

United States
Department of
Agriculture

Animal and
Plant Health
Inspection
Service

Policy and
Program
Development

Budget and
Program
Analysis

Riverdale, MD



Explanatory Notes

Fiscal Year 2010

For official use only

Enclosed is a copy of the APHIS portion of the FY 2010 **Explanatory Notes**. These Notes contain justifications of proposed funding changes for FY 2010 as well as explanations of ongoing programs. This material, along with the FY 2010 budget, will be the basis for hearings to be conducted by the House and Senate Appropriations Committees.

The **Explanatory Notes** are considered to be the property of these Committees and, therefore, **are not to be released** to the public until publication of the Appropriation Hearings.

2010 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 customers and 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 customers and 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 and phytosanitary 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 under five major areas of activity, as follows:

Pest and Disease Exclusion -- The pest and disease exclusion programs prevent the introduction of foreign plant and animal pests and diseases. APHIS monitors plant and animal health throughout the world and uses the information to set effective agricultural import policies. 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. APHIS engages in cooperative programs to control pests of imminent concern to the United States and to strengthen foreign plant protection and quarantine organizations. APHIS also 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.

The statutory authority supporting this program area is contained in 7 U.S.C. 166, 450, 1531-1542, 1581-1610, 7701-7772 and 8301 et seq. (Animal Health Protection Act of 2002); 18 U.S.C. 42; 19 U.S.C. 1306; and 21 U.S.C. 102-105, 111-120, 121-123, 127, 131, 135- 135b, 136, 136a-f, 612-614, 618, and 620; 45 U.S.C. 71-74, and 46 U.S.C. 3901-3902. The principal legislative authorities for these activities include the Plant Protection Act of 2000, Sections 12-14 of the Federal Meat Inspection Act, and the Public Health Security and Bioterrorism Response Act of 2002, P.L. 107-188 Section 211-231. The Department's enforcement responsibilities for endangered plants are contained in the Endangered Species Act of 1973.

Plant and Animal Health Monitoring -- The plant and animal health monitoring programs are largely cooperative efforts involving the Federal and State governments, and industry. APHIS conducts programs to prevent communicable plant and animal diseases of foreign origin from entering the United States. Upon entrance into this country, the pests and diseases are rapidly diagnosed. The Agency also conducts surveys in cooperation with the States to detect harmful plant and animal pests and diseases. The programs also help determine if there is a need to establish new pest or disease eradication programs.

The statutory authority for this work is contained in 7 U.S.C. 391, 450, 1622 and 8301 et seq. (Animal Health Protection Act of 2002); and 21 U.S.C. 111-112, 114, 114b-114c, 114d-1, 117, 127, 134e, 608, 610, and 620. Principal legislative authority for these activities is contained in the Act of May 29, 1884; Act of August 30, 1890; Act of February 2, 1903; Act of March 3, 1905; Act of June 17, 1930; Act of September 21, 1944; Act of February 28, 1947; Act of September 6, 1961; Act of July 2, 1962; and Public Law 97-46 of September 25, 1981; Act of October 14, 1982; Act of January 13, 1983; Public Law 99-198 of December 23, 1985; Public Health Security and Bio-terrorism Response Act of 2002, Public Law 107-188 Section 211-231.

Pest and Disease Management -- In cooperation with the States, APHIS conducts programs to detect, prevent, and eradicate pests and diseases that are harmful to agriculture. The Agency monitors and regulates interstate shipments of plants, livestock, and related materials to prevent the spread of disease and the distribution of impure, unsafe, and nonefficacious materials and products. Through its Wildlife Services program, APHIS protects agriculture from detrimental animal predators through identification, demonstration, and application of the most appropriate methods of control.

The statutory authority for this work is contained in 7 U.S.C. 281-286, 429, 426-426-b, 450-450f, 851-855, 1624, 3801-3813, 7701-7772 and 8301 et seq. (Animal Health Protection Act of 2002); and 21 U.S.C. 115-130, and 134-134h. Principal legislative authority for these activities is contained in the Animal Industry Act of May 29, 1884; Act of August 30, 1890; Act of February 2, 1903; Act of 1903; Act of March 3, 1905; Tariff Act of June 17, 1930; Act of 1931; Act of September 21, 1944; Plant Protection Act of 2000; Act of February 28, 1947; Act of September 6, 1961; Act of July 2, 1962; P.L. 92-629 of January 3, 1975; the Swine Health Protection Act of October 17, 1980; Public Law 97-46 of September 25, 1981; Act of October 14, 1982; Act of January 13, 1983; Public Law 99-198 of December 23, 1985; and the Public Health Security and Bioterrorism Response Act of 2002, Public Law 107-188 Section 211-231 and the Food, Agriculture, Conservation, and Trade Act (Farm Bill) of 1990.

Animal Care -- The Agency conducts regulatory activities to ensure the humane care and treatment of animals and horses as required by the Animal Welfare Act (AWA) 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. The Agency is reviewing public comments regarding the advance notice of proposed rulemaking to extend coverage under the AWA to rats, mice, and birds not involved in research.

Scientific and Technical Services -- APHIS 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.

The statutory authority supporting this work is contained in 7 U.S.C. 426, 427, 427i, 430, 7701-7772 and 8301 et seq. (Animal Health Protection Act of 2002); and 21 U.S.C. 151-159. The principal legislative authority for these activities is contained in the Act of May 29, 1884; Act of August 30, 1890; Act of February 2, 1903; Act of March 3, 1905; Tariff Act of June 17, 1930; Act of 1931; Act of September 21, 1944; the Plant Protection Act of 2000; Act of February 28, 1947; Act of September 6, 1961; Act of July 2, 1962; the Virus-Serum-Toxin Act of March 14, 1913; and the Public Health Security and Bioterrorism Response Act of 2002, Public Law 107-188

Section 211-231. Authority to collect user fees for veterinary diagnostics is contained in Section 2509 of the Food, Agriculture, Conservation, and Trade Act (Farm Bill) of 1990.

There were 5,874 permanent full-time employees and 1,869 other than permanent full-time employees as of September 30, 2008. Of the total, 1,240 full-time employees were located at headquarters. APHIS manages programs on a national basis through 2 regional offices and 465 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 FY 2008 include those listed below.

OIG Audits Closed

33601-09-CH Controls over Permits to Import Agricultural Products (as of March 4, 2009, this audit is officially closed: all Recommendations/corrective actions have been implemented)

OIG Audits in Progress and/or Still Open

33099-08-KC Controls over APHIS Pilot Certifications (APHIS expects to comment on a draft copy of the report in late spring 2009.)

50601-16-TE Controls over Genetically Engineered Animal and Insect Research (Audit still in progress; nothing significant to report.)

50601-17-TE Controls over Genetically Engineered Food and Agricultural Imports (OIG issued audit report with 3 recommendations. APHIS is currently developing its corrective actions to address the recommendations.)

50601-13-AT Department of Agriculture's Progress in Enhancing Agriculture Biosecurity Through Diagnostic and Reporting Networks (Audit still in progress; nothing significant to report.)

33701-01-HY Implementation of the National Strategy for Pandemic Influenza (Audit remains open, OIG issued a report January 2008. As of April 1, 2009, APHIS has implemented 7 of the 10 recommendations.)

50601-12-CH USDA's Controls over the Importation and Movement of Live Animals (Audit remains open, OIG issued a report March 2008. As of April 1, 2009, APHIS has implemented 8 of the 21 recommendations.)

33002-04-SF Animal Care Inspection of Dealers (Audit started March 2008 and still in progress; nothing significant to report.)

05099-29-AT Citrus Crop Indemnity Payments Resulting from Hurricane Wilma in Florida (Audit started October 2008 and still in progress.)

33601-02-KC Oversight of Designated Qualified Persons Enforcing the Horse Protection Act (Audit started August 2008 and still in progress; nothing significant to report.)

GAO Audits Closed

Job code 360830 Marine Aquaculture Development

GAO Audits in Progress

Job code 360871 Coordinated Framework for Regulation of Genetically Modified Agriculture (Audit remains open. GAO issued report November 2008 entitled GENETICALLY ENGINEERED CROPS: Agencies Are Proposing Changes to Improve Oversight, but Could Take Additional Steps to Enhance Coordination and Monitoring. APHIS and/or USDA have provided GAO with Statement of Action detailing the corrective actions to correct identified deficiencies.)

Job code 450489 Critical Infrastructure Protection for Pandemic Influenza (Audit still in progress; still ongoing; no significant issues to report.)

Job code 360883 Implementation of the Wild Horse and Burro Program (Audit still in progress; still ongoing; no significant issues to report.)

Job code 450540 User Fee Design Agriculture (Audit remains open. GAO issued report February 2008 entitled: FEDERAL USER FEES: Substantive Reviews Needed to Align Port-Related Fees with the Programs They Support (08-321); USDA and/or APHIS have provided GAO with Statement of Action detailing corrective actions to address identified deficiencies.)

Job code 360855 Veterinarian Capabilities for Disease Prevention, Food Safety, and Defense GAO (GAO issued report February 2009 entitled: VETERINARIAN WORKFORCE: Actions Are Needed to Ensure Sufficient Capacity for Protecting Public and Animal Health (09-178); USDA and/or APHIS in process of providing GAO with Statement of Action detailing corrective actions to address identified deficiencies.)

Job code 450536 Agencies Use of Efficiency Measures to Manage Cost and Performance (Audit started January 2009; still ongoing; no significant issues to report.)

Job code 250422 Consumer Protection Safety Commission Authorities (Audit started January 2009; still ongoing; no significant issues to report.)

Job code 120759 Review of Cost-Reimbursement Contracts in Federal Agencies (Audit started February 2009; still ongoing; no significant issues to report.)

Job code 361964 Irradiation of Food Products (Audit started March 2009; still ongoing; no significant issues to report.)

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Available Funds and Staff Years
2008 Actual and Estimated 2009 and 2010

Item	Actual 2008		Enacted 2009		Estimated 2010	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Funding for Salaries and Expenses:						
Appropriation.....	\$ 878,754,000	4,782	\$ 876,675,000	4,823	\$ 872,423,000	4,823
Proposed User Fees...a/.....	-	-	-	-	(19,500,000)	-
Agriculture Pest Facility in the State of Hawaii...b/.....	150,000	-	469,000	-	-	-
Rescission.....	(6,117,328)	-	-	-	-	-
Transfers from Commodity Credit Corporation.....	95,699,046	79	29,427,316	56	-	-
Farm Bill, Section 10201 and 10202.....	-	-	17,000,000	-	50,000,000	-
Discretionary Change to Mandatory Appropriation - Farm Bill.....	-	-	-	-	(35,000,000)	-
Unobligated Balances carried forward start of year.....	305,375,719	-	312,396,346	-	162,667,865	-
Recovery from prior years.....	32,023,457	-	-	-	-	-
Authority from Offsetting collections.....	105,771,005	-	107,288,444	-	107,624,886	-
Subtotal, funding.....	1,411,655,900	4,861	1,343,256,106	4,879	1,157,715,751	4,823
Agricultural Quarantine Inspection User Fees:						
Total Collections.....	540,736,588	1,032	484,039,997	1,060	487,912,317	1,060
Less: Transfer to DHS.....	(320,609,589)	-	(346,983,359)	-	(325,276,080)	-
AQI User Fees (APHIS).....	220,126,999	1,032	137,056,638	1,060	162,636,237	1,060
Total Salaries and Expense Available Funding.....	1,631,782,898	5,893	1,480,312,744	5,939	1,320,351,988	5,883
Obligations against Salaries and Expenses:						
Current Year Appropriation.....	804,233,288	4,782	820,277,720	4,823	821,518,093	4,823
Obligations against prior year appropriation.....	69,560,613	570	84,971,295	679	58,301,005	353
Obligations against Agricultural Quarantine Inspection User Fees.....	207,901,895	1,032	211,436,116	1,060	183,164,000	1,060
Farm Bill, Section 10201 and 10202.....	-	-	15,000,000	-	17,000,000	-
VHS Supplemental.....	-	-	1,000,000	-	4,000,000	-
Citrus Canker/Section 32.....	164,930	-	-	-	-	-
Melamine/Section 32.....	72,739	-	-	-	-	-
Emergency Transfers (CCC):						
Asian Longhorned Beetle.....	-	-	24,533,022	42	-	-
Bovine Tuberculosis.....	8,305,123	14	-	-	-	-
Cattle Fever Tick.....	4,082,062	14	4,894,294	14	-	-
Light Brown Apple Moth.....	31,193,545	17	-	-	-	-
Emergency Carryover (CCC):						
Asian Longhorned Beetle.....	763,644	2	165,720	1	608,348	2
Avian Influenza.....	127,394	-	-	-	-	-
Belgian Sheep.....	6,948	-	-	-	-	-
Bovine Tuberculosis.....	34,692,465	32	9,847,141	8	5,000,000	-
Cattle Fever Tick.....	-	-	1,150,670	3	-	-
Citrus Canker.....	7,260,429	9	-	-	-	-
Classical Swine Fever.....	-	-	24,887	-	-	-
Emerald Ash Borer.....	9,128,016	18	2,264,745	2	-	-
Exotic Newcastle Disease.....	62,669	-	-	-	-	-
Glassy Winged Sharpshooter.....	251,519	1	-	-	-	-
Infectious Salmon Anemia.....	31,727	-	-	-	-	-
Light Brown Apple Moth.....	3,273,770	2	33,428,997	17	10,100,000	6
Medfly (Guatemala).....	-	-	-	-	354,380	-
Medfly (FL, CA).....	1,274,517	4	-	-	103,730	-
Mexican Fruit Fly.....	584,420	4	-	-	78,214	-
Mormon Cricket.....	1,338,951	2	450,000	1	-	-
National Animal ID System.....	13,959	-	730,670	-	-	-
Plum Pox Virus.....	242,683	2	-	-	-	-
Potato Cyst Nematode.....	9,710,121	18	1,537,300	3	-	-
Rabies.....	272,137	3	-	-	-	-
Scrapie.....	215	-	-	-	-	-
Spring Viremia of Carp.....	50,125	-	-	-	-	-
Sudden Oak Death.....	1,387,521	6	1,354	-	-	-
Subtotal, Emergency Obligations.....	114,053,960	148	79,028,800	91	16,244,672	8
Subtotal, Direct Salaries and Expenses.....	1,195,987,425	6,532	1,211,713,931	6,653	1,100,227,770	6,244

Item	Actual 2008		Enacted 2009		Estimated 2010	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<u>Obligations under other</u>						
<u>USDA appropriations:</u>						
Agricultural Marketing Service:						
for administrative and technical support.....	6,077,360	-	6,322,263	-	5,743,458	-
Agricultural Research Service:						
for administrative and technical support.....	2,684,632	-	2,792,817	-	2,537,134	-
Coop State Research, Education & Extension Service :	82,674	-	86,006	-	78,132	-
Farm Service Agency:						
for administrative and technical support.....	125,830	-	130,901	-	118,917	-
Foreign Agricultural Service:						
for administrative and technical support.....	9,150	-	9,519	-	8,648	-
Forest Service:						
for administrative and technical support.....	941,423	-	979,360	-	889,699	-
Grain Inspection Service:						
for administrative and technical support.....	1,593,794	-	1,658,020	-	1,506,228	-
National Appeals Division:						
for administrative and technical support.....	30,307	-	31,528	-	28,642	-
Natural Resource Conservation Service						
for administrative and technical support.....	37,286	-	38,788	-	35,237	-
Office of the Chief Information Officer:						
administrative and technical support.....	2,213	-	2,302	-	2,091	-
Office of the Chief Financial Officer:						
administrative and technical support.....	34,940	-	36,348	-	33,020	-
Office of Ethics:						
administrative and technical support.....	120,159	-	-	-	-	-
Office of the Secretary:						
administrative and technical support.....	568,055	-	590,946	-	536,845	-
Total, Agriculture Appropriations.....	12,307,823	-	12,678,798	-	11,518,050	-
<u>Other Federal Funds:</u>						
DOD: for Information Technology						
and other services and support.....	892,998	-	897,371	-	910,838	-
DOD, U.S. Air Force: for realty.....	4,109,032	-	4,129,155	-	4,191,122	-
DOD, U.S. Coast Guard.....	95,165	-	95,631	-	97,066	-
DOD, Air National Guard.....	486,511	-	488,893	-	496,230	-
DOD, U.S. Navy.....	1,065,420	-	1,070,637	-	1,086,705	-
DOD, U.S. Marine Corps.....	415,239	-	417,272	-	423,534	-
DOD, U.S. Army Corps of Engineers.....	2,464,442	-	2,476,511	-	2,513,677	-
Department of Energy.....	121,294	-	121,888	-	123,718	-
DHS: for AQI and other services and support.....	2,363,555	-	2,375,130	-	2,410,774	-
USDOJ, Geological Survey, National Park Service						
Office of Insular Affairs.....	113,815	-	114,372	-	116,089	-
USDOJ, Bureau of Land Management & Reclamation:						
for administrative and technical support.....	206,764	-	207,776	-	210,895	-
USDOJ, Fish and Wildlife Services:						
for natural resources and endangered species.....	1,816,259	-	1,825,153	-	1,852,544	-
USDOT, Federal Aviation Administration	789,830	-	793,698	-	805,609	-
Other Federal Funds.....	1,355,636	309	1,362,275	309	1,382,719	309
Total, Other Federal Funds.....	16,295,960	309	16,375,764	309	16,621,520	309
<u>Reimbursements:</u>						
Funds from States and local entities for						
wildlife services support.....	30,563,466	418	30,713,140	418	31,174,061	418
Import-Export User Fees.....	25,599,413	234	25,724,777	234	26,110,836	234
NVSL Testing Fees.....	685,868	-	689,227	-	699,570	-
Phytosanitary Certificate User Fees.....	4,515,355	85	4,537,467	85	4,605,562	85
Reimbursable Overtime.....	6,772,107	-	6,805,271	-	6,907,400	-
Product Certificates.....	912,326	-	916,794	-	930,553	-
Veterinary Diagnostics User Fees.....	3,467,783	-	3,484,765	-	3,537,062	-
Other User Fees.....	1,680,194	-	1,688,422	-	1,713,761	-
Other Reimbursements, Annual and No Year,						
Federal and Non-Federal.....	1,255,139	15	1,261,286	15	1,280,214	15
Subtotal, Reimbursable Salaries and Expenses.....	104,055,433	1,061	104,875,710	1,061	105,098,589	1,061
Total, Salaries and Expense Obligations.....	1,300,042,857	7,593	1,316,589,641	7,714	1,205,326,359	7,305

Item	Actual 2008		Enacted 2009		Estimated 2010	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Buildings and Facilities:						
Current Year Appropriation.....	-	-	4,712,000	-	4,712,000	-
Unobligated Balances carried forward, start of year.....	9,623,235	-	6,800,986	-	8,762,986	-
Recovery from prior years.....	359,936	-	-	-	-	-
Total, Buildings and Facilities						
Available Appropriations.....	9,983,171	-	11,512,986	-	13,474,986	-
Obligations.....	3,182,185	-	2,750,000	-	3,500,000	-
Unobligated Balances carried forward end of year.....	6,800,986	-	8,762,986	-	9,974,986	-
Trust Funds:						
Misc. Contributed Funds.....	16,896,585	150	14,000,000	150	14,000,000	150
Unobligated Balances carried forward, start of year.....	15,215,888	-	15,932,424	-	13,159,057	-
Recovery from prior years.....	509,868	-	-	-	-	-
Total, Trust Funds Available.....	32,622,341	150	29,932,424	150	27,159,057	150
Obligations.....	16,689,917	150	16,773,367	150	17,000,000	150
Unobligated Balances carried forward end of year.....	15,932,424	-	13,159,057	-	10,159,057	-
Total Obligations, Animal and Plant Health Inspection Service.....	\$ 1,319,914,959	7,743	\$ 1,336,113,008	7,864	\$ 1,225,826,359	7,455

a/Proposed User Fees for Animal Welfare, Biotechnology Regulatory Services, and Center for Veterinary Biologics.

b/General Provision 735 in Fiscal Year 2008 and General Provision 726 in Fiscal Year 2009.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Permanent Positions by Grade and Staff Year Summary
2008 Actual and Estimated 2009 and 2010

Grade	2008			2009			2010		
	Headquarters	Field	Total	Headquarters	Field	Total	Headquarters	Field	Total
Senior Executive Service.....	22	13	35	22	13	35	22	13	35
GS-15.....	72	50	122	72	50	122	72	50	122
GS-14.....	292	256	548	292	256	548	292	256	548
GS-13.....	254	476	730	256	478	734	256	478	734
GS-12.....	202	880	1,082	207	888	1,095	207	888	1,095
GS-11.....	102	867	969	108	871	979	108	873	981
GS-10.....	2	9	11	2	9	11	2	9	11
GS-09.....	119	493	612	122	501	623	122	503	625
GS-08.....	12	276	288	12	276	288	12	276	288
GS-07.....	95	512	607	97	517	614	97	520	617
GS-06.....	38	313	351	38	313	351	38	313	351
GS-05.....	29	263	292	29	266	295	29	266	295
GS-04.....	10	59	69	10	59	69	10	59	69
GS-03.....	0	5	5	0	5	5	0	5	5
GS-02.....	6	1	7	6	1	7	6	1	7
Other Graded Positions.....	39	162	201	39	162	201	39	162	201
Total Perm. Employment EOY.....	1,294	4,635	5,929	1,312	4,665	5,977	1,312	4,672	5,984
Unfilled Positions EOY.....	14	58	72	12	53	65	10	48	58
Total Permanent Positions.....	1,308	4,693	6,001	1,324	4,718	6,042	1,322	4,720	6,042
Staff Year Estimate.....	1,507	6,236	7,743	1,530	6,334	7,864	1,451	6,004	7,455

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

SIZE, COMPOSITION AND COST OF MOTOR VEHICLE FLEET

The FY 2010 Budget Estimate proposes the disposal and replacement of 529 passenger motor vehicles.

APHIS' veterinarians, animal health technicians, inspectors, plant protection and quarantine officers, wildlife biologists and other technical personnel rely upon the motor vehicles to assist in their daily job activities, which entails 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: 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 increase of 4 sedans/station wagons, 4 sport utility vehicles (SUVs), 15 light trucks, and 2 medium trucks. There is no planned change in the number of buses, and heavy duty trucks. The total planned net increase in the APHIS motor vehicle fleet is 25.

Replacement of motor vehicles. The Agency proposes replacing 529 of the 4,257 vehicles currently in the Agency fleet. The vehicles proposed for 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 more than three years of age.

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, 2008 are as follows:

Fiscal Year	Light Duty Vehicles					Medium/Heavy Duty Vehicles		Total Vehicles	Annual Operating Costs
	Sedans & Station Wagons	Vans	SUVs	Light Trucks		Buses	Trucks, Vans and SUVs		
				4x2	4x4				
FY 2007	423	174	293	923	2,208	1	1	4,023	\$8,849,966
Change from 2007	23	25	15	91	-208	0	288	234	\$3,885,009
FY 2008	446	199	308	1,014	2,000	1	289	4,257	\$12,734,975
Change from 2008	7	2	10	37	-72	0	22	6	\$2,882,437
FY 2009	453	201	318	1,051	1,928	1	311	4,263	\$15,617,412
Change from 2009	4	0	4	8	7	0	2	25	\$1,246,191
FY 2010	457	201	322	1,059	1,935	1	313	4,288	\$16,863,603

The APHIS aircraft fleet consists of 7 operable aircraft for domestic plant pest and disease management programs; 3 for the international plant and animal pest exclusion programs, one of which is inoperable and used for spare parts; and 32 for the Wildlife Services (WS) programs. Of the 32 WS aircraft: 20 are owned, 4 aircraft are borrowed and 8 aircraft are rented.

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 also serve the purpose of monitoring 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 proposes replacing 2 of the WS aircraft.

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):

Salaries and Expenses:

For necessary expenses of the Animal and Plant Health Inspection Service, including up to \$30,000 for representation allowances and for expenses pursuant to the Foreign Service Act of 1980 (22 U.S.C. 4085),

1 [\$876,675,000, of which \$23,494,000 shall be for the purposes, and in the amounts, specified in the table titled "Animal and Plant Health Inspection Service, Congressionally-designated Projects" in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act),]

2 \$872,423,000, of which [~~\$2,025,000~~]\$2,058,000 shall be available for the control of outbreaks of insects, plant diseases, animal diseases and for control of pest animals and birds to the extent necessary to meet emergency conditions; of which [~~\$29,590,000~~]\$25,047,000 shall be used for the cotton pests program for cost share purposes or for debt retirement for active eradication zones; of which

3 [~~\$14,500,000~~]\$14,607,000 shall be for a National Animal Identification program[, of which \$3,500,000 is for information technology infrastructure and services, and \$9,395,000 is for field implementation, and \$1,605,000 is for program administration]; of which [~~\$60,594,000~~]\$60,243,000 shall be used to prevent and control avian influenza and shall remain available until expended[; of which \$1,015,000 of the plum pox program shall remain available until September 30, 2010]: Provided, That funds provided for the contingency fund to meet emergency conditions, information technology infrastructure, fruit fly program,

4 emerging plant pests, cotton pests program, grasshopper and mormon cricket program, the plum pox program, the National Veterinary Stockpile, [up to \$12,895,000 in animal health monitoring and surveillance for the animal identification system] the National Animal Identification System, up to

5 \$1,500,000 in the scrapie program for indemnities, up to \$1,000,000 for wildlife services methods development, up to \$1,000,000 of the wildlife services operations program for aviation safety, and up to 25 percent of the screwworm program shall remain available until expended: Provided further, That no funds shall be used to formulate or administer a brucellosis eradication program for the current fiscal year that does not require minimum matching by the States of at least 40 percent: Provided further, That this appropriation shall be available for the operation and maintenance of aircraft and the purchase of not to exceed four, of which two shall be for replacement only: Provided further, That, in addition, in emergencies which threaten any segment of the agricultural production industry of this country, the Secretary may transfer from other appropriations or funds available to the agencies or corporations of the Department such sums as may be deemed necessary, to be available only in such emergencies for the arrest and eradication of contagious or infectious disease or pests of animals, poultry, or plants, and for expenses in accordance with sections 10411 and 10417 of the Animal Health Protection Act (7 U.S.C. 8310 and 8316) and sections 431 and 442 of the Plant Protection Act (7 U.S.C. 7751 and 7772), and any unexpended balances of funds transferred for such emergency purposes in the preceding fiscal year shall be merged with such transferred amounts: Provided further, That appropriations hereunder shall be available pursuant to law (7 U.S.C. 2250) for the repair and alteration of leased buildings and improvements, but unless otherwise provided the cost of altering any one building during the fiscal year shall not exceed 10 percent of the current replacement value of the building.

In fiscal year [~~2009~~]2010, the agency is authorized to collect fees to cover the total costs of providing technical assistance, goods, or services requested by States, other political subdivisions, domestic and international organizations, foreign governments, or individuals, provided that such fees are structured such that any entity's liability for such fees is reasonably based on the technical assistance, goods, or services provided to the entity by the agency, and such fees shall be credited to this account, to remain available until expended, without further appropriation, for providing such assistance, goods, or services.

The first change in language reflects the removal of funding for Congressionally Directed projects from the President's Budget request.

The second and fifth change in language will provide the program the needed flexibility to react to changing future of the National Animal Identification System. The Secretary of Agriculture is carefully weighing all of the options to determine how USDA and its partners can make the National Animal Identification System most effective and successful. APHIS is continuing to collaborate with the States, industry, producers, and the interested Congressional representatives to develop program policy in a manner that invites and is responsive to the input of all stakeholders. Therefore, designating specific funding levels for the components of the NAIS would not be prudent at this time.

The third and fourth change in language will allow APHIS to carry unobligated funds into the next fiscal year, providing flexibility to address seasonal issues and variations in outbreak levels from year to year for the Plum Pox line item.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

LEAD-OFF TABULAR STATEMENT

SALARIES AND EXPENSES

CURRENT LAW

Appropriations Act, 2009.....	\$ 876,675,000
Budget Estimate, 2010.....	<u>872,423,000</u>
Decrease in appropriation.....	<u>\$ (4,252,000)</u>
Adjustments in 2009:	
Appropriations Act, 2009... a/.....	\$876,675,000
General Provision 726..... b/.....	<u>469,000</u>
Adjusted Base for 2009.....	\$ 877,144,000
Budget Estimate, 2010.....	<u>872,423,000</u>
Decrease over adjusted 2009.....	<u>\$ (4,721,000)</u>

a/ The amount is pursuant to P.L. 111-8.

b/ Includes \$469,000 provided in FY 2009 by General Provision 726, for the planning and design of construction of an agriculture pest facility in the State of Hawaii.

SUMMARY OF INCREASES AND DECREASES

(On basis of appropriation)

<u>Item of Change</u>	2009		<u>Earmark</u> <u>Reductions</u>	2a	<u>Program</u> <u>Change</u>	2010 <u>Estimated</u>
	<u>Enacted</u>	<u>Pay Costs</u>				
Agricultural Quarantine Inspection (Appr.).....	\$26,979,000	\$664,000	-\$1,643,000		\$0	\$26,000,000
Cattle Fever Ticks.....	9,907,000	250,000	0		\$3,000,000 3a	13,157,000
Foreign Animal Disease/Foot and Mouth Disease.....	4,000,000	4,000	0		0	4,004,000
Fruit Fly Exclusion & Detection.....	62,320,000	818,000	-218,000		0	62,920,000
Import/Export.....	12,963,000	335,000	0		0	13,298,000
Overseas Technical & Trade Operations.....	15,725,000	156,000	0		291,000 3b	16,172,000
Screwworm.....	27,635,000	79,000	0		0	27,714,000
Tropical Bont Tick.....	425,000	4,000	0		0	429,000
Subtotal, Pest and Disease Exclusion.....	<u>\$159,954,000</u>	<u>\$2,310,000</u>	<u>-\$1,861,000</u>		<u>\$3,291,000</u>	<u>\$163,694,000</u>
Animal Health Monitoring & Surveillance.....	129,180,000	1,940,000	-\$3,998,000		\$0 4a	127,122,000
Animal & Plant Health Reg. Enforcement.....	13,694,000	289,000	0		0	13,983,000
Avian Influenza.....	60,594,000	349,000	-700,000		0	60,243,000
Emergency Management Systems.....	15,619,000	175,000	0		0	15,794,000
National Veterinary Stockpile.....	3,739,000	18,000	0		0	3,757,000
Pest Detection.....	27,776,000	254,000	-1,274,000		0	26,756,000
Select Agents.....	5,128,000	48,000	0		0	5,176,000
Subtotal, Plant and Animal Health Monitoring.....	<u>\$255,730,000</u>	<u>\$3,073,000</u>	<u>-\$5,972,000</u>		<u>\$0</u>	<u>\$252,831,000</u>
Aquaculture.....	5,887,000	13,000	-\$94,000		\$0	5,806,000
Biological Control.....	9,737,000	230,000	0		0	9,967,000
Brucellosis.....	9,584,000	123,000	-650,000		0	9,057,000
Chronic Wasting Disease.....	17,014,000	68,000	-1,475,000		0	15,607,000
Contingency Funds.....	2,025,000	33,000	0		0	2,058,000
Cotton Pests.....	29,590,000	81,000	0		-4,624,000 5a	25,047,000
Emerging Plant Pests.....	133,677,000	623,000	-469,000		10,000,000 5b	143,831,000
Golden Nematode.....	816,000	15,000	0		0	831,000
Grasshopper.....	5,552,000	75,000	-1,049,000		0	4,578,000
Gypsy Moth.....	4,843,000	77,000	0		0	4,920,000
Imported Fire Ant.....	1,893,000	9,000	0		0	1,902,000
John's Disease.....	6,821,000	55,000	-939,000		0	5,937,000
Noxious Weeds.....	1,993,000	4,000	-826,000		0	1,171,000
Plum Pox.....	2,195,000	11,000	0		0	2,206,000
Pseudorabies.....	2,446,000	64,000	0		0	2,510,000
Scrapie.....	17,733,000	173,000	0		0	17,906,000
Tuberculosis.....	15,657,000	107,000	-248,000		0	15,516,000
Wildlife Services Operations.....	76,047,000	1,162,000	-6,707,000		0	70,502,000
Witchweed.....	1,510,000	7,000	0		0	1,517,000
Subtotal, Pest and Disease Management.....	<u>\$345,020,000</u>	<u>\$2,930,000</u>	<u>-\$12,457,000</u>		<u>\$5,376,000</u>	<u>\$340,869,000</u>

<u>Item of Change</u>	2009		Earmark <u>Reductions</u>	2a	Program <u>Change</u>	2010
	<u>Enacted</u>	<u>Pay Costs</u>				<u>Estimated</u>
Animal Welfare.....	21,522,000	457,000	\$0		\$0	21,979,000
Horse Protection.....	499,000	1,000	0		0	500,000
Subtotal, Animal Care.....	\$22,021,000	\$458,000	\$0		\$0	\$22,479,000
Biotechnology Regulatory Services.....	12,877,000	173,000	-259,000		0	12,791,000
Environmental Compliance.....	2,669,000	46,000	0		0	2,715,000
Plant Methods Development Labs.....	9,712,000	237,000	0		0	9,949,000
Veterinary Biologics.....	16,922,000	403,000	0		0	17,325,000
Veterinary Diagnostics.....	23,585,000	590,000	-397,000		0	23,778,000
Wildlife Services Methods Development.....	17,986,000	355,000	-2,548,000		0	15,793,000
Subtotal, Scientific and Technical Services.....	\$83,751,000	\$1,804,000	-\$3,204,000		\$0	\$82,351,000
APHIS Information Tech. Infrastructure.....	4,474,000	0	\$0		\$0	4,474,000
Physical/Operational Security.....	5,725,000	0	0		0	5,725,000
Subtotal, Management.....	\$10,199,000	\$0	\$0		\$0	\$10,199,000
General Provision 726.....c/.....	469,000	0	-469,000		0	0
Total, Available Appropriations	\$877,144,000	\$10,575,000 1a	-\$23,963,000		\$8,667,000	\$872,423,000

c/The FY 2009 General Provision 726 provides \$469,000 to remain available until expended for the planning and design of construction of an agriculture pest facility in the State of Hawaii.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

Project Statement by Program - Current Law

(On basis of appropriation)

	<u>2008 Actual</u>		<u>2009 Enacted</u>		Increase or Decrease	<u>2010 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>		<u>Amount</u>	<u>Staff Years</u>
<u>Pest & Disease Exclusion</u>							
Agricultural Quarantine Inspection (Approp).....	\$26,873,559	303	\$26,979,000	303	-\$979,000	\$26,000,000	303
Cattle Ticks.....	7,599,424	110	9,907,000	114	3,250,000	13,157,000	114
Foreign Animal Disease/Foot-and-Mouth Disease.....	8,634,135	27	4,000,000	2	4,000	4,004,000	2
Fruit Fly Exclusion and Detection.....	55,560,654	373	62,320,000	373	600,000	62,920,000	373
Import/Export.....	11,158,341	147	12,963,000	153	335,000	13,298,000	153
Overseas Technical & Trade Operations	0	0	15,725,000	71	447,000	16,172,000	71
Screwworm.....	21,683,268	36	27,635,000	36	79,000	27,714,000	36
Trade Issues Resolution and Management.....	12,417,465	52	0	0	0	0	0
Tropical Bont Tick.....	421,032	2	425,000	2	4,000	429,000	2
Total Pest & Disease Exclusion.....	<u>144,347,877</u>	<u>1,050</u>	<u>159,954,000</u>	<u>1,054</u>	<u>3,740,000</u>	<u>163,694,000</u>	<u>1,054</u>
<u>Plant & Animal Health Monitoring</u>							
Animal Health Monitoring & Surveillance.....	115,635,706	885	129,180,000	885	-2,058,000	127,122,000	885
Animal & Plant Health Reg. Enforcement.....	12,350,934	125	13,694,000	132	289,000	13,983,000	132
Avian Influenza.....	0	0	60,594,000	159	-351,000	60,243,000	159
Biosurveillance.....	1,834,896	4	0	0	0	0	0
Emergency Management Systems.....	12,286,389	84	15,619,000	80	175,000	15,794,000	80
High Pathogen Avian Influenza.....	47,515,481	131	0	0	0	0	0
National Veterinary Stockpile.....	0	0	3,739,000	8	18,000	3,757,000	8
Pest Detection.....	27,529,932	116	27,776,000	116	-1,020,000	26,756,000	116
Select Agents.....	4,221,243	18	5,128,000	22	48,000	5,176,000	22
Total Plant & Animal Health Monitoring.....	<u>221,374,581</u>	<u>1,363</u>	<u>255,730,000</u>	<u>1,402</u>	<u>-2,899,000</u>	<u>252,831,000</u>	<u>1,402</u>
<u>Pest & Disease Management</u>							
Aquaculture.....	6,807,015	6	5,887,000	6	-81,000	5,806,000	6
Biological Control.....	9,371,765	105	9,737,000	105	230,000	9,967,000	105
Brucellosis.....	9,465,276	56	9,584,000	56	-527,000	9,057,000	56
Chronic Wasting Disease.....	17,682,351	31	17,014,000	31	-1,407,000	15,607,000	31
Contingency Funds.....	731,227	15	2,025,000	15	33,000	2,058,000	15
Cotton Pests.....	36,560,314	37	29,590,000	37	-4,543,000	25,047,000	37
Emerging Plant Pests.....	93,740,170	265	133,677,000	284	10,154,000	143,831,000	284
Golden Nematode.....	801,351	7	816,000	7	15,000	831,000	7
Grasshopper.....	5,599,148	34	5,552,000	34	-974,000	4,578,000	34
Gypsy Moth.....	4,769,379	35	4,843,000	35	77,000	4,920,000	35
Imported Fire Ant.....	1,884,714	4	1,893,000	4	9,000	1,902,000	4
Johne's Disease.....	10,538,709	25	6,821,000	25	-884,000	5,937,000	25
Low Pathogen Avian Influenza.....	14,608,916	30	0	0	0	0	0
Noxious Weeds.....	1,775,484	2	1,993,000	2	-822,000	1,171,000	2
Plum Pox.....	2,183,607	5	2,195,000	5	11,000	2,206,000	5
Pseudorabies.....	2,385,186	29	2,446,000	29	64,000	2,510,000	29
Scrapie.....	16,488,765	79	17,733,000	79	173,000	17,906,000	79
Tuberculosis.....	15,289,221	49	15,657,000	49	-141,000	15,516,000	49
Wildlife Services Operations.....	73,812,871	530	76,047,000	530	-5,545,000	70,502,000	530
Witchweed.....	1,504,395	3	1,510,000	3	7,000	1,517,000	3
Total Pest & Disease Management.....	<u>325,999,864</u>	<u>1,347</u>	<u>345,020,000</u>	<u>1,336</u>	<u>-4,151,000</u>	<u>340,869,000</u>	<u>1,336</u>

	<u>2008 Actual</u>		<u>2009 Enacted</u>		<u>Increase or Decrease</u>	<u>2010 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>		<u>Amount</u>	<u>Staff Years</u>
<u>Animal Care</u>							
Animal Welfare.....	20,498,499	200	21,522,000	204	457,000	21,979,000	204
Horse Protection.....	493,521	5	499,000	5	1,000	500,000	5
Total Animal Care.....	<u>20,992,020</u>	<u>205</u>	<u>22,021,000</u>	<u>209</u>	<u>458,000</u>	<u>22,479,000</u>	<u>209</u>
<u>Scientific & Technical Services</u>							
Biosecurity.....	1,796,169	0	0	0	0	0	0
Biotechnology Regulatory Services.....	11,728,323	74	12,877,000	79	-86,000	12,791,000	79
Environmental Compliance.....	2,626,485	20	2,669,000	20	46,000	2,715,000	20
Plant Methods Development Labs.....	9,343,624	108	9,712,000	108	237,000	9,949,000	108
Veterinary Biologics.....	16,541,394	184	16,922,000	184	403,000	17,325,000	184
Veterinary Diagnostics.....	23,093,208	269	23,585,000	269	193,000	23,778,000	269
Wildlife Services Methods Development.....	17,552,446	162	17,986,000	162	-2,193,000	15,793,000	162
Total Scientific & Technical Services.....	<u>82,681,649</u>	<u>817</u>	<u>83,751,000</u>	<u>822</u>	<u>-1,400,000</u>	<u>82,351,000</u>	<u>822</u>
<u>Management Initiatives</u>							
APHIS Info. Technology Infrastructure.....	4,527,677	0	4,474,000	0	0	4,474,000	0
Physical/Operational Security.....	4,160,670	0	5,725,000	0	0	5,725,000	0
Total Management Initiatives.....	<u>8,688,347</u>	<u>0</u>	<u>10,199,000</u>	<u>0</u>	<u>0</u>	<u>10,199,000</u>	<u>0</u>
General Provision a/.....	148,950	0	469,000	0	-469,000	0	0
Rescission P.L. 110-161.....	6,117,328	0	0	0	0	0	0
Unobligated Balances, end of year.....	63,553,384	0	0	0	0	0	0
Total, Appropriated	<u>\$873,904,000</u>	<u>4,782</u>	<u>\$877,144,000</u>	<u>4,823</u>	<u>-\$4,721,000</u>	<u>\$872,423,000</u>	<u>4,823</u>

a/ FY 2008 General Provision 735 provided an additional \$150,000 to the Agency for the planning and design of construction of an agriculture pest facility in the state of Hawaii. The FY 2009 General Provision 726 provides \$469,000 to remain available until expended for the planning and design of construction of an agriculture pest facility in the State of Hawaii.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

Project Statement by Program - Current Law
(On basis of available funds)

	2008 Actual		2009 Enacted		Increase or Decrease	2010 Estimated	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
Pest & Disease Exclusion							
Agricultural Quarantine Inspection (Approp).....	\$26,873,559	303	\$26,979,000	303	-\$979,000	\$26,000,000	303
Cattle Ticks.....	7,599,424	110	9,907,000	114	3,250,000	13,157,000	114
Foreign Animal Disease/Foot-and-Mouth Disease.....	8,634,135	27	4,000,000	2	4,000	4,004,000	2
Fruit Fly Exclusion and Detection.....	65,767,754	553	69,246,163	570	-3,446,415	65,799,748	471
Import/Export.....	11,158,341	147	12,963,000	153	335,000	13,298,000	153
Overseas Technical & Trade Operations	0	0	15,725,000	71	447,000	16,172,000	71
Screwworm.....	28,175,302	36	33,510,461	36	-777,393	32,733,068	36
Trade Issues Resolution and Management.....	12,417,465	52	0	0	0	0	0
Tropical Bont Tick.....	421,032	2	425,000	2	4,000	429,000	2
Total Pest & Disease Exclusion.....	161,047,011	1,230	172,755,624	1,251	-1,162,808	171,592,816	1,152
Plant & Animal Health Monitoring							
Animal Health Monitoring & Surveillance.....	132,670,001	955	140,252,796	948	-10,917,546	129,335,250	925
Animal & Plant Health Reg. Enforcement.....	12,350,934	125	13,694,000	132	289,000	13,983,000	132
Avian Influenza.....	0	0	83,233,001	266	-6,068,886	77,164,115	199
Biosurveillance.....	1,834,896	4	0	0	0	0	0
Emergency Management Systems.....	15,046,950	95	19,674,300	91	-880,300	18,794,000	88
High Pathogen Avian Influenza.....	55,787,837	219	0	0	0	0	40
National Veterinary Stockpile.....	0	0	3,739,000	8	18,000	3,757,000	8
Pest Detection.....	27,529,932	116	27,776,000	116	-1,020,000	26,756,000	116
Select Agents.....	4,221,243	18	5,128,000	22	48,000	5,176,000	22
Total Monitoring & Surveillance.....	249,441,793	1,532	293,497,097	1,583	-18,531,732	274,965,365	1,530
Pest & Disease Management							
Aquaculture.....	6,807,015	6	5,887,000	6	-81,000	5,806,000	6
Biological Control.....	9,371,765	105	9,737,000	105	230,000	9,967,000	105
Brucellosis.....	9,465,276	56	9,584,000	56	-527,000	9,057,000	56
Chronic Wasting Disease.....	17,682,351	31	17,014,000	31	-1,407,000	15,607,000	31
Contingency Funds.....	731,227	15	4,015,032	15	74,968	4,090,000	15
Cotton Pests.....	38,716,617	47	30,054,425	47	-4,507,425	25,547,000	47
Emerging Plant Pests.....	112,873,720	445	174,161,913	571	1,382,100	175,544,013	439
Golden Nematode.....	801,351	7	816,000	7	15,000	831,000	7
Grasshopper.....	5,599,148	34	6,549,351	34	-1,471,351	5,078,000	34
Gypsy Moth.....	4,769,379	35	4,843,000	35	77,000	4,920,000	35
Imported Fire Ant.....	1,884,714	4	1,893,000	4	9,000	1,902,000	4
Johne's Disease.....	10,538,709	25	6,821,000	25	-884,000	5,937,000	25
Low Pathogen Avian Influenza.....	16,515,100	55	0	0	0	0	0
Noxious Weeds.....	1,775,484	2	1,993,000	2	-822,000	1,171,000	2
Plum Pox.....	2,183,607	5	2,195,000	5	11,000	2,206,000	5
Pseudorabies.....	2,385,186	29	2,446,000	29	64,000	2,510,000	29
Scrapie.....	16,974,569	79	20,305,811	79	923,000	21,228,811	79
Tuberculosis.....	15,289,221	49	15,657,000	49	-141,000	15,516,000	49
Wildlife Services Operations.....	74,267,244	536	77,555,711	534	-5,553,711	72,002,000	532
Witchweed.....	1,504,395	3	1,510,000	3	7,000	1,517,000	3
Total Pest & Disease Management.....	350,136,079	1,568	393,038,243	1,637	-12,601,419	380,436,824	1,503

	2008 Actual		2009 Enacted		Increase or Decrease	2010 Estimated	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
Animal Care							
Animal Welfare.....	20,498,499	200	21,522,000	204	457,000	21,979,000	204
Horse Protection.....	493,521	5	499,000	5	1,000	500,000	5
Total Animal Care.....	20,992,020	205	22,021,000	209	458,000	22,479,000	209
Scientific & Technical Services							
Biosecurity.....	1,796,169	0	0	0	0	0	0
Biotechnology Regulatory Services.....	11,728,323	74	12,877,000	79	-86,000	12,791,000	79
Environmental Compliance.....	2,626,485	20	2,669,000	20	46,000	2,715,000	20
Plant Methods Development Labs.....	9,343,624	108	9,712,000	108	237,000	9,949,000	108
Veterinary Biologics.....	16,541,394	184	16,922,000	184	403,000	17,325,000	184
Veterinary Diagnostics.....	23,093,208	269	23,585,000	269	193,000	23,778,000	269
Wildlife Services Methods Development.....	17,990,828	162	18,519,094	162	-2,226,094	16,293,000	162
Total Scientific & Technical Services.....	83,120,031	817	84,284,094	822	-1,433,094	82,851,000	822
Management Initiatives							
APHIS Info. Technology Infrastructure.....	4,627,188	0	4,802,651	0	-128,651	4,674,000	0
Physical/Operational Security.....	4,160,670	0	5,725,000	0	0	5,725,000	0
Total Management Initiatives.....	8,787,858	0	10,527,651	0	-128,651	10,399,000	0
Rescission P.L. 110-161.....	6,117,328	0	0	0	0	0	0
Office of Ethics.....	120,159	0	0	0	0	0	0
General Provision a/.....	148,950	0	469,000	0	-469,000	0	0
Farm Bill, Section 10201 and 10202.....	0	0	17,000,000	0	33,000,000	50,000,000	0
Farm Bill, Section 10201 and 10202 Carryover.....	0	0	0	0	0	0	0
Discretionary Change to Appropriation.....	0	0	0	0	-35,000,000	-35,000,000	0
Total, Appropriated.....	879,911,229	5,352	993,592,709	5,502	-35,868,704	957,724,005	5,216
CCC Transfers (as of 4/06/09).....	43,580,730	45	29,427,316	56	-29,427,316	0	0
CCC Carryover.....	70,473,230	103	90,636,123	35	-49,601,484	41,034,639	8
Citrus Canker Section 32.....	164,930	0	0	0	0	0	0
Melamine Section 32.....	72,739	0	0	0	0	0	0
VHS Supplemental.....	0	0	5,000,000	0	-5,000,000	0	0
VHS Supplemental Carryover.....	0	0	0	0	4,000,000	4,000,000	0
Trust Funds.....	16,689,917	150	29,932,424	150	-2,773,367	27,159,057	150
Total, Available.....	\$1,010,892,774	5,650	\$1,148,588,572	5,743	-\$118,670,871	\$1,029,917,701	5,374

a/ FY 2008 General Provision 735 provided an additional \$149,000 (post rescission) to the Agency for the planning and design of construction of an agriculture pest facility in the state of Hawaii. The FY 2009 General Provision 726 provides \$469,000 to remain available until expended for the planning and design of construction of an agriculture pest facility in the State of Hawaii.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

Project Statement - Crosswalk for the Combined Programs and Redirected Funds
(Comparable basis of appropriation)

	<u>2008 Actual</u>		<u>2009 Enacted</u>		Increase or Decrease	<u>2010 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>		<u>Amount</u>	<u>Staff Years</u>
<u>Pest & Disease Exclusion</u>							
Agricultural Quarantine Inspection (Approp).....	\$26,873,559	303	\$26,979,000	303	-\$979,000	\$26,000,000	303
Cattle Ticks.....	7,599,424	110	9,907,000	114	3,250,000	13,157,000	114
Foreign Animal Disease/Foot-and-Mouth Disease.....	4,000,135	2	4,000,000	2	4,000	4,004,000	2
Fruit Fly Exclusion and Detection.....	55,560,654	373	62,320,000	373	600,000	62,920,000	373
Import/Export.....	12,639,341	153	12,963,000	153	335,000	13,298,000	153
Overseas Technical & Trade Operations	15,570,465	71	15,725,000	71	447,000	16,172,000	71
Screwworm.....	21,683,268	36	27,635,000	36	79,000	27,714,000	36
Tropical Bont Tick.....	421,032	2	425,000	2	4,000	429,000	2
Total Pest & Disease Exclusion.....	<u>144,347,877</u>	<u>1,050</u>	<u>159,954,000</u>	<u>1,054</u>	<u>3,740,000</u>	<u>163,694,000</u>	<u>1,054</u>
<u>Plant & Animal Health Monitoring</u>							
Animal Health Monitoring & Surveillance.....	115,635,706	885	129,180,000	885	-2,058,000	127,122,000	885
Animal & Plant Health Reg. Enforcement.....	12,350,934	125	13,694,000	132	289,000	13,983,000	132
Avian Influenza.....	62,124,397	161	60,594,000	159	-351,000	60,243,000	159
Emergency Management Systems.....	13,156,893	80	15,619,000	80	175,000	15,794,000	80
National Veterinary Stockpile.....	2,760,561	8	3,739,000	8	18,000	3,757,000	8
Pest Detection.....	27,529,932	116	27,776,000	116	-1,020,000	26,756,000	116
Select Agents.....	4,221,243	18	5,128,000	22	48,000	5,176,000	22
Total Monitoring & Surveillance.....	<u>237,779,666</u>	<u>1,393</u>	<u>255,730,000</u>	<u>1,402</u>	<u>-2,899,000</u>	<u>252,831,000</u>	<u>1,402</u>
<u>Pest & Disease Management</u>							
Aquaculture.....	6,807,015	6	5,887,000	6	-81,000	5,806,000	6
Biological Control.....	9,371,765	105	9,737,000	105	230,000	9,967,000	105
Brucellosis.....	9,465,276	56	9,584,000	56	-527,000	9,057,000	56
Chronic Wasting Disease.....	17,682,351	31	17,014,000	31	-1,407,000	15,607,000	31
Contingency Funds.....	731,227	15	2,025,000	15	33,000	2,058,000	15
Cotton Pests.....	36,560,314	37	29,590,000	37	-4,543,000	25,047,000	37
Emerging Plant Pests.....	93,740,170	265	133,677,000	284	10,154,000	143,831,000	284
Golden Nematode.....	801,351	7	816,000	7	15,000	831,000	7
Grasshopper.....	5,599,148	34	5,552,000	34	-974,000	4,578,000	34
Gypsy Moth.....	4,769,379	35	4,843,000	35	77,000	4,920,000	35
Imported Fire Ant.....	1,884,714	4	1,893,000	4	9,000	1,902,000	4
Johne's Disease.....	10,538,709	25	6,821,000	25	-884,000	5,937,000	25
Noxious Weeds.....	1,775,484	2	1,993,000	2	-822,000	1,171,000	2
Plum Pox.....	2,183,607	5	2,195,000	5	11,000	2,206,000	5
Pseudorabies.....	2,385,186	29	2,446,000	29	64,000	2,510,000	29
Scrapie.....	16,488,765	79	17,733,000	79	173,000	17,906,000	79
Tuberculosis.....	15,289,221	49	15,657,000	49	-141,000	15,516,000	49
Wildlife Services Operations.....	73,812,871	530	76,047,000	530	-5,545,000	70,502,000	530
Witchweed.....	1,504,395	3	1,510,000	3	7,000	1,517,000	3
Total Pest & Disease Management.....	<u>311,390,948</u>	<u>1,317</u>	<u>345,020,000</u>	<u>1,336</u>	<u>-4,151,000</u>	<u>340,869,000</u>	<u>1,336</u>
<u>Animal Care</u>							
Animal Welfare.....	20,498,499	200	21,522,000	204	457,000	21,979,000	204
Horse Protection.....	493,521	5	499,000	5	1,000	500,000	5
Total Animal Care.....	<u>20,992,020</u>	<u>205</u>	<u>22,021,000</u>	<u>209</u>	<u>458,000</u>	<u>22,479,000</u>	<u>209</u>

	<u>2008 Actual</u>		<u>2009 Enacted</u>		Increase or Decrease	<u>2010 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>		<u>Amount</u>	<u>Staff Years</u>
<u>Scientific & Technical Services</u>							
Biotechnology Regulatory Services.....	11,728,323	74	12,877,000	79	-86,000	12,791,000	79
Environmental Compliance.....	2,626,485	20	2,669,000	20	46,000	2,715,000	20
Plant Methods Development Labs.....	9,343,624	108	9,712,000	108	237,000	9,949,000	108
Veterinary Biologics.....	16,541,394	184	16,922,000	184	403,000	17,325,000	184
Veterinary Diagnostics.....	23,093,208	269	23,585,000	269	193,000	23,778,000	269
Wildlife Services Methods Development.....	17,552,446	162	17,986,000	162	-2,193,000	15,793,000	162
Total Scientific & Technical Services.....	<u>80,885,480</u>	<u>817</u>	<u>83,751,000</u>	<u>822</u>	<u>-1,400,000</u>	<u>82,351,000</u>	<u>822</u>
<u>Management Initiatives</u>							
APHIS Info. Technology Infrastructure.....	4,527,677	0	4,474,000	0	0	4,474,000	0
Physical/Operational Security.....	4,160,670	0	5,725,000	0	0	5,725,000	0
Total Management Initiatives.....	<u>8,688,347</u>	<u>0</u>	<u>10,199,000</u>	<u>0</u>	<u>0</u>	<u>10,199,000</u>	<u>0</u>
General Provision a/.....	148,950	0	469,000	0	-469,000	0	0
Total, Appropriated	<u>\$804,233,288</u>	<u>4,782</u>	<u>\$877,144,000</u>	<u>4,823</u>	<u>-\$4,721,000</u>	<u>\$872,423,000</u>	<u>4,823</u>

a/ FY 2008 General Provision 735 provided an additional \$149,000 (post rescission) to the Agency for the planning and design of construction of an agriculture pest facility in the state of Hawaii. The FY 2009 General Provision 726 provides \$469,000 to remain available until expended for the planning and design of construction of an agriculture pest facility in the State of Hawaii. The funding has been included in the Fruit Fly Exclusion and Detection line item.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Justification of Increases and Decreases
Salaries and Expenses(1) An increase of \$10,575,000 to fund increased pay costs.

- (a) This increase will enable APHIS to maintain current staffing levels, which are critical to achieving the Agency's objective of protecting American agriculture. Approximately 66 percent of APHIS' budget is in support of personnel compensation. Consequently, absorbing pay costs would require a reduction in direct program operations and severely limit the Agency's ability to conduct offshore threat assessment and risk reduction activities; regulate and monitor to reduce the risk of introduction of invasive species; ensure the safe research, release, and movement of agricultural biotechnology events; manage issues related to the health of U.S. animal and plant resources and conflicts with wildlife; and develop emergency preparedness and response capabilities to quickly detect, contain and eradicate animal and plant pest and disease outbreaks.

(2) A decrease of \$23,494,000 from Congressionally Designated Projects:

- (a) APHIS is requesting a reduction of \$23,494,000 to eliminate Congressionally-designated activities from the budget request to focus on other priorities. Of this amount, \$12,870,000 is considered pass-through funding used by APHIS to enter into contracts and cooperative agreements with state and local entities, and colleges and universities, in order to comply with the directives. The remaining \$10,624,000 is used by APHIS internally to carry out the Congressional directives for the benefit of the designated states.

The programs requesting the largest reductions are as follows: the Wildlife Services Operations program with a reduction of \$6,707,000, including \$5,495,000 in APHIS retained funds and \$1,212,000 in pass-through funds; the Animal Health Monitoring and Surveillance program with a reduction of \$3,998,000, all in pass-through funds; the Wildlife Services Methods Development program with a reduction of \$2,548,000, including \$1,499,000 in APHIS retained funds and \$1,049,000 in pass-through funds; and the Agricultural Quarantine Inspection program with a reduction of \$1,643,000, all in APHIS retained funds. The programs would, in most cases, conduct these activities without direction; however, the funding amounts provided to the states would vary from the amounts directed and allow for other funding sources to be considered. For example, we are directed to spend \$1,643,000 for the pre-departure interline inspection of mainland-bound airline passengers from Hawaii, allowing APHIS to perform quarantine functions between the neighboring islands of Hawaii. Since this is the most efficient way to inspect passenger baggage that is being transferred to other aircraft prior to departure to the U.S. mainland, it is anticipated that the Agency would continue the activities, but we may do so under a reimbursable agreement with the State versus using Federal funds to conduct the program activities. Another example would be the directive to spend \$1,268,000 for chronic wasting disease (CWD) in Wisconsin. While the Agency recognizes that Wisconsin's needs with regard to CWD are great, other States that are faced with similar problems with CWD are left at a disadvantage. APHIS would prefer to provide funding to all affected states based on risk from a consistent, scientific, national approach to the disease. Similarly, the Agency is directed to provide funding to designated states for specified wildlife management activities. These activities are often conducted by APHIS employees and would occur based on a national wildlife management perspective rather than a state-specific perspective. In addition, the affected states requesting assistance would be encouraged to contribute resources as appropriate instead of using Federal funds at specified levels.

(3) An increase of \$3,291,000 for Pest and Disease Exclusion Activities:(a) An increase of \$3,000,000 for the Cattle Fever Tick program (\$9,907,000 and 114 staff years available in FY 2009).

The Cattle Fever Tick program strives to prevent the re-introduction and establishment of cattle fever ticks and bovine babesiosis in the continental United States by maintaining a permanent quarantine zone between Texas and Mexico, also known as the permanent buffer zone. However, the number of tick-infested premises in the permanent quarantine and tick-free areas outside the buffer zone has increased dramatically in recent years. If unaddressed, the cattle fever tick situation will rapidly deteriorate as APHIS will not be able to stop the increasing rate of tick re-infestations. As the infestation increases, both APHIS and Texas resources risk being overwhelmed.

There has been a significant increase in the number of infested premises identified outside of the quarantine zone. As of December 2008, there were 55 infested premises outside the quarantine zone as compared to 25 in 2007, a 120 percent increase. Further, the situation in the quarantine zone has deteriorated. As of September 2008, 49 infested premises were found in the quarantined area as compared to 42 by September 2007. These outbreaks can likely be attributed to the following factors: commingling of livestock with free-ranging wildlife that perpetuate tick populations; unrestrained movement of wildlife, spreading ticks in and out of the quarantine zone; increasing number of deer and exotic ungulates maintained on "hunting ranges" in the area that serve as alternate hosts of cattle ticks in the absence of cattle; reduction in surveillance for Mexican stray and smuggled livestock along the Rio Grande River as a result of having to deploy existing APHIS resources into eliminating infestations outside of the quarantine zone; increased abundance of white-tailed deer and other cervids along the Mexican bordering states, which move freely across national borders, or shallow rivers, and crisscross the Rio Grande River; and, environmental changes in weather patterns, climate, and vegetation creating suitable microhabitats for the ticks.

In FY 2008 and FY 2009, USDA used its emergency authority to transfer funds from the Commodity Credit Corporation (CCC) to address tick outbreaks outside the permanent quarantine area. The program also received a budget increase in its appropriated line item in FY 2009. APHIS has invested these additional resources into key containment strategies outlined in its 5-year tick eradication strategic plan, including enhanced surveillance, inspections, treatments, and trace-outs, especially in the expanded quarantine areas. Because of these increased resources, the program has been able to identify incursions of the pest that may have gone unnoticed—and therefore untreated—in prior years. In fact, the program anticipates identifying the highest number of newly infested premises in its history during FY 2009. (As of April 20, 2009, the total number of newly infested premises identified in the systematic and free areas of Texas had reached 89, with 26 of those being discovered during the second week of April alone.)

The CCC transfer and baseline level of appropriated funding available to APHIS in FY 2009 will allow the Agency to continue identifying outlying tick infestations, eradicate those infestations, and slowly reduce the number of acres included under temporary blanket quarantines until the Agency is once again containing ticks within the permanent quarantine zone. However, after the emergency response is over, APHIS will not be able to maintain these advances, nor truly address the problem at its source, if its baseline appropriation remains level. Therefore, APHIS is requesting \$3 million in FY 2010 to focus on continued implementation of the program's 5-year cattle fever tick eradication strategic plan—especially those initiatives that the Agency has not yet begun addressing.

Steady implementation of the strategic plan will allow APHIS to accomplish five program goals necessary to achieve complete eradication of the cattle fever tick. The goals and action items include: preventing the entry of cattle fever ticks into the United States by clearing and

maintaining trails along the river, which ensures that the ticks cannot spread to the cattle from the brush; identifying areas of high activity of tick incursions and developing agreements with wildlife agencies for controlling whitetail deer and exotic ungulates that cross the river from Mexico; maintaining an effective surveillance program to rapidly detect any cattle fever tick incursions by working with the Texas Animal Health Commission (TAHC) to develop comprehensive standards; preventing the establishment of cattle fever tick infestations by developing, enforcing, and updating standards to quickly eradicate infestations; identifying and procuring the tools and knowledge necessary to maintain the United States as free of cattle fever ticks, together with USDA's Agricultural Research Service, TAHC, and other cooperators; and, collaborating with Mexico to eliminate cattle fever ticks in areas of Mexico that impact the United States.

Specifically, APHIS will use \$3 million of the increase to repair or replace old equipment (in some cases more than 30 year-old equipment); upgrade to newer, better technologies for communicating or recording spatially referenced data; install game-proof fencing in key areas of the existing quarantine line; support methods development work for treating tick-infested wildlife; conduct annual evaluations of the surveillance methods to determine if changes in the methods employed are required; and begin using newly available tools, such as long-lasting injectable vaccines, as part of the systematic control procedures.

APHIS will measure overall program performance by the percentage of cattle fever tick outbreaks outside the quarantine zone that are eliminated in less than 12 months. Outside of the permanent quarantine zone, the risk of cattle fever ticks spreading into areas currently free of ticks will be minimized or eliminated. The Agency's target for 2010 is to continue to eradicate 100 percent of cattle tick infestations identified outside the quarantine zone in less than 12 months.

Without the requested increase, any advances that have been realized with the use of emergency funding will be lost. In addition, if ticks continue to move outside the quarantine zone, the chances that bovine babesiosis will be introduced into the U.S. cattle population is greatly increased. This reintroduction could have severe consequences, including high mortality and loss of production in the cattle population, resulting in adverse economic effects on the estimated \$30 billion beef and cattle industry in the southeast U.S. In Texas alone, which represents 12 percent of the national herd value, the total economic impact could be up to \$706 million if ticks and babesiosis become reestablished. Also, trade would be impacted, including new interstate movement restrictions and international quarantine requirements.

- (b) An increase of \$291,000 for the Overseas Technical and Trade Operations program (\$15,725,000 and 71 staff years available in 2009).

The Overseas Technical and Trade Operations (OTTO) program works to open, expand, and retain new markets for U.S. agriculture; monitor the sanitary and phytosanitary conditions of agricultural products traded with partner countries; ensure the smooth and safe movement of agricultural commodities into and from the United States; resolve technical trade issues; and prevent the introduction of foreign animal diseases into the United States. To conduct these activities, the program stations foreign service officers (FSOs) abroad to work directly with their international counterparts. The program currently has 49 FSOs working overseas. At present, members of the senior Foreign Service are eligible for locality pay when serving at overseas posts, whereas lower-grade Foreign Service personnel are not. The Foreign Service Pay Modernization Initiative, currently under Congressional consideration, would provide locality pay at the District of Columbia rate (currently 23.1 percent higher than the base Federal pay scale) to all FSOs abroad to address pay disparities that affect FSO retention rates for all agencies that station employees abroad. In addition, by raising overseas pay rates to match domestic rates, the proposed changes will remove a disincentive to lower-grade Foreign Service members serving overseas in the later stages of their careers. The requested increase of \$291,000 would help offset these increased salary costs and allow the program to continue conducting critical activities to facilitate safe agricultural trade.

(4) An redirection of \$350,000 and 1 staff years for Plant and Animal Health Monitoring and Surveillance Activities:

(a) A redirection of \$350,000 and 1 staff year for the Trichinae Certification program (\$0 and 0 staff years available in FY 2009).

Trichinella spiralis is a parasitic nematode (roundworm) that is found in many warm-blooded carnivores and omnivores, including pigs. Section 11010 of the Food, Conservation, and Energy Act of 2008, Public Law #110-246, authorized appropriations of \$1,500,000 for each of fiscal years 2008 through 2012 to fund a Trichinae Certification Program.

On October 10, 2008, APHIS published a Final Rule establishing the Trichinae Certification Program (9 CFR Part 149). This final rule establishes a program that certifies premises having minimal risk for development of trichinae infection in resident swine due to certified and auditable good production processes as defined in the trichinae certification program. The program includes a new APHIS user fee of \$51 per application to cover the costs of implementing the rule. Additionally, industry incurs a portion of costs for items such as slaughter plant verification sampling and testing and audit costs associated with farm certification. APHIS would like to request a redirection of \$350,000 within the Animal Health Monitoring and Surveillance line item to further support the activities of the certification program.

Three USDA agencies (APHIS, the Food Safety and Inspection Service, and the Agricultural Marketing Service) collaborate to verify that certified pork-production sites manage and produce pigs according to the requirements of the program's good production practices. USDA also verifies the identity of pork from the certified production unit through slaughter and processing.

Production sites participating in the program may be certified as "trichinae safe" if sanctioned production practices are followed. The adherence of the sites to the good production practices is established through on-farm audits performed by trained accredited veterinarians. This on-farm certification mechanism establishes a process for ensuring the quality and safety of animal-derived food products from farm through slaughter and is intended to serve as a model for the development of other on-farm quality and safety initiatives. This program will also facilitate safe trade by increasing the level of confidence of U.S. trading partners in U.S. pork products.

APHIS is requesting a redirection of \$350,000 from monitoring and surveillance activities to the Trichinae Certification Program within the Animal Health Monitoring Surveillance line item. This redirection will provide a "jump start" to the voluntary Trichinae Certification program by supporting program management and assistance for producer participation. APHIS anticipates that enrolling higher numbers of participants in the program will help drive export markets and further increase the level of confidence U.S. trading partners have in U.S. pork products.

(5) A net increase of \$5,376,000 and 12 staff years for Pest and Disease Management activities:

(a) A decrease of \$4,624,000 for the Cotton Pests Program (\$29,590,000 and 37 staff years available in FY 2009).

The program to eradicate the boll weevil, a pest that has cost cotton growers tens of millions of dollars per year in control costs and losses for decades, is reaching a successful conclusion. APHIS anticipates that the pest will be eradicated by the end of FY 2010. While reinfestations have occurred as a result of recent hurricane activity, eradication in the near term is still feasible based on the program's success to date. Therefore, in FY 2010, the program will require a lower appropriation as the Boll Weevil program scales back eradication activities and shifts into its ongoing surveillance mode.

The Cotton Pests Program will continue to focus on eradicating pink bollworm (PBW) from the United States and will shift the majority of its resources to activities against this pest. By the end

of FY 2009, APHIS expects to have eradicated the pest from 61 percent of currently infested cotton acreage and will achieve eradication from 74 percent of infested acreage by the end of FY 2010 (up from 48 percent of infested acreage in FY 2008). The program's strategy includes: 1) mapping activities to identify cotton field locations, acreage, and genotypes; 2) detection trapping and visual surveys; and 3) control activities including mating disruption with pheromones, *Bacillus thuringiensis* (Bt) cotton, sterile moth releases, and minimal insecticide applications. Eradicating the boll weevil and PBW will lower production costs for growers, increase their yields, and improve fiber quality.

- (b) An increase of \$10,000,000 for the Emerging Plant Pests Program (\$133,677,000 and 284 staff years available in FY 2009).

The Emerging Plant Pests (EPP) program enables APHIS to maintain the infrastructure to respond to outbreaks and introductions of economically significant plant pests and diseases. In FY 2010, APHIS requests a \$10 million increase to enhance its ability to address outbreaks of the Asian longhorned beetle (ALB) in Massachusetts, New Jersey, and New York. ALB is a devastating pest of hardwood trees including maple, elm, willow, and birch. If this pest becomes widely established, it could cause billions of dollars in economic losses to industries such as timber, recreation, and tourism. If the ALB were allowed to infest all urban areas of the lower 48 States, it could cause almost \$800 billion in tree replacement costs.

The program's strategy of conducting intensive surveys to find infested trees, removing them, and protecting exposed trees with chemical treatments has proven to be successful. Two infestations—in Chicago, Illinois, and Hudson County, New Jersey—were eradicated in FY 2008. The program is still battling the largest ALB infestation (in New York), as well as an outbreak in New Jersey and part of Staten Island, and a third infestation in Worcester, Massachusetts. The Worcester outbreak was just detected in FY 2008 and is the first find in Massachusetts. The regulated area contains more than 635,000 host trees with a replacement value of \$635 million. The main concern with the discovery of ALB in Massachusetts is that the infested area borders New England's economically and environmentally valuable hardwood forests. Forest-related manufacturing, tourism, and recreation contribute more than \$20 billion annually to New England economies. In Maine, for example, the timber industry contributes \$6.5 billion to the State's economy. Of the 17.7 million acres of forest in Maine, more than half is hardwood that could be susceptible to the ALB. In FY 2009, the program is addressing the Massachusetts outbreak with \$24.5 million in emergency funds from the Commodity Credit Corporation. However, this eradication effort – as well as the efforts in New Jersey and New York – will take several additional years to complete. The requested increase for FY 2010 would enable the program to enhance delimiting surveys in New Jersey and Massachusetts and, in turn, enable the program to establish more accurate regulatory and control/treatment areas. Without funds to conduct thorough delimiting surveys, the program may miss infested trees, which would allow the beetle to encroach on valuable hardwood forests.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

SUMMARY OF INCREASES AND DECREASES - PROPOSED LEGISLATION

<u>Item of Change</u>	2010		
	<u>Current Law</u>	<u>Program Changes</u>	<u>President's Request</u>
Pest & Disease Exclusion.....	\$163,694,000	\$0	\$163,694,000
Plant & Animal Health Monitoring.....	252,831,000	0	252,831,000
Pest & Disease Management.....	340,869,000	0	340,869,000
Animal Care.....	22,479,000	0	22,479,000
Scientific & Technical Services.....	82,351,000	0	82,351,000
Management Initiatives.....	10,199,000	0	10,199,000
Total Available.....	<u>\$872,423,000</u>	<u>\$0</u>	<u>\$872,423,000</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 Budget request assumes a three-month delay in the receipt of fees, which would result in collections of \$19.5 million in FY 2010. Receipts from these fees are not used to offset appropriations request for FY 2010.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
SALARIES AND EXPENSES
Geographic Breakdown of Obligations and Staff Years
2008 Actual and Estimated 2009 and 2010

	FY 2008		FY 2009		FY 2010	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
UNITED STATES:						
Alabama.....	\$5,114,543	31	\$5,274,895	33	\$5,091,416	31
Alaska.....	880,874	3	981,747	3	968,647	3
Arizona.....	14,497,899	99	14,755,166	100	14,525,509	99
Arkansas.....	4,526,057	32	4,679,407	33	4,336,910	32
California.....	88,301,193	174	82,544,247	174	48,928,850	146
Colorado.....	112,308,196	512	117,659,667	512	112,289,276	487
Connecticut.....	1,989,026	11	2,097,218	13	1,329,196	11
Delaware.....	1,189,966	7	1,248,652	8	1,100,419	7
Florida.....	63,442,252	469	60,678,858	469	57,198,537	440
Georgia.....	9,963,840	50	10,279,250	53	9,762,058	50
Hawaii.....	24,105,777	342	25,534,098	344	22,522,997	330
Idaho.....	17,229,015	38	10,590,754	38	7,888,915	32
Illinois.....	10,870,067	47	9,690,516	49	9,369,005	47
Indiana.....	5,508,981	37	6,149,353	40	6,360,865	37
Iowa.....	37,981,444	361	38,401,071	361	37,639,144	349
Kansas.....	8,698,384	35	9,119,581	35	8,632,250	33
Kentucky.....	9,800,247	41	9,506,906	41	9,418,121	41
Louisiana.....	4,879,728	40	5,206,873	43	4,936,530	40
Maine.....	6,363,765	27	6,030,295	27	5,803,990	25
Maryland.....	288,481,416	1,553	296,261,800	1,596	284,887,204	1,509
Massachusetts.....	11,543,933	63	36,246,149	68	14,001,955	47
Michigan.....	16,600,709	101	15,719,819	101	13,474,900	75
Minnesota.....	29,359,673	152	29,831,061	157	28,870,052	144
Mississippi.....	9,776,092	70	9,944,123	72	8,234,048	70
Missouri.....	7,546,632	47	7,866,832	49	7,627,290	47
Montana.....	6,081,108	45	6,398,953	45	5,628,313	45
Nebraska.....	4,770,166	30	5,021,772	30	4,754,970	27
Nevada.....	5,304,328	21	4,325,965	21	3,778,774	19
New Hampshire.....	16,212,920	19	16,056,867	19	16,077,430	19
New Jersey.....	10,216,362	74	10,569,677	74	12,533,614	74
New Mexico.....	29,239,445	49	6,676,614	49	11,222,939	41
New York.....	32,021,438	128	33,925,892	130	34,060,314	116
North Carolina.....	78,031,619	429	81,659,685	445	78,028,280	429
North Dakota.....	5,459,436	32	5,777,744	33	4,236,353	30
Ohio.....	8,183,641	68	7,818,060	68	7,857,446	68
Oklahoma.....	5,296,902	34	5,566,078	36	5,294,150	34
Oregon.....	6,895,376	33	7,362,449	36	7,038,809	33
Pennsylvania.....	10,489,334	62	11,235,202	65	10,932,926	60
Rhode Island.....	466,277	2	509,246	2	502,079	2
South Carolina.....	3,484,227	28	3,704,125	28	3,564,773	28
South Dakota.....	3,448,817	18	3,666,868	18	2,860,392	16
Tennessee.....	6,434,337	35	6,570,004	36	6,505,742	35
Texas.....	69,739,453	391	73,024,911	398	63,493,735	366
Utah.....	5,731,668	67	6,175,707	67	3,178,716	56
Vermont.....	1,908,339	11	2,011,148	11	1,628,017	11
Virginia.....	4,337,131	32	4,572,662	33	4,234,391	32
Washington.....	10,118,392	56	10,786,009	58	10,217,269	56
West Virginia.....	3,000,036	16	2,874,491	16	2,512,856	16
Wisconsin.....	13,149,693	33	12,313,675	33	8,139,570	27
Wyoming.....	4,997,922	37	5,245,225	39	4,706,981	35

	FY 2008		FY 2009		FY 2010	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
U.S. TERRITORIES:						
District of Columbia	8,558,944	46	8,800,517	50	8,595,778	46
Guam	292,135	3	360,457	3	431,564	3
Puerto Rico	11,789,376	116	12,256,375	118	11,937,222	114
INTERNATIONAL REGIONS						
AFRICA:						
South Africa	385,518	7	404,819	7	430,554	7
Senegal	926,590	8	948,649	8	978,061	8
Other	268,821	2	274,335	2	281,688	2
ASIA/PACIFIC:						
China	909,964	6	926,508	6	948,567	6
Japan	571,073	6	587,617	6	609,676	6
South Korea	486,380	2	491,895	2	499,248	2
Other	4,594,585	38	4,699,365	38	4,839,071	38
CARIBBEAN:						
Dominican Republic	1,410,311	11	1,465,528	11	1,481,083	11
Other	465,337	4	476,565	4	491,536	4
CENTRAL AMERICA:						
Guatemala	2,186,423	14	2,224,051	14	2,274,222	14
Nicaragua	833,923	5	847,710	5	866,092	5
Panama	4,916,589	34	5,010,339	34	5,135,339	34
Other	2,719,000	19	2,771,390	19	2,841,243	19
EUROPE/NEAR EAST:						
Austria	112,577	1	115,334	1	119,011	1
Belgium	509,790	5	523,577	5	541,959	5
Egypt	563,843	7	583,144	7	608,879	7
Other	2,176,248	17	2,228,588	17	2,243,091	17
NORTH AMERICA:						
Canada	469,522	4	480,552	4	495,258	4
Mexico	10,497,584	50	10,635,452	50	10,819,275	50
SOUTH AMERICA:						
Brazil	1,100,043	9	1,124,859	9	1,157,947	9
Chile	150,025	1	152,782	1	156,458	1
Other	3,114,749	22	3,176,152	22	3,258,023	22
Total direct obligations:	\$1,195,987,425	6,532	\$1,211,713,931	6,653	\$1,100,227,770	6,244

Note: Total direct obligations does not include advances and reimbursements.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

Classification by Objects2008 Actual and Estimated 2009 and 2010

(\$000)

	<u>2008</u>	<u>2009</u>	<u>2010</u>
Personnel Compensation:			
Washington, DC.....	\$107,821	\$112,376	\$108,705
Field.....	323,462	337,127	326,115
11 Total personnel compensation.....	431,283	449,503	434,820
12 Personnel benefits.....	126,046	126,383	123,893
13 Benefits for former personnel.....	706	702	683
Total, pers. comp. & benefits.....	<u>558,035</u>	<u>576,588</u>	<u>559,396</u>
Other Objects:			
21 Travel & transportation of personnel.....	42,212	44,220	38,315
22 Transportation of things.....	6,813	11,733	6,568
23.1 Rent, Communications, and Utilities.....	22,214	25,005	20,461
23.2 Communication Services.....	354	534	345
23.3 Communication Services - GSA.....	16,466	16,312	15,930
24 Printing and reproduction.....	2,419	2,409	2,286
25.1 Contractual Services Performed by Other			
Federal Agencies.....	87,113	84,573	80,263
25.2 Other services.....	4,206	4,247	4,100
25.3 Repair, Alteration or Maintenance of			
Equipment, Furniture or Structure.....	9,074	8,903	8,570
25.4 Contractual Services - Other.....	36,362	37,324	35,434
25.5 Agreements.....	225,575	252,094	194,787
25.6 ADP Services and Supplies.....	3,821	3,816	3,601
25.7 Miscellaneous Services.....	14,761	13,777	12,987
25.8 Fees.....	703	689	674
26 Supplies and materials.....	75,568	65,187	60,525
31 Equipment.....	30,867	30,763	29,403
32 Land & Structure.....	23	27	24
41 Grants, Subsidies & Contributions.....	22,480	22,181	21,792
42 Indemnity/Compensation.....	35,968	10,834	4,312
43 Int. & Div.....	947	492	450
44 Refunds.....	0	0	0
99 Other.....	6	6	5
Total, other objects.....	<u>637,952</u>	<u>635,126</u>	<u>540,832</u>
Total direct obligations.....	<u>1,195,987</u>	<u>1,211,714</u>	<u>1,100,228</u>
<u>Position Data:</u>			
Average Salary, ES positions.....	\$158,945	\$163,872	\$167,805
Average Salary, GS positions.....	\$80,046	\$82,472	\$84,428
Average Grade, GS positions.....	12.50	12.60	12.70

Note: Total direct obligations does not include advances and reimbursements.

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. plant and animal 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) work to safeguard U.S. agricultural and natural resources from the introduction of invasive pests and diseases. The AQI program encompasses a variety of activities designed to address the agricultural pest risks posed by international travel and trade. In carrying out the AQI mission, APHIS conducts the following activities to prevent the entry of foreign pests and diseases in the United States: assesses the risks associated with international trade and specific imported agricultural products and develops regulatory import policies to protect the health of U.S. agriculture and ecosystems; conducts off-shore risk reduction activities including pre-departure inspections of passenger baggage destined for the U.S. mainland from Hawaii, Puerto Rico, and other Pacific and Caribbean islands 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; validates treatments; inspects and quarantines imported plant propagative materials; conducts trade validation and compliance activities to prevent smuggling through the Smuggling Interdiction and Trade Compliance program; and provides the scientific support necessary to carry out these activities and those carried out by CBP.

Cooperative Program Management

With the creation of the DHS in FY 2003, the responsibility for conducting agricultural port inspections of international passengers, passenger baggage, mail, and means of conveyance at U.S. ports of entry and certain off-shore locations transferred to CBP. APHIS and CBP are committed to working cooperatively to ensure the safety of the United States, its food production, and its ecosystems. In FY 2008, APHIS and CBP officials continued a joint quality assurance program to ensure that agricultural inspection policies are effective. As part of the quality assurance effort, APHIS and CBP conduct port reviews to evaluate operations at individual ports and identify any problems or needs. The review teams observe CBP's agricultural operations at the ports and make recommendations for improving operations based on proven agricultural procedures. During FY 2008, APHIS and CBP conducted seven port reviews at maritime

ports, airports, and land border crossings. Eight reviews are planned for FY 2009. In addition, a follow up review will be conducted on a port reviewed earlier to assure corrective actions have taken place.

Inspections and Pest Interceptions

During FY 2008 a total of 151,659,450 international passengers/pedestrians entered the United States as air, vehicle, maritime passengers and pedestrians. Agricultural inspectors inspected the baggage of nearly 21,066,098 million of these international passengers/pedestrians. Passenger baggage is inspected manually, with x-ray technology, or through the use of detector dogs. Agricultural inspectors also cleared 47,632 ships and 2,530,170 cargo shipments during the year. In total, agricultural inspectors intercepted 80,802 reportable pests at land borders, maritime ports, airports, foreign sites, and post offices.

Pre-Clearance and Pre-Departure

Pre-Departure Inspections

APHIS conducts pre-departure inspections of passengers traveling from Hawaii, Puerto Rico, and other islands to reduce the threats of agricultural pests and diseases before the passengers reach the mainland United States. Because of their tropical climate, these islands are affected by pests and diseases such as exotic fruit flies and classical swine fever. In FY 2008, APHIS inspected the baggage of 21,442,658 passengers before their departures from Hawaii and Puerto Rico. APHIS tracks the success of these efforts through the number of Mediterranean fruit fly outbreaks in the mainland United States that can be traced to Hawaii. The program met its performance target of zero such outbreaks in FY 2008.

Military Pre-Clearance

APHIS also cooperates with the U.S. Department of Defense to inspect military passenger baggage and equipment prior to its returning from overseas. Heavy military equipment is frequently encrusted with soil that can harbor a variety of agricultural pests, including invasive weed seeds, live insects and snails, and even disease organisms like foot-and-mouth disease. During FY 2008, APHIS participated in military pre-clearance operations in Nicaragua, England, Germany, Djibouti, the United Kingdom, the Netherlands, Turkey, Luxemburg, Norway, Spain, Greece, the Azores, Ethiopia, Cuba, Haiti, El Salvador, Panama, Honduras, and Jamaica. APHIS also established a permanent position to oversee military pre-clearance in the U.S. Central Command at MacDill Air Force Base, Florida. This position will coordinate the extensive inspection of returning cargo, vehicles, and passengers from Kuwait, Iraq, and Afghanistan. Expansion of this program to other countries with U.S. military presence, such as Qatar and Kyrgyzstan, is under consideration. These initiatives will help ensure that returning military personnel and equipment can enter the United States smoothly while protecting U.S. agriculture.

Commodity Pre-Clearance

APHIS conducts foreign commodity pre-clearance programs in 30 countries, facilitating the safe import of more than 170 commodities. The goal of pre-clearance, an activity that importers pay for through trust funds, is to minimize pest and disease risks away from the United States and allow trade to occur more smoothly by allowing highly perishable products to move to markets without additional delay. In FY 2008, APHIS continued to expand the use of irradiation to pre-clear fruits and vegetables. In addition to pre-clearance programs for irradiated fruit in Thailand and India, the program added programs in Vietnam (for dragon fruit) and in Mexico (for guavas). The use of irradiation allows for the treatment of delicate tropical fruits that would not tolerate other quarantine treatments and increases the variety of tropical fruits available in the United States. In some cases, it can also replace the use of other treatments, such as methyl bromide fumigation, that are harmful to the environment. Additional programs are being established in South Africa and New Zealand.

Smuggling Interdiction and Trade Compliance

Smuggling Interdiction and Trade Compliance's (SITC) mission is to detect and prevent the unlawful entry and distribution of prohibited and noncompliant products that may harbor exotic plant and animal pests and diseases. Program officials analyze and identify potential smuggling pathways, conduct product traces, and coordinate with investigative organizations to increase compliance with APHIS' regulatory requirements. In FY 2008, SITC made 4,486 seizures totaling approximately 544,151 pounds (the figures below are included in this overall figure) of illegal plants and plant products; meat and meat products including poultry, beef, and pork; and dairy products.

Avian influenza (AI) continued to be a major focus for the program in 2008. A total of 475 seizures totaling approximately 41,532 pounds of unauthorized poultry products were made during FY 2008. In an effort to heighten awareness among importers, distributors, wholesalers and other key stakeholders, the program continued its national public awareness campaign which focused on the threat of Avian Influenza in smuggled poultry and the role SITC plays in safeguarding against the threat.

SITC conducted 109 special operations in FY 2008 to identify potential smuggling pathways for prohibited plants, plant products, meat and meat products; and dairy products. Among other detections, the program uncovered three importers who were illegally importing prohibited pollen for bee feed. Pollen can transmit a variety of honey bee pests and diseases, which could threaten the already endangered U.S. honey bee population (which has been affected by colony collapse disorder in recent years). SITC seized 97,282 pounds of prohibited bee pollen and bee feed products and provided information to CBP that led to the interception of an additional two shipments of prohibited pollen from China totaling 85,979 pounds. SITC also initiated 11 product recalls, five for animal products and six for plant products.

Plant Inspection Stations

In its review of APHIS' plant health safeguarding efforts, the National Plant Board identified the import of nursery stock and other propagative plant materials as a significant pathway for invasive pests and diseases. To reduce the risks associated with such imports, APHIS requires certain imported plant materials to enter the United States through one of 17 plant inspection stations, mostly located at major ports of entry. APHIS inspectors and identifiers at these stations inspect shipments to ensure that imported plants are not harboring pests and diseases of regulatory significance. In FY 2008, Agency inspectors working in the plant inspection stations cleared 33,159 imported shipments containing over 1.3 billion plant units (cuttings, whole plants, or other propagative materials) and nearly 2.6 million kilograms of seeds. Through these inspections, they intercepted more than 4,200 reportable pests.

Risk Analysis and Scientific Support

The Plant Epidemiology and Risk Analysis Laboratory (PERAL) at APHIS' Center for Plant Health Science and Technology develops pest risk analyses and epidemiological approaches to pest exclusion. In FY 2008, PERAL completed 204 risk analyses associated with imports, exports, invasive pest threats, and programmatic requirements. These analyses helped open, expand or maintain export markets for 23 U.S. commodities. PERAL's Pest Advisory Group evaluated 33 pests for the potential risk they pose to U.S. agriculture.

The Treatment Quality Assurance Unit (TQAU) performs quality assurance reviews and audits of program treatments and certifications to ensure that they are both effective and administered properly. In FY 2008, TQAU tested and approved a new infrared methyl bromide monitoring device that will improve the safety and accuracy of quarantine treatments as well as save time for APHIS personnel. In collaboration with the National Science Foundation Center for Integrated Pest Management at North Carolina State University, TQAU developed web-based systems for recording and tracking data from quarantine cold and irradiation treatments. These two databases are used by both Agency officials and APHIS' international counterparts,

and they facilitate trade by improving transparency and information exchange. TQAU also developed a treatment for commodities that act as hosts for the red palm mite, which is widespread in the Caribbean and poses a threat to tropical plants such as palm and banana trees in Florida and other southern States.

Export Certification

APHIS facilitates the export of agriculture shipments through the use of EXCERPT, an electronic database containing plant health import requirements for over 200 countries. APHIS export certifications are provided as a service to U.S. exporters and help ensure U.S. products meet the agricultural requirements of the country of destination. Over 2,500 authorized certification officials, including APHIS officers and county and State plant regulatory officials, can access information on foreign countries' phytosanitary certification requirements on-line.

Once the requirements are verified, the authorized certification officials conduct inspections on the materials and the appropriate export certificates are issued. These export certificates facilitate the entry of commodities into foreign markets and represent approximately \$25 billion in trade annually. In FY 2008, APHIS and State officials issued more than 500,000 Federal plant health export certificates for agriculture shipments.

Also in 2008, APHIS continued the implementation of its Phytosanitary Certificate Issuance and Tracking (PCIT) database. PCIT allows exporters to apply for certificates and schedule inspection appointments on-line. It also provides APHIS with the ability to capture export application information; document inspection and certification information; print an original phytosanitary certificate on secure paper; and generate export reports. Use of the PCIT system increased dramatically in FY 2008; more than 212,000 of the certificates were issued from the system. APHIS is also discussing with its international counterparts the possibility of exchanging phytosanitary certificates electronically between governments.

2. Cattle Fever Ticks

The APHIS Cattle Fever Tick program works to prevent the reinfestation of the Southeastern United States by this pest through surveillance, curative measures, and maintaining a permanent quarantine zone along the southern border of Texas. Two species of cattle fever ticks, *Boophilus annulatus* and *B. microplus*, responsible for transmitting the causal agents of the foreign animal disease bovine babesiosis, were officially eradicated from 14 southern states and a portion of southern California, with the exception of the permanent quarantine zone between Texas and Mexico. Today, the permanent quarantine zone extends approximately 500 miles from Del Rio, Texas, to the Gulf of Mexico, ranging from 200 yards to six miles in width. The program functions under authorities and guidance of State and Federal regulations.

Essential activities of the program include range inspections of all premises located inside the quarantine zone and treatments for infested livestock and wildlife when ticks are discovered. APHIS mounted patrol inspectors, known as tick riders, carry out horseback river patrols to apprehend stray or smuggled cattle, horses, and other livestock, and thus prevent the introduction of cattle fever ticks into the United States from Mexico. During FY 2008, APHIS horseback river patrols along the U.S.-Mexican border apprehended a total of 128 Mexican livestock compared to 71 livestock in FY 2007, representing an 80 percent increase. Out of the 51 cattle apprehended, 30 were infested with cattle ticks. Ten out of the 51 horses apprehended were infested with cattle ticks.

There has been a significant increase in the number of infested premises identified in both the quarantine and free zones. As of September 2008, there were 47 infested premises outside the quarantine zone as compared to 25 in 2007, an 88 percent increase from 2007 and a 422 percent increase from 2006. Further, the situation in the quarantine zone has deteriorated. As of September 30, 2008, 85 infested premises were found in the quarantined area as compared to 42 by September 2007, a 102 percent increase over the previous year. These outbreaks can likely be attributed to the following factors: increasing number of deer and exotic ungulates maintained on "hunting ranges" in the area—these animals serve as alternate hosts of

cattle ticks in the absence of cattle; commingling of livestock with free ranging wildlife that perpetuate tick populations; unrestrained movement of wildlife from Mexico, spreading ticks in and out of the quarantine zone; reduction in surveillance for Mexican stray and smuggled livestock along the Rio Grande as a result of having to deploy existing APHIS resources into eliminating infestations outside of the quarantine zone; increased abundance of white-tailed deer and other cervids along the Mexican bordering states that move freely across national borders; and favorable climatic conditions for tick survival and propagation.

The high number of outbreaks has precipitated the continued implementation of temporary quarantines in Starr, Maverick, Dimmit, Webb, and Zapata counties, which are outside the permanent quarantined area. Premises and livestock within the temporary quarantined area must be systematically inspected and treated, and movement of all livestock must be controlled. Deer populations must be treated as well.

The increased number of wildlife animals serving as alternate hosts of cattle ticks within the permanent quarantined area aggravates eradication efforts and activities, as the program is limited to two strategies for controlling ticks on wildlife animals. The first strategy is using ivermectin-medicated corn feeders to eradicate ticks on wildlife. The deer feed on the corn that is medicated with an anti-parasitic drug. Since the Food and Drug Administration bans the use of medicated corn feeds 60 days before the hunting season, during the hunting season (November through February), and for 60 days after the hunting season, APHIS has been employing an alternate strategy: 4-poster permethrin-treated rollers attached to protein feeders. The 4-poster applies acaricide to the head, neck, and ears of the deer as they feed on whole kernel corn, and deer self-treat other portions of their bodies during grooming behaviors. The apparatus can be used throughout the year. APHIS will continue to monitor both strategies for reducing tick infestation in wildlife populations. APHIS will also use tick-inhibiting vaccines designed for deer and automated collaring treatment devices developed by USDA's Agriculture Research Service (ARS).

Introduction of acaricide-resistant populations of cattle fever ticks from Mexico could prevent the program from reaching its goals. Experience in other countries has indicated that once established in a tick population, acaricide resistance is impossible to eliminate. During FY 2008, APHIS continued working with ARS, the Food and Drug Administration, and the Environmental Protection Agency pursuing other options for the use of macrocyclic lactones (acaricides). In the future, the evaluation and use of tick-inhibiting vaccines in the program may serve as effective acaricide alternatives.

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

APHIS' safeguarding strategy includes both inspection and exclusion activities at U.S. borders, as well as collaborations with foreign governments on programs to monitor and address invasive species before they spread to the United States. The Agency's Foreign Animal Diseases (FAD) and Foot-and-Mouth Disease (FMD) program protects the United States from exotic animal diseases. This program detects and controls FAD outbreaks throughout the world by participating in cooperative animal disease eradication programs, thereby reducing the risk of these diseases spreading to the United States. APHIS also conducts animal health capacity building activities in foreign countries to monitor and control animal diseases and maintains a cadre of animal health professionals throughout the world.

South America

The livestock population in South America is potentially one of the world's largest reservoirs for the viruses causing FMD. Because FMD spreads very quickly, any northward spread could reach the United States. To prevent this occurrence, APHIS works with cooperators in Bolivia, Colombia, Ecuador, Paraguay, and Venezuela to control or eradicate the disease.

The World Organisation for Animal Health (OIE) and many countries are recognizing areas within certain countries, such as Brazil, Argentina and Bolivia, as free of FMD without vaccination. This recognition significantly increases the pressure on U.S. regulatory and trade negotiation groups to allow the export of certain beef and pork products from those areas into the United States. APHIS activities to support the

continuing eradication efforts are vital to help ensure that any eventual trade in currently restricted products will occur with no appreciable FMD risk.

Each year, the program in Colombia conducts approximately 1,000 field investigations of cattle with potential FMD symptoms. In 2008, APHIS supported the control and eradication of an FMD outbreak along the Colombia - Venezuela border. Consequently, the Agency has increased its focus on higher-risk FMD areas in Colombia, such as border regions. To enhance surveillance activities, APHIS and the Columbian Agricultural Institute implemented a geographic information system mapping project to identify and locate centers of cattle population.

In contrast to recent successes in Bolivia and Colombia, other parts of South America are still struggling with eradication. Venezuela and Ecuador, for example, continue to suffer FMD outbreaks. In these areas, APHIS is helping to support veterinary laboratories, create emergency response units, establish movement control posts, and support vaccination campaigns. These efforts are crucial in protecting not only the advances that have been made in countries like Colombia over the past 30 years, but also to the goal of hemispheric eradication. APHIS FMD activities in Venezuela focus on building non-traditional alliances with institutions such as state governments, universities, and rural associations, which have been invaluable for APHIS activities to support FMD eradication. In Ecuador, APHIS has supported a pilot FMD eradication program in four provinces along the Colombian border since 2006. This program has four main activities: vaccination support; geographic information system mapping; training for cattlemen, vaccinators, and others; and outreach. In calendar year 2008, the program conducted a vaccination campaign in the pilot area. In the future, APHIS plans to focus its efforts within South America on areas that show a continuing circulation of FMD virus or displaying a slower eradication curve. These areas include Venezuela and Ecuador. Pushing more rapid progress in eradication of FMD virus from these areas will guarantee the more rapid advance of the eradication effort in all of South America.

Central America

APHIS cooperates with Panama's Ministry of Agriculture to conduct FMD prevention activities (in conjunction with screwworm prevention activities) in Panama, which serves as the gateway to Central American from South America. In FY 2008, this program conducted 23,000 visits to farms, ranches, and agricultural community leaders as part of its outreach campaign. The program also inspected 83,000 animals and 42,000 vehicles at control points. APHIS and Panama's Ministry of Agriculture also maintain a BSL-3 laboratory that analyzes all samples for vesicular diseases from Central America. This laboratory is using a real-time test to diagnose vesicular diseases, avian influenza (AI), and FMD. In FY 2008, the laboratory tested 855 samples for Central America and Panama, and none of these tested positive for FMD. APHIS also collaborated with ministries of agriculture in Costa Rica, Honduras, and Nicaragua to survey for and prevent FADs in those countries.

North America

APHIS continued working with Canada and Mexico to standardize FAD diagnostic procedures for FMD and other vesicular diseases, AI, and bovine tuberculosis. In addition, the Agency continued its partnership in the Mexico-U.S. Commission for the Prevention of FMD and other FADs. This Commission supports a BSL-3 animal health laboratory in Palo Alto, Mexico, which provides surge capacity in case of a domestic FAD outbreak. In FY 2008, this laboratory tested more than 50,000 samples for many diseases of cattle, horses, and poultry. All samples for FMD and highly pathogenic avian influenza (HPAI) tested negative. The Commission serves as a key contributor to the North American FMD Vaccine Bank, and is directly involved in the US-Canada-Mexico North American Animal Health Committee and the FMD Emergency Management Working Group. An additional six Mexican laboratories that are aligned with the central laboratory tested 100,000 cattle for bovine spongiform encephalopathy (BSE), with no positive or suspect cases detected.

Caribbean

APHIS continued to support control and eradication of Classical Swine Fever (CSF) on Hispaniola, which includes the Dominican Republic (DR) and Haiti. In FY 2008, CSF vaccinations and surveillance continued at the border between the countries at the national level in the DR.

In the DR, 834,000 pigs were vaccinated against CSF. This includes 98 percent of commercial farms and 78 percent of backyard farms. Ten confirmed outbreaks (antigen positive) were reported in the DR. A total of 1,897 swine samples were collected and tested for CSF. Of these samples, 5.43 percent tested positive for viral antigen.

In Haiti, the swine population is estimated to be 820,200, with most in backyard farms. In FY 2008, 627,000 pigs belonging to approximately 191,000 owners were vaccinated for CSF (or about 76 percent of the total estimated swine population). Also, eight outbreaks were investigated. A total of 833 swine samples were collected and tested for CSF. Of these samples, 5.66 percent tested positive for viral antigen.

Africa

APHIS works with ministries of agriculture in a variety of African countries to help build veterinary infrastructure and improve their ability to manage animal health problems. In FY 2008, APHIS collaborated with the OIE, the United Nation's Food and Agriculture Organization (FAO), and the African Union-InterAfrican Bureau of Animal Resources (AU-IBAR) to support the strengthening of animal health infrastructures via "train the trainer" workshops and training field technical experts in 25 countries in western and central Africa. The training programs focused on improving laboratory diagnostic activities, field epidemiology and disease recognition, Geographical Information System Spatial Epidemiology, and crisis management (including incident command systems training). APHIS also strengthened the two regional support laboratories for western and central Africa (located in Senegal and Nigeria) by providing laboratory experts to evaluate and review the laboratory processes and provide guidance in improving the service delivery of the laboratories

4. Fruit Fly Exclusion and Detection

APHIS' Fruit Fly Exclusion and Detection (FFED) program, with partners both domestic and international, is conducting 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 has developed a strategic plan for FYs 2006 - 2010, which includes three goals (described below) to prevent establishment of exotic fruit flies in the United States. FFED's long-term performance measure is the number of outbreaks of exotic fruit flies in the United States. The FY 2008 target was two, but the program experienced five fruit fly outbreaks. Two of the outbreaks were in the Los Angeles basin of California, one was in the San Jose area of California southwest of Sacramento, one was in the Escondido area of California, and one was in the Raymondville/Lasara area of Texas. The program eradicated four of these outbreaks in FY 2008 and will eradicate the fifth in FY 2009.

The program uses sterile insect technology to both prevent and respond to exotic fruit fly outbreaks. Sterile insect technology is used as an essential operational tool for successful exclusion and control programs. The program's El Pino sterile production facility in Guatemala produced a total of 113 billion sterile Mediterranean fruit flies (Medflies) in FY 2008 and provided approximately 300 million sterile Medflies each week for the preventive release programs in California and Florida. The remaining flies are utilized in the Moscamed program, an international program with a five year plan goal of reducing the risk of Medfly infestations in Mexico and Guatemala. Sterile fly production costs remained the lowest in the world, at about \$133 per million flies for domestic customers and \$170 for others, and sterile fly quality met or exceeded international standards. In addition, the program completed a new fruit fly production module at San Miguel Petapa, near Guatemala City, to serve as a back-up to APHIS' Mexican fruit fly (Mexfly) sterile production facility in Texas.

The program works to prevent the establishments of fruit flies in the United States through three strategies: 1) enhancing its ability to detect and respond to introductions of fruit flies and strengthening preventive release programs; 2) ensuring that Medfly does not move north of the State of Chiapas, Mexico; and 3) eradicating the Mexfly from Texas and northern Mexico along the Lower Rio Grande Valley.

Enhance detection and response capabilities and strengthen preventive release programs

The program's rapid response to detections has bolstered the ability of impacted growers to maintain international and interstate trade of host commodities, while avoiding the cost of fumigation treatments. During FY 2008, the program placed 507 square miles under quarantine in the United States as a result of fruit fly outbreaks. This was reduced to 74 square miles by the end of the fiscal year. The program did not meet its target of zero detections under a preventive release program that resulted in an outbreak. The Medfly outbreak in the Palos Verdes Peninsula of Los Angeles County was in a preventive release program area, and was eradicated on August 13, 2008.

- In FY 2008, 47 Oriental fruit flies were detected in 20 areas of California with the need for only one regulatory action in the Lakewood area of Los Angeles County. The program is eradicating this pest from the Lakewood area through chemical control by applying spot bait stations and foliar bait sprays in the area surrounding detection sites. Eradication of Oriental fruit fly from the Lakewood area of Los Angeles County is expected in FY 2009.
- In the Palos Verdes Peninsula area of Los Angeles County, 21 adult and 17 larval Mediterranean fruit flies (Medfly) were detected from October through December of 2007. This triggered regulatory action and the initiation of a Federal quarantine on November 8, 2007. This Medfly incursion was in an area of the Los Angeles Basin where APHIS and the State worked together to release sterile Medflies in a Preventive Release Program. The program utilized the same sterile insect technique (SIT) as the main means of control in the eradication project by releasing sterile male Medflies at a rate of 500,000 sterile male Medflies per square mile per week over an area surrounding the detection sites. The Federal Quarantine was removed on August 13, 2008.
- In the San Jose area of Santa Clara County, 6 additional adult Medflies were detected in October 2007. These detections were a trigger to initiate a Federal Quarantine on October 26, 2007. The program also utilized SIT as the main means of area-wide population control to eradicate the Medfly from the San Jose area. Eradication was declared on August 4, 2008.
- A Medfly incursion was detected in the Dixon area of Solano County during FY 2007. The program responded with SIT technology. Medfly eradication was declared on August 8, 2008.
- In the Escondido area of San Diego County, five Mexflies were detected in November 2007. These detections triggered a Federal quarantine which was initiated on November 30, 2007, and removed after Mexfly was declared eradicated in San Diego County on July 15, 2008. The program also utilized SIT as the main means of area-wide population control by releasing sterile Mexflies at a rate of 250,000 sterile males per square mile per week.
- From February through April 2008, the detection of 9 adult 54 larval Mexflies in the Raymonville/Lasara area of Willacy County triggered a Federal quarantine. APHIS responded to the outbreak by releasing sterile Mexflies in the area surrounding the detection sites. A Federal interstate quarantine was initiated on April 27, 2008, and the quarantine ended on August 20, 2008.

In Florida, APHIS and the Florida Department of Agriculture and Consumer Services (FDACS) continued to maintain approximately 56,000 fruit fly detection traps statewide. Four adult Oriental fruit flies were detected in three separate areas in the Orlando area of Orange County. One guava fruit fly was also detected in the Orlando area of Orange County. One adult Medfly was detected in the Pompano Beach area of Broward County. All of these detections resulted in intensified surveillance activities but no additional control or regulatory actions. APHIS and the State also worked to release sterile Medflies under a Preventive Release Program in three areas. Florida's PRP continues to demonstrate success, with no Medflies detected since 1998. In addition, APHIS cooperated with other State and territorial plant

regulatory agencies to maintain fruit fly surveillance programs in 10 additional States and territories: Alabama, Arizona, Georgia, Hawaii, Louisiana, Mississippi, New Mexico, Puerto Rico, South Carolina, and the Virgin Islands. The program detected no exotic fruit flies in any of these States or Territories in FY 2008.

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

APHIS works cooperatively with Mexico, Guatemala, and Belize in the Moscamed Program, which for the past 30 years has protected U.S. agriculture by preventing the northward spread of Medfly populations out of Central America. In FY 2008, the Moscamed Program successfully achieved its annual goal of preventing Medfly spread north of the State of Chiapas, Mexico. There were no Medfly outbreaks in the neighboring Mexican States north of the program operations zones. In addition, the program maintained the size of its Medfly-free buffer zone at about 75,000 square kilometers in Chiapas, Mexico; 30,000 square kilometers in Peten, Guatemala; and all of the country of Belize (about 22,000 square kilometers).

To achieve this successful outcome in 2008, the program maintained an intensive detection network of approximately 30,000 Medfly traps, which enabled a rapid response to a total of 19 Medfly outbreaks in the Medfly-free areas and an additional 114 outbreaks in areas of low Medfly prevalence inside Chiapas and along the border in Guatemala. This was a considerable decrease in outbreaks compared to 2007 when there were more than 250 outbreaks in the free area and more than 2,000 outbreaks in the low prevalence zone of the barrier. The program attributes the lower level of 2008 outbreaks to effective ground-based outbreak control actions, along with an ongoing aerial release of sterile Medflies to eradicate the outbreaks and also to suppress the Medfly populations in high-risk program areas. A large organic bait aerial spray program in early 2008 over Medfly hot spots in the southwest Guatemala coffee belt also helped considerably to reduce the Medfly population pressure on the program's fly-free and low prevalence areas.

Although the program's actions in 2008 played a large role in maintaining the Medfly-free buffer zone, program officials also attribute lower Medfly population levels to other uncontrollable factors, such as a *La Niña* condition in the Pacific Ocean (lower sea surface temperatures), which brought about increased rainfall (causing higher Medfly pupae mortality) and cooler average temperatures (slowing the Medfly life cycles and reducing the number of fly generations). They also believe that lower Medfly population pressure was due in part to continuing high world coffee prices, which led to a more complete coffee harvest in Guatemala at the end of 2007 and fewer of the Medflies' preferred host (coffee berries) being available for optimal growth of succeeding fly generations.

Eradicate Mexfly from Texas and northern Mexico along the Lower Rio Grande Valley (LRGV) and maintain the area free of reintroduction

In Mexico, APHIS maintained an emergence center for sterile Mexflies. This enabled the Agency to release sterile insects on Mexico's side of the border and protect citrus production in Texas. The Agency also kept a trap line along the border with both California and Texas to provide an early detection tool for the northern movement of exotic fruit flies from Mexico. To further protect the United States, APHIS conducts a sterile release program along the border of California and Texas to suppress Mexican fruit fly activity.

One Texas County was declared free of Mexfly in the LRGV in FY 2008, one short of the program's goal of having two Mexfly-free Texas counties or Mexican municipalities. APHIS did not reach its FY 2008 target of two Mexfly free Texas counties or Mexican municipalities to be declared free. The program reached its target of releasing 150 million, sterile Mexflies per week in the LRGV of Texas in FY 2008.

5. Import/Export

The goal of the National Center for Import and Export (NCIE) is to prevent the introduction of foreign animal disease by imposing science-based import requirements as well as to open, expand, and retain new markets for U.S. agriculture by resolving animal health issues that impact trade.

The NCIE works closely with other Federal agencies, States, foreign governments, and industry in carrying out the program's dual mission of safeguarding U.S. agriculture and facilitating safe agricultural trade. APHIS animal health experts negotiate import and export protocols for animals and animal products that are founded on sound scientific principles and fair trading practices. 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

In FY 2008, APHIS conducted the regulatory oversight for the importation of millions of head of livestock. This included more than 2.4 million cattle, 10.3 million swine, 17,002 horses, 10.88 million live poultry, 23.2 million hatching eggs, 34.1 million commercial birds, and 6.0 million units of poultry and livestock semen and livestock embryos. Additionally, approximately 14.15 million koi and goldfish were successfully imported from more than 20 countries.

Cattle imported from Mexico decreased from 1 million in FY 2007 to 743,522 in FY 2008. Canadian cattle imports increased this year from 1 million in FY 2007 to 1.33 million in FY 2008 due to the implementation of the Minimal Risk Rule for Bovine Spongiform Encephalopathy (BSE), which became effective in November 2007. This rule allows for the importation of breeding cattle. There were also a total of 26,682 bison imported, which was an increase from 19,101 bison imported in FY 2007.

APHIS processed a total of 9,011 import permit applications for animal products, organisms and vectors, and select agents during FY 2008. Of the 9,011 permit applications submitted, APHIS issued 8,869 permits.

APHIS continues to enhance and implement ePermits. ePermits is a Web-based system for the import permitting process that allows users to apply for a permit, check the status of applications, and view issued permits and other information on-line.

APHIS has also been working with other government agencies in developing and providing data for the Department of Homeland Security Customs and Border Protection's (CBP) Automated Commercial Environment (ACE)/ International Trade Data System (ITDS) initiative. All participating government agencies involved with the ACE/ITDS initiative continue to identify business processes that will be captured and maintained in ACE. APHIS collaborated with CBP during the first half of FY 2008 to clarify APHIS' processes related to imports, how they interact with CBP's processes, and how the two Agencies will interact through ACE/ITDS in the future. One of the required elements in ACE is the ability to track all permits issued by APHIS. This added control of tracking within ACE will also augment APHIS' ePermits system. APHIS continues to work with the developers of ACE to ensure that this function is implemented.

To help ensure that our standards for regulating imports and assessing the disease risk within defined regions are transparent and applied on a consistent and scientific basis, 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 FY 2008, APHIS' evaluated the animal health status in multiple countries and regions, including: foot-and-mouth disease in Argentina, Brazil, Slovakia, Slovenia, South Africa, United Kingdom, and Uruguay; tuberculosis (TB) in cattle, elk, and bison in Canada; brucellosis in elk and bison in Canada; highly pathogenic avian influenza, subtype H5N1, in Denmark and France; swine vesicular disease in Estonia, Slovakia, and Slovenia; classical swine fever in the European Union, Estonia, and Slovenia; TB in Mexico; screwworm in Panama; the conditions for the exportation of sheep meat in Uruguay; and, conditions for the exportation of swine semen in the European Union.

Exports

During FY 2008, 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 Brazil, Ukraine, and Pakistan; avian influenza for Argentina, Albania, Brazil, Bolivia, China, Chile, Cuba, Ecuador, European Union, Guatemala, Hong Kong, Indonesia, Japan, Libya, Mexico, Peru, Philippines, Sri Lanka, Singapore and Taiwan; equine piroplasmiasis for Canada; contagious equine metritis for Brazil; rabies for Taiwan; malignant catarrhal fever in wildebeest for Hong Kong and Chile; pseudorabies for Chile and Mexico; scrapie for Jamaica; West Nile virus for the Dominican Republic and Korea; the U.S. veterinary infrastructure for Ukraine; the cattle identification and tracking system for Macao and Ukraine; U.S. poultry health, inspection and certification system for Chile and Argentina; bovine and swine embryos and semen collection centers in Chile and the European Union; and U.S. zoning capabilities for Canada.

APHIS successfully maintained, expanded, and reopened markets in 19 countries during FY 2008 by providing detailed technical information and data that enabled many of our trading partners to accept the animal health status of the United States, and to lift restrictions imposed because of specific animal diseases. During FY 2008, the program issued approximately 111,448 animal products healthcertificates

APHIS issued point-of-origin certificates for the export of 35,147 head of cattle, 4,551 goats, 45,271 sheep, 92,744 pigs, 40.65 million live poultry, 77.6 million hatching eggs, 38.8 million day-old chicks, 28.43 million live fish (including mollusks and crustaceans), 77.37 million fish eggs, 11.1 million doses of bovine semen, 204,221 bovine embryos, 34,769 units of porcine semen and embryos, 34,108 equine semen and embryos, and 593 zoo animals.

6. Screwworm

The screwworm fly is a parasite that attacks all warm-blooded animals including humans. Untreated animals will eventually die from the infestation or from secondary bacterial infection. This parasite has caused significant losses to livestock industries through the weight loss and death of livestock, increased veterinary expenses, and insecticide costs. The success of the Screwworm program saves the livestock industry an estimated \$1.27 billion annually.

APHIS' Screwworm program prevents infestation of screwworm in the United States by working with Mexico and countries in Central America to create a screwworm-free buffer zone within Panama and eradicate the pest north of the Isthmus of Panama. The program has eradicated the pest from Guatemala to the Darien Gap, between Colombia and Panama. In FY 2008, APHIS produced 135 million sterile screwworm flies per week at its Mexico and Panama Facilities. The program released approximately 40 million flies per week to maintain the barrier at the Darien Gap. The Agency also provided flies to aid in screwworm eradication in Jamaica. Although officials declared Panama technically free of screwworm on July 12, 2006, Agency officials detected 4 cases of screwworm in Panama in FY 2008. The cases were located in the Panamanian Province of Darien, which is located within the program's control area. This area is forested and largely uninhabited. There was no northward spread from the control area, and there were no cases registered in other Central American countries.

In FY 2007, the Screwworm program moved into the newly built rearing facility in Pacora, Panama. In FY 2008, the program ran production test at levels of 40 million flies per week in Panama. The program is expecting delivery of a cobalt irradiation machine in mid FY 2009. Cobalt irradiation technology is more effective than the x-ray technology currently in use.

7. Trade Issues Resolution and Management

Sanitary (animal) and phytosanitary (plant) (SPS) health standards and requirements are complex factors affecting agricultural trade. Because of its technical expertise and regulatory authority, APHIS plays a central role in resolving technical trade issues to ensure the smooth and safe movement of agricultural commodities into and from the United States. SPS related activities ensure economic and marketing opportunities for farmers, ranchers, and other agricultural food producers. APHIS' role in these negotiations is to negotiate animal and plant health certification requirements, assist U.S. exporters meet foreign regulatory requirements, ensure that such requirements are technically justified and no more restrictive than necessary, and provide any additional technical information and support necessary to demonstrate the safety of U.S. agricultural products destined for foreign markets.

In FY 2008, APHIS was successful in resolving more than 100 SPS export issues including opening new markets and retaining and expanding existing markets. Together, these accomplishments are estimated to be worth more than \$900 million.

These 2008 SPS trade negotiations resulted in a number of countries lifting state-level bans on U.S. poultry exports that had been imposed as a result of low-pathogenic avian influenza detections. The lifting of these bans is estimated to allow an additional \$4.5 million worth of poultry exports from the states involved. APHIS also negotiated new export protocols for a range of live animals to Russia, opened the Mexican market for fetal bovine serum, secured access for California strawberries to China for the 2008 Olympics, and re-opened the market for U.S. wood veneer in China.

The program activities also included germplasm exports to China; poultry genetics to Ecuador; avian influenza and vaccination information and inspection reports for equine and bovine genetics for the European Union market; honey bees to Japan; peas and lentils to India; and apples to Taiwan. Examples of market expansion efforts included wheat to Pakistan; stolons (a type of plant propagative material) to Mexico; horses to Australia and Japan; and bovine semen to Bolivia. Additional new markets include cervids (hoofed mammals including deer and elk) and cervid semen to Canada; pet birds and breeding swine to Columbia; bovine semen to Mongolia and Peru; and California pomegranates to Korea.

Trade Facilitation (Released Shipments)

APHIS attachés posted overseas play an active role in resolving 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 number of reasons, including questions about a phytosanitary or veterinary certificate or confusion over entry requirements. Sometimes concerns about recent media reports of pest or disease detections in the United States may result in shipments being detained, rejected, or destroyed. APHIS attaches intercede to clarify, assist, and negotiate the release of these shipments. In FY 2008, APHIS attachés successfully obtained the release of more than 200 individual shipments, worth more than \$23 million. Examples of these shipments include containers of corn seeds to Mexico worth \$1.9 million, egg yolks to Peru worth \$215,000, soybeans to Taiwan worth \$400,000, and swine to China worth \$900,000.

International Standards

APHIS is an active participant in international standard setting organizations such as the International Plant Protection Convention (IPPC) and the World Organisation for Animal Health (OIE). The Agency works with foreign regulatory officials in these organizations to ensure international standards are science-based,

fair, and practical. Standard-setting work helps expand markets and facilitates safe agricultural trade by mitigating risks.

In 2008, the Agency and its international partners adopted guidelines on the implementation of the concept of regionalization, after 5 years of discussion. Regionalization is the recognition of pest or disease-free areas or areas of low pest or disease prevalence. An area can be a country, part of a country, or all or parts of several countries. This is a concept recognized by both the IPPC and the OIE, and the application of the concept is also an obligation under the World Trade Organization Agreement (Article 6). The guidelines encourage members to develop transparent processes for regionalization decisions, including the publication of appropriate regulations. The guidelines also recognize that each regionalization decision must take into account the unique circumstances related to the pest or disease in question, environmental factors, and differences in various countries' SPS infrastructure.

In FY 2008, the IPPC adopted four new or updated standards: the recognition of pest free areas and areas of low pest prevalence; revision of the pest risk analysis framework; phytosanitary treatments for regulated pests; and, the definition of new phytosanitary terms and concepts. The IPPC is also investigating the replacement or reduction of the use of methyl bromide as a phytosanitary measure.

Capacity Building and the APHIS International Visitor Center

APHIS cooperates with other Federal agencies including USDA's 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 assistance activities. Requests for assistance in areas that APHIS has expertise include biotechnology, regulatory processes and policy, pest risk analysis, epidemiology, wildlife control and surveillance, foreign animal disease, diagnostics, and other aspects of animal and plant health, quarantine, and inspection.

APHIS' International Technical Regulatory Capacity Building (ITRCB) center coordinates the Agency's capacity building efforts. In addition, the APHIS International Visitors Center (IVC) plays a key role in coordinating technical assistance. In FY 2008, the IVC hosted more than 500 individuals from 79 countries throughout the year, nearly six times more visitors than the previous year. The IVC arranged a variety of programs for these international visitors, including visits to ports and APHIS diagnostic laboratories, training in risk assessment, and exchanges on biotechnology, fruit fly programs, avian influenza, disease surveillance, and a variety of other topics.

Overseas, APHIS provides capacity building assistance in several ways. These projects are coordinated through the ITRCB. Some examples are:

Animal Health: The Agency conducted several veterinary epidemiology workshops in Indonesia related to the highly pathogenic avian influenza (HPAI) response, three live bird market workshops in Central America, and an additional live bird market workshop at the new OIE sponsored training center for Africa in Bamako, Mali.

Wildlife: The Agency conducted activities related to HPAI monitoring in wild birds in Asia, Latin America, and the north Atlantic.

Plant Health: The Agency conducted training for specialists from 54 countries across 5 continents in individual and regional pest risk analysis, SPS regulatory assessments, detector dog programs, pest free area assessments, and DNA extraction, among other areas.

Biotechnology: The Agency conducted training on genetically modified organisms and risk assessment for genetically modified foods and provided outreach and on-site training to South African ministerial officials.

8. Tropical Bont Tick

The presence of Tropical Bont Tick (TBT) and its associated diseases, heartwater and dermatophilosis, in the Caribbean pose a risk to U.S. livestock production. Previously unexposed populations (such as those in the United States) are highly susceptible to infection. Death losses can reach over 50 percent in cattle and 90 percent in sheep and goats. APHIS cooperates with 10 Caribbean countries to monitor TBT populations and assist the countries in building veterinary infrastructure through the Caribbean Amblyomma Program (CAP).

The CAP emphasizes continuing the surveillance of the Amblyomma tick and the cattle diseases it vectors with the intention of initiating programs to manage these diseases through strengthening local field veterinary epidemiology expertise, emergency planning and response. The 10 participating countries each have a veterinary epidemiologists-paraepidemiologist (VEP) to investigate animal disease outbreaks, provide emergency response to animal health events, collect samples for national laboratories, maintain data collection systems, and maintain close contact with the private sector for the development of public-private dialogue. APHIS and cooperators, including CIRAD (Centre de coopération internationale en recherche agronomique pour le développement, a French research agency), provided formal training for the VEPs in the areas of basic veterinary epidemiology, biosecurity in animal health, sampling techniques for animal disease diagnosis, the packing and shipping of animal specimens according to the International Air Transport Association's standards, and use of global positioning systems for animal disease surveillance.

PLANT AND ANIMAL 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 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 identification, prosecution, education and outreach. This investigative arm of APHIS strives to achieve voluntary or enforced compliance of 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 animal

identification, disease surveillance, data collection, 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 program provides rapid trace-back capabilities for foreign animal disease incursions, emerging disease outbreaks, and major animal diseases within the country. AHMS incorporates new technologies to bolster efforts and provide for more rapid detection, analysis, and reporting of foreign and domestic diseases, including significant zoonotic diseases. In FY 2008, APHIS continued to enhance animal disease surveillance and delivery of epidemiologic services. Some examples of the monitoring and surveillance provided include the following.

Foreign Animal Disease Investigations

To prevent foreign animal disease (FAD) incursions, APHIS veterinarians, including 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 (FADD). In FY 2008, 311 cases of animals presenting signs indicating possible FADs were investigated. Of these 311 reports subsequent APHIS investigations resulted in the discovery of malignant catarrhal fever on premises located in Texas, Georgia, Louisiana, and Alabama. Equine piroplasmiasis was discovered in two different premises in Florida. Both diseases were quickly contained and eradicated through quarantine followed by depopulation.

Comprehensive Surveillance System

APHIS is continually working to improve its surveillance system by developing national surveillance plans. In FY 2008, APHIS continued implementation of its classical swine fever (CSF) program as part of Comprehensive Swine Surveillance plan. In addition to CSF surveillance, the Agency continued integrating revised pseudorabies (PRV) surveillance into the plan. As a result, APHIS identified PRV infection in eight transitional herds in Arkansas (1), Florida (1), Michigan (4), and Texas (2), and provided Federal indemnity to depopulate them. Swine brucellosis was also detected in four transitional herds in Arkansas (1), Florida (1), Hawaii (1), and South Carolina (1). Transitional herds are made up of captive feral swine or swine that have reasonable opportunities to be exposed to feral swine. All affected transitional herds were depopulated without disease spread.

The Swine Health Protection Act allows APHIS to license facilities that feed cooked garbage to swine and to conduct searches for unlicensed facilities feeding raw garbage to swine, a primary risk factor for numerous infectious diseases of these animals. In FY 2008 under provisions of the Swine Health Protection Act, APHIS conducted 8,133 inspections of licensed premises and found 196 alleged violations. Of these, 87 were corrected without enforcement action and 109 violations involved enforcement action. Searches made for non-licensed facilities totaled 35,296 in FY 2008. Of these, 96 non-licensed feeders were found, of which 77 were either licensed or resolved without enforcement action.

Bovine Spongiform Encephalopathy

To maximize efficiency and effectiveness, the ongoing BSE surveillance program was designed to target those cattle populations where BSE is most likely to be found. Cattle that are identified as "clinical suspects", whether categorized as such by sample collectors or post-sampling on the basis of the clinical history associated with the animal sampled, are considered to be of the highest value for ongoing surveillance. In FY 2008, APHIS continued to implement its ongoing BSE surveillance program by testing 42,952 cattle that were 30 months of age or older for BSE. No cattle tested positive for the disease. This achieved the program goal to test approximately 40,000 cattle, 30 months of age or older, annually from the following surveillance stream sources: on-farm, veterinary diagnostic laboratories, public health laboratories, Food Safety and Inspection Service, State-inspected slaughter facilities, and rendering or 3D/4D facilities.

National Animal Identification System

Premises registration, the foundation of National Animal Identification System (NAIS), is critical to rapidly detecting and evaluating the scope of animal disease outbreaks, controlling emergency program budgets, and improving emergency response efficiency. In FY 2008, premises registration continued to be a priority. At the end of FY 2008, all 50 states, 2 U.S. Territories, and several Tribal Nations were participating in the national premises identification registration system, which the Agency supported by providing cooperative agreement funding to States and Tribes. The States and Tribes themselves administered the premises registration process. By the end of FY 2008, there were 485,539 registered premises (approximately 33.8 percent of the national total). Thirteen States have at least 50 percent of their premises registered.

In FY 2008, APHIS had taken steps to increase participation in the second component of the NAIS, animal identification. Three additional manufacturers were authorized to begin producing animal identification number devices for general use by producers in the NAIS. This action brings the total to eight manufacturers producing 25 identification devices (14 radio frequency identification eartags, 2 injectable transponders, 7 visual-only eartags, and 2 slaughter swine premises identification eartags) for official use in the NAIS and animal disease programs. Approximately 5 million animal identification number devices have been distributed to date.

The tracing component of the NAIS continues to advance. Producers already have access to several animal tracking databases (ATDs) for reporting the movement of animals that are shipped from their premises or animals that are moved into their premises. Seventeen organizations are working with USDA to provide ATDs, some of which are at varying levels of being operational and integrated with USDA systems. USDA's Animal Trace Processing System provides the conduit for communicating and receiving information from the ATDs by animal health officials for use during a disease trace-back.

National Animal Health Laboratory Network

In FY 2008, APHIS continued to increase its diagnostic capacity through the National Animal Health Laboratory Network (NAHLN). The NAHLN was established to address significant emergent biological and chemical threats, including foreign animal diseases and bioterrorist threats, to animal agriculture and to a secure food supply in the United States. APHIS and the Cooperative State Research, Education, and Extension Service administer the NAHLN testing and surveillance program which totals 58 laboratories in 45 States.

National Veterinary Accreditation Program

Accredited veterinarians are instrumental in increasing USDA's capability to perform competent health certifications and to maintain extensive disease surveillance and monitoring. The voluntary National Veterinary Accreditation Program (NVAP) certifies private veterinary practitioners to work cooperatively with Federal veterinarians and state animal health officials. The NVAP proposed rule, published in the *Federal Register*, would create a two-tiered system. Category I would authorize veterinarians to perform accredited duties predominantly on companion animals (also defined as animals not including food producing animals, equines, aquaculture, or species that carry APHIS animal program diseases). Category II veterinarians would be authorized to perform accredited duties on all species. The new two-tiered system would replace the current structure under which an accredited veterinarian is authorized to perform accredited duties on all species. The new system would increase the level of training and skill of accredited veterinarians in animal disease surveillance, prevention, and preparedness in the event of an animal health emergency in the United States. In FY 2008, through cooperative agreements with state institutions, several Web-based educational tools have been completed.

2. Animal and Plant Health Regulatory Enforcement

The Investigative and Enforcement Services (IES) staff provides support to all APHIS programs, as well as Customs and Border Protection at the Department of Homeland Security, by conducting investigations of alleged violations of Federal laws and regulations under the Agencies' jurisdiction through appropriate administrative, civil, or criminal procedures. Each year, the demand for IES services continues to grow and the impact upon the human, fiscal, and information technology resources needed to deliver those services continues to increase.

In FY 2008, APHIS personnel initiated a total of 5,995 investigations, a slight decrease over the 6,648 investigations initiated in FY 2007. APHIS completed investigations resulted in 775 warnings, 3,896 civil penalty stipulations, and 185 Administrative Law Judge decisions. As part of the investigative process, APHIS assessed almost \$4.16 million in fines, a significant increase over the \$2.7 million assessed in FY 2007.

APHIS conducted 5,137 investigations involving agricultural quarantine violations (including plant pests and diseases), resulting in 365 warnings, 3,716 civil penalty stipulations, 60 Administrative Law Judge decisions, and over \$2.2 million collected in fines. An example of enforcement includes a consent decision that was issued to Arrow Air ordering, among other things, that the company pay a civil penalty of \$20,000 to resolve allegations involving its (a) failure to provide advance notification of arrival of aircrafts, (b) improper disposal of regulated garbage, and (c) causing the unauthorized movement of items placed on hold prior to inspection. The Agency also provided assistance and facilitated contacts with Immigration and Customs Enforcement on an ongoing investigation where they targeted a company smuggling items out of the United States by means of livestock trailers. Several trailers have been stopped, and as part of the operations over \$1 million in electronics have been seized. In addition, trailers apprehended leaving the United States were found to be transporting a load of sheep that were being illegally exported from the United States.

APHIS conducted 449 investigations involving animal health programs in FY 2008, resulting in 146 warnings, 114 civil penalty stipulations, 19 Administrative Law Judge decisions, and \$200,000 in assessed fines. An example of enforcement in this area is a Decision and Order by Reason of Default issued by an Administrative Law Judge to Leroy Baker, Jr. for 69 counts in violation of the Commercial Transportation of Equines for Slaughter Act and regulations. Mr. Baker was ordered to cease and desist from violating the Act and was assessed a civil penalty of \$162,800.

APHIS conducted 406 Animal Welfare Act (AWA) investigations in FY 2008, resulting in 221 formal cases submitted for civil administrative action, 264 warnings, 73 Administrative Law Judge decisions, and 65 civil penalty stipulations, and \$1.25 million in assessed fines. An example of enforcement of the AWA involved Jerry Korn, owner of For the Birds. Mr. Korn's exhibitor license was revoked as a result of approximately 14 animals dying because of neglect. Mr. Korn continued to exhibit animals despite having his license revoked, and a total of four cases have been filed against him. Three of the cases against For the Birds have been issued a Cease and Desist Order, and a \$57,750 fine has been assessed against the facility. The fourth case is awaiting a hearing.

APHIS conducted 3 investigations involving Biotechnology programs in FY 2008, resulting in 1 civil penalty stipulation, 33 Administrative Law Judge decisions, and \$513,125 in assessed fines. In a high profile case, The Scotts Company LLC agreed to pay a civil penalty of \$500,000 which is the maximum penalty allowed by the Plant Protection Act of 2000 for failure to comply with performance standards and permit conditions for field trials of glyphosate-tolerant creeping bentgrass and improperly moved genetically engineered grass seed. As part of the settlement agreement, within one year Scotts will conduct three public workshops for other potential developers of genetically engineered plants and other interested parties. These workshops will focus on best management practices and technical guidance on the identification and prompt resolution of biotechnology compliance incidents.

3. Biosurveillance

The Biosurveillance program supports development of computer automated communication and information technology systems that accomplishes real-time integration and analysis of human, animal, plant and environmental surveillance information. The program also supports data interpretation analyzed in the context of predictive analysis of the threat environment. The goal of the program is the seamless sharing of analysis products with Federal, State and local partners that will help guide preparedness, outbreak, and event responses.

APHIS continued to improve information collection of offshore pests and diseases as one pillar of its biosurveillance efforts. FY 2008 work centered on building capacity in the Caribbean Basin; progressing towards integration of animal health information with the Systematized Nomenclature of Medicine (SNOMED) information cataloging; and improving the collection of open source pest information gathering and storage techniques. In addition, APHIS is in the process of acquiring technology that can quickly identify unknown potential pathogens from a sample. Such a capability could improve diagnostic capabilities, and in the wake of a bioterrorism incident where the causative agent is unknown, such a capability could speed response and recovery efforts.

During FY 2008 the Agency also established the APHIS Exercise Program, which is used to execute scenarios for emergency response plans for training purposes. Four plant health exercises were planned and executed during the year. The outcomes were used to improve response capabilities and provide feedback to the programs regarding activities and preparedness. APHIS also provided funding for advanced level incident command system training to increase the level of preparedness of our incident management teams.

4. Emergency Management Systems

The Emergency Management Systems program strives to enhance APHIS' animal health emergency preparedness efforts by providing leadership, strategies, and resources for effective and expedient emergency response and continued emergency management activities. The following are selected examples of program accomplishments achieved during FY 2008.

Working Groups

APHIS coordinated and/or participated in many working groups to prepare Federal personnel and resources in the event of an animal emergency. These groups included: the U.S. Avian Influenza Joint Working Group, the Interagency Working Group for the Coordination of Zoonotic Disease Surveillance, the Interagency Bovine Spongiform Encephalopathy Communications Group, and an interagency Agriculture Intelligence workgroup with the Federal Bureau of Investigation and the Food and Drug Administration. In addition, APHIS has oversight of the decontamination/disposal and modeling working groups of the multi-agency Foreign Animal Disease Threat subcommittee.

Modeling

Ongoing modeling activities continue to be a priority for APHIS. The Agency continued to develop banked scenarios within the Joint Modeling Operations Center (JMOC) in FY 2008. JMOC is a collaborative project between APHIS and the U.S. Department of Homeland Security (DHS). The models used to develop the banked scenarios support exercises or simulations. The scenarios provide realistic practice exercises for first responders as well as provide support for both strategic and tactical decision making during the process of developing emergency response plans.

Response Planning and Test Exercises

APHIS utilized its 26 Area Emergency Coordinators (AEC) to actively engage State, Tribal, local governments, and industries in advancing their emergency preparedness and response capabilities. All 50 States have demonstrated a systematic approach to evaluating readiness for preparation, prevention, response to, and recovery from terrorism, major disasters, and any other emergencies threatening or affecting their animal agriculture. APHIS also participated in 97 animal health related test exercises with stakeholders in various States. A rigorous test exercise program provides an opportunity for emergency managers, responders, and other stakeholders to train and practice prevention, protection, response, and recovery capabilities in a realistic environment.

Additionally, to better meet the needs of its stakeholders, APHIS completed the first draft of the "Foreign Animal Disease Preparedness and Response Plan" (FAD PReP). FAD PReP incorporates the principles and applied systems of the National Response Framework, the National Incident Management System, and the National Animal Health Emergency Management System. The plan identifies the veterinary functions and countermeasures necessary to rapidly contain and control foreign animal diseases, and integrate the veterinary functions and countermeasures into emergency management systems and operations. The introductory and general sections of FAD PReP provide summary or overview emergency management information that applies to both notifiable highly pathogenic avian influenza and foot-and-mouth disease (FMD).

In addition to FAD PReP, the Agency has added capabilities to its FMD response planning operations, including updating its FMD Response Plan. In June 2008, APHIS met with the Texas Animal Health Commission to review issues identified in the recent Palo Duro FMD exercise that had been organized by APHIS. APHIS and DHS have also established a tiered incident management philosophy for responding to an FMD outbreak, thereby increasing both Agencies' ability to seamlessly respond to, and mitigate the potential effects of an incident.

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. In FY 2008, efforts by NAHERC staff to promote its mission helped increase enrollment and recognition among the animal health community. As of October 2008, NAHERC received 919 applications through the USAJOBS web site. A total of 606 applicants have qualified for the program. Ongoing recruitment efforts include online advertising, direct mail campaigns, attendance at veterinary conferences/seminars, and networking with animal health professionals.

The National Veterinary Stockpile (NVS) is the nation's repository of veterinary countermeasures for battling catastrophic animal health events. Operational since 2006, the NVS is able to deploy within 24-hours large quantities of countermeasures against the 17 most damaging animal diseases. These countermeasures include supplies, equipment, and vaccines. They also include large numbers of trained, self-sufficient contractor personnel (600 within 72 hours) with equipment to help States that do not have enough of their own personnel to depopulate and dispose of animals and decontaminate facilities. To ensure States are ready to use their countermeasures, the NVS maintains a vigorous outreach program.

Foreign Animal Disease Investigations

During FY 2008, APHIS responded to 311 foreign animal disease (FAD) investigations. The States with the highest number of investigations were Georgia, California, Texas, Tennessee, Florida, Colorado, Iowa, Idaho, Michigan, Illinois, Kansas, Mississippi, and Wisconsin. Some of the animal health incidents and FAD investigations follow.

- In April 2008, cattle with malignant catarrhal fever were found near affected wildebeest in Texas. Depopulation occurred in trace States with indemnity, and quarantine and testing on index premises.
- In May 2008, notifiable low pathogenic avian influenza was found in a commercial broiler multiplier in Arkansas. The flock was depopulated and multiple country trade bans were issued. Due to APHIS efforts, the Agency was able to re-open trade with 49 countries.
- In August 2008, the program discovered swine with potential vesicular lesions at a large Iowa slaughter plant. Successful, rapid joint State, Federal, and industry FAD investigation and communication efforts occurred, which allowed for same day diagnostic results.

5. High Pathogen Avian Influenza (HPAI)

APHIS has both an international and domestic role in controlling the spread of Highly Pathogenic Avian Influenza (HPAI) and reducing its effects to both the economy and public health. Domestically, the Agency is working with other Federal agencies, States, and industry to prevent the introduction of HPAI in U.S. commercial broilers, layers and turkeys, their respective breeders, and the live bird marketing system. Internationally, APHIS is collaborating with organizations such as the World Organisation for Animal Health and the Food and Agriculture Organization to rapidly identify and respond to HPAI to prevent, control, and eradicate avian influenza where it currently exists. APHIS has taken action to prevent the accidental or intentional introduction of HPAI into the United States and ensure preparedness in the event of an outbreak of the disease. APHIS' combined efforts are organized into four functional areas similar to the pillars of the National Strategy for Pandemic Influenza. The combined APHIS efforts take place through three functional domestic efforts and one international effort.

DOMESTIC EFFORTS

APHIS' major domestic activities take place in three functional areas and include (1) expansion of previous surveillance of commercial establishments, live bird markets, and inclusion of upland game birds under domestic bird surveillance and diagnostics; (2) surveillance of wild bird populations that had previously not been monitored within wildlife surveillance and diagnostics; and (3) outreach and education.

Domestic Bird Surveillance and Diagnostics

There are four domestic areas of concentration in commercial surveillance: live bird marketing system (LBMS), upland game, commercial surveillance outside of the LBMS, and assistance to the broiler industry for expansion of HPAI surveillance in commercial operations through the National Poultry Improvement Plan (NPIP). APHIS entered into cooperative agreements with the States previously enrolled in the NPIP and LBMS. APHIS increased the overall number of States with LBMS agreements to 34, number of States with NPIP agreements to 42, and number of States with upland bird agreements to 31.

APHIS' National Veterinary Services Laboratories (NVSL) continues to provide support to approved laboratories that process samples submitted from the HPAI and low pathogenic avian influenza surveillance programs. To meet the demand for reagent production to support the laboratories, NVSL has developed and contracted out the production of the Agar Gel Immuno Diffusion (AGID) test reagents that are used to test for the presence of antibodies to highly pathogenic avian influenza in a bird sample. Reagents for over 2 million AGID tests were shipped in FY 2008. APHIS has also purchased supplies and equipment necessary for the increased on-site reagent production in order to decrease or eliminate the commercial contract in the future.

Wild Bird Surveillance

The wild bird surveillance campaign encourages hunters and bird enthusiasts to report sick birds. APHIS used advertisements in popular hunter magazines and bird enthusiast publications, and public service announcements as the main education and outreach tools for wild bird surveillance. The outreach effort has

expanded the Agency's surveillance through passive efforts of backyard poultry producers, pet owners, bird enthusiasts, and hunters. These passive efforts are increasing the voluntary submission of samples through raising the public's awareness of the disease and how the public can assist in surveillance efforts.

APHIS continued its efforts to prevent the introduction and spread of HPAI through illegal transportation of material. APHIS participated in Operation Egg Bay in which the Agency worked jointly with Ebay to detect the illegal entry of poultry or poultry products into the U.S. This has resulted in approximately 170 investigations and has led to numerous market and port blitzes searching for poultry products.

Outreach and Education

The *Biosecurity for the Birds* program has continued to engage key audiences with its messages and raise awareness about biosecurity. A completely revamped *Biosecurity for the Birds* website went live in April 2008, featuring on-line ordering capabilities and a mirror site in Spanish. The *Biosecurity for the Birds* program has allowed APHIS to reach smaller segments of the avian marketplace including backyard poultry producers, and pet bird owners to educate a wide variety of people on HPAI and practices to reduce the threat of highly pathogenic avian influenza introduction. The campaign is also designed to reach minority and underserved communities such as Hispanic, Vietnamese, Filipino, Native American, and Amish.

INTERNATIONAL EFFORTS

As a lead technical Agency within the integrated U.S. Government response to HPAI worldwide, APHIS is implementing a comprehensive program of international activities directly aligned to the three pillars of the National Strategy for Pandemic Influenza: 1) Preparedness and Communication; 2) Surveillance and Detection; and 3) Response and Containment. USDA's major activities under each of the strategic pillars are summarized below.

Preparedness and Communication

APHIS, in adherence to international guidelines, continues to advise the public and private sector on the risks of HPAI and raise awareness on the potential consequences in the social, political, economic, and public health arenas.

USDA and the Asian Pacific Economic Forum (APEC) along with the World Health Organization, World Organisation for Animal Health (OIE), and Food and Agriculture Organization (FAO) collaborated to deliver a seminar to increase awareness of the importance of maintaining biosecurity within the LBMS. Additionally, a workshop relating biosecurity efforts and their economic benefits to the poultry sector was provided to APEC members. Other live bird market biosecurity workshops were held in Mexico and Colombia. Participants included public service representatives and private industry stakeholders.

USDA, in partnership with the Egyptian poultry private industry, hosted a conference for Egyptian veterinary leaders and policymakers, poultry industry officials, academics, and other interested parties. These workshops were based on the U.S. NPIP.

Surveillance and Detection

As a means to centralize, standardize and manage surveillance and detection efforts worldwide, HPAI activities are now facilitated through the International Technical and Regulatory Capacity Building (ITRCB) group at USDA. ITRCB serves as the clearing house for coordination of USDA technical experts in field offices abroad who are dispatched to strengthen global HPAI surveillance and detection capacities. For example, wild bird migration surveillance activities in Canada, China, Greenland, Mexico and Russia were implemented through the coordination efforts under ITRCB.

To further assist and strengthen surveillance and detection capacities of our partners abroad, USDA has provided Thermocycler, or reagent machines, to Egypt, Kenya, Senegal, and Cote D'Ivoire. USDA has also provided the logistical support for these capacities, including technical training and reagents for specialists from 32 African nations.

Response and Containment

APHIS remains committed in its efforts to safeguard all U.S. interests from the HPAI threat. Given the scope and integration of global markets, APHIS is mindful that the trans-boundary nature of the HPAI threat means that an outbreak abroad could have domestic security implications. Therefore, USDA continues to actively lead and participate in global response and containment efforts.

Through strategic agreements with the OIE and FAO, APHIS provides technical specialists available for deployment to, and coordination of international responses to HPAI outbreaks. APHIS is pivotal in providing human resources and political support to the maintenance of the Crisis Management Center (CMC) at FAO. The CMC is a flexible organization centered on the strategic goal of responding and containing the threats of trans-boundary diseases. This approach reduces the threat of disease outbreaks such as HPAI from becoming a pandemic.

6. Pest Detection

The Pest Detection program seeks to strengthen APHIS' emergency preparedness efforts through the early detection of invasive pests. By discovering newly introduced pests before they have a chance to spread, the Pest Detection program seeks to prevent small outbreaks from becoming full-blown emergencies. APHIS and its State cooperators carry out surveys for pests of regulatory significance through the Cooperative Agricultural Pest Survey (CAPS) program. The CAPS network also allows APHIS to maintain a comprehensive network of cooperators and stakeholders to facilitate its mission of safeguarding America's plant resources.

In FY 2008, APHIS and its State cooperators targeted 268 individual pests in surveys nationally. A total of 48 pests and pathogens were detected (either through CAPS surveys or reported to APHIS) and identified as new or re-introduced to the United States. Thirteen of these were significant and listed as reportable and actionable. Examples include the cyst nematode *Heterodera filipjevi*, which affects grains such as rye and wheat, and palm lethal yellowing phytoplasma, which affects numerous palm species. These detections allow the program or its cooperators to take quick action and prevent large-scale outbreaks. As a result of the palm lethal yellowing phytoplasma detection, for example, Texas State officials quarantined the suspect palms and destroyed the material before the disease could spread. Overall, the program detected 92 percent of the known significant introductions of plant pests or diseases before they spread from the area of original colonization and caused significant economic or environmental damage, exceeding its target of 89 percent.

The program is also continuing to develop commodity and resource-based surveys to monitor for the presence of pests that threaten a specific commodity or resource. These surveys allow the program to target high-risk hosts and commodities, gather data about a larger number of pests specific to a high-risk commodity, and establish better baseline data about pests that have recently been introduced in the United States. In FY 2008, the program and its cooperators conducted 100 commodity-based surveys with approximately 7 pests per survey. Overall, the program targeted 65 high-risk pests for national survey in citrus, oak, and soybean commodities as well as exotic wood boring bark beetles and cyst nematodes. By using the commodity-based approach, the program was able to increase its survey capacity and greatly exceeded its performance target for the number of exotic pests surveyed for (the target was 39). The cost of each individual survey was estimated at \$20,590, \$2,400 below the target. In FY 2008, the program also published reference manuals and survey guidelines for new commodity surveys for grapes, pine, and small grains for use in FY 2009 surveys.

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/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 the appropriate Federal authority, either APHIS or the Centers for Disease Control and Prevention (CDC). Those select agents that pose a significant threat to plant or animal health are covered by APHIS. By identifying and registering these facilities, APHIS is able to monitor and track the movement of select agents.

Entity Registration and Issuing of Permits

At the beginning of FY 2008, there were 75 registered entities on record with APHIS' Agriculture Select Agent Program (ASAP), and three new applications for certificates of registration were submitted during the course of the year. Entities include universities and research institutions. Several individual laboratories that handle select agents may be part of a single entity. Registration can be a lengthy process, sometimes requiring several rounds of data review or, possibly require the applicant to construct new laboratory space. At the close of FY 2008, ASAP was reviewing all three new registrant applications to ensure compliance with Federal requirements.

A certificate of registration is valid only for the specific activities, people, and locations described by the entity in their application. Any changes must be submitted to APHIS or CDC in an amendment request (e.g., changes in personnel, floor plan of laboratory where the agent is stored, specified activity, etc.). During FY 2008, ASAP received 1,514 requests for amendments from APHIS-registered entities. Each request was reviewed and processed. Additionally, ASAP reviewed and provided responses to 345 requests made through CDC's Select Agent Program (Division of Select Agents, DSAT) regarding registrations, amendments, and renewals pertaining to USDA-only agents that are held by entities registered with DSAT.

APHIS processed and issued 368 import select agent permits during FY 2008. Of the 368 permits issued, 59 were new applications, 44 were amended applications, and 265 were renewed permit applications.

Collaborative Efforts

In September 2008, APHIS, CDC, and the Federal Bureau of Investigation entered into a Memorandum of Understanding with the Department of Homeland Security (DHS), agreeing to provide DHS information on entities registered with select agents. Through this action, APHIS is helping DHS implement the requirements of their Critical Infrastructure Protection program.

APHIS also has entered into an agreement with CDC to share data entry systems into the National Select Agent Registry (NSAR) and continues to develop work flows and processes that are consistent between both agencies. APHIS will continue working with CDC to obtain a secure connection to their system, transfer data from the APHIS system to CDC, and fund future maintenance and development costs for NSAR.

In addition, during FY 2008, APHIS drafted a compliance inspection program plan that, when implemented, will allow for more frequent unannounced inspections of registered entities and aid them in achieving and maintaining compliance with select agent regulations. APHIS and CDC are also working on a joint workshop for registered entities so that critical information on oversight of select agents is shared and issues of concern are discussed.

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 low pathogen 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 of animal disease events. The Wildlife Services program protects American agriculture from predators through identification, demonstration, and application of wildlife control measures.

Selected Examples of Recent Progress:

1. Aquaculture

APHIS' aquaculture program strives to protect domestic aquaculture production, which is worth over \$1 billion annually in the United States. APHIS conducts activities that will prevent the introduction or spread of reportable aquatic animal pathogens into farmed populations; conducts activities in collaboration with other relevant agencies and stakeholders to prevent the spread of aquatic animal pathogens into wild aquatic animal populations; and works to reduce conflicts between wildlife and aquaculture production.

Aquaculture Health

During FY 2008, APHIS continued its efforts to control Viral Hemorrhagic Septicemia (VHS), especially in the Great Lakes Region. VHS has caused mass mortalities in U.S. fish populations and has affected numerous wild species not previously known to be susceptible to the disease. Of greatest concern is that this virus strain can infect economically important farm-raised fish such as catfish, the most valuable aquaculture species in the United States. During FY 2008, APHIS implemented cooperative agreements with State agencies to conduct surveillance on wild populations in 19 States both bordering and in close proximity to the Great Lakes. APHIS also developed an education and outreach campaign focused on aquaculture facility biosecurity issues and vectors of disease transmission not easily controlled by regulatory activities. Additionally, APHIS invested in wet lab infrastructure at the National Veterinary Services Laboratories in Ames, Iowa, so that it can conduct confirmatory testing and other activities related to the aquaculture program.

During FY 2008, APHIS completed the National Aquatic Animal Health Plan (NAAHP) to protect U.S. wild and cultured aquatic animal resources from foreign pathogens; support effective aquaculture; achieve efficient and predictable commerce; and meet national and international trade obligations. The agencies involved in developing the NAAHP include APHIS, the Department of the Interior's Fish and Wildlife Service, and the Department of Commerce's National Oceanic and Atmospheric Administration's National

Marine Fisheries Service. APHIS is in the final stages of publishing a notice of availability for the NAAHP, which will outline a national framework for aquatic animal health issues.

Wildlife Management

Some of the Agency's activities include: recommending and/or providing wildlife exclusion or scaring devices; conducting surveys of fish-eating birds to determine population distribution and movements; conducting wildlife food-habits studies; working on-site with producers to set up integrated control programs to reduce fish losses from birds and other wildlife; and working with the Department of the Interior's Fish and Wildlife Service and state wildlife agencies to jointly develop bird damage-management plans to protect aquaculture products while ensuring the continued viability of bird populations.

In FY 2008, APHIS provided wildlife damage management assistance to aquaculture producers in 14 states. This included assistance to commercial anglers, baitfish and crawfish producers, catfish farmers, fish hatcheries, sport fish producers for pond stocking, and tropical fish producers. The Agency also managed wildlife predation 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. This industry is valued at more than \$600 million per year (NASS 2000) in the United States, with nearly 65 percent of catfish production occurring in Mississippi. The Agency's National Wildlife Research Center (NWRC) showed that the damage impact of the double crested cormorant to the industry ranged from \$9.8 to \$13 million. To further prevent damage in FY 2008, the Agency and cooperating producers dispersed 325,578 cormorants and moved 91 cormorant roosts, of which 150,000 cormorants and 40 roosts were in Mississippi, from nearby aquaculture facilities.

2. Biological Control

This program uses biological control (biocontrol) organisms, such as natural enemies, to safeguard America's agricultural production and natural ecosystems from economic losses caused by insects, other arthropods, nematodes, weeds, and diseases of regulatory significance, while minimizing adverse environmental impacts. The organisms are part of an integrated pest management strategy to mitigate the impacts of exotic, invasive insect pests, weeds, and plant pathogens, while minimizing the impacts of control tactics for these pests on the environment and non-target organisms. Biocontrol agents become self-sustaining, and involve little or no cost once they are successfully introduced. APHIS uses biocontrol to target species for which other control methods (such as chemical or cultural control) are impractical.

The program operates biocontrol facilities that produce agents for release and distribution against six pests: hemlock woolly adelgid (HWA), winter moth, pink hibiscus mealybug (PHM), imported fire ants (IFA), tropical soda apple (TSA), and yellow starthistle. These invasive pests have caused significant environmental damage by competing with local flora, overtaking pasture land, poisoning livestock, and destroying crops. In FY 2008, the program developed ten additional biocontrol agents and transferred the technology to State cooperators to manage. The target weeds or pests include purple loosestrife, saltcedar, giant salvinia, hydrilla, leafy spurge, Russian knapweed, garlic mustard, TSA, and PHM.

In FY 2008, this program released 2.6 million laboratory-reared biocontrol agents against PHM. This compares to 1 million released in FY 2007. In addition, the program reared approximately 4 million biocontrol agents in the laboratory against PHM. This compares to 2.7 million reared in FY 2007.

In FY 2008, APHIS worked with cooperators to address 54 invasive insect and weed pests. Thirty-six new species were identified as possible control agents and are being evaluated for use against invasive pests such as kudzu, HWA, PHM, swallow wort, winter moth, TSA, IFA, red palm mite, Asian citrus psyllid, Russian knapweed, Canada thistle, yellow starthistle, Dyer's woad, and yellow toadflax. The development of these new agents will significantly reduce the economic and environmental impact of these invasive

species. Also in FY 2008, the Agency explored rearing and release technology for 29 potential biocontrol agents. This technology allows the agents to be bred efficiently and released with maximum benefits to the environment. The technology can then be transferred to the States for use in their own sustainable biocontrol projects. The program also continues to identify potential biocontrol agents in foreign countries for consideration against pests of regulatory concern occurring in or near the Continental United States or American territories. Potential agents are thoroughly evaluated to ensure that they will not affect non-target species.

3. Brucellosis

The Brucellosis Eradication Program's goal is to limit the potential economic losses to animal agriculture and avoid the health threat that the disease poses. Brucellosis is an infectious and contagious disease caused by bacteria of the genus *Brucella*. It is a zoonotic disease, meaning it can affect both animals and humans. Although brucellosis can infect other animals, the main threat of disease is to domestic cattle, bison, and swine herds. Humans, infected incidentally by contact with infected animal tissues or ingestion of dairy foods made from unpasteurized milk from infected animals, may develop a severe intermittent fever, general malaise, and muscle pain.

For the first time in the 74-year history of the Brucellosis program, all 50 States, Puerto Rico, and the U.S. Virgin Islands were simultaneously designated brucellosis Class Free for a brief period in FY 2008. This accomplishment was made possible thanks to the diligent and cooperative efforts of Federal, State, and industry partners. This milestone occurred when Texas was declared brucellosis free on February 1, 2008. However, in May 2008, the State of Montana disclosed a second brucellosis affected cattle herd within a twenty-four month period, resulting in its reclassification to brucellosis Class A State status on September 3, 2008. Subsequently, FY 2008 began and ended with 49 States and three Territories classified as brucellosis Class Free status and one State classified as brucellosis Class A State status. All States except Texas remain classified as Stage III (Free) for swine brucellosis; Texas remains classified at Stage II.

The national herd prevalence rate for bovine brucellosis was 0.0003 percent in FY 2008. Three new brucellosis affected cattle herds were disclosed in FY 2008. The first herd, a research herd, was disclosed in Louisiana in January 2008, pursuant to herd certification testing. This research herd is under quarantine and a strict herd plan, which includes quarterly herd testing. The second brucellosis affected herd was disclosed in Montana in May 2008, pursuant to herd testing as part of Montana's Yellowstone Area Brucellosis Prevention and Surveillance Herd Management Plan activities. The affected herd was depopulated and a thorough epidemiology investigation completed. Since this was the second brucellosis affected herd disclosed in Montana within 24 months, Montana no longer met the requirements for Class Free status and was subsequently reclassified to Class A State status. The third brucellosis affected herd was disclosed in Wyoming in June 2008, pursuant to first point testing at the market. The affected herd was depopulated and a thorough epidemiologic investigation conducted; no additional brucellosis affected herds were found. Both Wyoming and Louisiana continue to maintain Class Free State status provided no additional brucellosis affected herds are disclosed within 24 months of their initial brucellosis affected herd.

Maintaining brucellosis State status focuses on continual surveillance activities. Two primary surveillance activities are conducted for bovine brucellosis: Market Cattle Identification (MCI) testing; and Brucellosis Milk Surveillance Testing (BMST). During FY 2008, APHIS tested approximately 7.349 million head of cattle under the MCI surveillance program. BMST surveillance is conducted in all commercial dairies – a minimum of two times per year in Class Free States and a minimum of four times per year in Class A States. Approximately 138,000 BMSTs were conducted in FY 2008; approximately 110 of those BMSTs yielded suspicious results after repeat screening. All suspicious BMSTs were confirmed negative for brucellosis. There were approximately 3.799 million calves vaccinated for brucellosis in FY 2008.

Feral swine infected with brucellosis continue to pose a risk to transitional swine herds in several states. Transitional herds are made up of captive feral swine or swine that have reasonable opportunities to be

exposed to feral swine. Three brucellosis affected swine herds were depopulated in FY 2008. There are two main swine surveillance activities directed at validating States' swine brucellosis status. These activities include Market Swine Testing (MST) and herd validation (required of all commercial herds in some States that have regulations that are more restrictive than the Federal regulations). There were approximately 440,215 swine tested in the MST surveillance program in FY 2008. Approximately 114,905 additional swine were tested on farm, mainly for movement, herd validation, and exhibition purposes.

APHIS continues to recognize the importance of cooperating with the Federal and State agencies in the management of the wild bison and elk in the Greater Yellowstone Area (GYA). The Secretaries of the U.S. Department of Agriculture and the U.S. Department of the Interior (DOI) agreed on a new Greater Yellowstone Interagency Brucellosis Committee Memorandum of Understanding (MOU). The updated MOU has been resubmitted and is currently under review for concurrence by GYA Governors.

In FY 2008, APHIS continued its involvement in several on-going developmental projects such as the Bison Quarantine Feasibility Study, brucellosis transmission studies in bison and elk, and immunocontraceptive studies. Working closely with DOI's National Park Service, APHIS has been able to both maintain a viable bison population and prevent transmission of brucellosis to domestic livestock. APHIS personnel assisted with Interagency Bison Management Plan (IBMP) management operations. In FY 2008, there were 135 hazing operations performed. Capture operations resulted in the capture of 1,794 bison. APHIS personnel assisted in the transport of 1,276 bison to slaughter and the distribution of the meat to over 60 Native American organizations and food banks.

The IBMP partner agencies are committed to the adaptive management framework of the IBMP. In FY 2008, the partners committed to a schedule of multiple working meetings between August and December 2008. The agendas of these meetings are designed so that partner agencies can effectively deliberate on recent recommendations by the U.S. Government Accountability Office; assess the effectiveness and outcomes of IBMP management activities (highlighting winter 2007-2008); and considering prevailing conditions, develop and incorporate short- and long-term adaptive management adjustments to the IBMP for winter 2008-2009 and beyond.

The Bison Quarantine Feasibility Study has progressed to a stage where it is ready to translocate its first group of brucellosis free Yellowstone bison to a suitable location outside the GYA. Five Native American organizations have applied to receive the first group of 22 cows, 16 calves, and 4 bulls as a first step in conserving valuable Yellowstone bison genetics on land that has been removed from the GYA.

APHIS is working closely with all the GYA States, which include Idaho, Montana, and Wyoming, to assist them in maintaining or regaining their brucellosis Class Free classification. GYA States are proceeding, in consultation with APHIS, with the development and implementation of individual livestock herd and individual elk herd unit plans to mitigate potential transmission of brucellosis from elk or bison to cattle.

4. Chronic Wasting Disease

The Chronic Wasting Disease (CWD) program's goal is to eradicate the disease in domestic livestock, and control the disease in wildlife in order to minimize the threat of disease spread to domestic livestock. Chronic wasting disease 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.

APHIS works closely with States, Tribes, other Federal agencies, and industry stakeholders to maintain a coordinated approach to CWD. State and Federal agriculture agencies are responsible for safeguarding the health of domestic livestock. State and Federal wildlife management agencies are responsible for the management of free-ranging cervids. When native wildlife species 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 depending on the individual State. In

preparing for the implementation of a regulated national CWD program, many States have established CWD surveillance and/or herd certification programs (HCP) and import requirements for captive cervids.

APHIS developed a national HCP in consultation with States, the farmed cervid industry, and the United States Animal Health Association. The rule establishing the HCP has been challenged, resulting in further program implementation delays and substantive changes needed to the rule. APHIS has drafted a new proposed supplemental rule that is expected to be published for public comment in FY 2009. The proposed HCP will recognize existing State programs that have the necessary authorities and meet or exceed national program standards for surveillance, inventory, identification, and fencing.

The following are selected accomplishments achieved during FY 2008.

Farmed cervids

Farmed cervid testing increased in FY 2008 to 20,777 from 17,189 tests conducted in FY 2007. The increase may reflect mandatory state program testing due to large numbers of deer dying from epizootic hemorrhagic disease; the farmed captive deer industry growth; and many state programs becoming more restrictive in terms of testing required for state program participation and movement.

On August 25, 2008, APHIS' National Veterinary Services Laboratory confirmed CWD in a 3-year-old doe at a farmed white-tailed deer facility in Kent County, Michigan. This was the first confirmed case of CWD in Michigan. The remaining animals on the property were depopulated by APHIS on August 26, 2008. A second positive herd was discovered in Portage County, Wisconsin, and was confirmed in early October 2008. This is a captive hunting preserve with about 150 white-tailed deer. At the end of FY 2008, only Wisconsin and Colorado were known to have any positive captive herds.

Wild cervids

During FY 2008, APHIS funded the testing of approximately 100,000 wild cervids through cooperative agreements. In FY 2008, APHIS provided \$5 million to State wildlife agencies and \$600,000 to Tribes in support of their CWD activities. Forty-eight states received FY 2008 funding and two states extended their FY 2007 agreements. In addition to an ongoing cooperative agreement with the Native American Fish and Wildlife Society, over 30 individual Tribes received CWD assistance.

APHIS Wildlife Services' National Wildlife Research Center (NWRC) continued to focus on the interface between free-ranging and captive cervids. Through novel research—including development of live-animal tests, vaccines, and techniques to improve separation and prevent transmission—NWRC is helping to provide needed information used to address issues associated with CWD. NWRC scientists continued to explore a CWD vaccine; evaluate the feasibility, practicality, and usefulness of a rectal biopsy as a live animal test for CWD in elk; assess the role of predators and scavengers in CWD epidemiology; and develop methods to detect CWD prions and decontaminate infected sites.

5. Cotton Pests

The Cotton Pests program works to address boll weevil and pink bollworm (PBW), both of which cause damage to cotton crops by feeding on cotton buds and flowers. The role of the Cotton Pests program is to eradicate the boll weevil and pink bollworm from all cotton-producing areas of the U.S. and northern Mexico in cooperation with States, the cotton industry, and Mexico.

Boll Weevil

Since the cooperative Boll Weevil Eradication Program began in 1993, APHIS has demonstrated great proficiency in aggressively eradicating a pest that has caused more than \$22 billion in crop loss and control costs.

The Boll Weevil Eradication Program continues to make impressive progress, combining extensive trapping with the prudent use of pesticides to treat only infested cotton fields. At the close of the 2008 season, weevil-free acreage had increased from 94 to 96 percent. Approximately 98 percent of all cotton acreage is expected to be weevil-free by the end of FY 2009, with 99 percent projected for 2010, and complete eradication expected by the end of FY 2011. Nationwide, the boll weevil has been eradicated from over 15 million of the 16 million acres of cotton produced. Cotton producers are enjoying lower production costs, increased yields, and less dependence on chemical pesticides. In FY 2008, as a result of program operations, Mississippi moved into the post-eradication phase, and Arkansas, Tennessee, and Missouri moved to within one season of becoming weevil-free. Damaging tropical storms in the Gulf of Mexico delayed program progress in the coastal areas of Texas. However, APHIS expects that all remaining infestations will be eliminated by 2011.

Pink Bollworm

The PBW is one of the most destructive pests of cotton in many of the major cotton-growing regions of the world. The goal of the PBW eradication program is to eradicate the PBW from the infested areas of the United States, essentially the southwestern portion of the Cotton Belt. Two key operational elements of the program include *Bacillus thuringiensis* (Bt) transgenic cotton and sterile moth releases.

The PBW costs cotton growers approximately \$21 million annually in control costs and lost yield. The sterile PBW moth release program, which began in 1970, has prevented this pest from becoming established in California's San Joaquin Valley. This same technology has been incorporated into the area wide eradication program in Texas, New Mexico, and Arizona.

The program encourages growers to plant Bt transgenic cotton varieties as they provide an exceptional level of control for PBW. To reduce the development of insect resistance to Bt cotton, the program maintains full compliance with the Environmental Protection Agency's (EPA) Refuge Requirements. During the 2008 season, areas within the program were authorized by EPA and State agencies to use up to 100 percent Bt cotton in combination with the release of sterile moths. The program released sterile moths on all cotton fields in the eradication region, including those growing Bt transgenic and conventional cotton. This component is particularly important as a final control measure to achieve eradication. PBW sterile moths produced in the PBW-rearing facility in Phoenix were aurally released at a rate of 100 moths per acre per day, beginning at the four-leaf growth stage and until defoliation or harvest.

In FY 2008, PBW populations continued to decline as a direct result of APHIS' eradication program, with infestation levels within the program areas dropping by more than 95 percent over the last two to three years. In Texas, relatively light PBW infestations occurred around Corpus Christi and in the southern High Plains. These infestations should decline, and eventually be eliminated, as eradication is accomplished in the program area around El Paso. In FY 2008, APHIS met its performance targets of eradicating PBW from 45 percent of the infested cotton acreage and bringing 100 percent of the total PBW infested acreage into the eradication program. APHIS expects to eradicate this pest by FY 2013.

6. Emerging Plant Pests

The Emerging Plant Pests (EPP) line item was established to provide APHIS with the infrastructure flexibility to initiate and continue urgent plant pest and disease programs that are or have been partially funded through emergency funds.

For FY 2008, the program's performance target was that no more than one of the five main EPP target pests or diseases (Citrus Health Response Program, Emerald Ash Borer (EAB), Glassy-winged Sharpshooter, Asian Longhorned Beetle, and *Phytophthora ramorum*) would escape the quarantine area and cause significant economic or environmental damage. The Agency met this goal, as only the EAB

program experienced outbreaks outside of the quarantine area that caused significant damage. In August 2008, the ALB program experienced an outbreak in Massachusetts which was outside of the quarantine area, but no significant economic or environmental damage had occurred when the fiscal year closed.

Citrus Health Response Program

The goal of the Citrus Health Response Program is to sustain the United States' citrus industry, maintain growers' continued access to export markets, and safeguard citrus-growing States against a variety of citrus diseases and pests. Because eradicating citrus canker in Florida is no longer considered feasible, APHIS is working closely with regulatory officials from Florida and other citrus-producing States, industry stakeholders, university scientists, and scientists with USDA's Agricultural Research Service to develop industry production guidelines and best practices for fruit and nursery stock production to prevent the spread of citrus canker and other citrus diseases.

During FY 2008, APHIS implemented new regulations governing the movement of fresh citrus fruit, nursery stock and other citrus products to prevent the spread of citrus canker and citrus greening outside of Florida. APHIS further modified the regulations on November 19, 2008, with a final rule for citrus canker that requires treatment and inspection of fruit for canker lesions at packinghouses but discontinued the need for pre-harvest surveys to show grove freedom of citrus canker. The prohibition of movement to citrus-producing States remains in effect. APHIS prepared a detailed risk management analysis, economic impact study, and environmental assessment to support these rule changes. During the 2007-2008 shipping season, 17.6 million bushel cartons of fresh citrus fruit moved to non-citrus States, while 14.7 million bushel cartons were exported outside the United States. Digital cameras and immunoassay test kits now are being used to quickly identify citrus canker lesions found during packinghouse inspections. No citrus canker detections occurred outside of Florida.

In FY 2008, APHIS' Federal Order on citrus greening disease was revised to include provisions governing the movement of host plants of the Asian citrus psyllid (ACP), an insect vector for greening, from the entire States of Florida and Hawaii, the Commonwealths of Guam and Puerto Rico, and portions of Alabama, California, Georgia, Mississippi, South Carolina, and Texas. These host plants must be treated with an approved insecticide, inspected and found free of ACP as a condition for interstate movement. The program intensified surveillance activities in all citrus-producing States targeting citrus canker, citrus greening, citrus variegated chlorosis, citrus nematodes and other exotic pests in both commercial citrus groves and high risk areas such as residential properties, nurseries, and packing facilities. Greening now is found in 32 Florida counties and covers most of the area where commercial citrus is produced. Greening also was detected for the first time in Louisiana. Additional greening surveys were performed in Texas with no detection of the disease. ACP were found in Alabama, California, Georgia, Louisiana, Mississippi, and South Carolina. Citrus psyllids were also detected in Mexico for the first time, and APHIS is providing technical assistance and funding to Mexico to help prevent their movement into new areas of the United States.

Emerald Ash Borer

APHIS continued to address Emerald Ash Borer (EAB) through intensive survey and regulatory activities. In addition, APHIS conducted an outreach campaign to raise public awareness of EAB issues and solicit the public's help in detecting EAB infestations. In FY 2008, this program used a new trap and lure for survey and detection activities. This trap presents significant cost efficiencies compared to the girdled trap trees used in previous years. The new traps cost approximately \$125 each, while girdled trap trees cost approximately \$300 each. Traps were deployed in a grid-based survey around the generally infested areas in Michigan, Illinois, Indiana, Ohio and Pennsylvania, and at high-risk sites across the country such as sawmills, campgrounds, and highway rest areas. Surveys revealed EAB infestations in Missouri, Virginia, and Wisconsin for the first time, as well as expansion of the pest in Michigan's Upper Peninsula. Each of these detections resulted in APHIS' expansion of the area(s) quarantined for EAB, which is now 185,596 square miles. To prevent further artificial spread of the pest, the program regulates EAB host materials

such as logs, firewood, and nursery stock. In FY 2008, APHIS maintained 853 compliance agreements with businesses that deal with host materials. Regulatory personnel conducted numerous special operations, primarily associated with non-commercial firewood and logging activities, and included large public venues and ferry operations, which were excellent opportunities for public outreach and education. EAB program management staff also held EAB clinics and workshops for educational purposes, inviting state, tribal, municipal, and industry participants. The EAB program continues to support efforts to develop and deploy biological control agents for this pest, focusing on three parasitic wasps that have been identified as having potential to reduce EAB populations. Current biological control efforts include trial releases of the wasps, the construction of a rearing facility for the wasps in Brighton, Michigan, and refinement of rearing and release protocols.

Glassy-Winged Sharpshooter

The Glassy Winged Sharpshooter (GWSS) is a vector for Pierce's Disease (PD), which poses a significant threat to California crops. Since FY 2000, APHIS and the California Department of Food and Agriculture (CDFA) have conducted a research and control program to reduce GWSS populations without significantly impacting agricultural production areas. In FY 2008, APHIS continued working with the CDFA on a Statewide management program to minimize the impact of PD and its vectors, and reduce GWSS populations without significantly affecting agricultural production areas. Since FY 2003, this program has contained the GWSS within nine California counties (Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Tulare, and Ventura) where it is established. In FY 2008, APHIS and CDFA conducted area-wide management programs in major citrus-producing areas of Kern, Riverside, and Tulare Counties. These programs were highly successful at suppressing GWSS populations and maintaining rejections of bulk citrus at low levels. These low rejection levels enabled citrus growers to comply with State regulations and move their products to packing houses for export. Overall in FY 2008, the program applied area-wide treatments to more than 12,000 citrus acres in Kern, Riverside, and Tulare Counties. State officials continued to inspect nursery stock for GWSS life stages at originating and destination counties. Also in FY 2008, 37 GWSS interceptions were made on nursery shipments, with 53 egg masses and three shipments that had emerging GWSS nymphs that would have established populations in uninfested areas of California. This data compares to 49 interceptions in FY 2007 with 64 egg masses. These interceptions and egg mass finds prevent the GWSS from becoming established in non-infested areas, where mitigation efforts would be costly and time-consuming.

Asian Longhorned Beetle

The Asian Longhorned Beetle (ALB) is a devastating pest of hardwood trees. It was first detected in Brooklyn, New York, and was later found in other areas of New York, as well as in Illinois and New Jersey. It has the potential to cause almost \$800 billion in value losses to urban trees in the United States. In April 2008, APHIS declared the ALB infestations in Illinois and Hudson County, New Jersey, eradicated. The current New Jersey outbreak covers parts of Middlesex and Union Counties in New Jersey, as well as Staten Island in New York City (NYC). The program addressed this outbreak by conducting surveys and treatments in all areas. The New York quarantine covers most of Manhattan, and parts of Brooklyn and Queens. It also covers two areas of Long Island: Islip and an area along the Nassau-Suffolk County line. The program continued treatments in Brooklyn and Queens, and conducted ground surveys throughout the infested area in NYC and on Long Island. In August 2008, an ALB infestation was detected in Worcester, Massachusetts. This was the first find in the State, and was most likely a separate introduction from other ALB detections. In response to this infestation, the program began initial surveys and established a 62 square-mile quarantine area.

Potato Cyst Nematode

Potato 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 continuing their efforts towards the eradication of PCN. The Idaho PCN program

encompasses extensive soil survey and fumigation of eight infested fields (approximately 1,100 acres) in Idaho. These fields, along with fields that are associated with these affected fields, have been under Federal quarantine since 2006 to prevent the spread of nematodes.

In FY 2008, the PCN eradication program conducted various surveys within the State of Idaho that support the program's detection, delimiting, and eradication efforts. More than 100,000 soil samples (doubled from FY 2007 sampling efforts) have been collected and processed in 2008 -- all with negative results.

APHIS also continued the National PCN detection survey in Idaho, and in 28 other States. Nearly 59,000 soil samples were collected and processed, and PCN was not found to be present outside of the eight fields in the current eradication zone.

Phytophthora ramorum

Phytophthora ramorum (*P. ramorum*) is a plant pathogen that causes Sudden Oak Death and several other plant diseases. This program works to prevent the artificial (human-assisted) movement of *P. ramorum*. In FY 2008, APHIS continued a regulatory and control program to prevent the artificial spread of *P. ramorum* from 14 infested California counties and reduce the infection level in nurseries. To achieve this goal, the Agency works with officials in California, Oregon, and Washington to establish quarantines, and require nursery inspections before host plants may be shipped interstate. These activities minimize the artificial spread of *P. ramorum* through nursery shipments, while allowing healthy plants to move. In FY 2008, this program worked with the nursery industry to reduce the presence of the disease in the nursery system and also reduce the quarantine area. This program's quarantine measures have minimized its artificial spread through nursery shipments, while allowing the interstate movement of healthy plants. However, the program did detect one infested nursery in Curry County, Oregon. Also in FY 2008, APHIS continued to support the development, communication, and implementation of best management practices in nurseries within California and Oregon. This effort will help nurseries reduce the risk of *P. ramorum* introduction and establishment. To date, there is no evidence of any disease caused by *P. ramorum* being established outside of the quarantine area as a result of artificial movement. Since FY 2002, this program has protected the nation's landscape and has safeguarded several industries from enormous potential losses.

Karnal Bunt

To address Karnal Bunt, APHIS works with trading partners to assure them that this wheat disease presents only a grade and quality issue, and not a phytosanitary issue requiring quarantines. In Arizona and California, the program is progressing toward de-regulating several additional areas. In Texas, all samples from the regulated area and from the national survey tested negative. If the program achieves the same results in FY 2009, Texas will be able to de-regulate the remaining 18,000 acres.

Light Brown Apple Moth:

Light Brown Apple Moth (LBAM) is a devastating invasive pest that multiplies rapidly and can attack more than 2,000 types of plants and trees found throughout the United States. If it were to become established, LBAM could cause California an estimated \$160 million to more than \$2 billion in crop damage and control costs annually.

In FY 2008, APHIS spent approximately \$500,000 from the EPP line item to support LBAM eradication efforts. These funds supplemented approximately \$35 million in emergency funds from the Commodity Credit Corporation to continue LBAM eradication efforts in California. The pest has now been detected in 15 California counties: Alameda, Contra Costa, Los Angeles, Marin, Monterey, Napa, San Francisco, San Luis Obispo, San Benito, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Solano, and Sonoma. In June 2008, APHIS and the California Department of Food and Agriculture reprioritized the eradication strategy to employ several pest management techniques simultaneously to more effectively combat LBAM

infestations. During FY 2008, the program continued statewide surveys, applied treatments to heavily infested areas, continued enforcing State and Federal regulations, and enhanced public outreach efforts. In addition, the program carried out a national survey in 47 States. This survey found no detections outside the regulated areas in California and Hawaii. (LBAM was first reported in Hawaii in the late 1800s. Currently, the entire State is regulated because of the lack of data on the distribution of LBAM within the State). Also in FY 2008, the program conducted mating disruption and insecticidal control activities to manage LBAM populations. The mating disruption activities used the LBAM pheromone delivered by twist ties or other ground-based applications in selected locations. The insecticidal control activities used targeted ground applications of organic insecticides (e.g., Spinosad, *Bacillus thuringiensis*) on infested sites with high larval populations. In addition, the program is evaluating several biological control agents, including parasitic wasps, to suppress LBAM populations. The program is also accelerating the development of large-scale, mass rearing of sterile insects to support LBAM eradication. Scientists will conduct a demonstration trial of this sterile insect technology in the spring of 2009, and expect to begin releasing 500,000 sterile LBAM per week as a pilot program shortly thereafter.

Other Plant Pests and Diseases:

The EPP line item also includes a nominal amount of funds to control or eradicate miscellaneous plant pests and diseases that are not specifically identified elsewhere in the APHIS budget. In FY 2008, APHIS conducted activities to control and/or eradicate *Sirex noctilio*, hydrilla, and several miscellaneous plant pest and diseases. To address *Sirex*, the program continued surveys in Maryland, Michigan, New Hampshire, New Jersey, Ohio, Vermont, and West Virginia to further define the pest's distribution. In addition, the program continued field and laboratory studies to evaluate the nematode *Beddingia siricidicola*, as a biological control agent of *Sirex noctilio*. In September 2008, the program began controlled releases of this nematode in Pennsylvania and New York. Analyses of these releases are in varying stages of completion. APHIS also used approximately \$370,000 in EPP funds to continue hydrilla control projects near the border of Virginia and North Carolina, approximately \$230,000 on Olive Fruit Fly control activities in California, and approximately \$420,000 among several programs to control or eradicate miscellaneous plant pests and diseases not specifically identified elsewhere in the APHIS budget.

7. Golden Nematode

The golden nematode is one of the world's most damaging potato pests. APHIS works to prevent potatoes and other solanaceous plants from being infested with golden nematode and to control the pest in known infested areas. First detected in the United States in 1941 in Nassau County on Long Island, New York, it was subsequently found in eight other New York counties. For over 60 years, an effective Federal and State quarantine program has confined the pest to nine counties in New York. If golden nematode were to become more widely established in U.S. potato, tomato, and eggplant production areas, annual crop losses could reach \$4.8 billion. The program facilitates international and interstate agricultural shipments by strictly enforcing quarantine requirements and maintaining a risk-based management system.

The golden nematode was first detected in the United States in Long Island, New York in 1941. Through an effective regulatory and control strategy, the program has successfully confined the infestation to 6,185 acres in nine counties of New York State. Many countries prohibit the importation of potatoes and other commodities from regions infested with golden nematode. The cooperative State-Federal program has protected the United States and nearly all of New York State from trade restrictions. Annually, potato, tomato, and eggplant crops contribute \$80 million to New York's economy and \$5.7 billion to the nation's economy.

The Golden Nematode program conducts annual State-wide surveys of all potato production areas in New York, enabling the export and interstate shipment of a variety of agricultural products. In FY 2008, the program collected 10,406 soil samples from 4,013 acres in New York. There were no new detections of the nematode in 2008. The APHIS Golden Nematode laboratory is also providing assistance to other eastern States by examining soil samples collected by those States to confirm the absence of potato cyst nematodes.

Control of Golden Nematode is achieved through the systematic growing of nematode resistant potato varieties which is mandated by New York Department of Agriculture and Markets. APHIS conducts soil surveys to ensure the crop rotation system is effective. Development of new nematode resistant potato varieties is supported by funding from APHIS, USDA's Agricultural Research Service (ARS), New York State and Cornell University. Growers now have 45 nematode resistant potato varieties from which to choose. There are currently no potato varieties that have full resistance to Golden Nematode race Ro2. Cornell University and USDA ARS are conducting research to develop Ro2 resistant varieties.

In FY 2008, three potato fields in upstate New York known to be infested with Golden Nematode Ro2 were successfully fumigated. APHIS provided New York funding for the treatments through a cooperative agreement.

Additionally, APHIS prevents golden nematode movement by strictly enforcing regulations that require cleaning of all equipment that comes into contact with soil in infested areas. The program works cooperatively with growers and the State to ensure farm equipment, potato shipments and all regulated articles are treated and certified to prevent nematode spread while allowing production to continue with minimal interruption. In FY 2008, the program exceeded its target for regulatory treatments by conducting regulatory treatments on 2,021 pieces of used farm equipment.

8. Grasshopper and Mormon Cricket

Grasshoppers and Mormon crickets are natural components of the rangeland ecosystem. However, their populations can reach outbreak levels and cause serious economic losses, especially when accompanied by a drought. Land managers utilize integrated pest management techniques including grazing management, cultural and mechanical methods, prescribed burning, and other techniques to dampen the growth of grasshopper populations and prevent outbreaks.

Despite the best land management efforts, grasshopper infestations often cover vast acreage, and individual landowners may not have the resources to control these infestations and therefore, must rely on Federal support. The Plant Protection Act authorizes APHIS to cooperate with Federal land management agencies, State agencies, and private landowners to control grasshoppers and Mormon crickets on western rangelands. The Plant Protection Act also specifies that APHIS pays for the full cost of conducting treatments on Federal lands, 50 percent of the cost on State lands, and one-third of the cost on privately owned lands. Surveys are an essential first step in determining the species and extent of grasshopper infestations and whether there is a need for suppression treatments. APHIS conducts surveys in the spring to pinpoint areas that may need treatments later in the season. These surveys begin in February or early March, when Mormon crickets and grasshoppers start to hatch. APHIS also conducts fall, or adult insect, surveys and uses the data to produce hazard maps that indicate which areas may have high populations the next year. We provide these maps to State cooperators and academic researchers and use the information to plan for outbreaks that may develop in the next year.

Surveys found more grasshopper outbreaks in FY 2008 than in previous years, especially in Arizona and Montana. If this trend of grasshopper population increases continues, there is a potential for a dramatic increase in the need for treatments in FY 2009. In regard to Mormon crickets, outbreaks of this pest can last anywhere from 5 to 20 years, and the Mormon cricket outbreak that started in 2000 appears to have subsided and populations are at normal levels. In FY 2008, APHIS conducted treatments to protect 116,232 acres. By comparison, treatments were requested to protect 182,221 acres in FY 2007. The decrease in treatments in 2008 can be attributed to the reduced need for Mormon cricket treatments in Idaho, Nevada, and Utah. The following chart shows the FY 2008 acres protected by State:

State	Acres Protected
Arizona	3,360
Idaho	12,478
Montana	98,600
Oregon	150
Utah	704
Washington	940
Total:	116,232

The grasshopper and Mormon cricket program met its performance target for FY 2008 of conducting surveys in all 17 States affected by these insects.

9. Gypsy Moth

Gypsy moth is a destructive insect of trees and shrubs. The goal of the program is to prevent and limit human-assisted spread beyond the quarantine area through an active regulatory program. In FY 2008, APHIS and its State cooperators continued to conduct survey activities for both Asian and European gypsy moth to detect and delimit any isolated populations. As part of these efforts, the program deployed approximately 250,000 traps nationwide. Asian gypsy moth (AGM) is not established in the United States, but survey efforts revealed two introductions of this biotype in FY 2007, and APHIS carried out eradication activities for these two introductions in FY 2008.

European gypsy moth is established in all or parts of 19 eastern States and the District of Columbia, and APHIS and State cooperators conduct regulatory activities within the quarantine area to prevent 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 infested to non-infested areas. Outdoor household articles, such as lawn furniture, are also regulated; because of the large number of household moves each year, homeowners moving from a regulated area are required to inspect and self-certify their belongings to supplement Federal and State resources.

The European gypsy moth also spreads each year by natural movement 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 FY 2008, five new counties (one in Ohio, two in Virginia, and two West Virginia) were found to be infested and added to the quarantined area. This action allows APHIS and State cooperators to ensure that businesses and residents in the newly infested areas comply with regulations designed to prevent long-distance spread of the pest.

To address a particularly high-risk pathway for AGM, the program continued cooperative offshore risk-reduction activities with the Russian Department of Forestry and Department of Quarantine. Vessels departing for the United States from 10 Russian ports are inspected for gypsy moth, and those found to have egg masses are cleaned before they leave the port. APHIS monitors the effectiveness of those efforts through DNA analysis of all AGMs detected on ships and land in the United States. In FY 2008, the program inspected approximately 500 vessels at Russian ports and met its performance target of preventing AGM introductions linked to Russia. Additionally, APHIS expanded these exclusion efforts by implementing an agreement with Japan's Ministry of Agriculture, Forestry, and Fisheries to inspect vessels from Japanese ports where high populations of AGM are known to be present and remove any AGM life forms. Discussions are underway with the governments of the People's Republic of China, and the Republic of Korea to establish similar programs.

10. Imported Fire Ant

Two species of imported fire ants (IFA) were introduced into the United States from South America at the port of Mobile, Alabama between 1918 and the 1930s through soil used as ballast in cargo ships. Today, the IFA infests more than 320 million acres in Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Puerto Rico. IFA are a major public nuisance because of their ferocious sting and aggressive behavior, and they can also damage several agricultural commodities.

APHIS works to prevent further IFA spread by enforcing the Federal quarantine and cooperating with IFA-infested States to regulate host materials such as nursery stock and soil-moving equipment. APHIS also evaluates the efficacy of regulatory treatments for preventing IFA spread by artificial means and works with States, industry, and other Federal agencies to develop and test promising new insecticides and biological control agents.

In FY 2008, the IFA program continued working with infested States to accomplish its goal of preventing the artificial spread of IFA through host materials such as nursery stock. The program conducted a series of regulatory blitzes to check that regulated articles moving outside the quarantine area had been properly treated in accordance with APHIS' quarantine regulations. These quarantine regulations, which require that host materials from infested areas be certified free of IFA, are our primary method of preventing the pest's spread. The blitzes were coordinated among Oklahoma, New Mexico, Arkansas, Tennessee, and North Carolina (several of the States that form the leading edge of the current IFA-infested area). In addition, the program held training sessions with nursery inspectors and public meetings with growers and producers in Alabama and Oklahoma.

APHIS and its cooperators are continuing a biological control project using various species of phorid flies, *Pseudacteon spp.*, a natural enemy of imported fire ants. With technical support and funding from APHIS, State officials conduct releases in infested areas with the hope that the flies will become established and ultimately spread over entire areas. The presence of the flies should negatively impact IFA populations and allow native ants to compete for resources, thus aiding in the restoration of the ecological balance. Preliminary data from a USDA/Agricultural Research Service integrated pest management project utilizing the flies, along with another biological control agent and insecticidal bait applications, has shown that IFA populations can be controlled with fewer insecticide applications over time when biological control agents are in place.

Since spring 2002, 93 releases involving three species of phorid flies have been completed or scheduled (10 in calendar year 2008), with several releases in each of the 13 States/territories under Federal quarantine. Flies have been successfully established in parts of at least 11 States and Puerto Rico. The program ultimately plans to introduce six to eight species of flies, with plans on track to add the fourth species by calendar year 2010.

In FY 2008, APHIS met the performance target of no IFA infestations outside of regulated areas that could be attributed to regulated articles infested with fire ants. APHIS expects to maintain the zero infestation level for the future.

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.

The goal of the Johne's Disease Program, through the Voluntary Bovine Johne's Disease Control Program (VBJDCP), is 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. The VBJDCP is voluntary and is managed using a Federal, State, and industry cooperative approach. It has been developed in cooperation with the National Johne's Working Group and the Johne's Committee of the United States Animal Health Association, State veterinarians, and industry representatives. The VBJDCP intends to reduce the percentage of dairy cattle herds infected, increase the number of seed stock producers in the test negative program and decrease the percentage of infected cattle within herds (decrease within-herd prevalence).

Johne's is a bacterial disease caused by a bacillus, *Mycobacterium avium*, subspecies *paratuberculosis*. The disease is spread by shedding the organism in the feces of infected animals. Since the organism is resistant to temperature changes and drying, it persists in the environment for long periods of time. There is no effective treatment for Johne's. Cattle in infected herds usually belong in one of four categories: (1) infected animals that are clinically sick, shedding large numbers of bacteria; (2) infected animals with no signs of disease, but shedding bacteria; (3) infected animals that are not shedding; and (4) noninfected 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.

In cooperation with States, affected industries, and producers, APHIS recently updated a National Johne's Disease Strategic Plan to help reduce the prevalence of the disease in the United States. The revised strategic plan proposes to continue the VBJDCP, which provides testing guidelines for States to use in order to identify cattle herds at low risk for Johne's disease infection. However, it also recommends 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 program continues to encourage producer participation by emphasizing the implementation of comprehensive producer education and training programs; defining and prioritizing knowledge gaps that influence producer participation and affect Johne's disease control; enhancing State implementation of the Program, and thus uniformity, through better participant coordination; and strengthening the standardized national database to allow measurement of program progress and participation.

In FY 2008, 49 States and Puerto Rico were in compliance with national program standards, with the program goal being 50 States enrolled. Only Montana has not adopted the VBJDCP, which is attributed to lack of industry interest in the State. Based on a survey of environmental samples, the 2007 National Animal Health Monitoring System Dairy study found that approximately 68 percent of U. S. dairy farms are affected by Johne's disease. This study also showed that 35 percent of dairy herds either participated in a custom Johne's control program or participated in the VBJDCP. In FY 2008, VBJDCP enrollment numbers declined for the first time since the program's inception. By the end of the reporting period for FY 2008, 7,265 herds were enrolled in the program compared to the program's peak of more than 8,500 herds in FY 2007. Although the program did not reach its underlying goal of enrolling at least 15 percent of the dairy herds in the Nation, it did enroll 12 percent of the target population.

Approximately 19 percent of cattle herds enrolled in the VBJDCP have a test-negative herd classification for Johne's. This is below the target of 30 percent but, because the program is voluntary, the ratio of test-negative to test-positive producer participation cannot be controlled. In FY 2008, the program certified 1,397 test negative herds, which was below the target of 2,500. Enrolling fewer test-negative herds may indicate that there are fewer Johne's free herds in the country than estimated through prevalence studies, though it may also indicate that owners of herds free of the disease perceive fewer benefits from the program. The program will continue to strive towards achieving its aggressive performance targets in the VBJDCP.

Currently, the program is supporting a national demonstration project. In FY 2003, the program implemented pilot studies focusing on current testing schemes and control methods in each region of the

country. Sixteen States are involved in this project, encompassing 63 dairy herds and 23 beef herds. To date, 17 papers have been published in peer reviewed journals, and 119 presentations have been made as a result of these studies. In addition, the herd demonstration projects have resulted in 183 producer or veterinary seminars and 14 papers in non-peer reviewed publications. At least nine additional projects have been started using national demonstration herds as the setting for additional studies.

12. Low Pathogenic Avian Influenza

The national goal of the Low Pathogenicity Avian Influenza (LPAI) Prevention and Control Program is to prevent the introduction of, and provide control for, H5 and H7 avian influenza outbreaks in U.S. commercial poultry industry and the live bird marketing system (LBMS). The LPAI program was initiated in FY 2004 following a series of serious outbreaks of low pathogenicity H7N2 avian influenza in the two previous years.

National Poultry Improvement Plan (NPIP)

On May 28, 2008, APHIS published a proposed rule to amend the NPIP and its auxiliary provisions by providing new or modified sampling and testing procedures for plan participants and participating flocks. Prior to the proposed rule's publication, the changes had been discussed and voted on by delegates at a National Plan Conference. The changes would keep the provisions of the plan current with changes in the poultry industry and provide for the use of new sampling and testing procedures. The comment period for the proposed rule closed July 28, 2008. The proposed final rule received a "not significant" designation from the Office of Management and Budget. APHIS plans on publishing this final rule in the spring of 2009. Specifically, APHIS proposed the following: 1) increase the number of approved tests for avian influenza used in breeding and commercial poultry from two to four (the two additional tests can provide highly specific results quickly, making them extremely useful as screening tests for avian influenza and as part of an initial State response and containment plan in the event of an outbreak); 2) increase the frequency of required avian influenza tests to 90-day intervals instead of 180-day intervals (this increase in testing will enhance U.S. flock health and help to maintain the U.S. classification of "avian influenza clean" for chickens and turkeys); 3) expand the U.S. avian influenza clean classification to include other breeding flocks, such as ostrich and emu; 4) add more detailed requirements for authorized laboratories. (the authorized laboratory minimum requirements would include check-test proficiency, trained technicians, laboratory protocol, annual State site visit, service review every 3 years, reporting criteria and verification); 5) expand the information contained in the audits of poultry slaughter plants and to enact changes in surveillance sampling at commercial meat-type turkey slaughter plants; and 6) require a designated State contact representative to facilitate communication between the State and APHIS.

Live Bird Marketing System (LBMS)

In October 2004, APHIS published Uniform Standards for H5 and H7 LPAI Prevention and Control in the LBMS to establish a more consistent approach by participating States in the control of LPAI in the LBMS. A revised and updated edition of the Uniform Standards was published in August 2008 that includes a new section on General Criteria for Indemnification of H5/H7 LPAI in the LBMS.

State participation in the LBMS program is voluntary. Participating States enact regulations necessary for compliance of their live bird markets (LBMs), producers, and distributors. All LBMs, producers, and distributors that supply the markets in participating States must be registered or licensed with the State, and must allow Federal and State inspectors access to their facilities, birds, and records. These facilities must also have written biosecurity protocols in place. APHIS coordinates and administers the program and provides personnel and resources to assist States with implementation and compliance with program requirements.

Surveillance in the LBMS remains a high priority. APHIS initiated cooperative agreements with 40 States and Territories in FY 2008 to conduct surveillance activities in the LBMS. These include: Alabama,

Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Maryland, Maine, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Vermont, Virginia, Washington, West Virginia, and Puerto Rico.

From July 2007 to June 2008, 75,456 tests were conducted for H5/H7 LPAI surveillance in the LBMS. Since many samples were pooled from up to five birds, statistically more than 200,000 birds were actually tested. In FY 2008, 20 LBMS premises were found positive for notifiable avian influenza (NAI): 3 production flocks, 2 auctions, and 15 retail LBMs. Also in FY 2008, 5 backyard premises were positive for NAI. All premises were depopulated, cleaned, disinfected or otherwise addressed according to the Uniform Standards. APHIS provided indemnity for one LBMS premises and two backyard poultry flocks that tested positive for NAI. As a result of the LBMS program and the surveillance and response efforts by APHIS and the States, the incidence of LPAI in the LBMS, especially in the Northeastern United States, has decreased steadily. The number of LBMS premises that tested positive for LPAI decreased from 29 in FY 2007 to 20 in FY 2008 (more than a 30 percent decrease).

13. Noxious Weeds

The Noxious Weed program works with its cooperators to contain or eradicate noxious weed infestations. It also provides national guidance on weed management policy to its cooperators by developing control methods and conducting environmental assessments of treatment options.

In FY 2008, APHIS found four new noxious weed infestations and is working with cooperators to eradicate them. Hydrilla, one of the most problematic aquatic weeds in the United States, was detected in Kansas. It forms dense mats of vegetation that interfere with recreation and destroy fish and wildlife habitats, and once established, it decreases water flow and clogs irrigation and flood-control canals. Cogongrass, already present in eight southeastern States, was discovered in Tennessee. It can invade and overtake undisturbed ecosystems, displacing a large variety of native plant species. Onionweed was detected in Arizona. This species is an aggressive plant that reproduces quickly. *Salsola vermiculata* is a shrubby perennial that was introduced to California as an experiment to improve forage. After the testing site was abandoned, the weed spread into nearby hillsides and canyons.

The program and its cooperators continued activities to control a variety of other noxious weeds, including wavyleaf basketgrass, an exotic, highly-invasive, fast-moving forest grass that can rapidly replace native plants, and turn forest floors into monocultures with little habitat value for other species, in Maryland. The program also continued eradication efforts for *Orabanche ramose*, a parasitic weed and a major threat to a broad range of wild broadleaf plants and crop plants, from three locations in Virginia.

Other program targets include Benghal dayflower and tropical soda apple in southern States; hogweed and goatsrue in New York; giant salvinia and hydrilla in and around Caddo Lake in Texas and Louisiana; and Japanese dodder in California. In addition, APHIS continued working with the Nez Perce Bio-Control Center in the state of Idaho to provide technology transfer workshops, and biological control agents to its cooperators. During FY 2008, the program targeted eight weed species, including yellow star thistle, spotted knapweed, and purple loosetrife.

APHIS also continued working with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds on the Pulling Together Initiative (PTI), which supports the creation of local cooperative weed management area partnerships that focus on mitigating the threat of invasive weeds. In 2008, APHIS funded grant projects in six States to conduct surveys, eradication, and site restoration activities involving weeds such as giant hogweed, cogongrass, giant salvinia, and hydrilla. On the regulatory side, APHIS developed a risk assessment for and issued a Federal import quarantine order to prevent the importation of two new species, the old world climbing fern (*Lygodium microphyllum*) and the maidenhair creeper weed

(*Lygodium flexuosum*). In addition, the Agency developed a work plan to add these weeds to the Federal Noxious Weed List.

To measure progress, the program tracks acres infested and treated for several weed species, including the Benghal dayflower in several southern states, tropical soda apple in the state of Alabama, Common Broomrape (*Orobanche minor*) in the state of Georgia, and giant hogweed in the state of Oregon. In FY 2008, the program met or exceeded its goals for each of these weed species.

14. Plum Pox

Plum Pox Virus (PPV) is a viral 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 \$5.2 billion in 2007. 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. Currently, the program is addressing outbreaks in Pennsylvania, New York, and Michigan.

In Pennsylvania, crews collected and processed 231,062 samples with no positive results from orchards, homeowner sites, sentinel trees, and wild trees within 25 miles of infected sites. FY 2008 was the State's second consecutive year of negative survey. Scientific protocol requires three consecutive years of negative survey for an area to be eligible for deregulation. The five square-mile regulated area in Tyrone Township, York County, met this criterion in FY 2008 and was deregulated in November 2008. This leaves 49 square miles still regulated, down from its peak of 350 square miles in 2003.

In New York, crews collected and processed 110,774 samples from orchard and homeowner surveys in Monroe, Niagara, Orleans, and Wayne Counties. Additional orchard surveys were conducted in Ontario and Yates Counties. The surveys resulted in continued detections in Niagara and Orleans Counties and new detections in Wayne County, where two growers had infected trees in their orchard blocks. Although the number of confirmed positive plants detected in 2008 was down 50 percent from FY 2007, the new finds are located 60 miles east of the closest known infected areas found in 2006 and 2007. The location of the new finds indicates that the New York infestation is larger than previous delimiting surveys have indicated. In response to these finds, the program has removed all trees that were infected or in the buffer zone and is continuing delimiting surveys.

In Michigan, crews continued intensive survey around the positive detection site found in Berrien County in 2006, and accomplished a second consecutive year of negative survey. Survey teams in Allegan, Berrien, and Van Buren Counties collected 33,754 samples from orchards and 4,629 samples from homeowner properties and unmanaged areas around the positive site. Sampling was also completed at the research block in Oceana County containing nursery stock from the same shipment as the original positive tree. All samples in FY 2008 tested negative for PPV. FY 2008 was the State's second consecutive year of negative sampling. One more year of negative results will allow the quarantined areas of the State to be deregulated.

For FY 2008, APHIS projected that all remaining regulated areas in Pennsylvania would survey negative for PPV. The program met this target and achieved a second consecutive year of negative surveys. If these surveys find no PPV in FY 2009, the program will be able to de-regulate the entire State.

15. Pseudorabies

Pseudorabies is a viral disease of swine that most often manifests as a reproductive disease, neurological disease, and/or respiratory disease in swine. The Pseudorabies Virus (PRV) was declared eradicated from the commercial swine population by industry in October 2004. Currently, the APHIS PRV program focuses on managing the continued risk for disease introduction into the commercial herd, monitoring

through surveillance to rapidly detect disease if it is present, and responding appropriately if disease is detected. PRV has existed in the swine population in the United States for at least 150 years. Older swine can survive infection, becoming carriers of the PRV for life. Animals other than swine can also become infected with PRV and usually die shortly after infection. The virus does not cause illness in humans.

At the end of FY 2008, all 50 States and three territories were in Stage V, PRV free, status thus meeting the program's performance target. The last PRV outbreak in commercial production swine occurred in February 2003, in Pennsylvania.

In FY 2008, APHIS identified PRV infection in eight transitional herds in Arkansas (1), Florida (1), Michigan (4), and Texas (2), and provided Federal indemnity to depopulate them. One case was diagnosed as a mixed infection with swine brucellosis. All cases were confined to transitional swine production, with no spread to commercial production herds. Transitional production swine are defined as feral swine that are captive or swine that have reasonable opportunities to be exposed to feral swine. This classification of swine is differentiated from feral or wild swine that are free-roaming and from commercial production swine that are continuously managed and have adequate facilities and practices to prevent exposure to either transitional production or feral swine. All positive animals were promptly depopulated. These eight cases were in contrast to 18 cases reported in FY 2007 and 12 in FY 2006.

New disease challenges in the commercial industry (Porcine Reproductive and Respiratory Syndrome, circovirus, etc.) mandate strict biosecurity and marketing protocols. The design and use of these protocols allow little chance for infections in transitional swine operations to infect commercial swine operations. APHIS' focus has remained on emphasizing separation of feral and transitional swine from commercial swine production. The Agency requires States to develop Feral-Transitional Swine Management Plans as part of their annual PRV reporting requirements.

Market swine surveillance (meat juice sampling) continued in FY 2008 as a major surveillance tool for the PRV program. Commercial plants participated in States with a sizeable commercial swine industry. These States include Iowa, Kentucky, Southern Minnesota, Nebraska, North Carolina, and Pennsylvania. APHIS identified no commercial herd PRV infections through meat juice sampling. In FY 2008, the Agency continued integrating revised PRV surveillance as a part of a developing Comprehensive Swine Surveillance initiative.

16. 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. 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 scrapie will be perceived as a human health risk, or a threat to wildlife. The industry loss due to scrapie is estimated to be \$10 to \$20 million annually, not including lost market opportunities due to export restrictions.

The current APHIS scrapie program focuses on six primary areas: education and prevention; animal identification; surveillance; tracing of positive and exposed animals; cleanup of flocks through genetic susceptibility testing and indemnification of susceptible exposed animals; and the Scrapie "free" Flock Certification Program (SFCP).

During FY 2008, 61 infected or source flocks in 20 States were newly identified, and 64 new and previously existing infected or source flocks were either cleaned up or put on a flock cleanup plan. Upon completion of the cleanup plan, the flocks are placed on monitoring plans for five years. Thirty-one infected or source flocks located in 15 States remained on clean up plans at the end of FY 2008. These flocks are also under movement restrictions.

As of September 30, 2008, 145,343 sheep and goat premises had been assigned identification numbers in the Scrapie National Generic Database. This represents an increase of eight percent from the previous year. The program has issued official ear tags to 113,656 of these premises (up 13.8 percent from FY 2007). There are currently 1,971 flocks enrolled in the SFCEP, and, of these, 505 are certified as scrapie-free, an increase of 94 during the fiscal year. Like all other official identification used in APHIS disease programs, scrapie ear tags are compliant with National Animal Identification System standards.

In FY 2008, the indicator of scrapie prevalence—the percent black-face sheep found positive at slaughter—continued to decrease, down 29 percent compared to FY 2007. This decrease exceeded the FY 2008 target for the long-term performance and unit measures by 45 percent. Black-face sheep have much higher scrapie prevalence than white-face or mottled-face sheep, making them the best population for assessing progress. There was also a 15 percent reduction in the number of newly infected and source flocks identified during the fiscal year. During FY 2008, the program sampled 48,269 animals (45,404 at slaughter facilities and 2,865 at other sites) for scrapie testing, exceeding the FY 2008 target by 269 samples. APHIS also continued to increase the number of black-face sheep sampled, which increased the efficiency and effectiveness of the surveillance effort because of the higher prevalence of scrapie in these sheep.

Through APHIS' Small Plants Initiative, sample collection has increased at low volume plants through contracts with the establishments to either ship the animal heads to a centralized collection facility or to collect samples on-site. APHIS also initiated a pilot project to sample live black-face sheep from a market in Texas in order to sample animals that would otherwise be lost to surveillance as a result of exports to Mexico. These efforts have enabled collection of a greater number of samples from a larger geographic area, and allowed APHIS to meet the target for sample collection in FY 2008.

In FY 2008, APHIS completed the evaluation of and approved rectal lymphoid tissue biopsy as a new live animal test method. The data indicate that rectal biopsy may be superior to third eyelid biopsy for ante-mortem diagnosis of scrapie in sheep and goats. This is the first live animal scrapie test approved for goats. APHIS also completed a prevalence study in goats in FY 2008 that demonstrated, with a confidence level of 95 percent, that the prevalence of scrapie is less than 0.1 percent in the culled mature goat population.

APHIS will continue to provide indemnity assistance and testing for producers that experience scrapie infection or exposure in their flocks. The indemnities greatly promote the effort in controlling the disease through the depopulation and disposal of infected and exposed animals. Indemnity payments and genotype testing assist producers in remaining viable by providing funds for repopulation and by minimizing the number of exposed animals that must be removed. Indemnity will provide APHIS a preferred means of responding to Nor98-like scrapie. Unlike typical scrapie that can be eradicated by use of genotyping scrapie resistant animals, the Nor98-like scrapie is problematic because goats and all genotypes of sheep appear to be susceptible, making depopulation the preferred option for handling exposed animals. Data from Europe indicates that Nor98-like scrapie may occur sporadically and may not be eradicable through current methods. APHIS has identified six cases of this virus type in the last two years.

Finally, as a result of efforts beginning in 2004, the scrapie program has continually recognized annual operational savings. The effort to allow private laboratories to genotype samples has introduced the economic element of competition, thereby lowering the cost to producers and to APHIS for the tests. The genotype testing is used to identify sheep that are resistant to scrapie. This testing is not related to disease diagnostic testing, which is done by National Veterinary Services Laboratories and the National Animal Health Laboratory Network. In FY 2008, APHIS estimates the cost savings for genotyping to be \$58,903 for that year. Advancements in testing procedures during 2004 led to an immunohistochemistry test requiring one slide instead of two. This resulted in a 50 percent cost savings, or \$1,135,100, in 2008. Lastly, by reducing the number of lower-risk white-faced sheep sampled at slaughter, APHIS saved an estimated \$396,650 in test and labor costs. The change in cost from initiation of the program is used to calculate cost savings.

17. Tuberculosis

The goal of the APHIS Tuberculosis (TB) program is to provide national leadership in the eradication of the disease in domestic livestock. TB is a common and deadly infectious disease caused by mycobacteria. There are various strains of mycobacteria, with *Mycobacteria bovis* affecting cattle and cervids, as well as other animals. TB was once the most prevalent infectious disease of cattle and swine in the United States. The disease caused more losses among farm animals in the early part of the twentieth century than all other infectious diseases combined. Since the creation of the National Tuberculosis Program, TB has been nearly eradicated from the Nation's livestock population. Despite strong efforts, the goal of eradication has remained elusive. Remaining challenges to the program include infected wildlife and the importation of infected cattle from Mexico.

At the end of FY 2008, 46 States, 2 Territories, and 1 zone were TB Accredited-Free (AF), including Puerto Rico and the U.S. Virgin Islands. Two States (California and New Mexico) were modified accredited advanced, one State (Minnesota) was modified accredited, and one State (Michigan) had split State status. Of these, 20 States and the U.S. Virgin Islands have maintained AF status for over 25 years; 20 States have been AF for 15 or more years; 5 States have been AF for 10 or more years; 2 States and Puerto Rico have been AF for 5 or more years; and 1 State and 1 zone have had AF status for less than 5 years.

In FY 2008, a total of 11 affected cattle herds were identified, including 3 dairies in California, 3 beef herds in Michigan, 4 beef herds in Minnesota, and 1 mixed use cattle herd in New Mexico. These 11 herds were all located in areas where affected herds have been found in the past. In contrast, 7 affected herds were discovered in FY 2007. Of the 11 affected herds identified in FY 2008, all but 1 herd in California have been depopulated.

Including the 11 TB-affected bovine herds discovered in FY 2008 and 3 herds that remain under quarantine that were identified in previous years, there were 14 affected herds among the estimated 971,400 cattle herds in the United States in FY 2008. The three herds that remain under quarantine from prior years include a dairy herd in New Mexico and two dairy herds in Michigan. Despite these cases, TB is extremely rare.

Slaughter surveillance for tuberculosis (TB) continued to exceed national goals in FY 2008. A total of 10,666 granulomas (small nodules that can indicate TB) were submitted from 170 U.S. slaughter establishments. These establishments slaughtered 33.6 million cattle. Thirty-four TB cases were identified in cattle in U.S. slaughter plants during FY 2008, and three of the newly affected herds identified in FY 2008 were detected as a result of this surveillance and subsequent epidemiologic investigations. These findings demonstrate the integral role of slaughter surveillance in the TB eradication program. In addition, TB response plans remain critical in areas where the disease has recently been detected.

APHIS continues to work with Mexico to ensure there is equivalency between the two countries' disease eradication program requirements. To accomplish this, reviews of Mexican State TB programs have been conducted under the umbrella of the United States and Mexico Binational Committee. Six review trips were completed in FY 2008. The review teams examined TB program integrity, progress, and the level of disease prevalence. APHIS has developed a five-year plan, *Strategic Plan for Reducing the Risk of Importing Tuberculosis Infected Cattle from Mexico 2008-2012*. This plan establishes a goal that Mexican TB eradication programs will reach the same level as U.S. programs by the end of 2012.

18. Wildlife Services Operations

APHIS 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.

Disease Surveillance

A key component of a national animal health surveillance system is the ability to identify potential pathways for animal diseases from wildlife to livestock. APHIS' 44 wildlife disease biologists provided technical assistance, conducted surveillance, and maintained control of more than 20 wildlife viruses, bacteria, parasites and pathogens. For example, APHIS conducted domestic disease surveillance activities for: avian influenza (AI) in wild birds (81,000 samples collected nationwide); plague and tularemia surveillance (5,557 and 6,396 samples, respectively, collected in 23 states); pseudorabies, swine brucellosis, and classical swine fever (30 states); rabies (20 states); chronic wasting disease (19 states); west Nile virus (5 states); bovine tuberculosis (TB) (3 states); and *E. coli* surveillance in feral swine (Texas and California). Additionally, APHIS initiated surveillance planning to incorporate foot-and-mouth disease and a potential trichinellosis component into a comprehensive feral swine disease surveillance program, coordinated the investigation of virulent Newcastle disease in wild birds in two states, trained more than 180 individuals at 6 workshops specifically designed for Highly Pathogenic AI (HPAI) surveillance, and incorporated Native American lands in plague sampling. Collaborative border programs led to the implementation of a US/Mexico Wildlife Disease Border Surveillance Plan, allowing cross border surveillance for rabies, plague, tularemia, AI, and other diseases. APHIS also participated in the North American Trilateral Working Group on HPAI Early Detection in Wild Birds, and coordinated international leadership by chairing the U.S. Interagency HPAI Steering Committee resulting in capacity building and wild bird surveillance for HPAI in 29 countries.

Rabies

In FY 2008, APHIS purchased and distributed 9,294,205 oral rabies vaccination (ORV) baits in Alabama, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Texas, Vermont, Virginia, and West Virginia. Cooperators purchased and distributed or helped APHIS distribute 2,781,336 baits, for a total of 12,075,541 baits distributed in ORV campaigns in FY 2008. The number of baits distributed to control specific rabies virus variants by target species was: raccoon, 8,948,472; gray fox, 2,085,875; coyote, 1,041,194. The Agency baited a total of 223,907 km², 17,442 km² less than in FY 2007. The reduced area baited was due in large part to the need for double density baiting of specific areas of high risk for raccoon rabies spread. In cooperation with the Centers for Disease Control and Prevention and State agricultural and health agencies, APHIS continued to expand use of the new rapid diagnostic rabies test that can confirm rabies in the field within 50 minutes. This has allowed for sound decisions in real-time based on the best available rabies surveillance data.

In FY 2008, the Agency expanded the distance between transects where flights dropped the ORV from 500 to 750 meters across a broader portion of ORV campaigns resulting in a 25 percent savings that was applied to rabies emergencies. The number of airports used for baiting operations was reduced from 9 to 7, centrally consolidating bait distribution to provide operational flexibility during bad weather and ground fog conditions. This step saved five operational days in bait distribution targeting raccoon rabies, which reduced travel and staff time costs.

Invasive Species

The brown tree snake (BTS) has eliminated 10 of the 12 native bird species and most lizard species and bat species on the island of Guam. APHIS continued to prevent the unintentional introduction of the BTS from Guam to other Pacific Islands, Hawaii, and the continental United States in FY 2008. The Agency intercepted 12,212 BTS on Guam or near ports of exit. APHIS' work with Department of Defense export processes has improved access, tracking, and inspection procedures of all outbound cargo and vessels. APHIS also continued the use of the oral BTS toxicant, acetaminophen, resulting in a significant reduction of BTS from Guam ports of exit.

Feral swine are an invasive species, occupying parts of 35 states, Puerto Rico, the United States Virgin islands, and Guam. Feral swine damage control activities to reduce disease threats can have a direct impact on the nation's international trade of swine products, and this is of importance to the industry, APHIS, and the European Union. Currently, feral swine populations are estimated to be 4-5 million animals throughout the United States feral swine activities have caused an estimated \$800 million in damage but many believe the extent of feral swine-related damage is significantly underestimated. Management strategies and activities for feral swine included removal via trapping, shooting, and aerial operations, which led to the removal of more than 28,000 feral swine.

Livestock Predation

According to the latest National Agricultural Statistics Service surveys, predators killed more than \$111 million worth of livestock annually. Each state has different needs from APHIS based on type of predators and their livestock populations. In Texas, the largest cattle-producing State, the Agency protected more than 1.74 million head of livestock by managing predation, which saved producers more than \$36.4 million. The Agency has provided management assistance of predators such as coyote and vultures in Florida, Minnesota, Pennsylvania, Virginia, West Virginia, and Wisconsin. In West Virginia, the Agency responded to more than 180 requests for service during FY 2008 and has effectively reduced livestock losses from more than 27 animals per farm in 1995 to less than 1.7 animals per farm. In Virginia, the Agency provided technical assistance to 347 people on coyote issues alone, and provided assistance on 215 farms and conducted 14 educational programs to instruct and inform citizens on livestock protection issues and abatement techniques.

Airport Safety

Wildlife strikes cost commercial aviation more than \$600 million annually in the United States and \$1.2 billion annually worldwide. At the end of FY 2008, the Agency reports 20 large transport aircraft destroyed by bird strikes and more than 350 people killed. Through cooperative agreements in FY 2008, APHIS worked with approximately 768 airports and airbases nationwide and reported many successful interventions to reduce wildlife hazards. The Agency provided direct management assistance including lethal control of hazardous wildlife, non-lethal dispersal of hazardous wildlife, modification of habitats to discourage wildlife, and capture and translocation of wildlife away from airports. In addition, APHIS continued a management program at Langley Air Force Base, Virginia, which has reduced the cost of wildlife strikes to military aircraft by 98 percent since its implementation in 2001.

Beaver Damage

APHIS conducts State-wide beaver damage management programs that also receive major funding from State agencies. By conducting management activities in FY 2008, the Agency prevented \$7.2 million in beaver damages in North Carolina. In Virginia, APHIS removed 228 beaver dams and provided assistance to 239 individuals to prevent property damage and to protect transportation structures from flooding damage. This work was supported by cooperative funding from the Virginia Department of Transportation. The Agency's cooperative beaver damage management program with the South Carolina Department of Transportation prevented more than \$1.4 million in damage, and the program's cost-benefit was \$2.06 saved for every \$1 expended. During FY 2008, APHIS conducted beaver management to protect roads, timber, and valuable/sensitive ecosystems in Wisconsin, including 20 old growth forest/sensitive habitat sites and 1,500 miles of trout streams. APHIS partnered with the Ojibwa Tribes of Northern Wisconsin to reduce beaver damage to trout streams and wild rice habitats, which are of great cultural importance to native American communities in that State. Overall, APHIS conducted beaver damage management in 20 states. For each dollar spent on this activity APHIS protected between \$1.47 to \$23.80 worth of resources.

19. Witchweed

APHIS works with cooperators in North and South Carolina to eradicate witchweed and reduce its threat to the U.S. corn and sorghum crop, which had a \$54 billion production value in 2007. If witchweed were to spread throughout the Corn Belt, crop yields for corn and sorghum would decrease by ten percent. This program also prevents U.S. commodities from facing restrictions in the global marketplace by reducing the threat posed by the disease.

In FY 2008, APHIS continued providing financial and technological support to the North Carolina Department of Agriculture and Consumer Services to enable them to complete the eradication of infested acres, conduct post-eradication surveys, and treat new infestations when detected. APHIS maintained primary responsibility for these activities in South Carolina. FY 2009 and 2010 will be critical years for this program, since approximately 1,000 acres – including all currently infested acres in South Carolina – may be removed from infested status. However, this progress may be slowed if corn acreage increases. An increase in corn acreage would also increase the probability of the program detecting the weed in new fields that may have been idle for several years after release or termination from the program. If ethanol production from corn in North Carolina is of continuing interest in 2009, the program expects to continue detecting new or re-infested fields. The program will increase its monitoring activities to ensure infested fields are being contained to the quarantine areas.

The program's primary performance measure tracks acres infested. For FY 2008, the program projected that 2,131 acres would be infested by the end of the fiscal year. Preliminary data indicates that this target was not met as of the end of FY 2008, as 2,374 acres were infested. However, the program will adjust this figure in January 2009 after they have compiled survey and treatment data for the entire 2008 growing season.

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) of 1970 as amended. Under this legislation first enacted in 1966 and amended several times thereafter, 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 9 CFR, 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 violations are discovered during a compliance inspection, additional actions will be taken, which include an increased frequency of unannounced inspections, and possibly revoking the license of the facility.

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

The program's risk-based inspection system concentrates activities on facilities where animal welfare concerns are the greatest. During FY 2008, the program conducted 16,169 inspections of licensees, registrants, and prospective applicants, a decrease from the 18,343 inspection conducted in FY 2007. In an important case resulting from the enforcement of the AWA, Marilyn Shepherd was assessed a fine of \$52,000 and permanently disqualified from becoming licensed under the AWA for operating as a dealer without obtaining the required AWA license. Ms. Shepherd was found guilty of selling 165 dogs on 26 occasions to NVK Kennels, a class "B" dealer under the AWA.

APHIS continues to work with the Office of Management and Budget on a number of performance measures introduced to the program during the FY 2007 Program Assessment Rating Tool process. The measures undertaken by APHIS include: percentage of facilities in substantial compliance of the AWA; percent of stakeholders who find outreach activities useful; percent of licensees and registrants with significant repeat violations of the AWA; percent of repeat violators reinspected for compliance of the AWA within the prescribed timeframe to ensure the humane treatment of animals; and the average cost of issuing licenses and registrations. In FY 2008, the program achieved a 99 percent rate of substantial compliance with the AWA, a 2 percent increase over the program's achievement the previous year. Also in FY 2008, the program determined that 91 percent of stakeholders participating in outreach activities found the activities useful to the program. The program also exceeded their goal of having 7 percent of licensees and registrants with significant repeat violations of the AWA, by only having 2 percent having significant repeat violations. The program reinspected 78 percent of repeat violators for compliance of the AWA within the prescribed timeframe, a significant increase over the 60 percent reinspected in FY 2007.

APHIS published in the *Federal Register* a rule proposing to amend the AWA regulations to add requirements for contingency planning and training of personnel by research facilities and by dealers, exhibitors, intermediate handlers, and carriers. The Agency is proposing these requirements because we believe all licensees and registrants should develop a contingency plan for all animals regulated under the AWA. This action would heighten the awareness of licensees and registrants regarding their responsibilities and help ensure a timely and appropriate response should emergencies or disasters occur.

APHIS also continues to emphasize public education and outreach through efforts which consisted of conducting canine care workshops, industry meetings, emergency activities, and conferences and training courses around the country.

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. The program activities ensure the humane care and treatment of animals covered under the HPA. Soring is a technique in which a trainer would irritate or blister a horse's forelegs through the injection or application of chemicals or mechanical irritants. The technique is used by horse owners and trainers to gain a competitive edge and improve their chances to win at shows.

In June 2008, APHIS began to implement protocols for penalties for foreign substance violations detected by APHIS inspectors through the use of gas chromatography/mass spectrometry (GC/MS). GC/MS is a technique used as an HPA enforcement tool. The technique allows inspectors to identify the chemical composition of mixtures that are sometimes applied to horses' legs. GC/MS makes it easier for APHIS inspectors to detect the presence of numbing substances and determine when horses have been subjected to chemical and/or mechanical means of soring.

APHIS has also incorporated the use of thermography protocols as part of the inspection process to determine if horses are in compliance with the HPA. Thermography imaging employs the use of infrared cameras to detect heat and locate areas of inflammation. This approach is used with the inspector's physical examination of the horse. APHIS plans to incorporate thermographic imaging as part of the inspection process for the 2009 show season to assist inspectors in the diagnosis of soring,

In August 2008, APHIS personnel again attended the Tennessee Walking Horse breed's biggest show, the Tennessee Walking Horse National Celebration. Out of 2,744 horses entered, there were 187 entries disqualified from competition due to violations of the HPA regulations. The violation rate in FY 2008 was 6.81 percent, compared to 4.02 percent in 2007, 9.73 percent in 2006, and 7.11 percent in 2005.

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; deal with foreign animal diseases and bioterrorism threats which 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 APHIS employees with e-mail and office automation tools, Internet access, and access to mission critical programs and administrative applications. AITI is the key technology enabler that supports APHIS mission critical programs and administrative applications.

Program objectives and priorities are to improve sharing of information across the Agency; improve coordination and accessibility of information, processes, and resources available to assist programs in emergencies; improve APHIS' cybersecurity posture; and, provide the means to take advantage of E-Gov initiatives as directed in the President's Management Agenda. The Agency's information technology (IT) infrastructure is maintained, enhanced, and operated to support these objectives. The following FY 2008 accomplishments support these objectives:

- **Critical Infrastructure Redundancy** – APHIS has begun the process of providing a highly-redundant infrastructure for key mission-critical IT services. This process has been completed for the enterprise Oracle infrastructure and is underway for e-mail and web access with completion expected in FY 2009. AITI has supported this initiative by funding the additional hardware and software components that are needed to provide this service.
- **APHIS Cybersecurity Improvements** – APHIS has undertaken a comprehensive Certification and Accreditation initiative in support of OMB direction, and USDA's goal to have 100 percent of systems accredited in FY 2006 and beyond. In FY 2008, AITI enabled APHIS to: certify and accredit numerous program specific investments and applications by leveraging the work

performed on the general support systems in FY 2007; eliminate threats and vulnerabilities by preventing viruses, worms, operating system/applications software weaknesses; and, managing undesirable activities that have an impact on the productivity and efficiency of our employees. APHIS prevented more than 800 million intrusion attempts and removed more than 35 million e-mail spam messages in 2008.

- Telecommunications Consolidation – APHIS consolidated management and billing of all wireless service in FY 2008. This effort has reduced costs, reduced billing complexity and overhead, and better situates APHIS for the transition to the Networx contract in FY 2008/2009.
- Help Desk Management – APHIS reduced the number of internal IT help desks from 31 to 28 in FY 2008. This effort has improved user support by providing more centralized services, reducing support staff and telecommunications costs and allowing for improved problem tracking and resolution. In addition, APHIS implemented improved service management tools in FY 2008.
- Emergency Response Support - APHIS has improved the security, reliability, and robustness of its network. This is critical in an emergency because it allows APHIS to direct critical program operations effectively. The APHIS Continuity of Operations Centers utilize the telephonic capabilities described previously to support responses to new emergencies by providing information to the public and employees.
- Web Presence Improvements/Web Migration Project - APHIS has improved the delivery of information across the Internet and Intranet making it easier for our external and internal customers to locate current information expeditiously. The public-facing Internet has been completely converted to the USDA “look and feel” standards with information arranged by topic rather than along organizational lines. APHIS, working with the Enterprise Shared Services staff at the Office of the Chief Information Officer’s National Information Technology Center (NITC), has also built the Stellent environment at NITC in Kansas City. The environment is being used to migrate web content into the Stellent Web Content Management system. This will allow for better sharing and management of web content across USDA.
- Project Management Office – During FY 2008, APHIS continued to strengthen its Project Management Office (PMO). The PMO began to develop standardize tools and processes to improve the management of IT projects in the Agency with a goal of improving IT project delivery in support of APHIS’ mission.

2. Biosecurity

The biosecurity program strives to prevent the intentional introduction of biologically harmful pests and diseases that affect American agriculture. The U.S. agricultural production, processing, and marketing systems are highly vulnerable to deliberate incursions, directly affecting the abundance and safety of the U.S. food supply. APHIS works toward the preparation for agricultural emergency response, and will continue to improve the Agency’s homeland security related activities including the preparation, planning, and consequence management of potential terrorist threats to U.S. agriculture.

The program continued incorporating the Forest Service’s Resource Ordering and Status System (ROSS) for Agency use. This system automates the inventory of people and their skills to be used in dispatching Agency resources to agricultural emergencies. The system also tracks these resources while deployed to an emergency response. In FY 2008, ROSS was used during emergency responses for Asian citrus psyllid in California, emerald ash borer in Missouri, bovine tuberculosis in California, various hurricane responses, and in APHIS emergency preparedness exercises. The program also established 15 Emergency Support Function (ESF) #11 positions to support the Agency’s role as a leading U.S. Department of Agriculture emergency coordinating agency. The newly established ESF #11 positions worked with multiple agencies to support the Federal Emergency Management Agency and the States affected during natural disasters

such as hurricanes Gustav and Ike, and coordinated the deployment of assets from the Agency's National Veterinary Stockpile to address carcass disposal issues during flooding incidents.

In addition, the Biosecurity program completed the Employee Qualification System (EQS) during the fiscal year. This system enables the Agency to identify human resources by individual qualifications associated with agricultural emergency response positions. The system will allow the Agency to dispatch the appropriate assets in the event of an emergency. Over 10,000 personnel are currently enrolled in EQS, and each individual has at least one associated specific emergency response position assigned to them. EQS has also been integrated with other relevant systems such as AgLearn, which offers and tracks appropriate training, and ROSS, which allows for the dispatch of needed personnel to emergency response sites.

3. Biotechnology Regulatory Services (BRS)

APHIS has successfully regulated the development of biotechnology-derived crops for almost 20 years. During that time, the Agency has authorized more than 15,000 field tests involving genetically engineered (GE) organisms without any known impacts on human health or significant environmental harm, and has evaluated more than 90 petitions for deregulation to ensure these plants posed no threat to other plants or the environment. As of September 30, 2008, APHIS has granted 78 petitions for the deregulation of plums, tomatoes, squash, cotton, soybeans, rapeseed, potatoes, papayas, beets, rice, flax, tobacco, sugar beet, alfalfa, red hearted chicory, and corn.

Compliance Oversight and Information Technology Systems

APHIS regulates the field testing (among other things) of newly developed biotechnology derived crops to ensure they do not pose a threat to plant health or the environment before they can be grown on a widespread basis. Crops being field tested must be grown under a permit or notification depending on the type of crop and its potential risk. In FY 2008, the program conducted 513 inspections: 230 inspections of permitted sites and 283 inspections of sites under notification. The program also evaluated 49 potential noncompliance incidents, with 48 notices of noncompliance issued and 1 warning letter issued. In FY 2008, one significant case was referred to the Agency's Investigative and Enforcement Services program for further investigation.

At the beginning of FY 2008, APHIS program began development of its new Biotechnology Quality Management System (BQMS), a voluntary compliance assistance program to help biotechnology researchers and companies to develop plans and practices to comply with biotechnology regulatory requirements. The goal of this voluntary program is to assist universities, producers, and companies, who introduce GE organisms, to analyze their operations, identify control points where problems could occur, and apply mitigation measures to address those vulnerabilities. The BQMS will take a proactive approach to compliance and provide the opportunity to head off compliance problems before they occur. This program is intended for participants who grow GE plants at multiple sites, often through the use of cooperators, and includes training guidelines and documentation procedures to ensure accountability at all levels. On June 5, 2008, APHIS received its official Certificate of Registration from the independent auditor, BSI Management Systems, indicating that the BQMS meets or exceeds all requirements of the internationally recognized ISO 9001:2000 standard. The ISO 9001:2000 standard provides a set of standardized requirements for quality management systems, and represents an international consensus on good quality management practices. The program continues to adopt new processes to leverage best practices, improving product and service quality, and maximizing program efficiency. Additionally, APHIS published a notice in the *Federal Register* to solicit letters of interest from the regulated community to participate in a BQMS voluntary pilot project. APHIS' goal for the pilot project is to identify areas for improvement to the audit standard and guidelines prior to full implementation of the system. Full implementation with industry participation is expected in FY 2009.

In FY 2008, APHIS completed an investigation of the unintentional release of GE creeping bentgrass into the environment. The investigation was initiated in 2005, after Agency inspection results and The Scotts Company LLC, self-reported several incidences and Agency inspection. Based upon the investigation, APHIS decided to pursue enforcement action against the Scotts Company. In FY 2008, APHIS entered into a settlement agreement with the Scotts Company. Under the agreement, the Scotts Company agreed to pay a significant civil penalty and conduct three public workshops on best management practices and technical guidance for other potential developers of GE plants on the identification and prompt resolution of biotechnology compliance incidents. The workshops are to be completed within one year.

Proposed Regulatory Changes

In October 2008, APHIS published a proposed rule regarding its biotechnology regulations (APHIS Code of Federal Regulations, Volume 7, Section 340) in the *Federal Register*, which was open for public comment through November 24, 2008. The proposed rule outlines revisions to existing biotechnology regulations regarding the importation, interstate movement, and environmental release of certain organisms, including plants, GE arthropods (e.g., insects) and other invertebrates. In addition to the public comment period, APHIS held three public forums in October and November of 2008 to provide opportunities for public comment.

While APHIS' current regulations have been effective in ensuring the safe introduction of GE organisms, the program is reviewing potential revisions to update its existing regulations to address advances in science and technology. Revising the biotechnology regulations will allow the program to address new challenges, as well as meet current needs in evaluating the plant pest or noxious weed risks associated with the importation, interstate movement, and field release of certain GE organisms. The proposed changes will also improve regulatory processes so they provide more transparency to stakeholders, use agency resources more efficiently, and eliminate unnecessary regulatory burdens.

Genetically Engineered Animals

In September 2008, APHIS published a Request of Information on Genetically Engineered Animals in the *Federal Register* to gather information from the public before drafting official guidance or policy. The Agency was seeking information to determine current research being conducted with GE animals; identify the implications of the importation and interstate transportation of GE animals on the health of the U.S. livestock population; and coordinate any GE animal policy with the Food and Drug Administration policies. Currently, most GE animals are being developed to support human and veterinary medicine. These animals are being engineered to study and address issues such as diabetes, blood clotting, and possible resistance to diseases such as Bovine Spongiform Encephalopathy (BSE). All comments received will be thoroughly reviewed before determining the best course of action.

International Activities

In FY 2008, APHIS worked with international partners to coordinate regulatory policy on GE crops and reduce potential trade disruptions resulting from incongruous risk assessments of new GE varieties. APHIS personnel participated in trilateral activities with Mexico and Canada to exchange information and harmonize approaches to biotechnology regulation. Mexico adopted new regulations for oversight of agricultural biotechnology in March 2008, and the United States is working closely within the trilateral forum to provide guidance as Mexico moves toward implementation of their new rules. APHIS also participated in a workshop with Mexico and Canada to discuss regulatory triggers for GE organisms. The United States and Canada are developing guidance on the environmental release of GE organisms. Finally, the Agency is working with Mexico and Canada on a simultaneous review of a petition for approval of a new drought-tolerant corn variety.

APHIS also continues to participate in the U.S./China Biotechnology Working Group to exchange information and identify common approaches for regulation and communication regarding genetically

engineered plants. APHIS is the lead agency for the technical working group. APHIS continues to exchange technology with Chinese regulatory counterparts for risk assessments, developing and implementing effective programs to enhance compliance with regulations, and improving risk communication among government agencies and the general public. Technical level discussions with Chinese counterparts will increase cooperation with reviews of agricultural biotechnology being developed and used in both China and the United States.

In FY 2008, APHIS participated in biotechnology training activities with India to share information on the science-based risk assessment processes for regulating genetically engineered organisms. In support of the U.S. Trade and Development Agency's India Agricultural Biotechnology Training Program, APHIS met with Indian regulatory officials on four separate occasions in 2008. This training program is part of the India-U.S. Agricultural Knowledge Initiative that began last year in India and provides an understanding of how science leads to Agency regulatory decisions. These interactions assist APHIS in building critical relationships with international countries and encourage science-based biotechnology regulation programs worldwide.

4. Environmental Compliance

APHIS' Environmental Compliance program (EC) provides support to APHIS programs to help them comply with various environmental laws, regulations, and executive orders. The primary focus is on compliance with the National Environmental Policy Act (NEPA), the Endangered Species Act of 1973 (ESA), and the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

The Environmental Compliance program also supports the furtherance of 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.

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

During FY 2008, APHIS completed one draft and one final EIS. These include:

- A final supplemental EIS on the Importation of Solid Wood Packing Material, and
- A draft EIS on the Use of Genetically Engineered Fruit Fly and Pink Bollworm in APHIS Plant Pest Control Programs.

As stated above, APHIS prepares EAs to analyze the potential for environmental impacts of a proposed action that generally are classified in the EA category under APHIS NEPA implementing regulations (7 CFR 372.5). During FY 2008, EC completed 30 EAs of varying complexity (compared to 18 in FY 2007). An additional 64 EAs were completed by other APHIS programs units; in these cases, EC provided support in the form of guidance, training, review and policy direction, as needed.

Examples of EAs prepared during FY 2008 include the following:

- Golden Nematode Eradication,
- The importation of swine and swine products from Estonia, and
- Light Brown Apple Moth Eradication and Quarantine Programs.

Before implementing a proposed action, APHIS must carefully consider the potential for any effects to listed threatened or endangered species or their habitats, as required by the ESA (16 U.S.C. 1531 et seq.).

Once the potential for effects has been established, APHIS must consult with the U.S. Fish and Wildlife Service (FWS) and/or the National Marine Fisheries Service (NMFS) to determine the most appropriate means of minimizing these effects. Examples of the types of ESA assessments and consultations conducted by APHIS in FY 2008 include the following:

- Onionweed Eradication Biological Assessment,
- Light Brown Apple Moth Eradication Biological Assessments, and
- Snails in Port of Tacoma, Washington Biological Assessment.

In accordance with FIFRA and the Federal Food, Drug, and Cosmetic Act (FFDCA), APHIS obtains and maintains pesticide registrations (working with the U.S. Environmental Protection Agency (EPA)) and drug approvals (working with the U.S. Food and Drug Administration (FDA)) for products used in many APHIS programs.

In addition, EC provides a range of other services to other APHIS programs, including identifying products that are less harmful to the environment than conventional pesticides, obtaining pesticide and drug use approvals from EPA and FDA using the most efficient and timely approaches, and serving as a liaison to pesticide manufacturers to obtain label and use amendments.

Some examples of APHIS FIFRA and FFDCA actions include:

- FIFRA Section 18 Registration for dimilin, and
- Brodifacoum to control rats in Alaska.

5. 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 to ensure that the appropriate Agency takes the lead, shares costs, and integrates security in co-locations.

APHIS has developed security guidelines for its BSL-3 environments. These guidelines are in compliance with Homeland Security Presidential Directives (HSPDs). During FY 2008, APHIS continued to increase security at its mission critical facilities including the National Wildlife Research Center's new Biosafety Level-3 Agriculture (BSL-3AG) Wildlife Disease Research Laboratory in Ft. Collins, Colorado. This facility will support expanding research, methods development and operational efforts to better understand and combat emerging and invasive wildlife diseases, some of which are transmissible to humans. APHIS also initiated implementation of BSL-3 security at the bison quarantine facility, located in Gardiner, Montana, which will require a 100 percent upgrade in size. In addition, APHIS initiated and tested the use of the new Federal Smart Card mandated under HSPD-12.

Physical Security

The security program has been very aggressive and diligent in implementing security that meets or exceeds Federal standards. The following outlines security measures implemented during FY 2008:

- Completed physical security upgrades of 24 State and District Office facilities;
- Completed annual aviation reviews of 26 aircraft and hanger facilities;
- Installed countermeasures including access control, intrusion detection, fencing, lighting, safes, vehicle alarms, and other countermeasures at 52 APHIS facilities/program locations/assets;
- Reviewed and fine-tuned guard service at 12 critical and secondary facilities;
- Installed 500 HSPD-12 compliant access control readers for APHIS facilities to use the Federal Identity Smart Card;

- Added 10 facilities to the National Access Control Enterprise, a system that includes national identification/access cards of approximately 13,000 cardholders, 1,500 card readers, more than 2,400 alarm points, and approximately 280 cameras;
- Responded to more than 60 threats against APHIS personnel or work place violence allegations;
- Protected APHIS personnel at 35 horse shows while conducting regulatory activities under the Horse Protection Act;
- Conducted workplace violence training at 15 locations and educated more than 1,000 personnel; and,
- Reviewed and designed security for 12 new construction projects.

Homeland Security Supplemental Presidential Directive-12

HSPD-12 mandates a consolidated Human Resources/Information Technology/Security effort in order 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 FY 2008, APHIS:

- Installed 1,000 HSPD-12 card readers in its critical infrastructure and has the first Physical Access System in the Federal government to read the Federal Smart Card in over 100 buildings.
- Established seven enrollment stations to enroll and identity-proof all APHIS personnel;
- Sponsored more than 2,000 APHIS employees for their Federal Smart Cards, to be used for building and computer access; and,
- Upgraded 50 facilities to use the Federal Smart Cards for building access.

6. Plant Methods Development Labs

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. The program is carried out at APHIS' Center for Plant Health Science and Technology (CPHST), which consists of seven 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 commodities of trade. 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

To carry out its goal of safeguarding U.S. agricultural resources, APHIS needs the appropriate technological tools. The program aims to develop new, or improve existing, tools each year to enhance APHIS' safeguarding capabilities. The program reached its FY 2008 annual performance target by developing or improving at least five quarantine treatments for commodities of trade. The program developed new treatment schedules for logs, nectarines, peaches, apples and sweet cherries. Various commodities were added to existing treatment schedules in the cold treatment, methyl bromide, and irradiation series. Several treatment schedules were improved with the addition of more defined pest and commodity lists.

Over the past year, the Agency initiated an agenda to establish an irradiation treatment program to supplement, and potentially replace, other treatment options that are deleterious to the environment or fruit quality. The irradiation series was re-worked to reflect the use of generic doses and was submitted to International Plant Protection Convention for inclusion as an International Standard for Phytosanitary Measurement treatment option. If this treatment is accepted as an international standard, it could expand

trade opportunities around the world, both by allowing trade in commodities for which there currently are no alternative quarantine treatments and by providing an additional treatment option for other commodities. Irradiation may be able to serve as an alternative to methyl bromide in some cases. In FY 2008, the irradiation program continued its growth with the addition of four overseas facilities – two in Thailand, one in Vietnam and one in Mexico. The program also deployed the Irradiation Reporting and Accountability Database (IRADS) to allow quick access to treatment, traceback, and certification information for irradiation treatments.

The Plant Methods program continues to develop and deliver Lucid identification tools for APHIS to support domestic, port, and offshore pest identification responsibilities. Lucid identification tools are media-rich, internet-accessible keys used to identify pests, diseases, and weeds of interest to APHIS and cooperators. During FY 2008, the program released several keys, including *Grasshoppers of the Western United States, Edition 3*. The program completed the development of two Lucid tools, *Pacific Invasive Ants* and *Wood Boring Beetle Families of the World*, which are planned for release in December 2008.

Emergency Response

The Plant Methods program supports APHIS' emergency response efforts by ensuring that accurate diagnostic tools are available for use in responding to outbreaks of serious plant diseases and pests, such as light brown apple moth (LBAM), which was detected for the first time in the continental United States in March 2007. In response, Plant Methods Development Laboratories developed survey measures as well as eradication and control plans to assist the LBAM emergency program. In FY 2008, Plant Methods also provided support for several high priority programs, including panicle rice mite, gladiolus rust, *Phytophthora ramorum* (*P. ramorum*), and potato cyst nematode (PCN). Diagnostic tools for the detection of PCN, *P. ramorum*, *Phytophthora kernoviae*, citrus variegated chlorosis (*Xylella fastidiosa*), huanglongbing (citrus greening) in plant and vector tissue and *Synchytrium endobioticum* (potato wart) are currently either already deployed or ready for deployment to diagnosticians throughout the United States. These assays have been validated and have proficiency tests developed to ensure accuracy of the diagnostics users.

Sterile Insect Technology

Several APHIS programs release sterile insects to help control or eradicate targeted pest populations. The sterile insects distributed by APHIS mate with wild insects and prevent wild insects from producing viable offspring.

In FY 2008, Plant Methods scientists continued to develop new sterile insect technologies for the pink bollworm (PBW) program with the use of genetically modified insects to increase effectiveness of the sterile release program. The use of genetically modified insects will allow the dose of radiation used to induce sterility to be lowered, which will improve sterile insect performance and also allow improvements in program monitoring. A final Environmental Impact Statement on the "Use of Genetically Engineered Fruit Fly and Pink Bollworm in APHIS Plant Pest Control Programs" was completed in October 2008. This accomplishment paves the way for the operational use of more efficient strains of sterile insects in APHIS control programs by meeting the Agency's responsibility for environmental analysis under the National Environmental Policy Act, and ensures that the use of genetically modified insects will not have unintended consequences.

The Plant Methods program is also investigating the use of genetically modified insects to improve SIT for fruit fly programs. In 2008, program scientists evaluated transgenic Mediterranean and Mexican fruit fly strains that contained internal fluorescent markers, a heritable genetic sex sorting system, and a genetic sterilization system that kills female offspring. The ability to rear and release only males would greatly improve cost effectiveness of the program because only male flies are released to prevent irradiated flies from mating with each other in the wild.

In FY 2008, the Plant Methods program also initiated the development of mass-rearing, release, and other sterile insect technologies for the LBAM in support of eradication efforts against this exotic invasive pest. Scientists will conduct a demonstration trial of LBAM SIT in California beginning Spring 2009.

Risk Mapping

In FY 2008, the program utilized the cooperative North Carolina State University/APHIS Plant Pest Forecasting System (NAPPFASST) and Geographic Information System (GIS) software, to develop pest risk maps based on climate and/or host distribution for all of the more than 100 pests on the Cooperative Agricultural Pest Survey (CAPS) program pest list. NAPPFASST 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 NAPPFASST maps. The CAPS Pest Risk Maps depict areas of the United States that may be at higher risk for pest establishment, based on host availability and pest biology. The combination of the host information and biology in a standardized manner allows the end user (i.e., state survey coordinator) to more easily determine the pests of survey priority and where to focus survey resources. The CPHST risk mapping group focused considerable effort in 2008 on improving the appearance, descriptions and data layers of the CAPS Risk Maps.

7. Veterinary Biologics

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. CVB accomplishes its mission through the 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.

Licensed Products and Inspections

By the end of FY 2008, there were 2,300 active licensed or permitted products for the control of 213 animal diseases. During the fiscal year, APHIS licensed/issued permits for 59 new products that are critical for protecting American agriculture, facilitating trade, and enhancing agricultural economic opportunities. In addition, APHIS conducted approximately 2,150 tests on vaccines and diagnostic test kits used in the surveillance and eradication activities of the Agency's programs. APHIS also licensed the first product for the control of swine brucellosis, a disease that has long plagued the swine industry and complicated brucellosis eradication efforts. APHIS shipped 2,781 vials of reagents, 51 kit panels, 97 slides to facilitate testing consistency and quality by biologics manufacturers and other regulatory authorities.

APHIS conducted 85 on-site inspections in FY 2008; 43 percent of the inspections were in support of a new establishment or product license for the industry. APHIS performed 92 regulatory actions, issued 47 warning notices, and conducted 38 investigations of possible regulation violations during the fiscal year. In addition, the Agency received 456 adverse event reports related to veterinary biological products. APHIS allocated 49.5 days per specialist for the inspection of licensed and unlicensed biologics manufacturing sites to assure compliance with regulations/standards.

APHIS provided a variety of services related to the import and export of veterinary biological products. More than 5,635 Certificates of Licensing and Inspection for the export of veterinary biologics were issued. This represented a 60 percent increase from 2007. Because of APHIS' vigilance, there were no foreign animal disease events related to the importation of more than 86 million biologics doses.

Collaborative Efforts

During FY 2008, APHIS participated in strategic discussions with the regulated biologics industry on their future needs and analyzed the findings of an International Benchmarking Survey on the impact of regulatory requirements on the economic viability of the industry. APHIS also hosted and sponsored a Veterinary Biologics Public Meeting which was attended by 232 manufacturers, domestic and international regulatory officials, and the public. The Agency also worked with the Food and Drug Administration (FDA) on novel regulatory approaches to licensing other pre-harvest vaccines and products containing both APHIS-regulated and FDA-regulated components.

In addition to working with domestic industry associations, APHIS has also fostered new international collaborations with the Canadian and European governments on veterinary biologics-related issues. These collaborations have led to improved organizational effectiveness and efficiency and allowed the Agency to successfully assess the safety of an emerging issue with potential contaminant in feline vaccines and to take action consistent with international regulatory counterparts. APHIS also provided expertise and training at a joint APHIS/Institute for International Cooperation in Animal Biologics education program. More than 160 delegates from 16 countries participated in this 3-week course aimed at educating foreign officials on U.S. regulatory processes.

APHIS also provided expertise for audits by foreign regulatory officials at several U.S. vaccine manufacturers. This collaboration added confidence in APHIS' regulatory system and ensured that export opportunities remain open. APHIS' involvement in the Veterinary International Cooperation on Harmonization led to the development of several new technical guidelines related to target animal safety and post-licensing monitoring product performance. Once implemented, these guidelines will serve as international standards and allow for increased trade with Japan and the European Union.

Collaborations with the Department of Homeland Security and other interagency groups resulted in reports and plans that assure the U.S. is ready for emerging diseases or events, and that APHIS-regulated veterinary biologics are integrated into surveillance and response programs. The Agency licensed eight new novel combination products that will aid in the response and control of emerging diseases. APHIS provided direction and technical information on licensing issues related to the development and eventual licensing of foreign animal disease products (e.g., foot-and-mouth disease vaccine and avian influenza vaccine) which will better ensure that the U.S. is in a position to respond to a disease incursion.

To maintain consistent, transparent, and predictable operations, CVB received annual recertification to International Organization for Standardization (ISO) 9001 Standards during FY 2008. This certification provides formal third-party verification and recognition, both nationally and internationally, that the Center's business practices meet international standards for quality products, customer satisfaction, individual accountability, and process improvement.

8. Veterinary Diagnostics

The National Veterinary Services Laboratories (NVSL) is unique in its functions. NVSL serves as the United States' national and international reference laboratory for animal diseases, conducting disease surveillance testing; providing national leadership in coordination and emergency laboratory response; training State and university laboratory personnel; providing proficiency testing; and developing improved diagnostic technologies. NVSL handled over 47,000 accessions—one or more diagnostic samples received from the same submitter on the same day—and 194,000 samples for diagnostic testing in FY 2008.

In 2008, the NVSL received over 42,000 equine sera as part of a national surveillance effort to determine the prevalence of equine piroplasmosis serologically positive horses in the United States. The NVSL's unique role as the only laboratory in the U.S. performing this test for importation of horses and the sensitivity surrounding the identification of any positive animals made it the appropriate choice for this

surveillance effort. Additionally, NVSL confirmed and provided diagnostic support for the wildebeest-associated malignant catarrhal fever outbreak originating in a Texas ranch/game park. Over 800 samples were tested by nested PCR over a 5 month period.

National Animal Health Laboratory Network

NVSL serves as the confirmatory laboratory for the National Animal Health Laboratory Network (NAHLN) laboratories. The NAHLN was established to address significant emergent biological and chemical threats, including foreign animal diseases and bioterrorist threats, to animal agriculture and to a secure food supply in the United States, and to provide diagnostic surge capacity in the event of a significant animal disease outbreak. APHIS and the Cooperative State Research, Education, and Extension Service administer the NAHLN testing and surveillance program which totals 58 laboratories in 45 States.

Surveillance continued for classical swine fever in States with a high risk for introduction, including Puerto Rico. Currently, 36 State/university NAHLN laboratories are testing samples collecting as part of the surveillance efforts. This coordinated effort initiated surveillance for foreign animal diseases that pose a risk to U.S. animal agriculture. The effort not only provides early detection on an incursion of a foreign animal disease, but also ensures that we have proficient diagnosticians prepared to respond to the large number of samples generated during an outbreak of a foreign animal disease. Confirmatory testing is performed at NVSL's Foreign Animal Disease Diagnostic Laboratory in Plum Island, New York.

A "Train the Trainer" program has been developed and implemented for foot-and-mouth disease diagnostics, and rapid assay diagnostics for classical swine fever, avian influenza, and exotic Newcastle disease. This program has increased the number of State/university laboratories, from 14 to 36, approved to conduct the classical swine fever and foot-and-mouth assays. The program has also increased the number of approved laboratories to conduct avian influenza and exotic Newcastle disease testing from 44 to 53. Not only has the program increased the number of laboratory personnel prepared to respond to a national animal health emergency, but it has also provided the United States with a cadre of trainers available to teach others when needed. Successful implementation of this program is a significant step for the network and its mission of ensuring sufficient diagnostic capability and capacity to address an animal health emergency.

To increase the overall diagnostic testing capability of member laboratories, the NAHLN provided high throughput equipment that was distributed to 31 NAHLN laboratories located in the highest risk states for an avian influenza introduction in FY 2007. Training sessions were held in collaboration with a NAHLN laboratory and the NVSL (Diagnostic Virology Laboratory and Foreign Animal Disease Diagnostic Laboratory) during the summer of 2008. Representatives from 31 NAHLN laboratories participated in a 2-day training course that included an overview of high-throughput systems, instruction on equipment programming, and breakout sessions that provided hands-on use of each piece of equipment. The systems have been validated for use with real time diagnostics for avian influenza, classical swine fever, and foot-and-mouth disease. This technology allows semi-automated processing of diagnostic samples and test methods to enhance the daily testing output of each laboratory.

Technical Training

Five foreign animal diseases diagnostics training courses were held on Plum Island at the Foreign Animal Disease Diagnostic Laboratory with clinical demonstration of 11 foreign animal diseases (FADs). APHIS scientists also participated in several FAD awareness courses held in Virginia, Michigan, Colorado, Nebraska, Wisconsin and New England. Additional expert training was provided to international laboratories in the Republic of Georgia, Afghanistan, Pakistan, Guatemala, Dominican Republic, and Haiti, and domestically to NAHLN labs. Scientific presentations were made to international groups in Australia, Brazil, Egypt, and Germany.

The NVSL, as part of its role as a World Organisation for Animal Health (OIE) avian influenza reference laboratory, provided training to 47 scientists from 29 countries in various diagnostic techniques for avian influenza. In addition, NVSL scientists traveled to Tanzania, Panama, Colombia and Mexico to provide in-country training for avian influenza diagnostics.

9. Wildlife Services Methods Development

APHIS' National Wildlife Research Center (NWRC) applies scientific expertise to the development of practical methods to resolve problems caused by the interaction of wild animals and society. NWRC provides Federal leadership and expertise to resolve wildlife conflicts related to plant and livestock, forestry, human health and safety (including wildlife diseases), invasive species, and threatened and endangered species.

In FY 2008, the NWRC developed a new five year strategic plan that aligned its project management system with USDA and APHIS strategic plans. This process will allow NWRC to evaluate its program delivery within the context of the Department and Agency goals. During FY 2008, NWRC scientists conducted an average of 16 studies under each of 17 research projects, and tested and/or improved 17 wildlife damage management methods.

Wildlife Research

NWRC's Agriculture and Resource Research Program focuses on reducing wildlife damage to livestock, crops, aquaculture, property and other human activities. At the Bismarck, North Dakota field station, scientists collaborated with researchers from Ohio State University to conduct a radio-telemetry study to determine the potential for European starlings to serve as vectors in the transmission of *E. coli* among dairy farms. The results from this study are important for developing management plans for preventing disease transmission at the agriculture-wildlife interface. The NWRC's field station in Logan, Utah investigated the effectiveness of reproductive control for protecting wildlife species from predation by coyotes. Survival of pronghorn fawns was significantly greater in areas where coyotes were sterilized, indicating that this approach can help in the management of wildlife species. Scientists from the NWRC Mississippi field station collaborated with Agency biologists and Michigan Department of Natural Resources to evaluate management of cormorants as a means of improving the local yellow perch fishery. The scientists documented the correlation between cormorant populations and the decline of yellow perch. Studies found that management efforts reduced cormorants more than 60 percent, and that yellow perch numbers increased dramatically following the first three years of this collaborative research and management project.

NWRC scientists in Fort Collins, Colorado, completed a multi-year study to evaluate the feasibility of using GonaCon™ and DiazaCon™ as reproductive inhibitors for controlling black-tailed prairie dog colonies in urban and suburban settings. This non-lethal method for local population control will play a critical role in resolving wildlife-human conflicts involving prairie dogs in urban landscape settings. NWRC chemists in Fort Collins, Colorado, determined the optimal ratio of theobromine and caffeine, two naturally occurring compounds in chocolate, to create a selective toxicant for canids. NWRC conducted studies in California and Utah to demonstrate that the Coyote Lure Operative Device (CLOD) can be used to deliver the theobromine-caffeine toxicant under field conditions. This research could lead to the availability of an effective alternative selective toxicant for controlling livestock predators. Scientists at the NWRC Hawaii Field Station conducted studies to determine the extent of bird damage in seed crops and to evaluate the effectiveness of an operational control program to protect new strains of seed corn and soybeans from bird depredations and damage in the Hawaiian Islands. The scientists found that an integrated management plan that includes the removal of birds and the alteration of farm practices to reduce food and water sources for birds will result in a drastic reduction in damage and reduce the need for extensive use of labor-intensive bird chasers in fields.

NWRC's Wildlife Disease Research Program develops risk assessments, management plans, and diagnostic methods for wildlife diseases that impact agriculture and human health and safety. The NWRC field station in Kingsville, Texas, examined the attractiveness of 5 baits for an oral delivery system of biological agents to feral swine that included a flavor additive that will increase the success of trapping and could be used to selectively deliver vaccines or toxicants to feral swine. NWRC scientists collaborated with researchers from Auburn University to find that raccoon population interbreeding occurred across the Arkansas river thereby confirming the dispersal of animals across the river and the possible subsequent transmission of rabies. This study increases the understanding of the role of natural geographic barriers, such as the Alabama River, in delineating oral rabies vaccination zones and slowing the westward movement of raccoon rabies. In addition, APHIS is cooperating with Merial pharmaceutical company, that has the license for the RABORAL[®] V-RG rabies vaccine, to develop methods to improve vaccine stability. The work will enable the development of more efficient oral bait delivery systems and improve the efficiency and effectiveness of APHIS' wildlife rabies vaccination efforts. NWRC scientists also developed an efficient prototype electropositive filter water sampling system for detection of avian influenza virus (AI) in environmental samples. This method greatly increases the potential to detect the presence of AI in the environment and for identifying sites that pose a high risk of infection to migratory birds.

Invasive Species Research

NWRC's Invasive Species and Technology Development Research Program focuses on risk assessments for invasive species as well as developing wildlife damage management methods. Working cooperatively with United States Geologic Survey and United States Fish and Wildlife Service (USFWS) biologists, the NWRC field station in Gainesville, Florida, developed information for a black vulture management model for evaluating lethal control on the sustainability of vulture populations. The model provides a framework within which decision-makers can set limits on levels of allowable lethal control to achieve specific population objectives. The model will facilitate the process by which Agency biologists and others apply for and receive USFWS depredation permits for migratory birds.

CONTINGENCY FUNDS

1. Asian Gypsy Moth

In FY 2008, APHIS released \$151,050 in contingency funds to conduct eradication activities in California to prevent the spread and establishment of Asian Gypsy Moth (AGM). The program treated one site in Los Angeles County with approximately 120 acres. The program will conduct follow up surveys in FY 2009 to ensure the treatment was successful. Unlike European gypsy moth, which is established in the eastern United States, AGM is not established in the United States, but is periodically introduced. It not only has a much broader host range than its European relative, but can spread rapidly because the female is capable of flying 25 miles (unlike the flightless European gypsy moth female). When AGM is detected in the United States, APHIS and affected States respond quickly with eradication treatments. To ensure that eradication of spot infestations is successful, APHIS follows eradication treatment with three years of survey trapping.

2. Contagious Equine Metritis

In FY 2008, APHIS used approximately \$85,500 of contingency funding to address a limited outbreak of contagious equine metritis (CEM). Mitigating the impact of the presence of three CEM-infected stallions in the United States required quarantine of all potentially infected and exposed animals; complete diagnostics and treatment of affected horses; gathering and destroying of any semen collected from infected stallions; and the use of "test" mares for breeding with suspect stallions and subsequent diagnostic testing of mares to ensure successful elimination of CEM from those stallions. APHIS successfully contained and eradicated this disease with activities in accordance with Federal regulations.

3. Gypsy Moth

In FY 2008, APHIS released \$152,024 in contingency funds to conduct European gypsy moth (EGM) eradication activities in Oregon (Jackson County). The EGM is established in parts of the eastern United States, and APHIS' goal with regard to this slow-moving species is to prevent human-assisted movement of the moth out of the quarantine area, to non-infested areas of the United States. APHIS treated an area of one square mile surrounding the detection site in Jackson County, and will conduct enhanced trapping activities in this area in FY 2009 to ensure that eradication efforts were successful.

4. Malignant Catarrhal Fever

In FY 2008, APHIS used approximately \$287,000 in contingency funds to cover costs associated with a malignant catarrhal fever (MCF) disease outbreak. The epidemiological investigation showed that cattle were shipped from the affected herd site in Texas to other operations in Alabama, Arkansas, Georgia, Illinois, Louisiana, Mississippi, and Texas. APHIS informed the World Organisation for Animal Health (OIE) and our trading partners of the disease detection and provided information on the actions being taken to contain the disease. APHIS worked in close cooperation with the Texas Animal Health Commission in responding to the MCF outbreak and carrying out an epidemiologic investigation. APHIS also worked closely with other animal health officials in the affected States to identify potentially exposed animals.

The total number of cows potentially exposed to the virus was 589. Of the total exposed, 400 cows are currently under quarantine, with the majority being located at the premises of disease origin. APHIS recommended that these cattle remain under quarantine for a period of seven months. This duration is aligned with current knowledge of the virus and its incubation period. Any cows or calves recognized as being infected during the quarantine period, or positive upon diagnostic testing at the end of the quarantine period, will be euthanized.

5. Rabies

In FY 2008, APHIS used approximately \$805,000 of Contingency Funds to address the heightened risk of raccoon rabies spread along the established oral rabies virus containment areas along the borders of New York, Vermont and Canada. APHIS conducted Trap Vaccinate and Release (TVR) activities in portions of New York and Vermont along the U.S.-Canadian border in coordination with international counterparts. TVR activities were also conducted in Ohio to address a rabies emergency east of Cleveland along the shore of Lake Erie. Approximately 7,000 raccoons were hand-vaccinated in these emergency areas to suppress outbreaks and to maintain or restore areas to raccoon rabies-free status. The Agency also used a portion of these funds to purchase baits for a gray fox rabies emergency in west Texas, where similar activities were conducted.

Summary of FY 2008 Contingency Fund Releases

	Emergency/Activity	Releases from Contingency Fund in FY 2008	Obligations Against Contingency Fund in FY 2008
1	Asian Gypsy Moth	\$151,050	\$151,050
	Cattle Fever Tick a/	383,312	0
2	Contagious Equine Metritis	85,540	85,540
3	European Gypsy Moth	152,024	152,024
4	Malignant Catarrhal Fever	371,589	287,364

	Emergency/Activity	Releases from Contingency Fund in FY 2008	Obligations Against Contingency Fund in FY 2008
5	Rabies	850,000	804,734
	Total FY 2008 Contingency Transfers	\$1,993,515	\$1,480,712

a/ Release approved late in FY 2008. Obligations will be incurred in FY 2009.

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

1. Asian Longhorned Beetle

In FY 2008, APHIS spent approximately \$1 million in carryover funds from the Commodity Credit Corporation (CCC) on Asian longhorned beetle (ALB) eradication activities in New Jersey and New York. ALB is a serious threat to forest resources nationwide, as roughly 30 percent of U.S. trees are ALB host trees. In April 2008, ALB was declared eradicated from Illinois and portions of northern New Jersey. The CCC funds supplemented the approximately \$20 million in appropriated dollars that APHIS spent on ALB eradication in FY 2008. The program addressed the current New Jersey outbreak by conducting surveys and treatments in Middlesex and Union Counties in New Jersey, as well as on Staten Island in New York City (NYC). In addition, the program continued treatments in Brooklyn and Queens, and conducted ground surveys throughout the remaining infested area in NYC and on Long Island. In Massachusetts, the program is responding to an infestation in Worcester by beginning initial surveys and establishing quarantine boundaries.

2. Avian Influenza

In FY 2008, APHIS used approximately \$127,394 of carryover Commodity Credit Corporation funding to indemnify a backyard flock owner in North Carolina and a live bird market in New Jersey. Additionally, funding was used for indemnification, depopulation, cleaning, and disinfection of one upland game bird facility in Idaho. This facility contained a mixed population which included pheasants, quail, and ducks. Each of these incidents involved H5 or H7 strains of low pathogenic avian influenza. In addition, all premises were depopulated, cleaned, disinfected or otherwise addressed according to the Federal regulations.

3. Bovine Tuberculosis

Tuberculosis (TB) is a common and deadly infectious disease caused by mycobacteria. There are various strains of mycobacteria, with *Mycobacteria bovis* affecting cattle and cervids, as well as other animals. In FY 2008, APHIS had approximately \$57.8 million in Commodity Credit Corporation (CCC) funding available to support TB eradication and enhanced surveillance efforts in California, Michigan, Minnesota, and New Mexico. The total funding available included approximately \$34.6 million from prior transfers, and approximately \$22.9 million that the Secretary transferred from the CCC during FY 2008.

California

During FY 2008, the Agency depopulated 2 dairy herds (approximately 5,500 head of cattle) and purchased exposed and reactor animals traced from these two dairy herds; established a cooperative agreement with the State; and supported on-site personnel involved in the incident response (depopulating, testing, and tracing affected animals/herds). As of October 2008, more than 175 herds had been traced in or out of the affected herd. APHIS identified a third affected herd through this epidemiologic tracing effort. The third

herd is currently under quarantine. California's TB State status has been downgraded from Accredited Free to Modified Accredited Advanced as a result of the confirmed TB positive herds.

Michigan

During FY 2008, APHIS established an agreement with the State to continue surveillance, control, and elimination efforts necessary to maintain the current Split State Status for TB in Michigan.

Minnesota

The Agency provided indemnities associated with depopulating TB affected herds and established necessary agreements with veterinarians and with the State to support targeted TB surveillance efforts during the fiscal year. As a result, as of the end of FY 2008, no herds remained under quarantine in Minnesota. The State is currently classified as TB Modified Accredited.

New Mexico

APHIS depopulated a large dairy herd (about 12,000 head of cattle) and purchased exposed and reactor animals traced from this dairy. Additionally, the Agency established an enhanced surveillance cooperative agreement with the State, which also supported enhanced surveillance activities in Texas (since the State borders the New Mexico county where the affected herd was depopulated). The state is currently classified as Modified Accredited Advanced.

APHIS' National Veterinary Services Laboratory supported emergency efforts by conducting the TB confirmatory testing. In addition, the Agency's Center for Epidemiology and Animal Health provided support by conducting risk analyses associated with the TB outbreaks.

4. Cattle Fever Tick

The Agency's Cattle Fever Tick Program was established to eliminate babesiosis from the Nation's cattle population. Babesiosis is a severe and often fatal disease of cattle. The cattle fever tick (*Boophilus annulatus*) and the southern cattle tick (*B. microplus*) are vectors of the causal agents of babesiosis. To stop the spread of ticks, 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 State-Federal program was established. During FY 2008, the Secretary provided approximately \$5.2 million in Commodity Credit Corporation funding to support cattle fever tick program operations in southern Texas. Temporary blanket quarantines were established adding 600,000 acres to the existing permanent quarantine area. APHIS hired 14 temporary mounted patrol inspectors and 30 temporary animal health technicians to carry out tick surveillance, inspections, treatments, and trace-outs in the new blanket quarantine areas in Texas. The additional resources helped the program increase the number of premises inspected (45,775 in 2008 versus 36,329 in 2007) and the number of cattle treated within the traditionally "free" and permanent quarantine areas (146,611 versus 68,559) during FY 2008.

By the end of September 2008, APHIS had begun to see a decrease in the number of identified infested premises at any point in time. The number of infested premises reached a peak in July 2008, when a total of 139 were under quarantine, including 57 in the traditionally "free" area. By the end of September, the number had been reduced to 103 infested premises under quarantine, including 51 in the traditionally "free" area. APHIS is continuing emergency response program operations in FY 2009.

5. Citrus Canker

Citrus canker, present in Florida, is a disease that causes lesions on the leaves, stems, and fruit of citrus trees. While not harmful to humans, the disease affects the health and marketability of infected fruit. APHIS' Citrus Health Response Program's (CHRP) is working to contain the disease now while maintaining grower's continued access to export markets. In FY 2008, APHIS had \$7.3 million in Commodity Credit Corporation funding available that was applied toward a one-year cooperative agreement with the State of Florida Department of Agriculture. The State of Florida operates compliance

agreements with growers, nurseries, harvesters, packers and processors; performs surveys of commercial citrus groves, buffer areas, nurseries and nursery environs; and enters survey data and map areas where canker occurs to aid growers in disease management. Florida's efforts, combined with packinghouse inspections and multiple pest surveys by USDA, are important to preventing the spread of citrus canker outside of the State of Florida to other citrus-producing areas of the United States.

6. Emerald Ash Borer

Emerald ash borer (EAB) is an exotic forest pest that has infested and killed millions of ash trees in the United States since it entered the country. It was first found in Michigan in 2002 and has spread to Ohio, Indiana, Illinois, Maryland, Pennsylvania, West Virginia, Missouri, Virginia, and Wisconsin. Because the pest infests and kills healthy ash trees, making them brittle and likely to cause public safety hazards, infested trees must be removed, at a considerable expense to landowners and/or local governments. The goal of the EAB program is to prevent the human assisted spread and minimize the natural spread of EAB. In FY 2008, APHIS had \$30.442 million in Emerging Plant Pest (EPP) funding and \$11.393 million in Commodity Credit Corporation (CCC) funding available to address EAB. The program used \$8.627 million of the CCC funding to conduct grid-based survey activities in a 100-mile band around the generally infested area. The survey covered areas in Indiana, Illinois, New York, Ohio, Pennsylvania, Wisconsin, Michigan's Upper Peninsula, Prince George's County, Maryland, and areas of Virginia. In addition, lure-baited sticky traps were placed at up to fifty high-risk sites across the country that participated in the 2008 national EAB survey. The remaining APHIS funds were used for regulatory and control activities and outreach to the general public in infested areas.

7. Glassy Winged Sharp Shooter

In FY 2008, APHIS spent approximately \$250,000 in carryover funds from the Commodity Credit Corporation on Glassy Winged Sharp Shooter (GWSS) management activities in California. GWSS is a vector for Pierce's Disease (PD), a lethal disease that affects grapevines and threatens California's wine industry. These funds supplemented the approximately \$26 million in appropriated dollars that APHIS spent on these activities. In FY 2008, APHIS and the California Department of Food and Agriculture (CDFA) continued a Statewide management program to minimize the impact of PD and reduce GWSS populations without significantly affecting agricultural production areas. Since FY 2003, this program has contained the GWSS within nine California counties. In FY 2008, APHIS and CDFA conducted area-wide management programs in major citrus-producing areas to suppress GWSS populations and maintain rejections of bulk citrus at low levels. These low levels enabled citrus growers to continue moving their products to packing houses for export. In addition, State officials continued to inspect nursery stock at originating and destination counties in search of GWSS egg masses. This activity prevents the GWSS from establishing in non-infested areas, where mitigation efforts would be costly and time-consuming.

8. Light Brown Apple Moth

Light Brown Apple Moth (LBAM) is a devastating invasive pest that multiplies rapidly and can attack more than 2,000 types of plants and trees found throughout the United States, including nursery stock, cut flowers, fruits, and vegetables. If it were to become established, LBAM could cause California an estimated \$160 million to more than \$2 billion in crop damage and control costs annually.

In FY 2008, APHIS spent approximately \$34.5 million in emergency funds from the Commodity Credit Corporation to continue LBAM eradication efforts in California while preventing further spread of the pest. The pest has been detected in 15 California counties: Alameda, Contra Costa, Los Angeles, Marin, Monterey, Napa, San Francisco, San Luis Obispo, San Benito, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Solano, and Sonoma. As of November 14, 2008, all but Los Angeles and San Luis Obispo are quarantined. Since the initial detection in February 2007, the program has placed approximately 50,000 traps throughout 47 California counties, and has confirmed more than 45,000 moths. In June 2008, APHIS and the California Department of Food and Agriculture reprioritized the eradication strategy to employ

several pest management techniques simultaneously to more effectively combat LBAM infestations. In FY 2008, the program continued statewide detection and delimitation surveys, applied treatments to eradicate outlying infestations and suppress the leading edges of LBAM infestations, targeted treatments at heavily infested areas, continued stringent enforcement of State and Federal regulations, and enhanced public outreach and communication efforts. In addition, the program carried out a national survey in 47 States. This survey found no detections outside the regulated areas in California and Hawaii (LBAM was first reported in Hawaii in the late 1800s and, currently, the entire State of Hawaii is regulated because of the lack of data on the distribution of LBAM there). The program also pursued mating disruption, biological control, insecticidal control, and sterile insect technology. The mating disruption used the LBAM pheromone delivered by twist ties or other ground-based applications. No aerial dispersal of the pheromone occurred in FY 2008. APHIS is evaluating several biological control agents, including parasitic wasps, to suppress LBAM populations. APHIS also used targeted ground applications of organic insecticides (e.g., Spinosad, *Bacillus thuringiensis*) on infested sites with high larval populations. In addition, the program is accelerating the development of large-scale, mass rearing of sterile insects to support LBAM eradication. By the spring of 2009, this program expects to begin releasing 500,000 sterile LBAM per week as a pilot program.

At the beginning of FY 2008, two of the 12 initially affected counties (Los Angeles and Napa) had been freed of infestation and de-regulated. For FY 2008, the program projected to maintain this progress, but was unable to do so. By the end of FY 2008, Los Angeles County remained de-regulated since no additional finds were detected. However, LBAM was again found in Napa County, as well as in San Benito, Santa Barbara, and Sonoma Counties. In response to these finds, the program is deploying additional traps and applying treatments to eradicate outlying infestations and suppress the leading edges of LBAM infestations.

9. Mediterranean Fruit Fly

In FY 2008, APHIS had \$1.7 million in Commodity Credit Corporation (CCC) funding available to help support the eradication of three Mediterranean fruit fly (Medfly) outbreaks in California. Medfly is one of the world's most destructive agricultural pests, has a wide host range that includes commercially important crops such as citrus and stone fruits. The Medfly eradications were completed in Dixon, San Jose, and Los Angeles Counties, California. In response to outbreaks, the sterile flies are traditionally released for two life cycles and the increased survey methods continue for three life cycles. Fruit fly life cycles can last up to four months depending upon the temperature of the area in question. The CCC funds supported the purchase of diet material and other supplies for sterile fly production; aerial release of the sterile flies; survey activities, which included trapping and fruit cutting; and pesticide applications. The successful effort prevented the pests from becoming established in these areas. Because of the rapid response of the Fruit Fly Exclusion and Detection program, agricultural losses due to this emergency were minimized.

10. Mexfly

In FY 2008, APHIS had approximately \$662,000 in Commodity Credit Corporation (CCC) funding available to address Mexican fruit fly (Mexfly) outbreaks in San Diego County, California, and Willacy County, Texas, with the release of sterile Mexflies and increased surveillance activities. Mexfly is native to central Mexico and is a major pest of agriculture throughout many parts of the world. It is not established in the United States except in the Lower Rio Grande Valley in Texas. In response to outbreaks, sterile flies are traditionally released for two life cycles and the increased survey methods continue for three life cycles (a typical life cycle of the fruit fly may last up to four months, depending on the temperature of the area in question.) The CCC funds supported the purchase of diet material and other supplies for sterile fly production; aerial release of the sterile flies; survey activities, which included trapping and fruit cutting; and pesticide applications. The program completed eradication activities in California and Texas. The successful effort prevented the pests from becoming established in these areas. Because of the rapid response of the Fruit Fly Exclusion and Detection program, agricultural losses due to this emergency were minimized.

11. Mormon Cricket

In FY 2008, APHIS had \$1.788 million in Commodity Credit Corporation (CCC) funding available to address Mormon crickets in Idaho, Nevada, and Utah. Mormon crickets cause little damage at low population levels, but they can develop into outbreaks under certain conditions. At larger population levels, they form roving bands and damage crops and rangeland in their paths.

In FY 2008, the available CCC funds were used for Mormon cricket and grasshopper surveys and treatments in Idaho, Nevada, and Utah. In Idaho, there were 12,478 acres treated; in Nevada, 929 acres were treated; and in Utah, there were 92 acres treated. In addition, some of the funds were used in Utah to search for naturally-occurring fungi that are known to infect and be lethal to Mormon crickets. This approach that uses fungi as a bio-pesticide (a biological product that can be used like a chemical insecticide), has been successfully developed for use against locusts (which are similar to Mormon crickets), in both Africa and Australia.

12. Plum Pox

In FY 2008, APHIS spent approximately \$240,000 in carryover funds from the Commodity Credit Corporation to compensate stone fruit growers in New York and Pennsylvania for the effects of APHIS regulatory actions to control plum pox virus (PPV), a disease that attacks several prunus species, including peaches, apricots, plums and nectarines. In New York, the program compensated growers for trees removed in late FY 2007. In Pennsylvania, the program provided compensation to growers whose trees were removed several years ago but who cannot replant because the virus may still be present in the soil (program regulations allow replanting of PPV host species after 5 years). These compensation payments are critical to gaining grower support for APHIS' eradication program. They provide incentive for growers to cooperate with the program in removing infested orchards, rather than allowing infested trees and materials to continue to spread PPV.

13. Potato Cyst Nematode

In FY 2008, APHIS had available \$11.247 million in Commodity Credit Corporation funds to address Potato Cyst Nematode (PCN). PCN is a major pest of potato crops in cool-temperate areas and is one of the most difficult potato pests to control.

In FY 2008, APHIS continued to enforce Federal regulations designed to prevent the spread of PCN from the quarantined area in Idaho and continued eradication efforts through extensive soil sampling and fumigation of eight affected fields (approximately 1,100 acres). These affected fields, along with all associated fields, have been under Federal quarantine since 2006 to prevent the spread of nematodes. More than 100,000 soil samples, doubled from 2007 sampling efforts, have been collected in 2008—all with negative results.

APHIS also continued the National PCN detection survey in 28 other potato-producing States to ensure that U.S. potato production systems are free from PCN. Nearly 59,000 soil samples were collected and PCN was not found to be present outside of the eight fields in the current eradication zone.

14. Rabies

In FY 2008, APHIS used approximately \$272,000 of carryover Commodity Credit Corporation funding to continue to address the heightened risk of rabies spread along the established oral rabies virus containment areas along the borders of New York, Vermont and Canada. The Agency purchased 196,656 oral rabies vaccination baits for distribution. Temporary APHIS personnel assigned to the raccoon rabies emergencies conducted activities such as applying these oral vaccination baits in those areas that are considered at high risk, including areas of Ohio, in an effort to maintain or restore areas to raccoon rabies-free status.

15. Sudden Oak Death

P. ramorum is a plant pathogen that causes Sudden Oak Death and several other plant diseases. In FY 2008, APHIS spent approximately \$1.4 million in emergency funds from the Commodity Credit Corporation to continue a regulatory and control program to prevent the artificial spread of *P. ramorum* from 14 infested California counties and reduce the infection level in affected nurseries. These funds were in addition to the approximately \$6.1 million that APHIS spent from the Emerging Plant Pests line item for this program. In this program, APHIS works with officials in California, Oregon, and Washington to establish quarantines, and requires nursery inspections before host plants may be shipped interstate. In FY 2008, this program worked with the nursery industry to reduce the presence of the disease in the nursery system and also reduce the quarantine area. This program's quarantine measures have minimized the artificial spread of the disease through nursery shipments, while allowing the interstate movement of healthy plants. To date, there is no evidence of any disease caused by *P. ramorum* being established outside of the quarantine area as a result of artificial movement.

Summary of Key FY 2008 CCC Funded Emergency Activities

	Emergency/Activity	Prior Year Carry Over (Start of Year)	Recoveries from Unpaid Obligations	FY 2008 Transferred and Redirected Amounts	Total Available in FY 2008 a/
1	Asian Longhorned Beetle	\$1,163,199	\$271,351	\$0	\$1,434,550
2	Avian Influenza	6,169,403	661,795	0	6,831,198
3	Bovine Tuberculosis	34,692,465	224,560	22,927,704	57,844,729
4	Cattle Fever Tick	0	0	5,232,732	5,232,732
5	Citrus Canker b/	11,702,546	557,884	-5,000,000	7,260,430
6	Emerald Ash Borer	8,620,894	2,771,868	0	11,392,762
	Exotic New Castle Disease c/	4,059,449	200,645	-2,000,000	2,260,094
7	Glassy Winged Sharp Shooter	251,915	0	0	251,915
8	Light Brown Apple Moth	3,273,770	183,931	74,538,610	77,996,311
9	Mediterranean Fruit Fly	1,700,930	31,698	0	1,732,628
10	Mexican Fruit Fly (Mexfly)	662,634	0	0	662,634
11	Mormon Cricket	1,788,951	0	0	1,788,951
12	Plum Pox	242,683	2,840	0	245,523
13	Potato Cyst Nematode	10,205,656	1,041,766	0	11,247,422
14	Rabies	270,736	1,400	0	272,136
15	Sudden Oak Death	150,848	1,238,027	0	1,388,875
	Total	\$84,956,079	\$7,187,765	\$95,699,046	\$187,842,890

a/ Total Available includes account recoveries, where applicable.

b/ Redirected \$5,000,000 to Light Brown Apple Moth.

c/ Redirected \$2,000,000 to Cattle Fever Tick

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, \$4,712,000, to remain available until expended.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and Facilities

The Buildings and Facilities account funds major nonrecurring construction projects in support of specific program activities and recurring construction, alterations, preventive maintenance, and repairs of existing APHIS facilities. By their nature, construction projects and the associated obligation of funds typically extend over multiple years, however, the funding for the entire project must be approved and available prior to initiating the project or entering into any contracts. This is especially true for major structural renovations such as replacing stairwells, ceilings, or electrical wiring throughout the facility, or when installing energy upgrades. The contract bidding and award process for such projects is also lengthy.

Appropriations Act, 2009.....	\$4,712,000
Budget Estimate, 2010	<u>4,712,000</u>
Increase in Appropriation.....	+0

SUMMARY OF INCREASES AND DECREASES

(on basis of appropriation)

<u>Item of Change</u>	<u>2009 Appropriation</u>	<u>Program Changes</u>	<u>2010 Estimated</u>
Basic buildings and facilities repair, alterations, and preventive maintenance.....	\$4,712,000	+0	\$4,712,000

PROJECT STATEMENT

(On basis of available funds)

<u>Item of Change</u>	<u>2008 Actuals</u>	<u>2009 Enacted</u>	<u>Program Changes</u>	<u>2010 Estimated</u>
Unobligated balance available, start of year	\$9,623,235	\$6,800,986	--	\$8,762,986
Recovery from prior years	359,936	--	--	--
Total, Appropriation	--	4,712,000	--	4,712,000
Total, Available	9,983,171	11,512,986	--	13,474,986
Total obligations	-3,182,185	-2,750,000	--	-3,500,000
Total, Unobligated balance available, end of year	\$6,800,986	\$8,762,986	--	\$9,974,986

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
 BUILDING AND FACILITIES
Geographic Breakdown of Obligations and Staff Years
2008 Actual and Estimated 2009 and 2010

	FY 2008		FY 2009		FY 2010	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<u>United States:</u>						
Alabama.....	\$0	0	\$0	0	\$0	0
Alaska.....	0	0	0	0	0	0
Arizona.....	17,015	0	0	0	0	0
Arkansas.....	0	0	0	0	0	0
California.....	0	0	0	0	0	0
Colorado.....	180,406	0	522,637	0	200,000	0
Connecticut.....	0	0	0	0	0	0
Delaware.....	0	0	0	0	0	0
Florida.....	0	0	0	0	25,000	0
Georgia.....	0	0	0	0	0	0
Hawaii.....	132,908	0	0	0	25,000	0
Idaho.....	0	0	0	0	0	0
Illinois.....	0	0	0	0	0	0
Indiana.....	0	0	0	0	0	0
Iowa.....	300,001	0	75,000	0	75,000	0
Kansas.....	0	0	0	0	0	0
Kentucky.....	0	0	0	0	0	0
Louisiana.....	0	0	0	0	0	0
Maine.....	0	0	0	0	0	0
Maryland.....	0	0	0	0	0	0
Massachusetts.....	7,697	0	0	0	1,280,000	0
Michigan.....	0	0	0	0	0	0
Minnesota.....	0	0	0	0	0	0
Mississippi.....	80,000	0	0	0	0	0
Missouri.....	0	0	0	0	0	0
Montana.....	18,352	0	0	0	0	0
Nebraska.....	0	0	0	0	0	0
Nevada.....	0	0	0	0	0	0
New Hampshire.....	0	0	0	0	0	0
New Jersey.....	0	0	0	0	0	0
New Mexico.....	0	0	0	0	0	0
New York.....	351,952	0	15,001	0	50,000	0
North Carolina.....	0	0	0	0	0	0
North Dakota.....	0	0	0	0	0	0
Ohio.....	0	0	0	0	0	0
Oklahoma.....	0	0	0	0	0	0
Oregon.....	0	0	0	0	0	0
Pennsylvania.....	31,105	0	33,895	0	0	0
Rhode Island.....	0	0	0	0	0	0
South Carolina.....	0	0	0	0	0	0
South Dakota.....	0	0	0	0	0	0
Tennessee.....	0	0	0	0	0	0
Texas.....	1,024,429	0	1,426,000	0	1,000,000	0
Utah.....	0	0	0	0	0	0

	FY 2008		FY 2009		FY 2010	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Vermont.....	0	0	0	0	0	0
Virginia.....	0	0	0	0	0	0
Washington.....	0	0	0	0	0	0
West Virginia.....	0	0	0	0	0	0
Wisconsin.....	117,000	0	0	0	0	0
Wyoming.....	0	0	0	0	0	0
District of Columbia.....	0	0	0	0	0	0
Puerto Rico.....	0	0	0	0	0	0
Virgin Islands.....	0	0	0	0	0	0
Canada.....	0	0	0	0	0	0
Mexico.....	675,655	0	50,000	0	40,000	0
<u>Central America:</u>						
Dominican Republic.....	0	0	0	0	0	0
Panama.....	35,000	0	0	0	0	0
Caribbean.....	0	0	0	0	0	0
Guatemala.....	(330,000)	0	50,000	0	30,000	0
Other, Central America.....	0	0	0	0	0	0
<u>South America:</u>						
Chile.....	0	0	0	0	0	0
Brazil.....	0	0	0	0	0	0
Colombia.....	0	0	0	0	0	0
Peru.....	0	0	0	0	0	0
Other, South America.....	0	0	0	0	0	0
<u>Europe/Africa:</u>	0	0	0	0	0	0
<u>Asia/Pacific:</u>						
Guam.....	0	0	0	0	0	0
Japan.....	0	0	0	0	0	0
China.....	0	0	0	0	0	0
Other, Asia/Pacific.....	0	0	0	0	0	0
Other Obligations (See below)	540,666		577,467		775,000	
Total direct obligations	\$3,182,186	0	\$2,750,000	0	\$3,500,000	0
Other Obligations:						
HMMA Matching Funds	\$123,822		\$25,000		\$75,000	
FCA's	\$328,444		\$307,467		\$350,000	
A/E Services	\$57,949		\$170,000		\$250,000	
Construction Contingency	\$30,451		\$75,000		\$100,000	

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and Facilities

Classification by Objects2008 Actual and Estimated 2009 and 2010

(\$000)

		<u>2008</u>	<u>2009</u>	<u>2010</u>
Other Objects:				
21	Travel and transportation.....	\$0	\$0	\$0
23	Rent, Communication, and Utilities.....	25	26	27
25	Other Services.....	2,349	2,652	3,390
26	Supplies and materials.....	31	22	25
31	Equipment.....	12	8	10
32	Land & structure.....	54	42	48
41	Grants, Subsidies & Contributions.....	711	0	0
	Total, other objects.....	<u>3,182</u>	<u>2,750</u>	<u>3,500</u>
Total direct obligations.....		<u>\$3,182</u>	<u>\$2,750</u>	<u>\$3,500</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. The following provides a status of ongoing major construction projects as of September 2008.

National Plant Germplasm and Biotechnology Laboratory. Phases 1 & 2. Beltsville, Maryland

The National Plant Germplasm and Biotechnology Laboratory supports APHIS' safeguarding efforts and plant health programs through the development of diagnostic technology for plant pathogens and quarantine testing protocols and programs. APHIS took beneficial occupancy of 75 percent of the new facilities in the first quarter of FY 2004. The remaining 25 percent of the project consisted of constructing a Biosafety Level (BSL) -3 Agricultural High Containment Laboratory/Greenhouse, where diagnostic work can be conducted on dangerous plant pathogens. The project was completed as of February 13, 2008 and APHIS has taken full occupancy of the new facilities. The construction contract has been closed-out.

Ames Master Plan for Facility Consolidation and Modernization Lab. Ames, Iowa

The Ames modernization project is a joint undertaking of APHIS' National Veterinary Services Laboratories and Center for Veterinary Biologics, and Agricultural Research Service's (ARS) National Animal Disease Center. Bringing these programs together at one site will lead to greater efficiencies of operation, closer collaborative work, and the fostering of a world-class animal disease research and service culture. The combined facilities are being referred to as the National Centers for Animal Health. ARS has the lead for managing construction of the entire Master Plan project. The plan has been funded through appropriations totaling \$462 million over 6 years.

The plan includes two phases. Phase 1 of the Consolidated Laboratory Facility, the High Containment Large Animal Housing and Training Facility (also referred to as the BSL-3 Agricultural Animal Facility), was completed in February 2004. Phase 2 of the Consolidated Laboratory Facility will provide additional BSL-2 and BSL-3 laboratories, caged animal facilities, administrative/office/conference spaces, and support services spaces. Crews began excavation for the project in September 2005, and construction is scheduled to be completed by February 2009. Construction of the final component of the Ames Master Plan, the Low Containment Large Animal Facility was begun in January 2007.

When finished, the complex will include almost 1 million square feet of biosafe, energy-efficient modern facilities that will provide state-of-the-art capabilities for research, diagnosis, and biological product evaluation, thereby enhancing USDA's ability to respond to foreign animal disease and bioterrorism threats. USDA anticipates that all phases of new construction for the Ames Master Plan will be complete by February 2009 leaving only demolition of smaller outbuildings and site work to be completed during 2009.

Miami Airport Facility, Miami, Florida--Plant Inspection Station

In January 2008, APHIS began construction of the Plant Inspection Station portion of its new agricultural inspection facility at the Miami International Airport. This APHIS "one-stop" facility houses the Agency's air cargo operations, the plant inspection station, the canine operations kennel units, and a 100 stall animal import/export center (APHIS moved into the Animal Import Center portion in January 2005). APHIS commodity and cargo inspection operations works extremely closely with the Department of Homeland Security officials in service delivery to importers. ARS has the lead for managing construction of the remainder of the project, which is expected to be completed by the end of December 2010.

APHIS Buildings and Facilities Master Plan

The Agency's performance goal relevant to our facilities is to implement the scheduled improvements, construction, security, and maintenance as specified. Performance data will be collected through contractor reports and on-site verification. The Agency's Buildings and Facilities Master Plan strategy is to modernize existing facilities when required, as well as to properly operate and maintain existing facilities. Nine design/construction projects were awarded in FY 2008. Twenty-two repairs were successfully completed in FY 2008.

Facilities Condition Assessment

In FY 2000, APHIS embarked upon a comprehensive Facilities Condition Assessment (FCA) 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 future maintenance needs, and, implement financial management and capital asset improvement efforts in support of the President's Management Agenda.

Since the inception of the FCA program, 35 of the existing APHIS facilities have been assessed. The consulting firm tasked with assessing APHIS' facilities has automated a standard process for assessing the relative condition of assets, and facilitating comparison both within and among facilities. Each asset is assigned a Facilities Condition Index (FCI), a standard measure used throughout the country and industry. The FCI is expressed as a ratio of the cost to remedy maintenance deficiencies to the current replacement cost of the facility. A recent FCA program review of the 35 facilities, performed by the consulting firm resulted in an overall FCI of 0.22. This indicates that 22 percent of the estimated replacement value for the 35 facilities has been identified as currently being deficient or anticipated to need correction in the next five years. This overall FCI of 0.22 is much lower than our FY 2008 projection. Our original projection was based on 15 of our older buildings. The FY 2008 actual assessment is based on 35 buildings, including several newer facilities. Including newer buildings resulted in the lower FCI score.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Summary of Budget and Performance
Statement of Agency Goals and Objectives

The U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) was established by the Secretary of Agriculture on April 2, 1972, under the authority of the Reorganization Plan No. 2 of 1953 and other authorities. APHIS is an action-oriented agency that works with other Federal agencies, Congress, States, agricultural interests, and the general public to carry out its mission to protect the health and value of American agriculture and natural resources. APHIS strives to assure its customers and stakeholders that it is on guard against the introduction or reemergence 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 bioterrorism, invasive species, diseases of wildlife and livestock, and conflicts between humans and wildlife. The Agency also addresses sanitary and phytosanitary trade barriers and 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 mission priorities that contribute to the Department's overall goals and strategic objectives. As part of its strategic direction, APHIS intends to strengthen components of its protection system by focusing on the following key priorities:

1. Strengthen our safeguarding system domestically and in other countries;
2. Strengthen our emergency response preparedness;
3. Facilitate safe agricultural trade through international standard setting and effective management of sanitary and phytosanitary issues; and,
4. Enhance the well-being of animals covered by the Animal Welfare Act and the Horse Protection Act.

These strategic mission priorities are also shown below, as they relate to the corresponding Agency strategic goal.

Agency Strategic Goals	Agency Mission Priorities	Functional Areas/ Programs that Contribute	Key Outcome
<p>Agency Goal 1: Safeguarding the health of animals, plants, and ecosystems</p>	<p><u>Priority 1:</u> Strengthen our safeguarding system domestically and in other countries</p> <p><u>Priority 2:</u> Strengthen emergency response preparedness</p> <p><u>Priority 4:</u> Enhance the well-being of animals covered by the Animal Welfare Act and the Horse Protection Act</p>	<ul style="list-style-type: none"> • <u>Pest & Disease Exclusion</u> – (Except Import/Export-International & Overseas Technical and Trade Operations) • <u>Plant & Animal Health Monitoring</u> • <u>Pest & Disease Management</u> • <u>Animal Care</u> • <u>Scientific & Technical Services</u> • <u>Management</u> 	<p><u>Key Outcome 1:</u> To provide a secure agricultural production system and healthy food supply to consumers by defending against diseases, minimizing production losses, maintaining market viability and containing environmental damage</p>

Agency Strategic Goals	Agency Mission Priorities	Functional Areas/ Programs that Contribute	Key Outcome
Agency Goal 2: Facilitating safe agricultural trade	<u>Priority 3:</u> Facilitate safe agricultural trade through international standard setting and effective management of sanitary and phytosanitary issues	<u>Pest & Disease Exclusion –</u> (Import/Export-International & Overseas Technical and Trade Operations only)	<u>Key Outcome 2:</u> To assist agricultural producers with gaining access to and retaining foreign markets by resolving sanitary phytosanitary trade barrier issues, facilitating the export of healthy U.S. animals and animal products, and protecting expanded markets abroad

Selected Accomplishments Expected at the FY 2010 Proposed Resource Level for Key Outcome #1

Pest and Disease Exclusion: Safeguard animal and plant resources against introduction of foreign pests and disease, while meeting international trade obligations.

- **Cattle Fever Tick:** APHIS will continue the implementation of the 5-year strategic plan. Implementation of the strategic plan will allow APHIS to accomplish five program goals, with objectives and action items to accomplish each goal, necessary to achieve complete eradication of the cattle fever tick. The goals and action items include: 1) preventing the entry of cattle fever ticks into the United States by clearing and maintaining trails along the river; 2) identifying areas of high activity of tick incursions and developing agreements with wildlife agencies for controlling whitetail deer and exotic ungulates that cross the river from Mexico; 3) maintaining an effective surveillance program to rapidly detect any cattle fever tick incursions; 4) preventing the establishment of cattle fever tick infestations; 5) identifying and procuring the tools and knowledge necessary to maintain the United States as free of cattle fever ticks, and, 6) collaborating with Mexico to eliminate cattle fever ticks in areas of Mexico that impact the United States.

Plant and Animal Health Monitoring: Minimize agricultural production losses and export market disruption by quickly detecting and responding to new invasive agricultural pests and diseases or other emerging agricultural health situations.

- **Plant and Animal Health Monitoring:** APHIS will continue its efforts to move toward targeted surveillance. This approach focuses surveillance resources in higher risk areas rather than broad reaching, resource intense surveillance efforts. The efficiencies realized will allow APHIS to redirect resources to other priority needs thereby increasing the overall effectiveness.
- **Pest Detection:** APHIS will continue its efforts to increase the program’s efficiency through expanding the use and scope of a survey format for surveying for multiple pests within a commodity, environmental niche, business model, or taxonomic group. These types of surveys allow APHIS and its cooperators to survey for a variety of pests that threaten a particular commodity or environment, rather than conducting individual surveys for single pests. Currently, the program has developed commodity-based survey guides for six commodities, including citrus, grapes, oak, pine, small grains, and soybeans, as well as a survey guide for Exotic Woodborers and Bark Beetles. The program will

continue working with State cooperators to implement these efficiency-based surveys as well as developing guides for additional commodities, environments, and taxonomic groups.

Pest and Disease Management: Minimize risks to agricultural production, natural resources, and human health and safety by effectively managing existing agricultural pests and wildlife damage in the U.S.

- Emerging Plant Pests (EPP): APHIS will enhance its ability to address outbreaks of the Asian longhorned beetle (ALB) in Massachusetts, New Jersey, and New York. The program's strategy of conducting intensive surveys to find infested trees, removing them, and protecting exposed trees with chemical treatments has been successful. APHIS will enhance delimiting surveys in New Jersey and Massachusetts, and in turn, enable the program to establish more accurate regulatory and control/treatment areas.

Animal Care: Ensure the humane care and treatment of animals covered under the Animal Welfare Act (AWA) and the various laws protecting horses.

- Animal Care: APHIS' animal welfare program will continue its outreach and education efforts. The expected outcome of this effort is increased levels of compliance with APHIS regulations, which is a more efficient and effect use of resources. Enforcement of regulations can then be targeted toward repeat offenders, thus achieving higher long run compliance rates.

Scientific & Technical Services: Develop and apply scientific methods that benefit agricultural producers and consumers, protect the health of American animal and plant resources, and sustain agricultural ecosystems.

- Biotechnology Regulatory Services: APHIS will continue implementing its Biotechnology Quality Management System (BQMS), a voluntary compliance assistance program to help biotechnology researchers and companies to develop plans and practices to comply with biotechnology regulatory requirements. APHIS is currently conducting a pilot program to collect benchmark data on the initial BQMS. The five participants will develop, implement, and maintain a quality management system within their organizations to proactively manage the movement and field release of regulated GE organisms. APHIS will be evaluating the results of the pilot program and incorporating any changes in FY 2010 to develop an effective program and improve compliance.

Selected Accomplishments Expected at the FY 2010 Proposed Resource Level for Key Outcome #2

Pest and Disease Exclusion: Safeguard animal and plant resources against introduction of foreign pests and disease, while meeting international trade obligations.

- Overseas Technical and Trade Operations: In accordance with the Foreign Service Pay Modernization Initiative currently under Congressional consideration, the Agency will address pay disparities that affect the retention rates of foreign service officers stationed abroad, and allow the program to continue conducting critical activities to facilitate safe agricultural trade and safeguard U.S. agricultural resources. The program provides internationally-based animal and plant health expertise and allows APHIS to gather information on emerging or changing pests and disease threats overseas; intervene to release U.S. shipments held up in foreign ports due to technical problems; coordinate with foreign governments and international organizations to enhance global regulatory infrastructure; and, promote the development and use of international standards and science-based regulatory decisions.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Summary of Budget and Performance
Key Performance Outcomes and Measures**Agency Goal 1: Safeguarding the health of animals, plants and ecosystems**

Key Outcome 1: To provide a secure agricultural production system and healthy food supply to consumers by defending against diseases, minimizing production losses, maintaining market viability and containing environmental damage.

Long-Term Performance Measure: A safe and efficient agricultural and environmental sector provided through:

- Pest & Disease Exclusion (Except Import/Export-International & Overseas Technical and Trade Operations)
 - Continue to eliminate outbreaks of cattle fever tick outside the quarantine zone, in less than twelve months; and,
 - Maintain Medfly-free area in Chiapas, Mexico and Guatemala.
- Plant & Animal Health Monitoring
 - Increase the value of damage prevented/mitigated as a result of the Monitoring and Surveillance programs.
- Pest & Disease Management
 - Increase the value of damage prevented/mitigated as a result of the ongoing control and eradication programs; and
 - Minimize the number of pests/diseases not contained within the quarantine area.
- Animal Care
 - Increase the percentage of repeat violators reinspected for compliance with the Animal Welfare Act in the prescribed timeframe;
 - Increase the number of animal welfare inspections; and,
 - Increase the percent of licensees and registrants in substantial compliance of the Animal Welfare Act.
- Scientific & Technical Services
 - Maintain a 99 percent rate of compliance for facilities with biotechnology permit conditions.
- Management Initiatives
 - Maintain an "up-time" rate of 99 percent or higher for key information technology services.

Efficiency Measures:

- Increase the value of damage prevented or mitigated per program dollar spent;
- Reduce the time it takes to investigate and resolve violations in cases settled through APHIS administrative procedures;
- Reduce the average cost of an investigation;
- Reduce the cost to produce 1,000 sterile moths for the cotton programs; and
- Reduce the average cost to issue an animal welfare license or registration

Key Outcome 2: To assist agricultural producers with gaining access to and retaining foreign markets by resolving trade barrier issues, facilitating the export of healthy U.S. animals and animal products, and protecting expanded markets abroad.

Long-Term Performance Measures: Improved trade opportunities for U.S. exporters provided through:

- Pest & Disease Exclusion (Import/Export & Overseas Technical and Trade Operations only)

- Increase the value of expanded and retained markets, new market access, and trade facilitated.

Key Performance Targets

Performance Measure	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Target	2010 Target
<i>1. Pest and Disease Exclusion</i>						
Percentage of cattle fever tick outbreaks occurring outside the quarantine zone eliminated in less than 12 months	100%	100%	100%	100%	100%	100%
Size (in square kilometers) of the medfly-free zone within the Moscarded Program operating area of Mexico and Guatemala	86,507	97,792	98,000	98,000	98,000	98,000
Value of expanded and retained markets, new market access, and trade facilitated (dollars in millions)	\$1,400	N/A	\$942	\$1,000	\$1,000	\$1,000
<i>2. Plant and Animal Health Monitoring and Surveillance</i>						
Value of damage prevented or mitigated by the Monitoring and Surveillance programs per dollar spent	N/A	N/A	\$9.50	\$9.76	\$9.99	\$10.24
Value of damage prevented or mitigated by the Monitoring and Surveillance programs (dollars in billions)	N/A	N/A	\$1.37	\$1.41	\$1.45	\$1.48
<i>3. Pest and Disease Management</i>						
Value of damage prevented/mitigated as a result of the ongoing control and eradication programs (dollars in millions)	\$79	\$451	\$751	\$871	\$956	\$999
Value of damage prevented/mitigated per program dollar spent for ongoing control and eradication programs	\$1.12	\$3.22	\$3.61	\$3.16	\$2.78	\$2.43
Emerging Plant Pests: Pests/Diseases not contained within the quarantine area	2	3	1	1	1	1

Performance Measure	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Target	2010 Target
<i>4. Animal Care</i>						
Animal Welfare: Percent of repeat violators reinspected for compliance with the Animal Welfare Act within the prescribed timeframe to ensure the humane treatment of animals	N/A	N/A	60%	78%	80%	80%
Number of animal welfare inspections	16,474	18,600	18,343	16,187	16,500	17,000
Percentage of licensees and registrants in substantial compliance with the Animal Welfare Act	N/A	N/A	97%	99%	95%	96%
<i>5. Scientific and Technical Services</i>						
Biotechnology Regulatory Services (BRS): Percent of facilities in compliance with permit conditions (# of permits with no violations/ # of active permits)	97.5%	98.0%	97.0%	99.1%	99.0%	99.0%
<i>6. Management Initiatives</i>						
APHIS Information Technology Infrastructure: Percentage of time APHIS' key services (e.g., e-mail, Oracle applications) and assets are available (Up-Time)	99.5%	99.9%	99.8%	99.8%	99.8%	99.8%

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Full Cost by Functional Area
(On basis of appropriated funds)

Pest and Disease Exclusion

PROGRAM ITEMS	DOLLARS IN THOUSANDS		
	FY 2008	FY 2009	FY 2010
Agricultural Quarantine Inspection	22,843	22,932	22,100
Cattle Ticks	6,460	8,421	11,183
Foreign Animal Disease/Foot-and-Mouth Disease	7,339	3,400	3,403
Fruit Fly Exclusion & Detection	47,353	52,972	53,482
Screwworm	18,431	23,490	23,557
Overseas Technical & Trade Operations	0	13,366	13,746
Tropical Bont Tick	358	361	365
Trade Issues Resolution & Management	10,555	0	0
Import/Export	9,485	11,019	11,303
Program Operational Costs	12,470	13,804	14,127
Indirect Costs	9,204	10,189	10,427
Total Pest and Disease Exclusion	144,497	159,954	163,694
FTEs	1,050	1,054	1,054

		FY 2008	FY 2009	FY 2010
Performance Measure:	Value of expanded and retained markets, new market access and trade facilitated (dollars in billions)	\$1.00	\$1.00	\$1.00
Performance Measure:	Number of severe outbreaks of exotic fruit flies detected on the U.S. mainland	5	2	2
Units:	Number of medfly pupae produced weekly (in billions)	1.8	2.0	2.0
Units Cost:	Cost to produce 1 million sterile medfly pupae (costs have been negatively impacted by increasing energy, fuel and utility costs)	\$131	\$138	\$145

Animal and Plant Health Monitoring

PROGRAM ITEMS	DOLLARS IN THOUSANDS		
	FY 2008	FY 2009	FY 2010
Animal Health Monitoring & Surveillance	98,290	109,803	108,054
Animal & Plant Health Regulatory Enforcement	10,498	11,640	11,886
Avian Influenza	0	51,505	51,207
Biosurveillance	1,560	0	0
Emergency Management Systems	10,443	13,276	13,425
Highly Pathogenic Avian Influenza	40,388	0	0
National Veterinary Stockpile	0	3,178	3,193
Pest Detection	23,400	23,610	22,743
Select Agents	3,588	4,359	4,400
Wildlife Disease Monitoring & Surveillance	0	0	0
Program Operational Costs	19,105	22,069	21,819
Indirect Costs	14,102	16,290	16,105
Total Animal and Plant Health Monitoring	221,375	255,730	252,831
FTEs	1,363	1,402	1,402

		FY 2008	FY 2009	FY 2010
Performance Measure:	Value of damage prevented or mitigated by the Monitoring and Surveillance programs (dollars in billions)	\$1.382	\$1.445	\$1.481
Unit Cost:	Value of damage prevented or mitigated by the Monitoring and Surveillance programs per dollar spent	\$9.76	\$9.99	\$10.24

Pest and Disease Management

PROGRAM ITEMS	DOLLARS IN THOUSANDS		
	FY 2008	FY 2009	FY 2010
Aquaculture	5,786	5,004	4,935
Biological Control	7,966	8,276	8,472
Boll Weevil	0	0	0
Brucellosis	8,045	8,146	7,698
Chronic Wasting Disease	15,030	14,462	13,266
Contingency Fund	622	1,721	1,749
Cotton Pests	31,076	25,152	21,290
Emerging Plant Pests	79,679	113,625	122,256
Golden Nematode	681	694	706
Grasshopper	4,759	4,719	3,891
Gypsy Moth	4,054	4,117	4,182
Imported Fire Ant	1,602	1,609	1,617
Johne's Disease	8,958	5,798	5,046
Low Pathogenic Avian Influenza	12,418	0	0
Noxious Weeds	1,509	1,694	995
Plum Pox	1,856	1,866	1,875
Pseudorabies	2,027	2,079	2,134
Scrapie	14,015	15,073	15,220
Tuberculosis	12,996	13,308	13,189
Wildlife Services Operations	62,741	64,640	59,927
Witchweed	1,279	1,284	1,289
Program Operational Costs	28,134	29,775	29,417
Indirect Costs	20,766	21,978	21,713
Total Pest and Disease Management	326,000	345,020	340,869
FTEs	1,347	1,336	1,336

		FY 2008	FY 2009	FY 2010
Performance Measure:	Value of damage prevented/mitigated as a result of the ongoing control and eradication programs (dollars in millions)	\$871	\$956	\$999
Unit Cost:	Value of damage prevented/mitigated by On-Going Pest and Disease Management Programs per program dollar spent	\$3.16	\$2.78	\$2.43
Units:	Number of damaging strike events prevented	590	660	660
Unit Cost:	Dollars saved by U.S. Aviation industry by preventing damaging strikes (\$158,000/strike) (dollars in millions)	\$93.22	\$104.28	\$104.28

Animal Care

PROGRAM ITEMS	DOLLARS IN THOUSANDS		
	FY 2008	FY 2009	FY 2010
Animal Welfare	17,424	18,294	18,682
Horse Protection	419	424	425
Program Operational Costs	1,812	1,900	1,940
Indirect Costs	1,337	1,403	1,432
Total Animal Care	20,992	22,021	22,479
FTEs	205	209	209

		FY 2008	FY 2009	FY 2010
Performance Measure:	Percent of licensees and registrants in substantial compliance of the AWA	99%	95%	96%
Performance Measure:	Percent of licensees and registrants with repeat violations of the AWA	2%	3%	3%
Unit Cost:	Average cost of issuing licensing and registrations	\$569	\$550	\$525

Scientific and Technical Services

PROGRAM ITEMS	DOLLARS IN THOUSANDS		
	FY 2008	FY 2009	FY 2010
Biosecurity	1,527	0	0
Biotechnology Regulatory Services	9,969	10,945	10,872
Environmental Compliance	2,233	2,269	2,308
Plant Methods Development Labs	7,942	8,255	8,457
Veterinary Biologics	14,060	14,384	14,726
Veterinary Diagnostics	19,629	20,047	20,211
Wildlife Services Methods Development	14,920	15,288	13,424
Program Operational Costs	7,135	7,228	7,107
Indirect Costs	5,267	5,335	5,246
Total Scientific and Technical Services	82,682	83,751	82,351
FTEs	817	822	822

		FY 2008	FY 2009	FY 2010
Performance Measure:	Percent of Biotechnology Regulatory Services (BRS) facilities in compliance with permit conditions (# of permits with no violations/ # of active permits)	99.1%	99.0%	99.0%
Units:	Number of BRS sites/inspections inspected at least once during season (mid risk).	209	200	200
Unit Cost:	Cost per BRS site inspection	\$1,423	\$1,450	\$1,450

Management Initiatives

PROGRAM ITEMS	DOLLARS IN THOUSANDS		
	FY 2008	FY 2009	FY 2010
APHIS Information Technology Infrastructure	3,849	3,803	3,803
Physical Operational Security	3,537	4,866	4,866
Program Operational Costs	750	880	880
Indirect Costs	553	650	650
Total Management Initiatives	8,688	10,199	10,199
FTEs	0	0	0

		FY 2008	FY 2009	FY 2010
Performance Measure:	Percent of time APHIS' key services and assets are available.	99.8%	99.8%	99.8%

Total Pest and Disease Exclusion	144,497	159,954	163,694
Total Animal and Plant Health Monitoring	221,375	255,730	252,831
Total Pest and Disease Management	326,000	345,020	340,869
Total Animal Care	20,992	22,021	22,479
Total Scientific and Technical Services	82,682	83,751	82,351
Total Management Initiatives	8,688	10,199	10,199
Total for All Functional Areas	\$804,233	\$876,675	\$872,423