program." The initiatives from the action plan included: requiring the Horse Industry Organizations (HIO) to institute a penalty protocol pre-approved by APHIS; revising the regulations for the Horse Protection Program to allow the Agency to have direct control of the Designated Qualified Persons (DQP) program instead of it being under control of the HIOs; holding accredited veterinarians accountable for enforcing the HPA; revising the regulations to require show management to have each horse inspected by a USDA-certified DQP at each show or related events; and revising the regulations to mandate that all horses be uniquely identified to prevent horses from showing that are found in violation of the HPA.

APHIS also published a proposed rule in the *Federal Register* for public comment in June 2011 to revise the current HPA regulations, adding a mandated penalty protocol for the HIOs to consistently enforce the HPA. This rule is currently in the stage of final clearance with an estimated implementation of January 2012. All other initiatives from the action plan are currently being drafted into another proposed rule that will make significant revisions to the current regulations to strengthen enforcement of the HPA.

### SCIENTIFIC AND TECHNICAL SERVICES

Current Activities: The programs within this component ensure the effectiveness of the technology and protocols used in APHIS programs. APHIS conducts these programs to: develop new or improved methods for managing wildlife damage to crops, livestock, natural resources, property, and public health and safety; develop and evaluate quarantine treatments for trade commodities; respond to foreign animal diseases and bioterrorism threats that endanger animal agriculture and the food supply in the United States; control or eradicate harmful plant pests; facilitate global agricultural trade; ensure that new products produced using biotechnology are safe for agriculture and the environment; and, apply new technology to protect the health and marketability of animals and animal products. The Agency also conducts laboratory testing programs to support disease and pest control and/or eradication programs. APHIS maintains a central laboratory that is internationally recognized as the national reference laboratory for all animal diseases. Additionally, APHIS provides advice and assistance to Agency programs on environmental compliance requirements with respect to pesticide registration and drug approvals for products used in implementing these programs.

#### Selected Examples of Recent Progress:

##### 1. APHIS Information Technology and Infrastructure

The APHIS Information Technology Infrastructure (AITI) program is comprised of the hardware, software, and telecommunications infrastructure that provides Agency employees with office automation tools, Internet access, and access to mission-critical programs and administrative applications. It also provides a robust, stable, and secure information infrastructure for those mission-critical applications and the day-to-day business of APHIS.

APHIS maintains, enhances, and operates the information technology infrastructure to support Agency business, conduct research and analysis, carry out administrative processes, record program activities and deliver program services. The AITI program objectives and priorities are to continually improve sharing of information across the Agency; improve coordination and accessibility of information, processes, and resources available to assist programs in emergencies; and, improve APHIS' cyber-security. The 2011 accomplishments listed below support these objectives.

- Availability – APHIS personnel supported internal and external stakeholders by providing optimal levels of service and improving customer service response times.
  - a. APHIS maintained 99.97 percent availability for its key computing systems, meeting the Agency target for infrastructure up-time.
  - b. APHIS reduced response times for service-desk trouble tickets by 1 minute to 20.6 minutes, meeting its response time target.
  - c. APHIS increased the secure patching of workstations by five percent to 92 percent exceeding the APHIS target.
- Telecom Services Transition – APHIS transitioned all telecommunications services, including wide-area-network, long distance voice, toll free, and wireless phone services to the General Services Administration Network program. This saved APHIS more than \$1 million in telecommunications service charges during 2011.
- EMail Migration – APHIS migrated all of the Agency's 8,107 users to the USDA's Business Productivity Online Services, such as Online Communicator Service which provided electronic mail (e-mail) via cloud computing. APHIS also moved Blackberry services to USDA-provided services.
- Video Conferencing Support – APHIS provided increased video conferencing services to bring its employees together with each other, as well as other agencies, and to enhance internal communications.

Increased video conferencing results in reduced travel, which saved both time and money, and increased participation in large-scale meetings. The increased use of Video Conferencing supports the Administration's "Going Green" initiative and APHIS' "Cost Saving" initiative.

## 2. Biotechnology Regulatory Services

APHIS oversees a science-based regulatory framework for the safe development and use of genetically engineered (GE) organisms, and facilitates the review and acceptance of agricultural biotechnology products at home and in foreign markets. APHIS is responsible for regulating the importation, interstate movement, and field release of GE organisms that may pose a pest risk to plant health. APHIS has safely authorized more than 31,000 field trials of GE crops and organisms at nearly 240,000 sites. APHIS continues to see increases in new crops, new traits, and combinations tested due to technological and scientific advancements. In 2011, APHIS evaluated approximately 135,000 constructs, i.e. genetically distinct plant lines, in field test applications compared to 105,000 in 2010. In addition, scientific advances resulting in new crops and traits have increased the complexity of reviews required for sound regulatory decisions. APHIS has approved a total of 87 petitions for nonregulated status of GE organisms including 6 approved published petitions in 2011 for herbicide tolerant alfalfa, herbicide tolerant sugar beets, amylase corn, "seed production technology" corn, insect resistant cotton, and an altered colored rose. As of September 30, 2011, APHIS is in the process of reviewing 24 petitions.

### *Compliance Oversight*

An effective compliance program can help minimize infractions related to movement and field testing of GE organisms, reducing the potential impact on the U.S. consumer and domestic markets, as well as international trade. APHIS regulates the field testing and movement of newly developed biotechnology crops to prevent potential threats to plant health. Crops being field tested must be grown under a permit or notification, depending on the type of crop and its potential risk. In 2011, APHIS' Biotechnology Regulatory Services (BRS) program issued 2,544 new permits and notifications using an online permitting system, ePermits. In 2010, BRS conducted 528 inspections to maintain regulatory compliance and found a compliance rate of 99 percent. In 2011, BRS completed 828 inspections, which is a 57 percent increase over 2010, while maintaining the compliance rate at 99 percent.

APHIS also continued implementing the Biotechnology Quality Management System (BQMS) Program, a compliance assistance tool that helps biotechnology organizations develop management systems to enhance compliance with biotechnology regulatory requirements. In 2011, APHIS published a revised audit standard and technical guidelines for the BQMS Program. APHIS also held multiple training sessions and annual surveillance audits for the first ten members of the BQMS program. In addition, APHIS recruited eight new participants into the BQMS program and held new participant workshops, initial one-on-one compliance assistance activities (baseline assessments), and internal audit training for the new participants. APHIS currently has 18 participants enrolled in the BQMS program. These 18 entities account for more than 90 percent of all notifications and permits processed by APHIS.

### *National Environmental Policy Act Pilot and Petition Process Improvements*

APHIS' determination of nonregulated status of a genetically engineered crop is an important factor in the acceptance of U.S. biotechnology crops in international markets. The Agency recently faced legal challenges over determinations of nonregulated status and is undertaking efforts to improve the petition process, including enhancing the documentation necessary to assess the plant risk. Before a GE organism can be commercialized, APHIS

conducts a thorough evaluation to determine how likely it is to pose plant pest risk. Depending on the circumstances, APHIS prepares an environmental assessment and/or environmental impact statement as part of the determination process for nonregulated status. In 2011, APHIS implemented a pilot project to improve its ability to create timely and high-quality *National Environmental Policy Act (NEPA)* documents through the use of applicant-funded environmental documents prepared by outside experts. APHIS held a NEPA Pilot Workshop with project participants in July 2011 to provide guidance on how to develop environmental reports to support their petition requests. In addition, In 2011, APHIS used the Lean Six Sigma continual process improvement tool to identify additional changes to the biotechnology petition process, which will significantly decrease the length and variability of the process. APHIS anticipates implementing these changes in 2012.

### *International Activities*

In 2011, APHIS continued to foster the safe worldwide development of agricultural biotechnology products by building critical relationships with other countries, encouraging science-based biotechnology regulation programs, and increasing the promotion of public confidence in GE products. APHIS works with international partners to enhance coordination of regulatory approaches and to provide capacity building assistance to developing countries for the regulation of GE crops. These activities help promote U.S. exports of GE products by ensuring that our trading partners understand and accept the U.S. system for regulating GE crops.

In 2011, APHIS continued to work closely with Mexico and Canada towards harmonization of regulatory policies and procedures, including a pilot project for joint review of a new GE drought-tolerant corn variety. APHIS and the Foreign Agricultural Service continued to work closely together to foster cooperation with China on regulation of GE crops, participating in discussions on risk assessment of new GE products and mechanisms for information exchange. APHIS also continued to participate in activities related to trade in biotechnology products under the Cartagena Protocol on Biosafety, an international treaty that governs the movement of living modified organisms resulting from modern biotechnology. In 2011, APHIS represented the United States at the fourth Meeting of the Parties, held in Nagoya, Japan, and at the Ad Hoc Technical Experts Group meeting on improving biotechnology risk assessment guidance.

APHIS also provided technical and regulatory assistance to developing nations, including those in the Latin America, Africa, and Asia Pacific regions. In 2011, APHIS presented information about the U.S. regulatory system at an environmental risk assessment workshop in Vietnam and participated in a workshop on risk assessment and management of biotechnology field trials in Mexico. In 2011, APHIS also provided information about USDA's biotechnology regulatory policies and procedures to visitors from New Zealand, Kazakhstan, Ukraine, South Africa, Colombia, Japan, China, India, Indonesia, France, Belgium, Italy, South Korea, United Kingdom, and the European Union.

### 3. Environmental Compliance

APHIS' Environmental Compliance program (EC) provides support to Agency programs by helping them comply with various environmental laws, regulations, and Executive Orders. The program's primary focus is compliance with the National Environmental Policy Act (NEPA), the Endangered Species Act, and the Federal Insecticide, Fungicide and Rodenticide Act.

The program also supports a strong environmental ethic within APHIS by contributing sound, cost-effective, environmental policy guidance; providing clear options through which environmental initiatives can be pursued economically and efficiently; and anticipating, whenever possible, Agency needs relative to its environmental responsibilities and recommending cost effective means through which those needs may be met. The program also supports APHIS' broader initiatives to ensure robust participation by members of the public in the environmental compliance process.

In response to Executive Order (EO) 13175: Consultation and Coordination with Indian Tribal Governments, APHIS formed a working group to reexamine Agency policies and procedures on Tribal consultation. The EO requires Federal agencies to more aggressively fulfill their obligations to consult with Native American Tribes before making decisions that could impact those Tribes. The group designed a process for assessing and

documenting the potential impact of APHIS actions on Tribes; completed a process for facilitating and documenting government-to-government consultation; and, completed a first draft of an Agency-wide directive on Tribal consultation requirements.

#### National Environmental Policy Act

Before implementing any action or activity, Federal agencies must consider the need for preparing either an environmental assessment (EA) or an environmental impact statement (EIS). Upon completion of an EA, the agency can either reach a Finding of No Significant Impact or determine that there is a potential for significant impacts on the environment and prepare an EIS.

The program prepares EAs to analyze the potential for environmental impacts of proposed actions that generally are classified in the EA category under APHIS NEPA implementing regulations (7 CFR 372.5). During 2011, APHIS completed 76 EAs and 1 EIS of varying complexity. Examples of EAs completed during 2011 include the following:

##### Relative to Plant Health:

Asian Citrus Psyllid Control Program, Asian Longhorned Beetle Cooperative Eradication Program, European Grapevine Moth Eradication Program, three Fruit Fly Eradication Programs, Importation of Bromeliads from Europe, Light Brown Apple Moth Cooperative Eradication Program, Nematode Eradication Programs, and Permitting for releases of four non-indigenous biological control organisms.

##### Relative to Animal Health:

Importation of Swine and Swine Products from Four Countries in the European Union, and Importation of Fresh Ovine Meat from Uruguay.

Examples of EIS documents completed during 2011 include the following:

##### Relative to Biotechnology:

EC prepared parts of the draft EIS for the request of non-regulated Status of Glyphosate-Tolerant H7-1 Sugar Beets for BRS, and completed one final EIS and Record of Decision for the determination of nonregulated status of alfalfa genetically engineered for tolerance to the herbicide glyphosate.

##### Relative to Animal Health:

EC issued a Notice of Intent to hold and then conducted four public meetings to prepare for an EIS in connection with the construction of a tick barrier for the Cattle Fever Tick Eradication Program in Texas.

#### Endangered Species Act

Before proceeding with program actions, Federal agencies must also ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitat. Agencies accomplish this through preparation of Biological Assessments and seeking concurrence with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (the Services). There were 14 no-effects determinations and 14 concurrences reached with the Services during 2011.

Examples of program actions supported with ESA documentation during 2011 include the following:

##### Relative to Plant Health:

Asian Longhorned Beetle Program, National Boll Weevil Cooperative Control Program, European Grapevine Moth Eradication Program, three Fruit Fly Eradication Programs, National Gypsy Moth Cooperative Control Program, and National Pink Bollworm Cooperative Eradication Program.

##### Relative to Animal Health:

Importation of Animals and Animal Products from Peru.

### Federal Insecticide, Fungicide, and Rodenticide Act

APHIS uses pesticides in many of its agricultural protection programs, and is required to acquire and maintain the necessary registrations and exemptions for protection of the agricultural environment. In 2011, this work involved submission to and approval from the U.S. Environmental Protection Agency for 50 pesticide labels, 32 registration support documents, and 5 usage reports. Although some of the approved pesticide registrations were for the fruit fly program and several were for disinfectants for animal health programs, most of these documents were in support of vertebrate control efforts for APHIS' wildlife programs.

#### 4. Physical Operational Security

APHIS oversees and implements precautionary measures to ensure continued, efficient mission operations and protection from disruption, degradation, or destruction of its facilities. APHIS works with the Department of Justice, the Federal Protective Service, the Department of Homeland Security, and local law enforcement agencies to ensure that the appropriate organization takes the lead, shares costs, and integrates security where co-location of employees exist.

APHIS has developed security guidelines for its bio-safety level 3 (BSL-3) laboratory environments. These guidelines are in compliance with Homeland Security Presidential Directives (HSPDs). APHIS also expanded its security enterprise by implementing the universal identity and access Federal Smart Card mandated under HSPD-12.

#### Physical Security

The APHIS Security Program has implemented security countermeasures at Agency facilities that meet or exceed Federal standards. The following illustrate security countermeasures implemented during 2011:

- Completed physical security upgrades of 49 State and District Office facilities and 6 critical facilities;
- Completed annual aviation reviews of 11 aircraft hangar facilities;
- Installed countermeasures including access control, intrusion detection, fencing, lighting, safes, and vehicle alarms, at 22 APHIS facilities/program locations;
- Reviewed and fine-tuned guard service at 4 critical facilities;
- Installed 65 HSPD-12 compliant access control readers at APHIS facilities to support the use of the Federal Identity Smart Card;
- Added 10 facilities to the National Access Control Enterprise, a system that includes national identification/access cards of approximately 80,000 cardholders, 3,000 card readers, more than 6,400 alarm points, and approximately 800 cameras; and,
- Reviewed and designed security for 10 new construction projects.

#### Threat Investigation and Mitigation

The APHIS Security Program is responsible for investigating, assessing, and mitigating all threats directed at Agency facilities, programs, and personnel. These threats include death threats, bomb threats, terrorist threats, other violent threats, assaults, and miscellaneous criminal acts. The APHIS Security Program accomplished the following in 2011:

- Investigated, assessed, and mitigated 51 external threats to APHIS employees;
- Investigated 8 miscellaneous criminal acts directed at APHIS facilities or employees;
- Provided safety awareness presentations to approximately 550 APHIS employees;
- Provided self-defense training to approximately 60 APHIS employees; and,
- Developed a web-based secure database to record and track threats to the Agency.

#### Protective Operations

The APHIS Security Program is responsible for providing protection for threatened Agency employees and upper

level management, as well as for other designated high-threat level events. During 2011, the APHIS Security Program conducted the following protective operations:

- Provided security for APHIS employees enforcing the Horse Protection Act at 69 horse shows throughout the country;
- Provided security for APHIS employees enforcing the Animal Welfare Act at ten inspections throughout the country; and,
- Provided temporary security at four APHIS facilities in response to threats to programs or personnel.

#### Workplace Violence Prevention and Response Program

The APHIS Security Program is responsible for investigating, assessing, and intercepting all workplace violence allegations and incidents. The Security Program also provides workplace violence training to agency employees throughout the country. During 2011, the APHIS Security Program accomplished the following in relation to the workplace violence program:

- Investigated and assessed 110 workplace violence allegations; and,
- Provided workplace violence training to 710 APHIS employees.

#### Homeland Security Supplemental Presidential Directive-12

HSPD-12 mandates a consolidated Human Resources/Information Technology/Security effort to identity-proof all APHIS employees and contractors. APHIS designed and implemented a program that will ensure all personnel have background investigations and are cleared prior to receiving their Federal identification badge. During 2011, APHIS:

- Installed 550 HSPD-12 card readers in its critical infrastructure, making it the first Federal Agency to have a Physical and Logical Access System that reads the Federal Smart Card in more than 200 buildings;
- Expanded the Security Enterprise to all of USDA, protecting the Department's critical information technology and research infrastructure;
- Supported 35 enrollment stations to enroll and identity-proof USDA/General Services Administration personnel;
- Sponsored more than 300 APHIS, Agricultural Marketing Service and Grain Inspection, Packers and Stockyards Administration employees, and enrolled more than 400 employees for their Federal Smart Cards, which are to be used for building and computer access; and,
- Upgraded all APHIS facilities to use the Federal Smart Cards for building access.

#### 5. Plant Methods Development Laboratories

The Plant Methods Development Laboratories' program goal is to provide advanced scientific and technological capabilities to protect and improve our nation's plant resources in agriculture and the environment. APHIS' Center for Plant Health Science and Technology carries out the program (which consists of eight laboratories located throughout the United States). Plant methods laboratories support APHIS plant health programs and emergency response capabilities by ensuring that accurate tools are available to detect, identify, and diagnose plant pathogens, insect pests, and weeds. Plant methods laboratories also develop and evaluate quarantine treatments for traded commodities. Additionally, the program evaluates biological control organisms and new biological and chemical materials, adapts or invents equipment for specific pest projects, conducts pathway and pest risk analysis, provides technical consultation and training for Agency personnel and their State and university cooperators, and serves as a liaison between APHIS and the research community.

#### Pest Exclusion and Detection Technology

This program develops new, or improves existing, tools each year to enhance APHIS' safeguarding capabilities. The program reached its 2011 annual performance target by developing or improving at least five quarantine treatments for traded commodities. The program developed and validated a vacuum steam heat treatment and microwave heat

treatment for hardwood veneer logs, which will be used as an alternative to methyl bromide (a pesticide that depletes the ozone layer and use of which the United States is working to reduce as part of an international effort). The program also developed new treatment schedules for citrus (lemons and limes), involving leaf washing. Citrus leaf washing can mitigate spread of the Asian citrus psyllid and could allow interstate movement of certain products from areas quarantined for the pest. The program also developed citrus cold treatment schedules for two exotic fruit flies, *Bactrocera invadens* (which attacks a wide variety of specialty crops) and *Bactrocera zonata*, the peach fruit fly. APHIS also continued to establish new and support existing irradiation treatment programs. The result has been an increase in trade and a reduction in methyl bromide fumigations. The program worked with the irradiation program in Colombia to validate inspection procedures for figs, which supported development of an import rule.

### Pest Identification

The Plant Methods program continues to design, develop, and deliver digital, media-rich, identification tools for APHIS to support domestic, port, and offshore pest identification responsibilities. The tools are internet-accessible and provide users with matrix-based keys, digital images, fact sheets, and other support aids valuable for identifying pests, diseases, and weeds of interest to APHIS and its partners. In 2011, the program released a large number of tools including, *Ironclad ID: Tool for Diagnosing Ironclad and Cylindrical Bark Beetles of the United States*;; *Oncid ID: Tool for Diagnosing Adult Twig Girdlers*; *Xyleborini Ambrosia Beetles: An Identification Tool to the World Genera*; *Bark Beetle Genera of the United States*; *Citrus ID*; *Dried Botanical ID*; *Identifying Commonly Cultivated Palms*; *Terrestrial Mollusc Tool*; *Common Nymphal Grasshoppers*; and *Symptoms of Diseases and Disorders of Cultivated Palms*. A digital screening aid, containing adult and larvae keys, titled *Pink Bollworm and its Look-Alikes*, was released to support the cotton-growing regions of the United States. In addition, the program delivered two internet portals to digital plant protection and quarantine aids currently available on the internet: *A Resource for Wood Boring Beetles of the World* and *ID Source: Your Gateway to Pest Identification*. During the summer of 2011, the program initiated upgrades to the new tools, including filtering image galleries, word and phrase search capabilities, and mobile access to matrix-based keys, designed to make them more user-friendly and accessible to users in the field.

### Risk Mapping

In 2011, the program used the cooperative North Carolina State University/APHIS Plant Pest Forecasting System (NAPPFAST) and Geographic Information System (GIS) software to update and create new pest risk maps for target pests in the Cooperative Agricultural Pest Survey (CAPS) program. NAPPFAST is a web-based system that uses biological models and geo-referenced weather data to create maps, while GIS software allows the user to combine, display, and analyze many types of spatial data such as host data and the NAPPFAST maps. An external review of the NAPPFAST system was completed and recommendations on improvements and areas of development to the system were made. Based on the recommendations from the system review, the program revised the methodology used to generate the final risk maps to better depict areas that have low suitability. The CAPS Pest Risk maps depict areas of the United States that may be at higher risk for pest establishment, based on host availability, climate, and introduction pathways. Using data in the CAPS risk maps, the program can calculate zonal statistics to populate a statistical tool that can be used to prioritize State, regional and national survey priorities. The combination of the host information, biology, and trade data in a standardized manner will allow State survey coordinators to easily determine the pests of survey priority and where to focus survey resources in their States.

In addition to the CAPS risk mapping project, the program generated a total of 202 risk maps for high wheat production States that displayed susceptibility for infection by *Tilletia indica*, the causal agent of Karnal bunt. The maps were based on climate and crop phenology, the study of periodic plant and animal life cycle events and how these are influenced by seasonal and variations in climate. In 2011, the program also generated 20 national level maps based on climate, irrigation, and major wheat susceptibility periods for infection. APHIS also generated risk maps for *Drosophila suzukii* (which attacks a variety of fruit crops and has been found in California), Brown Marmorated Stink Bug (which also has a wide host range and has been found in Mid-Atlantic States), *Tuta absoluta* (a serious tomato pest found in Europe and South America), and *Megacopta cribaria* (an exotic stinkbug that feeds on kudzu and potentially other legumes).

## 6. Veterinary Biologics

APHIS' Center for Veterinary Biologics (CVB) regulates veterinary biological products to ensure that these products are pure, safe, potent and effective. These products include vaccines, bacterins, antisera, diagnostic test kits and analogous products, developed for the diagnosis, prevention, and treatment of animal diseases. CVB accomplishes its mission through thorough evaluation of pre-licensing dossiers; testing of products submitted for licensure; facility and product inspections; investigations of non-compliance; and post-marketing surveillance. This comprehensive regulatory approach is the most effective way to ensure only quality Federally licensed veterinary biological products are available to U.S. consumers.

APHIS continues to experience increased workload due, not only to the growing number of new products submitted for licensure, but also due to the increased complexity of these new products. This complexity requires APHIS scientists to continually update their expertise in this field, just to keep pace with advances in veterinary biological science. Thus, these new products require a significant increase of effort on APHIS' part to ensure that the products are pure, safe, potent, and effective.

### Licensed Products and Inspections

By the end of 2011 there were 100 different manufacturers licensed for approximately 2,000 veterinary biological products for the control of 215 animal diseases. These are critical for protecting American agriculture, facilitating trade, and enhancing agricultural economic opportunities. During the fiscal year, APHIS received 253 license applications; of these the Agency issued 44 licenses/permits for the control or diagnosis of existing or new/emerging animal diseases, expedited 9 licenses for swine influenza products, facilitated the transfer of 9 licenses issued by the State of California to the USDA, and denied or inactivated 145 applications by industry.

APHIS initiated a business process improvement plan in 2011 under the Department's Lean Six Sigma initiative with the objective of decreasing turnaround times for license submissions. Some of these process improvements, including the electronic workflow of documents, are projected to increase program efficiency. The Agency shifted its processes from a "first-come-first-serve" approach to accommodating many requests from manufacturers to prioritize newer product license requests over product license requests that the same manufacturer may have submitted in previous years. APHIS projects additional savings from reductions in reagent/reference production, laboratory testing, and animal use. Other steps to improve processes will continue to be reviewed and implemented.

APHIS conducted 64 on-site inspections in 2011, of which 13 percent of the inspections were in support of a new establishment or product license for the industry. APHIS performed 76 regulatory actions, issued 37 violation notices, and conducted 37 investigations of possible regulation violations during the fiscal year. In addition, the Agency received 607 adverse event reports related to veterinary biological products. Adverse events are undesirable effects that occur after the use of a medication or vaccine, or other biological product. These events may, or may not, be caused by the product. APHIS gathers this information to better learn how products are used in field conditions and applied to the evaluation process to assure pure, safe, potent, and efficacious products are available.

Also in 2011, APHIS provided a variety of services related to the import and export of veterinary biological products. The Agency reviewed/processed more than 3,600 Certificates of Licensing and Inspection and issued 1,016 Export Certificates for veterinary biological products. The Agency processed all Export Certificates within 4 days, and processed 98 percent of Certificates of Licensing and Inspection within 28 days. APHIS helped to ensure there were no foreign animal disease events related to the importation of more than 56 million biologics doses.

### Collaborative Efforts

APHIS provided expertise and training at a joint Center/Institute for International Cooperation in Animal Biologics education program. More than 160 delegates from 20 countries participated in this 3-week course aimed at educating foreign officials on U.S. regulatory processes.

APHIS addressed concerns from the biologics industry and several Congressional offices regarding policy on export labeling by working extensively with the USDA's Office of General Counsel and industry stakeholders to draft guidelines on the labeling of export products. These guidelines add flexibility for increasing exports and preserve U.S. jobs by allowing manufacturers to maintain or expand domestic labeling operations.

Finally, APHIS hosted the Nebraska National Guard Agribusiness Development Team for the purpose of providing information to them about the Agency's mission. During this meeting there were collaborative discussions about APHIS functions and processes, all in preparation for the Team's 2012 deployment to Afghanistan.

## 7. Veterinary Diagnostics

APHIS' National Veterinary Services Laboratories (NVSL) serves as the United States' national and international reference laboratory for animal diseases. NVSL conducts diagnostic testing of disease surveillance samples collected in support of APHIS animal disease programs. NVSL also provides national leadership to coordinate emergency laboratory responses and train State and university laboratory personnel. To ensure that laboratories supporting APHIS programs are properly prepared, NVSL provides rigorous proficiency testing. To achieve the highest level of quality in disease diagnoses, NVSL continues to develop improved diagnostic technologies. NVSL handled more than 47,000 accessions (one or more diagnostic samples received from the same submitter on the same day) and 515,000 diagnostic tests in 2011.

In 2011, NVSL collected serum samples from 233 cattle and 1,257 cervids (e.g., deer and elk). NVSL provided serum panels to several companies investigating a serum-based tuberculosis (TB) test for cervids and cattle. APHIS continues to collaborate with Canada, Mexico, and the United Kingdom to receive serum samples from TB-positive animals in those countries.

### National Animal Health Laboratory Network

NVSL serves as the confirmatory laboratory for the National Animal Health Laboratory Network (NAHLN) laboratories. APHIS established the NAHLN in partnership with the American Association of Veterinary Laboratory Diagnosticians (AAVLD) and the National Institute of Food and Agriculture, formerly the Cooperative State, Research, Education and Extension Service to (1) address significant emergent biological and chemical threats to animal agriculture, (2) help ensure a secure U.S. food supply, and (3) provide diagnostic surge capacity (i.e., the ability to run diagnostic tests on substantially greater volumes of animal samples in the event of a significant animal disease outbreak). Currently the NAHLN consists of 55 State and university laboratories, located across 42 States, and 4 Federal animal laboratories. APHIS' NVSL coordinates activities, participates in methods validation and provides training, proficiency testing, assistance, materials, and prototypes for diagnostic tests.

In 2011, the NAHLN program collaborated with the AAVLD to expand and improve the 2010 Quality Management System (QMS) Training Program. APHIS provided QMS training to representatives from 11 countries in east Africa in July, and further training was provided to NAHLN laboratories as well as representatives from Kazakhstan, Kenya, Russia, Tanzania, and Ukraine in August 2011. Each curriculum included an interactive environment with training on quality system requirements, the accreditation process, document control, internal auditing, and root cause analysis.

In March 2011, NVSL conducted tabletop exercises for highly pathogenic avian influenza (HPAI) and foot-and-mouth disease (FMD). These exercises were held to address questions generated from both the HPAI and FMD tabletop exercise series in the NAHLN laboratories regarding NVSL's role as a reference laboratory and test policy needs regarding laboratory testing at different stages of a foreign animal disease outbreak. In June 2011, additional laboratory-related questions were addressed at a policy workshop that included personnel from other units within APHIS.

APHIS sponsored FMD disease tabletop exercises in 2010. In 2011, individual exercise summary reports were produced and shared with each participant of the APHIS. APHIS used information gathered from the exercises to examine and appropriately revise the decision-making process for NAHLN activation and de-activation, testing

capacity, surveillance sample collection protocols, testing algorithms during different phases of the outbreak, and communication and coordination processes.

APHIS has built a secure website within the CoreSHIELD framework. This framework was developed by multiple Federal partners with the purpose of supporting Federal, State and local governmental regulatory agencies and laboratories in defending the food supply through web-based tools. These tools focus on enhancing threat prevention and response, risk management, communication and asset coordination, as well as public education. A NAHLN Portal is being developed within that framework to securely share information, such as standard operating procedures, with laboratories, proficiency testing status, financial agreements and assay performance monitoring data. This approach promotes leveraging resources to generate products for multiple groups and networks. User acceptance testing is currently underway and the NAHLN Portal's deployment is anticipated in 2012.

#### Foreign Animal Disease Detection

In 2011, NVSL's Foreign Animal Disease Diagnostic Laboratory (FADDL) provided diagnostic support for foreign animal diseases, trained national and international veterinarians, and assisted in capacity building of foreign diagnostic laboratories. The FADDL Diagnostic Services Section participated in 97 foreign animal disease investigations, received 2,119 classical swine fever surveillance submissions, and supported 13 international/reference investigations. FADDL conducted a Foreign Animal Disease Diagnostician School and an International Transboundary Animal Disease Course, each resulting with the training of 23 veterinarians.

#### 8. Wildlife Services Methods Development

APHIS' National Wildlife Research Center (NWRC) employs more than 150 scientists, technicians, and support personnel at its Fort Collins, Colorado, headquarters and at seven field stations around the country. NWRC scientists develop methods to improve Agency wildlife damage management activities. There currently are 243 active studies ongoing at the facility. Highlights of accomplishments for the year include the following.

##### *Agriculture Protection*

APHIS researchers monitored domestic calves at two sites in New Mexico and Arizona to investigate factors influencing calf mortality and producer disease detection rates. Results indicated that year-round calving, especially in areas with high predator densities, are subject to higher losses, leading the researchers to recommend that livestock farmers change husbandry practices from year-round calving to calving only in specific seasons.

APHIS researchers have documented the economic impact of increasing populations of double-crested cormorants on sport fisheries and associated economies in central New York. According to the most recent study, the total economic impact of cormorants for the Finger Lakes region ranged from \$132 to \$532 million in damages, and 1,000-5,000 lost jobs for the period of 1990-2006. The benefits of cormorant control programs ranged from \$20 to \$50 million in avoided damages and 100-300 regional jobs saved.

##### *Wildlife Diseases*

APHIS researchers documented the movement and impact of European starlings among dairy farms in Pennsylvania. Results of the analysis indicated that starlings cost the State more than \$10 million annually in lost productivity, and are associated with increased occurrences of both Johne's disease and *Salmonella* in cattle.

APHIS researchers documented that avian influenza viruses (AIV) can accumulate in snails and mollusks, and that these species can be used to detect AIVs in natural water bodies, thus potentially reducing costs for AIV surveillance. In a similar study, researchers also showed that house mice and Norway rats are an important farm-side risk factor for transmission of AIVs to poultry.

APHIS scientists created a user-friendly, on-farm tool to assess the risk of transmission of bovine tuberculosis between cattle and wildlife in Michigan. The researchers identified several key risk factors of transmission,

including storage of livestock feed, pastured livestock access to daytime cover used by wildlife, and cattle access to standing water sources commonly used by wildlife.

#### *Chemical Methods*

Researchers incorporated the non-lethal bird repellent anthraquinone into a rodenticide bait to reduce the accidental consumption of lethal rodent bait by birds. This effort reduced bird deaths while retaining efficacy with rodents.

APHIS launched a searchable, web-based database containing bioassay records and data for chemicals evaluated from 1943 to 1987 by the NWRC, its predecessors, and the U.S. Geological Survey's Patuxent Wildlife Research Center (formerly part of the U.S. Fish and Wildlife Service). This database contains information regarding repellency, toxicity, reproductive inhibition, and immobilization of various chemicals, and it is extremely useful to other researchers worldwide involved in environmental risk assessments and the development of new wildlife damage management tools.

#### *Reproductive Inhibitors*

APHIS researchers developed and registered GonaCon as a reproductive inhibitor for white-tailed deer. They are currently modifying the formulation so that it can be delivered orally rather than having to be injected. Licensing negotiations are currently being conducted for the private manufacture and use of GonaCon for deer and other wildlife and companion animals.

#### *Aviation Safety*

Scientists evaluated various vegetation management strategies to reduce the attraction of wildlife to airports. They also collaborated with radar experts at the National Center for Atmospheric Research in Colorado to assess the MERLIN Aircraft Birdstrike Avoidance Radar System for detecting birds of various sizes, flight behaviors, and group sizes on airports.

#### *Information Transfer*

APHIS researchers at the NWRC published 122 scientific studies in 61 different professional scientific journals and proceedings ranging in disciplines; including economics, ecology, reproductive biology, chemistry, wildlife diseases, and wildlife biology. Scientists gave 126 presentations at professional scientific forums sharing information on new control methods, invasive species, and diseases as they impact the health of humans and domestic animals. These publications give scientists worldwide data they can use to reduce conflicts between wildlife and people.

### EMERGENCY ACTIVITIES FUNDED BY TRANSFERS FROM COMMODITY CREDIT CORPORATION (CCC)

#### 1. Asian Longhorned Beetle

In 2011, APHIS spent approximately \$18 million in CCC funds on Asian longhorned beetle (ALB) eradication activities in Worcester County, Massachusetts, in response to an infestation found in August 2008. This was the first find in the State, and was most likely a separate introduction from other ALB infestations. The program has been conducting delimitation surveys and enforcing a quarantine that covers a 110 square-mile quarantine area in Worcester County and includes the entire City of Worcester, Town of West Boylston, Town of Boylston, and Town of Shrewsbury and a portion of the Town of Holden. Since August 2008, the program has inspected 1,573,304 host trees, detected 20,167 infested trees, and removed 20,060 infested and 10,250 high risk trees in Worcester County. During calendar year 2011, the program inspected 864,517 host trees, detected 1,171 infested trees, and removed 1,401 infested and high-risk trees. The program had projected that it would find 1,750 infested trees in calendar year 2011, but the actual figure is far less. This is because surveys are showing that trees in the further reaches of

the infested areas are more lightly infested than those in the core, indicating that the program is approaching the fringes of the infestation. Through regulatory activities, the program is continually monitoring any host wood movement to prevent the human-assisted spread of the pest. In addition, regulatory officers follow any leads of prior wood movement to determine if any satellite infestations exist elsewhere. Surveys continue in the Worcester area, using ground crews and tree climbing crews.

## 2. Bovine Tuberculosis

During 2011, APHIS spent approximately \$1.8 million in CCC funding to conduct activities to support the bovine tuberculosis (TB) program. This funding supported APHIS activities, indemnity payments for animals destroyed because of TB, and cooperative agreements with the States of California, Michigan, Minnesota, New Mexico, and Texas. The availability of CCC funds to support response efforts has improved the TB situation in Texas, California, Minnesota, and New Mexico. Both Minnesota and New Mexico were determined to be TB Accredited Free in September 2011. Although improvements have also been realized in Michigan, the presence of a wildlife reservoir for TB will require a long-term response.

USDA has established five status levels, or stages, for States and zones as they make progress eradicating bovine tuberculosis. The five in ascending order are: Non-accredited, Accredited Preparatory, Modified Accredited, Modified Accredited Advanced, and Accredited-free. A State or zone qualifies into one of the categories based on: (1) the infrastructure existing in the State or zone for conducting a bovine tuberculosis eradication program; (2) the compliance with the provisions of the tuberculosis uniform methods and rules; and (3) the prevalence of infection in the State or zone. Each State has specific requirements for movement, surveillance testing, record keeping and animal identification depending on their TB status designation. Zones or States with less risk require lower rates of testing, thereby reducing the economic burden on producers.

### California

In 2011, a TB-affected dairy herd was identified in California. It is currently being managed under the test-and-remove approach, where animals are tested for the disease and only those animals confirmed positive are removed from the herd. California remains classified as Modified Accredited Advanced. Also in 2011, APHIS used CCC funding to fund a cooperative agreement with California to conduct testing and epidemiological investigations associated with this herd. The Agency also purchased animals that tested positive for, or were exposed to, TB.

### Michigan

APHIS identified two TB-affected herds in Michigan in 2011. These numbers represent a considerable improvement over the past decade. Also in 2011, APHIS used CCC funding to purchase animals that tested positive for, or were exposed to, TB and to depopulate and indemnify a TB-affected beef herd in Michigan. APHIS also funded a cooperative agreement with the State to conduct TB surveillance activities (including herd testing) and epidemiological investigations. These continued efforts were necessary to maintain the split-State status for TB in Michigan, with Accredited Free, Modified Accredited Advanced, and Modified Accredited zones.

### Minnesota

The CCC funding APHIS provided to Minnesota has allowed the State to take an aggressive approach to eradicate TB in the northwestern part of the State, resulting in the last TB-affected herd being identified in October 2008.

### New Mexico/Texas

In 2011, APHIS used CCC funding in New Mexico to fund a cooperative agreement with the State to conduct TB surveillance activities (including herd testing) and epidemiological investigations. These continued efforts were necessary to maintain the split-State Status for TB in New Mexico and allow the State to regain Accredited Free status. Additionally, APHIS established cooperative agreements with Texas to support testing and enhanced surveillance activities, since Texas borders New Mexico's Modified Accredited Advanced zone and conducts a large volume of testing for cattle originating in New Mexico.

### 3. European Grapevine Moth

The European Grapevine Moth (EGVM) is a significant pest of grapes and other specialty crops. In October 2009, APHIS confirmed the first detection of EGVM in the United States in major grape production areas of northern California. Grapes, including wine grapes, table grapes and raisins, rank second among all crops produced in California, generating 10 percent of the State's \$31.4 billion in farm sales. The program consists of intensive survey efforts to identify affected areas, regulatory compliance activities to prevent the artificial spread of the pest, and an outreach program to educate industry groups, affected growers, and residents. Affected commercial growers are responsible for conducting treatments to suppress EGVM populations in their vineyards, orchards and fields while the program conducts treatments in residential and riparian areas. Although new EGVM detections occurred in Nevada and Santa Cruz Counties in 2011, Statewide detections in 2011 were down approximately 99.9 percent compared to 2010 (fewer than 150 detections in 2011 compared to 100,959 individual moths in 2010). Because APHIS and the State implemented a survey, quarantine, and control program, international markets have remained open to U.S. grapes, stone fruits, berries, and other host commodities. Overall, the program placed 58,782 traps in commercial vineyards in 2011. Additionally, the program established approximately 4,000 compliance agreements in 2011, and completed treatments on 2,947 properties in the 10 quarantined counties. Additionally, several hundred growers conducted treatments in commercial vineyards. In 2012, the program anticipates releasing four counties -- Fresno, Mendocino, Merced, and San Joaquin -- from quarantine based on successful implementation and completion of the deregulation plan developed by the program's Technical Working Group. The four counties that are planned for release in early 2012 will remain under surveillance for an additional year to ensure that there are no latent EGVM populations.

### 4. Farm Bill

#### *Plant Pest and Disease Management and Disaster Prevention (Section 10201)*

This program makes available CCC funds for early plant pest detection and surveillance, threat identification and mitigation of plant pests and diseases, and technical assistance in the development and implementation of audit-based certification systems and nursery plant pest risk management systems. The Farm Bill specified that these funds be made available incrementally, starting with \$12 million in 2009, \$45 million 2010, and \$50 million in 2011 and thereafter.

In 2011, the Plant Pest and Disease Management and Disaster Prevention program provided \$50 million in funding to build and preserve critical plant health safeguarding initiatives across the United States. This funding supported State and national efforts to improve pest detection and mitigation activities and ensure that small farms and specialty crops remain a viable segment of our national economy. APHIS and cooperators have identified six major strategies to implement Section 10201: 1) enhancing plant pest/disease survey and analysis; 2) targeting domestic inspection activities at vulnerable points; 3) enhancing pest identification tools and technology; 4) developing programs to safeguard nursery production; 5) enhancing outreach and education; and 6) enhancing mitigation capabilities.

APHIS funded 312 projects in the six goal areas through Section 10201 in 2011. Approximately 75 percent of the projects directly provided funds to 48 State departments of agriculture and 2 territories. The other 25 percent provided funds to universities, Federal agencies, Tribal organizations, non-profit entities, or enabled APHIS to provide training to cooperators on diagnostic procedures or canine teams; was used to procure traps and lures that APHIS distributed nationwide to cooperators in many pest programs; and supported development of an improved data management system for use by States and territories, other cooperators, and APHIS.

Under the enhancing pest/disease survey and analysis goal, APHIS funded surveys for pests of national significance such as Asian defoliating moths, plum pox virus, *Phytophthora ramorum*, grape pests (including the European Grapevine Moth), tomato pests (including *Tuta absoluta*, walnut twig beetle and thousand cankers disease), and honey bee pests (including sub-sampling to help determine the cause of colony collapse disorder). The program began cooperative projects to analyze pathways that put specialty crops at risk to exotic invasive pests and develop risk and economic assessment tools to help determine survey priorities. The program provided more than \$16.3 million to 131 projects in this goal area.

The second goal involves efforts to target domestic inspection activities at vulnerable points that result from the movement of commodities potentially carrying pests of regulatory significance. Under this goal, APHIS provided funds to train and place canine teams for domestic survey in California and Florida. These teams are used for the enhancement of the States' efforts to mitigate pests that escape undetected through ports of entry and, in some cases, as a consequence of deliberate introductions of illegal goods. Other projects in 2011 provided funds to monitor critical entry points in Texas and Florida and to train dog teams to detect snails. The program provided nearly \$6.9 million for 16 projects in this goal area.

Under the pest identification tools and technology goal, one key project is the National Survey Supply Program that oversees timely procurement and delivery of quality survey supplies, such as traps and lures to APHIS and State cooperators. Other projects include the continued development of a web-based system for survey results; enhanced laboratory capacity and training of cooperators in high risk states; and a variety of projects aimed at providing more precise and faster detection and identification tools for citrus pests and diseases. APHIS funded 57 projects for a total of \$5.7 million in support of this goal.

Under the nursery safeguarding goal, APHIS focuses on developing science-based best management practices and risk mitigation practices to exclude, contain, and control regulated pests from the nursery production chain and developing and harmonizing audit-based nursery certification programs. Primary areas of focus include ongoing work on control and management practices for *Phytophthora ramorum* at the National Ornamentals Research Site on the campus of the Dominican University of California. Other projects include forming a broad-based initiative that supports the development of audit-based systems for safeguarding nursery production, and State initiatives to develop and pilot harmonized nursery stock certification programs for economically important and high-risk specialty crops, such as fruit trees, blueberries, and strawberries. The program provided more than \$2.7 million for 21 projects in this goal area.

Under the outreach and education goal, projects include the expansion of the Northeast Forest Pest Outreach and Survey Program from nine states in 2009 to 14 states in 2011; the continued development and deployment of several eLearning modules to increase pest screening and diagnostic capacity of first detectors; a pilot program in Florida to educate international travelers about the risks associated with bringing certain foods and agricultural products into the country; and a national public information campaign to increase awareness among the general public of invasive pest issues. APHIS provided more than \$3.9 million for 41 projects in this goal area.

Under the enhance mitigation capabilities goal, APHIS provides technical assistance prior to, during, and immediately following a plant pest outbreak through the development of New Pest Response Guidelines and through immediate mitigation efforts. Some of these efforts include brown marmorated stink bug mitigation, gypsy moth control, mollusk mitigation, and plum pox virus eradication in New York. APHIS provided more than \$11.7 million in 46 projects in this goal area.

#### National Clean Plant Network – NCPN (Section 10202)

The National Clean Plant Network is a program that provides reliable sources of pathogen-free planting stock of high-value specialty crops such as apples, peaches, almonds, grapes, oranges, lemons, strawberries, raspberries, blueberries, and hops. It helps ensure that new varieties desired by nurseries and growers are free of invasive diseases. Beginning in 2009, the Farm Bill authorizes funding of \$5 million for the network each year for four years (2009-2012).

In 2011, APHIS used a cooperative application process to provide NCPN funds to qualified clean plant centers. This process allowed stakeholders to offer input into the program through pre-proposals, which are designed to help clean plant centers prioritize and harmonize their resourcing requests. As a result, APHIS entered into 19 cooperative agreements with clean plant centers. These include the University of Arkansas, Auburn University (Alabama), University of Arizona, University of California at Davis, University of California at Riverside, Florida A&M University, Florida Department of Agriculture and Consumer Services (both germplasm and budwood programs), University of Hawaii, Louisiana State University, Michigan State University, Missouri State University, Cornell University (New York), North Carolina State University, USDA's Agricultural Research Service at Oregon

State University, Oregon State University, Clemson University (South Carolina), Texas A&M University, and Washington State University. The clean plant centers that receive NCPN funding are using the resources to: 1) diagnose for harmful pathogens that cause disease in covered specialty crops, 2) apply therapeutic measures to eliminate these pests, 3) establish plantings of clean plant 'starter' material and make this material available to nurseries and growers, and 4) engage with nurseries and growers in education/outreach programs to communicate the economic value to industry of using clean nursery stock. These activities will result in clean plant centers making additional sources of healthy planting stock for fruit trees, grapes, citrus, berries, and hops available to industry while ensuring that nurseries and growers have access to clean plant material necessary to sustain their businesses, maintain productivity, and improve the quality of their products.

In 2012, the program plans to expand the network to establish an education/outreach component to the network to ensure that all farmers, including small and mid-sized entities, are aware of the benefits of using clean planting stock and how best to obtain this material.

#### 5. Light Brown Apple Moth

Light Brown Apple Moth (LBAM) is an invasive pest that reproduces rapidly and can attack more than 2,000 types of plants and trees throughout the United States, including fruits, vegetables, nursery stock, and cut flowers. Potential national production losses in areas susceptible to LBAM range from \$700 million to \$1.6 billion annually. The pest has been detected in 22 California counties, 16 of which are Federally regulated. In 2011, APHIS spent approximately \$5 million in emergency funds from the CCC to conduct LBAM suppression and control activities with the California Department of Food and Agriculture. In 2011, the program continued State-wide detection and delimitation surveys, applied treatments to eradicate outlying infestations and suppress the leading edges of infestations, targeted treatments at isolated infested areas, continued stringent regulatory enforcement, and enhanced public outreach and communication efforts. These activities maintain trade and interstate commerce. In addition, the program pursued mating disruption, biological control, and insecticidal control.

#### Summary of Key 2011 CCC Funded Emergency Activities

	Emergency/Activity	Prior Year Carry Over (Start of Year)	Account Recovery	FY 2011 Transferred and Redirected Amounts	Total Available in FY 2011
1	Asian Longhorned Beetle	\$18,008,455	\$347,934	\$0	\$18,356,389
2	Bovine Tuberculosis	5,640,922	185,798	0	5,826,720
5	European Grapevine Moth	0	0	16,922,324	16,922,324
6	Farm Bill	396,067	388,869	55,000,000	55,784,936
7	Grasshopper	6,527,903	463,890	-6,000,000	991,793
8	Light Brown Apple Moth	3,011,871	4,555,324	0	7,567,195
	Total	\$33,585,218	\$5,941,815	\$65,922,324	\$105,449,357

18-107

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Proposed Language Changes

The estimates include proposed changes in the language of this item as follows: (new language is underscored; deleted language is enclosed in brackets):

Buildings and Facilities:

For plans, construction, repair, preventive maintenance, environmental support, improvement, extension, alteration, and purchase of fixed equipment or facilities, as authorized by 7 U.S.C. 2250, and acquisition of land as authorized by 7 U.S.C. 428a, [~~\$3,200,000~~]\$3,175,000, to remain available until expended.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and Facilities - Current LawLead-Off tabular

Appropriations Act, 2012 .....	\$3,200,000
Budget Estimate, 2013 .....	3,175,000
Change from 2012 Appropriation .....	<u><u>-\$25,000</u></u>

Summary of Increases and Decreases - Current Law

(Dollars in thousands)

	<u>2010</u> <u>Actual</u>	<u>2011</u> <u>Change</u>	<u>2012</u> <u>Change</u>	<u>2013</u> <u>Change</u>	<u>2013</u> <u>Estimated</u>
Discretionary Appropriations:					
Basic buildings and facilities repair, alterations, and preventive maintenance.....	\$4,712	-\$1,183	-\$329	-\$25	\$3,175
Total Appropriation or Change.....	<u>4,712</u>	<u>-1,183</u>	<u>-329</u>	<u>-25</u>	<u>3,175</u>

Project Statement

(On basis of appropriation)

(Dollars in thousands)

	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Enacted</u>		<u>2013 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>
Discretionary Appropriations:								
Buildings and Facilities.....	\$4,712	0	\$3,536	0	\$3,200	0	\$3,175	0
Rescission P.L. 112-10.....	0	0	-7	0	0	0	0	0
Total Appropriations.....	<u>4,712</u>	<u>0</u>	<u>3,529</u>	<u>0</u>	<u>3,200</u>	<u>0</u>	<u>3,175</u>	<u>0</u>
Balance available, SOY .....	9,976	0	6,750	0	1,469	0	200	0
Rescission of Prior Year Unobligated....	0	0	-629	0	0	0	0	0
Recoveries.....	651	0	36	0	0	0	0	0
Total Available.....	<u>15,340</u>	<u>0</u>	<u>9,687</u>	<u>0</u>	<u>4,669</u>	<u>0</u>	<u>3,375</u>	<u>0</u>
Balance available, EOY .....	<u>-6,750</u>	<u>0</u>	<u>-1,469</u>	<u>0</u>	<u>-200</u>	<u>0</u>	<u>-200</u>	<u>0</u>
Total Obligations.....	<u>8,589</u>	<u>0</u>	<u>8,218</u>	<u>0</u>	<u>4,469</u>	<u>0</u>	<u>3,175</u>	<u>0</u>

Project Statement

(On basis of obligations)

(Dollars in thousands)

	<u>2010 Actual</u>		<u>2011 Actual</u>		<u>2012 Enacted</u>		<u>2013 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>
Discretionary Obligations:								
Buildings and Facilities.....	\$8,589	0	\$8,218	0	\$4,469	0	\$3,175	0
Recoveries.....	-651	0	-36	0	0	0	0	0
Balance available, EOY .....	<u>6,750</u>	<u>0</u>	<u>1,469</u>	<u>0</u>	<u>200</u>	<u>0</u>	<u>200</u>	<u>0</u>
Total Available.....	<u>14,688</u>	<u>0</u>	<u>9,650</u>	<u>0</u>	<u>4,669</u>	<u>0</u>	<u>3,375</u>	<u>0</u>
Balance available, SOY .....	-9,976	0	-6,750	0	-1,469	0	-200	0
Rescission P.L. 112-10.....	0	0	7	0	0	0	0	0
Rescission of Prior Year Unobligated....	0	0	629	0	0	0	0	0
Total Appropriations.....	<u>4,712</u>	<u>0</u>	<u>3,536</u>	<u>0</u>	<u>3,200</u>	<u>0</u>	<u>3,175</u>	<u>0</u>

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and FacilitiesGeographic Breakdown of Obligations and Staff Years  
2010 and 2011 Actual and Estimated 2012 and 2013

	<u>FY 2010 Actuals</u>		<u>FY 2011 Actuals</u>		<u>FY 2012 Estimate</u>		<u>FY 2013 Estimate</u>	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<u>United States:</u>								
Arizona.....	0	0	\$30	0	0	0	0	0
California.....	0	0	50	0	0	0	0	0
Colorado.....	0	0	572	0	0	0	0	0
Florida.....	0	0	175	0	0	0	0	0
Hawaii.....	0	0	200	0	0	0	\$1,032	0
Idaho.....	0	0	247	0	0	0	0	0
Iowa.....	0	0	66	0	0	0	0	0
Maryland.....	\$938	0	30	0	0	0	0	0
Massachusetts.....	470	0	5,053	0	0	0	0	0
Mississippi.....	0	0	60	0	0	0	0	0
Montana.....	0	0	10	0	0	0	0	0
New York.....	5,391	0	527	0	\$4,420	0	0	0
North Carolina.....	0	0	0	0	0	0	99	0
Pennsylvania.....	14	0	0	0	0	0	0	0
Texas.....	1,777	0	618	0	0	0	0	0
Utah.....	0	0	40	0	0	0	0	0
Mexico.....	0	0	540	0	0	0	1,280	0
<u>Central America:</u>								
Guatemala.....	0	0	0	0	0	0	764	0
<u>Asia/Pacific:</u>								
Korea.....	0	0	0	0	49	0	0	0
<b>Total direct obligations</b>	<b>\$8,589</b>	<b>0</b>	<b>\$8,218</b>	<b>0</b>	<b>\$4,469</b>	<b>0</b>	<b>\$3,175</b>	<b>0</b>

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and FacilitiesClassification by Objects2010 and 2011 Actual and Estimated 2012 and 2013

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Other Objects:				
23 Rent, Communication, and Utilities.....	0	\$0	\$0	\$0
25 Other Services.....	\$8,587	8,213	4,467	3,173
26 Supplies and materials.....	0	2	2	2
31 Equipment.....	0	0	0	0
32 Land & structure.....	0	0	0	0
43 Interest and Dividends.....	3	2	0	0
Total, other objects.....	<u>9</u>	<u>8</u>	<u>4,469</u>	<u>3,175</u>
	0			
Total direct obligations.....	<u>\$8,589</u>	<u>\$8,218</u>	<u>\$4,469</u>	<u>\$3,175</u>

ANIMAL AND PLANT HEALTH INSPECTION SERVICE  
BUILDINGS AND FACILITIES  
STATUS OF MAJOR CONSTRUCTION PROJECTS

The Buildings and Facilities (B&F) appropriation funds major, nonrecurring construction projects in support of program activities, and recurring construction, alterations, and repairs of existing facilities.

*APHIS Buildings and Facilities Goal and Strategy*

The Agency's performance goal for our facilities is to implement the scheduled improvements, construction, security, and maintenance. The contractor is responsible for performing all inspections and tests necessary to substantiate that the supplies or services furnished under the contract conform to contract requirements, including any applicable technical requirements for specified manufacturers' parts. In addition, a design firm is required to validate that work is in accordance with the approved plans and specifications. APHIS typically identifies on-site certified personnel to perform contracting officer representative services. APHIS' engineering staff attends on-site construction progress meetings to track construction status. APHIS collects performance data through contractor reports and on-site verification. The Agency's Buildings and Facilities strategy is to modernize existing facilities when required, as well as to properly operate and maintain existing facilities. Currently, there are 52 active projects. APHIS awarded 37 design/construction projects and successfully completed 38 repairs in 2011.

*Facilities Condition Assessment*

In 2000, APHIS embarked upon a comprehensive Facilities Condition Assessment program to: better understand the existing condition of facilities, strategically maintain them by identifying deficiencies and funding needs, stabilize the current facilities repair backlog, predict maintenance needs, and implement financial management and capital asset improvement efforts.

The consulting firm tasked with assessing APHIS' facilities has automated a standard process for assessing the relative condition of assets, and facilitating comparisons both within and among facilities. Each asset is assigned a Facilities Condition Index (FCI), a standard measure used throughout the industry. The FCI is expressed as a ratio of the cost to remedy maintenance deficiencies relative to the current replacement cost of the facility.

At the end of 2011, the FCI for the 40 facilities assessed was 0.22; that is, the cost to correct currently identified and anticipated deficiencies is 22 percent of the estimated replacement value for the 40 facilities. Ideally, the Agency should strive to maintain an FCI of less than 0.20.

The following provides a status of major ongoing construction projects as of September 2011.

*New York Animal Import Center— Modernization, Newburg, New York*

In 2011, APHIS' B&F program completed the first two short-term phases in the New York Animal Import Center modernization project. Prior to this work, the FCI for this facility was 0.25. Due to the completion of Phases I and II of the modernization program in 2010 and 2011, the FCI is currently .09 (a 64 percent improvement). Once the modernization is complete, this facility will be essentially new.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Summary of Budget and Performance  
Statement of Agency Goals and Objectives

The Secretary of Agriculture established the Animal and Plant Health Inspection Service (APHIS) on April 2, 1972, under the authority of Reorganization Plan No. 2 of 1953 and other authorities. The mission of the Agency is to protect the health and value of American agriculture and natural resources.

Together with its stakeholders, APHIS promotes the health of animal and plant resources to facilitate their movement in the global marketplace and to ensure abundant agricultural products and services for U.S. customers. APHIS strives to assure its stakeholders that it is on guard against the introduction or re-emergence of animal and plant pests and diseases that could limit agricultural production and damage export markets. At the same time, APHIS monitors and responds to potential acts of agricultural bio-terrorism, invasive species, diseases of wildlife and livestock, and conflicts between humans and wildlife. The Agency also manages and resolves sanitary (animal) and phytosanitary (plant) trade barriers and addresses certain issues relating to the humane treatment of animals. Finally, APHIS ensures that biotechnology-derived agricultural products are safe for release in the environment.

APHIS has four strategic goals and eight strategic objectives that contribute to all of the Secretary's priority goals.

<b>USDA Strategic Goal</b>	<b>Agency Strategic Goal</b>	<b>Agency Objectives</b>	<b>Programs that Contribute</b>	<b>Key Outcome</b>
<b>USDA Strategic Goal 1:</b> Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving	<b>Agency Goal 1:</b> Support rural communities and the public, and promote and enforce animal welfare	<u>Agency Objective 1.1:</u> Implement agricultural pest and disease management programs, including those in affected rural areas  <u>Agency Objective 1.2:</u> Protect and promote animal welfare	Animal Welfare, Horse Protection, Wildlife Damage Management, Wildlife Services Methods Development	<u>Key Outcome 1:</u> Provide assistance and support to rural communities by: minimizing production losses, maintaining market viability, protecting the public, and ensuring the humane care and treatment of animals
<b>USDA Strategic Goal 2:</b> Ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources	<b>Agency Goal 2:</b> Protect forests, rangelands, and private lands	<u>Agency Objective 2.1:</u> Reduce threats to forests and private working lands	Tree and Wood Pests	<u>Key Outcome 2:</u> Ensure protection of forests and private working lands, as well as natural resources, by reducing threats

USDA Strategic Goal	Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
<p><b>USDA Strategic Goal 3:</b> Help America promote agricultural production and biotechnology exports as America works to increase food security</p>	<p><b>Agency Goal 3:</b> Expand opportunities to develop and trade safe agricultural products, including biotechnology derived agricultural products</p>	<p><u>Agency Objective 3.1:</u> Enhance the regulatory framework that allows for the safe development of genetically engineered organisms</p> <p><u>Agency Objective 3.2:</u> Facilitate safe agricultural trade through international standard setting and effective management of sanitary and phytosanitary (SPS) issues</p>	<p>Biotechnology Regulatory Services, Animal Agriculture Import/Export, Overseas Technical and Trade Operations</p>	<p><u>Key Outcome 3:</u> Facilitate agricultural trade and the development of biotechnology products through the use of a rigorous regulatory system, thereby providing agricultural producers with additional options for production and assisting them with exporting their products</p>
<p><b>USDA Strategic Goal 4:</b> Ensure that all of America’s children have access to safe, nutritious, and balanced meals</p>	<p><b>Agency Goal 4:</b> Minimize and prevent damage to the U.S. food supply caused by plant and animal pests and diseases</p>	<p><u>Agency Objective 4.1:</u> Monitor the health status of U.S. agricultural resources</p> <p><u>Agency Objective 4.2:</u> Develop and implement programs to address plant and animal pests and diseases of concern</p> <p><u>Agency Objective 4.3:</u> Provide diagnostics and technical support to enhance pest and disease programs, including emergency response capabilities for these pests and diseases</p>	<p>APHIS – All Other</p>	<p><u>Key Outcome 4:</u> Provide a secure agriculture production system and healthy food supply to consumers by defending against plant and animal pests and diseases</p>

**Key Outcome 1:** Provide assistance and support to rural communities by: minimizing production losses, maintaining market viability, protecting the public, and ensuring the humane care and treatment of animals.

Measure: Increase the viability of rural communities by providing local services, reducing damage to agricultural resources caused by wildlife, and protecting and promoting the welfare of animals covered under the Animal Welfare Act and Horse Protection Act

APHIS is engaged with the public every day to carry out activities that prevent, minimize, and/or manage damage that impacts agriculture, property, natural resources, and even threatens public health and safety. An example of such activities would be livestock predation management. APHIS continues to provide leadership in research and

operational management of predator conflicts, which aims to strike a balance between protecting livestock while respecting the role predators play in the ecosystem. According to the latest National Agricultural Statistics Service surveys, predators kill more than \$127 million worth of livestock annually. APHIS prevents and reduces wildlife predation to livestock through education, technical assistance to producers, and direct predation damage management. Most of APHIS' wildlife damage mitigation specialists are placed in rural areas.

APHIS' Animal Welfare program carries out activities designed to ensure the humane care and treatment of animals. These activities include inspection of certain establishments that handle animals intended for biomedical research, sold as pets at the wholesale level, transported in commerce, or used for exhibition purposes. Program personnel inspect licensed establishments to ensure compliance with the Animal Welfare Act (AWA). The program places emphasis on the inspection of facilities and records management, investigation of complaints, re-inspection of problem facilities, education of regulated entities, and training of inspectors.

In FY 2011, APHIS strengthened animal welfare regulatory efforts, as well as improved many of its processes and procedures. For example, the Agency published a proposed rule to strengthen regulations related to commercial dog breeders and dealers and addresses the importation of dogs for purposes of resale, research, or veterinary treatment. Additionally, APHIS submitted for clearance a proposed rule to change the definition of retail pet store to assure the public that animals sold at retail as pets over the internet are monitored for their health and receive humane treatment. The program will review and address comments received as a result of these proposed rules. Also in FY 2011, APHIS implemented several business process improvements to strengthen inspection and compliance of regulated entities. For example, the Agency re-evaluated the current methodology for calculating the frequency of inspections at facilities with more egregious violations; this change will allow for better use of limited program resources and will ultimately increase overall compliance. APHIS also designed and presented a series of webinars to program employees to promote a higher level of consistency in the inspection process. Additionally, APHIS has evaluated its enforcement processes and has initiated efforts to streamline them – thereby making enforcement more efficient and effective. APHIS will continue to seek process and practice improvements that maintain focus on strengthening inspection and compliance efforts.

Long-term Performance Measure: Maintain the percentage of licensees and registrants in substantial compliance with the Animal Welfare Act

Selected Past Accomplishments Toward Achievement of the Key Outcome 1:

- Responded to more than 64,800 requests in 50 States for wildlife technical assistance in FY 2011
- Regulated entities maintained 95-99% substantial compliance with the Animal Welfare Act over 2007-2011 due to enforcement and education efforts

Selected Accomplishments Expected at the FY 2013 Proposed Resource Level for Key Outcome 1:

- Continue to respond to requests for wildlife technical assistance in all 50 States
- Protect and promote the welfare of animals covered under the Animal Welfare Act through monitoring regulatory compliance and providing non-regulatory activities such as outreach, education, and training with affected parties

Efficiency Measure: Average cost of issuing animal welfare licenses and registrations

**Key Outcome 2:** Ensure protection of forests and private working lands, as well as natural resources, by reducing threats.

Measure: Reduce damage to forests and private working lands

In cooperation with various other Federal and state agencies, industry, and producers of all sizes, APHIS conducts plant and animal health programs to prevent, control, or eliminate pests and diseases of concern to American agriculture and natural resources. The detection and management of these pests and diseases has protected and enhanced agricultural products and natural resources in many rural areas, including forests and private working lands.

APHIS' tree and wood pests program protects forests, private working lands, and natural resources from devastating pests such as the emerald ash borer (EAB), the Asian longhorned beetle (ALB), and the gypsy moth. Numerous native hardwood tree species that are common throughout U.S. forests and urban landscapes are hosts to these pests. APHIS continues to face challenges in addressing tree and wood pests such as the EAB, and seeks to efficiently use resources to address pests where success is achievable, such as eradicating the ALB and preventing the spread of gypsy moths.

The EAB is an exotic forest pest that has killed millions of ash trees in the United States. First found in Michigan in 2002, it has spread to 14 additional States and continues to spread. Due to the lack of control tools available, the Agency shifted its goal in recent years from eradication to preventing the human assisted spread and minimizing the impacts of natural spread of the pest. APHIS continues to scale back the Federal activities in light of the revised approach, and will manage an outreach program and provide national coordination. In addition, the program will continue developing and deploying biological control agents as the most promising long-term action against this pest.

The ALB is a devastating pest of hardwood trees. First detected in Brooklyn, New York, in August 1996, ALB was later found in other areas of New York, Illinois, New Jersey, Massachusetts, and Ohio. APHIS has eradicated outbreaks in Illinois; Jersey City, New Jersey; and Islip, New York. Currently, the program is addressing outbreaks in New York, New Jersey, Massachusetts, and Ohio. In Massachusetts, survey and tree removal are reducing ALB population levels. Eradication confirmation surveys are continuing in Manhattan, and survey activities are continuing in Brooklyn, Queens, and Nassau-Suffolk County. The New Jersey program is continuing eradication confirmation surveys in parts of Middlesex and Union Counties, as well as on Staten Island in New York City. In Ohio, the program is continuing regulatory activities, delimitation surveys, and tree removal in response to the June 2011 infestation discovery. APHIS will continue to conduct the necessary eradication activities and move toward eradication of this devastating pest.

The gypsy moth is a significant and destructive pest to some of North America's most beautiful and popular deciduous trees, including maples, oaks, and elms. APHIS strives to prevent the human-assisted movement and establishment of gypsy moth populations in non-quarantine areas through regulatory activities. Since the inception of APHIS' multi-tiered approach to pest suppression in 2000, the spread of the gypsy moth has been dramatically reduced, by more than 70 percent, from the historical level of 13 miles per year to 3 miles per year. Using this approach, APHIS partners with cooperators along the leading edge of the quarantine area in what is called a Slow-the-Spread program (STS). This is a region-wide strategy to minimize the rate at which gypsy moth spreads into uninfested areas. In the past 6 years, the STS has prevented any new infestations on 40 million acres susceptible to the pest. Furthermore, an intensive port environ trapping program, combined with Memorandums of Understanding signed with both Russia and Japan, has allowed APHIS to prevent the establishment of Asian gypsy moth populations. APHIS will continue these cooperative efforts to address the damaging moths.

Long-term Performance Measure: Increase the percent of treatment area treated for ALB in Massachusetts

Selected Past Accomplishments Toward Achievement of the Key Outcome 2:

- Successfully eradicated ALB in Chicago, Illinois, and Hudson County, New Jersey, in FY 2008.
- Successfully eradicated ALB in Islip, Long Island, in Summer 2011.
- Completed 89 percent of ALB eradication activities in New Jersey and 74 percent of eradication activities in New York.

Selected Accomplishments Expected at the FY 2013 Proposed Resource Level for Key Outcome 2:

- Reduce the ALB population in Massachusetts and prevent its spread by detecting and removing infested trees.
- Conclude confirmation surveys for ALB in Manhattan.
- Conduct surveys to delimit Ohio ALB infestation and conduct regulatory and outreach activities.

Efficiency Measure: Value of damage prevented by the Gypsy Moth program per dollar spent

**Key Outcome 3:** Facilitate agricultural trade and the development of biotechnology products through the use of a rigorous regulatory system, thereby providing agricultural producers with additional options for production and assisting them with exporting their products.

**Measure:** Enhance America's ability to develop and export agricultural products, including biotechnology derived products

As a world leader in the safe development of genetically engineered plants and plant products, the United States has tremendous opportunities to increase its exports of such products. A vital component to strengthening exports is having a regulatory system that ensures the safe use of these products in agricultural systems and the environment.

APHIS, as one of three Federal Agencies (including the Environmental Protection Agency and the Food and Drug Administration) assessing the safety of agricultural biotechnology products, ensures the safe use of biotechnology derived products in agricultural systems and the environment. Since the United States is a world leader in assessing their safe use in the environment, many countries active in the development and deployment of these valuable products look to the United States' safety assessments for assurance and guidance that these products are unlikely to pose adverse effects on agriculture or natural resources. Therefore, through a strong, scientifically based regulatory system, APHIS facilitates the review and acceptance of agricultural biotechnology products both at home and in foreign markets. These activities help ensure that producers have options to choose from when looking for crop varieties that will fit their needs. APHIS regulates the importation, interstate movement, and environmental release of newly developed genetically engineered products to ensure they do not pose a threat to plant health or the environment before they can be grown on a widespread basis. APHIS has taken steps to improve its environmental review processes for petitions for non-regulated status. These improvements allow APHIS to reach determinations of non-regulated status more quickly, making new agricultural products available to producers and growers, while ensuring that all determinations are made in accordance with the Plant Protection Act and the National Environmental Policy Act. The Agency will continue to implement process improvements.

APHIS also supports the exportation of agricultural biotechnology products by providing significant input to international standard setting activities and import policy. The Agency tracks overall performance by the percent of permit holders in compliance with permit conditions. In FY 2011, 95 percent of permit holders were in compliance and the Agency anticipates continuing this trend in the future. APHIS will continue to seek ways to ensure the safe importation, interstate movement, and environmental release of genetically engineered products.

**Long-term Performance Measure:** Maintain compliance with biotechnology permit conditions

**Selected Past Accomplishments Toward Achievement of the Key Outcome 3:**

- Reviewed and approved 87 different plant lines that were found safe for use in the environment and accounted for more than 90 percent of soybean, 80 percent of corn, and 80 percent of cotton adopted and grown by farmers in the United States
- Over the past two decades, provided regulatory analysis and oversight on more than 31,000 field trials of genetically engineered crops and organisms at nearly 240,000 sites

**Selected Accomplishments Expected at the FY 2013 Proposed Resource Level for Key Outcome 3:**

- Increase the number of biotechnology plant lines reviewed and found safe for use in the environment
- Increase the number of inspections for field trial sites

**Efficiency Measure:** Average cost of a biotechnology inspection

**Key Outcome 4:** Provide a secure agriculture production system and healthy food supply to consumers by defending against plant and animal pests and diseases.

**Measure:** Minimize and prevent damage to agriculture caused by animal and plant pests and diseases

APHIS programs minimize damage to agriculture and help to ensure that all Americans, have access to safe and nutritious food. These programs focus on safe agricultural products, both plant and animal. APHIS provides monitoring and surveillance, eradication, and control programs for many pests and diseases that can negatively affect our crops and herds, and potentially enter the food products. The Agency also provides the programs to protect our herds, as well as for programs that protect food-producing plants from pests and diseases. By preventing the entry and establishment of pests and diseases, the Agency helps keep fresh food accessible, minimizes production losses, and creates consumer confidence in agricultural products. A key component of the safeguarding system is the early detection and rapid response to pests and diseases should they reach the United States in order to prevent their spread.

There were no significant outbreaks of animal diseases in FY 2011, and the Agency continued to enhance the nation's ability to trace diseased or exposed animals in order to prevent disease spread. As a result of increasing diversity of livestock and poultry rearing facilities in the United States, USDA initiated a more flexible animal disease traceability system to effectively respond to animal disease concerns and minimize harm to producers. While disease prevention is an APHIS top priority, an effective response system must be in place in the event of a disease outbreak; the potential emergence of highly contagious diseases makes that need all the more urgent. USDA's new framework closes gaps in our ability to trace potentially sick animals and builds on our progress in this area. For example, USDA will use, and make available to States and Tribes, the information technology infrastructure that we have developed to support our traceability efforts to date. USDA expects that the new system will impose less of a cost on producers than the National Animal Identification System since it focuses only on animals moving interstate and allows for the use of low cost tags for identifying animals.

USDA is taking deliberate and transparent steps to implement the new traceability framework. In August, USDA published the proposed rule on traceability for livestock moving interstate with a comment period that ended in December 2011. The rule proposes, with some exceptions, that all livestock moved interstate must be officially identified and accompanied by an Interstate Certificate of Veterinary Inspection or other documentation. The rule would provide additional requirements on the cattle sector for interstate movements to help improve traceability and would not fundamentally change existing requirements for other livestock movement. APHIS will evaluate all comments on the proposed rule before publishing a final rule, anticipated in 2012.

APHIS is also taking steps to modernize its entire regulatory framework. For example, the Agency published concept papers for both the brucellosis and tuberculosis eradication programs describing a national approach to surveillance and eradication strategies that enhances disease mitigation, response, and control activities. One such modernization was the publication of an interim rule in December of 2010 that amended the brucellosis regulations to make them less cumbersome while maintaining cattle health, consumer confidence and trade opportunities.

APHIS has also implemented a policy that would reduce the use of Federal funds to depopulate entire tuberculosis-affected herds and indemnify owners as the primary management option. APHIS will now base its approach on the individual circumstances surrounding each herd. To aid in this effort, APHIS developed an epidemiological model to guide decisions regarding the implementation of herd depopulation versus test-and-remove protocols. Both programs are working together to develop a common framework that will increase consistency and flexibility of the regulations while reducing the administrative burden.

APHIS also conducts plant health programs to prevent and control pest and disease outbreaks, such as the European grapevine moth (EGVM). EGVM, a significant pest of grapes, was initially discovered in major grape production areas of northern California in 2010. The pest damages grape production when larvae feed on the flowers and berries; subsequent fungal infection causes further damage. High population densities of EGVM can destroy entire vineyards, resulting in a total loss of grapes at harvest. Other potential impacts include reduced availability of fresh and processed commodities, a decreased number of export markets for the grape and stone fruit industry, and increased costs to both the producers and consumers.

Many of the detrimental impacts have been avoided due to the rapid response to the initial discovery of the pest. APHIS, State, County, and University cooperators continue to conduct survey and regulatory activities to prevent the artificial spread of the pest, as well as education and outreach efforts to educate industry groups, affected growers, and residents. Affected growers are responsible for conducting treatments to suppress EGVM populations in their vineyards, orchards, and fields while APHIS and its cooperators conduct treatments in residential and

riparian areas. Although new EGVM detections occurred in Nevada and Santa Cruz Counties in 2011, Statewide detections were down approximately 99.9 percent compared to 2010 (fewer than 150 detections in 2011 compared to 100,959 individual moths in 2010). The Agency will continue survey, regulatory, and suppression efforts for the next several years to ensure that the pest does not spread to new areas or begin to establish itself.

Long-term Performance Measure: Increase the value of damage prevented and mitigated as a result of APHIS' plant and animal health monitoring and surveillance efforts

Selected Past Accomplishments Toward Achievement of the Key Outcome 4:

- There were no new introductions of foreign animal diseases that spread beyond the original area of introduction that caused significant economic damage or damage to the health of animals
- Program efforts reduced detections of European grapevine moths by more than 99 percent between 2010 and 2011

Selected Accomplishments Expected at the FY 2013 Proposed Resource Level for Key Outcome 4:

- Continue the effective surveillance for foreign animal diseases
- Continue to develop a specific plan for effective animal disease traceability in the United States
- Continue to conduct regulatory activities to prevent the spread of the European grapevine moth

Efficiency Measure: Value of damage prevented and mitigated per program dollar spent

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and ExpensesStrategic Goal Funding Matrix

(On basis of appropriation)

(Dollars in thousands)

	2010 Actual Amount	2011 Actual Amount	2012 Enacted Amount	Change	2013 Estimate Amount
<u>Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving.</u>					
Animal Welfare.....	\$24,479	\$24,435	\$27,087	-\$2,928	\$24,159
Horse Protection.....	500	499	696	-203	493
Wildlife Damage Management.....	78,937	72,058	72,500	-4,788	67,712
Wildlife Services Methods Development.....	18,902	17,078	18,000	-1,249	16,751
Total Cost, Strategic Goal.....	122,818	114,070	118,283	-9,168	109,115
Staff Years, Strategic Goal.....	945	922	927	-32	895
<u>Ensure our National forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources.</u>					
Tree & Wood Pests.....	77,146	74,994	55,638	-11,719	43,919
Total Cost, Strategic Goal.....	77,146	74,994	55,638	-11,719	43,919
Staff Years, Strategic Goal.....	376	376	321	-19	302
<u>Help America promote agricultural production and biotechnology exports as America works to increase food security.</u>					
Agriculture Import/Export.....	12,604	12,579	13,354	-45	13,309
Biotechnology Regulatory Services.....	13,322	13,037	18,135	-1,384	16,751
Overseas Technical & Trade Operations.....	20,176	20,136	20,104	-2,357	17,747
Total Cost, Strategic Goal.....	46,102	45,752	51,593	-3,786	47,807
Staff Years, Strategic Goal.....	246	246	257	-1	256
<u>Ensure that all of America's children have access to safe, nutritious, and balanced meals.</u>					
Agricultural Quarantine Inspection (Appropriated).....	29,000	25,948	27,500	-2,375	25,125
Animal and Plant Health Regulatory Enforcement.....	15,483	15,455	16,275	-499	15,776
Animal Health Technical Services.....	32,360	29,550	32,500	5,358	37,858
APHIS Info. Technology Infrastructure.....	4,474	4,465	4,335	-168	4,167
Aquatic Animal Health.....	6,021	5,422	2,261	403	2,664
Avian Health.....	66,568	50,090	52,000	-2,259	49,741
Cattle Health.....	114,530	109,594	99,000	-8,697	90,303
Contingency Fund.....	2,058	2,054	1,000	984	1,984
Cotton Pests.....	23,390	20,958	17,848	-8,933	8,915
Emergency Preparedness & Response.....	19,746	19,707	17,000	-257	16,743
Equine, Cervid & Small Ruminant Health.....	39,427	36,826	22,000	-4,067	17,933
Field Crop & Rangeland Ecosystems Pests.....	13,138	11,296	9,068	-201	8,867
National Veterinary Stockpile.....	3,568	3,561	2,750	-485	2,265
Pest Detection.....	28,113	26,702	27,500	-1,883	25,617
Physical/Operational Security.....	5,725	5,714	5,365	-439	4,926
Plant Protection Methods Development.....	21,773	21,230	20,600	-893	19,707
Speciality Crop Pests.....	150,849	150,079	153,950	-2,895	151,055
Swine Health.....	25,733	25,547	23,000	-2,658	20,342
Veterinary Biologics.....	16,457	16,424	16,457	-697	15,760
Veterinary Diagnostics.....	30,006	32,309	31,611	-156	31,455
Zoonotic Disease Management.....	10,468	10,447	9,000	1,374	10,374
Buildings & Facilities.....	4,712	3,529	3,200	-25	3,175
Congressionally Undesignated Funding.....	0	5,076	0	0	0
Total Cost, Strategic Goal.....	663,599	631,983	594,220	-29,468	564,752
Staff Years, Strategic Goal.....	3,287	3,213	3,174	-99	3,075

	2010 Actual Amount	2011 Actual Amount	2012 Enacted Amount	Change	2013 Estimate Amount
Subtotal, Appropriated Salaries and Expenses .....	904,953	863,270	816,534	-54,116	762,418
Subtotal, Buildings & Facilities.....	4,712	3,529	3,200	-25	3,175
Total Cost, All Strategic Goals .....	\$909,665	\$866,799	\$819,734	-\$54,141	\$765,593
Total Staff Years, All Strategic Goals .....	4,854	4,757	4,679	-151	4528

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Summary of Budget and Performance  
Key Performance Outcomes and Measures

Key outcomes and performance measures under each of the Agency's strategic goals as outlined below:

**Goal 1:** USDA will assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving

Key Outcome 1: Provide assistance and support to rural communities by: minimizing production losses, maintaining market viability, protecting the public, and ensuring the humane care and treatment of animals

Key Performance Measures 1:

Goal 1, Measure #1: Percent of licensees and registrants in substantial compliance of the Animal Welfare Act

APHIS' Animal Welfare program carries out activities designed to ensure the humane care and treatment of animals. These activities include inspection of certain establishments that handle animals intended for biomedical research, sold as pets at the wholesale level, transported in commerce, or used for exhibition purposes. While APHIS remains committed to strong enforcement and outreach efforts to improve compliance of regulated entities, the Agency is also committed to reducing operational spending. In 2013, APHIS will continue to prioritize its inspection through risk-based determination and seek opportunities to gain efficiencies. This will allow APHIS to effectively direct its resources in a manner that maximizes its ability to enforce the AWA. Due to the program's focus on educating newly licensed entities and serious violators, APHIS expects a decrease in the number of licensees and registrants in compliance with the AWA. However, APHIS expects to increase compliance in the out years as we work with those regulated entities to understand requirements and expectations established through regulation.

Key Performance Targets 1:

<b>Performance Measure</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Target</b>	<b>2013 Target</b>
<u>Animal Welfare:</u> Percent of licensees inspected and registrants in substantial compliance of the Animal Welfare Act <sup>1</sup>	99%	99%	95%	98%	89%	91%
<i>Animal Welfare Funding</i>	\$20,498	\$21,522	\$24,479	\$24,435	\$27,087	\$24,159

**Goal 2:** USDA will ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources

Key Outcome 2: Ensure protection of forests and private working lands, as well as natural resources, by reducing threats

Key Performance Measures 2:

Goal 2, Measure #1: Number of trees in Massachusetts detected with Asian longhorned beetle

<sup>1</sup> Due to the increased inspection and enforcement efforts for problematic dog dealers, the Agency will likely initially experience lower compliance levels as new entities are inspected. APHIS expects to rapidly increase compliance in the out years as we work with those regulated entities to understand requirements and expectations established through regulation.

Goal 2, Measure #2: Percent of eradication program completed in New Jersey, New York, and Massachusetts

In cooperation with various other Federal and state agencies, and industry, including producers of all sizes, APHIS conducts plant and animal health programs in order to prevent, control, or eliminate pests and diseases of concern. The detection and management of these pests and diseases has stimulated economic growth, and protected and enhanced agricultural products and natural resources in many rural areas, including forests and private working lands. Currently, the program is addressing outbreaks in New York, New Jersey, Massachusetts, and Ohio. In FY 2013, APHIS will continue to manage the spread of such devastating pests as the Asian longhorned beetle (ALB). Specifically, the Agency will reduce the ALB population in Massachusetts and prevent its spread by detecting and removing infested trees. In New York, APHIS will continue eradication confirmation surveys in Manhattan, parts of Middlesex and Union Counties in New Jersey, as well as on Staten Island in New York City. The Agency will continue infestation survey activities in Brooklyn, Queens, and Nassau-Suffolk County, New York, and regulatory activities, delimitation surveys, and tree removal in Ohio.

Key Performance Targets 2:

<b>Performance Measure</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Target</b>	<b>2013 Target</b>
<u>Tree and Wood Pests – Asian Longhorned Beetle</u> : Number of trees in Massachusetts detected with Asian longhorned beetle	6,431	12,000	2,250	1,171	750	400
<u>Tree and Wood Pests – Asian Longhorned Beetle</u> : Percent of eradication program completed in: New Jersey, New York, Massachusetts	N/A	N/A	79% 56% 4%	89% 74% 6%	89% 74% 6%	100% 74% 8%
<i>Tree and Wood Pests – Asian Longhorned Beetle Funding*</i>	\$19,516	\$19,918	\$32,521	\$32,456	\$55,638*	\$43,919

\* The original structure funding for the Asian longhorned beetle program was separately identified within the Emerging Plant Pests line item. In the new structure, Asian longhorned beetle is included in the Tree and Wood Pests line item, and is no longer separately identified.

**Goal 3:** Help America promote agricultural production and biotechnology exports as America works to increase food security

Key Outcome 3: Facilitate agricultural trade and the development of biotechnology products through the use of a rigorous regulatory system, thereby providing agricultural producers with additional options for production and assisting them with exporting their products

Key Performance Measures 3:

Goal 3, Measure #1: Cumulative number of genetically engineered plant lines reviewed by USDA and found safe for use in the environment

Through a strong scientifically based regulatory system, APHIS facilitates the review and acceptance of agricultural biotechnology products both at home and in foreign markets. These activities help ensure that producers have options to choose from when looking for crop varieties that will fit their needs. APHIS' Biotechnology Regulatory Services oversees a science-based regulatory framework for the safe development and use of biotechnology derived products. APHIS' role is to ensure, by conducting thorough evaluations, that newly developed crops do not pose a threat to plant health or the environment before they can be grown on a widespread basis. APHIS has also evaluated and granted non-regulated status to 87 plant lines. The rapid adoption and broad use of agricultural biotechnology has precipitated a tremendous growth in APHIS' workload in terms of the number and complexity of applications received.

APHIS is committed to maintaining an effective biotechnology compliance program for genetically engineered (GE) organisms and improving the GE crop deregulation process. The petition review process involves multiple steps, including an environmental analysis required by the National Environmental Protection Act (NEPA), and currently takes an average of 3 years to complete. The Agency conducted a business process improvement review using the Lean Six Sigma tool and has identified several changes that will reduce average timelines for reviewing deregulation petitions by 13 and 16 months to just over a year. In FY 2013, APHIS will continue implementing process improvements and increasing the number of plant lines reviewed and granted non-regulated status.

Key Performance Targets and HPPG Measures 3:

<b>Performance Measure</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Target</b>	<b>2013 Target</b>
<u>Biotechnology Regulatory Services:</u> Cumulative number of genetically engineered plant lines reviewed by USDA and found safe for use in the environment	78	80	81	87	93	99
<i>Biotechnology Regulatory Services Funding</i>	\$11,728	\$12,877	\$13,050	\$13,037	\$18,135	\$16,751

**Goal 4:** USDA will ensure that all of America's children have access to safe, nutritious, and balanced meals

Key Outcome 4: Provide a secure agriculture production system and healthy food supply to consumers by defending against plant and animal pests and diseases

Key Performance Measures 4:

Goal 4, Measure #1: Number of foreign animal diseases that spread beyond the original area of introduction and cause severe economic and environmental damage

Goal 4, Measure #2: Number of compliance inspections for European Grape Vine Moth

By preventing the entry and establishment of pests and diseases, the Agency helps keep fresh food accessible, minimizes production losses, and creates consumer confidence in agricultural products. A key component of the safeguarding system is the early detection and rapid response to pests and diseases, should they reach the United States, in order to prevent their spread. The Agency conducts early detection methods through the monitoring and surveillance programs. In FY 2011, there were no significant foreign animal diseases that spread beyond the original area of introduction and caused severe economic and environmental damage or damage to the health of animals. In FY 2013, APHIS plans to maintain this status. In addition, the European grapevine moth (EGVM), a significant pest of grapes, was detected in California in 2010. APHIS believes that many of the economic impacts have been avoided due to the rapid response to the initial discovery of the pest. Without these efforts, the moth

could impact as many as 11,623 farms in California that produce grapes and raisins valued at \$3.1 billion. APHIS will continue surveillance, regulatory, and suppression efforts for the next several years to ensure that the pest does not spread to new areas or re-establish itself in previously treated areas.

Key Performance Targets 4:

<b>Performance Measure</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Target</b>	<b>2013 Target</b>
<u>Animal Health:</u> Number of foreign animal diseases that spread beyond the original area of introduction and cause severe economic and environmental damage	0	0	0	0	0	0
<i>Animal Health Funding*</i>	\$122,507	\$129,180	\$121,667	\$118,035	\$290,579	\$278,695

\* In the original structure, funding for surveillance activities was separately identified within the Animal Health Monitoring and Surveillance line item. In the new structure, these funds are included in the various Animal Health commodity line items and are no longer separately identified.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Full Cost by Department Strategic Goals  
(On basis of appropriated funds)  
(dollars in thousands)

Strategic Goal 1 - Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving.					
	PROGRAM ITEMS - Discretionary	FY 2010	FY 2011	FY 2012	FY 2013
	Animal Welfare	\$20,073	\$20,037	\$22,211	\$19,810
	Horse Protection	410	409	571	404
	Wildlife Damage Management	64,728	59,088	59,450	55,524
	Wildlife Services Methods Development	15,500	14,004	14,760	13,736
	Program Operational Costs	12,282	11,407	11,828	10,912
	Indirect Costs	9,825	9,126	9,463	8,730
	Total Discretionary Costs for Strategic Goal 1	\$122,818	\$114,070	\$118,283	\$109,115
	FTEs	945	922	927	895
Performance Measure:	Animal Welfare: Percent of licensees inspected and registrants in substantial compliance of the Animal Welfare Act	95%	98%	89%	91%
	<i>Animal Welfare Funding</i>	\$24,479	\$24,435	\$27,087	\$24,159
Strategic Goal 2 - Ensure our National forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources.					
	PROGRAM ITEMS - Discretionary	FY 2010	FY 2011	FY 2012	FY 2013
	Tree & Wood Pests	\$63,260	\$61,495	\$45,623	\$36,014
	Program Operational Costs	7,715	7,499	5,564	4,392
	Indirect Costs	6,172	6,000	4,451	3,514
	Total Discretionary Costs for Strategic Goal 2	\$77,146	\$74,994	\$55,638	\$43,919
	FTEs	376	376	321	302
Performance Measure:	Tree and Wood Pests – Asian Longhorned Beetle: Number of trees in Massachusetts detected with Asian longhorned beetle	2,250	1,171	750	400
Performance Measure:	Tree and Wood Pests – Asian Longhorned Beetle: Percent of eradication program completed in NJ/NY/MA	79/56/4%	89/74/6%	89/74/6%	100/74/8%
	<i>Tree and Wood Pests – Asian Longhorned Beetle Funding<sup>1</sup></i>	\$32,521	\$32,456	\$55,638	\$43,919
Strategic Goal 3 - Help America promote agricultural production and biotechnology exports as America works to increase food security.					
	PROGRAM ITEMS - Discretionary	FY 2010	FY 2011	FY 2012	FY 2013
	Agriculture Import/Export	\$10,335	\$10,315	\$10,950	\$10,913
	Biotechnology Regulatory Services	10,924	10,690	14,871	13,736
	Overseas Technical & Trade Operations	16,544	16,512	16,485	14,553
	Program Operational Costs	4,610	4,575	5,159	4,781
	Indirect Costs	3,688	3,660	4,127	3,825
	Total Discretionary Costs for Strategic Goal 3	\$46,102	\$45,752	\$51,593	\$47,807
	FTEs	246	246	257	256
	PROGRAM ITEMS - Discretionary	FY 2010	FY 2011	FY 2012	FY 2013
Performance Measure:	Biotechnology Regulatory Services: Cumulative number of genetically engineered plant lines reviewed by USDA and found safe for use in the environment	81	87	93	99
	Biotechnology Regulatory Services Funding	\$13,050	\$13,037	\$18,135	\$16,751

Strategic Goal 4 - Ensure that all of America's children have access to safe, nutritious, and balanced meals.					
	PROGRAM ITEMS - Discretionary	FY 2010	FY 2011	FY 2012	FY 2013
	Agricultural Quarantine Inspection (Appropriated)	\$23,780	\$21,277	\$22,550	\$20,603
	Animal and Plant Health Regulatory Enforcement	12,696	12,673	13,346	12,936
	Animal Health Technical Services	26,535	24,231	26,650	31,044
	APHIS Info. Technology Infrastructure	3,669	3,661	3,555	3,417
	Aquatic Animal Health	4,937	4,446	1,854	2,184
	Avian Health	54,585	41,074	42,640	40,788
	Cattle Health	93,915	89,867	81,180	74,048
	Contingency Fund	1,688	1,684	820	1,627
	Cotton Pests	19,180	17,186	14,635	7,310
	Emergency Preparedness & Response	16,192	16,160	13,940	13,729
	Equine, Cervid & Small Ruminant Health	32,330	30,197	18,040	14,705
	Field Crop & Rangeland Ecosystems Pests	10,773	9,263	7,436	7,271
	National Veterinary Stockpile	2,926	2,920	2,255	1,857
	Pest Detection	23,053	21,896	22,550	21,006
	Physical/Operational Security	4,695	4,685	4,399	4,039
	Plant Protection Methods Development	17,854	17,409	16,892	16,160
	Speciality Crop Pests	123,696	123,065	126,239	123,865
	Swine Health	21,101	20,949	18,860	16,680
	Veterinary Biologics	13,495	13,468	13,495	12,923
	Veterinary Diagnostics	24,605	26,493	25,921	25,793
	Zoonotic Disease Management	8,584	8,567	7,380	8,507
	Buildings & Facilities	4,712	3,529	3,200	3,175
	Congressionally Undesignated Funding	0	5,076	0	0
	Program Operational Costs	65,889	62,338	59,102	56,158
	Indirect Costs	52,711	49,870	47,282	44,926
	Total Discretionary Costs for Strategic Goal 4	\$663,599	\$631,983	\$594,220	\$564,752
	FTEs	3,287	3,213	3,174	3,075
	PROGRAM ITEMS - Mandatory	FY 2010	FY 2011	FY 2012	FY 2013
	Farm Bill: 10202 - National Clean Plant Network	\$5,000	\$5,000	\$5,000	\$0
	Farm Bill: 10201 - Plant Pest & Disease Mgt. & Disaster Prevention	45,000	50,000	50,000	50,000
	Trust Funds	18,392	9,418	12,000	12,000
	Program Operational Costs	0	0	0	0
	Indirect Costs	0	0	0	0
	Total Mandatory Costs for Strategic Goal 4	\$68,392	\$64,418	\$67,000	\$62,000
	FTEs	165	165	165	165
	PROGRAM ITEMS - Discretionary	FY 2010	FY 2011	FY 2012	FY 2013
Performance Measure:	Animal Health: Number of foreign animal diseases that spread beyond the original area of introduction and cause severe economic and environmental damage	0	0	0	0
	<i>Animal Health Funding</i> <sup>2</sup>	\$121,667	\$118,035	\$290,579	\$278,695
	Subtotal, Salaries & Expenses Discretionary <sup>3</sup>	904,953	863,270	816,534	762,418
	Subtotal, Buildings & Facilities	4,712	3,529	3,200	3,175
	Total Discretionary Request	909,665	866,799	819,734	765,593
	FTEs	4,854	4,757	4,679	4,528
<p><sup>1</sup> The original structure funding for the Asian longhorned beetle program was separately identified within the Emerging Plant Pests line item. In the new structure, Asian longhorned beetle is included in the Tree and Wood Pests line item, and is no longer separately identified.</p> <p><sup>2</sup> In the original structure funding for surveillance activities was separately identified within the Animal Health Monitoring and Surveillance line item. In the new structure, these funds are included in the various Animal Health commodity line items and is no longer separately identified.</p> <p><sup>3</sup> FY 2010 exclude the General Provision 723, which provides \$2,600,000 to remain available until expended for the construction, interim operations, and necessary demolition needs for establishment of an agricultural pest facility in the State of Hawaii.</p>					