ANNUAL REPORT

FY 2005-2006

Florida Department of Agriculture
and Consumer Services

Charles H. Bronson, Commissioner

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MESSAGE FROM THE COMMISSIONER

2005-2006 was an eventful year for the Florida Department of Agriculture and Consumer Services as we worked to carry out our mission of promoting and supporting Florida agriculture while safeguarding the public. We were presented with some difficult challenges, and we achieved some great successes.

The devastating 2005 hurricane season dealt some tough blows to Floridians, including our farmers and ranchers. Agriculture suffered over $2 billion in damage from the storms, and Department personnel worked hard to help growers assess and communicate the extent of their losses. In the weeks after Hurricane Wilma, I hosted tours of the impacted areas for USDA representatives and other officials, and I traveled to Washington to make sure that our lawmakers were aware of the magnitude of the destruction. Thankfully, federal funds were soon made available to help growers clean up debris, repair damaged structures, and plant again.

Farmers weren't the only ones who received our assistance after the storms. As the lead agency for Emergency Support Function 11, the Department is responsible for acquiring food, water, and ice for disaster victims. In response to Hurricanes Dennis, Katrina, Rita and Wilma, the Department supplied thousands of cases of food and millions of gallons of water to storm victims. Staff from our Division of Animal Industry assisted in animal rescue and evacuation and provided food and water to animal shelters, while Forestry personnel helped clear roads and restore power. In addition, Agricultural Law Enforcement officers provided security to hard-hit areas, staffed emergency operations centers, and conducted price-gouging investigations.

The hurricanes of 2005 were followed by an extended period of drought, which made for a very active wildfire season. During April and May 2006, about 1,500 wildfires scorched more than 20,000 acres in the state, with hurricane debris helping fuel the blazes. In May, a wildfire in Volusia County forced nearly a thousand people from their homes and closed a major highway. Firefighters from our Division of Forestry bravely battled the flames and worked to educate the public about fire prevention.

Protecting Florida's forest resources is a high priority for the Department. Forests provide us with many benefits: They clean the air, help filter pollutants and sediments from our water, and provide wildlife habitat and recreational opportunities. In 2006, the Division of Forestry celebrated the addition of the one millionth acre of forestland to the state forest system. The millionth acre was part of a nearly 4,000-acre acquisition in western Duval County, made jointly by the State of Florida and the City of Jacksonville.

There were many other achievements to celebrate this year. The Panhandle's first agricultural inspection station opened, providing Florida with a new layer of defense against agricultural pests and diseases and criminal activity. Our marketing staff completed an extensive research project on the CAFTA-DR countries to help Florida growers increase exports to Central America and the Caribbean. Once again, our spring produce marketing campaigns were enormously successful; the 2005-2006 marketing push helped increase retail sales by $394.4 million over the previous year.

What I've mentioned here is only a small sampling of the Department's recent projects. This annual report will tell you more about the important work that we do.

Charles H Bronson

Charles H. Bronson

Commissioner of Agriculture

INTRODUCTION

With over 3,000 employees organized under 19 separate offices and divisions, the Florida Department of Agriculture and Consumer Services is the largest and most diverse state agriculture agency in the country. Our responsibilities are so varied and extensive that it is difficult to imagine any Floridian whose life is not touched daily by the work we do. We support and promote Florida agriculture, protect the environment, safeguard consumers, and ensure a safe, wholesome food supply.

Florida agriculture is a $7 billion-a-year industry and an essential component of the state's economy. The activities of the Florida Department of Agriculture and Consumer Services help keep that economy going strong. Because a healthy agriculture industry contributes to a healthy Florida, assisting the state's farmers and ranchers is an important part of what we do. We collect and disseminate Florida agricultural statistics; manage Florida's state and community farmers' markets; enforce state animal health regulations; inspect feed, seed, and fertilizer; and help farmers fight crop diseases and pests. We assist in the production of food and also with its marketing. Key to our marketing effort is the Florida Agricultural Promotional Campaign, which is designed to increase sales of Florida agricultural products by helping consumers easily identify them. This multimedia campaign helps increase public awareness of the importance of Florida agriculture, which has an overall economic impact estimated at $87 billion annually.

Agriculture depends on healthy soil and clean air and water, so by protecting our natural resources, we protect the future of the state's second-largest industry. The Department encourages growers to adopt Best Management Practices to control erosion and runoff and protect surface and ground water quality. In addition, we provide comprehensive pesticide regulatory programs that ensure the protection of public health and the environment. Our Division of Forestry protects and manages the forest resources of Florida, ensuring their availability for future generations.

If you have a problem with a merchant or business, we're the ones to call. The Department is the state's clearinghouse for consumer complaints. Our toll-free Florida-only helpline, 1-800-HELPFLA, or 1-800-FL-AYUDA for Spanish-speaking consumers, is one of the busiest in the nation, with 20 full-time analysts manning the phones. We help consumers resolve problems – and we help prevent problems from occurring in the first place. Our brochures, newsletters, presentations, and email alerts inform Floridians about the latest scams and fraudulent schemes and teach people to be more savvy consumers. The Department regulates car repair shops, charitable organizations, health studios, dance studios, pawnbrokers, telemarketers, and sellers of travel. Our oversight in these areas is designed to protect consumers and promote a positive business environment in Florida.

The Department is the lead state agency for food safety. Our Division of Food Safety monitors food from farm gate through distribution and processing to retail point of sale. Department personnel regularly inspect everything from packinghouses to grocery stores, and our labs perform thousands of sophisticated analyses of food samples each year. We test fruits and vegetables for pesticide residues, dietary supplements for dangerous ephedrine alkaloids, and milk for contamination with residues of antibiotics. To prevent the spread of food-borne illness, the Department has the authority to halt the sale of any product considered hazardous to the public. We continue to enhance our capability to protect food security and respond to possible terrorist incidents involving the food supply.

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SUPPORTING FLORIDA AGRICULTURE

In 2005, Florida's agricultural cash receipts amounted to $7.76 billion, 9.14 percent higher than in 2004. Cash receipts were lower for corn, soybeans, sugarcane, tobacco and wheat. Receipts were higher for cotton, cattle and calves, floriculture, citrus, cucumbers, potatoes, snap beans, squash, tomatoes and watermelons.

Florida leads the nation in cash receipts for oranges, grapefruit, tangerines, cucumbers, and sugarcane and ranks second in cash receipts for tomatoes, strawberries, sweet corn, bell peppers, watermelon, squash, and greenhouse and nursery crops. Florida leads the nation in production of citrus, sugarcane, foliage plants, cut floral greens, and tropical fish and ranks second in the production of fresh market vegetables.

Statistical Reporting

Reliable information is essential to making production, marketing and policy decisions for the agricultural community. The Florida Department of Agriculture and Consumer Services shares in a cooperative federal/state program responsible for collecting and disseminating Florida agricultural statistics. Information on the state's major commodities is gathered through onsite producer surveys, voluntary mail questionnaires, and telephone and personal interviews. Statistics compiled from these data are available in over 200 reports issued annually.

In the past year, the public relations efforts of the Florida Agricultural Statistics Service included staffing an informational booth at industry trade shows for citrus and cattle. The booths allow the service to promote its role in the industry and increase the visibility of its reports.

Citrus

An initial citrus production forecast is issued in October and modified monthly through the citrus season based on fruit size measurements and observations on drop rate. These forecasts are based exclusively on objective data obtained directly by field personnel, including an extensive limb count survey conducted from July into September to estimate fruit set per tree. Florida's citrus growers, although hit hard by Hurricane Wilma in the lower interior and east coast producing areas, produced an estimated 147.9 million boxes of all oranges and 19.3 million boxes of grapefruit in the 2005-2006 season.

Cash receipts for all citrus crops sold in 2005 totaled $1.64 billion compared to $1.47 billion in the 2004 season. Citrus accounted for 21 percent of all cash receipts in 2005.

Vegetables

Florida growers harvested fresh market vegetables from 185,800 acres in 2005. Cash receipts for all vegetables amounted to $1.57 billion, which amounted to 20 percent of all cash receipts in 2005. Tomatoes, peppers, sweet corn, cucumbers and snap beans accounted for the largest amount of sales among vegetable crops.

Greenhouse and Nursery Production

The total value of Florida greenhouse and nursery production exceeds $1.9 billion. The foliage and floriculture industry contributed $976 million, up from $884 million in 2004.

Berries and Melons

Strawberry production for 2005 was up from the year before, resulting in cash receipts of $197 million compared to $178 million in 2004. Increases in prices for watermelons resulted in an increase in their total crop value to $126.9 million in 2005.

Field Crops

Potato production in 2005 decreased from the previous year resulting in cash receipts of $113.6 million to growers. Sugarcane production was down from the previous year and total cash receipts fell to $433 million in 2005

Cash receipts for peanuts increased to $69.8 million, due to increased production in 2005. Tobacco production was greatly reduced to 5.5 million pounds of tobacco, valued at $8.3 million in 2005. Increases in produc-

tion for cotton and cottonseed produced cash receipts of $28.3 million in 2005, compared to $24.5 million in 2004.

Other Fruits and Nuts

Receipts for other fruits and nuts, such as avocados, strawberries, blueberries, mangos and pecans, at $283.8 million, were higher than in 2004, mostly due to increases in cash receipts for strawberries and blueberries.

Dairy

An increase in milk production in 2005 and lower prices resulted in decreased cash receipts of $421 million compared to $432 million in 2004. The annual average farm gate price for milk in Florida was $18.60 per cwt in 2005, down from $19.20 in 2004.

Cattle and Calves

The total number of cattle and calves was down 20,000 head from 2004, but higher prices resulted in cash receipts for all cattle and calves of $502 million compared to $452 million in 2004.

Poultry and Eggs

Egg sales in 2005 totaled $101 million, down from $160 million in 2004 due to lower egg prices. Broiler production was down slightly in 2005 with sales decreasing to $204 million from $208 million in 2004 due to lower prices.

Aquaculture

Aquaculture contributed an estimated $79 million to total cash receipts. Tropical fish and aquatic plants accounted for the majority of the sales in this category.

Honey

Florida was fourth in the nation in honey production in 2005 (behind North Dakota, California, and South Dakota) with 13.8 million pounds valued at $12.0 million. There were an estimated 160,000 colonies in the state in 2005 with an average honey yield of 86 pounds per colony, 12 pounds per colony less than in 2004.

Fruit and Vegetable Inspection

The Department's Division of Fruit and Vegetables serves as a third party to provide on-request inspections for the purpose of certifying the quality and condition of produce shipped in and out of the state to national and international markets. The Department's services, provided in cooperation with the U.S. Department of Agriculture, enhance the marketability of fruit and vegetables produced and imported into Florida. During the 2005-2006 fiscal year, Division of Fruit and Vegetable inspectors inspected nearly 8.5 million tons of fruits and vegetables.

Committed to meeting the needs of Florida's fruit and vegetable industries through fiscally responsible quality assurance and technical assistance services, the Department continually strives to find innovative and cost-effective methods of inspection. In the past year, the division initiated and implemented an audit-based inspection program for processed citrus, the Florida Quality Systems Certification. The Department also continued efficiencies in its services to Florida's peanut industry with the use of EQIP, a computerized certification system used in Florida buying points.

License and Bond Service

The Department continued its support of Florida agriculture by conscientiously administering Florida's Dealers in Agricultural Products Law. This law ensures that Florida producers of agricultural products covered by the license and bond provisions receive proper accounting and payment for their products.

During the 2005 legislative session, a multitude of changes were made to the Agricultural Bond and License Law in order to adhere to the needs of the agricultural industry. These new laws came into effect during fiscal year 2005-2006 and implemented the following changes:

- Increased bond amounts and license fees:

Bond Amount	License Fee
$5,000-$9,999	$170
$10,000-$14,999	$230
$15,000-$100,000	$300

- Increased minimum bond amount to $5,000.
- Increased fees, filing requirements and fines.
- Changed definition of "agricultural products" to include sod, tropical foliage, hay and horticulture.
- Revised term "dealer in agricultural products to include partnerships, corporations, or other business entities.
- Added timber and timber by-products to exemption list.
- Revised "cash only" exemption.
- Added definition for "producer's agent" and "negotiating broker."
- Clarified definition of "net return basis."
- Established criteria a surety company must follow before a bond can be canceled.
- Requires dealers to provide mailing and street address es, and requires dealers to notify the Department in case of changes.
- Doubled the amount of the bond or certificate of deposit to twice the dollar amount during the month of maximum transaction in the preceding 12-month period.
- Allows the Department to issue a conditional license.
- Clarified complaint filing requirements.
- Changed minimum complaint amount from $250 to $500.
- Allows dealer-to-dealer complaints once all producer claims are paid out first.
- Changed maximum license fee for each additional location from $50 to $100.
- Implemented a $50 fee for filing a complaint with the Department (may be reimbursable).
- Changed maximum fine for violating the law from $1,000 to $2,500.
- Changed the continuing violation fine from $50 per day to $100 per day.
- Changed the penalty for late renewal of a license from $35 to $100.

During fiscal year 2005-2006, the Department issued 3,335 licenses and collected $557,271 in license fees. The Department managed $100,477,315.66 in bond protection for Florida growers.
Department associates settled 84 dealer complaints in the past year. Complaints against dealers in agricultural products must be filed within six months from the date of sale and total a minimum of $500. The efforts of Department associates resulted in a recovery of $899,748.12 on behalf of Florida agricultural dealers.

The Department closely monitors dealers to make sure they maintain adequate bonds to protect Florida growers. Department associates conducted 771 bond and compliance audits of dealer's records during the year. These audits are designed to ensure that bond amounts are maintained, to determine whether unlicensed dealers were exempt from license and bond requirements, to determine if prospective licensees were conducting business in a manner requiring licensure, and to document violations of Department enforcement actions.

The Department opened 44 new enforcement cases, closed 61 cases, and collected $119,940 in administrative fines during the 2005-2006 fiscal year. Enforcement actions resulted in an additional $1,071,467 of bond protection for Florida growers, and 40 of the cases ended in licenses being issued.

State Farmers' Markets

The Bureau of State Farmers' Markets manages four major program initiatives: State Farmers' Markets; Community Farmers' Markets; Women, Infants, and Children/Farmers' Markets Nutritional Program (WIC/FMNP); and County Fair permitting.

The hurricanes of 2005 caused extensive damage to three markets. The State Markets at Florida City, Immokalee and Pompano Beach received damage estimated at more than $12 million.

State Farmers' Markets tenants and clients marketed $229 million in wholesale value of produce and value-added products during fiscal year 2005-2006. The bureau operated 13 wholesale farmers' markets and closed one livestock auction market during the fiscal year. These markets offer a mix of wholesale and retail produce and attendant services such as truck weigh scales, farm supply, restaurants, and brokerage sales and shipping businesses. At year's end the available space for market tenants was 79 percent occupied for a total of more than 1.6 million square feet of warehouse, office and parking space.

More than 180 farmers operating at 23 community retail markets participated in the Women, Infants, and Children/Farmers' Markets Nutrition Program (WIC/FMNP) this year. By promoting the consumption of fresh fruits and vegetables to WIC mothers and children, this program encourages a healthy diet while boosting farmers' sales at participating locations. The program was offered in 17 counties and provided over 31,000 WIC recipients with information about good nutrition and the importance of fresh fruits and vegetables in their daily diets.

The County Fair permitting section issued permits for 50 fairs. Approximately $300,000 was distributed to these fairs and other public organizations as agricultural premium and awards reimbursements. These awards encourage participation by Florida's youth in agricultural programs.

The popularity of retail farmers' markets continues to grow in the Florida. There are over 70 retail markets promoted on the Department's web site.

Livestock and Domestic Animals

The Division of Animal Industry enforces state animal health regulations to prevent, control and eradicate infectious or communicable diseases of livestock and domestic animals. The division also works to protect the state from animal pests and diseases that threaten economic and public health.

Through the efforts of the Bureau of Animal Disease Control and Bureau of Diagnostic Laboratories personnel and resources, the division:

- Monitors livestock and poultry on farms, ranches, and at animal concentration points for disease status and carries out intensive animal disease investigations utilizing state-of–the-art laboratory testing for the diagnosis of domestic diseases, as well as emerging and potential foreign animal diseases.

- Works with producers and other cooperators to control animal diseases to ensure the health of the animal industries and to ensure safe and wholesome animal food products.

- Regulates, administers and enforces laws relating to animal health to prevent the introduction of diseased animals into Florida and to prevent the spread of diseases within the state.

- Monitors companion animal health issues, provides consumer protection assistance, and supports rule and legislation development to ensure the overall health of small animal populations and industries in Florida.

- Provides information to livestock producers, private practitioners and the public about regulatory requirements and best management practices through news releases, brochures, the Internet and personal visits.

- Develops, implements and tests emergency response plans in the event of foreign animal diseases and other natural or manmade disasters affecting animals and animal food productions.

Emergency management is also a responsibility of the division. Seventeen Emergency Support Functions (ESF) were established in the Florida Comprehensive Emergency Management Plan. Each ESF is headed by a lead or primary agency or organization, which was selected based on its authorities, resources and capabilities in that functional area. The Department's Division of Animal Industry is the primary lead responder for ESF-17, which was organized to ensure rapid response to animal and agricultural needs in a disaster or emergency scenario.

Animal Disease Control

The Department, through the Division of Animal Industry, is responsible for administering the state's animal disease prevention, control and eradication programs. In cooperation with USDA, the Department has moved beyond traditional perceptions of animal disease control

and eradication by addressing public health issues and major economic impacts by developing new programs. Recent outbreaks in other states of exotic Newcastle disease, pathogenic avian influenza, chronic wasting disease (CWD) in elk and deer, vesicular stomatitis, and the detection of a BSE-infected cow in an adjoining state emphasize the necessity of having a strong, active animal disease monitoring program in place with an open line of communication with public officials.

Rather than perceiving disease control and eradication programs as bureaucratic obstacles, the public is demanding that more be done to protect the nation's animal-origin food supply and companion livestock. These needs -- as perceived by the producer, the consumer, and associated animal industries -- will influence the overall acceptability and effectiveness of future disease control and eradication programs.

The Department's program activities take into consideration the changing face of animal industries in Florida and throughout the United States. Numerous species previously considered exotic or wildlife have straddled or crossed the line between wildlife and agriculture. Government and industry are faced with challenging learning curves in veterinary medicine and disease risk analysis for unfamiliar species, with few or no precedents. The Department recognizes the need to include these emerging animal industries with traditional livestock industries so they can coordinate and respond to a greater range of issues.

National Animal Identification System (NAIS)

The National Animal Identification System (NAIS) is a program intended to identify all agricultural animals as they come into contact with, or are intermingled with, animals other than herd mates from their premises of origin. The USDA long-term goal is to establish a system that can identify all animals that have had direct contact with a foreign animal disease or domestic disease of concern within 48 hours of discovery. The adoption of a nationwide animal identification and tracking system will help secure the health of the national herd and ensure consumer confidence.

The NAIS is being implemented by the Florida Department of Agriculture and Consumer Services, Division of Animal Industry, on a voluntary basis. In fiscal year 2004-2005, Florida entered into a cooperative agreement with the U.S. Department of Agriculture (USDA) to develop an animal identification system for Florida. The Division of Animal Industry implemented a premises identification system and expanded work with producers and industry groups on pilot animal identification projects. Division personnel continue to work with producers and industry leaders to develop practical approaches to meet the animal health and animal movement challenges of today's global marketplace.

As of June 30, 2006, a total of 2,823 Florida premises were registered. These premises include all species of livestock and each of Florida's USDA-approved livestock auction markets. Florida was the first major cattle-producing state to have 100 percent registration of its livestock markets. It is estimated that more than 85 percent of Florida's total cattle inventory is now housed on registered premises. The Division of Animal Industry continues to share information with and receive input from industry leaders representing all included species.

Pilot projects focused on all segments of the Florida livestock industry to test the application and aid in the implementation of the basic animal tracking and disease management directives of the NAIS. Participating producers viewed the feedback of performance and health-related information as a breakthrough in ranch management and marketing.

The Calf segment tracked electronically identified (EID) Florida calves in interstate commerce while evaluating tag retention and electronic readers and technology necessary to support the electronic Interstate Certificate of Veterinary Inspection (ICVI). Approximately 17,000 Florida calves shipped to Texas and Kansas feedlots were part of this project.

The Cull Cow segment tracks cattle individually identified by conventional or electronic means to verify farm or ranch of origin and age, and continues to track them as they move through the processing system. Florida producers received industry-driven monetary premiums for these source-verified cattle. Participating ranchers were eager to register their premises to be eligible to gain this marketing advantage. Electronic identification and visual tags were provided to stimulate further application of individual animal ID.

Several of Florida's major ranches have electronically identified each animal in their producing herds as well as each calf crop. Individual electronic identification of the brood cows provides for enhanced management and recordkeeping. Individual identification of the calves allows the return of production data for management decisions and also allows the calves to be marketed as source-verified.

The Equine segment of the NAIS has included education and outreach, premises registration, and individual horse identification. Much of the outreach was performed by field visits to equine premises, advertising in equine trade magazines, and addressing equine associations. There have been 1,234 premises with horses registered during this fiscal year, and more than 500 horses have been implanted with microchips. The micro-chipping project has received positive feedback from the equine community as a rapid, reliable form of individual identification for horses. This technology can also be used to monitor movement through the state's Agricultural Interdiction Stations.

The Florida Equine Card program has continued to grow with over 1,000 cards being issued during this fiscal year. Eleven states now accept the Florida Equine Interstate Passport Card which extends the duration of the Official Certificate of Veterinary Inspection (OCVI) from the standard 30-day period to six months, for interstate movement to equine events. The negative EIA Verification Card has also been received well by the horse owners as an alternative to the paper Coggins form used for interstate movement. One of the requirements to receive either card is a completed NAIS premises registration application.

Animal Movement

The monitoring of the movement of livestock into Florida by the Official Certificate of Veterinary Inspection is the Department's first line of defense against the inadvertent importation of animal diseases. When diseases threaten livestock in other parts of the country, the Department may enact additional regulations for animals being imported into Florida, often requiring prior notification, permission and permitting from the Department before shipments are allowed into Florida through the Agricultural Interdiction Stations.

Health Certificates

During fiscal year 2005-2006, the division processed 43,196 certificates representing more than 655,692 animals moving into or out of Florida. Beef and dairy cattle were the most numerous animals shipped, while horses accounted for the highest number of shipments moving into Florida. Other species accounting for much of the animal movement into and out of Florida were swine, goats, sheep and exotic species. All livestock transported into Florida are subject to certificate verification by Agricultural Law Enforcement officers.

Carcass Haulers Permits

The purpose of Carcass Hauler Permits is to effectively control or eradicate diseases. During fiscal year 2005-2006, 430 permits were issued. By June 30 of each year, individuals or businesses are required to apply for, and receive, a permit to haul any dead, dying, disabled or diseased animal, any product of an animal that died other than by slaughter, or any inedible animal product not meant for human consumption.

Livestock Haulers Permits

The purpose of the program is to protect owners of animals and legitimate businesses that haul livestock by improving control over livestock thefts and other illicit livestock operations. During fiscal year 2005-2006, the division issued 1,592 livestock haulers' permits/tags. These permits/tags are required for each vehicle by any individual hauling or transporting livestock for hire on Florida's public roads or highways.

For a fee, a special livestock hauler license tag is issued and is valid for the current calendar year. Starting in 2006, the division began using decals on issued tags. Every fifth year after 2006, livestock haulers will receive a new tag and a decal for that year.

Marks and Brands Program

In fiscal year 2005-2006, the division issued 169 new brand certificates, transferred 20 brands, and renewed 883 certificates. Currently, the total number of brands registered in Florida is 5,370.

Branding of livestock in Florida is not required, but if done, owners must register them with the state. Registration is accomplished by submitting an application to the division with a fee of $10.

Livestock brand registration was centralized at the state level in 1945. The change from county by county registration was instituted to prevent duplication of brands by different owners, especially as commerce and trade increased among different parts of the state.

Poultry

Several important diseases can have a disastrous impact on the poultry industry if allowed into the state. In an effort to carry out its mission of surveillance and control, the division conducts inspections of poultry facilities, live bird markets, weekend small animal sales, botanicas, imported birds, and backyard flocks in accordance with state rules and regulations and USDA's National Poultry Improvement Plan (NPIP). Through these programs, information on disease control and biosecurity on the farm has been distributed throughout the state in an effort to inform the public about their role in controlling these diseases.

Pullorum Diseases

Fowl typhoid (FT) and pullorum diseases (PD), affecting chickens and turkeys primarily, are caused by Salmonella Gallinarum and S. Pullorum, respectively. Clinical signs in chicks and poults include anorexia, diarrhea, dehydration, weakness and high mortality. In mature birds, FT and PD signs are decreased egg production, fertility, and hatchability, anorexia and high mortality rates. If allowed to spread, these diseases can have damaging effects on the poultry industry. In conjunction with the USDA's National Poultry Improvement Plan (NPIP) program, the state tests birds for pullorum typhoid and other deadly contagious poultry diseases. A total of 395 NPIP program flock inspections were conducted during fiscal year 2005-2006, and 607 poultry disease surveillance inspections were performed. There were 8,220 birds tested for pullorum typhoid (PT) during this fiscal year. Department inspectors continue to inspect and test for PT on poultry coming into Florida fairs for exhibition. During 2005-2006, the Department inspected 11,346 birds at 49 fairs. Inspectors tested 5,346 of the birds exhibited at the fairs.

Avian Influenza

Due to the recent outbreaks of avian influenza (AI) H5N1 in other countries and in response to increased public concerns, avian influenza surveillance has become a major focus for the Department and the Division of Animal Industry. An Avian Influenza State Response and Containment Plan was developed and a Poultry Emergency Disease Committee was established. Members on the committee consist of state, federal and industry representatives. In cooperation with the USDA, the expanded avian influenza surveillance program now includes sample collection and inspections at botanicas, live bird markets, animal sale markets, fairs/exhibitions, backyard flocks, sick bird investigations and commercial flocks.

Globally, there are many different strains of avian influenza (AI) virus causing a variety of clinical illnesses in poultry. Viruses can infect chickens, turkeys, pheasants, quail, ducks, geese and guinea fowl, as well as a wide variety of other birds. Migratory birds, especially waterfowl, have been shown to act as a natural reservoir for the less infectious strains of the disease. AI viruses can be classified into low pathogenicity (LPAI) and high pathogenicity (HPAI) based on the severity of the illness they cause. HPAI is the highly transmissible and lethal form of the disease that, once established, spreads rapidly. Because some LPAI viruses can mutate into HPAI viruses, surveillance for both is extremely important. Though surveillance continues for the existence of LPAI,

with the emergence of the lethal HPAI/H5N1 (over the past year), there has also been an increase in scrutiny and testing of birds in all facets of the industry for the presence of this deadly strain.

At weekend small animal sales, division staff inspected 177,272 birds, 852 of which were tested for AI. Monitoring and surveillance activities for *Mycoplasma gallisepticum* (MG), *Mycoplasma synoviae* (MS) and AI on commercial broiler breeding flocks were also continued for the 2005-2006 fiscal year. During 2005-2006, 109 flocks were tested and 9,496 samples were submitted to the division's diagnostic laboratories for MG and for MS testing.

The division continues to conduct quarterly hatchery inspections at commercial egg, meat, and turkey plants; 16 inspections were performed and 576 samples were submitted to the state diagnostic labs. The division also investigates all dead bird reports and (when possible) takes samples for testing for avian influenza and pullorum. Division staff also conduct routine inspections of dead bird disposal methods at commercial poultry farms. During the 2005-2006 fiscal year, 524 such inspections were conducted.

The Poultry Best Management Practices (BMPs) Quality Assurance Program was implemented in 2001. Currently, 199 farms are enrolled in the program and inspected by the division.

The division implemented a poultry database for permitting all poultry and eggs imported into the state or transshipped through Florida to other countries. During this fiscal year, 837 import permits and 607 transshipment permits were issued, representing 19,632,076 live birds and 16,607,367 dozen hatching eggs.

Cattle

During the 2005-2006 fiscal year, 536,856 cattle were inspected at livestock markets.

Brucellosis

Brucellosis is a contagious, costly disease of ruminant animals that also affects humans. Although brucellosis can attack other animals, its main threat is to cattle, bison and swine. The disease is also known as contagious abortion or Bang's disease. In humans, it's known as undulant fever because of the severe intermittent fever accompanying human infection, or Malta fever because it was first recognized as a human disease on the island of Malta. The disease is caused by a group of bacteria known scientifically as the genus *Brucella*. Three species of Brucella cause the most concern: *B. abortus*, principally affecting cattle and bison; *B. suis*, principally affecting swine and reindeer but also cattle and bison; and *B. melitensis*, principally affecting goats but not present in the United States. In cattle and bison, the disease currently localizes in the reproductive organs and/or the udder. Bacteria are shed in milk or via the aborted fetus, afterbirth, or other reproductive tract discharges.

There were 171 herds representing a total of 100,926 cattle tested in the field for brucellosis during the fiscal year, and one was found to be infected. An additional 85,470 cattle were tested at slaughter with nine reactors. At livestock markets, 655 cattle were tested, with none found to be infected. During the same period, 76,803 cattle were vaccinated against brucellosis.

Tuberculosis

Tuberculosis (TB) is a contagious disease of both animals and humans. It is caused by three specific types of bacteria that are part of the Mycobacterium group: *Mycobacterium bovis*, *M. avium* and *M. tuberculosis*. Bovine TB, caused by *M. bovis*, can be transmitted from livestock to humans and other animals. No other TB organism has as great a host range as bovine TB, which can infect all warm-blooded vertebrates. *M. avium* can affect all species of birds, as well as hogs and cattle. *M. tuberculosis* primarily affects humans but can also be transmitted to hogs, cattle and dogs.

Last year, the Department tested 112 herds for tuberculosis. The herds represented 3,656 cattle; no cattle were found to be infected.

Transmissible Spongiform Encephalopathies

Transmissible spongiform encephalopathies (TSE), or prion diseases, are rare forms of progressive neurodegenerative disorders that affect both humans and animals and are caused by agents that produce changes in the brain. TSE typically have incubation periods ranging from several months to years before symptoms become apparent. No conventional serologic test can identify TSE-infected animals, and so TSE are usually identified from the brain tissue of dead animals. There is no vaccine or cure for these diseases, and once symptoms appear, TSE are invariably fatal.

The TSE family of diseases includes bovine spongiform encephalopathy (BSE); scrapie, which affects sheep and goats; transmissible mink encephalopathy (TME); feline spongiform encephalopathy (FSE); chronic wasting disease (CWD) of deer and elk; and in humans, kuru, both classic and variant Creutzfeldt-Jakob disease (CJD and vCJD), Gerstmann-Straussler-Scheinker syndrome, and fatal familial insomnia. TSE have also been reported in captive exotic ruminants, and in exotic and domestic cats. The agent isolated from several of these cases is indistinguishable from BSE in cattle, suggesting the occurrence of TSE in these species resulted from BSE-contaminated feed.

Bovine Spongiform Encephalopathy (Mad Cow Disease)

Bovine spongiform encephalopathy (BSE), widely referred to as "mad cow disease," was first diagnosed in 1986 in Great Britain. BSE was discovered in Canada in 2003, Washington State in 2004, in Texas in 2005, and most recently in Alabama in 2006. The case of the BSE-infected cow from Washington State was later found to have originated from a Canadian herd. These isolated cases generated a rapid response from state and USDA officials, and resulted in new control, testing, and surveillance programs designed to rule out and prevent further cases in U.S. herds. The Department continues to work with federal and state partners to conduct surveillance and to prevent the introduction of BSE from foreign sources. During the 2005-2006 fiscal year, 4,990 samples were tested from Florida herds by the National Veterinary Services Laboratory (USDA). All were confirmed negative.

Johne's Disease

Johne's disease is a contagious, chronic and usually fatal infection that affects primarily the small intestine of ruminants. All ruminants are susceptible to Johne's disease. Johne's disease is caused by *Mycobacterium paratuberculosis*, a hardy bacterium related to the agents of leprosy and tuberculosis. The disease is worldwide in distribution. Signs of Johne's disease include weight loss and diarrhea with a normal appetite. Several weeks after the onset of diarrhea, a soft swelling may occur under the jaw (bottle jaw). Bottle jaw, or intermandibular edema, is due to protein loss from the bloodstream into the digestive tract. Animals at this stage of the disease will not live very long, perhaps a few weeks at most. Signs are rarely evident until two or more years after the initial infection, which usually occurs shortly after birth. Animals are most susceptible to the infection in the first year of life.

For fiscal year 2005-2006, the Florida Voluntary Johne's Program had 1,005 dairy and beef operations enrolled. The Live Oak Diagnostic Laboratory conducted 64,337 tests. The state of Florida is successfully meeting the guidelines developed cooperatively with the USDA for continued funding of this program.

Small Ruminants (Sheep and Goats)

During fiscal year 2005-2006, the Department inspected 12,149 small ruminants at livestock markets and 21,160 sheep and goats at weekend small animal sales. Division staff performed 5,763 goat/sheep field inspections.

Tuberculosis

Tuberculosis (TB) in goats and sheep, though considered a rare occurrence, is caused by one or more of the three types of Mycobacterium: *M. bovis*, *M. avium* and *M. tuberculosis*. *M. bovis* infects all warm-blooded vertebrates, including humans; while *M. avian* is the species that causes most of the infections in sheep. The bacterium can be transmitted to humans via milk, so dairy herds should be tested. Thirty sheep and 845 goats were tested for tuberculosis. There are 23 certified tuberculosis-free goat herds in Florida.

Brucellosis

Brucellosis is more common in goats than in sheep, and is caused by *Brucella melitensis*. The sign most often

associated with brucellosis in goats is abortion in goats, but not all animals that abort have brucellosis and not all brucellosis-infected animals will abort. The organism can be transmitted via blood, vaginal discharge, milk, aborted fetuses, and placenta. The danger of human infection and economic losses makes this another important disease to control and eradicate. Sixty-one sheep and 1,176 goats were tested for brucellosis. There are 23 certified brucellosis-free goat herds in Florida.

Scrapie

Scrapie is one of a number of diseases of ruminants that have been classified as transmissible spongiform encephalopathies (TSE). Scrapie affects the central nervous system of sheep and goats, but clinical signs may not appear until the animal is five years of age or older. The USDA's Voluntary Scrapie Flock Certification Program provides participating producers with the opportunity to protect their sheep from scrapie and enhance the animals' marketability by having them certified scrapie-free. Florida now has 42 flocks participating in this program, and the number of certified flocks remains unchanged at two. Under USDA-APHIS rules and regulations, and the Scrapie Eradication Uniform Methods and Rules, all sheep and goats in Florida are required to have an official USDA-APHIS approved tamper-resistant individual animal identification tag. For fiscal year 2005-2006, 2,430 premises had registered their herds under this program.

Equine

Contagious Equine Metritis

Contagious equine metritis (CEM) is a highly contagious reproductive disease that can affect all equids and is caused by the bacterium *Taylorella equigenitalis*. The infection can result in short-term infertility in mares that is sometimes associated with a vaginal discharge and, rarely, abortion. Mares can become unapparent carriers of the bacterium in their reproductive tracts and can shed the organism into the environment and transmit it through subsequent breeding. Stallions do not develop clinical signs but can carry the organism on their genitalia for years and spread the disease by breeding susceptible mares.

CEM is considered an exotic disease in the United States, which means it is not found in the native horse population. However, there are at least 25 countries and territories where CEM exists, including a number of the member states of the European Union. CEM is a serious venereal disease because it is highly contagious. There is no vaccine against CEM, but there are ways to detect infected horses and to rid infected stallions and mares of the bacterium via treatment and testing protocols.

Florida utilized 20 Approved CEM Quarantine Facilities to handle the CEM importation requirements for horses entering the United States. During 2005-2006, 242 imported stallions and mares were processed through these facilities. There were no positive horses detected.

Equine Infectious Anemia

Equine infectious anemia (EIA), also known as "swamp fever," is an incurable blood-borne disease that affects only members of the equine species. It is transmitted primarily by large biting flies but may also be transmitted by contaminated needles and surgical instruments and through breeding. Once an animal is infected, it remains infected for the rest of its life. While some horses die from acute infections, most remain as seemingly symptom-less carriers. However, infected animals are still capable of transmitting the disease and pose a threat to healthy animals. There is currently no vaccine or effective treatment for this disease. EIA is a disease of worldwide significance. In some foreign countries, the disease incidence may be as high as 50 percent or more. In the United States, it occurs in most every state; however, 90 percent of the cases occur in what is known as the "hot zone," those states bordering the South Atlantic Coast, the Gulf of Mexico, and the Mississippi River Basin, including Oklahoma and Texas. Disease risk in these areas is higher because environmental conditions are more favorable for prolonged insect vector seasons.

Florida's equine industry continues to be a vital economy to the state, and the Department is working hard to safeguard this important state resource from the potential devastating effects of this disease. With support and cooperation from the state's equine industries, Florida was one of the first states to implement an EIA disease control program.

Last year, more than 2.1 million horses were tested for EIA nationally. In Florida, more than 140,908 horses were tested, with only two reactors disclosed. On a national level, only 10 to 15 percent of the equine population is tested annually, but in Florida, more than 30 percent of the population is tested annually. In spite of being in the EIA "hot zone," Florida's EIA control program keeps the disease incidence at a very low rate (0.013 percent), which is well below the national level of 0.015 percent. This can be attributed to the Department's effective EIA control program and strong support from the state's equine industry.

Equine Piroplasmosis

Equine piroplasmosis (EP) is an animal disease caused by the parasitic organisms *Babesia equi* and *Babesia caballi*, and is primarily transmitted to horses by ticks. The greatest risk of introduction of this disease is through importation of horses from countries where EP is endemic.

Florida is the only state that monitors the status of horses imported from Puerto Rico and the U.S. Virgin Islands, where EP is endemic. Florida requires all horses to be negative for EP prior to shipment and to be retested 30 to 60 days after arrival. Last year, the Department issued 123 permits covering 127 horses, with negative results on all tests performed.

Arboviruses

Arthropod-borne viruses (arboviruses) are viruses that can be transmitted to humans and horses by mosquitoes. Arboviral infections in humans and horses may result in development of a fatal case of encephalitis: inflammation of the brain and spinal cord. These viruses are maintained in nature through continuous transmission between natural reservoir hosts (primarily wild birds) and certain species of mosquitoes (disease vectors). Humans and horses do not contribute to the spread of these diseases and, as such, are considered "dead-end" hosts. Although other animals are susceptible to arbovirus infections, humans and horses are most susceptible to developing clinical disease. The Department is actively involved in the monitoring of equine populations for eastern equine encephalomyelitis (EEE) and West Nile virus (WNV).

Eastern Equine Encephalomyelitis

Eastern equine encephalomyelitis (EEE) is one of several arboviruses transmitted by infected mosquitoes that may cause fatal encephalitis in humans and horses. Mosquitoes become infected with the virus after feeding on wild birds. Transmission of EEE from horse to horse or horse to human via mosquito bites is highly unlikely because humans and horses are poor reservoirs for the virus. In humans and horses, the mortality rate is extremely high: 50 percent or more in humans and 80 to 90 percent in horses.

EEE is most often detected in horses during the months of May through September. Each year, Florida reports 25 to 50 cases throughout the state. Many of these cases appear in the same areas year after year. Mosquito activity in Florida may occur on a year-round basis; therefore, cases of EEE may be reported during any given month. About every seven to 10 years, the number of cases reported reaches epidemic proportions and may be well over 100. In 2003, the number of cases reached epidemic levels with 207 cases being reported. During fiscal year 2005-2006, there have been 65 positive equine cases with additional tests pending results.

West Nile Virus

West Nile virus (WNV) is another mosquito-borne viral disease that may cause encephalitis in humans and horses, but unlike EEE, the clinical course of the disease is not as severe, and mortality rates are much lower: 25 to 30 percent in horses and less than 10 percent in humans. WNV is commonly found in wild birds, humans and other vertebrate animals in Africa, Eastern Europe, Western Asia and the Middle East, but until 1999 had not been documented in the Western Hemisphere. During the late summer of 1999, WNV was identified in New York City for the first time. By the end of the year, cases in wild birds, humans and horses had been documented in three Northeastern states. The virus survived the winter, and during 2000 continued to spread to 12 eastern coastal states.

By 2001, the virus had spread to 18 states, including Florida. Across the country, more than 730 equine cases were confirmed, with 156 fatalities. Florida alone reported 492 cases with 82 deaths. In 2002, WNV expanded rapidly westward. Almost 1,500 equine cases were reported in 40 states. Approximately one-third of the affected horses died. Florida reported 499 cases with 92 deaths. In 2003, there were 117 equine cases reported. During fiscal year 2005-2006, 11 positive cases were confirmed, with all cases confirmed during the summer months of 2005.

The Department continues to work closely with its other Arboviral Working Group partners to provide valuable surveillance data on equine cases. The EEE/WNV Equine Database has been an invaluable tool in tracking these diseases and reporting them to the working group in a timely manner. Early detection and reporting of arboviral cases help to warn citizens to take precautions against mosquito bites and to remind horse owners to ensure that their horses are appropriately vaccinated.

Swine

For fiscal year 2005-2006, 84,345 swine were inspected on 2,208 premises by field personnel, 18,706 were inspected at livestock markets, and 7,052 were inspected at fairs and shows.

Classical Swine Fever

Classical swine fever (CSF), also known as hog cholera, is a highly contagious viral septicemia affecting only swine. It has been eradicated from the United States since 1976. As the world's second-largest exporter of pork, the U.S. pork industry would suffer catastrophic losses should there be a CSF outbreak. Florida must remain vigilant in its surveillance for the emergence of foreign animal diseases because of its location and high feral swine population, the existence of garbage feeders, and increases in international travel. During the past fiscal year, in accordance with a state-federal cooperative agreement, a targeted surveillance program of slaughter plants and high-risk swine populations (garbage feeders, feral swine) was begun. In 2005-2006, 1,624 samples were submitted to the state diagnostic lab for testing.

Garbage Feeders

The cooperative State-Federal Swine Health Protection Act established standards for feeding waste to swine designed to prevent the introduction of foreign animal diseases such as foot-and-mouth disease (FMD) and classical swine fever (CSF) into U.S. herds. As the primary entity charged with fulfilling the requirements under this act, state inspectors have the responsibility of checking facilities that collect edible waste food products that are cooked and fed to swine monthly. During fiscal year 2005-2006, the Department licensed 93 garbage feeder operators and carried out 1,471 inspections. Through these inspections, 66,922 garbage-fed swine were evaluated and, if needed, tested for disease.

Swine Brucellosis and Pseudorabies (Aujeszky's Disease)

Brucellosis is a contagious, costly disease affecting ruminants, swine and humans. Caused by a bacterium, it affects livestock by causing abortion, low fertility, and lameness. Under the Cooperative State Federal Brucellosis Eradication Program, Florida is classified a brucellosis-free state for its commercial production swine. Like brucellosis, pseudorabies is a deadly disease of pigs that can be spread to cattle, horses, sheep, goats, dogs and cats. An infection with this viral disease leads to high mortality in newborn piglets, and older pigs can become carriers of the virus for life. A voluntary cooperative eradication program for pseudorabies was established in the United States in 1989 and involves industry and federal and state government. The program's primary activities include surveillance, herd monitoring, and herd cleanup. Swine producers that wish to have Qualified/Validated status or Modified-Monitored/Validated status or these two diseases must first pass a risk assessment test and complete a herd health plan. Florida is classified a pseudorabies-free state (also within the Commercial

Production Swine herds). For fiscal year 2005-2006, 826 animals were tested for pseudorabies and 884 animals were tested for swine brucellosis. One herd qualified as brucellosis- and pseudorabies-free.

Cervidae

Florida's captive cervidae industry continues to grow. While this industry is licensed primarily by the Florida Fish and Wildlife Conservation Commission (FWC), the Department is a partner working with disease control issues and importation policies. Rule 5C-26 addresses the movement of cervidae into the state by requiring that all imports originate from a herd participating in USDA surveillance/prevention programs. They must be chronic wasting disease (CWD) -free, and from accredited tuberculosis-free and brucellosis-free herds.

The Department's captive Cervidae Herd Health Plan requires mandatory testing of all animals that die or are killed if they are older than 16 months of age. Passive surveillance of symptomatic wild deer is also under way. To ensure these requirements are enforced, state personnel work with owners of captive cervidae herds on disease management programs. They visited 362 premises during the past fiscal year. No animals with positive results for tuberculosis, brucellosis or CWD have been found.

The Department continues to monitor the status of certain diseases affecting cervidae in other regions of the United States.

Chronic Wasting Disease

Chronic wasting disease (CWD) is a TSE of deer and elk. To date, this disease has been found only in cervids (members of the deer family) in North America. First recognized as a clinical "wasting" syndrome in 1967 in mule deer in a wildlife research facility in northern Colorado, it was identified as a TSE in 1978. CWD is a progressive disease that attacks the brains of infected animals, causing the animals to become emaciated, display abnormal behavior, lose bodily functions, and subsequently die. CWD has become of particular concern due to its lack of known prevention and treatment, lack of a live animal diagnostic test, and unknown origin and means of transmission. There is no known relationship between CWD and any other TSE of animals or people, and there is no evidence that CWD poses any risk to human health.

On April 9, 2002, the Department issued an emergency rule, 5C-ER-02-1, Chronic Wasting Disease. Current growth and resultant rapid widespread movement in the cervidae farming industry are increasing the potential for the spread of CWD and other diseases of cervidae. Due to the potential threat CWD poses to Florida's captive and free-ranging cervidae populations, the emergency rule enacted a 90-day ban on importation of cervidae from any state or location with reported cases of CWD and a 90-day restriction on importation of cervidae from all other states or locations. A permitting and reporting system was rapidly implemented by the Department to monitor interstate and intrastate movement of cervidae. The final rule for cervidae, 5C-26, became effective on November 27, 2002. This rule requires that cervidae being imported into Florida originate from a herd that participates in an official CWD surveillance/prevention program and be free of CWD for at least 60 months prior to importation. It also requires that all captive cervidae being transported within the state must originate from, and be moved to, premises currently licensed by FWC and currently enrolled in the Division of Animal Industry's Cervidae Herd Health Plan (CHHP) program. Since Rule 5C-26 became effective, the number of approved CHHP program herds has increased from 93 herds in 2002 to 261 as of June 30, 2006. Additionally, all cervidae being transported into or within Florida are required to be accompanied by a Certificate of Animal Movement, issued by the division within 30 days prior to movement.

A federal CWD Herd Status Rule was recently finalized that will place specific requirements on cervidae being moved from state to state. The Division of Animal

Industry is currently working with Florida's captive cervidae herd owners to help them achieve CWD Herd Status.

CWD has been diagnosed in both captive and free-ranging elk, mule deer, white-tailed deer and black-tailed deer located in Canada, Colorado, Illinois, Kansas, Minnesota, Montana, Nebraska, New Mexico, South Dakota and Wisconsin. The Department continues to work with the cervidae industry, USDA, and other state and federal agencies to prevent the introduction of CWD and conduct surveillance in farmed and wild cervidae populations in Florida. During the 2005-2006 fiscal year, 512 samples from free-ranging deer were submitted to the Kissimmee Diagnostic Laboratory or other approved USDA laboratories, and all were reported as negative.

Companion Animal and Small Animal Programs

In 2003, the Division of Animal Industry designated a separate program area to monitor companion animal health issues within the state and ensure compliance with existing rules and legislation affecting companion animals. Efforts have continued and expanded as compliance with interstate and intrastate small animal movement requirements, health certification by accredited veterinarians in Florida, consumer protection and assistance, and rule development/legislative support areas are monitored.

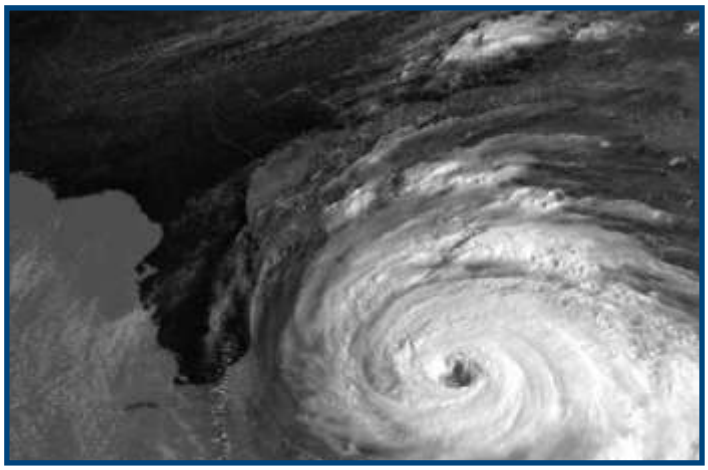
A tracking system was implemented to address consumer complaints involving health certification and the sale of small animals (dogs and cats), covered by Section 828.29, F.S., the Pet Law, and Section 585.145, F.S., relating to the control of animal diseases as well as Departmental rules. A total of 300 complaints were processed. These complaints involved 262 dogs and 30 cats and included complaints against 123 pet stores, 90 breeders, 38 brokers, 23 veterinary clinics, five private sellers, four boarding kennels and two miscellaneous subjects.

Mediation of consumer complaints resulted in refunds of purchases in the amount of $26,985. Eight cases/complaints were referred to other agencies, and 21 cases were referred to the Office of Agricultural Law Enforcement for further investigation. Eighty-nine educational letters were sent to sellers and their veterinarians in Florida in an effort to inform them of the requirements of Florida statutes governing the sale and health certification requirements of dogs and cats sold in or transported to Florida.

During the 2005-2006 fiscal year, division inspectors visited 533 pet stores to review Official Certificates of Veterinary Inspection and inform sellers about the requirements of the Pet Law for sales of dogs or cats in Florida.

Emergency Management

In the aftermath of Hurricane Andrew in 1992, Chapter 252, F.S., (State Emergency Management Act), was enacted which mandates the development of the Florida Comprehensive Emergency Management Plan. The plan establishes a framework through which the state of Florida prepares for, responds to, recovers from, and mitigates the impacts of a wide variety of disasters that could adversely affect the health, safety and/or general welfare of the residents of the state. The plan provides guidance to state and local officials on procedures, organization and responsibilities. It also provides for an integrated and coordinated local, state and federal response.



The plan calls for annual exercises to determine the ability of state and local governments to respond to emergencies. It also defines the responsibilities of state agencies and volunteer organizations. The plan describes the basic strategies, assumptions, operational goals and objectives, and mechanisms through which the state will mobilize resources and conduct activities to guide and support local emergency management efforts through preparedness, response, recovery and mitigation.

To facilitate effective operations, the plan adopts a functional approach that groups the types of assistance to be provided into 17 Emergency Support Functions (ESF). Each ESF is headed by a lead or primary agency or organization, which has been selected based on its authorities, resources, and capabilities in that functional area.

ESF 17 is organized to ensure a rapid, coordinated response to animal and agricultural needs in the disaster area. The Department is the primary agency for ESF 17. The Division of Animal Industry assigns personnel to staff ESF 17 at the State Emergency Operation Center as well as in the field and provides daily direction. This direction includes the assignment of personnel to handle requests for assistance and ensures that requests for assistance are prioritized, met, and documented.

ESF 17 establishes coordination with other Emergency Support Functions, multiple county, state, and federal agencies and volunteer organizations, and maintains open communications with these agencies and organizations in both the planning and operations stages.

In order to effectively coordinate the efforts of multiple organizations, a State Agricultural Response Team (SART) was formed in 2003. SART is a multi-agency coordination group consisting of governmental and private entities dedicated to all-hazard disaster preparedness, planning, response, and recovery for the animal sectors in Florida.

SART's mission is to empower Floridians through training and resource coordination to enhance all-hazard disaster planning and response for animal and agricultural issues. SART operates under the direction of an advisory board made up of representatives from supporting agencies and organizations.

Current agencies and organizations supporting SART include:

- Department of Community Affairs, Division of Emergency Management
- Disaster Animal Response Teams
- Farm Credit of South Florida
- Farm Service Agency
- Florida Animal Control Association
- Florida Association of Kennel Clubs
- Florida Cattlemen's Association
- Florida Department of Agriculture and Consumer Services:
  - Office of Emergency Preparedness
  - Division of Agricultural Environmental Services
  - Division of Animal Industry
  - Division of Aquaculture
  - Division of Dairy Industry
  - Division of Plant Industry
- Florida Farm Bureau Federation
- Florida Nursery, Growers and Landscape Association
- Florida Sea Grant
- Florida Veterinary Medical Association
- Farm Credit of South Florida
- Humane Society of the United States
- Southeast Milk, Inc.
- Sunshine State Horse Council
- University of Florida, Institute of Food and Agricultural Sciences
- University of Florida, College of Veterinary Medicine
- University of Florida, Plant Pathology
- United Animal Nations, Emergency Animal Rescue Service
- USDA, Farm Service Agency
- USDA, APHIS, Plant Pesticide Quarantine
- USDA, APHIS, Veterinary Services
- USDA, Office of Inspector General

Participating agencies supply personnel who comprise the SART Advisory Board. This board currently has over 30 members. It meets quarterly to provide guidance for animal and agriculturally related emergency management activities. The Division of Animal Industry personnel provide support and coordination for these meetings and for the SART Advisory Board.

In 2005, SART training conferences were held in Tallahassee, Kissimmee and Belle Glade. Over 20 presentations on plant, animal, aquaculture, emergency management and biosecurity topics were given. Over 600 attendees participated in these three conferences.

County support for the State Agricultural Response Team continued with the establishment of seven model counties that participated in planning sessions to assist in the preparation of training materials for county SART programs. Division of Animal Industry personnel provided support and coordination for these county SART programs.

Additional SART activities supported by division personnel included the purchase and staging of emergency response trailers, supplies and equipment; coordination and guidance on the preparation of multiple training modules and materials; and administration of the SART web site and the numerous community outreach activities related to emergency management education.

The 2005 hurricane season followed up a record 2004 season with an additional four major hurricanes impacting Florida. Many Division of Animal Industry personnel were assigned response duties at the State Emergency Operations Center (SEOC) in Tallahassee or for field response activities in impacted areas. The Division of Animal Industry acts as the lead agency for agriculture and animal issues at the SEOC. In this role, a wide variety of response efforts were coordinated to provide relief for Florida's citizens.

Division personnel provided over 6,000 staff hours in relief activities during the 2005 hurricane season.

In 2005, division personnel also participated in an Emergency Management Assistance Compact (EMAC) mission to Mississippi for Hurricane Katrina response efforts. Florida provided over 7,000 response positions and $175 million in aid to Mississippi.

Emergency management personnel provided programs at many conferences throughout Florida and in other states. These included the National Hurricane Conference, the Governor's Hurricane Conference, the North American Veterinarian Conference, the National SART Conference, and the Florida Veterinary Medical Association Conference.

Homeland Security Presidential Directive (HSPD) 5 requires response agencies to adopt the National Incident Management System (NIMS). NIMS provides a core set of concepts, principles and terminology to guide incident response. Due to this directive, division personnel participated in multiple Incident Command System training sessions. In 2005, division personnel attended 98 classes.

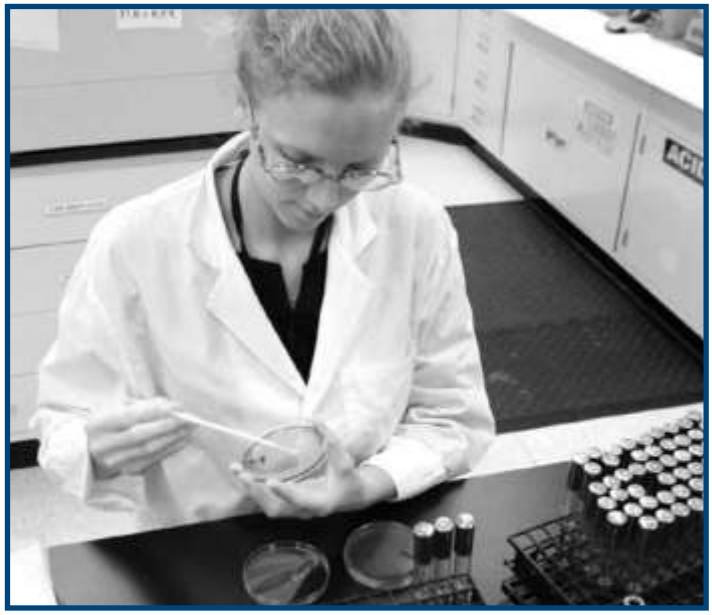
Division personnel also attended and participated in multiple SEOC exercises, including a statewide hurricane exercise, radiological incident exercise, and statewide food defense exercise.

Diagnostic Laboratories

Due to Florida's unique geographic location, its close proximity to countries that have endemic diseases that are considered exotic or have been eradicated from the United States, the increase in the number of non-native animal species introduced into the state, and the various international ports located in Florida, the state occupies a critical position in the nation's agricultural picture.

Imported animals pose a constant threat for the introduction of diseases, and the ongoing threat of terrorism raises concerns about the state's vulnerability to deliberately introduced biohazards. To meet these challenges, the Department's Diagnostic Laboratories are staffed with veterinarians and technicians who are highly trained in a range of diagnostic disciplines, including bacteriology, virology, molecular biology, toxicology, parasitology and pathology.

Many diseases are considered harmful to Florida's animal industry or to the general public and are listed as reportable to the Department. In addition to the monitoring and surveillance of animal diseases, the laboratories also provide thousands of tests each year for diseases of public health significance, such as West Nile virus, Lyme disease, Rocky Mountain spotted fever, chlamydia (psittacosis), toxoplasmosis, giardiaisis, salmonellosis, anthrax, leptospirosis and many others. Rabies suspect animals that have been implicated in human exposure incidents come to our laboratory for collection of samples that are then forwarded to human diagnostic laboratories at the Department of Health (DOH) for rabies analysis. The laboratory staff work closely with the Bureau of Animal Disease Control staff on disease surveillance programs.



The Diagnostic Laboratories at Kissimmee and Live Oak comprise a laboratory system certified by the American Association of Veterinary Laboratory Diagnosticians (AAVLD) as an all-species, full-service laboratory system. AAVLD certification is recognized worldwide.

The Bureau of Diagnostic Laboratories received operating capital outlay funds for replacement equipment in the laboratories. Those funds were utilized to upgrade laboratory equipment and purchase biological safety cabinets, microscopes, PCR equipment, laboratory grade refrigerators and other equipment to meet the demands of new tests. The Kissimmee Laboratory underwent an extensive electrical renovation that was needed to meet the new equipment demands and allow for future expansion. Funds were also received to initiate the process for phase two of the new campus master plan. The funding will be utilized to contract architects to finalize the design plans for a new shipping and receiving building and a new necropsy laboratory suite.

During fiscal year 2005-2006, the Diagnostic Laboratories received over 356,000 accessions, many with several sample submissions requiring numerous diagnostic procedures.

Kissimmee Animal Disease Diagnostic Laboratory

The Kissimmee Diagnostic Laboratory, one of two laboratories in the State of Florida Diagnostic Laboratory System, is a full-service, all-species laboratory receiving domestic and exotic animal species with the exception of primates. A wide variety of tests ranging from full necropsy/anatomical pathology service to clinical pathology, histopathology and immunohistochemistry are offered. Additional tests include microbiology (bacteriology/virology/serology), toxicology and molecular diagnostics.

The Florida Animal Disease Diagnostic Laboratories system has a Level 3 Biosafety Laboratory (BSL-3) at the Kissimmee Laboratory facility. This BSL-3 enables the bureau to provide rapid diagnostic procedures for diseases that are considered foreign in the United States and that could result in an undesired and potentially devastating outbreak due to unintentional introduction of an agent or due to bioterrorism. The U.S. Department of Agriculture (USDA), designated the Kissimmee Laboratory as part of a pilot system, the National Animal Health Laboratory Network (NAHLN). This initial program identified 12 laboratories across the United States to augment the National Veterinary Services Laboratory (USDA) in Ames, Iowa, and the Foreign Animal Disease Diagnostic Laboratory (USDA) at Plum Island, New York. This laboratory network was developed to provide increased Homeland and Domestic Security both in Florida and the nation.

The initial target diseases are exotic Newcastle disease (END), highly pathogenic avian influenza (AI), classical swine fever (CSF), African swine fever (ASF), foot-and-mouth disease (FMD), rinderpest, contagious bovine pleuropneumonia (CBPP), lumpy skin disease (LSD) and vesicular stomatitis (VS). Laboratory staff has received training on methods using new procedures in molecular diagnostics, including real-time reverse-

transcription polymerase chain reaction (rt-RT-PCR). Currently the facility is certified by the USDA to run rt-RT-PCR for AI, END, CSF and FMD. The laboratory has started surveillance for END, AI and CSF as part of the NAHLN effort to detect foreign animal disease before outbreaks may pose serious problems to agriculture. This is a concerted effort between the Bureau of Animal Disease Control field staff, the Florida Diagnostic Laboratories and the USDA. Laboratory staff have been actively performing surveillance testing in high-risk bird populations that consist mainly of backyard flocks, exhibition birds and other non-industry-related bird-rearing activities. Additional samples have been received at both Kissimmee and Live Oak for avian influenza testing due to increased surveillance by the National Poultry Improvement Program and the Florida Fish and Wildlife Conservation Commission (FWC). The laboratories continue to test for West Nile virus, a mosquito-borne disease that has continued to be prevalent in Florida. Several tests such as antigen capture ELISA, traditional RT-PCR, rt-RT-PCR, and viral isolation are performed to diagnose the disease. The Kissimmee Diagnostic Laboratory in conjunction with the Florida Department of Health monitors this disease as well as the traditional mosquito-borne diseases (arboviral diseases). Evaluating the spread of arboviral diseases in animals affords public health officials a barometer of impact to humans. New tests have allowed the laboratory to confirm the diagnosis of these diseases.

Live Oak Animal Disease Diagnostic Laboratory

During fiscal year 2005-2006, the Live Oak Animal Disease Diagnostic Laboratory worked to gain infrastructure, training, and testing improvements aimed to better serve Florida animal industries. These enhancements are intended to position the laboratory to meet changing needs and allow flexible response for future demands. Live Oak Laboratory performs mainly Florida program testing for USDA-regulated program diseases – brucellosis, equine infectious anemia, pseudorabies, avian influenza, avian mycoplasmas, pullorum typhoid and Johne's disease. During this fiscal year, Live Oak Laboratory received 15,978 accessions representing 294,698 samples requiring multiple testing procedures for disease analysis. Results of these tests are reported to officials responsible for emergency eradication efforts or ongoing animal disease control programs. These are primarily for cattle, horses, poultry and swine.

Live Oak Laboratory also performed over 1,808 non-program diagnostic procedures submitted by veterinary practitioners and the general public for clinical pathology, bacteriology, parasitology, serology and necropsy. During this fiscal year, 252 individual animals were submitted for post-mortem necropsy, encompassing multiple procedures including specific sample collections for various disease analyses. Poultry disease surveillance for the area broiler industry is a major component of sample submission, and testing is regularly conducted at Live Oak Laboratory to monitor birds for salmonella, avian influenza and other disease entities critical to poultry production and economics. Ongoing regular submissions of diseased backyard poultry via Bureau of Animal Disease Control field operations yields surveillance samples that could provide early detection of diseases that could be very detrimental to Florida's poultry industries. The Live Oak facility performed diagnostic services critical for sampling and forwarding samples to other laboratories for eastern equine encephalitis (EEE) and West Nile virus (WNV) cases in horses and surveillance sampling for transmissible spongiform encephalopathy (TSE) diseases: BSE (mad cow); scrapie (sheep and goats); and chronic wasting disease (CWD) in wild and captive deer.

Live Oak Laboratory also assisted a number of interagency animal disease cooperative efforts. The Florida Fish and Wildlife Conservation Commission regularly submitted white-tailed deer for necropsy to determine cause of disease condition or death as well as tissue sampling for chronic wasting disease surveillance. Suwannee County Department of Health submitted rabies suspect animals from human exposure incidents for collection of

samples that were forwarded to Florida Department of Health human diagnostic laboratories for rabies analysis. The laboratory staff worked closely with Bureau of Animal Disease Control field staff and District veterinarians on numerous individual cases as well as several ongoing disease programs to assist in the early detection of monitored diseases and to provide surveillance for the emergence of new animal disease threats.

Feed, Seed and Fertilizer

Feed Program

Animal feeds are regulated using a network of six Department-certified laboratories located throughout the United States. Registrants, including ingredient suppliers, livestock feed and pet food manufacturers, and other distributors of commercial feed products, are required to submit samples of their products for testing based on the feed type and tonnage distributed in the state. Results from the certified laboratories are reported to the State Feed Laboratory, where compliance with Chapter 580, F.S., is determined and regulatory actions are initiated as appropriate. In fiscal year 2005-2006, 637 companies were registered with the Department as distributors of commercial feed in Florida. A total of 2,368 samples were submitted and analyzed, with 53 violations in one or more categories. This represents an overall violation rate of 2.24 percent. Inspection, sampling and laboratory evaluation oversight was conducted to verify compliance with the feed program. Eleven consumer complaints were investigated, and 36 administrative fines totaling $25,600 were collected for feed rule violations.

Bovine spongiform encephalopathy (BSE), widely referred to as "mad cow disease," continues to be the most critical feed-related issue. BSE is a progressive and fatal neurological disorder of cattle that is caused by infectious protein agents called prions. The disease was first identified in 1986 in the United Kingdom, but it was not detected in the United States until December 2003, when BSE was diagnosed in a single dairy cow in Washington State (the cow had been imported from Canada). Subsequently, two additional cows, one in Texas and another in Alabama, were confirmed to have BSE in 2005 and 2006. In each case, swift government intervention prevented the infected cattle from entering the animal feed or human food markets.

Variant Creutzfeld-Jakob disease, a chronic and fatal neurodegenerative disease that affects humans, is assumed to be linked to the consumption of beef products contaminated with the BSE agent. The U.S. Department of Health and Human Services and the U.S. Department of Agriculture have implemented measures to protect the public from health risks associated with BSE and to prevent the spread of the disease in U.S. cattle. The Department continues to pursue funding from additional sources to enhance existing surveillance and laboratory analysis programs related to BSE prevention.

To ensure that this disease does not develop in Florida, the Bureau of Compliance Monitoring extended its contract with the U.S. Food and Drug Administration (FDA) to conduct inspections of feed manufacturers, distributors, transporters, salvagers, and ruminant feeders. The inspections are intended to prevent the establishment and amplification of BSE by ensuring that no prohibited mammalian protein products are used in feed for ruminant animals such as cows and sheep. A total of 300 BSE inspections were completed under the 2005 contract agreement, and 375 inspections are contracted for the 2006-2007 fiscal year. In August 2005, the Feed Section secured additional funds to enhance its feed analysis and inspection program where animal feeds are tested for materials prohibited by FDA's ruminant feed ban using polymerase chain reaction (PCR). This new technology uses a DNA amplification technique to isolate and amplify any bovine proteins present and potentially prohibited from use in sampled feed products. In the 2005-2006 fiscal year, 229 animal feeds were tested for the presence of bovine proteins using PCR.

Seed Program

The seed program is administered to ensure that Florida consumers have a source of high-quality seed for planting that meets or exceeds state and federal standards. Samples of agricultural, vegetable, and flower seed are collected and analyzed for purity, germination, and compliance with Chapter 578, F.S. Commercial seed samples are tested on a fee basis to determine seed quality for accurate labeling information. During fiscal year 2005-2006, 1,959 Seed Dealer Licenses were issued and 2,646 official seed samples were collected. Laboratory personnel analyzed 2,710 official, special, and commercial seed samples, requiring 49,351 determinations. Based on analyses, it was determined that 17.5 percent of the official samples were mislabeled and 3.4 percent were illegal.

The increased usage of genetically enhanced seed in Florida agriculture – predominantly corn, cotton, and soybean seed – is confirmed through the division's seed sampling and regulatory program. Samples of genetically enhanced seed may be subjected to additional analyses to ensure accurate labeling and protect Florida growers and consumers.

The Seed Investigation and Conciliation Council serves to assist farmers and seed dealers in determining the validity of complaints made by farmers against seed dealers and to recommend cost damages in those cases involving failure of the seed to produce as represented by the label on the seed package. This council received 10 new complaints this year, six of which are currently pending.

The division continues to play a vital role in controlling the spread of the invasive noxious weed tropical soda apple. During this fiscal year, the seed laboratory identified 16 seed lots contaminated with this prohibited noxious weed seed. The result was the stop-sale of 97,000 pounds of agricultural seed destined for planting in Florida and the Southeast. The Department continues to inform stakeholders about the severity of tropical soda apple and educate them about how to control it. An additional 168,000 pounds of agricultural seed were removed from sale due to laboratory analysis confirming the presence of other prohibited weed seed, including bindweed, Texas millet, and wild radish. Laboratory analysis resulted in the stop-sale of over 109,000 pounds of agricultural and vegetable seed due to germination below the minimum standard allowed under 5E-4.006, Florida Administrative Code.

Fertilizer Program

The fertilizer program continues as one of the most innovative programs in the country. Official samples of commercial fertilizer and agricultural liming materials are collected and analyzed to ensure they meet the standards established in Chapter 576, F.S. This program serves as a model for new fertilizer analytical methodologies. The laboratory has implemented new methodologies to meet the evolving needs of the Florida consumer in the areas of nutrient availability in controlled-release fertilizers and micro-nutrient solubility.

The Department is also involved with the South Florida Water Management District (SFWMD) and the Florida Department of Environmental Protection (FDEP) Lake Okeechobee and Estuary Recovery Plan. The University of Florida Institute of Food and Agricultural Sciences (IFAS) and Florida Department of Agriculture and Consumer Services are reviewing the recommended phosphorus application rates for agricultural crops, including the evaluation of Best Management Practices (BMPs) performance in meeting load reduction targets. In addition, the Department is also working with the Florida Department of Environmental Protection, SFWMD and IFAS to make recommendations for BMPs for urban fertilizer usage and content.

Issues such as heavy metals in fertilizers and nutrient BMPs at fertilizer plants are also administered under this program. The Fertilizer Material Assessment Advisory Group scientifically evaluates all new fertilizer materials before they are permitted into the Florida marketplace and used in the state's delicate environment. No new materials were reviewed by this group during the fiscal year. The laboratory also analyzes commercial samples on a fee basis to determine compliance with label guarantees. There were 4,136 fertilizer samples analyzed during the fiscal year, of which 1,216 were found to be deficient in one or more plant nutrients. The laboratory performed 154,621 determinations on these samples. The overall deficiency rate was 29.4 percent. Because of excessive deficiencies, fourteen licensees were placed on probation, and penalties and fines totaling $306,437.81 were levied, with $249,684.22 of that total returned to consumers. There were 502 licenses issued for the sale of fertilizer in Florida. Additionally, 1,549 brands and grades of specialty fertilizers were approved for distribution. Nearly 2 million tons of mixed fertilizer and fertilizer materials were reported sold in the state.

The fertilizer laboratory also performed 846 analyses for non-guaranteed trace metals in 523 fertilizer products. Four samples exceeded the established tolerances for arsenic and lead. A total of 942 environmental water samples were analyzed for nutrient content for other divisions in the Department. There were 7,397 determinations performed on these samples.

Agricultural Water Policy

Best Management Practices

The Department, through the assistance of the Office of Agricultural Water Policy (OAWP), has produced a number of Best Management Practices (BMPs) for water quality and water conservation that offer agriculture

certain protections under state law. BMPs are defined as a practice or combination of practices based on research, field-testing, and expert review, to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality in agricultural and urban discharges. When implemented, these practices are deemed to have a minimum individual or cumulative adverse impact to the water resources of the state. The process of developing BMPs includes the agricultural industry, Florida Department of Environmental Protection (DEP), Water Management Districts, and environmental community stakeholders with assistance from OAWP staff. Once the BMPs are adopted by rule and verified by DEP as effective in attaining targeted pollutant reductions, growers who implement BMPs receive a presumption of compliance with state water quality standards and are eligible to receive cost-share assistance. During this fiscal year, staff: adopted BMP manuals by rule for gulf citrus, vegetable and agronomic crops, and container nurseries in the South Florida region; produced draft BMP manuals for water conservation and sod farms; and continued work on equine and cow/calf BMP manuals.

Regional Partnerships

The Suwannee River Partnership was formed in 1999 as a coalition of state, federal and regional agencies, local governments, and private industry representatives working together to reduce nitrate levels in surface and ground waters. Initially, the partnership's efforts were limited to the Middle Suwannee River Basin. In 2003, the partnership expanded its work to include the Santa Fe River Basin. The partnership continues to assist dairy, poultry and row crop farmers with BMPs and conservation plans. This year, staff administered a cost-share program for row crop farmers, and implemented a quality assurance program to track and confirm BMP implementation.

The Lake Okeechobee Protection Act was passed by the 2000 Legislature to establish a restoration and protection program for the lake. Staff continues to work with the Florida Department of Environmental Protection and the South Florida Water Management District (SFWMD) to implement the Lake Okeechobee Protection Plan, which was submitted to the Legislature in 2004. The recommendations included in the plan are designed to reduce phosphorus loads and implement long-term solutions based on the lake's phosphorus total maximum daily load. In cooperation with DEP, SFWMD and other stakeholders, OAWP is working closely with dairy and beef cattle operations to improve nutrient management and surface water management to reduce phosphorus in storm water runoff. During the 2005-2006 fiscal year, staff amended the Lake Okeechobee watershed rule to expand the geographic coverage and include specific nutrient management measures.

State and Federal Cost-Share Programs

In order to assist agricultural producers in the implementation of BMPs, OAWP has developed working partnerships with various state and federal agencies. Through these partnerships, cost-share reimbursement monies are available for growers to implement BMPs that are otherwise cost prohibitive. Currently, OAWP has active agreements with USDA-NRCS, St. Johns River Water Management District, Suwannee River Water Management District, Southwest Florida Water Management District, South Florida Water Management District, several of the state's Soil and Water Conservation Districts, and most of the state's Resource Conservation and Development Councils in order to administer these cost-share programs. During fiscal year 2005-2006, staff worked to expand BMP cost-share programs, targeting dairy operations statewide, and have unveiled an innovative "mini-grant" cost-share program for smaller farmers within the Southwest Florida Water Management District area.

Field Staff and Technical Services

OAWP field staff are co-located within the five Water Management District offices throughout the state and help growers with the implementation of BMPs by providing technical assistance with state and federal pro-

grams, conservation planning, and cost-share application information. Field staff also play a vital role in ensuring that BMPs are implemented as designed, and perform critical follow-up inspections at growers' farm fields. Field staff continue to assume more management oversight of contracts that OAWP administers in support of BMP development and cost-share.

Soil and Water Conservation Council

The Soil and Water Conservation Council is a soil and water issues advisory body to the Commissioner of Agriculture. In addition to key agricultural producers, the council now includes representatives from the five Water Management Districts, the Florida Department of Environmental Protection, the University of Florida Institute of Food and Agricultural Sciences, the USDA-NRCS, the Florida Legislature, and the environmental community. The council's primary purpose is to make water policy recommendations to the Commissioner of Agriculture and to assist the Department with oversight of its key water resources programs. During this year, the council met twice with the Commissioner and addressed key issues including agricultural sustainability and expanding the use of controlled-release fertilizers as an element of water resource protection.

Mobile Irrigation Laboratories

Recognizing the invaluable service that the network of Mobile Irrigation Laboratories (MILs) provides to the state's agricultural industry, OAWP continues to support various programs associated with the MILs and has contributed funding in support of these services. The MIL programs are designed to provide assistance to the USDA-NRCS field staff as well as OAWP field personnel with site-specific irrigation testing, diagnostics, irrigation scheduling, and recommendations for system upgrades consistent with conservation planning and BMP implementation. During the 2005-2006 fiscal year, the Department received continued funding from the Legislature to support and expand the MIL network. Two new MILs were started in the central and northeastern part of the state, targeting predominately citrus and row crop production areas. OAWP has now transitioned into the role of statewide MIL coordination, which has improved both the service and reporting consistency of this important conservation program.

Assistance with Agricultural Exemption Determinations

For several years, the OAWP has had a Memorandum of Agreement (MOA) with the Southwest Florida Water Management District to assist it, in certain cases, in determining the validity of agricultural exemption claims under Section 373.406(2), F.S. When requested by a district to provide this assistance, OAWP staff produce a written report that includes scientific findings and expert technical evaluation as to whether the conditions for an agricultural exemption are met. The 2006 Legislature passed a requirement that, by July 1, 2007, the Department enter into an MOA with all five Water Management Districts in order to provide a non-binding review of exemption claims upon their request. The OAWP began working with the districts on the MOA in September 2006, and anticipates it will be executed wall ahead of the legislative deadline.

Florida's Agricultural Water Policy

Staff continue to work to implement the nine key policies enumerated in Commissioner Bronson's "Florida's Agricultural Water Policy" document that was released in July 2003. The document reflects the knowledge and experience of nearly 100 leaders in the agricultural, environmental, urban and regulatory fields. The document resides on OAWP's web site, www.FloridaAgWaterPolicy.com, and outlines statewide agricultural issues associated with the supply, use, conservation and allocation of the state's limited freshwater resources.

Agricultural Law Enforcement

The Office of Agricultural Law Enforcement consists of the Bureau of Uniform Services, the Bureau of Investigative Services, and an administrative staff dedicated to the protection of Florida's agriculture and food supply. The office supports all regulatory and law enforcement

programs of the Department and engages in cooperative partnerships with many federal, state and local law enforcement agencies throughout the state. It works to safeguard the agricultural industry from the introduction of devastating diseases and pests, to secure the state's borders, and to enforce criminal and civil violations occurring within state forests, criminal acts against consumers, and those crimes involving agriculture, horticulture and aquaculture.

The Florida Contraband Forfeiture Act authorizes the Office of Agricultural Law Enforcement to seize and forfeit real and personal property, including currency, vehicles, aircraft, and other articles that are used in violation of the act. In addition, the office conducts joint law enforcement ventures with federal agencies that result in the seizure of cash and property. As a result of forfeitures and Federal Asset Sharing, the office collected over $1.25 million in assets.

Beginning last fiscal year, the Office of Agricultural Law Enforcement has worked to bring all of its operations into compliance with accepted best practices of the law enforcement community through standards set by the Commission for Florida Law Enforcement Accreditation, Inc., to reach the final goal of achieving and maintaining accreditation.

Special Recognition

Medal of Valor

Investigator Dianna Ullery was awarded the Medal of Valor in June 2006 for her efforts in helping to evacuate residents from a burning building. The incident occurred during hurricane deployment in South Florida. After alerting residents and helping most from the building, Ullery discovered that an elderly person was still inside the building and could not escape on her own. Ullery and a police officer from the area entered the burning building and helped the person escape without injury. Investigator Ullery is the first recipient of the Medal of Valor for the Office of Agricultural Law Enforcement.

Officer of the Year

Investigator Allen Davis was the recipient of the Officer of the Year Award for the agency for outstanding work performance and accomplishments. Investigator Davis is exceptional in his abilities to investigate crimes and is responsible for establishing the agency's standards for the investigation of interdiction cases occurring at the inspection stations.

Hurricane Deployment

During fiscal year 2005-2006, Florida experienced more tropical and hurricane-strength storms. During these periods of emergency, all sworn personnel were deployed for various assignments throughout the state as part of the Florida Mutual Aid Plan. Officers were involved in relief efforts after each of the three hurricanes last year. Personnel were also deployed to Mississippi for relief efforts related to Hurricane Katrina. The types of assignments included urban search and rescue, humanitarian relief, security assignments, field command positions, patrol functions, price-gouging investigations, and staffing several emergency operations centers.

Bureau of Uniformed Services

The Office of Agricultural Law Enforcement's interdiction stations are Florida's first line of defense in the protection of its agriculture. The office operates 22 agricultural inspection stations located on all paved highways crossing the natural boundary of the Suwannee and St. Mary's rivers. In addition, a 23rd inspection station, which is located on Interstate 10 at the Florida-Alabama line, was opened in March 2006. Agricultural vehicle inspections are conducted at each location around the clock, 365 days a year, by 224 law enforcement personnel and a support staff of five individuals.

These officers support and supplement all of the Department's regulatory and law enforcement programs by conducting inspections of highway shipments of agricultural, horticultural, aquacultural and livestock commodities. These regulations and programs ensure compliance with Federal-State Marketing Agreements as well as laws,

rules and regulations enacted to make certain the public receives quality food products. Programs are also designed to prevent, control and eradicate specific plant and animal pests and diseases that could economically devastate segments of Florida's agricultural industry.

The state's border security is one of the four cornerstones in Florida's domestic security initiative. The increased vigilance of the Department's law enforcement officers has strengthened Florida's surface border protection. The implementation of the plan has resulted in the following:

- Performing interdictions/inspections of all commercial traffic and rental trucks entering and exiting the state.
- Tracking vehicles transporting dangerous cargo entering all interdiction stations.
- Utilizing real-time imaging of documents to track movement of agricultural commodities and livestock entering and exiting Florida.
- Utilizing mobile gamma ray technology to enhance detection of prohibited plants, pests, and animal diseases, and safeguarding Florida against agroterrorism and contraband smuggling.
- Utilizing canine (K-9) teams, specially trained to detect illegal plant and animal material. These specially trained dogs detect animal and plant materials that may harbor infectious diseases that could be harmful to Florida's farming community and to public health.
- Maintaining a 24-hour toll-free hotline to report suspicious inbound or outbound commercial vehicles, as well as other agroterrorism issues.
- Increasing staffing at all interdiction stations post September 11, 2001, has resulted in the identification of over 468 illegal aliens who attempted entry through concealed means as well as the recovery of $21 million in contraband, including narcotics, currency and stolen property.
- Implementation of a camera system at key locations with tag recognition software that enhances bureau personnel's ability to detect suspect carriers.

To facilitate movement of commercial highway traffic, the Office of Agricultural Law Enforcement continues a public-private partnership with the Florida Department of Transportation and private enterprise to provide commercial carriers with the PrePass™ electronic identifier. PrePass™ allows some vehicles to bypass interdiction stations, reducing station traffic and allowing officers to concentrate their efforts on specific carriers of agricultural, horticultural, aquacultural and livestock commodities.

During fiscal year 2005-06, the Office of Agricultural Law Enforcement conducted 11,710,849 vehicle inspections, detecting 5,558 violations. The violations resulted in 325 arrests, 3,211 warnings, 1,950 administrative actions and the apprehension of 72 illegal aliens.

The bureau also cooperates with federal, state and local governmental agencies on projects, both criminal and non-criminal, which either improve the efficiency of agricultural programs or generate additional revenues to the state without increasing costs to Florida's citizens.

Office of Agricultural Law Enforcement officers collected and provided the Florida Department of Revenue with 89,578 bills of lading pertaining to certain types of cargo entering Florida. These efforts resulted in an additional $8,708,148 in sales and use taxes being collected by the state during fiscal year 2005-2006 that otherwise would have gone uncollected. This cooperative effort not only greatly enhances the state's ability to collect sales and use taxes but also precludes out-of-state contractors and businesses from gaining an unfair competitive advantage over Florida entrepreneurs. Since the inception of the program in April 1993, this cooperative effort has resulted in the detection and collection of over $140 million in otherwise undetected sales and use taxes.

Bureau of Investigative Services

The Bureau of Investigative Services currently has a staff of 47 personnel. This includes 44 sworn officers, two full-time civilian positions and one part-time civilian

position. The bureau currently operates out of six investigative regions. Each CARL (Conservation and Recreation Land) officer has an office provided for them by the Division of Forestry on or near their assigned area. The Office of Agricultural Law Enforcement is engaged in cooperative partnerships with all federal, state, and local agencies in all 67 counties, providing investigative support in all matters over which the Department has jurisdiction.

The bureau provides investigative support for all divisions of the Department in both civil and criminal matters over which the Department has jurisdiction, which includes:

- The investigation of matters over which the Department has jurisdiction and incidents occurring on property owned, managed or controlled by the Department.
- The enforcement of criminal and civil violations occurring within state forests or any crimes involving agriculture, horticulture, aquaculture or citrus products.
- The enforcement of environmental crimes such as illegal dumping, and laws governing outdoor open burning. All personnel in the bureau are trained in fire and arson investigations, and investigate fires occurring in wildland and urban areas.
- The enforcement of laws governing consumer issues, including illegal telemarketing operations, sale of business opportunities, solicitations of contributions, sellers of travel, motor vehicle repair fraud, health studios, dance studios, pawnshops, moving and storage companies, and price-gouging.
- Developing and processing law enforcement sensitive information, conducting crime analysis of reported crimes, conducting research of persons suspected of committing crimes, and conducting background investigations of prospective employees of the agency.
- Providing protection services for the Commissioner of Agriculture and other dignitaries as needed.

Additionally, the bureau works closely with all local, state and federal agencies, providing investigative assistance and support in all matters over which the Department has jurisdiction, and is directly involved in safeguarding the pubic in issues relating to homeland security.

The bureau has two positions assigned to the state's joint response team under the direction of the Department of Environmental Protection. The team, which is represented by several state agencies, is trained in the response to and investigation of bio-hazard incidents statewide. The bureau continues to conduct threat assessments of regulated entities affiliated with fertilizer, pesticide, food, and petroleum production and distribution points. The bureau also investigates theft, shrinkage and suspicious activities regarding these materials.

During fiscal year 2005-2006, the bureau initiated a total of 2,340 investigations, with a closure rate of 86 percent. The number of investigations initiated includes investigations conducted by CARL officers on state lands:

Agency Assist	22
Animal/Livestock	66
Aquaculture	21
Arrest by Warrant	2
Background Investigations	60
Citrus/Canker/Plant	6
Consumer Related	289
Confidential Cases	6
Drugs/Alcohol	21
Environmental	61
Entomology/Pest Control	18
Equipment	8
Fertilizer	6
Financial	3
Fire Investigations	651
Food Safety	6
Fruit and Vegetable	1
Illegal Aliens	3
Information/ Investigations	27
Persons	3
Protective Operations	32
Petroleum	5
Special Operation	8
State Lands	964
Theft/Timber Theft	9
Traffic	23
Other	28

During this reporting period, the bureau was directly involved in the investigation of, or assisted in the investigation of, significant drug seizures, recovery of stolen property, and the payment of restitution to the Department for expenses and investigative costs totaling almost $4.5 million.

Domestic Marijuana Eradication Program

In January 2005, the Office of Agricultural Law Enforcement became the pass-through agency for the Outdoor Marijuana Eradication Program through the U.S. Drug Enforcement Administration. Reimbursement funds are paid to participating agencies for plants pulled.

During fiscal year 2005-2006, the bureau assisted in coordinating and completing eradication sweeps throughout the state. In the sweeps, local agencies are designated as the lead agency, and the bureau provides assistance to help plan and carry out operations. The bureau participated in 11 operations conducted throughout the state, providing personnel to assist in the actual eradication effort. These operations normally operate for an entire week at a time.

The following chart outlines a brief synopsis of accomplishments for calendar year 2005:

Plots Eradicated	284
Cultivated Plants Eradicated	29,646
Bulk/Processed Marijuana Seized	37.95 pounds
Total Arrests/Charges Filed	114
Firearms Seized	20
Total Assets Seized	**$11,401.00**

In comparison, the following chart outlines the accomplishments of the first six months of calendar year 2006.

Plots Eradicated	106
Cultivated Plants Eradicated	2,898
Bulk/Processed Marijuana Seized	11.10 pounds
Total Arrests/Charges Filed	114
Firearms Seized	26
Total Assets Seized	**$54,191.00**

Fire Investigations

The bureau investigates outdoor open burning and wildland fires primarily associated with careless or reckless acts, and arson. Other illegal fires, such as burning without authorization, and issues relating to safety regulations are also investigated.

Fiscal year 2005-2006 experienced drought conditions resulting in increased fire activity. The bureau investigated 651 fire-related incidents for cause and origin, which resulted in 79 arrests. Two adults and two juveniles were charged with arson/intentional-type fires, and 68 adults and seven juveniles were charged with misdemeanor offenses related to careless or reckless type acts and non-compliance with regulations.

The following chart outlines the categories of fires investigated:

Campfire	6
Debris Burning	178
Equipment	23
Incendiary	107
Incendiary (Juvenile)	23
Juvenile (Children)	17
Lightning	10
Miscellaneous	36
Railroad	2
Smoking	3
Undetermined	165
Unlawful Burning (Non-Comp)	81
Total Cases Initiated	**651**

State Lands Program

The bureau provides law enforcement services on lands owned, controlled or managed by the Department throughout Florida. The Division of Forestry currently manages approximately 1 million acres of property.

The bureau strives to reduce criminal activity on state lands by a proactive patrol presence, seeking voluntary compliance in the enforcement of the laws and rules designed to protect the environment. The bureau currently has 11 uniformed officers assigned full time to patrol specific state forest properties. The bureau also has five investigators, including one lieutenant, responsible for patrol of state lands on a full-time basis.

During fiscal year 2005-2006, the bureau initiated 942 investigations related to state lands. CARL officers and investigators issued 372 notices to appear to individuals for violation of rules governing state lands. In addition, CARL officers issued 289 written warnings for violations.

The following chart depicts the categories of incidents and activities officers handle on state lands. In comparing this chart to the chart of cases initiated, it is important to remember that not all incidents require an investigative report.

Animal Related	24
Boating/Water Sports	0
Burglary/Trespass	6
Camping/Day Use	109
Cultivation of Marijuana	3
Disturbances	11
Drug/Alcohol Related	226
Environmental	59
Found Property	11
Hunting/Fishing Related	73
Motor Vehicle Crash	12
Injury/Death	8
Property Damage	34
Recovered Stolen Property	5
Search and Rescue	4
Theft/Vandalism	64
Traffic Related	213
Vehicle/Motorcycle	63
Weapons	9
Wildlife	8
Total Cases Initiated	**651**

During normal patrol functions, officers perform compliance/safety checks and respond to issues that may not warrant a report. The following chart depicts a cumulative total of the types of complaints/responses handled by officers on patrol.

State Land Activities	CARL Officers	Investigators	Lieutenants
Animal Health	592	1,806	5
Boating Accidents	0	0	0
Boating/ Water Sports	132	773	6
Camping/ Day Uses Checks	9,663	16,691	2,504
Disturbance/ Nuisance	73	22	7
Drugs/ Alcohol	76	126	16
Environmental	88	50	0
Hunting/ Fishing	3,339	481	6
Motor Vehicle			
Accidents	13	8	0
Personal Injury	2	4	1
Property Damage	76	9	0
Search/Rescue	3	5	9
Theft/Vandalism	25	12	0
Traffic	1,200	36	54
Vehicle/ Motorcycle	3,524	95	8
Wildlife	58	18	0
Other	83	57	33
Total	**18,947**	**20,193**	**2,649**

During the reporting period, the bureau devoted a total of 14,336 hours patrolling state lands, traveling a total of 193,331 miles. CARL officers accounted for 11,265 hours and 146,475 miles patrolled.

The following is a summary of the bureau's investigative efforts and assistance rendered under headings of specific divisions.

Agricultural Environmental Services

(Includes entomology and pest control, and feed, seed and fertilizers.)

The bureau has one full-time investigator assigned to the Division of Agricultural Environmental Services. The investigator works division-related issues on a statewide

basis, and has been very successful in the investigation and completion of both criminal and administrative complaints. During fiscal year 2005-2006, there were 18 investigations initiated regarding pest control operations, and six investigations relating to fertilizers.

Other significant issues investigated include:

- The continued investigation of theft of anhydrous ammonia for use in manufacture of illegal methamphetamine.
- The use of chemicals to kill livestock in the Panhandle. This case crossed over with the Division of Animal Industry.

The bureau continues to assist in the threat assessment of aerial applicators as it relates to domestic security, contacting all aerial applicators known to be licensed in the state and updating information.

Animal Industry/Livestock

(Includes theft of livestock, illegal movement of animals without proper health certificates and documents, suspected outbreaks of contagious and infectious diseases, Pet Lemon Law issues, and animal abuse issues.)

During the reporting period, the bureau initiated 65 investigations relating to Division of Animal Industry issues, some of which crossed over to other divisions.

Animal cruelty was a major issue coming to the attention of the bureau. The bureau worked with the Division of Animal Industry and local governments to investigate these cases and seek appropriate corrective actions and judicial intervention.

Aquaculture

(Includes aquaculture farm theft, lease trespassing, and regulatory issues such as illegal movement of products.)

The bureau has one full-time investigator assigned to the aquaculture program. This person is responsible for land patrol to ensure product quality and rule compliance, as well as water patrol of leases located in coastal waters throughout the state.

The state currently has aquatic clam leases in the Big Bend area, Cedar Key area, Lee/Collier County area and the east coast. During fiscal year 2005-2006, a regular schedule was established for the investigator to travel to each area on a monthly basis for land and water patrol. Officers devoted 1,100 hours to the program, patrolling 11,708 miles statewide. They completed 213 food safety inspections, conducted 363 compliance inspections, and initiated 21 investigations relating to aquaculture issues.

Consumer Protection

(Includes illegal telemarketing operations, sale of business opportunities, solicitations of contributions, sellers of travel, motor vehicle repair fraud, health studios, dance studios, pawnshops, and moving and storage companies.)

The bureau enjoys a close working relationship with the Division of Consumer Services and conducts joint investigations of matters of mutual concern. The bureau and the division have established an intake system for consumer complaint referrals to aid in tracking complaints and investigations.

Consumer-related cases are typically labor intensive, requiring in-depth investigations to include document and records research and crime analysis and, at times, innovative investigative techniques to include covert operations. While the offenses investigated may originate in Florida with the suspect business, most victims are out of state, so agents need to obtain sworn affidavits and document evidence from them to prove a case. Occasionally agents have to acquire actual product samples as evidence for court purposes to prove inferior product claims or fraudulent and deceptive practices.

The following chart depicts a summation of consumer-related cases initiated by the bureau in this reporting period:

Business Opportunities	2
Charities	4
Dance Studios	0
Health Studios	0
Identity Theft	2
Motor Vehicle Repair	28
Moving and Storage	7
Non-Regulated	12
Organized Fraud	2
Pawn Shops	1
Price-Gouging	215
Travel	7
Telemarketing	10
Total Cases Initiated	**289**

The bureau also reviews all incoming complaints received by the Division of Consumer Services relating to motor vehicle repairs for early detection of potential criminal activity, and puts the information in a database for historical reference. During the fiscal year, the bureau reviewed and processed 2,920 motor vehicle repair complaints.

To investigate motor vehicle repair complaints, the bureau utilizes nine "undercover" vehicles which are certified by an ASE-certified mechanic prior to deployment. During fiscal year 2005-2006, the bureau acquired two enclosed trailers to haul certified vehicles to and from an area for investigation purposes. In addition, the agency has completed a modern garage facility for the agency's mechanic to set up and certify sting vehicles for investigative purposes.

Standards

(Includes petroleum inspections, fair rides, and weights and measures.)

During this fiscal year, the bureau has assisted the Bureau of Petroleum Inspection and the U.S. Secret Service with the checking of service stations in Florida for illegal scanning devices. The bureau is currently involved in an ongoing major investigation involving credit card scanning. As a result of the investigation thus far, two subjects have pleaded guilty to racketeering charges. Three vehicles and a bank account have been seized.

The bureau has assisted the Bureau of Petroleum Inspection with service of multiple subpoenas relating to price-gouging investigations of rising fuel prices during a state of emergency.

Division of Plant Industry

Plant Protection, Inspection and Certification

The Department's Division of Plant Industry is the plant protection arm of the Department. It works to detect, intercept and control plant and honey bee pests that threaten Florida's native plant and agricultural resources. The division maintains these functions through five bureaus:

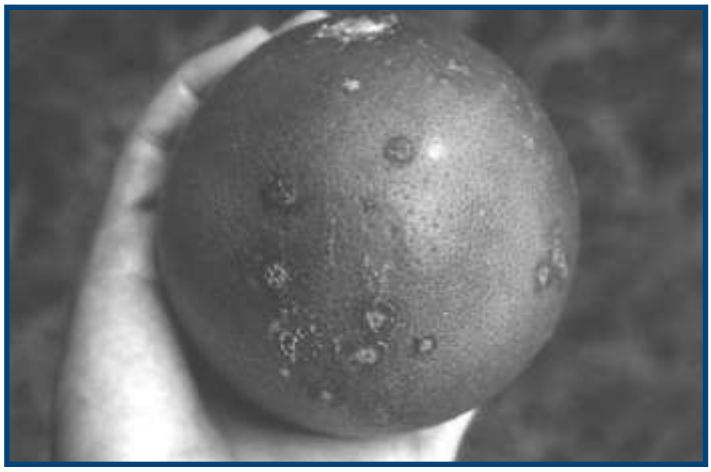
- Pest Eradication and Control
- Plant and Apiary Inspection
- Entomology, Nematology and Plant Pathology
- Methods Development and Biological Control
- Citrus Budwood Registration

This fiscal year, the division encountered new challenges with the discovery of new pests and diseases, an increasing number of Africanized honey bee finds, positive sudden oak death finds in nurseries, hurricanes, cessation of the Citrus Canker Eradication Program, and development of the new Citrus Health Response Program.

Florida's citrus industry and the division are working closely together with the United States Department of Agriculture (USDA) to make the transition from the Citrus Canker Eradication Program to the Citrus Health Response Program, a program that addresses multiple citrus pests and diseases, including citrus canker and greening. This program will cover such areas as citrus nursery stock, growers, harvesters, processors, packers and residential citrus. The USDA is in the process of revising the federal regulations that govern the movement of citrus fruit and citrus plant material out of Florida, and an interim rule may be in place before the beginning of the 2006-2007 harvesting and shipping season. In addition, new regulations impact citrus propagation and require citrus to be grown in protected enclosures to ensure disease-free nursery stock.

Bureau of Pest Eradication and Control

The Bureau of Pest Eradication and Control is headquartered in Winter Haven and the statewide program is managed from seven offices in various citrus-producing counties throughout the state. The Florida citrus industry is composed of 621,373 acres in the state. A key role of Pest Eradication and Control is to survey commercial citrus for citrus diseases of economic importance. Primary responsibilities within this bureau have been the detection of citrus canker and the regulation of citrus to prevent the spread of citrus canker in Florida. The bureau is responsible for the Citrus Health Response Program, which replaced the Citrus Canker Eradication Program after eradication was deemed no longer feasible in January 2006. The Citrus Canker Eradication Program in Miami-Dade, Broward, Palm Beach and Monroe counties was managed separately, but the statistics will be reported within this section.



After the 2004 hurricane season, science-based analysis indicated that the rate of canker detection and tree removal would need to accelerate to eradicate the disease successfully. Although substantial progress was made, some affected commercial citrus remained when hurricane Wilma passed through the state in October 2005.

In November 2005, USDA scientists with a panel of global experts came to the conclusion that the disease was so widely spread that continuing eradication would result in the destruction of an estimated 200,000 acres. Subsequent meetings concluded that the citrus industry could not survive the destruction of 25 percent of Florida's commercial citrus. In January 2006, USDA deemed eradication unfeasible and withdrew funding.

With the end of citrus canker eradication activities, the division closed its canker field offices in Miami, Plantation, West Palm Beach, Orlando and Fort Myers and laid off the staff working on residential activities. All survey and regulatory efforts were refocused on commercial citrus groves and the regulation of harvesting and packing operations.

In follow-up, the USDA coordinated the development of the Citrus Health Response Program (CHRP). The CHRP draft was developed by a joint taskforce made up of industry stakeholders, scientists, and state and federal regulators and presented to the Florida Legislature in March 2006. This new program looks at protection from and detection and management of citrus canker and greening as well as other potential citrus diseases and pests. It develops the best ways for growers, regulators and researchers to protect and manage the citrus industry. A major component of the CHRP was the protection of citrus nursery stock within structures and on sites approved by the Department.

During the 2006 legislative session, the 1900-foot eradication law was officially removed and new language was enacted. This new language requires the Department to implement a citrus health plan for certain purposes and makes it unlawful to propagate certain citrus nursery stock on or after January 1, 2007, at sites and under certain conditions not approved by the Department. New rule development is also in progress.

CCEP Program Statistics
(Approximate number, subject to final reconciliation)
Total Trees Removed, 1995 through January 10, 2006

Commercial	11,323,298
Nursery	4,334,154
Residential	865,724

Regulatory Report

Statewide Regulatory: The purpose of the regulatory branch of Pest Eradication and Control is to enforce state statutes in order to prevent the spread of pests and diseases such as citrus canker. This branch serves to help prevent the artificial spread of disease organisms by regulating the movement of host plants and plant material as well as exposed personnel and equipment in citrus groves and in quarantined areas. The regulatory section is also responsible to help monitor and protect the citrus indus-

try and its interstate and export markets by assuring that shipments of fresh fruit are free of citrus canker disease.

Since decontamination of personnel and regulated articles has been the Department's best line of defense against the artificial spread of citrus canker, the regulatory section has been charged with inspecting all regulated entities to ensure that decontamination rules are followed. Compliance agreements are issued to all regulated entities to ensure that these companies or individuals are registered with the Department and are aware of the rules. Other documents are also issued to regulated companies in order to control the movement of regulated articles as required, including harvesting permits, limited permits, federal certificates, stop-sale and hold orders, emergency action notifications and special permits. Reports of Violation are issued for non-compliance, with penalties that range incrementally from a one time administrative warning to a $5,000 fine and revocation of the violator's compliance agreement.

The following table reflects regulatory performance for the period July 1, 2005 through June 30, 2006:

	2004-2005	2005-2006	Variance
Inspections Performed	82,824	70,565	-15 percent
Agreements Issued	2,829	2,252	-20 percent
Reports of Violation	361	187	-48 percent
Fines Levied	$17,450	$21,700	+20 percent
Misc. Permits / Docs Issued	9,914	2,748	-72 percent
Ltd. Permits Issued	8,680	8,342	-4 percent
Boxes of Q. Fruit	4,687,200	4,504,680	-4 percent

The 2005-2006 citrus harvesting season was a difficult year for the Citrus Canker Eradication Program. Although the citrus industry was rebounding from the hurricanes of 2004, Hurricane Wilma had a significant impact on southern groves in the fall of 2005, causing a substantial loss of fruit and inciting considerable concern that canker may have been widely spread. New compliance agreements were issued with a mandate that the grower's compliance agreement number (C/A number) must be included on each trip ticket for each load of citrus fruit harvested. Although this requirement caused some initial concern among regulated companies and increased contact with our canker program offices, the net effect brought more growers and harvesters under compliance and heightened the industry's awareness of our canker program regulations.

Public Relations and Education

An important role of Pest Eradication and Control is the continuous education and public relations for both citrus growers and public entities statewide. In addition to standard public information activities – such as distribution of press releases, advertising, web site development, and maintenance of the canker helplines – numerous other outreach and education programs continue.

Department personnel assisted with citrus canker decontamination training for harvesters. Canker history and regulatory updates were some of the many topics covered. These educational sessions were conducted on site in groves or packinghouses as well as more formal venues such as agricultural organizations or town hall meetings.

Southeast Florida: Door-to-door campaigns have also been conducted in counties with active control programs to encourage the signing of waivers to inspect and cut infected and exposed trees. To expedite the eradication effort, state public liason officers (waverunners) contacted residents, explaining the program and seeking homeowner permission to survey properties and, if necessary, remove infected or exposed trees. the successful waverunner program continued until mid-January 2006. Waverunners were able to bring in enough waivers to provide 75 percent of control action voluntarily. Public realtions personnel were also assigned to Orlando and the Treasure Coast. Waverunner teams were assigned to three bases: Palm beach, Plantation and Sunset. In addition to the standard waverunner program duties, supervisors assisted with in-person visits to talk with property owners.

The statewide and southeast citrus canker helpline assited 65,370 requests this fiscal year. Information was provided on the eradication program, compensation for removal of trees, and industry compliance and training.

Post-harvest Fumigation at Wahneta Fumigation Station

To meet certification requirements of important market areas, fresh citrus fruit and other commodities produced in Florida must be certified for specified regulated pests. Arizona requires fumigation of all citrus fruit received. California, Hawaii and Texas require certification of citrus for freedom of Caribbean Fruit Fly unless it has met all pre-harvest certification requirements in accordance with the established Caribbean Fruit Fly Protocol. Oregon requires fumigation for certification of fresh blueberries for freedom of blueberry maggot. Other commodities may require fumigation for certification for freedom of common pests such as the red imported fire ant.

At Wahneta, the Department provided post-harvest closed-chamber fumigation service and certified 164 truck loads during this year. Fumigation services included 156 loads of citrus and eight loads of blueberries. Numbers of loads fumigated during this period increased 16 percent. Fumigation service was provided for a fee of $300 per load.

Bureau of Citrus Budwood Registration

Citrus nursery challenges accelerated this fiscal year. It was another tumultuous year for protecting the state's budwood supply after hurricanes and disease pressures left the budwood in a vulnerable position, with citrus greening being found in Florida in August 2005 and the Citrus Canker Eradication Program ending in January 2006. The Citrus Health Response Program, designed to help manage citrus canker and citrus greening as well as other citrus diseases and pests, replaced the eradication program. Since 2004, over 4 million citrus trees have been destroyed in eight Florida nurseries. An estimated 65 percent of the state's nursery inventory had been lost to citrus canker.

The continued spread of citrus canker impacted the citrus nursery industry, with several nurseries losing stock due to infection or proximity to infection. Although it did not have canker, the largest screen-protected budwood block in Florida was destroyed because it was associated with a nursery that did have canker. Screened budwood sources declined from 10 percent of the total active scion trees after hurricanes and canker losses to 4 percent of active scion trees. Seven screened scion groves were lost to citrus canker, hurricanes or economics. At this critical time, protected budwood is in need and the state has the lowest numbers of protected trees in recent history.

The loss of nursery production capacity caused an immediate shortage of trees for growers to replant. Almost overnight, growers reluctant to acquire nursery trees were trying to find trees. The price of trees stabilized and then rose as the shortage became more apparent. The largest nurseries in the state had been destroyed due to citrus canker and the largest suppliers of propagating material lost their budwood source trees at the same time.

Based on concerns that existed before citrus greening was found in Florida, the Florida Citrus Nurserymen's Association formed a Nursery Improvement Committee in July 2005. After the announcement of the discovery of citrus greening in August, the University of Florida and commercial citrus growers were invited to join the discussion on how to make nursery production safer. The Florida Citrus Plant Protection Committee (FCPPC) became the vehicle for discussing ideas on how to achieve clean stock production. This resulted in a repeal of Citrus Budwood Protection Program Rule Chapter 5B-60, F.A.C., and the issuance of a new rule, Chapter 5B-62, F.A.C., Citrus Nursery Stock Certification Program. New regulations in Section 581.1843, F.S., require all citrus nursery stock to be propagated in approved protective structures effective January 1, 2007. New citrus nurseries must be located at least one mile away from commercial citrus groves. Existing nurseries were allowed to remain at their present location, but must comply with a myriad of sanitary procedures. The risks and expenses of nursery tree production will undoubtedly result in higher tree prices. Budwood and nursery tree shortages are projected for the short term until citrus nurseries are rebuilt and able to regain financial stability.

Effective January 1, 2007, all citrus nursery stock must be produced in enclosed, insect-proof greenhouses that have all openings sealed along with double entryways with positive pressure air displacement. Also effective January 1, 2007, all budwood used to start nursery trees must originate in like greenhouses. Existing nursery stock not meeting the new requirements must be sold by January 1, 2008.

Thirty-five nurseries actively propagated citrus for commercial grove plantings in the 2005-2006 fiscal year. These nurseries propagated 1.3 million nursery trees. These figures do not count the nursery trees propagated and then destroyed due to citrus canker. Of the 35 nurseries, 11 grow only field bare-root trees, 19 nurseries grow only containerized trees in greenhouses, and five nurseries grow a combination of field and container trees. For the first time, greenhouse propagation numbers were higher than field-produced trees because of canker problems in field operations. Hamlin and Valencia sweet oranges continue to be the most produced varieties, followed by Ray Ruby grapefruit. Swingle remains the leading rootstock for 18 years.

The Dundee Foundation grove and budwood screenhouses were found to be within 1,900 feet of a citrus canker find in September 2005. The Citrus Canker Eradication Program ended before these trees could be destroyed; however, they remain under quarantine and cannot be used for budwood sources or moved to another location. The loss of the Dundee trees severely affected the bureau's ability to provide budwood to nurserymen. The Immokalee Foundation budwood sources were impacted by Hurricane Wilma in October 2005. After Wilma passed, trees were inspected for psyllids, the houses were quickly repaired, and all the trees were tested for citrus greening.

Planning a new foundation facility was top priority as the existing foundations are located in areas threatened by citrus canker and citrus greening. The bureau developed plans to replicate budwood sources in a location outside the commercial citrus growing areas to reduce the risk of exposure to citrus pathogens. The first small greenhouse was completed in December 2005 at a Division of Forestry site near Chiefland. Plans are progressing for constructing 83,520 square feet of greenhouse ranges for producing pathogen-free budwood for use in commercial nurseries. Greenhouse specifications have been written and the formal bid process should start early in the new fiscal year.

The Department distributed 47,248 budeyes from foundation trees this year. Bureau of Citrus Budwood Registration personnel made 53 budwood cuttings to supply 33 different customers. Florida commercial citrus nurserymen received 93 percent of the budwood cut, while 4 percent of the budeyes were used for research. Dooryard nurseries and non-participants received the remaining 3 percent of the budwood. Due to the shortage of budwood this fiscal year, none was exported out of state.

Program clones were evaluated this year to determine which selections were important to the industry for propagation or research. A group of nurserymen and researchers helped bureau personnel reduce the number of clonal selections that would be available in the future. The number of clones in foundation plantings prior to this meeting exceeded 750 and subsequently was reduced to less than 400.

Over 3,385 pathogen tests were completed in the bureau's laboratory and greenhouses this fiscal year. There are 51 selections in the process of being shoot-tip grafted this year.

Bureau of Plant and Apiary Inspection

Plant Inspection

At the end of fiscal year 2005-2006, there were 7,890 nurseries (9,646 block locations) with an inventory of 689,397,491 plants classified as ornamental nursery stock. There are 3,972 nursery stock dealers (7,512 outlet locations) registered with the Department.

Inspectors made 51,098 inspections of nursery and stock dealer establishments. As a result of these inspections, 1,191,176 plants were quarantined. There were 9,730 federal and 3,296 state and federal certificates issued for shipments of plants and plant products exported from Florida.

Department personnel inspected 11,489 shipments of plants and plant products imported into Florida from other states and countries, including 2,530 shipments of nursery stock. These inspections resulted in 287 (92 for nursery stock) regulatory actions for plant pests of quarantine significance. A total of 7,847 soil and root samples were collected and analyzed specifically for burrowing nematodes as required by the Burrowing Nematode Certification Program. The Burrowing Nematode Certification Program had 1,228 ornamental nurseries under certification as of June 30, 2006.

Department personnel tended 207 gypsy moth traps in North Florida. Other seasonal traps included boll weevil traps and European corn borer traps. Department and

USDA personnel tended more than 55,495 traps for exotic fruit fly detection.

Citrus Canker Nursery Inspection Program

As of June 30, 2006, there were 1,307 nursery blocks and stock dealer outlets inspected on a 60-day cycle for citrus inventory. This compares to a total of 1,146 nursery blocks and stock dealer outlets inspected on a 60-day cycle as of June 30, 2005. There are 81 locations that are identified as commercial (certified free of burrowing nematode) citrus nurseries. Commercial citrus nurseries are inspected on a 30-day inspection cycle.

Pink Hibiscus Mealybug

Between July 1, 2005, and June 30, 2006, Department personnel witnessed the destruction of 352,553 plants as a result of pink hibiscus mealybug (PHM). During this period, Plant Inspection personnel spent 2,956 hours working on PHM-related issues. There were 308 quarantine actions to nurseries and nursery stock dealers for PHM. As of June 30, 2006, 24 of those locations had plants remaining under quarantine.

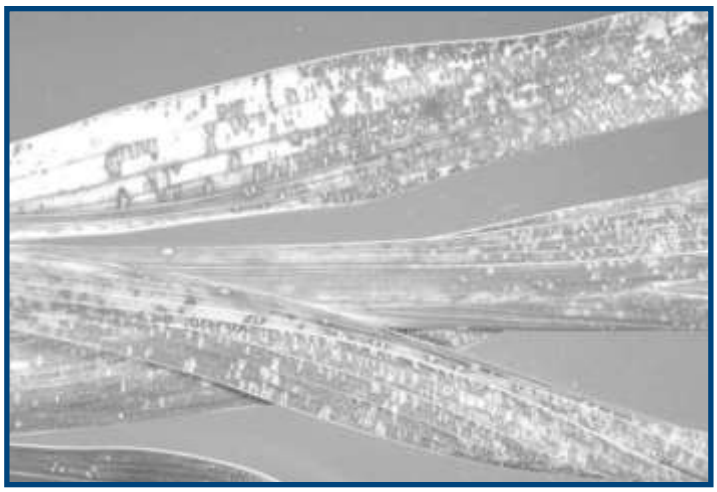
Sudden Oak Death

Phytophthora ramorum, the causal agent of sudden oak death (SOD), ramorum blight, and ramorum dieback, is known to occur in coastal forests and landscape plantings in Europe. It has also been detected in some horticultural nurseries in the United States. *Phytophthora ramorum* is one of a number of organisms (although not true fungi) that are collectively called "water molds." *Phytophthora* is translated to "plant destroyer," and most of the *Phytophthora* species are plant pathogens, many with extremely large host ranges.

During the fiscal year 2005-2006, Plant Inspection personnel submitted 912 samples for SOD. Of these samples, 49 were Elisa positive (+) and 10 samples were PCR positive for *Phytophthora ramorum*. Regulatory actions were taken at two nursery locations and one non-nursery location.

Gladiolus Rust

Uromyces transversalis, the causal agent of gladiolus rust (GR), is an obligate parasite that only grows and reproduces on members of the family *Iridaceae*, including *Gladiolus*, *Tritonia*, *Crocosmia* and *Watsonia* spp. GR was confirmed to be present in the United States in April 2006. As of June 30, 2006, regulatory actions and eradication efforts are underway at two locations. Inspectors have spent 563 hours conducting surveys and control measures for gladiolus rust.



Violations and Stop-Sale and Hold Orders

Between July 1, 2005, and June 30, 2006, Division of Plant Industry personnel issued four violations. Three of the violations issued were warnings, and one violation resulted in a penalty of $4,595. There were 1,276 stop-sale and hold orders for failure to renew annual registration. During the same period of time, 930 stop-sale and hold orders have been released as a result of fee payment or the nursery going out of business. Bureau personnel also issued 30 stop-sale and hold orders for pests and diseases such as citrus canker, citrus greening, pink hibiscus mealybug, and restricted aquatic plants.

Caribbean Fruit Fly Certification Program

The Caribbean fruit fly is a serious pest of many tropical and subtropical fruits of Central and South Florida. The fly-free zone certification protocol was developed to certify citrus fruit as free of Caribbean fruit fly larvae. Bermuda, Brazil, Colombia, Ecuador, Japan, Korea, New Zealand, the Philippines, Thailand, the People's Republic of China, Vietnam, and the states of California, Hawaii and Texas have accepted this certification procedure, which is fully funded by grower assessments. Fruit shipped to these areas must originate in specific Caribbean fruit fly controlled or designated areas in citrus-producing counties approved for shipment of fruit.

In the 2005-2006 season, 93,020 acres were certified in 22 eligible counties. The protocol establishes a safe and effective procedure for exporting citrus to areas requiring quarantine safeguards. Japan is currently the largest

importer of fresh Florida grapefruit; 4,570,612 cartons of citrus fruit were shipped to Japan under the protocol certification program this season.

Boll Weevil Eradication

At the close of the 2005 cotton-growing season, there were 345 commercial cotton producers in the state. These producers planted 85,721 acres of cotton in 13 counties, a decrease over the 2004 growing season of 1,783 acres of planted cotton. Throughout the 2005 cotton-growing season, there were no boll weevils trapped in the state.

Imported Fire Ant Certification Program

As of June 30, 2006, there were 1,492 nurseries and stock dealers under compliance agreement for Imported Fire Ant (IFA) certification purposes. This compares to a total of 1,895 nurseries and stock dealers under compliance on June 30, 2005. During this period, Plant Inspection personnel spent 3,867.75 hours associated with IFA activities.

Apiary Inspection

Africanized Honey Bee

Interaction of the small, but steadily growing established Africanized honey bee population in Florida with people, pets, and livestock is increasing. The Department made public education a priority, but the challenge was to educate the public about the risks of Africanized honey bees (ABH) while helping people understand how important honey bees and beekeepers are to Florida and Florida agriculture. To do this, the Department developed a joint training and education program with the cooperation of other agencies and UF-IFAS.

Education outreach and training opportunities have been available with the Florida State Beekeepers Association, Honey Bee Technical Council, Africanized Honey Bee Inter-Agency Coordination Group, Africanized Honey Bee Working Group, Southern Plant Board, Florida Association of Counties, Emergency Response Commission, the Department's Safety Committees, and with agriculture officials of Kentucky, Delaware, Alabama and Georgia. As AHB awareness increases and public safety concerns become a priority, the Department's Apiary Inspection Section has become the regional leader in AHB training.

Due to human stinging events and pet and livestock fatalities, there was public interest and extensive media coverage of Africanized honey bees this past year. This interest gave the Department additional avenues to educate the public about AHBs and the Florida apiary industry. The media also covered training conducted by apiary inspection personnel and others for the Florida Pest Management Association (FPMA), AHB workshops, the FPMA Convention, Southeast Pest Management Conference, Fire Rescue in Miami-Dade and Broward counties, and a host of beekeeping organizations within the state.

The Apiary Section AHB laboratory identification technicians received extensive certification training by the USDA in the full morphometric AHB identification analysis known as USDA-ID. The AHB laboratory lead technician has further qualified to offer and conduct training for other state and university laboratory personnel for certification in USDA-ID.

Staff continue to place, monitor and maintain AHB traps at several deep-water ports, near the interstate highway systems, and at locations having past stinging incidents and/or pet and livestock deaths. Today, nearly 500 AHB traps are in place throughout Florida. Along with AHB populations, new introductions continue to be found in the AHB traps at Florida's deep-water ports, arriving primarily from shipping traffic from South America, Central America, Mexico, and Texas. Approximately 400 potential AHB samples were analyzed last year with 40 percent of those having AHB characteristics. Since all AHB swarms cannot be trapped, many continue to enter the environment.

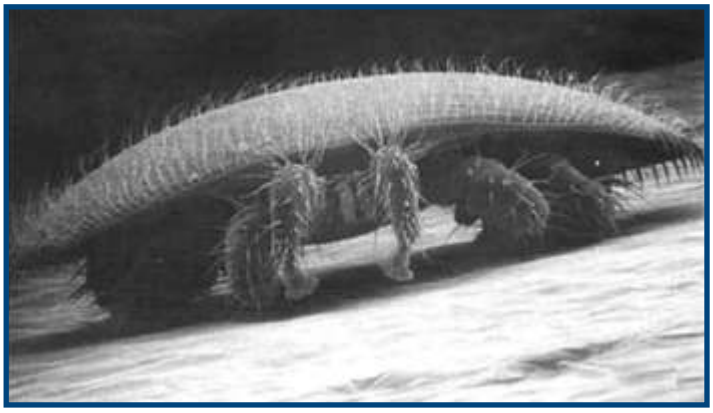
The Department has developed a comprehensive approach by partnering with the University of Florida's Institute of Food and Agricultural Sciences (UF-IFAS) Extension to conduct AHB awareness training and establish rescue and eradication procedures for emergency management services, first responders and pest control operators. Staff are working closely with the Florida Fire Chiefs' Association professional development training initiatives. AHB brochures and awareness literature have been created for distribution and access throughout the state. The Ag in the Classroom curriculum is currently being rewritten for public school students in grades K-5 to include more focus on AHB and the importance of honey bees.

In cooperation with other agricultural stakeholders, state, county, and local government agencies, UF-IFAS, and Florida's first responders, the Apiary Section continues to develop tools and training to protect the beekeeping industry and educate the public on how to effectively and safely deal with this potential danger. The transition to a feral AHB population in Florida continues.

Apiary Research Activities

Apiculture research projects in 2005-2006 resulted in positive outcomes to help maintain a healthy honey bee population in Florida.

- Research trials of a new varroa miticide using a natural thymol gel delivery method were completed. Data generated is being used to facilitate the registration of the product Apiguard®. Apiguard® has excellent efficacy on varroa mites and allows beekeepers to control this destructive parasite where other miticides may have failed.
- Field trials of the product Allisure® containing Allicin, an organic plant derivative, have been completed for varroa control efficacy. The Bureau of Methods Development and Biological Control is analyzing the data for compilation and publication.
- Field trails for a fungus control of the varroa mite were completed with our collaborators, the United States Department of Agriculture Agricultural Research Service (USDA/ARS), and Division of Plant Industry's Bureau of Methods Development and Biological Control. Publication of the results is anticipated in the near future.
- Field trials have begun for testing of a new delivery method for the biological control of wax moth larvae using *Bacillus thuringiensis* in a unique system.
- A new apiary was established for investigation of an integrated pest management strategy using cell differentiation to control varroa mites.



Distribution of Legislative Funds

Due to the efforts of many Florida beekeepers, legislative funds were allocated for research into the multiple threats that are weakening the apiculture industry in Florida. Contracts were developed with apiculture researchers to address the following projects:

1. Identification of the source of diseases, parasites and stress burdens of migratory beekeepers in Florida. Dr. T. Webster, KSU.
2. Development of semiochemical-based management strategies for the honey bee ectoparasite Varroa destructor. Dr. P. Teal, Dr. B. Torto, USDA/CMAVE, Gainesville, Florida.
3. Africanized bee extension project. Dr. B. Kern, UF-IFAS.

4. A rapid enzyme linked immunosorbent assay (ELISA) field test for AHB. Dr. E. Verdel, USF; Dr. B. Kitto, UT.
5. AHB quick test project. Mr. Dennis Van Englesdorp, PSU.
6. Trap/mating disruption for varroa. USDA/CMAVE.
7. Organic Acids/Essential Oils. Dr. J. Amrine UWV.
8. Integrated Pest Management/Best Management Practices. Dr. J. Ellis, UF-IFAS.

Apiary Disease Treatment, American Foulbrood (AFB), Mite, Industry Status

A new antibiotic, Tylosin®, was recently approved for use with honey bees for American foulbrood (AFB) control. This new product will assist beekeepers with the AFB antibiotic-resistance challenges that honey bees were experiencing with another product.

Beekeepers have also been given some relief from varroa mite-resistant Apistan® and Checkmite II® with the registration of ApiGuard®, a thymol gel. This new product (DPI/Apiary Section assisted with research), will allow effective control of varroa mites and also allow rotation with other products in this ongoing battle with varroa.

Inexpensive imported honey continues to undercut Florida honey on price, but not quality. The cost of honey production in Florida is significantly higher because of pests, disease, parasite control costs, labor and overhead. Historically beekeepers have been able to make a living from honey production alone, but not any longer. Honey production is decreasing and beekeepers are refocusing on "paid for pollination" contracts. And now, as beekeepers retire, they are not passing the business on to their children. Losing beekeepers means Florida's agriculture suffers from lack of pollination and production and lost revenue.

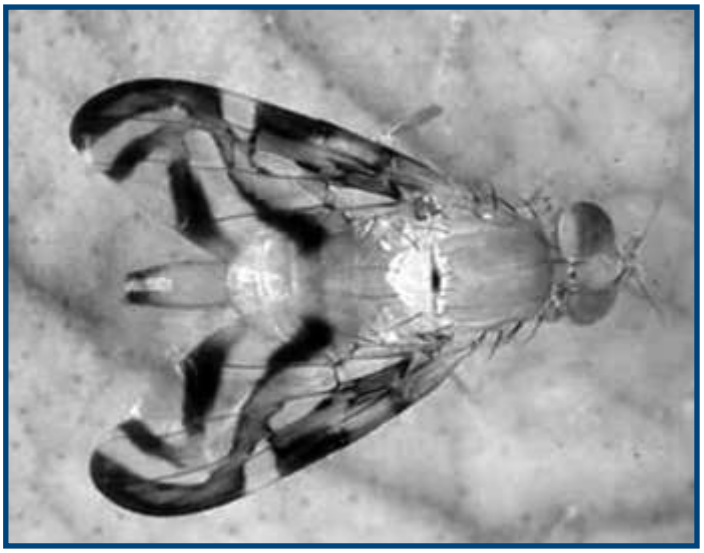
In the fiscal year 2005-2006, of the 165,224 honey bee colonies maintained by registered beekeepers, there were 45,440 colonies inspected from 3,046 apiaries. Compensation of $4,605 was paid to beekeepers for 293 honey bee colonies destroyed due to infestations of American foulbrood disease. There were 89,356 colonies that moved into Florida from 12 different migratory states and 98,364 colonies shipped to 17 different migratory states.

Bureau of Methods Development and Biological Control

The Bureau of Methods Development and Biological Control was involved in the initiation of several cooperative biocontrol programs during this past year as well as technology transfer and other supportive functions for the Department. The bureau maintains the Biological Control Rearing Facility (BCRF) in Gainesville as a multi-use operation for research and rearing of various biological control agents and their hosts including the Caribbean fruit fly (*Anastrepha suspensa*), phorid flies for control of the imported fire ant, and the root weevil *Diaprepes*.

Caribbean Fruit Fly

The Biological Control Rearing Facility continued production in fiscal year 2005-2006 of the Caribbean fruit fly (*Anastrepha suspensa*, Loew), rearing approximately 171 million or an average of 3.4 million per week. Average larval and pupal production per diet tray increased from 51,460 in FY04-05 to 55,262 in FY05-06. Various life stages were supplied to researchers at the University of Florida and the USDA as well as for the Division of Plant Industry's alternative pesticide testing, encompassing both soil drench and bait station technology.



Diaprepes Root Weevil

Mass rearing of *Diaprepes abbreviatus* continued at the BCRF to provide various life stages to researchers develveloping control strategies against this pest. Multiple diet cups were infested with 139,000 neonates, of which 25,000 were transferred to single cups. From these, over 17,000 pupated and emerged as adults. There was a significant decrease in neonate infestations, grub transfers, and pupae and adult production from previous years due to a change in demand because of the completion of some projects. However, over 21,000 neonates, 1,200 grubs and 8,800 adults were shipped to eight different researchers. In addition, the rearing of *Quadrastichus haitiensis*, an egg parasitoid, as a biological control agent has resulted in the release of 1.3 million parasitoids in Florida.

While the division's linear accelerator, used to irradiate larval diet to reduce microbial contamination, was temporarily inoperable, several replicates of refrigerated two-week-old diet were infested with grubs to assess the efficacy of this procedure to increase the shelf-life of the prepared diet. To date, there appears to be no significant difference in discarded cups due to microorganisms or poor larval development using this treatment versus fresh un-irradiated diet, but due to the organism's long life cycle many of these cups are still actively in production. More replicates will need to be run to definitively determine whether the shelf life of larval diet can be extended by refrigeration for at least two weeks, should this need arise again.

Phorid Flies (*Pseudacteon* sp.)

Mass rearing of the phorid flies *Pseudacteon tricuspis* and *P. curvatus* continued at the BCRF as part of a joint venture with the USDA to release these parasitoids as biological control agents against the imported fire ant (IFA) (*Solenopsis invicta*). This endeavor encompasses personnel and resources from the Division of Plant Industry, USDA/ARS and Animal and Plant Health Inspection Service (APHIS), and several other agencies in many of the southern states. Funding for the project continues to be mostly provided via a cooperative agreement with USDA/APHIS. Currently seven specially designed attack boxes are on-line for each species, and over 2.6 million flies of both species combined were produced this past fiscal year. The division currently is awaiting an additional species of phorid fly, *P. obtusus*, to be released by the USDA/ARS for mass rearing and shipment to field cooperators.

The USDA/APHIS Gulfport Laboratory is continuing to coordinate field release efforts with various federal and state cooperators. During this past year the division's facility supplied *P. tricuspis* to eight different states for release or research purposes. Additionally, *P. curvatus* was sent to six states and Puerto Rico for field release. During the coming year the division hopes to distribute both species to the majority of IFA-infested states again. It is hoped that these phorid flies and additional species will become successfully established throughout the entire southeastern United States within the next three to five years. These various phorid flies will work together to help suppress the IFA because they each attack a different size worker ant and attack at different times of the day. This should allow for a reduction in pesticide usage and give native ant species and other insects as well as ground nesting birds, reptiles, amphibians, and mammals an opportunity to reestablish themselves in numerous environmental niches.

Pink Hibiscus Mealybug Biocontrol Program

Pink hibiscus mealybug (PHM) (*Maconnellicoccus hirsutis*) was initially detected in Florida on June 21, 2002. Between June 21, 2002, and June 2006, pink hibiscus mealy bug was detected on 1,816 sites in 34 counties. During fiscal year 2005-20066, 520 new detections were documented in 224 new sections.

Delimiting surveys were conducted in new areas followed by the release of the parasites *Anagyrus kamali* and *Gyranusoidea indica*, which have been received from a rearing facility in Puerto Rico on a weekly basis. From initial releases through this fiscal year, Division of Plant

Industry personnel have released 658,200 *A. kamali* and 818,400 *G. indica* in 1,994 different sites. Weekly releases will continue as new sites are detected. Periodic surveys for mealybug spread, parasitism rates, and the impact of hyperparasites and predators such as *Cryptolaemus montrouzieri* will continue.

In September 2005, a cooperative agreement with USDA was initiated to provide a regional mass rearing facility for the parasites and predator of pink hibiscus mealybug. The facility infrastructure was completed in April 2006. Two crops of Japanese pumpkin, the host of PHM, were grown in cooperation with UF-IFAS in Citra and USDA/ARS in Fort Pierce. Both crops were successful, producing over 25,000 pounds of pumpkins. Subsequent crops will be grown in the summer and fall of 2006. The founder colony of biocontrol agents is being increased to production levels high enough for release in Florida or any state with a PHM infestation.

Tropical Soda Apple Biocontrol Program

A cooperative agreement was entered with USDA in September 2005 to establish a facility for the rearing and distribution of the South American leaf-eating beetle *Gratiana boliviana* as a biocontrol for the noxious weed tropical soda apple (*Solanum viarum*). The objective was to rear as many of these beetles as possible and distribute them to locations around the state where the weed is a problem. Two screen houses were built at the Fort Pierce Farmers' Market for the rearing of the host plants and the beetles. The growing of the plants began in early 2006, and the rearing of the beetles started in March of that year. The first release of beetles was made in May, and by the end of June, 5,400 adult beetles had been released. In addition, 500 larvae and 500 eggs had been placed in a secure location where TSA occurs. Results of this program are sent to a central database that also shows the results of similar activities by UF and USDA.

Asian Cycad Scale

Asian cycad scale (*Aulacaspis yasumatsui*) was first identified in Florida in Miami-Dade County in 1996. The infestation had apparently been present for one to two years or longer. This pest of cycads has since spread to at least 25 Florida counties, and heavy infestations have been reported from Alachua to Miami-Dade counties. During February 2002, the division collected the parasitoid *Coccobius fulvus* from infested cycads in the Naples area and released about 11,000 of these parasitoids in about 15 infested counties extending from the Orlando area south. Unfortunately, surveys during the past three years have indicated that *C. fulvus* has not provided adequate control of Asian cycad scale populations.

During the search for natural enemies of cycad scale funded by UF-IFAS and DPI, Dr. Ren Hui found *C. fulvus* in Guangdong, China. A parasite from Guangdong was collected and sent to the Gainesville quarantine laboratory in October 2004. A permit for release from quarantine was granted in June 2005. In early fall of 2005, 2,300 *C. fulvus* were released in the Gainesville area. Additional shipments of cycad scale and natural enemies were received from Vietnam in March 2006 and from China throughout the fiscal year.

Asian Citrus Psyllid

Division of Plant Industry personnel discovered Asian citrus psyllid (*Diaphorina citri)*, at Boynton Beach on June 2, 1998. It had spread to 28 counties by 2001. It is one of the most efficient vectors of citrus greening disease. In cooperation with UF-IFAS, two parasites of *D. citri*, *Diaphorencyrtus aligarhensis* and *Tamarixia radiata*, were introduced in the Division of Plant Industry's quarantine laboratory on October 21, 1998. A permit for field release was granted for *T. radiata* on July 12, 1999, and for *D. aligarhensis* on March 10, 2000. In fiscal year 2005-2006, approximately 24,227 *T. radiata* and *D. aligarhensis* were reared and released from the Division of Plant Industry's laboratory. Staff continue to monitor the effectiveness of these parasites.

Brown Citrus Aphid

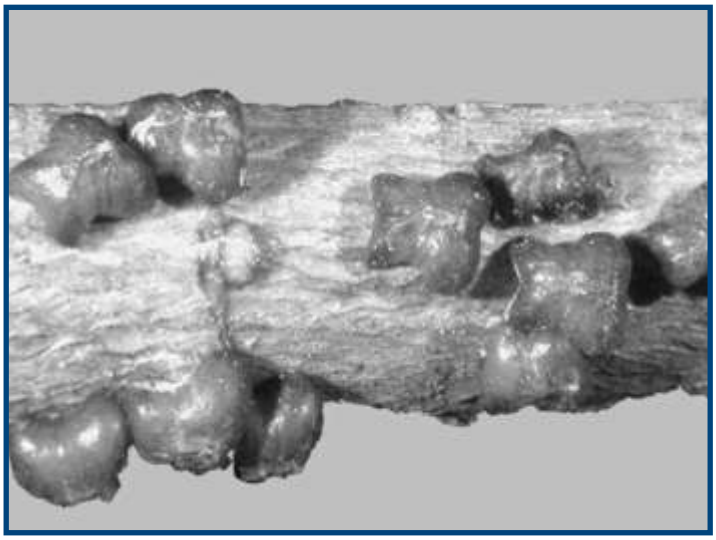
Brown citrus aphid (*Toxoptera citricida*) was detected in Broward and Miami-Dade counties in November 1995 and has since spread throughout the citrus-growing region of Florida. It causes economic losses by feeding on young citrus foliage and depleting sap. This aphid is one of the most serious pests of citrus due to its transmission of citrus tristeza virus (CTV). *Lipolexis oregmae* adults from Guam were imported into the Department's quarantine laboratory on August 19, 1999, and a permit for release of this parasite was granted on June 21, 2000. During fiscal year 2005-2006, 15,453 parasites were released.

Citrus Leafminer

The Department has continued to rear and release the citrus leafminer parasite *Ageniaspis citricola*, especially in the areas that are infested with citrus canker in South Florida. This parasite has been established in citrus-growing areas in Florida. Citrus leafminer populations were high in 2002, especially on young groves. To complement *A. citricola*, the parasites *Semielacher petiolatus* and *Citrostichus phyllocnistoides* were introduced into the Division of Plant Industry quarantine laboratory in July and August 2003. A permit application to release *C. phyllocnistoides* from quarantine was granted in May 2006 and subsequent releases initiated in Immokalee in June 2006.

Lobate Lac Scale

Lobate lac scale (*Paratachardina lobata*) was first found in Broward County in 1999. This species, from India and Sri Lanka, has rapidly become a serious pest of several ornamental and native plants in South Florida.



Cooperative efforts with UF-IFAS and USDA/ARS in Fort Lauderdale are under way to secure and introduce parasites from its native land. Two shipments of *Kerria lacca*, a commercial lac scale collected from Thailand, were sent to the quarantine laboratory in October 2003 and March 2004. Six parasites and two predators emerged from the shipment in March, and over 1,000 parasitoids representing three species emerged from the March 2004 shipment. Among those parasites, *Coccophagus tschirchii* and *Tachardiaephagus tachardiae* were listed in the literature as primary parasites of *K. lacca* and lobate lac scale. Unfortunately, neither parasite could be reared on lobate lac scale in the quarantine laboratory in Gainesville. A subsequent shipment of parasites from India was received in August 2005 and is still under evaluation.

Alternative Pesticide Research and Other Technique Development

Numerous pesticides from several chemical classes and with different modes of action (both labeled and experimental) continue to be evaluated in bioassays under concurrent laboratory and field conditions as potential replacements for diazinon. Diazinon is used as a chemical soil drench for emergency programs to control fruit flies of economic importance.

The efficacy of reduced application rates or dilutions of GF-120 NF Naturalyte Fruit Fly Bait in a simulated foliar spray for controlling the Caribbean fruit fly was studied. Field cage tests were completed. Results show potential in reducing grower costs involved in the Caribfly Protocol Program. Large field trials should be conducted to further validate the suggested rate change.

A grant-funded joint project with Analytical Research Systems was completed. The objective of the project was to look at the addition of polymeric additives to the currently used Caribbean fruit fly protein bait-spray which increased its "rain fastness" (water insolubility) and field longevity. This will decrease application costs and the amount of pesticides put into the environment. This technology could be transferred to many other applications. A final report was submitted to the Florida Citrus Production Research Advisory Council.

Longevity tests for adult Caribbean fruit fly under stress were incorporated into the quality control (QC) tests conducted. This was initiated to meet required routine quality control tests. The longevity of adults under stress, without water and food, provides a measure of fly quality. Tests are run on un-irradiated insects at the rearing facility, following irradiation and after shipment to the release facility. Data is currently being accumulated to establish a reliable baseline and will be included in the national and international database. Quality control mating tests were performed using wild caribflies isolated from Surinam cherry fruit collected in St. Lucie and Indian River counties with lab-reared flies from the BCRF in Gainesville. The overall objective of mating performance is to determine whether the sexual behavior of the flies from the laboratory strain is similar with that of the target wild population.

Degree-day accumulation study on eggs, larvae, and pupae of caribfly was started in order to determine the developmental time of the insect for inclusion into the national Tephritidae database. Each stage of an organism's development has its own total heat requirements, which can be estimated by accumulating degree-days between temperature thresholds throughout the season. The accumulation of degree-days from a starting point can help predict when a developmental stage will be reached. Degree-day monitoring does not indicate whether control action is warranted, but rather when a pest will reach susceptible life stages. If pests are abundant, monitoring degree-days helps to eliminate the guesswork otherwise required to determine the time for a control action.

Medfly Eclosion/Release Facility for SIT/PRP

The Preventative Release Program continued the aerial release of sterile Mediterranean fruit flies to deter the establishment of introduced wild flies. This facility also acts as a reserve for a Sterile Release Program should an infestation occur and a startup facility for other species of sterile fruit flies if available. Sterile medflies were released over a 570-square-mile area, which included Miami-Dade, Hillsborough, Manatee and Sarasota counties, at a rate of 143,774 per square mile or a total of 81,951,013 per week. A total of 4,261,452,657 sterile medflies were released during this reporting period.

Other projects originating at the facility included ongoing testing of new trap and lure combinations in various citrus groves and the conversion of a 20-by-30-foot storage room to a post-wash drying room for the eclosion tower trays; the room will be utilized during rainy weather. The facility personnel sent 35 complete eclosion towers to California to assist them in beginning their conversion from PARCs to towers. Division of Plant Industry personnel assisted with the exotic pest surveys and research in cooperation with the Cooperative Agricultural Pest Survey (CAPS).

Apiary Research

Methods bureau personnel in collaboration with the Apiary Inspection section assisted with several apiary tests during the fiscal year. Some of the tests included:

- Hive control of varroa mites (*Varroa jacobsonii)* using Allisure™ (Allimax International Ltd. UK).
- Determining optimum varroa mite economic treatment thresholds by establishing the correct sampling procedure.
- Investigating the use of small cell foundation (5.1 mm to 4.9 mm) as a tool for varroa mite control.
- Use of Certan B-401, *Bacillus thuringiensis* (Bt), for control of wax moths (*Galleria mellonella*) in Florida's apiary industry.

Caribbean Fruit Fly Research and Activities

This office maintains three continuous Caribbean fruit fly trap lines using plastic McPhail-type traps in portions of Indian River, Martin and St. Lucie counties. These traps are serviced weekly; the results showing number of flies caught by sex, species and condition of host plant are tabulated for later reference concerning the variation in the seasonal Caribbean fruit fly population. This data supports the Caribbean Fruit Fly Certification Program trapping information on fly populations in the urban area and is useful when conducting tests that involve the use of biological control agents or other suppression/control programs. This data was also given to another agency that included it in their larger GIS program.

A study to search for unknown hosts of the Caribbean fruit fly continues. Many species of ripe fruit collected off the tree or under the tree are incubated to see what species of insects develop in them. While no new hosts for Caribbean fruit fly were discovered, new science, national, county and host records for other insects were obtained from this study. One of special interest was the discovery of the fruit fly *Zaprionus indianus*. This fly is known from many parts of the world, but was not previously known to occur in North America. It is considered a serious pest of at least one commercial crop: figs. It may also be a pest of regulatory significance. A publication on this fly was co-authored.

This office also assisted with other Department-related activities such as the growing, harvesting and storage of Japanese pumpkins for feeding the pink hibiscus mealybugs for parasite rearing. Support was given to UF-IFAS for establishment of the *Larra bicolor* wasp against mole crickets and to the USDA for monitoring populations of a phorid fly for the control of the imported fire ant.

Training and Compliance/Fumigation/ Miscellaneous Activities

Bureau personnel continued to provide training and testing for employees for Restricted Use Pesticide (RUP) Licenses. The bureau coordinated employee applications and maintained records of CEUs for those licenses, provided record keeping for Right-To-Know and Material Safety Data Sheet (MSDS) files, coordinated disposal of hazardous chemicals produced at the Division of Plant Industry, and provided security/monitoring of the Gainesville facilities.

Fumigation of specimens, books, reprints, etc., for the Florida State Collection of Arthropods continued at the Gainesville Division of Plant Industry and University of Florida fumigation chambers. Annual evaluations and certifications of methyl bromide fumigation chambers used for blueberry fumigation were conducted during this period. Annual evaluations and certification of four methyl bromide atmospheric fumigation chambers used for citrus certification located at the Division of Plant Industry's Wahneta Fumigation Facility were performed.

The bureau provides technical assistance in the rearing and maintenance of a mole cricket colony located at UF-IFAS in Gainesville. This colony is a source of healthy specimens necessary to carry on different control research projects conducted throughout Florida.

Personnel also conducted bioassays and bulk density determinations to comply with Imported Fire Ant Program regulations.

Division of Plant Industry personnel often assist with document translation and tours of facilities to domestic and foreign visitors as well as daily assistance to employees and community organizations using Doyle Conner Building facilities.

Bureau of Entomology, Nematology and Plant Pathology

The Entomology Section completed 9,586 separate identifications this year involving 388,459 specimens. During that same period, four exotic species were found established within the state, all representing new U.S. records. There were also 10 new state records.

A total of 10,123 arthropod identification records were entered into the entomology database. This brings the

number of searchable Division of Plant Industry arthropod identification records to 129,350 with complete records for 1990 through 2005 and partial records as far back as 1983.

Florida State Collection of Arthropods

Donations to the Florida State Collection of Arthropods totaled more than 98,227 specimens, valued at $538,590. This brings the total number of specimens to more than 8 million. Fifteen guided tours and presentations were given this year, with more than 200 students and adult participants.

A Memorandum of Understanding with the McGuire Center for Lepidoptera and Biodiversity, University of Florida, to house the Division of Plant Industry Lepidoptera collection was implemented by the transfer of approximately 1.5 million specimens in over 7,000 display drawers and countless other storage boxes. The Diptera and Hemiptera collections were fully expanded and reorganized to take advantage of drawer space made available by the Lepidoptera move. Similarly, the Orthoptera collection was moved from the New Museum to the Weems' Museum, which allowed the rearrangement and expansion of the Coleoptera collection.

The U.S. National Park Service contracted with the Entomology Section to provide identifications of Diptera collected as part of the "All Taxon Biological Inventory" (ATBI) being conducted in the Great Smoky Mountains National Park. The objective of the ATBI is to document all life forms present in the park. From 2003 to the present, additional funding has been provided by "Discover Life in America" to enable two entomologists to engage in extensive entomological field work in the Smokies to advance the goals of the ATBI. Despite the fact that GSMNP is the most visited national park in the United States, it is surprisingly poorly known biologically. For example, the family of flies known as "fruit flies" is one of the best known among all fly families in North America, and yet Division of Plant Industry researchers have been the first to document the presence of 40 of these species in the park (also first records of 30 species in Tennessee and 10 in North Carolina), including at least two species previously unknown to science.

Fruit Fly Identification Laboratory (FFIL)

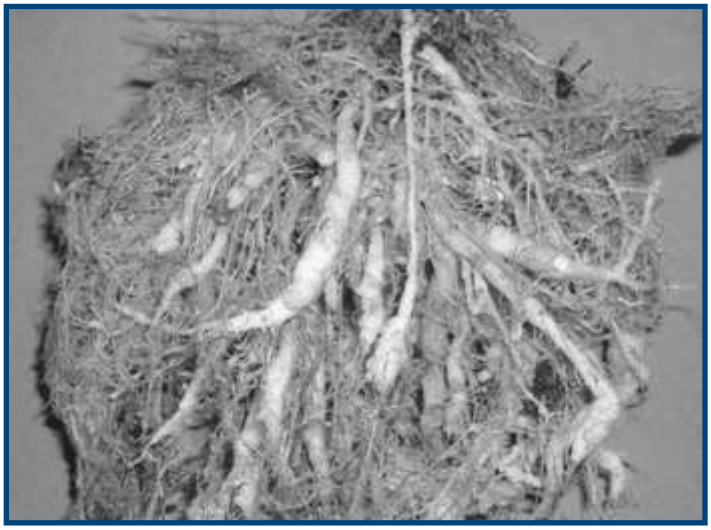
Division of Plant Industry inspectors and USDA fruit fly survey specialists serviced approximately 55,000 traps as part of the Cooperative Fruit Fly Detection and Surveillance Program for a total of 1,261,000 trap inspections during fiscal year 2005-2006. Of the trap inspections conducted, the Fruit Fly Identification Laboratory processed 263,199 fruit fly traps or 21 percent of all traps inspected in the field and screened ca. 2,304,162 total sterile Mediterranean and wild Caribbean fruit flies. There were 600 dissections performed to confirm sterility of Mediterranean fruit flies from the preventive release areas during the fiscal year. Although there were 203 instances in which urgent suspect target economic fruit flies were sent to the FFIL, no exotic fruit flies were detected during this survey period. Due to early detection, identification and prevention efforts, no economically significant fruit flies became established in Florida during fiscal year 2005-2006.

Nematology

This year the Nematology Section analyzed 15,694 samples. These samples contained more than 77,854 specimens of plant parasitic nematodes, which were identified to genus and/or species by the Division of Plant Industry's nematologists. This diagnostic work involved 23,150 morphological and molecular identifications. Nematological analyses for certification and regulatory programs relative to citrus, ornamentals and other Florida crops represented 93.3 percent of the total diagnostic work.

Meloidogyne floridensis is a root-knot nematode recently found infecting peach trees (*Prunus persica*) in Florida. This species also infects tomato. Comparative morphometric studies were conducted on four populations of *M. floridensis* from Alachua, Indian River and Hendry counties. The results of these studies indicate that there is little statistical variability among the populations examined and that morphometric parameters remain constant. Host test studies showed that clover (*Trifolium incarnatum*), cypress vine (*Ipomea quamoclit*), English water cress (*Nasturtium officinalis*), rape (*Brassica napus*) and zebina (*Malva sylvestris*) were good hosts. Poor hosts included sesame (*Sesamum indicum*) and sunn hemp (*Crotalaria juncea*). Non-hosts were jimsonweed (*Datura stramonium*), passion fruit (*Passiflora edulis*) and sorghum sudangrass (*Sorghum bicolor*). Two of the five plants determined to be good hosts are commonly used as cover crops in Florida (clover and rape), whereas the other three (crimson clover, English watercress and zebina) are weeds that are commonly found in Florida

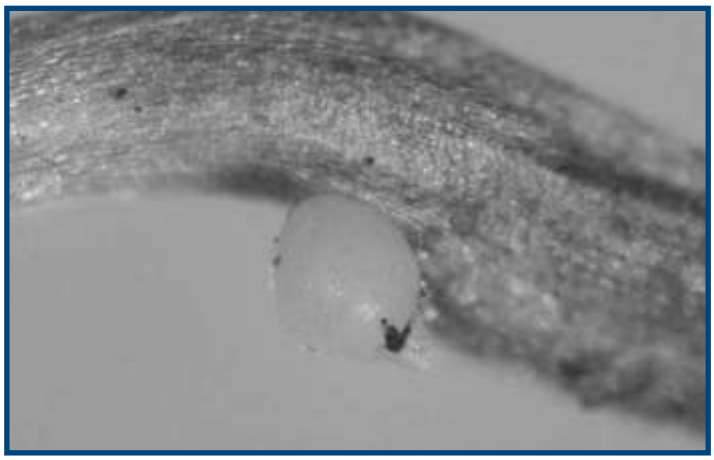
agriculture. These plant species may indeed serve as reservoirs for *M. floridensis* populations, and careful consideration should be taken when choosing cover crops or determining a weed control program in situations involving *M. floridensis*.



The studies on *Meloidogyne mayaguensis* were continued during this fiscal year. This root-knot nematode has been found in Alachua, Broward, Hillsborough, Miami-Dade, Gilchrist, Hardee, Hendry, Lee, Martin, Nassau, Orange, Palm Beach and St. Lucie counties, where it infects vegetable and agronomic crops, herbs, fruit trees, weeds and many ornamental plants. The host status of 19 petunia (*Petunia X hybrida*) cultivars to *Meloidogyne mayaguensis*, and *M. incognita* were evaluated in a greenhouse. All petunia cultivars were highly susceptible to both nematodes. The size of galls induced by *M. mayaguensis* was unusually large compared with those induced by *M. incognita*. The average gall diameter of *M. mayaguensis* ranged from 0.10 cm to 0.60 cm on petunia roots, whereas the gall size of *M. incognita* on petunia roots was usually very inconspicuous, ranging from 0.05 cm to 0.30 cm. In pathogenicity studies, four isolates of *Meloidogyne mayaguensis* from Florida reproduced well on all root-knot nematode resistant soybean cultivars (Bragg, Forrest, Benning, Boggs, GoSoy 17, Bossier, G-93-9009, Haskell, 74, Lee, and Prickett) used in the study regardless of the inoculum levels. Differences in virulence were detected among the *M. mayaguensis* isolates. Isolate N01-00304 was the most virulent to soybean. Among the soybean cultivars, Bragg sustained less galling and had fewer egg masses than the other cultivars.

Meloidoygne partityla was recently found infecting pecan seedlings in a nursery in North Florida. Pecan plants infected with this nematode were distributed in large patches throughout the nursery and exhibited leaf yellowing and poor growth. Large and small galls were observed in the main, secondary and feeder roots. Nematode-infected plant roots also showed callous tumors induced by bacterial infection. Both roots and tumors were colonized by *M. patityla* females and egg masses. *M. partityla* females are pear-shaped, white-colored, and sometimes transparent. Isozyme analyses of individual female root-knot nematodes, especially esterase (EST= Mp3), provided fast and reliable diagnostic information for the differentiation of the pecan root-knot nematode from the other common species of root-knot nematodes that occur in Florida. The implementation of good sanitation practices is the best approach to avoid the spread of this nematode within and between nursery stock producing sites and pecan orchards.

On May 17, 2005, a cyst-forming nematode, *Afenestrata orientalis* Kazachenco 1990, was found infecting the roots of the ornamental grass *Miscanthus sinensis* "Zebrinus" in Escambia County. This species was described in the Maritime Territory in the far east of Russia, where the nematode infects the roots of the perennial grass *Miscanthus purpureus*. The morphological identification of the Florida population was confirmed by the results of the molecular (rDNA) analysis conducted at the University of California, Riverside, which were also congruent with those of the nematode population from Russia.



This is the first record of *A. orientalis* in Florida and the United States. It is worth mentioning that another *A. orientalis* population with the same morphological and molecular characteristics as the Florida population has

been found in Guatemala infecting the roots of *Miscanthus sinensis* "Variegatus" and *Pennisetum setaceum* "Rubrum." The most probable means of introduction of the nematode from the Far East into the American continent has been through the trade of ornamental grasses between nurseries on the two continents. The distribution, host range, damage and economic importance of this cyst-forming nematode are not known.

The morphological illustration and description of a new lesion nematode infecting amaryllis (*Hippeastrum* sp.) in Florida were completed and submitted for publication. The host range of this new lesion nematode is not known.

On April 2006, the pale potato cyst nematode (*Globodera pallida*) was found for the first time in Idaho by agricultural officials of the Idaho State Department of Agriculture and the USDA/APHIS. This is the first report of this nematode in the United States. The detection of this regulated nematode pest of potato in Idaho has resulted in a trade ban of potatoes for export to Canada, Mexico, Japan and other international markets. The potato industry of Florida is indirectly affected by the total ban which, in some cases, involves all the states in the United States. The find of the pale potato cyst nematode prompted an intensive nematode survey of potato-growing areas of Florida by Department nematologists in cooperation with colleagues from USDA/APHIS and Division of Plant Industry Cooperative Agriculture Pest Survey (CAPS). The results of this survey have important regulatory significance because states that are free of the regulated pale potato cyst nematode may be exempted from the ban on the export of potato tubers and other crops to countries regulating the potato cyst nematodes. So far, 50 samples have been collected from potato fields in Manatee and St. John counties. The results of the nematological analysis of these samples did not provide any evidence of occurrence of the regulated pale and other cyst nematode pests of potato in the surveyed fields. These findings are in agreement with the results of additional nematode surveys conducted by the Nematology Section since 2001 on solanaceous crop hosts of the pale cyst nematode, confirming that this pest is not present in Florida.

Botany

For fiscal year 2005-2006, the Botany Section processed 7,488 samples. In addition, 150 specimens were added to the herbarium, bringing the total size of the collection to 9,351 specimens. The number of vials in the seed collection remained at 1,468.

Advanced Diagnostics Laboratory

The Advanced Diagnostics Laboratory (ADL) conducted diagnostic tests (molecular and/or chemical/biochemical) on a total of 2,163 regulatory samples consisting of 4,198 individual analyses. These analyses included those for citrus greening, citrus canker, citrus variegated chlorosis (CVC), potex-, poty-, and gemini plant viruses, and *Phytophthora ramorum* blight, as well as samples submitted as part of the imported fire ant program. In addition, DNA sequence analysis by the ADL confirmed that a recently discovered fruit fly is an undescribed species.

Citrus greening (huanglongbing) was detected in Florida during the latter half of 2005. This is the first known occurrence of this devastating citrus disease in North America. The ADL first identified the putative causal agent, *Candidatus* Liberibacter asiaticus, in citrus leaf samples submitted to the Division of Plant Industry by the CAPS/DPI survey for citrus greening in South Florida. As part of the resulting survey effort to determine the distribution of greening in Florida, a total of 1,802 leaf samples have been analyzed by the ADL, in addition to samples of the Asian citrus psyllid, the insect vector, and orange jasmine (*Murraya paniculata*), an important host for the psyllid. To date, 11 counties in Florida have been identified by the ADL as positive for greening in citrus. Training and hands-on experience in greening molecular diagnostics were also provided by the ADL to plant pathologists from UF, USDA, and the California Department of Food and Agriculture.

Studies on strains or genotypes of citrus canker in Florida and their host relationships continued, culminating with the discovery of two new forms of this pathogen. New technologies to quickly identify these strains are being developed by the ADL. To date, six different strains of *X. citri pv. citri* have been found in Florida and are named 1) Miami, 2) Manatee I, 3) Manatee II, 4) Seminole, 5) West Palm Beach and 6) Wellington.

Phytophthora ramorum blight, sudden oak death (SOD), was again confirmed in Florida by the ADL and the Pathology Section using morphometrics and DNA sequence analysis. In addition, the identities of some two dozen other *Phytophthora* samples were determined, or confirmed, by sequence analysis of DNA extracted from leaf tissue and/or cultured specimens submitted to the ADL.

Sequence analysis of poty- and potex- plant viruses for the Plant Pathology Section also continued. A newly described potexvirus, the Alternanthera mosaic virus, was found in Florida for the first time and its identity determined by sequencing. In addition, a new potyvirus was found in Passiflora in Florida and is currently undergoing sequence analysis by the ADL.

Plant Pathology

The Plant Pathology Section processed 15,737 samples for disease diagnoses. Of those samples, 10,499 were for citrus canker, and the remainders were statewide samples from various sources for diagnosis in the main plant problem clinic. There were three plant pathogens that appeared for the first time in the United States (citrus greening, squash vein yellowing virus, and gladiolus rust), four plant pathogens reported for the first time in the state, and 17 new host-pathogen combinations. The Citrus Germplasm Indexing Program performed 964 separate indexing tests and released 20 citrus varieties after indexing and cleanup for citrus tristeza virus.

In August 2005, the Asian citrus pathogen that causes the disease known as huanglongbing (HLB) or citrus greening (*Candidatus* Liberibacter asiaticus) was discovered in residential citrus in the Homestead area. Regular surveys for the disease had been under way since the discovery of the psyllid vector of the pathogen *Diaphorina citri* in residential citrus in the Delray Beach area in 1998. Extensive survey efforts revealed the pathogen was widely present in Miami-Dade and Broward counties, with moderate sized outlying infections in Palm Beach and Hendry counties, and smaller scattered outbreaks in eight other South Florida counties. In fiscal year 2005-2006, 3,488 citrus samples were processed by PCR for HLB diagnosis either by the division's Advanced Diagnostics Lab, the UF-IFAS Extension Plant Disease/SPDN Clinic, or by the USDA-Agricultural Marketing Service laboratory in Gastonia, North Carolina.

In January 2006, in the aftermath of many inoculum-dispersing hurricanes and numerous legal delays, the USDA announced that the citrus canker disease was no longer eradicable, and the Citrus Canker Eradication Program was abandoned. The program was replaced by a new effort to manage the disease in the best possible way. The new program is known as the Citrus Health Response Program, and will eventually incorporate monitoring and best management practices for all citrus pests and diseases in Florida and the United States.

Phytophthora ramorum, the causal agent of sudden oak death in California and Oregon, appeared in the spring of 2006 in two North Florida nurseries after a one-year hiatus. Infected camellias obtained from other states were showing typical ramorum blight symptoms, the foliar disease caused by the same pathogen. A joint multi-state and federal task force met to address the complex issue of preventing further spread of this pathogen. There is no evidence that *P. ramorum* has become established in Florida at this time as a result of these introductions in 2004 and 2006.

The probable cause of a mysterious and very destructive vine decline disease of watermelons was discovered by a team of plant pathologists with the Division of Plant Industry, UF-IFAS and USDA/ARS. The pathogen is a silverleaf whitefly-vectored potyvirus with the new name squash vein yellowing virus (SqVYV). The disease has been killing vines just before harvest in some watermelon production areas since 2003. The pathogen is much less destructive on other members of the Cucurbitaceae.

Clover yellow vein virus (ClYVV) has been found for the first time infecting the ornamental flower *Ammi majus*, a member of the Apiaceae. The diagnostic work was a joint effort of USDA/ARS and the Division of Plant Industry.

The exotic gladiolus rust pathogen *Uromyces transversalis* appeared for the first time on the North American continent on commercially grown gladiolus for cut flowers in the Manatee County area in the spring of 2006. About three weeks later, the disease appeared on another large commercial cut gladiolus production operation in a remote area in Collier County.

An eradication plan has been devised and is being finalized in cooperation with USDA and the California Department of Agriculture. The rust disease appeared in California this spring also. The disease was introduced into Colombia and Mexico in the last two to three years, and the U.S. gladiolus growers have been on high alert since.

In the late 1990s, a new species of Phytophthora, *P. tropicalis*, was segregated out of the *P. capsici* complex. The pathogen was frequently appearing on *Epipremnum* propagation material coming into Florida from Central America. During surveys for *P. ramorum* in spring 2005, the pathogen was detected on rotted roots of containerized *Laurus nobilis* and in runoff water in a nursery in North Florida. This indicates that the pathogen is probably now established in the state.

Canna yellow mottle badnavirus (CaYMV) was diagnosed for the first time in Florida in 2004 by the IFAS Plant Disease Clinic in Quincy. Samples of this new viral disease were submitted to the DPI Plant Pathology Section in May 2006. This disease was formerly known only from Japan and Minnesota, apparently spread by infected propagation materials.

Citrus Germplasm Introduction Program

The Citrus Germplasm Introduction Program (CGIP) received 79 new citrus selections this year. Three new varieties were imported from California: TDE1 and "Shasta Gold" (TemplexDancyxEncore) mandarins, and "Xie Shan" satsuma.

Fifty-five valuable and unique selections of the University of Florida's Citrus Improvement Program were submitted for thermal-therapy treatment of citrus tristeza virus infection. Selections included Murcotts, mandarins, sweet oranges, Valencia somaclones, canker-tolerant varieties, and a somatic tangor hybrid.

Twenty assorted types of unique citrus from the University of Florida citrus collection in Fort Pierce were submitted for rescue by shoot-tip micro-grafting treatment following field exposure to citrus canker.

A Nagami kumquat infected with citrus leaf blotch virus has begun thermal-therapy treatment in an attempt to evaluate the effectiveness of heat inactivation for this virus.

Cooperative Agricultural Pest Survey Program

The Florida Cooperative Agricultural Pest Survey (CAPS) program is the largest CAPS program in the nation. It is comprised of the state survey coordinator, three pest survey specialists, a GIS specialist, a public information specialist, a molecular diagnostician, four USDA pest survey specialists, and the entomology domestic identifier. The CAPS team was involved in many key surveys and initiatives throughout the state during fiscal year 2005-2006.

The CAPS team worked to make Florida's agricultural community and the general public more aware of exotic pests through such projects as the CAPS web pages, public outreach door hangers, a huanglongbing booklet, and computer desktop calendars. The GIS mapping specialist's production of accurate maps increased work efficiency on a number of activities of the division and other programs.

Soybean rust monitoring ended with over 1,575 acres in various leguminous crops surveyed. Three hundred and twenty-three human resource hours were employed. Commodity surveys expanded to cover cotton, peanut, soybean, sugarcane, potato, pepper and tomato and totaled 300 hours in approximately 10,000 acres around the state.

The CAPS team was instrumental in the huanglongbing emergency program surveys, which utilized the incident command system (ICS). The state survey coordinator and three pest survey specialists surveyed or directly managed over 60 survey individuals within the four-month period totaling over 600,000 acres in 20 counties and over 5,100 human resource hours tabulated. All Division of Plant Industry CAPS personnel received training from the USDA and are now certified at the NIMS/ICS 300 level.

CAPS, in cooperation with Plant Pathology and Plant Inspection, responded to the gladiolus rust incident, surveying 5,250 acres and helping quantify the problem within nearby commercial fields and the surrounding area in general.

Scirtothrips dorsalis was detected for the first time in Florida in October 2005. The CAPS program then designed a survey around positive nursery detections in three counties (Lake, Orange and Seminole) where the highest number of positive detections occurred. Twenty-seven positive samples for *S. dorsalis* and three new host records for *Ricinus communis*, *Ligustrum japonicum* and *Viburnum suspensum* were reported.

CAPS assisted in surveying for sudden oak death in soil and water samples from two commercial nurseries in Leon County. These nurseries had received SOD-positive plants from California in 2004. The 2006 detections appear to be re-introductions of the disease into Florida.

In recent years, Florida CAPS begin a monitoring and evaluation program of several invasive species that threaten trees of natural resource and agricultural significance in the United States. Florida's ideal environmental conditions and extensive international ports of entry make it especially susceptible to invasive species, so it is important to monitor the current situation.

Surveys began for species of concern associated with solid wood packing materials (SWPM) within a five- to 10-mile radius of the state's major international sea ports and airports to determine if the species of concern have established in nearby environs. Due to the constant year-round arrival of SWPM associated with many different commodities, this initiative is planned to continue for an unspecified length of time.

Domestic Security and Emergency Preparedness

The Office of Bio and Food Security Preparedness was renamed the Office of Agricultural Emergency Preparedness in April 2006 to better reflect the all-hazards mission of the office. Whether in preparation for agroterrorism incidents, natural disasters like hurricanes, or the potential spread of foreign animal diseases, the office helps to coordinate Department-wide preparedness initiatives.

Highlights for fiscal year 2005-2006 included:

- Completion of a statewide Food Defense Tabletop Exercise in February 2006. This event, held at the State Emergency Operations Center, was coordinated by the Office of Agricultural Emergency Preparedness with support from the Florida Department of Health, Florida Department of Business and Professional Regulation, Florida Division of Emergency Management, and Florida Department of Law Enforcement. Private sector support and participation was coordinated through the Florida Retail Federation and the Florida Restaurant and Lodging Association. With more than 150 participants representing local, state, federal, and private sector entities, the exercise was successful in improving the state's ability to communicate and respond during a large-scale food terrorism event.

- Coordination with the divisions to ensure that Department employees were compliant with the federally mandated National Incident Management System (NIMS). To date, more than 1,500 Department employees have completed more than 3,000 federally approved courses to assure that the agency remains NIMS-compliant. This enables Department employees to effectively communicate and seamlessly integrate with local, state, and federal partners in response to emergencies.

- Development of an online course entitled "Fighting Agricultural Terrorism in Florida: Domestic Security Awareness Basics for FDACS Inspectors and Staff." This course will be used to ensure that Department field employees are able to recognize potential terrorist threats to agriculture, and that they know how to make appropriate contacts if they come across suspicious activity.

- Securing a third consecutive year of grant funding from the Department of Homeland Security to support the Department's State Agricultural Response Team (SART). This team, with statewide coordination by the Department's Division of Animal Industry, pulls in more than 20 public and private partner agencies to prepare for and respond to agriculture and livestock emergencies.

- Continued federal grant funding (more than $2.5 million from the Department of Homeland Security and the Centers for Disease Control and Prevention) and support for key initiatives for the divisions of Agricultural Environmental Services, Animal Industry, Dairy Industry, Food Safety, Forestry, and for the offices of Agricultural Law Enforcement and Agricultural Emergency Preparedness.


Fresh
from
Florida®
PROMOTING
FLORIDA
AGRICULTURE

Florida Agricultural Promotional Campaign

The Florida Agricultural Promotional Campaign (FAPC), commonly referred to as "Fresh from Florida," is a promotional membership program designed to boost the image of Florida agriculture and increase sales by helping consumers easily recognize Florida agricultural products at the wholesale and retail levels.

The Department's Division of Marketing and Development continues to develop marketing strategies to assist in the movement of Florida agricultural products domestically and abroad. Efforts over the past 15 years have led to increased sales and public awareness of Florida's agricultural industries and their vital importance to the state's economy.

The campaign features various "Fresh from Florida" logos which promote Florida-grown fruits, vegetables, seafood, horticulture, viticulture, organic, apiary, livestock, and other specialty and dairy products. The logo automatically ties members into inclusive FAPC media advertising touting Florida agricultural products. There are also logos for international buyers and consumers, including the "From Florida USA" logo and the "From Florida" logo for value-added products.

FAPC Magazine

The Florida Agricultural Promotional Campaign (FAPC) magazine publishes twice a year. This publication promotes Florida's agricultural industry through FAPC-member feature articles, industry-sponsored events, and seasonal articles on specific commodities. It is distributed to the current FAPC member list, national and international produce and seafood buyers, attendees at trade events, and other agribusiness industry professionals.

Retail Campaigns: Global Grid, Farmer's Express, Florida Watermelon

The 2005-06 marketing campaigns – "Global Grid," "Florida Farmers' Express" and the "Florida Watermelon Campaign" – saw an increase in participating grocery stores, an expanded geographic area, and an increase in the number of advertisements. The marketing promotions, which ran from November 2005 to June 2006, are timed to coincide with Florida's important winter-spring harvest that supplies the United States with most of its domestically grown produce.

The Global Grid campaign, now in its fifth year, included 7,684 stores and generated $324.7 million in additional retail sales. The Florida Farmers Express campaign, now in its sixth year, included 1,734 stores and generated $41.1 million in additional retail sales. The Florida Watermelon Campaign, now in its third year, included 4,293 stores and generated $28.6 million in additional retail sales.

The three marketing campaigns spanned 43 U.S. states, the District of Columbia, five Canadian provinces, and 11 Caribbean and Central American countries. Thirty-four retail grocery chains with 13,711 individual stores participated. They featured Florida products in their circular ads 754 times, yielding 178,955 individual store ads that generated more than 8.8 billion consumer impressions. The three successful marketing initiatives were joint ventures between the Division of Marketing and Development, the Florida Department of Citrus, and the Florida Watermelon Association.

Central American Free Trade Agreement (CAFTA-DR)

The Central American Free Trade Agreement (CAFTA-DR) was signed on August 5, 2004, between the United States and five nations of Central America including Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica and the Dominican Republic. The purpose of CAFTA-DR, which went into effect in June 2005, is to eliminate tariffs and trade barriers between the United States and the CAFTA-DR countries and to expand regional opportunities for the farmers, ranchers, workers, manufacturers and service providers in those countries.

From November 2005 through May 2006, a pilot marketing campaign was implemented involving the PriceSmart warehouse shopping club, which has 24 outlets in 11 countries in the Caribbean, Central America and the American Virgin Islands. This promotion featured several Florida commodities including tomatoes, bell peppers, strawberries and citrus juices. While the marketing campaign was in place, market research teams from the Department were sent to all of the CAFTA-DR countries. These research teams went to observe shopping behaviors, talk to consumers, and collect information that will be used to increase understanding of the acceptance level and willingness of CAFTA-DR residents to purchase imported fresh fruits and vegetables from the United States.

A market research report on the six CAFTA-DR nations is now available to Florida's agricultural industry. This extensive study includes an examination of retailers and economic growth along with other pertinent information that will provide insight into the region and assist with sales opportunities for Florida's agricultural industry. The CAFTA-DR study provides a broad spectrum of information for segments of Florida's agricultural industry to utilize as they expand sales into this region.

To date, total U.S. exports to Central America and the Dominican Republic are valued at more than $15 billion annually. This means that the CAFTA-DR region is the U.S.'s second-largest export market in Latin America, after Mexico. With a combined population of nearly 48 million people, the CAFTA-DR region has become Florida's fourth-largest agricultural trading partner in the world, after Canada, Japan and the Netherlands.

Ethnic Marketing Campaigns

Cultural factors, including traditional diets and exercise habits, can increase obesity among some minority groups, particularly African Americans and Hispanics. According to the Centers for Disease Control (CDC), only about 25 percent of adults in the United States eat the recommended five or more servings of fruits and vegetables each day.

African Americans consume less than half the amount of vegetables that Caucasians consume. Statistics show that obesity-related health problems affect African Americans at rates higher than non-minorities. These startling statistics clearly show the need for a campaign to increase awareness among this impacted population.

In fiscal year 2004-2005, the Division of Marketing and Development launched an ethnic marketing campaign designed to educate African Americans about the major health risks that they faced and to provide them the tools to help reduce those risks. This health initiative encourages daily exercise and the increased consumption of fresh fruits and vegetables. The multimedia campaign was launched with a series of radio and television public service announcements and print advertisements. Tapping into the popularity of a celebrity spokesperson, division marketing representatives attended key community events throughout the state to promote the "Fresh from Florida" message. In its third year, the African American Health Initiative continues to bring awareness to obesity and other health-related issues faced by adults and children in Florida.

The Division of Marketing and Development is also reaching Florida's Hispanic community through its "Fresco de la Florida" campaign. This targeted program stresses the health benefits gained by eating more fresh Florida fruits and vegetables. Marketing staff promoted the healthy lifestyle message to Hispanic consumers through major cultural celebrations and historic events throughout the state, including Hispanic food shows such as Fispal Latino. Attendees are provided Spanish-language information and nutritional facts about fresh Florida fruits and vegetables, as well as recipes for their use in traditional Hispanic meals. Some of these events included Calle Ocho in Miami; Puerto Rico Cultural Parade in Tampa; Hispanic Unity's Maroone Fest in Fort Lauderdale; and Univision's Mujer Familia y Hogar in Miami.

The Hispanic campaign utilizes multimedia advertising, including radio, newspapers, magazines and bus ads in Orlando, Tampa and Miami. The ads encourage the Hispanic community to lose weight and improve prenatal care by adding "Fresh from Florida" fruits and vegetables to their menu.

Culinary Promotions

Chef Justin Timineri serves as the culinary ambassador for Florida. His job as executive chef in the Division of Marketing and Development is to support Florida's agriculture industry by creating modern-style dishes that reflect Florida's diverse population, and by conveying the benefits of eating Florida products. As part of the "Fresh from Florida" marketing campaign, Timineri conducts cooking demonstrations and other promotions to help increase consumer awareness of the variety and wholesomeness of Florida agricultural products. His responsibilities include promoting all of Florida's agricultural products, creating new recipes, attending trade events, performing cooking demonstrations, and educating children on the value of health and nutrition in food.

Florida Agriculture and Nutrition Education

Students on summer break often have more leisure time and less adult supervision than they do during the school year. Consequently, they will choose many of their own meals and snacks. If these snacks are low in nutrition and fiber – and high in salt, sugar, and fats – they can contribute to the growing problem of childhood obesity.

For the second year, the Florida Department of Agriculture and Consumer Services conducted "Xtreme Cuisine Cooking School," teaching Florida students how to make their own healthy snacks using "Fresh from Florida" fruits and vegetables, whole grains, lean meats, and other nourishing recipe ingredients. Classes were held during April and May – traditionally the last months of the school year – at middle schools in Naples, Miami, Orlando and Tallahassee.

Students were taught how the Florida fruit and vegetables used in these recipes provide vitamins and minerals that can help prevent heart disease and other obesity-related illnesses. They also learned the dangers caused by excessive amounts of salt, sugar, and fats in their diet, how fiber could eliminate their desire for high-calorie, low-nutrition snack foods, and how many calories they need each day.

A sponsorship from the Florida Department of Citrus provided "Xtreme Cuisine" curriculum outlining nutrition basics. Each "Xtreme Cuisine" curriculum packet contained four original recipes with nutritional breakdowns. In addition, the "Fuel Up and Get Fit" healthy activity booklet allows students to compare calories burned through common sports and recreational activities and calories consumed by eating a variety of Florida-produced fruits and vegetables. It also provides mini-recipes for 16 different produce commodities with easy to understand nutritional facts. Students completing the cooking school received "Xtreme Cuisine" certificates attesting to their skill in the preparation of healthy snacks.

Cattle Trade Missions

The Department continues to attract international cattle buyers by conducting trade missions from Florida and hosting reverse trade missions into the state. Florida's beef cattle breeds are well suited to many areas of South and Central America because they show little or no effects from extremely high temperatures. These cattle are environmentally adapted to tropical and subtropical climates, making them highly desirable to cattlemen from countries with the similar climate conditions.

During fiscal year 2005-2006, the Division of Marketing and Development organized two beef cattle trade missions through the U.S. Livestock Genetics Export, Inc. (USLGE), a cooperator with the U.S. Department of Agriculture. These missions included trade missions to Costa Rica and Brazil, and a reverse mission to Florida.

In Costa Rica, representatives from the Department met with Corfoga, the Costa Rican Cattle Association. These

contacts provided invaluable opportunities to gain direct marketing knowledge and promote the Florida beef cattle industry.

During the reverse mission to Florida, participants from Ecuador, Honduras, Nicaragua, and Panama came to Florida to discuss potential business opportunities with cattlemen and research scientists, and to attend the Florida International Agribusiness Trade Conference in Ocala. Educating ranchers gives them the ability to plan, control and adopt management strategies to ensure that the Florida cattle they purchase will produce more beef more efficiently.

Additionally, the Department took a small delegation of cattlemen to Brazil as part of a multi-phase marketing program aimed to promote and increase sales of Florida cattle genetics. Brazil possesses large and well-developed agricultural sectors and its economy is expanding along with its presence in world markets, making the Brazilian cattle industry an excellent business prospect for Florida.

Thoroughbred Horse Missions

Florida horses have long been prized in North American racing circles for their superb quality. Florida is home to some 600 Thoroughbred farms and training centers, with more than 75 percent of these located in the Ocala/Marion County area. Florida Thoroughbred farms, training centers, breeding, and racing stock create an economic impact estimated at $1 billion annually.

Trade contacts initiated by the Florida Department of Agriculture and Consumer Services have produced more than $3 million in exports of Florida horses. More sales are expected as Florida marketing representatives continue to facilitate trade missions with foreign buyers. The Division of Marketing and Development sent an equine trade mission to Canada and conducted three reverse trade missions for Korean, Italian, Canadian and British buyers. These missions, which have seen combined sales totaling over $1 million, were co-hosted by the Florida Thoroughbred Breeders' and Owners' Association. The purpose of these missions is to enlighten or further educate foreign buyers on the quality and value of Florida's equine industry.

Reciprocal visits from contacts made during the Canadian mission are scheduled for August 2006 and April 2007 horse sales. Past mission attendees from Korea, Italy, Mexico and Britain are expected to return during those times.

Florida Agri-Journal

The Florida Agri-Journal is a monthly publication that reaches more than 8,000 Florida Agricultural Promotional Campaign members as well as members of numerous Florida associations, Florida livestock producers, Agriculture Committee members in the Florida House and Senate, and Florida State Farmers' Market tenants.

This publication provides producers with timely risk management tools including, but not limited to, production management, financial risk solutions, disease management practices, pest mitigation, bioterrorism protection techniques, marketing information, and crop insurance. The information contained in this publication enables Florida agricultural producers to make informed risk management decisions regarding their operations. Some data is directed to specific crop producers, while other data is broad-based and of value to any specialty crop producer in the state, including livestock and forage. The publication also includes special features, editorial illustrations, trade leads, events, retail trends, and international marketing data.

Seafood and Aquaculture Marketing

The Department's Bureau of Seafood and Aquaculture Marketing provides information to the Florida seafood and aquaculture industry to facilitate buying, selling and marketing Florida seafood and aquaculture products. The mission of the bureau is twofold: to market Florida products to consumers; and to assist the seafood and aquaculture industry to increase sales. The bureau has been serving the industry and consumers for over 30 years.

The bureau produces educational materials for consumers. It provides promotional materials, supplier directories, and training on handling and storage safety for retailers, foodservice professionals, wholesalers and processors. The bureau provides educational and technical support and training for fishermen, aquaculturists, retailers and foodservice professionals. It serves as a liaison for aquaculturists, commercial fishermen, government agencies and the consuming public by utilizing the expertise of industry advisory councils. The bureau provides public relations to the media on behalf of the seafood, aquaculture and marine life industries. It also provides marketing services, including electronic marketing programs identifying U.S. and international buying and selling operations. It assists and promotes Florida industry through the distribution of recipe brochures and educational materials to visitors at seafood festivals throughout the state and at industry trade events, domestically and abroad.

The Department is committed to serving seafood and aquaculture audiences with integrity and professionalism to increase the industry's sales and profits through global marketing and education. This year, seafood and aquaculture promotional materials, press releases and public service announcements were distributed. Activities of the Bureau of Aquaculture and Seafood Marketing generated 1.5 billion consumer impressions nationwide with a sales value of approximately $8 million. Chief among the audiences served by the Department are:

- Consumers seeking information to wisely purchase, prepare, serve and store seafood and aquaculture products. The Department reaches consumers by means of printed materials, news releases and public service announcements through television, radio, print media and appearances at regional seafood festivals.

- Producers (fishermen, processors and aquaculturists) needing technical, educational, marketing and promotional assistance, as well as safety, handling and storage information turn to the Department. Florida fishermen and processors took advantage of marketing and promotional opportunities to sell their products. The Department's marketing and promotional programs use the "Fresh from Florida" logo and are backed by a multilevel campaign creating consumer awareness and interest and fueling demand for Florida products.

"Florida Wild and Wonderful Shrimp" Campaign

As a result of bureau and industry efforts, the "Florida Wild and Wonderful Shrimp" incentive program expanded into a total of 13 supermarket chains in 26 states and the District of Columbia. A total of 2,645 stores partnered with the bureau in year three of the campaign to promote Florida wild-caught shrimp. In addition to Florida chains Publix and Albertson's, the campaign drew national and regional partners Kroger, Roundy's, Harris Teeter, Bi-Lo, Cub Foods, Heinen's, King Soopers, Schnucks, Fred Meyer, Farm Fresh, and Texas-based Central Market.

Data reported by supermarket chains that partnered in the incentive program:

Amount Purchased During Ad Period	774,750 lbs.
Number of Chains Participating	9
Number of Stores Participating	2,645

Geographic area covered in promotion:
Alabama, Alaska, Colorado, Delaware, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Kentucky, Maryland, Minnesota, Mississippi, Missouri, New Jersey, North Carolina, Ohio, Oregon, South Carolina, Tennessee, Texas, Virginia, Washington and Wisconsin.

Public Relations

The Bureau of Seafood and Aquaculture Marketing public relations team continued to focus on increasing the sale of Florida seafood with a variety of approaches including print, online and broadcast media coverage and event participation. These activities produced almost 7.9 million consumer impressions with an ad value of over $331,000.

Seasonal Seafood Advisory

To better serve Florida's retail, wholesale and restaurant seafood industry, the bureau has developed the Florida Seafood Season Advisory. This advisory is published and distributed monthly via email and highlights seasonal openings and closures of commercially harvested Florida seafood. In addition to the regular monthly distribution, special advisories are sent when updated information is received regarding a certain species, opening or closure.

Trade Events

The Bureau of Seafood and Aquaculture Marketing coordinated and hosted the Florida Pavilion at the International Boston Seafood Show, March 12-14, 2006, at the Boston Convention and Exposition Center in Boston. With more pavilion space than in previous years, Florida seafood and aquaculture companies were provided a high-profile, eye-catching way to present and promote their products. The companies participating included Leavins Seafood, Apalachicola; Wood's Fisheries, Port St. Joe; Cox's Wholesale Seafood, Tampa; Shaw's Southern Belle Frozen Foods, Jacksonville; Cuzzy's Special Sauce, Tallahassee; Incredible Fish, Miami; White Water Clams, Miami Lakes; All American Gator Products, Pembroke Park; and Gulf and South Atlantic Fisheries Foundation, Tampa.

Participating in this event allows Florida companies to promote the attributes of Florida seafood and aquaculture products, and gives them an opportunity to make new contacts and generate sales. Over 16,000 seafood and aquaculture buyers from around the world attended the show. Those buyers visiting the Florida Pavilion contributed to an estimated $7 million combined sales, a record for the participating companies within the Florida Pavilion.

Actual results reported by participating Florida companies were:

Sales Leads Collected	676
Show Sales	$7.4 million
Anticipated Future Sales	$11.4 million

The bureau worked with the Southern United States Trade Association to coordinate a Southern U.S. Seafood Pavilion at the European Seafood Exposition (ESE) in Brussels, Belgium. The six companies (three from Florida) who exhibited in this year's pavilion reported sales of $11.2 million as a result of this event. ESE, the largest seafood-only trade show in the world, provides companies with an excellent venue to make sales and develop new business relationships. The new exhibit – with its red and white walls, with bright blue overhead accents and large vertical company banners – proved to be quite eye-catching and stood out in a field of many exhibits.

Promoting Florida Seafood on Television

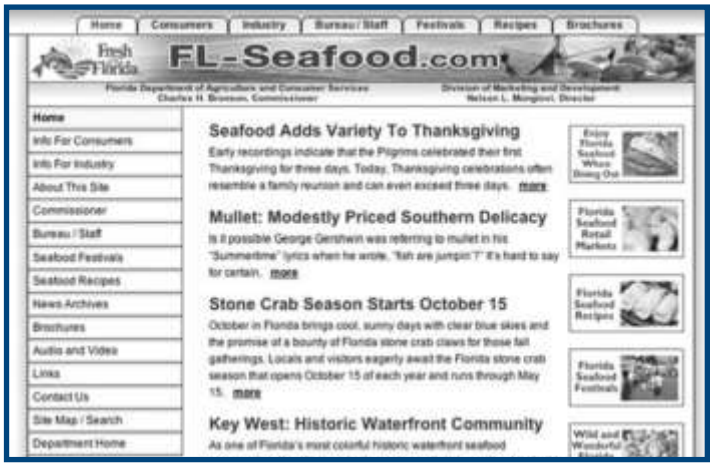
Florida seafood has been featured as part of a regularly scheduled culinary series on WCTV, a Tallahassee CBS affiliate, and WCJB a Gainesville ABC affiliate. Bureau staff prepared Florida wild-caught shrimp on many segments, demonstrating the many ways to prepare and serve Florida shrimp. In addition, Florida blue crab, spiny lobster, yellowfin tuna, pompano, farm-raised clams and grouper were all prepared on live television.

The recipes used in the segments verify the ease of cooking fresh Florida seafood at home. During the culinary features, bureau staff pointed out the many health benefits of eating fresh seafood to the viewers.

Promoting Florida Seafood on the World Wide Web

The bureau's two web sites – www.FL-Seafood.com and www.WildFloridaShrimp.com – provide consumers, Florida's seafood and aquaculture industry, retailers and the press with many downloadable seafood and aquaculture-related brochures, point-of-purchase materials, videos, audio files and press releases.

For consumers, the web sites features: Florida seafood recipes; nutritional information about seafood; information about 28 popular Florida seafood species; oyster safety information; calendar of Florida seafood festivals; tips for handling, storing and cooking seafood; a list of retailers and restaurants across the state that feature Florida seafood; history of Florida's coastal fishing communities; and a list of suppliers of finished alligator leather products. The web sites provide wholesalers and retailers with convenient on-line order forms for promotional materials, research and educational information on food safety and handling, trade leads, seafood advisories, and the "sEa-notes" newsletter.



Food Distribution

The Department administered or provided support through commodities and/or cash for a number of U.S. Department of Agriculture programs in Florida, including the National School Lunch Program, Summer Food Service Program, and the Emergency Food Assistance Program that provides commodities for distribution to the needy.

During fiscal year 2005-2006, approximately 200 agencies serving over 2,000 food pantries, soup kitchens, and other emergency feeding organizations throughout Florida, received over 75 million pounds of food valued at almost $55 million. As a result, approximately 3 million people were reached on a daily basis, making Florida's food distribution program the fourth-largest in the nation.

The Department is involved in the Food Recovery Program and other programs that endeavor to eliminate hunger and food insecurity in the state. This fiscal year, farmers donated nearly 11.4 million pounds of fresh produce for distribution to those in need. The Department produces the Food Recovery Resource Guide, which lists organizations involved in food recovery. The guide is available to the general public and to schools, restaurants, hotels, grocery stores, and other entities involved in the preparation of meals and/or the sale of food items.

WIC/Farmers' Market Nutritional Program

The Florida Department of Agriculture and Consumer Services and the Florida Department of Health jointly administer the WIC/Farmers' Market Nutrition Program. This U.S. Department of Agriculture program has two statutory objectives: to provide fresh produce to eligible women and children who are nutritionally at risk; and to help local farmers by expanding the awareness of, use of and sales at local farmers' markets. In 2005-2006, booklets totaling over $634,020 in $4 coupons were provided to over 31,700 eligible WIC clients in Alachua, Bay, Escambia, Gadsden, Holmes, Jackson, Leon, Okaloosa, St. Johns, Santa Rosa, Sumter, Suwannee, Union, Volusia, Wakulla, Walton and Washington counties. The Department entered into agreements with 183 farmers authorizing them to participate in the program. Participants can redeem the coupons for the purchase of locally grown fresh fruits and vegetables from authorized farmers at community farmers' markets.

WIC/FMNP is a very successful program that provides eligible WIC clients with fresh produce and participating farmers with new customers. As a result, both groups continue to enthusiastically support the program.

Emergency Response

As the lead agency for Emergency Support Function (ESF) 11, the Department is responsible for acquiring food, water and ice for disaster victims. In the event of a disaster, the Bureau of Food Distribution also provides USDA commodities to disaster relief organizations for the mass feeding of disaster victims. Water and ice are given out at various points of distribution throughout the affected area.

In response to Hurricanes Dennis, Katrina (in Florida and Mississippi), Rita and Wilma, the Department provided about 20,000 cases of USDA commodities and 27,338 cases of other commercial food items which were used towards more than 3,158,554 meals served to victims of the storms. The Department also provided 12,663,500 gallons of bottled water and 96,440,000 pounds of ice for distribution to people affected by these events. In addition, the Department provided 41,206 cases of baby formula and baby food and 6,054 cases of baby and adult diapers and wipes. Thirty Department employees contributed a total of 5,191 hours working at the Emergency Operations Center and supporting the Logistical Staging Areas in the aftermath of these storms.

Bureau of Education and Communication

The Bureau of Education and Communication is responsible for educating and informing consumers through news releases, brochures and other publications, exhibits and displays, graphics presentations, the Internet, broadcast, and other media. Bureau productions are integral to many projects that are part of the Florida Agricultural Promotional Campaign (FAPC), a program that assists the state's agricultural producers in expanding markets and promoting and selling Florida-grown products. In addition to its role within the Division of Marketing and Development, the bureau also produces numerous projects for other divisions throughout the Department.

During fiscal year 2005-2006, the bureau issued more than 206 press releases to inform the public about various regulatory and promotional activities of the Department. The bureau also responds to inquiries from the public and mails out publications upon request. More than 16,000 publications were mailed in response to over 1,900 individual requests received via mail, telephone, email and the Internet.

Florida Market Bulletin

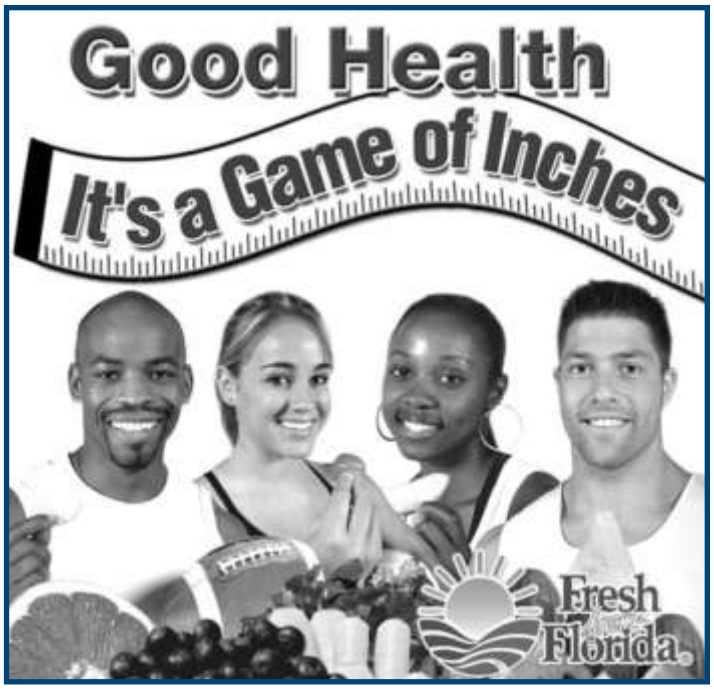
The Florida Market Bulletin is a primary vehicle for keeping Florida's farming community informed of issues affecting the state's agriculture industry and the Department. This agricultural newspaper has been published regularly by the Department since 1917, and is currently available in printed form and on the Internet. In addition to disseminating agricultural news and information, the monthly Florida Market Bulletin provides a forum by which Florida residents can advertise to buy or sell agriculture-related items through its classified advertising section. During the 2005-2006 fiscal year, 5,302 classified ads appeared in the Market Bulletin. Monthly circulation averaged 11,970.

Video and Radio

The bureau produces and disseminates audio and video productions such as television and radio public ser-

vice announcements, radio programming, agricultural producer assistance videos, informational/promotional videos, documentaries, and training videos. Major video projects produced during the fiscal year included:

- Television and radio spots promoting the Florida State Fair in Tampa. The spots were produced in conjunction with the Florida State Fair Authority.
- Television and radio public service announcements explaining the severe threat of wildfire due to the debris left behind by recent hurricanes and urging residents to clear property and burn safely.
- A television public service announcement warning residents of severe wildfire conditions and urging them to report suspected arson to the state's Arson Alert Hotline.
- Three public service announcements explaining the Department's wide-ranging consumer protection role and publicizing the statewide toll-free consumer help line.
- A television public service announcement outlining the Department's role in enforcing the state's Pet Law, which affords protection to consumers who purchase animals as pets.
- A television public service announcement, "Healthy Eating is a Game of Inches," that touts the benefits of eating fresh fruits and vegetables as part of an active and healthy lifestyle.

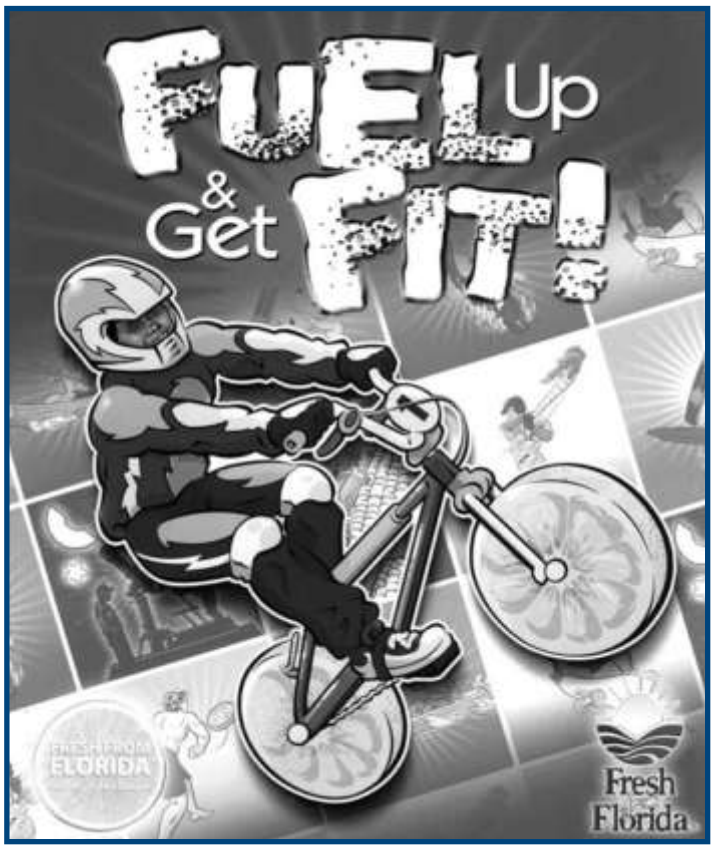


- A television public service announcement, produced in conjunction with the Suwannee River Partnership, publicizing the organization's efforts to protect and preserve the environmental and recreational aspects of the Suwannee River Basin while working in harmony with agriculture.
- Six 30-minute episodes of "The Florida Report" that explain the Department's agricultural support functions and highlight the practices of various farming operations around the state. Produced in conjunction with the Florida Farm Bureau, these reports aired on RFD-TV, a satellite network that primarily serves rural and farming communities.
- A television public service announcement explaining the Department's role of checking the accuracy of food products' nutritional labels and urging consumers to report suspected mislabeling.
- An informational video about the state's Citrus Canker Eradication Program.
- An informational/promotional video about the Future Farmers of America state officers.
- An informational video about Florida's "Woman of the Year in Agriculture," outlining the contributions to the state's agricultural community by the 2005 recipient, Marlene Strickland of Sarasota.
- An informational/promotional video that highlights the attributes of Florida seafood. This video was distributed to seafood markets and other retail outlets for use as a point-of-sale marketing tool to promote sales of Florida products.
- Five television spots and four radio spots, produced in conjunction with the Florida Propane Gas Safety, Education and Research Council, that promote the environmentally friendly aspects of propane gas as a residential energy source, the dependability of propane during natural disasters or other emergencies, and the many ways that propane can be used in farming.
- Three informational videos about the winners of the 2005 Commissioner's Agricultural-Environmental Leadership Awards, detailing the progressive environmental practices of: Kerry's Bromeliad Nursery, in Homestead; Larson Dairy, Inc., in Okeechobee; and Richard N. Raid, Ph.D., of Royal Palm Beach.
- A weekly agricultural radio news program produced in conjunction with Southeast AgNet.

Graphics

The bureau is responsible for the design, illustration and production of printed brochures, reports, booklets, posters, billboards, ads, and other marketing, promotional and educational materials pertaining to agricultural marketing programs and other activities of the Department. The bureau's graphics section was involved in the production of more than 350 projects during the fiscal year. Major graphics productions included:

- Commissioner's Agricultural-Environmental Leadership Awards program booklet.
- "Woman of the Year in Agriculture Award" program booklet.
- "2005 Florida Agriculture Statistical Directory," which provides comprehensive information and data on Florida agriculture including statistics, comparative performances of major commodity groups, and benchmark economic data.
- "Fuel Up and Get Fit," a brochure for kids that promotes an active lifestyle and healthy recipes made with fresh fruits and vegetables.



- A calendar promoting Florida wildflowers.
- Department Annual Report for fiscal year 2004-2005.
- A market research report on the six nations of the CAFTA-DR trade agreement that involves Costa Rica, the Dominican Republic, Honduras, El Salvador, Guatemala and Nicaragua. The study includes an examination of retailers and economic growth, along with other pertinent information that will provide insight into the region and assist with sales opportunities for Florida's agricultural industry. The study provides a broad spectrum of information for segments of Florida's agricultural industry to utilize as they expand sales into this region.
- Images and print components for the Division of Forestry's "One Million Acres" program, which marks the acquisition of a million acres of public lands for conservation and recreational purposes.

- Logo, brochure, ads and billboard for the Suwannee River Partnership.
- "Exceptional Living from the Exceptional Energy," a brochure promoting propane gas as an efficient, clean-burning, reliable and environmentally friendly residential fuel.
- Logo, folder, booklet and posters for the "Xtreme Cuisine Cooking School," which teaches children how to make healthy snacks with fresh fruits and vegetables.
- Billboard, magazine ads and web graphics for the "Healthy Eating is a Game of Inches" campaign that promotes an active lifestyle and consumption of fresh fruits and vegetables.

Web Development

The Bureau of Education and Communication designed and maintains the Division of Marketing and Development's two web sites, www.Florida Agriculture.com and www.FL-Seafood.com. During fiscal year 2005-2006, the sites received approximately 490,000 visits which yielded nearly 2.2 million page views.

The sites contain information and materials that help Florida farmers more effectively market their commodities. These marketing tools include trade leads, current market prices, information about the Florida Agricultural Promotional Campaign, agricultural statistics, license and bond requirements, agricultural classified ads, point-of-purchase marketing and promotional materials, and an extensive list of agricultural links for research purposes. The web sites also foster the notion that the more consumers know about the many agricultural commodities grown in Florida, the more they will choose to buy products that are "Fresh from Florida." The sites inform consumers about the wholesomeness, variety and availability of Florida agricultural products by providing: recipes for meals using Florida-grown ingredients; nutritional data; seasonal availability information; food handling and safety tips; and locations and contact information for Florida's community farmers' markets, U-pick farms, seafood markets, agricultural fairs and expositions, and wineries and vineyards.

The bureau develops and maintains other web sites in cooperation with agricultural organizations that have partnered with the Division of Marketing and Development to promote Florida agricultural products. These web sites include:

- Florida Wildflower Seed and Plant Growers Association Inc.: www.floridawildflowers.com
- Florida Wildflower Advisory Council: www.wildflowertag.com
- Florida Propane Safety, Education and Research Council: www.propanefl.com
- Food for Thought from Florida's Farmers, Florida Farm Bureau Federation: www.florida-farmers.com
- Plants at Work, Professional Landcare Network: www.plantsatwork.org

ENSURING A SAFE, WHOLESOME FOOD SUPPLY

The Department's experienced staff of public health professionals and laboratory scientists monitors approximately 45,000 food manufacturing/processing plants, retail food establishments and similar food businesses to ensure compliance with food wholesomeness and safety standards. The Department maintains a close working relationship with the U.S. Food and Drug Administration (FDA), the U.S. Department of Agriculture (USDA), the Florida Department of Health, the Florida Department of Business and Professional Regulation, and other agencies to share information, avoid duplication of effort, and carry out food safety activities effectively and efficiently.

The Department continues to emphasize proper sanitation and safe food handling practices in the establishments that it inspects, permits and regulates. It also provides consumer protection safeguards by checking the accuracy of product labels, net weight and grade standards. Laboratory analysis is performed to ensure the absence of food-borne pathogens or other contaminants. The Department continues to assist the food industry through training for the implementation of Hazard Analysis Critical Control Point (HACCP) programs. HACCP concentrates on preventing, eliminating or reducing food safety hazards to an acceptable level; these hazards may occur during any stage of the food production or handling process. Thus far, HACCP training efforts have concentrated on high-risk foods, including seafood, sushi, sprouts and juices that have not been through a pasteurization process and high-risk processes, such as acidification and reduced oxygen packaging.

One of the Department's major missions is to protect the public from unsafe foods by laboratory surveillance testing for food-borne pathogens, illegal additives or contaminants, misrepresented products and the presence of pesticides or other chemical residues for the enforcement of established tolerances. The Department is a leader in the development and implementation of sophisticated analytical techniques and methods to ensure the safety of foods throughout the production and distribution process. By administering the Interstate Milk Shippers Program and similar state regulations, the Department assures consumers that dairy products are wholesome and are produced, processed and merchandised under sanitary conditions. These programs also enable Florida dairy farmers to ship their products in interstate commerce.

The Department emphasizes the prevention of food-borne illness, and when any situation relating to food safety arises, the Department has the authority to immediately stop the use of improper equipment or to halt the sale of products deemed unsafe to the public. As the lead state agency for food safety, the Department has continued to make preparations in its laboratories and inspection force to respond to any terrorist attacks on the food supply. Inspectors have been trained as early responders, and the Food Safety Laboratories have key roles in laboratory response, both at the state and national level.

Bureau of Food and Meat Inspection

The Department has broad consumer protection responsibilities in the area of foods. It inspects, permits and regulates food manufacturing/processing plants, retail food establishments and similar food businesses in Florida to assure compliance with food wholesomeness and safety standards. There were 44,059 such businesses operating during the past year, including 2,740 water vending machines.

During fiscal year 2005-2006, a total of 77,715 inspections were conducted to determine compliance with sanitation standards or HACCP requirements. Other frequent activities by food inspectors included visits to establishments for complaint investigations, administrative purposes, sample collection, and enforcement actions such as placement or removal of stop-sale or stop-use orders.

As a result of this inspection activity, the Department cited 3,441 individual food businesses for failure to meet sanitation and food safety standards; 550 of those firms received administrative complaints and were assessed $751,132 in fines. In other actions resulting from surveillance inspections, 21,532 notices of violation, 21,807 stop-sale orders and 11,150 stop-use orders were issued.

The stop-sale orders were written on over 22.4 million pounds of food products with 19.2 million pounds of this food ordered for destruction as it was deemed unsafe or otherwise unfit to remain in the Florida marketplace. In addition to sanitation and food safety concerns, inspections also entailed a variety of other consumer protection safeguards. Food labels were reviewed for accuracy and compliance with federal and Florida requirements. Packaged foods were test-weighed to assure net weight accuracy. Ground beef was tested to ensure the amount of fat was correctly stated on the label and that poultry or pork products had not been added; it was also tested for the presence of fillers and sulfites. Shucked oysters were tested for mandatory expiration dating and added water. Eggs were examined to verify labeled grade and size. Other foods received similar safety and quality checks.

An important part of the food inspection program is response to consumer needs and concerns. During the fiscal year 2005-2006, over 61,000 telephone calls, 1,600 email messages and numerous faxes and letters were received from consumers and permitted firms. The inquiries asked a variety of questions about food and food handling practices, or expressed a concern about food establishment conditions. A total of 2,208 consumer complaints were investigated, and each person filing a complaint was advised of the findings.

The Department continues to work in close cooperation with FDA and USDA on food safety activities. Under contractual arrangement with the FDA, the Department inspected 420 interstate food manufacturers/processors. The Department and the FDA have also entered into partnerships in several program areas to avoid duplication, share information, and assist each other in carrying out food safety activities. The Department continued to provide egg and poultry grading and inspection service for 14 establishments under authority of a longstanding cooperative agreement with the USDA. A total of over 800 million pounds of poultry and eggs were graded or inspected in order to qualify for labeling under USDA standards. Many Department officials and inspectors are commissioned FDA officers, and others are licensed by the USDA.

The Department continues to emphasize the enforcement of Florida's statutory requirement that the country of origin of any fresh fruit or vegetable produced outside the United States be identified to food store customers. This identification can be accomplished through labeling of individual items or by signage at the display. During the fiscal year, 517 violations were identified and 179 administrative fines totaling $51,600 were collected from establishments that had violations.

The Department continued its surveillance of herbal dietary supplements containing harmful compounds. Ingestion of products containing ephedrine alkaloids (sometimes called ma huang, sida cordifolia, or pinellia) has been associated with several deaths, including at least one in Florida. On December 30, 2003, the FDA announced its intention to publish a final rule effectively banning the sale of dietary supplements containing ephedrine alkaloids. On January 7, 2004, following the announcement of the proposed ban by federal rule, Commissioner Bronson wrote a letter to Florida producers, distributors and merchants engaged in the manufacture, distribution and sale of ephedrine-containing dietary supplements. In the letter he announced the forthcoming ban and requested the industry voluntarily stop marketing these supplements immediately. Food safety inspectors visited 15,000 stores and requested voluntary removal of the product from the shelves. On February 11, 2004, the FDA published the final rule in the Federal Register declaring dietary supplements containing ephedrine alkaloids adulterated under the Federal Food, Drug and Cosmetic Act because they present an unreasonable risk of illness or injury. On April 14, 2004, Commissioner Bronson announced the stop-sale of ephedra products. On July 26, 2004, a final rule was published in the Florida Administrative Code declaring dietary supplements containing ephedrine to be adulterated under provisions of Chapter 500.10, F.S. With the federal and state ban in effect, Division of Food Safety inspectors continue surveillance for these banned products and issue stop-sale orders for ephedrine-bearing dietary supplements when found.

The popularity of diet plans based on low carbohydrate

intake continues in this country. The Department has conducted laboratory surveillance of nutrient claims for many years, but now is also focusing on specific nutritional claims such as "low carbohydrate," "reduced carbohydrate," "low fat," "low sugar," "no sugar," "low salt," "fat free," and other nutritional claims to ensure that these products are accurately represented to the consuming public. Legislation introduced in 2002 set forth specific schedules for responses to nutrient claims violations, and the Department has rigorously adhered to that schedule. Requirements related to such claims are determined by the FDA and adopted by the state. The result of the Department's actions on this issue has had national impact as many food processors have changed their label or their formulation to comply with labeling requirements. In addition, products have been voluntarily removed from the Florida market for failure to comply with accurate nutritional labeling criteria.

During fiscal year 2005-2006, the Department tested 572 samples for nutritional label claims, resulting in 147 notice-of-violation letters, 42 defect action letters and six notice-of-warning letters issued for nutritional labeling violations. Appropriate fines were assessed for non-compliance with the law. The Department issued notice-of-violation letters, adverse findings letters, and defect action level letters when necessary to assure compliance with the law. The letters covered such issues as excess fat in ground beef; undeclared allergens; high bacterial plate counts in various ready-to-eat (RTE) foods such as sandwiches, salads, cheese, sprouts, sushi and produce; species adulteration; and general labeling deficiencies.

The Department initiated administrative actions against 386 food establishments that did not pay the required renewal fee for a Food Establishment Permit and collected $287,884 in administrative fines, fees for late payment, and delinquent permits and fees. These establishments were open for business, had been inspected and were in violation because they were operating without a permit. Permit renewal is required annually under Florida law.

Hazard Analysis Critical Control Point (HACCP)

The Department continues to be actively involved in the ongoing training and implementation of Hazard Analysis Critical Control Point (HACCP) programs in the food industry. HACCP is an internationally recognized, science-based, systematic, preventive, process control program to assure the production of safe food. It complements existing sanitation and good manufacturing practices programs. The program concentrates on preventing, eliminating or reducing hazards which may occur during any stage of the food production or handling process. Since December 1997, federal and state food rules have required seafood processors to evaluate their food handling processes and to develop and follow an HACCP plan if there was a critical control point in the process. During the 2005-2006 fiscal year, 648 verification HACCP inspections were conducted for the bureau's various HACCP programs. The HACCP verification inspections included high risk products such as seafood, sprouts, fresh juice and sushi. The Department's HACCP unit continues to coordinate with industry and other agencies to provide training, assistance and information.

Several firms in Florida grow fresh sprouts for shipment to retail outlets such as grocery stores and supermarkets. The Department has required sprout growers to institute and use an HACCP plan to control the hazards in the growth of these potentially hazardous foods. In 2001, FDA published regulations which require fresh juice processors to apply HACCP principles in the production of juice for beverage use. During the 2005-2006 fiscal year, the Department conducted 56 HACCP inspections of fresh-squeezed juice manufacturing firms. The Department continues to provide training and technical assistance to the state's small citrus juice processors. HACCP personnel continue to be involved with industry, academia and regulatory agencies to provide training support and expertise as HACCP principles are applied in other food industries such as fresh citrus juice processing, sprout growers, shell eggs and retail establishments.

Other Programs

The Department maintains an active role in managing food safety issues, including providing assistance to state and local health agencies in the investigation of food-borne illness; coordinating the collection of samples to monitor potentially unsafe foods; responding to consumer requests; providing educational materials; conducting informal hearings on administrative complaints; and interpreting rules to maintain an overall food safety program that addresses both local and national concerns.

The Bureau of Food and Meat Inspection continues an active intra-agency partnership with the Office of Agricultural Law Enforcement's Agricultural Interdiction Stations. The 24-hour, seven-day-a-week communications systems between the two entities continue to provide increased surveillance of food products entering and leaving the state. Through coordinated activities, thousands of pounds of potentially unsafe food have been destroyed and prevented from entering Florida's food chain, or the vehicles have been sealed and sent back to their state of origin. Communications have been established with the regulatory authorities in other states regarding the return of these sealed delivery trucks. Coordination with comparative agencies in neighboring states has allowed their food safety professionals to meet the truck and supervise the destruction of the products as well as take appropriate regulatory action against the firm. Cooperation between the Division of Food Safety and Agricultural Law Enforcement has resulted in enhancement of the safety of food through continuous monitoring and rapid response to problems associated with the transportation of foods throughout the farm-to-table food continuum at every road portal into the state.

During the 2003 Legislative Session, the Florida Food Safety and Food Security Advisory Council was created to serve as a forum for presenting, investigating and evaluating issues of current importance to the assurance of a safe and secure food supply to the citizens of Florida. The Department continues to host this council, which brings together diverse partners to address common food safety and food defense issues of concern in Florida. The legislature recently changed the name of the Council to the Florida Food Safety and Food Defense Advisory Council to be consistent with current Homeland Security nomenclature.

Meat, poultry, eggs, juice, dairy and other food commodities are susceptible to contamination from a wide variety of physical, microbial, chemical and radiological agents in transportation. The Florida Food Safety and Food Security Advisory Council created a workgroup to address the issue of transportation in the food industry with a particular focus on tanker trucks. The workgroup was specifically charged with analyzing the industry's current cleaning regiments and security issues. The workgroup reported back to the Advisory Council in the fall of 2004. The recommendations from the Transportation Working Group were accepted and have become the standard guidance for the Food Transportation Industry in Florida.

The Department provides Certificates of Free Sale and food manufacturing documents for food products that are used for human consumption and exported to other countries. Businesses receiving such documents must be permitted by the Department and have a current satisfactory sanitation rating. In fiscal year 2005-2006, the Department processed and issued over 5,500 Certificates of Free Sale. One hundred and twenty-seven firms received service this fiscal year for shipment of U.S.-origin food products to some 28 different countries.

The Department oversees bottled water plants, bulk water vendors and self-vending water machines. The Department coordinates with other agencies to ensure all drinking water processed in Florida continues to meet the federal and state Safe Drinking Water Acts. The Department is working closely with sister agencies to clarify water source requirements and assure that all areas of the process will be adequately protected. When a bottled water product is labeled as "spring water," its source must meet a geological definition of a spring. The Department reviews labeling of water products to make sure they are accurate and are not misrepresented. The agencies are working in concert to detail specific information for dissemination to potential operators so they know from the outset what is involved, from obtaining a permit to drill a well to the finished, safe, properly labeled, consumable product. The Department also works closely with the Bottled Water Association on an international level as bottled water is imported from various countries and the imported water must meet all applicable drinking water standards.

There are over 2,740 self-vending water machines at convenient locations throughout the state. They offer

another source of safe and convenient drinking water to Florida's residents and visitors. The Department uniquely identifies and tracks each machine to make sure it is properly inspected and sampled at established intervals.

Self-vending ice units are a new addition to the food industry in Florida. These units are self-contained modular buildings that produce, store, bag and vend ice to consumers. The Department has been actively involved in evaluating the design, construction and sanitation procedures to confirm compliance of the units with all sanitation code requirements.

Hurricane recovery efforts were a major focus of the Department's priority work in fiscal year 2005-2006. The Department planned and carried out a well-organized response to the emergencies created in food safety as a result of three major hurricanes (Dennis, Katrina and Wilma). Working closely with federal, state, local and industry partners, it should be noted that there were no reported food-borne illnesses during the three major hurricane events. The work accomplished during recovery efforts by the Department included over 9,700 firms visited. The effort of the emergency inspections teams resulted in over an estimated 15.3 million pounds of potentially harmful food being destroyed and removed from the marketplace, either through regulatory or voluntary actions. Hurricane relief efforts involved the entire Bureau of Food and Meat Inspection.

Marketplace survey food samples are taken as a matter of routine during the inspection process or if violation of state or federal standards is suspected. In fiscal year 2005-2006, field inspection staff collected over 5,710 samples for laboratory testing and analysis. These samples were sent to the Department's Tallahassee Food Laboratories for analysis. Florida has some of the most stringent and far-reaching food safety laws in the nation. The Department has broad powers for enforcing food protection laws. Regulatory action is often taken on the laboratory results from the survey samples. The Department has initiated nationwide and statewide recalls of food products in conjunction with the Food and Drug Administration. These recalls are based on laboratory results that confirm that food samples were adulterated, contaminated, held under unsanitary conditions, temperature abused, or mislabeled. The marketplace survey sample program is just one more level of consumer protection that the Department offers to Floridians.

Farm-raised fish production has increased to an unprecedented level while limits are placed on wild-caught fish in order to avoid depleting the resource. The farm-raised fish are quite inexpensive when compared to fish such as grouper or snapper, but the fillets are similar in appearance. This price differential creates a potential for large-scale misbranding of seafood. Advances in technology have enabled the Department to confirm the true identity of some of these seafood items. Testing of imported grouper and snapper for confirmation of species has disclosed a significant percentage of misbranded lots. With the help of sister state and federal agencies, other states, academia and industry, the Department continues to develop tests and procedures to ensure that the consuming public receives wholesome, safe and properly identified seafood. When misbranding is verified, the product is removed from the marketplace.

One of the major goals of the bureau's testing and inspection programs is to discover and remove food products from the marketplace due to contamination with pathogenic organisms to prevent potential food-borne illness outbreaks. The bureau had an inspection team win a 2006 Davis Productivity Award for actions taken. The 15-member team potentially prevented multiple cases of food-borne illnesses by removing products from the national marketplace that were contaminated with the human pathogen *Listeria monocytogenes*. Their work resulted in 26,000 pounds of product being recalled nationally over a seven-month period, preventing losses due to illnesses in consumers. The Economic Research Service of the United States Department of Agriculture estimates that the productivity loss from one premature death (stillborn child) from one case of *Listeria monocytogenes* could cost over $1 million in economic loss.

In conjunction with the USDA, the Department periodically conducts inspections for food products illegally imported for sale. Products found include: illegal invasive plants; plants and animals from prohibited disease- and/or pest-infested areas; and meats from foot-and-mouth disease, hog cholera, and bovine spongiform encephalopathy (mad cow disease) areas.

Bureau of Chemical Residue Laboratories

One of the Department's major missions is to protect the public by monitoring fruits, vegetables and other foods for the presence of unsafe residues of pesticides or other chemicals such as antibiotics and the enforcement of authorized tolerances. The Bureau of Chemical Residue Laboratories analyzes food items for the presence of potential chemical contaminants.

Food samples are collected from farms, packinghouses, processing facilities, and in the distribution chain. All foods grown in Florida, and those brought into the state to be offered for sale, are subject to unannounced collection and analytical testing to assure adherence to the standards for allowable levels of pesticide or other chemicals, freedom from contamination or illegally used chemicals, and proper representation in labeling. The Department also provides pesticide residue data to federal agencies for use in making dietary risk assessments and for other purposes. During fiscal year 2005-2006, the Department's laboratories conducted some 328,666 different determinations for residues of specifically targeted pesticides and other chemicals on 2,711 food product samples.

Pesticide Residues

The primary focus of the Chemical Residue program is the analysis of pesticide residues in fresh fruits and vegetables. The Department's regulatory program is one of the most comprehensive monitoring and enforcement programs in the nation and provides the residents of Florida with valuable information concerning the safety of the food supply. In addition to assuring the proper use of pesticides by Florida growers, a thorough testing program enhances the status of Florida-grown produce in nationwide and international markets.

Florida is an important producer of fresh fruits and vegetables for the nation. Samples are selected for regulatory surveillance based on several factors. An emphasis is put on Florida-grown commodities. Statistics on Florida-grown produce, as well as national consumption patterns and previous history of pesticide residue findings, are used to develop sampling plans that will target products most likely to contain illegal residues.

During the past year, the Department conducted surveys of tomato, watermelon, potato, corn and strawberry growers early in the growing seasons in order to assure proper pesticide use. In support of Florida-grown citrus, 83 samples were analyzed, including 45 oranges, 24 grapefruit, eight tangerines and six tangelos. Grapefruit are exported to Japan and growers must meet strict pesticide regulations. Data provided by the Department can help provide assurance of the safety of Florida produce and aid its acceptance into foreign markets.

During fiscal year 2005-2006, the Chemical Residue Laboratories analyzed 1,490 samples in its regulatory surveillance monitoring program and 1,221 additional samples of pears, grapes, green beans and watermelon under contract with the USDA. The regulatory samples included 1,421 fresh fruit and vegetable samples which were tested for pesticides to assure compliance with federal pesticide residue tolerances. In addition, 59 honey samples and 10 fish samples were tested for illegally used antibiotics. Products sampled in the regulatory program were grown in Florida (695, or 46.6 percent) or other parts of the United States (484, or 32.5 percent), or were imported foods from 25 different countries destined for Florida markets (311, or 20.9 percent).

Pesticide residue violations in fresh fruits and vegetables led to 27 incidents of food adulteration in fiscal year 2005-2006. An additional seven violations for antibiotic adulteration of honey were also issued. Whenever possible, field personnel traced back product to its origin and took additional samples. Of the fresh fruits and vegetables analyzed in this regulatory surveillance program, 1.9 percent exceeded established tolerance levels or contained pesticides not approved for use on a commodity. However, in imported produce tested, 3.9 percent (12 of 311) was identified with illegal residues, while in U.S. produce only 1.3 percent (15 of 1,179) was in

violation. By agreement with the FDA, Florida's pesticide surveillance focus is on domestic products while the FDA targets imports. A strong FDA partnership with Florida provides information and resources needed to prevent violative product from being distributed.

More than 170 pesticides are screened in the regulatory program, representing a 20 percent increase from the previous fiscal year. Pesticides of particular interest in Florida crops or new registrations are routinely added to the screen. The Department continues to support Florida's citrus industry by continually expanding their pesticide analysis screen to include agrichemicals with special use exemptions as well as those of particular interest for citrus export. The Department also focused on enforcement of pesticide crisis exemptions which were granted to Florida growers. Of the active ingredients with exemptions, all of the fruit and vegetable exemptions are monitored, including myclobutanil in legumes, fenbuconazole in grapefruit, and thiophanate methyl in tomatoes and citrus. Additional special surveys to monitor crisis exemptions for other commodities/pesticide combinations (such as coumaphos in honey) will be continued.

The Department continues to be active in the USDA Pesticide Data Program (PDP), an internationally recognized program that focuses on providing comprehensive data on pesticides for the purpose of risk assessment. An additional 1,221 samples of fresh pears, grapes and watermelons, and frozen green beans were analyzed as a part of this program, which targets very low part-per-billion levels of pesticides in commodities most frequently consumed by infants and children. Samples include both domestic and imported products. Commodities and sampling sites are chosen to statistically represent the product available for consumption throughout the United States.

Antibiotic Residues

In the fall of 2005, the fluoroquinolone antibiotics ciprofloxacin and enrofloxacin were detected in imported fish. Analyses of fish collected by Florida and analyzed by the FDA confirmed the presence of fluoroquinolones. Florida-detained and violative product was voluntarily destroyed as a result of this cooperative effort. The Chemical Residue laboratory has developed fluoroquinolone analysis capabilities and continues surveillance, analyzing an additional 10 samples this year. Early in 2006, fluoroquinolones were also reported in imported honey. In response, the Chemical Residue Laboratory developed a method for ciprofloxacin and enrofloxacin and has completed analyses on 59 samples to date. Violative findings in 12 percent of the honey samples (seven of 59, or 12 percent) have led to warnings and import alerts by FDA.

Bureau of Food Laboratories

The Bureau of Food Laboratories uses chemical, microbiological, molecular and physical methods to analyze foods processed or sold in Florida. These analyses help to ensure a safe and wholesome food supply by verifying the absence of adulterants, especially microbial food pathogens and food allergens, by verifying conformance with standards of safety and quality, and by ensuring accurate representation in labeling and nutritional claims. Emphasis is placed on current and emerging food safety issues, such as microbiological contamination, unapproved food components, filth, chemical and heavy-metal contaminants, new food and food packaging technology, dietary supplements and other label and nutritional claims, and natural toxicants. The Bureau of Food Laboratories is also a national leader in preparations to respond in the event of a terrorist incident or emergency event involving the food supply.

Testing of food products using molecular methods, especially nucleic acid analyses based on the polymerase chain reaction (PCR), continued expansion during the year and now includes testing for *Escherichia coli* O157:H7, Shigella and Salmonella. Molecular methods for analysis of Hepatitis A in green onions, cyclospora in produce, noroviruses, and *Vibrio parahaemolyticus* and *Vibrio cholerae* in shellfish are undergoing development or

validation. Testing for specific toxin genes in *E. coli* was continued for the USDA Microbiological Data Program (MDP).

DNA fingerprinting, or pulsed field gel electrophoresis (PFGE), is being performed by the Food Laboratories for quality assurance, as well as for typing when specific organisms such as *Listeria monocytogenes* or Salmonella are recovered from a food product. The patterns produced by the PFGE are submitted for inclusion in the PulseNet national database. This data can then be used by epidemiologists in search of the causative agent for outbreaks. The staff is certified in PFGE by the Centers for Disease Control and Prevention.

Food Analyses

During fiscal year 2005-2006, the Department performed 42,538 analyses on 8,319 samples. The majority of samples (5,710) were received under Division of Food Safety or other Department regulatory inspection programs. In addition, significant numbers of samples (1,542) were received from the joint state and USDA Microbiological Data Program, and 1, 067 were other special samples. Out of 5,710 regulatory samples, 5,244 samples, representing 91.84 percent of state program samples, were found to be in compliance with all applicable food safety requirements. A summary of regulatory pathogen analyses results is shown below:

Summary of Regulatory Pathogen Analyses	
Organism	**Adulterated Samples**
Listeria spp.	84 of 2,212
Salmonella	0 of 1,031
E. coli (generic)	26 of 1,821
E. coli O157:H7	0 of 374
Staphylococcus aureus	1 of 1,583

Food safety issues remain a major emphasis of the analytical program. With the continued identification of food-borne illness outbreaks, increased monitoring for pathogens in ready-to-eat food is necessary. Microbiological pathogen analyses focused on Salmonella, *Listeria monocytogenes*, *Staphylococcus aureus*, *E. coli* O157:H7 and generic *E. coli*. Targeted products for these analyses included ready-to-eat produce, processed meats, fresh cut vegetables, sprouts, prepared salads, ground beef, cheese, smoked fish, spices and sandwiches. As a result of past outbreaks, the Department continues to monitor fresh citrus juices. Additionally, analyses of bottled and vended water and ice for adulteration by either microbiological or chemical contaminants represented a significant component of state surveillance programs.

Summary of Water/Ice Analyses (Microbiological)	
Sample type	**Adulterated/Misbranded**
Vended Water	22 of 743
Bottled Water	5 of 175
Ice	32 of 134
Total Water/Ice	**59 of 1,052**

In its sixth year, the USDA Microbiological Data Program, which is designed to determine the frequency that potential pathogens are detected in fresh produce, required Florida, California, Colorado, Michigan, New York, Ohio, Texas, Washington State and Wisconsin to systematically monitor fresh produce commodities for Salmonella and generic *E. coli*. A total of 1,542 samples were analyzed by the Department. Commodities tested included leaf and romaine lettuce, domestic and imported tomatoes, cantaloupe, cilantro, green onions and parsley. In January 2006, cilantro and parsley were replaced by sprouts. The sampling plans and findings of the collective participating laboratories provided an accurate representation of national exposure to the selected pathogens. Further expansion of this program, both in types of organisms (for example, adding testing for Shigella) and commodities tested is expected. During this fiscal year, the MDP program was expanded to include analyses for *E. coli* O157:H7. A project to test for toxigenic *E. coli* other than *E. coli* 0157:H7 continued in this year for the MDP program using a multiplex PCR test.

In August 2002, the Bureau of Food Laboratories was certified by the FDA for microbiological testing of shellfish in support of the National Shellfish Sanitation Program (NSSP). The laboratories are due for reinspection in spring of 2006, and are maintaining competency for this certification.

Other areas of public health and consumer protection emphasis include monitoring juices, honey, syrups and vanilla for fraudulent formulations or adulteration; ground meats for fat claims and species identification; lead in candy; and artificial colors in candy, sodas and bakery products. Bakery products are also monitored for insect filth and rodent contamination, as well as

nutritional claims. Dietary supplements continue to be monitored for the presence of ephedra alkaloids. Unsafe or misrepresented products are removed from sale by the Bureau of Food and Meat Inspection.

Florida's fresh seafood is monitored by the Department in response to concerns regarding species identification, decomposition (histamine in scromboid species and indole in shrimp) and safe levels of mercury. Fish tested by the Department include tuna, grouper, mahi-mahi, red snapper, salmon, swordfish, mackerel, blue marlin, amberjack and catfish. A DNA sequencing method for authentication is being validated for use beginning in 2006-2007.

The Department continues its extensive surveillance of products making nutritional claims such as "low carbohydrate" and "fat free." Products making "sugar free" claims have been under particular scrutiny due to their potential impact on diabetics and other consumers. Monitoring of undeclared food allergens continues with particular focus on milk, egg and peanut allergens. With the passing of the Federal Food Allergen Labeling and Consumer Protection Act, the Department continues to ensure appropriate and understandable food allergen labeling. Also, effective this year is the requirement for trans-fat labeling. The Department has extensively surveyed the market for accuracy in trans-fat declarations, as well as correctness in labeling.

A norovirus detection method for oysters developed in-house using an FTA filter was modified to detect Hepatitis A on green onions, the cause of a recent large outbreak, and cyclospora analysis is being evaluated. The Molecular Laboratory also modified and tested food sample preparation methods for the Food Emergency Response Network (FERN) protocols for real-time PCR and conventional PCR detection for certain pathogens on food samples.

ISO 17025 Accreditation

The division's Food Safety Laboratories made significant progress toward the goal of ISO 17025 accreditation. Accreditation to this international standard is increasingly recognized as the primary standard for assessing the quality of test laboratories. The bureaus have commenced final preparation for an ISO 17025 audit. A quality manual has been completed, and extensive efforts have been made in the areas of document control, written procedures and training documentation.

National Databases

Both the Food Laboratories and the Chemical Residue Laboratories continue to provide data to the FDA-supported eLEXNET national data system, which allows real-time exchange of information concerning potential or suspected food supply problems. Staff members use eLEXNET for Food Emergency Response Network (FERN) projects.

The Chemical Residue Laboratories has submitted data to the eLEXNET national repository of food sample analyses. Data will be exported directly from the laboratories database to the eLEXNET system. An application was also developed which provides direct export of data collected for the Pesticide Data Program from the laboratories database to the PDP Oracle database in Washington, D.C.

Education and Training

Educational opportunities for laboratory personnel were emphasized in order to remain on the leading edge of science and technology. In July 2005, the Department hosted the 42nd Annual Florida Pesticide Residue Workshop (FPRW) along with the 7th Food-borne Pathogen Analysis Conference. Both conferences are highly regarded for their excellent content and speakers; they allow Department chemists and microbiologists to share the latest developments in technology with experts from other agencies and nations. The FPRW was attended by over 120 scientists and included representatives from six foreign countries. In addition, Department scientists have been active on several national committees and attended and hosted training workshops in order to update knowledge in the areas of analytical chemistry, microbiology, and new technologies. Training of two analysts from the Department of Health occurred at the division's facility; two of the division's staff members were trained at the Department of Health's Bureau of Laboratories in Tampa. Staff members, in addition, participated as trainers for national training programs for FERN.

Protecting Citizens in the Event of Food Terrorism

Food Security/First Responder Training

Recognizing the ongoing public concern about terrorist

actions against the food supply, the Department conducted a two-day training course for all food inspection field and headquarter personnel (three sessions statewide) to sharpen response skills. The Department's Office of Bio and Food Security Preparedness and Division of Food Safety, along with law enforcement agencies, collaborated to develop the course. The training focused on food security in food processing plants, warehouses and retail outlets. It also included incident command training, digital photography for evidence gathering, chain of custody food sampling techniques, general evidence gathering and crime scene security, and personal security.

Responding to Food Terrorism

The Food and Chemical Residue Laboratories continued their initiative to enhance capability to respond to a counter-terrorism incident involving the food supply. Accomplishments in this domestic/food security initiative include maintaining strong partnerships with other state and federal agencies – including the Florida Department of Health, FDA, USDA and Centers for Disease Control and Prevention (CDC) – operation of an active Biosafety Level-3 laboratory, the acquisition and use of sophisticated analytical equipment, and substantial ongoing training of staff in procedures for processing and analyzing samples suspected of containing terrorist threat agents. Staff attended training at the regional FDA and USDA laboratories, at workshops, via teleconferences, and at the Food Laboratories. Additionally, bureau staff gave lectures and presentations on issues in domestic/food security at conferences throughout Florida. Food Laboratories staff have been instructors at FERN workshops on real-time PCR as well as microbiological analysis for potential threat agents.

The Food Laboratories have undergone inspections by the FDA, CDC and USDA regarding its capability to safely handle and provide security of highly dangerous select agents and toxic chemicals, and the laboratories have satisfied all requirements. This has allowed the Department to be one of the few state agricultural departments to have a food laboratory as a member of the national Laboratory Response Network (LRN) for public health protection.

Renovations of existing laboratory space were completed in the Chemical Residue and Food Laboratories to provide space for safe and secure preparation and analysis of foods for presence of hazardous chemical agents. The renovated space includes chemical fume hoods and associated equipment for sample preparation and extraction as well as space for additional instrumentation.

Both the Food Laboratories and the Chemical Residue Laboratories are active members of the Food Emergency Response Network (FERN). FERN was formed to respond specifically to the threat of terrorism in foods. In addition to biological capabilities, the laboratories have expanded counter-terrorism capabilities to include testing foods for chemical agents. Verification of FERN methods and protocols to be used in the event of national food emergencies are being performed by both the Food Laboratories and the Chemical Residue Laboratories, both having obtained cooperative agreements from FERN for these activities. Funds and instrumentation received under the cooperative agreements have enabled the laboratories to develop complex microbiology and molecular analysis, as well as toxin screening techniques utilizing gas, liquid, and inductively coupled mass spectrophotometry. FERN methods have been developed and validated in several high-risk commodities. Instrument and method training for analysts as well as participation in FERN surveillance exercises and proficiency check samples has significantly improved the laboratories' ability to detect agents of concern in complicated food matrices. The collaborative contributions of these two state food laboratories to national food security exercises are making Florida a national leader in food safety and security. The laboratories have participated in FDA or FERN counter-terrorism surveillance exercises and several FERN and LRN proficiencies since July 2005.

Division of Dairy Industry

The Department's Division of Dairy Industry ensures that dairy products purchased by Florida consumers are wholesome, produced under sanitary conditions, and correctly labeled. The division regulates the production, transporting, processing, distribution, and labeling of milk and milk products. It establishes standards for these products, whether they originate in Florida or other states.

The division issues permits and conducts inspections for Florida dairy facilities. As of June 30, 2006, these facilities included:

161 dairy farms
19 milk processing plants
71 frozen dessert manufacturers
17 single-service milk container manufacturers
39 milk distribution depots
9 milk receiving, transfer, and wash stations
20 milk hauling services

In addition to its inspection program, the division collects and tests samples from dairy farms and processing plants for compliance with established product quality standards. These samples are collected by field inspectors and tested in a division laboratory for excessive bacteria and somatic cells and for the presence of antibiotics, added water, and other impurities.

The programs administered by the Division of Dairy Industry are part of a uniform national dairy sanitation program outlined in the Pasteurized Milk Ordinance (PMO) published by the U.S. Food and Drug Administration (FDA). Likewise, most of the dairy product quality standards enforced by the division are part of the PMO or the Code of Federal Regulations. As in all states, both the PMO and the relevant sections of the Code of Federal Regulation have been adopted in state statute or rule.

The fact that all states have adopted uniform regulations makes it possible to ship dairy products from state to state with a minimum amount of interstate regulatory interference. The interstate shipment of dairy products is coordinated through the Interstate Milk Shippers Conference (IMS), an organization that includes representation from FDA, the dairy producing and processing industry, and all state dairy regulatory agencies.

An IMS rating officer routinely performs surveys for the purpose of determining compliance with the PMO. In addition, the FDA will conduct periodic check ratings to determine if both the industry and state regulatory agency are in compliance with the requirements in the PMO. A state that fails its FDA inspection can be denied the right to ship Grade A milk across state lines. During fiscal year 2005-2006, IMS rating officers performed 11 plant surveys, 13 single-service containers manufacturer audits, and four farm group surveys involving 23 dairy farm inspections. FDA conducted three plant check ratings, one single-service container manufacturer audit, and farm group check rating involving 13 farms.

The Florida Dairy Industry

Florida dairy farms are large, milking an average of about 850 cows each. In spite of the hot, humid climate, these cows average about 16,577 pounds of milk per year or about 5 gallons per day per cow. Even though the state's 137,000 dairy cows rank it first in the Southeast and 16th nationally, Florida still imports approximately 25 percent of its milk – and the proportion of imported milk is growing. Florida's 16 Grade A milk processors include four Dean Food plants, two Publix plants, one Winn-Dixie plant, and two plants owned by National Dairy Holdings Group, LP.

Dairy Inspections

The division's 11 field inspectors are stationed from Miami to Pensacola. They make regular visits to dairy farms and processing plants to inspect, consult, and collect samples. During the past year, dairy inspectors performed 1,574 inspections at dairy farms and plants in Florida. They also collected 11,572 samples of milk and milk products. They made 1,617 inspections of milk transport tankers and bulk milk haulers.

Monitoring Antibiotics in Milk

The industry has established a rigorous program to monitor milk for contamination with residues of antibiotics commonly used to treat cows on dairy farms. During this fiscal year, 61,494 transport tankers representing more that 2.9 billion pounds of milk were checked for antibiotics in Florida. Only 13 (1 in 4,730) of these tankers, were found to contain traces of antibiotics. All 13 loads were dumped. Nationally, about 1 in 2,043 tankers of milk are found to have antibiotic contamination. Florida dairymen do an exceptional job of preventing antibiotic residues in their milk.

Aquaculture

The Division of Aquaculture was created in 1999 by the Florida Legislature and is responsible for six programs: aquaculture certification; aquaculture leasing of sovereignty submerged land; shellfish resources development; shellfish processing plant certification; shellfish harvesting area management; and technical support. Florida's aquaculture industry is one of the leading producers in the nation with $75 million in farm gate value during the 2005 production year.

Aquaculture Certification Program

Chapter 597, F.S., established the Aquaculture Certificate of Registration to recognize aqua-farming businesses. Aquacultural businesses in Florida are required to be certified annually and to attest that they will comply with the Best Management Practices provided in Chapter 5L-3, Florida Administrative Code. The Aquaculture Certificate of Registration is used to identify aquaculture producers as members of Florida's agricultural community and to identify aquacultural products produced in the state. Site inspections are conducted at aquaculture facilities to ensure compliance.

The Department certified 964 aquaculture facilities during fiscal year 2005-2006. Forty-eight percent of certified farms produce shellfish, 26 percent produce ornamental fish and plants, 19 percent produce food fish, and the remaining 7 percent produce live rock, alligators and bait. Certified farms are found in 59 of the state's 67 counties, with the highest number of certified farms (20 percent) occurring in Levy County. Hillsborough County is next with 10 percent, followed by Dixie and Lee counties with 6 percent each.

Sovereignty Submerged Lands Leasing Program

The Department is responsible for the Aquaculture Lease Program under the provisions in Chapter 253, F.S. Currently, the Department administers 633 aquaculture leases containing about 1,508 acres, and 80 shellfish leases containing about 1,287 acres. Aquaculture leases are located in Brevard, Charlotte, Collier, Dixie, Franklin, Indian River, Lee, Levy, Manatee, Monroe, Palm Beach, Pinellas, St. Johns, Volusia and Wakulla counties. In response to its statutory mandate, the Department identifies tracts of submerged lands throughout the state that are suitable for aquacultural development. Twenty-one Aquaculture Use Areas have been identified by the Department and authorized by the Board of Trustees in nine coastal counties: Brevard, Charlotte, Collier, Dixie, Franklin, Indian River, Lee, Levy and Volusia.

Oyster Culture and Shellfish Resource Development Program

Under the mandate to improve, enlarge, and protect the oyster and clam resources of the state, the Department is actively engaged in enhancing shellfish resources and restoring oyster reefs on public submerged lands. During fiscal year 2005-2006, the Department collected 65,664 bushels of processed oyster shell from processors in Franklin County and 3,696 bushels from processors in Levy County. Oyster resource development projects were conducted in cooperation with local oystermen's associations in four coastal counties. A total of 376,446 bushels of live oysters were replanted on public reefs in Franklin, Wakulla, Dixie and Levy counties.

Restoring Public Oyster Reefs

The Department is involved in a comprehensive multi-county project to restore oyster reefs that were damaged by Hurricane Ivan through a $1.7 million grant from the National Oceanic and Atmospheric Administration. This project is designed to enhance oyster production, to facilitate recovery of the oyster business, and to provide significant resource restoration benefits. The project promotes the development of self-sustaining reef communities, which in turn, perform ecological services that contribute to fisheries habitat, ecosystem stability, nutrient cycling, and improved water quality. Functioning oyster reefs are recognized as an essential component in stabilizing and sustaining ecological relationships in almost all Gulf estuarine ecosystems.

Shellfish Harvesting Area Classification and Management Program

This program seeks to classify and manage Florida coastal waters for maximum use of shellfish resource, protection of public health, and promotion of a healthy coastal environment. The program is audited each year by the U.S. Food and Drug Administration to ensure compliance with the provisions of the National Shellfish Sanitation Program.

A total of 38 shellfish harvesting areas are currently classified and managed statewide. During fiscal year 2005-2006, the required annual update reports were completed for all 38 shellfish harvesting areas and all of the shellfish harvesting areas requiring a triennial reappraisal report were completed. The data and reports support current classification and management for all shellfish harvesting areas.

During fiscal year 2005-2006, a total of 795 sampling excursions were conducted to collect and analyze 13,101 water samples for fecal coliform bacteria. There were a total of 435 closures and re-openings of shellfish harvesting areas.

Shellfish Processing Facility Program

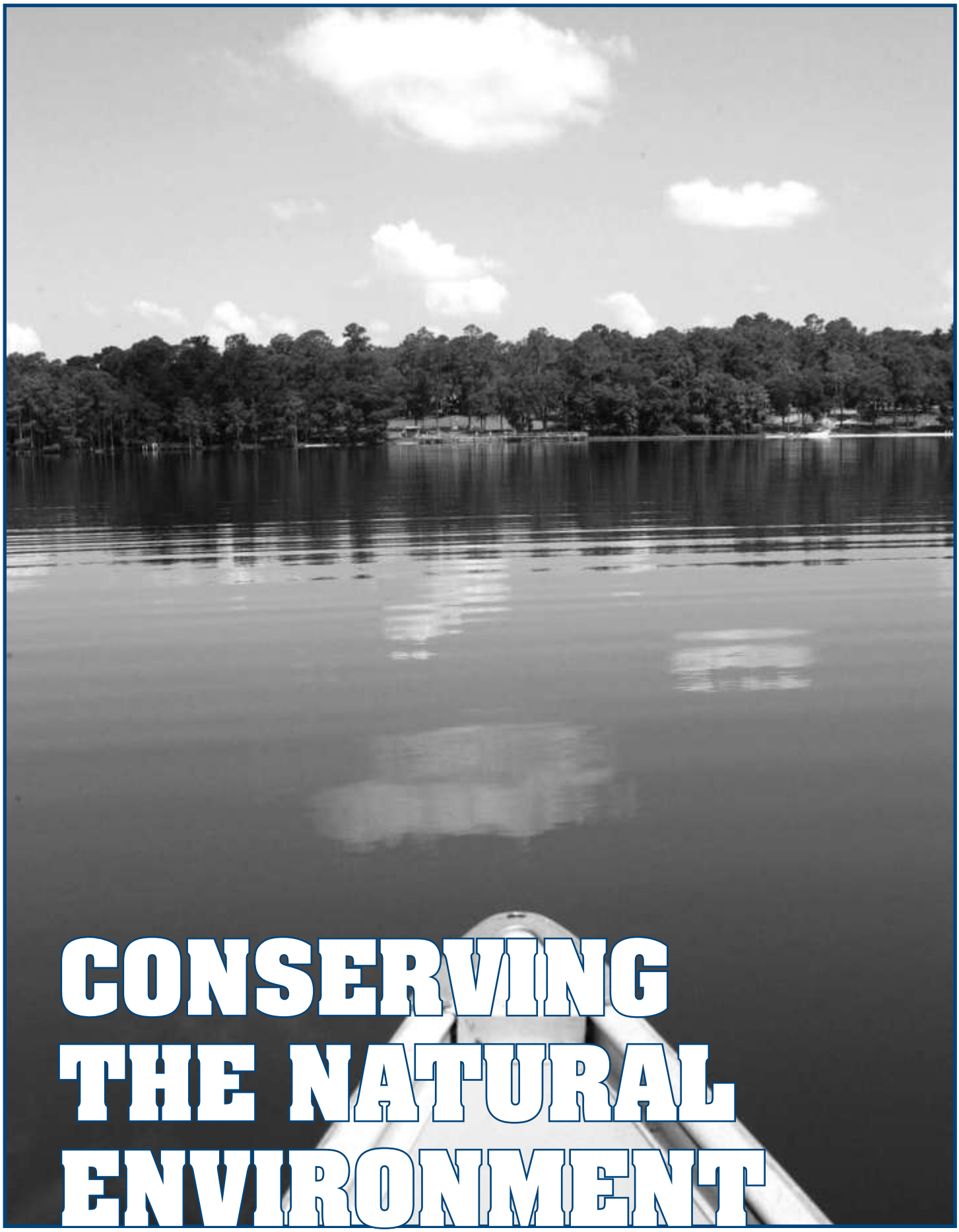
This program seeks to ensure wholesome shellfish products through inspection, education and enforcement of state regulations and national guidelines. The program is audited each year by the U.S. Food and Drug Administration to ensure compliance with the provisions of the National Shellfish Sanitation Program.

A total of 99 Shellfish Processing Plant Certifications Licenses were issued during fiscal year 2005-2006. A total of 367 regulatory processing plant inspections were conducted.

Based on fiscal year 2005-2006 inspection results, a total of 51 warning letters and nine settlement letters were issued. Action was taken to destroy shellfish products when they were found to be adulterated, contaminated, unwholesome, mislabeled, or exceeding the product shelf life.

Technical Support Programs

The division provides substantial technical and administrative support for aquacultural and shellfish operations. Staff provides and participates in workshops, seminars and problem solving activities to help provide information to Florida farmers. In addition, staff manages contracts to researchers for legislative appropriation to provide quick answers to industry issues.



CONSERVING THE NATURAL ENVIRONMENT

Division of Agricultural Environmental Services

Scientific Evaluation Section

Registration Reviews

During the 2005-2006 fiscal year, staff of the Scientific Evaluation Section (SES) conducted environmental fate and effects assessments on 35 active ingredients in 33 product brands in support of New Active Ingredient, Significant New Use, Special Local Need, and Experimental Use Permit registration requests. The results of these evaluations were presented during the monthly meeting of the Pesticide Registration Evaluation Committee. SES recommended approval for all registration requests after determining that the products would introduce no unacceptable risk to human populations, non-target species or the environment when used according to the label. In some cases, product registration was approved on the condition that the registrant conduct additional studies or provide additional information to further demonstrate that the product will not adversely impact water quality, non-target species, or human health. SES also evaluated the environmental fate and potential toxicity of nine products seeking emergency-use exemptions (Section 18). To bolster the review process, SES used many of the methodologies recently developed for special category registrations.

Investigative Reviews

In addition to reviews conducted in support of pending pesticide registrations, SES staff also conducts evaluations in response to relevant registration announcements by the U.S. Environmental Protection Agency (EPA) and requests from the Department's Bureau of Compliance Monitoring, the Bureau of Entomology and Pest Control, the Florida Department of Environmental Protection, the Florida Department of Health, and the public. These assessments may be related to use of pesticides for agriculture, mosquito control, or general pest control. Five of the more intensive review efforts are described below.

Birth Defects in Children of Farm Workers

In the spring of 2005, The Palm Beach Post reported that, within months of each other, three migrant worker women in Immokalee had given birth to babies with birth defects. The newspaper also reported that each mother was employed by AgMart and had worked in tomato fields in Florida, North Carolina and New Jersey in the year prior to giving birth. Staff of SES provided support to investigations within the Bureau of Compliance Monitoring, the Florida Department of Health, and the Collier County Department of Health by identifying the pesticides that were used when these women worked and evaluating the potential for each of these materials to cause adverse effects in a developing fetus. The Florida Department of Agriculture and Consumer Services' report includes a description of the potential for toxic effects from abamectin, buprofezin, copper hydroxide, endosulfan, ethylene thiourea, ethylhexanol, fenpropathrin, mancozeb, methamidophos, n-methyl pyrrolidone, and naphthalene. In the fall of 2005, the Department released its final report to the Collier County Health Department, the Florida Department of Health, and the EPA.

At the request of the Joint Legislative Commission on Migrant and Seasonal Labor, SES staff provided information on: (1) the federal and state pesticide registration process; (2) the toxicological data that registrants are required to submit for federal and state registration; and (3) the process by which the EPA and the Florida Department of Agriculture and Consumer Services evaluate and mitigate risks to human populations. Of special interest to the commission were worker safety precautions and the ability of current registration and risk assessment process to protect sensitive populations such as pregnant workers.

Termiticide Efficacy Reviews

In March 2003, the Department adopted the Termiticide Efficacy Rule (5E-2.0311 Florida Administrative Code) which requires that any product registered as a preventative treatment against termites in new construction in Florida must satisfy specific efficacy criteria. Since the rule's adoption, the Division of Agricultural Environmental Services has reviewed efficacy submissions from 21 registrants associated with 54 products. SES has posted 13 efficacy reviews on the division web site. In addition, for products registered at the time of rule adoption, the registrant is provided the amount of time to gather the necessary efficacy data. Therefore, in the past year, SES reviewed several protocols and annual reports for studies already in progress. SES continues to provide oversight to assure that registered products satisfy the rule and in the coming year, anticipates the submission of additional annual reports from active efficacy studies.

Review of EPA Risk Assessment on Organic Arsenical Herbicides

In April 2006, the Environmental Protection Agency (EPA) released the first draft of the human and non-target risk assessments on the organic arsenical herbicides (MSMA, DSMA, CAMA and DMA) as part of the agency's re-registration review process. The EPA also announced it would be accepting stakeholder comments on these documents. Staff of SES reviewed the EPA's risk assessments with special attention paid to the assessment of: (1) the potential for use of organic arsenical herbicides to cause unreasonable risks through accumulation of arsenic in soil; (2) the potential for use of organic arsenical herbicides to cause unreasonable risks through impacts to ground water quality; and (3) the potential for organic arsenical herbicides to be converted to inorganic arsenic in the environment following application. SES based its review comments on the scientific literature related to human health and environmental fate issues related to organic arsenical compounds. The Florida Department of Agriculture and Consumer Services submitted its comments to the EPA on June 5, 2006, and these comments were posted on June 8. The Department anticipates the release of the final Re-registration Eligibility Decision document in August 2006.

Review of USEPA Re-registration Risk Assessment on Aldicarb

Similar to the efforts made related to the organic arsenical herbicides, the Florida Department of Agriculture and Consumer Services provided comments to the EPA on both the human health and ecological risk assessments for aldicarb. The Department submitted several data sets demonstrating that the Florida Aldicarb Rule (5E-2.028 F.A.C.) appears to have mitigated drinking water risks as evidenced by three potable well surveys and the Department's ground water monitoring efforts. The Department looks forward to working with EPA to further refine the assessment and to review mitigation measures.

Review of USEPA Re-registration Risk Assessment on Simazine

The Department commented on the EPA's risk assessment for simazine. SES's comments focused on the EPA's assessment of the potential risks from simazine as they relate to humans consuming surface and ground water. SES provided the agency with surface and ground water monitoring data from Florida and recommended several measures to further refine the environmental fate modeling.

Ground Water Protection

Lake Wales Ridge Monitoring Network

The Lake Wales Ridge Monitor Well Network (LWRMN), located in citrus-rich Polk and Highlands counties, is a collaborative effort between the Department, the U.S. Geological Survey (USGS) and the Southwest Florida Water Management District. The 31 shallow ground water wells of the network are sampled quarterly and analyzed for a suite of chemicals to assess temporal trends in ground water pesticide and nitrate residue levels. This network allows the Department to evaluate the relationship between agrichemicals and ground water quality in a geographic area that is highly susceptible to contamination. The sampling of this network provides information on the fate of agrichemicals in vulnerable Florida soils and may also provide an early indication of potential future drinking water threats. Sampling was initiated in 1999, and to date 29 sampling events have been conducted. The USGS currently maintains a web site on this project and is working to publish several of the findings in peer-reviewed journals.

Data from the network has proven very useful in regulatory matters and has served to initiate additional projects for the Department. The Department has provided data from the LWRMN to the EPA in response to the release of the risk assessments and risk reduction options for aldicarb and simazine (see discussion above). The USGS included data from the network in its National Water Quality Assessment Program (NAWQA) report entitled "Pesticides in the Nation's Streams and Ground Water, 1992-2001." This report is a summary of the NAWQA monitoring data from ground and surface water from around the country. As another example of the utility of the network, while screening LWRMN water samples for carbamate pesticides, bureau staff noted a detectable level of the carbamate oxamyl. Subsequent sampling and analyses reported a single oxamyl detection in excess of the maximum contaminant level for this compound. This elevated detection prompted staff of the bureau to: (1) notify the registrant of the detection; (2) request the Bureau of Compliance Monitoring to perform a pesticide compliance inspection at the adjacent groves; (3) evaluate the environmental fate of oxamyl following application; and (4) query the Florida Department of Environmental Protection (DEP) potable well database

for prior detections of oxamyl in the vicinity of this detection. In addition, at the request of the Department, DEP arranged for the testing of potable wells in the vicinity of these groves to ensure public safety.

This year, staff of the Bureau of Pesticides and USGS initiated efforts to expand the LWRMN to include monitoring wells located in regions of Polk and Highlands counties not associated with citrus. This expansion would allow the Department to evaluate the potential impact of other land uses (e.g., golf courses or residential) on ground water quality. USGS will delineate non-citrus land uses using the most recent land-use classification based on the digital orthophoto quadrangles satellite coverages. Priority for targeted land uses and pesticides will be determined on the basis of pesticide usage rates and amounts and chemical properties including the toxicity, persistence, and solubility of pesticides. To date, USGS staff have queried monitoring well and land-use data bases for the Ridge and evaluated regional land-use coverages. The USGS is working with the Department to select target land-use categories from the 2004 Southwest Florida Water Management District digital land-use coverage for developing the non-citrus network.

Evaluation of Organic Arsenical Herbicides

The Division of Agricultural Environmental Services continues to interact with the Methane Arsonic Acid Task Force to foster the development of a ground water study to evaluate the risk that arsenical herbicides pose to Florida's ground water quality. The Department requested this study in response to reports that identify a possible link between arsenical herbicide use and elevated ground water and soil levels of arsenic. This year, SES staff accompanied Task Force consultants on a site visit of a potential location for the study in Polk County. Upon review of the soil textural analysis and finalization of the study design, the Department plans to attend the next phase of site characterization, which will include, among other activities, deeper soil characterization and the determination of ground water flow direction.

In a related project, SES staff collaborated with field inspectors from the Bureau of Compliance Monitoring as well as staff from the City of Naples and the Collier County Pollution Control and Prevention Department (CCPCPD) to investigate arsenic concentrations observed in shallow monitoring wells at several area golf courses and city parks. Ground water samples from over 30 monitoring wells were collected in the area. The Division of Food Safety laboratory analyzed the samples for total arsenic, while the Bureau of Pesticides laboratory analyzed the samples for mono- and dimethylarsenate, which are breakdown products of MSMA and DSMA, respectively. After review of the data and preparation of the report, the Department could neither confirm nor disprove a definite association between arsenical herbicide use and detections of arsenic in ground water. This finding underscores the need for a controlled field study to assess the potential impacts of these pesticides on ground water quality. The final report has been provided to the Collier County Pollution Control and Prevention Department and the City of Naples. Also, the SES administrator was invited to speak at the annual meetings of the Everglades GCSA and the South Florida GCSA on environmental issues regarding organic arsenical herbicides.

1,3-Dichloropropene Ground Water Study

This study was required as a condition of the Special Local Need registration of Curfew (active ingredient 1,3-Dichloropropene). During this year, the Department reviewed the proposed work plans submitted by Dow AgroSciences (DAS) for a ground water study. In March 2006, representatives of the Department, the Florida Department of Environmental Protection, DAS, and the registrant's consultant met to discuss the study protocol and potential sites. During the meeting, DAS characterized the various commercial uses of Curfew in Florida, and the results of four retrospective ground water studies, two prospective ground water studies, a tap water study, and two environmental fate studies. Currently, DAS is considering two golf course sites for the study. One site is in the Central Ridge region of Florida (Polk County) and the other is located in coastal Collier County. The Department has evaluated the hydrogeologic data from the proposed sites and conducted a site visit.

More recently, DAS requested that the Department consider data from the Curfew Tap Water Study conducted in 2000 and asked whether the data was sufficient to demonstrate that 1,3-D would not likely adversely impact shallow ground water in Florida. SES reviewed the hydrogeology of the areas in Florida where the wells were located, as well as the locations of Curfew-treated areas relative to the locations of potable wells. SES concluded that since (1) many of the wells in the study

were screened in the deep aquifer and below the confining layer, and (2) many of the wells were located up- or cross-gradient from the treated field, that the results of the tap water study could not proxy for a more controlled study on ground water near a golf course. In the future, the Department anticipates further efforts with DAS to finalize a monitoring study design and decide on a location that will be mutually acceptable.

Thiamethoxam Ground Water Studies

As a condition of the registration of thiamethoxam in 2001, the USEPA required the registrant to conduct both a prospective and a retrospective ground water study. SES has reviewed the final reports from the prospective studies conducted in Michigan and Georgia and has been actively involved in overseeing the retrospective ground water monitoring study in Florida. Staff have conducted site visits to most of the study sites in Manatee, Hamilton and Suwannee counties and attended many of the sampling events. SES anticipates continued involvement as this study progresses over the next two years.

Suwannee River Nitrate Project

The Division of Agricultural Environmental Services continues to provide technical and quality assurance assistance on a study examining the effect of agricultural management practices on nutrient levels in ground water in the Middle Suwannee River Basin. Staff conducted the annual field audit to assure compliance with quality assurance requirements.

Surface Water Protection

Caloosahatchee River Basin Monitoring Project

In spring 2005, the Southwestern Conservancy requested that the Florida Department of Environmental Protection (DEP) list a segment of the Caloosahatchee River as impaired due to detections of malathion. In response, DEP reviewed the data and concluded that the detections were not of sufficient magnitude or frequency to place any segment of the river on the Impaired Waters (303(d)) list. However, DEP stated its intent to further study the watershed in a collaborative effort with the South Florida Water Management District and the Department of Agriculture and Consumer Services.

The three agencies developed a surface water monitoring program designed to (1) generate data to meet the requirements of the TMDL rule (FDEP), (2) generate data sufficient to assess potential impacts to non-target organisms (FDACS), and (3) generate data sufficient to establish a baseline for evaluating the effectiveness of agricultural best management practices which may be implemented in the future. Samples will be collected monthly and analyzed for 66 pollutants by the DEP laboratory.

Samples are collected monthly and include (1) six grab samples from locations in the rivers' tributaries or canals and (2) three 48-hour composite samples from canals, each draining a predominantly single land-use (citrus groves, sugar cane fields, and residential areas). The first sampling event was conducted in January. Since then, monthly samples have been collected through July. To date, the results of only the initial sampling event have been reported to the Department.

Preparation of Manuscripts on the Risks of Carbamates and Oxamyl Drift

SES, in collaboration with University of Florida, has prepared two peer-reviewed manuscripts based on two studies conducted in South Florida. The first paper describes the pulsed nature of pesticide detections in a "flashy" canal in the Indian River Citrus Area, and then evaluates the potential impact such detections could have on estimating risks to aquatic species. This paper was accepted for publication in Environmental Toxicology and Chemistry. The second manuscript describes the potential for runoff of oxamyl from citrus following application and has been submitted for publication.

Review of Surface Water Monitoring Programs

SES staff continue to review the results of the pesticide-monitoring network for surface water in South Florida that is managed by the South Florida Water Manage-

ment District. This network regularly reports on pesticide detections from several locations within the south Florida canal system and is a useful source of monitoring data for the Department.

Fipronil Surface Water Studies

As a condition of the registration of fipronil for fire ant control, the EPA and the Florida Department of Agriculture and Consumer Services required that the registrant conduct a runoff study and a surface water monitoring study to demonstrate the effectiveness of label-recommended no application zone buffers. The registrant has completed these requested studies and has provided the study reports to SES, where they are being reviewed.

Golf Course BMP Manual

In 2002, the Florida Department of Environmental Protection (DEP), a coalition of Green Industry associations, the University of Florida, and other interested parties concluded that a Best Management Practices (BMP) manual specific to Florida was needed to guide golf course superintendents to make informed decisions on the use of pesticides and fertilizers to ensure the preservation of surface and ground water quality. SES staff serve on the Pesticide Management sub-committee which is charged with preparing the section describing environmentally protective practices and pesticide use measures for golf course superintendents. DEP anticipates release of this document later in 2006.

Endangered Species Protection Program

State ESPP Plan and Bulletins

In response to the finalized federal field implementation program, the Department has the option of submitting a state-initiated plan to protect federally listed species from the use of pesticides. The objectives of the State Endangered Species Protection Program (ESPP) are:

- To develop Endangered Species Protection Bulletins based on the most current and accurate data available for federally listed species identified as potentially threatened by pesticide use.
- To update the Department's ESPP web page to include Endangered Species Bulletins and endangered species protection information.
- To identify additional mechanisms for disseminating the Bulletins and educational materials to pesticide users, including Internet links (i.e., from other web sites), email and traditional mail.
- To continue coordinating with Florida Natural Areas Inventory to develop GIS-based habitat and occurrence maps for endangered species to be used in the Bulletins.
- To explore processes for educating pesticide users on endangered species protection.
- To evaluate the potential impact of new registration actions on federally listed endangered and threatened species.
- To update a memorandum of agreement between the Department and the U.S. Fish and Wildlife Service with regard to the protection of endangered species and the issuance of Section 18 applications.
- To assist the Environmental Protection Agency in making species-specific effects determinations for Florida species.

Mosquito Control and the Miami Blue Butterfly

The Miami Blue butterfly is endemic to Florida and until recently was thought to be extinct. In 2002, the Miami Blue was listed by the Florida Fish and Wildlife Conservation Commission (FWC) as an endangered species and in June, the U.S. Fish and Wildlife Service (USFWS) added the Miami Blue to its candidate list for possible future federal listing. USFWS decided that listing was not warranted at this time due, in part, to the recovery and reintroduction efforts by University of

Florida (UF) researchers. The area where UF researchers and FWC are most interested in reintroducing the butterflies is North Key Largo, where conditions appear to be ideal for the butterflies' survival. However, reintroduction efforts near populated areas in the region have created potential conflicts with ongoing mosquito control programs.

This year, the SES collaborated with the Florida Coordinating Council for Mosquito Control (FCCMC) and participated on the Miami Blue subcommittee. This subcommittee is charged with developing recommendations to the FCCMC that will: (1) allow re-introductions of the Miami Blue to continue on public lands that will aid in the recovery of the Miami Blue butterfly (and ultimately de-list the sub-species), and (2) allow the Mosquito Control Districts to continue to provide mosquito control as required by Chapter 388, F.S.

The Miami Blue subcommittee first met on February 15, 2006, in Gainesville. All parties agreed to the following: (1) the Florida Park Service (in consultation with the University of Florida) will provide the Keys Mosquito Control District (MCD) a map with areas that can be sprayed (by truck) within Bahia Honda, (2) in the event that reintroductions occur in North Key Largo, for this year, no buffer zones will be required outside of current no-spray zones in North Key Largo, and (3) incidental take permit(s) should be issued by Florida Fish and Wildlife Conservation Commission to the Keys MCD to allow for incidental take in areas outside of the current no-spray zones. Additional considerations concerning the use of buffers around no-spray zones or reintroduction areas will be made after the completion of the research scheduled to begin in the next few months (summer 2006). Reintroductions in North Key Largo are scheduled for late July to early August.

Assessing the Impact of Ultra-low-volume Application of Permethrin on Non-Target Aquatic Species

Based on concern over the risks to aquatic organisms, the labels for mosquito control products containing permethrin prohibit aerial application for mosquito control in Florida unless granted permission by the Department in a public health emergency. At the urging of the Florida Coordinating Council on Mosquito Control, investigators within the Public Health Entomology Research and Education Center at Florida A&M University are conducting field studies to assess the impact of permethrin on non-target species following ultra-low-volume aerial application. The first phase of the study was initiated in July 2005. The overall objectives of these studies are to: (1) measure permethrin residues deposited in the ground, water, and air, (2) conduct field bioassay with mosquito fish (*Gambusia holbrooki*), and (3) evaluate mosquito control efficacy with caged mosquitoes (*Ochlerotatus taeniorhynchus*). A total of six trials were conducted late in 2005 using the water-based product Aqua-Reslin. In Phase 2 of the project, four trials with the oil-based product Permanone occurred in 2006. SES has assisted in the collection of data and interpretation of results for several of the trials. Depending on the outcome of these trials, the restriction on aerial use in Florida could be revisited.

Miscellaneous

Quality Assurance and Quality Control (QA/QC)

In August 2005, the Department was notified of the U.S. Environmental Protection Agency's requirement for preparing a Quality Assurance Project Plan (QAPP) for the activities performed by the Division of Agricultural Environmental Services under the EPA Performance Partnership Grant program. After attending a training workshop in Atlanta, SES, in cooperation with other division staff, finalized and submitted the first draft of this document to the EPA prior to the reporting deadline. The EPA is currently reviewing the QAPP.

Pesticide Registration Section

The Pesticide Registration Section registers pesticides that are distributed, sold or offered for sale in Florida. During the 2005-2006 fiscal year, a total of 12,182 pesticide brands were registered for sale and distribution in Florida. Approximately $3.6 million in registration fees was collected to support the Department's pesticide programs.

Pesticide Registration Evaluation Committee

Included in pesticide registration activities were reviews for special registration actions such as Experimental Use Permits, Special Local Need, New Active Ingredient, and Significant New Use registrations that are processed, reviewed and issued through this office. These special registrations are reviewed by the Department and other affected state agencies through the Pesticide Registration and Evaluation Committee (PREC), a consensus-determining body that is responsible for evaluating pesticides,

advising the Department of risks associated with the proposed use of the pesticides, and proposing solutions or actions for reducing risks to acceptable levels. The Registration Section's professional staff serves as both liaison and active participants in the PREC process. This fiscal year, 23 Special Local Need registrations, 27 Experimental Use Permits, eight Significant New Use, and 11 New Active Ingredient registrations were evaluated.

Emergency Exemptions

Florida's diverse agricultural system, mild climate, and tourism/trade activities make the state particularly susceptible to the introduction and proliferation of pests. When an emergency condition arises and no effective registered pesticides are available to control a new pest or avert an anticipated significant economic loss due to an urgent and non-routine pest problem, the Department may submit petitions to the U.S. Environmental Protection Agency (EPA) for emergency exemptions from registration. Pest emergencies often involve introduced pest species of foreign origin, such as invasive insects, weeds and plant diseases, with the potential to inflict millions of dollars of losses in affected crops and commodities. Exemption requests frequently seek the use of new, low-risk chemicals that may actually decrease the total use of chemicals on the affected crops through their compatibility with integrated pest management programs and the elimination or reduction of repeated applications of broad-spectrum pesticides of limited efficacy.

The approval of emergency use exemptions is a critical part of the Department's efforts to assure the long-term viability of Florida's specialty crop producers and continued agro-economic development. The process provides important crop protection tools that maintain Florida's competitiveness in key domestic and international markets.

With the Department's technical support, the EPA issued 12 emergency exemptions for pesticide use in Florida during fiscal year 2005-2006. The Department also continued its participation in Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 18 issues by attending the May 2006 Section 18 workshop on a new federal rule adopted March 28, 2006. Prior to the adoption of this new rule, the Department was a two-year participant in the EPA's Section 18 Pilot Program for Annual Renewal of Exemptions for reduced-risk pesticides. During the fall 2003 and 2004, the state submitted comments and suggestions for EPA consideration as it finalized the specifics of this new rule.

On July 7, 2005, a crisis exemption was declared for the use of diquat dibromide to control bacterial citrus canker in citrus groves. This action was taken by the Department to minimize the damage from spreading canker spores as Hurricane Dennis reached the state on July 10, 2005.

The Department continued its support for Florida's cotton, citrus, and fruiting vegetable industries by requesting the EPA to recertify Florida's exemptions for the use of thiophanate-methyl to control Fusarium "'hardlock," postbloom fruit drop, and white mold, respectively. For the eighth year, fenbuconazole was approved by the EPA for controlling greasy spot in grapefruit. A sixth-year request for the use of pyriproxyfen to assist in managing the spread of silverleaf whitefly, which transmits the bean golden mosaic virus to Florida's bean crop, was not submitted since EPA approved the use directives for addition to the product's FIFRA Section 3 label, making another exemption request unnecessary.

The Pesticide Registration Section consulted with the beekeeping industry and the Department's Division of Plant Industry in obtaining the eighth consecutive approval for the use of coumaphos to control the small hive beetle and varroa mite in honeybee colonies. After the documented development of coumaphos-resistant mite populations, the Department was also successful in petitioning the EPA for the use of an alternative product containing thymol for control of this devastating pest.

Florida's agricultural sector remains vigilant in its preparations for the potential threat of the pest Australasian soybean rust (ASR) (*Phakopsora pachyrhizi*). The Florida industry was granted the use of myclobutanil, the first of four chemicals requested, to protect specialty leguminous crops (Crop Group 6) from this fungal disease. To date, Florida's soybean industry has not suffered significant losses from ASR.

Naled was granted a three-year (September 22, 2005, through September 22, 2008) quarantine exemption by the EPA after Florida made the case for continuing to protect various sites from potential destruction caused by tephritid fruit flies.

An aquatic herbicide emergency exemption for penoxsulam was sought by the Department to assist other state and federal agencies in their efforts to prevent the spread of fluridone-resistant hydrilla. The impact of hurricanes in 2004 and 2005 helped to spread this weed pest into new aquatic areas of the state. EPA granted the exemption request for 100,000 aquatic acres in the sovereign waters of Florida.

Registration Tracking System

During the fall of 2005, the Pesticide Registration Section successfully migrated the Registration Tracking System (RTS) to an Oracle version 10g database with the accompanying Oracle 9i Forms and Reports. The section subsequently completed the process of updating the 2005 product brand registration information into RTS. The section continued with RTS training for internal headquarters staff and enforcement field staff. February 2006 brought the beginning of discussions on electronic government (e-gov) capabilities to allow registrants to pay registration fees online. After the section concluded internal testing of both the storefront and the backend processing modules, a limited-production run with nine volunteer companies was successfully initiated in May 2006. This limited-production run expanded to 20 companies by the end of June 2006. Currently, 10 companies have successfully used the new e-gov credit/debit card system to activate their pesticide product brands, whether new or renewed. Total implementation is scheduled for fall 2006, in time for the 2007 re-registration period. This will allow Florida's pesticide companies to submit payments for new product brands registration requests online and to process their company's annual re-registrations online, thus eliminating hold-time delays from the manual payment processing currently handled by the Department. The Registration Section is continuing to review and correct the 2006 re-registrations that were mailed during the last quarter and received during this period.

In an effort to continue enhancing the Florida registration process and to provide greater customer service to Florida consumers, the Department's internal customers and pesticide registrants, this section is investigating the option to participate in an e-label pilot project, coordinated through the National Pesticide Information Retrieval System, with six other state registration programs.

Pesticide Laboratory Section

The Department's Pesticide Laboratory analyzes a variety of official samples, including formulated pesticide products, pesticide application tank mixes, and environmental samples to support compliance investigations and pesticide management activities. Formulation analyses are performed in accordance with Florida Statutes for label guarantee, and tank-mix sample analyses are performed to assess the use percentages of the active ingredient. A total of 50 formulation and/or tank-mix samples were analyzed, requiring 1,298 sample determinations to verify whether the correct percentages of guaranteed active ingredients were within allowable tolerances. The rate of violations encountered for product formulations testing this past year was 6.3 percent (last year's violation rate was 3.8 percent). Samples this year again included formulated material utilized by the Department in the mosquito control program as a result of the active hurricane season (these mosquitocides were all found to be formulated within specifications). The directed approach to sampling formulated products, which was developed jointly by the Pesticide Laboratory and the Bureau of Compliance Monitoring, was suspended temporarily this year due to inspection priorities involving farm worker protection. The directed approach program enables the Department to be able to test a wider scope of products, in a variety of categories, to ensure public safety and minimize environmental impacts. This approach has also improved the Department's ability to focus on pesticide products that may not be in compliance with guarantee tolerances.

In support of registration, compliance and technical assessment activities, 411 environmental samples were analyzed, requiring 35,908 determinations. The laboratory also responded to a wide variety of method development requests and increased its screening capabilities during the past year. Method development work for individual compounds and related analytes was conducted in a variety of environmental matrices (e.g., soil, water, vegetation). In addition, 12 active ingredients were added to the laboratory's Gas Chromatographic/Mass Spectrometric pesticide screening capabilities.

To ensure a high quality of analysis, the laboratory analyzed 886 quality control samples, requiring 22,366 determinations. Quality assurance samples were analyzed for method development and validation as well as for control of routine sample analyses. The laboratory's

technical training program continues to include quarterly in-house proficiency samples. Further, the laboratory completed its Quality Manual and revised Standard Operating Procedures in preparation for an EPA-required Quality Assurance Project Plan (QAPP) that was submitted by the Department this past March.

The laboratory reported approximately the same total number of sample determinations during fiscal year 2005-2006 (59,572) as were reported for fiscal year 2004-2005 (56,296). However, the total number of samples analyzed during fiscal year 2005-2006 (1,347) was less than the number analyzed during fiscal year 2004-2005 (1,881) due to the three-month shutdown of the laboratory for the complex-wide HVAC installation. The reported 59,572 determinations for nine months of analytical operations is indicative of the quantity of pesticide screens requested this year by the pesticide program areas.

Finally, the laboratory fully implemented the Customer Explorer Module of its Laboratory Information Management System (LIMS) over the course of fiscal year 2005-2006. This automated electronic sample processing software allows the laboratory's customers to navigate and track all sample analysis activities, further enhancing the overall quality and efficiency of data generated for the laboratory's customers.

Pesticide Certification and Licensing

The Pesticide Certification and Licensing Program helps to ensure a safe food supply, healthy environment, and the protection of workers and the public through training and competency testing of pesticide users. This program is coordinated with the U.S. Environmental Protection Agency (EPA) and the University of Florida (UF) to ensure consistency in educational efforts and certification standards. EPA has approved the Department's program as meeting federal pesticide applicator certification requirements, and EPA staff provides limited guidance and program assistance as needed. UF assists by developing training manuals and certification exams, providing training classes and workshops, and administering the majority of the certification exams.

In fiscal year 2005-2006, the Department issued or renewed 2,576 pesticide applicator licenses and 591 pesticide dealer licenses. The total number of active licenses as of June 30, 2006, was 11,883. Department staff approved 1,293 pesticide training programs to issue continuing education units (CEUs) for pesticide applicator recertification and license renewal, making available 4,226.5 CEUs for license renewal. An online CEU Class Search is available to help pesticide applicators locate training opportunities that provide CEUs. Department staff also monitored 44 hours of training classes throughout the state and gave seven presentations on pesticide laws and regulations, licensing requirements, and procedures relevant to pesticide use.

Aldicarb Permit Program

The Aldicarb Permit Program tracks the use of the restricted-use pesticide aldicarb (Temik) in Florida to ensure protection of ground water from contamination with aldicarb residues. All uses of aldicarb must be approved prior to application, and soil type and wells must be identified for each application site before permits are issued. In fiscal year 2005-2006, the Department issued permits for aldicarb to be applied to 3,756 sites in Florida, including 417,286 acres of citrus, 27,934 acres of potatoes, 24,616 acres of peanuts, 12,209 acres of cotton, and 442 acres of grain sorghum. Permit applications may be submitted by fax or mail or online at www.temikpermit.com. Information about the aldicarb program and permit applications are available on the Department web site www.flaes.org.

Aircraft Registration Program

The Department administers a registration program for aircraft used to apply or dispense pesticides, fertilizer, and seed. Aircraft owners/operators are required to register all aircraft used and must also report to the Department all sales, purchases, leases, and other transactions involving these aircraft. As of June 30, 2006, there were 123 aircraft registered. The number registered to apply each of the following products is as follows: 95 public health pesticides; 31 agricultural pesticides; 25 fertilizer; 14 seed. In addition, six aircraft are voluntarily registered to apply oral rabies vaccine baits.

Worker Protection Program

The Department uses a multifaceted approach to protect agricultural workers from pesticide hazards. Certification and licensing is required of individuals who use restricted-use pesticides to ensure they are aware of pesticide safety requirements and are competent to use pesticides properly. Since the inception of the program, the Department has certified and licensed 7,299 individ-

uals to use restricted-use pesticides in agricultural sites, and there are currently over 11,000 individuals licensed. Also, licensed pesticide applicators are required to train their unlicensed assistants on pesticide safety before restricted-use pesticides are handled.

The Department enforces the federal Worker Protection Standard (WPS) in Florida, which requires pesticide safety training for all agricultural pesticide handlers and agricultural workers who work at agricultural sites where pesticides have been applied in the last 30 days. The training must include information on how pesticides enter the body and how to prevent pesticide exposure. Since the inception of the program, 1,477 individuals have been certified to conduct WPS pesticide safety training. A total of 52,327 EPA worker cards and 7,104 EPA handler cards have been issued to certified trainers to issue to individuals they train. The EPA card system is voluntary and the numbers do not represent the total number of individuals trained.

The Florida Agricultural Worker Safety Act (FAWSA) is also enforced by the Department and requires agricultural employers to provide a fact sheet or Material Safety Data Sheet (MSDS) to agricultural workers upon request so workers will know the hazards of pesticides they may be exposed to in the work place. Under FAWSA requirements, the Department also makes available a pesticide safety sheet in English, Spanish, and Creole/Haitian with illustrated instructions on preventing pesticide exposure and a toll-free telephone number for the Florida Poison Control Centers. To date, over 44,806 pesticide safety sheets have been distributed by the Department to assist pesticide safety trainers. The safety sheet can also be downloaded from the Department's web site at www.flaes.org/complimonitoring/workersafety/index.html.

During the 2005-2006 fiscal year, the Department conducted 555 Worker Protection Standard (WPS) inspections at farms, forests, nurseries and greenhouses. One-hundred sixty-four, or 30 percent, of these inspections identified violations of the Worker Protection Standard, and a total of 329 violations were identified for the year.

In addition to enforcing the worker protection standards set out under state and federal law, the Department conducts education and outreach programs for agricultural workers. Sessions are conducted to educate workers about pesticides, and a bilingual outreach educator is available to meet with workers as needed. In addition, the Department conducts "train the trainer" programs in order to reach more workers through the help of other workers and worker organizations.

The Department strongly encourages workers to seek immediate medical attention if they believe they have been harmed by pesticides while working. Workers are also encouraged to promptly report potential violations of the WPS to the Department for investigation and response. Under the WPS, workers must be notified about treated areas so they may avoid inadvertent exposures; handlers and workers must be supplied with water, soap, and towels for routine washing and emergency decontamination; transportation must be made available to a medical care facility if a worker or handler may have been poisoned or injured; and information must be provided about the pesticide to which the worker may have been exposed. Additionally, personal protective equipment must be provided and maintained for handlers and early-entry workers; safety training is required for all workers and handlers; a pesticide safety poster must be displayed; handlers and workers must be informed of pesticide label requirements; and central posting of recent pesticide applications must be displayed.

Pesticide Regulation

The Pesticide Compliance Section helps ensure that pesticides are used correctly and according to the rules and laws developed to protect consumers, the environment and our food supply. Two-hundred seventy specific complaints, tips and allegations were investigated. Samples were collected of various pesticides to assure that they were formulated correctly and contained precisely what their labels guaranteed. Allegations concerning pesticides drifting from a targeted area onto other non-target areas were investigated, and samples of soil, water and vegetation were collected from the areas in question and analyzed. Fish, bird and animal deaths allegedly caused by pesticides were investigated. Claims of pesticide exposure were investigated, including claims of pesticide exposure to farm workers. Section staff worked to ensure that the Worker Protection Standard was followed on various agricultural establishments throughout the state. Investigations were also conducted to ensure that pesticides imported into Florida were properly registered and allowed to be used. Additionally, staff from the Pesticide Compliance Section checked on the production of wood treated with Chromated Copper Arsonate (CCA).

The Bureau of Pesticide Regulation, coordinating with the Florida Department of Environmental Protection, helped implement "Operation Cleansweep," a mobile pesticide collection program that provides a safe way to dispose of cancelled, suspended, and unusable pesticides at no cost.

For the 2005-2006 fiscal year, the Department conducted 1,070 pesticide inspections at agricultural, non-agricultural, and product-related establishments. Two-hundred forty-five, or 23 percent, of these inspections identified violations of the Florida Pesticide Law, and a total of 647 violations were identified for the year. The Department issued 262 enforcement actions regarding these violations, 26 of which were administrative fines. The Department assessed $144,700 in fines and collected $18,058.33 in fine money during the 2005-2006 fiscal year.

Some of the more common violations identified during the inspection process include 329 violations of the Worker Protection Standard, 42 violations of lack of personal protective equipment, 37 unregistered pesticides, 24 misbranded pesticides, 29 incomplete applicator records, 10 restricted-use/purchase violations, and nine pesticide drift violations.

Pest Control Program

The Pest Control Section investigated 445 formal consumer complaints and conducted 3,879 licensed business inspections. Enforcement activities resulted in the issuance of 351 enforcement actions and the imposition of $68,825 in fines. The Bureau of Entomology and Pest Control issued or renewed 4,451 business licenses, 6,454 certified operator's certificates, 34,490 employee identification cards, and 3,040 limited governmental/private and limited lawn maintenance certificates. Certification examinations were administered to 2,069 applicants. The bureau continued efforts to improve compliance with requirements in several sectors of the pest control industry. Regulations were modified to address automated misting pesticide devices and independent contracting of employees. Continued efforts in fumigation safety, preventative treatments for new construction, and compliance with the commercial landscape maintenance industry were continued areas of enforcement. The bureau has continued to address consumer contract issues with the industry and has modified several rules to provide clear guidance to the regulated industry.

Mosquito Control Program

The Department held three meetings of the Florida Coordinating Council on Mosquito Control during fiscal 2005-2006. Some of the issues considered included use of Permethrin for aerial application, establishment of the Miami Blue butterfly study in the Florida Keys, the state's West Nile virus response plan, and research priorities as well as enforcement policy and consumer assistance. The division activated its Mosquito Control Incident Response Team (MCIRT) following the landfall of Hurricane Dennis in the Florida Panhandle on July 10, 2005. Activation was in response to emergency mosquito control needs of the affected counties. Staff also provided assistance to Pinellas County in response to a localized outbreak of West Nile virus in which 18 human cases of the arbovirus were confirmed.

There were eight Public Health Pest Control certification training sessions provided, and 223 certificates were issued or renewed. New Aerial Public Health Pest Control certificates were issued to 11 applicators and renewed for 20 applicators. Active licenses for the section include 1560 Public Health Pest Control certified applicators and 132 Aerial Public Health applicators. The Department awarded $1,802,000 in mosquito control aid to the districts in fiscal year 2005-2006, and allocated $250,000 for mosquito control research through its competitive grants program.

Operational Support – Dog Fly Program

Operational Support completed 49 inspections, including five complaints, regarding mosquito control activities. No enforcement actions were taken as a result of these investigations. During the reporting period, 22 dog fly control missions were conducted, covering 65,469 acres and applying 335.9 gallons of pesticide (Dibrom). There were no mosquito control missions during this fiscal year.

Mosquito Control Incident Response Team

The division activated a Mosquito Control Incident Response Team (MCIRT) shortly following landfall of Hurricane Dennis on July 10, 2005. Gulf and Washington counties, which were badly flooded, were provided with surveillance assistance and equipment to support a reduction of mosquito populations. MCIRT personnel were also dispatched to assist with mosquito surveillance in response to Hurricane Wilma, which made landfall north of the Florida Keys and moved across the

southern end of the Florida peninsula to Miami. The division added additional members to the MCIRT and provided Incident Command System training to all team members up through the ICS 300 level. The division is committed to maintaining a high level of readiness to respond to natural disasters.

Commissioner's Agricultural Environmental Leadership Awards Program

The 12th annual Commissioner's Agricultural-Environmental Leadership Awards were presented to two Florida agricultural operations and one educator in recognition of their leadership in promoting progressive environmental practices. The presentation took place at the Florida Farm Bureau's annual convention in Orlando on October 14, 2005.

Three winners were selected from the group of finalists by a selection committee made up of representatives from the Nature Conservancy; the state's Water Management Districts; the Florida Farm Bureau; the Florida Cattlemen's Association; the Florida Dairy Association; the Florida Department of Environmental Protection; the Florida Nursery, Growers and Landscape Association; the Florida Fruit and Vegetable Association; the Florida Citrus Mutual; and the Florida Forestry Association. The 2005 winners were:

- Kerry Herndon, owner of Kerry's Bromeliad Nursery of Homestead. Kerry's Bromeliad Nursery is one of the largest potted orchid production complexes in the world, and the largest in North America, growing more than 5 million orchids at its facilities in Homestead and Apopka. Kerry's has pioneered and implemented numerous Best Management Practices for potted plant production. These practices include ebb-and-flow irrigation, rainwater recycling, reverse-osmosis water treatment, total containment of pesticide runoff, and the use of environmental cooling chambers for year-round orchid flowering.

- Louis Larson, owner of Larson Dairy, Inc., of Okeechobee. Larson Dairy has been family owned and operated since the late 1940s. The Larson family was the first to install a lagoon system to control wastewater. The dairy's waste management uses a closed system to hold and recycle nutrients. Solids are separated from the wastewater before entering the lagoon and are later used to make compost. The filtered water is then pumped to the fields where it is sprayed through center-pivot irrigation. Nutrients in the treated water are absorbed by the crops, which are harvested and fed to the cows, completing the cycle.

- Richard Raid, Ph.D., a researcher and professor with the University of Florida/Institute of Food and Agricultural Sciences, Everglades Research and Education Center, in Belle Glade. Dr. Raid created a school garden program, called Students SOAR, designed to provide elementary school students with hands-on experience in agriculture. Since 1994, he has worked with a program which uses barn owls as a method of sustainable rodent control in the Everglades Agricultural Area. Florida sugarcane farmers and leafy vegetable growers encourage the owls to nest near their fields. As a result, barn owls have ideal nesting habitat and growers have fewer rodent pests. The environment benefits because growers use fewer chemical rodenticides. Thanks to the Barn Owl Program, the Everglades Agricultural Area now has some of the highest concentrations of barn owls in the United States.

Forestry Programs

Wildfires

There was an increase in the number of wildfires from the previous fiscal year. There were 4,028 wildfires in fiscal year 2005-2006, compared to 2,365 in fiscal year 2004-2005. Human-caused wildfires also increased with fiscal year 2005-2006 having 3,373, compared to 1,989 in fiscal year 2004-2005.

The increase in fire activity can be attributed to the below-average rainfall and increased fuel loads result-

ing from the hurricanes of 2004 and 2005. The leading cause of wildfires for fiscal year 2005-2006 was lightning, which accounted for 704 fires, followed by incendiary, which accounted for 667 fires.

The Division of Forestry provided the management structure and resources necessary to bring humanitarian aid and emergency services to the citizens of Florida impacted by the devastating results of the hurricanes of 2005. The division carried out leadership roles throughout the state, and all four of the division's State Type 1 Incident Management Teams (IMTs) were deployed several times.

Missions included: assisting the state EOC's Emergency Support Functions; managing Logistical Staging Areas, Damage Assessment Teams, Distribution Centers, and Emergency Support Function (ESF 11 Food, Water and Ice); managing Search and Rescue Teams (ESF 9 Search and Rescue); supporting initial attack of fire (ESF 4 Firefighting); supplying potable water to hospitals and kidney dialysis centers (ESF 8 Health and Medical Services); transporting feed and water for livestock (ESF 17); and assisting road clearing and power restoration efforts (ESF 3 Public Works and Engineering).

The division also deployed Incident Management Teams to assist the Florida-led recovery efforts in southern Mississippi for Hurricane Katrina. Responses were also made for Hurricanes Dennis, Rita and Wilma. There were numerous responses in other counties that were handled by local Division of Forestry resources or Type 3 Incident Management Teams:

Event	Personnel assigned
Hurricane Dennis	216
Hurricane Katrina	405
Hurricane Rita	75
Hurricane Wilma	268
Total	**964***

*Some employees were on multiple assignments; this number does not include local/home district response.

Forest Protection

Division of Forestry personnel made 8,323 media contacts this year as part of the division's public education campaign on wildfire prevention. In addition, seven Wildfire Mitigation Specialists prepared 184 local press releases for daily and weekly newspapers. The emphasis this year was on communicating to Florida citizens the need for caution with residential burning of yard waste, the increased wildfire hazard of post-hurricane fuel and arson.

From January through June, the division utilized four different radio spots in its fire prevention campaign. A 30-second radio spot on dry conditions and accumulated wildland fuel was broadcast statewide for eight weeks during a period of high wildfire activity in January ("Conditions are Dry Like in Texas and Oklahoma").

In April, two additional radio spots were aired ("Know the Law before You Burn" and "Take Measures to Protect Your Home from Wildfires"). These radio spots were broadcast statewide for 11 weeks on more than 55 affiliate stations to reach an estimated 3 million listeners.

A 30-second radio spot encouraging citizens to report suspicious activity that might be the work of an arsonist was broadcast statewide for an eight-week period during May and June.

Forestry district and center personnel used the division's "Living on the Edge in Florida" and "How to Have a Firewise Home" CD-ROMs to conduct 11 Firewise workshops for community leaders and 13 homeowner association workshops.

In an effort to increase the number of Firewise workshops statewide, a contractual services agreement was executed with Pandion Systems, Inc., to host 25 additional Firewise workshops over a 12-month period.

The Division of Forestry and Florida Agriculture in the Classroom were selected as co-recipients of the Florida Fire Chiefs Association's 2005 Award of Excellence in Community Public Education for the "Living on the Edge in Florida" teaching module for grades 9-12. The award was presented at Fire-Rescue East in Jacksonville on January 27, 2006.

A 24-by-36-inch "Are YOU Prepared for Wildfires?" poster was developed as an education tool for offices and community buildings. The full-color poster illustrates 10 things homeowners can do to make their homes safer from wildfire. Additional text on the reverse side of the poster explains how homes burn, Firewise construction, Firewise landscaping techniques, and the Firewise communities/USA recognition program. Additionally all 10 existing Firewise Communities in Florida were recertified for 2006.

Portions of the wildfire prevention campaign included the use of billboards and movie theater advertising. The three different messages used included: Smokey Bear and his message "Only You Can Prevent Wildfires"; "Think Before You Burn," which focused on the issues of escaped debris burning; and "Hurricane Debris = Wildfire Fuel," which focused on the wildfire danger that exists from large amounts of debris left over from the 2004 hurricane season. These messages were used statewide on 16 billboards that were leased for a two-month period and in movie theater ads that played on 410 screens before each movie for a six-week period. Sixty-seven theaters showed the ads as free lobby advertising on plasma TV screens, and over half of the billboards from last year are still up as an additional source of free advertising.

The statewide Fire Danger Weather Campaign was launched during Wildfire Awareness Week in April. Thirteen television stations participated in the campaign by reading a weather-related question on the air during the weather portion of the newscast. Viewers were then directed to go to the television web site and click on the Division of Forestry link to answer the question and be eligible to win a fire danger weather kit. The kits contained a rain gauge, thermometer, calendar, and various other prevention materials and brochures that were related to the effects of weather on fire behavior.

An interagency wildfire prevention clown training was conducted at the Ocala Fire College in February. The Division of Forestry now has eight new wildfire prevention clowns.

The Arson Alert Association sponsored refreshments for several Firewise workshops and Cooperator meetings this past year.

The "Know the Law" brochure was revised to incorporate the new regulations concerning yard debris burning. Each district received several boxes of the new brochures.

Mitigation Specialist Gerry LaCavera and the Okeechobee Wildfire Prevention Committee received the prestigious Bronze Smokey Bear award at the Florida Fire Chiefs Association Conference on Marco Island in July. LaCavera received his award for his prevention and mitigation efforts after Hurricane Charley in the Caloosahatchee District. LaCavera also developed a wildfire prevention plan for Louisiana after Hurricane Katrina. The Okeechobee wildfire prevention committee was honored for their efforts in spreading the fire prevention message throughout the Okeechobee District and for their work with the Highlands County Children's Museum. Only 10 Bronze Smokey Bear awards are given out nationally each year.

This year, the Division of Forestry continued its effective Prescribed Fire Educational Campaign. The campaign included billboards and radio. Two radio public service announcements were premiered at the Prescribed Fire Awareness Week press conference in March 2006. During the one-year run, the radio PSAs aired just over 7,000 times across Florida. In addition, 14 billboards went up around the state in March 2006.

The Department administered the Volunteer Fire Assistance Grant Program to volunteer fire departments that served rural communities with a population of 10,000 or less. Approximately $520,315 was awarded to 130 fire departments. This was a 50 percent matching fund, which enabled the fire departments to purchase approximately $1,040,630 of equipment and supplies. Sixty-four Slip-on Water Tanks, valued at $941,000, were also purchased and distributed to volunteer departments. Twenty-seven volunteer departments received a total of $58,000 worth of fire prevention materials to further their fire education programs.

The division screened $6.6 million worth of federal ex-

cess property to support its fire program. Approximately $4 million was in aircraft and aircraft parts.

Natural Resource Management

The Department manages natural resources by acquiring land, providing technical assistance to private landowners, and operating programs on state forests and other state lands. The Division of Forestry employs multiple-use principles to ensure a sustained healthy forest for 1,001,668 acres on 33 state forests. The most current scientific knowledge is used to ensure good stewardship and the practice of silviculture based on sound ecological principles. The Department supports other state agencies as a cooperating manager on 275,000 acres and assists management on an additional 475,000 acres of public forests through special agreements with such public entities as the Department of Environmental Protection, the Florida Fish and Wildlife Conservation Commission, Water Management Districts and various counties.

Land acquisition closings through the Division of Forestry's Additions and Inholdings Program of Florida Forever totaled 701 acres at a value of $1,475,000. A total of 7,744 acres was added to the state forest system during the year under Florida's Conservation Land Acquisition Programs. All of these lands are managed to provide as many compatible uses and benefits to the public as possible while still providing protection for threatened or endangered species of plants and animals. Public recreational opportunities on these lands include fishing, hunting, hiking, picnicking, canoeing, camping, swimming, bird watching, bicycling and horseback riding. Approximately 791,080 visitors participated in these activities during the year. The management of state forests generated revenues of approximately $5.89 million during the year, with an estimated $4.08 million coming from the sale of timber and the remainder coming from other state forest income, including recreation fees charged by the Department. The Department pays 15 percent of the revenue from state forest operations to the counties in which these forests are located. The revenue returned to counties for fiscal year 2004-2005 was $1,425,561. It is anticipated that approximately $883,656 will be returned to counties for fiscal year 2005-2006. There are substantial direct and indirect benefits provided to local governments from the management of these lands.

Technical Assistance

The Department provides technical assistance to help private landowners and communities make intelligent decisions to develop and achieve their objectives in forest land management. During the 2005-2006 fiscal year, the Forest Land Enhancement Program (FLEP), which is part of the 2002 Farm Bill, has awarded a total of $472,429 in cost-share money to non-industrial private forest landowners to help them implement forest management activities on their property. This cost-share amount reached a total of 167 landowners on 9,926 acres throughout the state. Florida's Forest Stewardship Program is part of a national initiative to encourage private forest landowners to manage their properties for multiple use. Through the Department's leadership, 140 forest stewardship plans were completed on 36,210 acres, and 44 landowners were certified as implementing forest management practices in the Forest Stewardship plans during the year. This year, the Department will also be providing, through the USDA Forest Service's Forest Land Recovery Program, $6 million to private landowners who suffered damage to their timberlands in the 2004 hurricane season. The Department's Andrews Nursery produced and sold 7.4 million bare root pine seedlings and 4.3 million containerized pine and wiregrass seedlings to 540 Florida customers. This produced $1.1 million in revenue. The Department awarded $316,000 in federal urban and community forestry grants to a total of 26 local governments, nonprofit organizations and educational institutions to enhance their ability to carry out effective urban forest management programs in their respective communities. In addition, the Department also awarded 214 emergency urban and community grants with a value of $14 million to local governments, nonprofit organizations and educational

institutions that received damage during the 2004 hurricane season. These funds will be used to replant trees, correct hazardous situations involving trees, and educate the public about trees and storms. As a result of the 2005 hurricanes, the U.S. Forest Service has provided an additional $700,000 for similar grants to be allocated to impacted areas in August 2006.

Forest Health

The Southern Pine Beetle (SPB) Prevention Cost-Share Program was open to private non-industrial forest (PNIF) landowner applicants that started in May 2006. The program accepted applications for $576,000 to treat 20,041 acres with thinning and prescribed burning treatments. There was $152,000 spent on SPB prevention and restoration activities on state lands in fiscal year 2005-2006. A pilot SPB hazard rating map based on satellite forest imagery was completed for northeast Florida. Public service ads promoting SPB prevention and healthy forests ran for 16 weeks in 34 newspapers between February and June 2006. As for SPB infestations, activity has been negligible and consistent with the pheromone trap survey prediction of low activity statewide.

The non-native redbay ambrosia beetle and its associated vascular fungus are killing redbay trees at dramatic rates in Georgia, South Carolina and Florida. There are now five Florida counties – Baker, Bradford, Clay, Duval, and St. Johns – with confirmed infestations, whereas in January 2006 only Duval County was known to be infested. Percent mortality of redbay at the site of the initial infestation in Duval County has increased from 10 percent to 81 percent in the last year. Redbay mortality, beetle flight traps, and the susceptibility of potted and planted avocado trees (same genus as redbay) are being monitored by the Forest Health Section. A poster urging against the non-local transport of redbay firewood has been distributed to the Florida Department of Environmental Protection's Division of Recreation and Parks and selected private campgrounds, and is posted at Division of Forestry campgrounds in the region.

There have been many inquiries concerning oak mortality. Field investigations have yielded no evidence to suggest that Florida's oaks are under siege from any novel or particularly threatening insect pests or diseases. Depending on circumstances and species, post-mortem evaluations have pinpointed common diseases as probable causal agents in many cases. A previously unreported basal canker infection has been confirmed in four north-central Florida counties, but the role of this infection in the overall scenario is likely to be minimal. A circular describing this disease has been prepared and placed on the Division of Forestry's web site. Presentations entitled "Why is my oak tree dying?" have been given in at least six locations in Florida and other southern states. Environmental stresses and hurricane influences are considered key reasons why these trees dying.

Non-native invasive plant surveys were either conducted or supported by the Division of Forestry during fiscal year 2005-2006. A survey of invasive plant populations on state forests is ongoing, with 20 of the state forests completed. A survey of invasive plant populations on six private conservation easement properties in Central Florida was conducted, providing landowners with location and size of infestations of eight species on those sites. An aerial survey of non-native invasive plant species was conducted extending approximately from Orlando to Micanopy in cooperation with several agencies. Eight species were recorded, and the extensive nature of the cogon grass invasion in Central Florida was clearly shown by this survey.

Hydrology

The Division of Forestry is responsible for development, implementation and monitoring of Silviculture Best Management Practices (BMPs) that protect the state's water resources, and for implementing hydrologic and wetland restoration on state forests.

The division conducted its 13th BMP implementation survey last year and reported an overall compliance of 99 percent for bona-fide silviculture operations sampled

statewide. The 2005 BMP Implementation Survey evaluated 4,477 practices on 190 individual forestry operations (sites). This cooperative effort involved 52 individual public and private non-industrial landowners and covered 28,906 acres in 39 Florida counties. Forty-six sites were on private non-industrial forestland, 119 on industrial forestland, and 25 on public forestlands. The statewide average compliance for the period of record is 93 percent, and a total of 4,491 individual forestry operations have been surveyed since 1981.

Silviculture BMP training accounted for over 35 workshops conducted throughout the state to continually update landowners, loggers and foresters of recent changes. Over 1,450 individuals participated in these training sessions.

In addition, the Division of Forestry continued to solicit participation by forest landowners in Florida's Administrative Rule 5I-6, which provides additional incentives to comply with forestry BMPs. These incentives include property rights protection under Florida's Right to Farm Act, and a presumption of compliance with state water quality standards where BMPs are followed. Rule 5I-6 became effective on February 11, 2004, with over 9,000 individual tracts totaling over 5.24 million acres of forestland enrolled in the program through the end of the fiscal year.

Despite significant damage from an unusually active hurricane season in 2005, the division continued its wetland restoration efforts on state forests. Most of these efforts were implemented with the cooperation and assistance of other state and federal agencies.

During the 2005-2006 fiscal year, eight restoration projects were completed on four of the 33 state forests. These projects enhanced or restored a total of 8,460 acres of historically altered wetlands at a total estimated cost of $435,000. The division's share of the restoration costs amounted to approximately $85,000, or 19.5 percent of the total; the balance was funded through Water Management District restoration project funding and Florida Department of Transportation and mitigation programs coordinated through the Water Management Districts.

Since 2002, 22,220 wetland acres on 10 state forests have been restored through the completion of 25 restoration projects. Total expenditure for all projects to date is approximately $1,083,000, of which the division's share is $149,600, or roughly 14 percent. Approximately 44 percent of all wetland restoration projects on state forests are funded through mitigation; another 12 percent are funded through federal grants. The remaining 30 percent has been funded through wetland restoration project funding offered through other state agencies.

All projects completed within the last five years are being monitored for effectiveness and hydrological and ecological impacts.

Currently, the division has nine active restoration projects on nine forests and ten additional projects in the planning stage on nine forests.

Field Operations

The division's forestry programs are implemented by Field Operations staff located in the state's 15 field units and the Tallahassee state office. The field units are grouped into four regions, each under a Deputy Chief of Field Operations. The multifunctional workforce of personnel and equipment provides a responsive and comprehensive approach to land management and wildfire control statewide.

Forest Resource Planning and Support Services

The Bureau of Forest Resource Planning and Support Services (FRPSS) provides support to all bureaus within the Division of Forestry. Sections include technical and professional staff to address issues in Information Technology, Construction, Equipment, and Planning.

Information Technology

The Forestry Information Technology (IT) section supports microcomputers, applications, Geographic Information Systems (GIS), and Global Positioning Systems (GPS) for the Division of Forestry throughout the state. Related functions include: hardware and software acquisition; installation and maintenance; Intranet/Internet web page management; application development and maintenance; ongoing upgrading of computer networks; and spatial analyses in support of state lands management and wildland fire protection.

During fiscal year 2005-2006, the primary tasks for the section focused on production support for the Fire Management Information System (FMIS), development of a Cooperative Forestry Assistance accomplishment reporting system (CARS), GIS and computer support during hurricane season, and installation of high-speed Internet connections for several field offices.

The Application Section continued to support the core division applications: Volunteer Application (VOLT), Rare Plant Tracking (RARE), Best Management Practices (BMPs), Florida Fire Management Information System (FMIS), Forest Management Sales (FMS), Seedling System (SED), Forestry Equipment Inventory (FEI), Time Allocation and Accomplishments Reporting System (TAARS), and Compliance Suite/Safety System. Several enhancements were made to the division's web site. First, static web pages were relocated to a Department enterprise server. Second, a new process was established for all web site development and production. Third, Webtrends statistical software was configured to track web site usage. Also, several other small projects were completed: Changes were made to improve ADA compliance to reach the goal of 100 percent; a recreation-specific events page was developed to highlight the Million Acre acquisition; a weather contest was created to promote weather awareness during severe weather week; Intranet and Internet pages were updated based on quarterly review from the program areas; and monthly web pages were developed for the Health and Wellness Intranet. The web site continues to change and grow as the needs of the division expand.

The GIS section assisted in hurricane mapping support and the development of national wildland fire incident support mapping standards. GIS and GPS technology continues to be emphasized among field units and forestry program areas while web mapping opportunities are explored. An Intranet web site was developed to provide better support to our GIS users.

Other projects involved the purchase of 121 new computers. The priority was to install laptops for supervisors, managers and incident team members. Twenty-one field offices were upgraded from dial-up Internet to high-speed Internet service. This faster Internet service allows the users to have faster access to Department applications, email, Internet and the People First personnel system.

Equipment/Telecommunication

The Bureau of Forest Resource Planning and Support Services' Equipment Section has statewide responsibility for fleet management for the Division of Forestry. The current fleet replacement needs are $44 million. The Equipment Section's major task is the purchase of specialized fire-fighting and forestry land management equipment and motor vehicles. In fiscal year 2005-2006, the division received approximately $10 million in budget allocations and grants to purchase forestry equipment. This section also coordinates motor vehicle and equipment specification development for bids and acquisition, equipment inventory, warranty issues and special projects for the division as to the compliance for forestry equipment performance. These motor vehicles will receive custom fabrication to meet firefighting and land management specific requirements at the division's Lake City Central Shop.

Construction

The Construction Section provides complete project management for the division's fixed capital outlay projects, including construction and maintenance programs statewide. During fiscal year 2005-2006, an estimated 20,000 square feet of building space were constructed at a cost of approximately $3.2 million. The Construction Section coordinates design, engineering, bid specifications and construction management for each project. A current major project is the construction of the new Wacassassa Forestry Center Headquarters complex in Gainesville for $2.1 million. The new facility improves the division's capabilities for firefighting, forest management and access to the general public.

Safety - Workers' Compensation

The Division of Forestry provided workers' compensation coverage to 1,280 full-time workers for the fiscal year 2005-2006 reporting period. There was a 20 percent increase in the number of accidents/injuries during the same time frame. This was due to the division's emergency responses to hurricanes and wildfires, both in and out of state.

A proactive approach is utilized that includes identification cards with a contact number for CorVel, the managed-care provider, with instructions for reporting an injury; Workers' Compensation information brochures for new employees; and an Intranet site. This fiscal year, a health and wellness page was added that provides the latest health, fitness, nutrition and medical advice available to help educate and encourage employees to make small changes in lifestyle that will make big differences in their personal and professional lives. The division's Safety Committee provides a structure to ensure the best communication of statewide safety issues.

Forestry Youth Academy

The Division of Forestry's Youth Academy in the Goethe State Forest in Levy County provides a life-changing experience for juvenile offenders that will transform them into productive citizens.

The Forestry Youth Academy is a low-risk residential program for youthful offenders aged 15 to 19. It was established in 1996, through a joint agreement between the Division of Forestry, the Florida Department of Juvenile Justice, and the Levy County School Board.

Residents receive academic and vocational training and learn important social and life skills. They are taught discipline and teamwork and have the opportunity to develop positive values and a sense of personal responsibility. Hands-on training is available in such areas as building and maintenance, heavy equipment operation, small gas engine repair, welding, culinary arts, agri-science, pest control, chainsaw operation and firefighting.

When students graduate from the Forestry Youth Academy, they leave with a high school diploma or enough credits to place them back in their appropriate grade level. They also earn two vocational certifications. This year, thirty-three students left the program as "Successful Completers," earning credits towards a high school diploma and receiving at least two vocational certifications.

Training

Florida Center for Wildfire and Forest Resources Management Training

The Florida Center for Wildlife and Forest Resources Management Training in Brooksville marked its eighth year of operation in 2006. The center provides classes on Basic Fire Control Training to the division's new firefighters. This is a seven-week training program that is offered twice per year. This year, 39 new candidates received certification as Wildland Firefighters in Florida.

The center also provided 64 open-enrollment training courses during the fiscal year. These included courses in Wildland Firefighting, Incident Management, Computer Training, Instructional Development, Vehicle Repair and Maintenance, Domestic Preparedness, Leadership, Health and Safety, and Natural Resource Management. These courses were attended by 1,119 Division of Forestry employees and 465 non-division (cooperator) students. The training center assisted the division's districts to offer 85 Incident Management courses during the same time period.

The Training Center also provided environmental education to teachers and students through our Forestry Teacher Tour, Future Farmers of America, and the Envirothon program.

SAFEGUARDING FLORIDA'S CONSUMERS

Division of Consumer Services

During fiscal year 2005-2006, the Division of Consumer Services provided consumer information, processed complaints, and promoted consumer protection. During this period, the division's Consumer Hotline had another busy year handling 307,681 telephone calls to assist consumers and businesses. The division received 32,786 written complaints and provided 413,058 brochures, pamphlets and booklets for distribution to consumers. In addition, 8,933 email requests for information were processed through the Call Center.

The division continued its public awareness of consumer topics by providing speakers to civic groups and organizations throughout the state. The speakers provide information on important consumer-related topics, answer questions on current frauds and scams, and provide educational materials on a variety of topics. In addition, the division utilizes its web site www.800helpfla.com to educate consumers and businesses. During fiscal year 2005-2006, the web site received a total of 2,157,663 web visits. Consumers can obtain information concerning the many areas the Department regulates and find out what their rights are under these laws. Consumers also learn how to file complaints to have their disputes resolved. In an effort to become more efficient and to streamline its business processes, the division began imaging and scanning all registration and complaint files. The benefits gained from imaging and scanning have resulted in increased productivity, division staff having instant access to documents, records storage fees will soon be eliminated and public records requests can be processed promptly. Additionally, by automating its business processes, the division now has control over the integrity of its files that were otherwise cumbersome to manage.

Businesses have access to licensing and registration information, as well as the forms necessary to comply with applicable regulations. The Department also functions as the U.S. Consumer Product Safety Commission's liaison in Florida regarding product recalls, inspections and investigations.

Call Center

The Call Center's staff maintains and operates the Department's toll-free consumer hotline, 1-800-HELP-FLA (1-800-435-7352), and the Spanish hotline, 1-800-FL-AYUDA (1-800-352-9832). Call Center personnel track and analyze data to provide current information to callers. During fiscal year 2005-2006, Call Center staff provided 588,272 assists to consumers and businesses by providing brochures, complaint forms and registration forms. Eighty-four percent of callers responding to surveys ranked the Call Center's service as outstanding.

The Call Center assists individuals daily with consumer-related issues, providing up-to-date information or transferring callers to the appropriate governmental agency. Consumer questions cover various areas the Department regulates, such as business opportunities, dance studios, game promotions, health studios, intrastate moving, motor vehicle repair, Florida's Do Not Call program, pawn shops, sellers of travel, solicitation of charitable contributions, telemarketing and the motor vehicle Lemon Law. Call Center analysts also respond to inquiries on a multitude of subjects that are not regulated, such as landlord/tenant issues, buying clubs, and retail store regulations. Staff utilizes the Department's computer database to develop statistical information on the frequency and type of calls received. Each call is logged under a specific subject category in the database, which allows the Department to track the most prevalent consumer issues. This record enables consumer education efforts to be tailored to the specific needs of the public. The division's telephone system was enhanced to more efficiently operate the division's Call Center.

As a result of the hurricanes that affected Florida in 2005, the Call Center converted to a price-gouging hotline. The Call Center responded to over 14,824 consumers seeking information and assistance due to the disasters.

Consumer Complaints

The Bureau of Mediation and Enforcement processes all consumer complaints filed with the Division of Consumer Services. Complaints are received online and via mail, and deal with a variety of subjects. Division staff attempt to resolve disputes through informal mediation, and they review complaints for compliance with applicable laws. The top five complaint categories during fiscal year 2005-2006 were: telephone sales solicitations (Do Not Call), travel and vacation plans, price-gouging, motor vehicle repair, and communications. During fiscal year 2005-2006, the division received 14,151 complaints filed against entities regulated by the division and recovered $3,932,934 in money and property for consumers. In addition, another 18,635 complaints filed against non-regulated businesses were received, which resulted in $2,081,251 in refunds to consumers. The division also assisted in recovering an additional $103,154 in consumer refunds from security instruments (bonds, letters of credit, or certificate of deposits) filed with the Department for the protection of consumers from a breach of contract.

New Motor Vehicle Lemon Law

The Department administers the Florida New Motor Vehicle Warranty Enforcement Act, commonly known as the "Lemon Law." Personnel respond to consumer complaints and inquiries, provide information about the Lemon Law, and determine whether claims are potentially eligible for state arbitration before the Florida New Motor Vehicle Arbitration Board.

The Department also provides certification to motor vehicle manufacturers who establish informal dispute settlement procedures in compliance with applicable federal and state statutes. In fiscal year 2005-2006, the Department re-certified informal dispute settlement procedures for General Motors, Honda/Acura, Nissan/Infinity, Bentley, Saab, Volkswagen/Audi, AM General, Isuzu, Hyundai, Kia Motors, Saturn, and Ford Motor Company. These manufacturers utilize the Better Business Bureau Auto Line program. Porsche, Toyota and Lexus were also recertified. These manufacturers utilize the National Center for Dispute Settlement program. Each of these programs is audited throughout the year for compliance.

During fiscal year 2005-2006, the division answered 19,028 telephone calls on the Lemon Law hotline, 1-800-321-5366. The division also processed 1,091 requests for state arbitration and approved 965 of these for referral to the Attorney General's office. In addition, division staff reviewed 2,940 consumer cases that were processed through the manufacturers' informal dispute settlement programs.

Regulated Programs

The Department is responsible for regulating a variety of industries operating in Florida, including business opportunities, dance studios, game promotions/sweepstakes, health studios, intrastate moving, motor vehicle repair shops, Florida's Do Not Call program, pawn shops, sellers of travel, solicitation of contributions, and telemarketing. These programs are designed to protect consumers and the integrity of each industry. Industry members must submit a registration/license application or similar filing and, in some cases, a surety bond, certificate of deposit, or letter of credit to ensure consumer refunds in the event a business defaults.

Business Opportunities

The Business Opportunities Program requires individuals who sell or lease any products, supplies or services for the purpose of starting a business to register and disclose certain information to prospective purchasers. Some sellers must also submit a $50,000 surety bond, certificate of deposit, or letter of credit. In fiscal year 2005-2006, the Department registered 1,880 sellers of business opportunities and franchise filings, processed 802 written complaints, recovered $205,557 in consumer refunds, and collected $23,500 in administrative fines.

Dance Studios

The Dance Studio Program requires all ballroom dance studios to register with the Department. In some instances, registrants are required to post a surety bond, certificate of deposit, or letter of credit. For fiscal year 2005-2006, the Department registered 168 dance studios, processed 37 written complaints, recovered $18,801 in consumer refunds, and collected $2,650 in administrative fines.

Game Promotions

The Game Promotions Program requires operators who conduct contests, games of chance, or gift enterprises in connection with the sale of consumer products or services to file with the Department. Unless they have been granted a waiver, operators are also required to establish

a trust account or obtain a bond in an amount equivalent to the total value of all prizes offered. During fiscal year 2005-2006, the Department processed 4,116 game promotion filings, processed 204 written complaints, recovered $5,681 in consumer refunds, and collected $271,561 in administrative fines.

Health Studios

The Department regulates health clubs that offer health club activities or physical exercise equipment. Some health studios are required to post a $50,000 surety bond, certificate of deposit, or letter of credit to satisfy consumer claims that may result from violations of Florida law. During fiscal year 2005-2006, the Department registered 1,948 health studios, processed 671 written complaints, recovered $52,616 for consumers, and collected $41,500 in administrative fines.

Intrastate Moving

The Department regulates intrastate moving companies operating in Florida. This law requires a written estimate be given to consumers before the mover provides any moving or packing services. During fiscal year 2005-2006, the Department registered 978 moving companies, processed 714 written complaints, recovered $74,556 in consumer refunds, and collected $80,453 in administrative fines.

Motor Vehicle Repair Shops

The Department regulates all motor vehicle repair shops in Florida in accordance with the Motor Vehicle Repair Act. This law requires an estimate and invoice form be provided to consumers for repair work exceeding $100. During this period, the Department started using e-commerce to allow motor vehicle repair shops to conduct online transactions when renewing their registration. Additionally, the Department launched the Motor Vehicle Repair Education Assistance Program which provided scholarships for mechanics to attend technical training or other courses related to auto repair. The Department provided scholarships totaling $100,000 to 114 motor vehicle shops. During fiscal year 2005-2006, the Department registered 10,625 motor vehicle repairs shops, bringing the total registered shops to 22,895. The Department conducted 3,943 on-site enforcements which resulted in 359 investigations. Staff processed 2,477 written complaints, recovered $1,072,654 for consumers, and collected $244,030 in administrative fines.

Do Not Call

The Florida Do Not Call law is a privacy law enacted to protect consumers from unwanted telephone solicitations and pre-recorded messages. Consumers can subscribe to the Do Not Call List for an initial fee of $10, with a $5 annual renewal fee. Subscribers may file a complaint with the Department for any unwanted phone calls they have received from non-exempt businesses. Consumers may also file a complaint if they receive pre-recorded messages. At the end of fiscal year 2005-2006, the Department had processed 13,549 new subscriptions and 95,661 renewals for a total of 109,210 subscriptions. The program processed 5,162 written complaints. Sixty-nine cases were referred to the Office of General Counsel for prosecution. A total of $191,068 was collected in civil penalties.

Pawn Shops

The Department licenses all pawn shops operating in Florida pursuant to the Florida Pawnbroking Act. Each pawnshop must maintain a net worth of at least $50,000 or file a $10,000 security in the form of a surety bond, certificate of deposit, or letter of credit. During fiscal year 2005-2006, the Department licensed 1,090 pawn shops, recovered $23,242 in consumer refunds, and collected $18,000 in administrative fines.

Sellers of Travel

The Department regulates travel agencies in Florida for compliance with the Sellers of Travel Act. Non-exempt sellers of travel must register and, in some cases, submit a performance bond, certificate of deposit, or letter of credit in an amount not to exceed $25,000, or $50,000 if they sell vacation certificates. A seller of travel that has been in business for at least five years and meets certain other requirements may apply for a security waiver. In addition, independent agents must submit annual filing statements to the Department. During fiscal year 2005-2006, 5,396 sellers of travel and independent agent registrations were received. The Department processed 5,317 written complaints, recovered $2,157,318 in consumer refunds, and collected $74,221 in administrative fines.

Solicitation of Contributions

The Solicitation of Contributions Act requires charitable organizations, sponsors, professional fund-raising consultants, and professional solicitors to register with the Department. During fiscal year 2005-2006, the

Department processed 11,771 registrations for charitable organizations, sponsors, professional solicitors and fund-raising consultants. The Department also processed 160 written complaints and collected $44,285 in administrative fines.

Telemarketing

The Florida Telemarketing Act requires non-exempt telemarketers to obtain a license from the Department and submit a $50,000 surety bond, certificate of deposit, or letter of credit. During fiscal year 2005-2006, the Department licensed 819 businesses and individuals, processed 1,031 written complaints, and recovered $24,938 for consumers.

Investigations

The Investigations Section conducts investigations of businesses (both regulated and non-regulated) and responds to consumer complaints. The priority for this group is to ensure businesses operate in compliance with applicable laws. This group also investigates businesses suspected of fraud and deceptive trade practices. During fiscal year 2005-2006, the Investigations Section worked 4,474 enforcements and initiated 543 investigations covering a variety of topics. The high-volume cases for investigations were motor vehicle repair, sellers of travel, and intrastate moving. This section conducted a Regional Onsite Inspection Project in several counties which resulted in 2,413 enforcements. During the inspection, 1,854 shops were found in compliance, 286 field administrative complaints were issued, 268 shops were found closed, and 53 new shops were found.

Consumer Education

The Division of Consumer Services continued to promote its educational outreach programs aimed at increasing public awareness of consumer protection issues among Florida citizens. During fiscal year 2005-2006, the division provided 3,435,460 assists to consumers and businesses statewide through a variety of formats, including the web site, newspaper articles, newsletters, brochures and public presentations.

Division representatives gave public presentations on consumer-related topics to more than 7,635 consumers representing various groups and organizations throughout the state. A public service announcement targeting the Hispanic community was published in Central Florida in a hurricane survival guide during the 2005 hurricane season. Additionally, public service announcements were aired on the services available through the division's Call Center. The announcements ran 14,763 times, were distributed to more than 250 cable systems throughout the state, and ran on more than 55 channels. These announcements had the potential to reach more than five million households. The division's web site was continually updated to include relevant information to businesses and consumers on various laws, as well as current frauds and scams.

The division continued to publish its monthly e-newsletter for Florida consumers. The newsletter provides quick tips on important consumer-related issues and lists resources for finding additional information. At the end of fiscal year 2005-2006, the subscription list contained 17,104 subscribers.

Additionally, the division continued to submit articles on consumer-related issues to the Elder Update, a newsletter published bi-monthly by the Department of Elder Affairs. More than 70,000 copies were distributed to senior citizens. The division's educational efforts focus on making individuals better consumers and helping them make more informed decisions when purchasing products and services and signing contracts. The division also functions as the U.S. Consumer Product Safety Commission's liaison in Florida regarding product recalls, inspections and investigations.

Division of Standards

Petroleum Inspection

The Department regularly conducts inspections of the petroleum distribution system and analyzes samples of petroleum products to ensure that consumers are offered quality products at fair measure.

In fiscal year 2005-2006, more than 99 percent of the samples collected and analyzed from more than 10.4 billion gallons of petroleum fuel distributed throughout Florida met state standards, which are considered among the strictest in the nation. The Department issued 320 stop-sale orders to prevent the sale of over 1 million gallons of substandard fuel.

The quality of gasoline, kerosene, diesel and fuel oil is determined at Department laboratories through analy-

ses of octane rating, distillation, vapor pressure, sulfur content and flash point.

Laboratory personnel analyze antifreeze for corrosion, freezing point, boiling point and chemical content as part of the antifreeze registration and regulatory program. Similarly, brake fluid also must pass strict standards for boiling point, elastomer swelling and chemical content before being registered by the Department for sale to the public. The Department registered 449 brands of antifreeze and brake fluid as acceptable products to be marketed in Florida.

In all, laboratory analysts at Department laboratories in Tampa, Tallahassee and Port Everglades analyzed 39,399 samples of petroleum fuels, antifreeze and brake fluid. Department inspectors conducted 183,158 petroleum inspections on retail dispensers at 9,192 petroleum facilities throughout Florida. Inspections included calibrating tests, proper installation and maintenance of measuring devices, and labeling of petroleum dispensers. As a result of these inspections, 3,828 pumps were taken out of service because of improper calibration and 35,526 correction notices were issued for poorly maintained pumps.

The Department handled 5,394 petroleum-related consumer complaints as a result of posting the 1-800-HELPFLA consumer hotline decal on petroleum dispensers. Complaints have concentrated on fuel quality, meter accuracy and price. The field staff is charged with responding to these complaints within 24 to 48 hours. In addition, the Department handled 3,350 consumer complaints related specifically to potential price-gouging, mostly a result of Hurricanes Dennis, Katrina, Rita and Wilma affecting the distribution of petroleum products throughout Florida.

This past year the Department began preparing for the arrival of alternative fuels in Florida. In preparation, the Department legislatively redefined "petroleum fuel" to include alternative fuels such as E85 (85 percent ethanol and 15 percent gasoline) and biodiesel. Additionally, the Department adopted into rule fuel quality standards and labeling requirements for such fuels, ensuring that consumers will continue to be protected when alternative fuels begin to appear on the motor fuel market in Florida.

To ensure that consumers receive fair measure from petroleum pumps, the Department continues to use numerous fraud investigation techniques, including the deployment of undercover vehicles. The unmarked vehicles have a specially designed and calibrated gasoline tank that enables a trained inspector to determine a pump's calibration without a service station operator's knowledge. The undercover vehicles have confirmed that most petroleum pumps are accurate and consumers are receiving fair measure.

Weights and Measures

The Department performed inspections and tests on more than 59,000 weighing and measuring devices, including retail scales, prescription balances, livestock scales, truck scales and taximeters. Of those inspected, 4,872 were found out of compliance with state standards and ordered corrected; another 1,912 were immediately taken out of service.

Department inspectors routinely check the accuracy of net contents and labels of packaged goods such as dry goods, standard-pack food commodities, household items, building and construction materials, gardening products and hundreds of other products purchased daily by consumers and businesses in the state. In fiscal year 2005-2006, inspectors sampled lots representing more than 499,000 packages. Stop-sale orders were placed on over 77,000 packages that contained less than the stated contents or failed to provide the required information on the label. Many more packages were recalled or relabeled by producers as a result of Department inspections.

Inspectors randomly tested 14,108 items for price accuracy in 247 businesses, primarily grocery, department, discount, drug, building supply and other retail stores. Overall results showed that 1.52 percent scanned at more than the posted price and 1.30 percent scanned at less than the price advertised. Violations were corrected immediately, and 38 businesses that failed to meet the 98 percent national accuracy standard faced additional sanctions and testing.

The Weights and Measures Field Inspection and Regulatory Program continues to utilize an automated inspection data collection system. The system enables the program to use resources more effectively in targeting areas of lower compliance.

In the state metrology laboratory, the state primary standards of mass, length and volume were used in comparing and calibrating more than 10,492 mass standards used by state inspectors, laboratories, high-tech industries and commercial scale repair agencies, as well as 751 test measures used to check the accuracy of gas pumps and wholesale meters. The laboratory maintained its accreditation by the National Voluntary Laboratory Accreditation Program, which it obtained in 2003. It was one of the first state metrology laboratories to achieve this accreditation. The lab provides Florida citizens and industries with calibration services traceable to national standards, while performing special tests such as standardizing grain samples for use in testing moisture-determining equipment at commercial grain elevators.

Fair Rides Inspection

The Department has an amusement ride inspection program which, by reputation, is the most comprehensive of any state in the country.

All amusement rides, except those at theme parks, which are exempt by law, are inspected and permitted each year by the Bureau of Fair Rides Inspection. Permanent amusement rides – those located at a fixed site – are inspected twice each year. Temporary amusement rides, such as those used by carnivals, are inspected each time they are moved or set up.

The Department has 15 inspection specialists who are stationed statewide and who inspect and permit amusement rides. Department inspectors are constantly trained with recurring on-the-job training, structured training seminars developed by the Department, and continuing education seminars sponsored by the amusement industry, amusement ride manufacturers, safety organizations, and engineers or other subject matter experts.

In fiscal year 2005-2006, the Department issued permits for about 1,600 amusement rides and conducted 9,980 inspections statewide. Those inspections identified about 15,000 deficiencies on those amusement rides, all of which were corrected before the rides were allowed to open for public use. The Department issued 381 stop-operation orders for unsafe, uninsured or un-inspected amusement rides. The Department also investigates accidents and mechanical failures involving amusement rides and, when appropriate, closes and impounds unsafe amusement rides.

The Florida Amusement Device and Attraction Advisory Committee was created in 1991 by the Commissioner of Agriculture to advise and consult with the Department on amusement ride issues. The committee, which is appointed by the Commissioner, includes a cross-section of members from the amusement industry, fair industry, amusement parks, and technical or subject matter experts. This committee holds at least two public meetings annually to discuss safety issues, ride inspections, ride equipment, industry concerns and other matters in support of the Department's inspection program.

Each year, the Department participates in a consultation program with the large theme parks in Florida on safety issues. Department staff visits each of the parks and reviews safety, maintenance and operation procedures of the park rides. Furthermore, the theme parks file an affidavit of annual inspection on all their rides. The Department is a member of the American Society of Testing and Materials, Committee F-24, which develops standards for the manufacture, fabrication, performance and testing of amusement rides and devices. The Department is also a member of the Council for Amusement and Recreational Equipment Safety (CARES), which is a national association of government regulatory officials that shares information among members and works with the U.S. Consumer Products Safety Commission on amusement ride issues.

LP Gas Inspection

The Bureau of Liquefied Petroleum (LP) Gas Inspection is charged with the regulation of LP gas usage, storage, distribution, handling and transportation from the time the product enters the state until it reaches its final point of consumption. There are over 3,000 storage and distribution facilities in the state, and they handle approximately 400 million gallons of propane annually. During fiscal year 2005-2006, the Bureau of LP Gas Inspection conducted 9,626 facility inspections, investigated 55 LP-gas related accidents, and issued 10,262 licenses and qualification examination certifications. The bureau took 4,330 enforcement actions to ensure compliance with safety regulations, including 1,861 notices of non-compliance and 1,920 cease-and-desist notices.

The bureau administered 1,174 examinations during fiscal year 2005-2006. In addition, it conducted over 44 classes for safety training of dispensing unit operator personnel, building officials and pipeline distribution system operators. In May 2006, the bureau co-sponsored the annual Ocala Safety School, which had 135 participants. Each year this week-long school draws attendees from all over the world.

In addition to the regulatory duties prescribed in Chapter 527, F.S., the bureau is charged with administrative oversight for the Florida Propane Gas Safety, Education and Research Act. Under this act, a regulatory assessment is collected annually from the propane gas industry to fund programs for training, education, consumer safety, marketing, research and development programs relating to the propane industry in Florida. In conjunction with this program, the Department maintains a consumer information web site and publishes and distributes thousands of consumer safety brochures relating to home heating safety, safe grilling, general safety practices, and the reporting of gas system changes to gas suppliers.

Division of Licensing

Private Investigative, Recovery and Security Industries, Concealed Weapons and Firearms Programs

The Division of Licensing administers two different licensing programs. Though these programs function differently, they both serve to enhance public safety and promote the general welfare of Floridians.

First, under the authority of Chapter 493, F.S., the division licenses and regulates individuals and agencies in the private investigative, recovery, and security

industries. The division's regulatory oversight of these industries protects the public from unqualified and unscrupulous individuals by ensuring that only knowledgeable and qualified individuals are licensed to perform regulated duties.

Second, the division administers the concealed weapons and firearms program in accordance with the provisions set forth in Section 790.06, F.S., issuing licenses to law-abiding citizens who have demonstrated competency with a firearm. Public safety is not the only benefit derived in this program. In superintending this program, the division applies uniform standards for issuing concealed carry licenses, thereby guaranteeing that no honest, law-abiding citizen who qualifies for such a license under the law is arbitrarily denied his or her rights. The division thus plays an integral role in safeguarding individual liberty.

In fiscal year 2005-2006, the division received 190,487 new and renewal applications, and issued 186,070 licenses. These numbers, reflecting cumulative totals from both licensing programs, represent a slight decrease from the total number of applications received and licenses issued last year (a 4 percent and a 3 percent decrease, respectively). This decrease is attributable to the smaller number of new applicants seeking to enter the workforce in the private investigative, recovery, and security industries. The number of licensed individuals and agencies in the regulated industries grew to 139,506, an increase of 2 percent over the previous year.

The concealed weapons licensing program experienced the busiest year in its 18-year history. The 58,613 new applications received and the 56,789 new licenses issued were the highest production totals since the inception of the program in October 1988. At fiscal year's end, there were 384,648 concealed carry licensees, an increase of almost 11 percent over fiscal year 2004-2005.

As the number of licensees increases, so too does the demand for customer service, a fact evidenced by the growing number of inquiries made to the division's Public Inquiry Section. Employees in this section respond to telephone inquiries from citizens, applicants, and licensees about rules and regulations, fees, and various other licensing-related matters. In fiscal year 2005-2006, the Public Inquiry Section fielded 153,395 telephone calls, an increase of 18 percent over the call load from the previous year.

The leveling off in the growth of the licensee population in the regulated industries in fiscal year 2005-2006 was accompanied by a decrease in regulatory activity. The Bureau of Regulation and Enforcement conducted 1,778 complaint investigations in fiscal year 2005-2006, only 60 fewer than the previous year; however, at 4,709, the number of compliance inspections was down almost 30 percent from the previous year. Nonetheless, the number of administrative actions, actions that include license denials, suspensions, and revocations in both licensing programs, totaled 10,613, only a slight decrease from the 10,995 conducted in fiscal year 2004-2005.

It should be noted that it is difficult to determine with certainty the causes of the significant increase in demand for concealed carry licenses. Florida law does not require an applicant for a Florida Concealed Weapon or Firearm License to indicate on the application a specific reason for wanting such a license. However, in conversations with instructors who teach firearms courses at private gun ranges throughout the state, division representatives learned that many students were attending firearms classes and obtaining concealed carry licenses out of concern for their personal safety in the wake of the widespread destruction and the accompanying disruption of civil order caused by hurricanes.

While one can speculate about the impact of hurricanes on concealed carry licensing trends, there is certainly no room for speculation on the effects of these storms in Florida and throughout the South. The hurricanes of 2005 had a profound impact on the lives and livelihoods of millions of people, and the division saw firsthand the effects of those storms on one regulated industry in particular.

In the weeks after Hurricane Katrina struck the Gulf Coast, Florida security agencies received many requests for assistance from businesses and government entities in Louisiana, Alabama and Mississippi. Damage from the storm was so severe and widespread that law enforcement authorities and security agencies in those three states were unable to handle the need for security operations. The division coordinated efforts to facilitate licensed Florida agencies' ability to respond to this emergency, disseminating information regarding licensing requirements and licensing agency contacts in those

other states to licensed Florida agencies.

But Florida was not spared by Katrina, and there were emergencies here at home as well. Many counties along the Gulf Coast, especially those in the Panhandle, had their own share of damage, and there were shortages of security personnel in these counties. Pursuant to an Executive Order signed by Governor Jeb Bush, the Division of Licensing enacted a temporary waiver of licensing requirements, authorizing licensed out-of-state security officers to enter Florida to work for Florida-based security agencies for up to 30 days to provide emergency services.

Two months later, in October 2005, Hurricane Wilma cut a swath across the southern peninsula from Naples to West Palm Beach, leaving in its wake downed power lines, damaged homes, and deserted businesses. Once again, additional security forces were needed to address this crisis, and, once again, acting under authority of an Executive Order from Governor Bush, the division authorized out-of-state security officers to work in Florida in response to the disaster.

The emergency response from out of state was focused and coordinated in both of these instances. Several of the nation's largest security firms sent emergency response teams consisting of licensed security agents to provide emergency security services to ensure civil order. In addition, electric utility crews sent from neighboring states to assist in restoring power brought with them millions of dollars of property and equipment needed to assist in disaster recovery. They also brought with them their own security personnel to protect those valuable assets. The division provided immediate authorization and registration for these out-of-state security officers prior to their arrival on the scene, and division investigators were dispatched to perform onsite inspections to confirm that these security officers were properly licensed in their home states and that they were performing regulated duties in Florida in accordance with the law.

Finally, it is important to note the passage of a bill during the 2005 legislative session that will improve public safety and affect the Division of Licensing's business processes. In its 2005 session, the Florida Legislature passed comprehensive legislation that, when fully implemented, will substantially enhance security operations at Florida's seaports. The vulnerability of seaports to threats of terrorism is well documented. Security experts point to the fact that over 9 million cargo containers enter the United States each year through its ports, while only 3 percent of these containers are inspected. These experts also warn of the possibility of attacks on ships while those vessels are in port. Such an attack could have devastating consequences if the vessel contained highly explosive or environmentally hazardous materials. For obvious reasons, seaport security is a matter of paramount importance in light of the war on terror and the defense of the homeland. Recognizing these potential threats, the Department of Homeland Security spent approximately $1.6 billion on port security in fiscal year 2005. Overall spending on port security has increased by more than 700 percent since September 11, 2001.

The new legislation will require each port in Florida to conduct its own risk analysis and assessment and to develop security and incident response plans. These plans will be subject to annual review by the Florida Department of Law Enforcement. Moreover, the law, which took effect on July 1, 2006, establishes stringent new qualifications, training requirements, and certification standards for security officers who provide security services at Florida's seaports. In the coming fiscal year, the division will be working closely with law enforcement authorities and seaport officials in implementing this new law. This involves revising the division's licensing standards to include criteria for these new specialized security officers and developing new curriculum material to be used to train these officers.

PROMOTING EMPLOYEE EXCELLENCE

Training and Development

To ensure optimal service to the citizens of Florida, the Department invests in its employees by providing numerous training, educational and recognition opportunities. This supportive environment contributes to the superior level of personal commitment and professional pride of its staff.

Training

To provide the highest quality of service, the Department continuously trains its employees, thus increasing their knowledge, skills and abilities. This year, a total of 1,225 employees participated in Department-wide training classes, such as New Employee Orientation, Team Building, Stress Management, Time Management, Diversity, Leadership, Department Supervisory Standards, Conflict Resolution, Meetings Management, Train-the-Trainer, Advanced Train-the-Trainer, CPR/AED, the People First system, and various software titles. This fiscal year, 300 user licenses were available to employees to allow their participation in Internet-delivered computer classes offered by New Horizons. The Training and Development Section also assisted other divisions with their design, development, and evaluation needs.

The Training and Development Section works in conjunction with the Bureau of Personnel Management to provide many of the training sessions identified above, especially the New Employee Orientation and Supervisor Skills training. In addition, the Bureau of Personnel Management trains staff in a variety of topics on an ad hoc basis as needed. Topics include performance appraisals, attendance and leave, ADA, and benefits.

Education

Thirty-three employees who continued their education by taking work-related classes received tuition reimbursement from the Department, and 143 employees participated in the state's tuition waiver program. These employees further developed their ability to contribute to the Department by taking classes at universities, community colleges, and technical centers throughout the state.

A total of 57 Department managers participated in the Certified Public Manager Program. This two-year program is a systematic approach to training and developing governmental administrators in order to improve their performance and the performance of government. Since the Department's initial participation in the program, 215 employees have received the designation of Certified Public Manager after successfully completing the program.

Awards

The Department not only encourages life-long learning, it rewards those who attain exemplary achievements. Eighteen nominations were submitted for a Davis Productivity Award, detailing the extraordinary efforts of 171 individuals, and approximately $8,342,854 was saved by employees' initiatives and hard work.

Employees are also recognized for their length of service to the Department. Approximately 286 employees were awarded certificates for their continued service to the Department.

Minority Businesses

The Department spent approximately $18.4 million with certified minority businesses during the 2005-2006 fiscal year. The Department continues to be one of the leading agencies in minority spending.

Bureau of Finance and Accounting

In October 2001, the Department began the development of the Administrative Image Management System (AIMS), which is an imaging management work process system for purchasing and disbursement/vouchering with other administrative components in the areas of leasing and developing contracts. In disbursements, productivity has improved with the implementation of AIMS. During fiscal year 2005-2006, the Department processed 94,663 disbursement transactions with an average prompt payment of 97.26 percent, with it reaching a high of 99.73 percent. In spite of staff reductions and vacancies, the Department has been able to continue to process payment to vendors at a very high rate of compliance.

AGMIC – Agriculture Management Information Center

Security Policies Rewrite

Beginning in August 2005, the Department's Chapter 8 Security Policies were reviewed and targeted for a major rewrite. This rewrite of Chapter 8 was necessitated by the adoption of a new state rule, Chapter 60DD-2, (Florida Information Resource Security Policies and

Standards), Florida Administrative Code. Chapter 8 was rewritten to align the security policies and procedures of the Department with the new rule. This rewrite represents the first major revision of Chapter 8 since it was initially adopted in November 1995.

Information Technology Risk Assessment

The Department contracted with Dyntek, Inc., to review five selected mission-critical applications and the information technology infrastructure serving those applications. Through recommendations by Dyntek, the Department increased the overall security posture of the IT infrastructure.

Disaster Recovery Planning and Testing

Over the weekend of May 19-21, 2006, AGMIC staff executed the annual Disaster Recovery Planning (DRP) test for the recovery of applications and infrastructure selected for this year's test. This test was a coordinated effort between AGMIC staff and the division staff who tested the application remotely in Tallahassee.

Five critical applications selected by division directors were first restored in the DRP test lab and documented. This practice allowed for additional findings and remediation before the actual exercise. All applications were successfully recovered with no outstanding issues remaining. The DRP team credits its success to the preparation accomplished in the Department's disaster recovery test laboratory. The lab is utilized to demonstrate and document the recoverability of the Department's mission-critical applications.

Server Consolidation Project

Beginning in the 1980s, data centers, including the Department's, started migrating away from central mainframe computers and began to distribute data processing functions among smaller, more cost-effective computers. This trend became possible with the advent of reliable computers with a much lower cost than a mainframe computer. The industry called these devices "servers." The idea was to distribute functions and data and move away from a monolithic structure.

With the explosion of data storage during the 1990s and the advent of the Internet, most data centers are finding themselves at the other end of the spectrum: too distributed with too many servers to manage, back up, maintain, repair and replace.

Therefore, the tendency today is a much more consolidated approach. This approach is not a complete reversal to the old monolithic model of a single mainframe, but a judicious assessment of network functions to reduce the number of servers to a functional minimum. This approach ultimately has proven to be more cost-effective and is commonly referred to as "server consolidation."

In order to implement the server consolidation plan, the Department has divided its network into six regions. In each of these six regions (super sites), new network resources are being installed. From this site the Department will service other locations in the region. The six regions are Tallahassee, Gainesville, Orlando, Tampa, Fort Myers and Miami.

Central Data Storage Repository for Department Data Files

This initiative involved the acquisition of a physical storage device with incredibly high capacity to store, preserve and serve data. The Department has acquired an HP Storage Area Network (SAN) that is currently housed in the Department Central Computer Facility. Think of it as an immense hard disk drive that will be accessible by all major operating systems.

Initially, the SAN will be implemented with a storage capacity of about four terabytes. The same amount of hard disk drive space will be available to mirror what is currently in production to facilitate a non-stop disk-to-disk backup process. The SAN provides a centralized management console, has its own independent intelligence (logic), and is capable of self-diagnosis to prevent deterioration problems. The self-diagnosis capabilities of the SAN will send warnings not only to Department personnel but to the manufacturer on a round-the-clock basis. The maintenance contract requires a technician and replacement parts to be on site within four hours after the receipt of a service call. The current centralized tape backup system is capable of holding 22 tapes concurrently; each tape has a density of 200 gigabytes of storage. The new automated tape library system will have the capability of holding 60 tapes concurrently; each tape will have a density of 800 gigabytes of storage. The new automated tape library system provides the capability to run backup jobs 24 hours a day, seven days a week.

Mayo Central Computer Facility Backup Generator

The Department has installed a diesel-powered generator to provide backup power to the Central Computer Facility located in the Mayo Building in Tallahassee. In the event of a power outage affecting the building, the generator will automatically start and begin supplying power to the Central Computer Facility. The generator system is tested on a weekly basis to ensure we are always ready for a power outage.

Health, Safety, and Security Manual Enhancements

The Department chaired the Capitol Complex Emergency Evacuation Working Group during the last year. The focus of the working group has been to provide a unified response in order to meet the emergency evacuation needs of the Capitol Complex employees and visitors. Their work has resulted in formalized evacuation and shelter-in-place plans for each Capitol Complex agency. Efforts of the working group continue in the areas of emergency communications, educational materials and training dealing with emergencies.

The Division of Administration has supplemented its Health, Safety and Security Manual with formalized evacuation and shelter-in-place plans for the Mayo Building and Conner Complex in Tallahassee. Testing and exercising of the Continuity of Operations Plan and Information Technology Disaster Recovery Plan have continued each year, as has the training of employees in both plans.

Office of Inspector General

The Office of Inspector General (OIG) is established in accordance with Section 20.055, F.S. The OIG provides a central point for coordination of and responsibility for activities that promote accountability, integrity and efficiency in government. The OIG is comprised of two sections to accomplish these responsibilities. The following provides detailed information about each section's responsibilities.

Auditing Section

The internal auditing activity provides independent, objective assurance and consulting services to add value and improve the Department's effectiveness of risk management, control, and governance processes. An assurance service is an objective examination for the purpose of providing an independent assessment or opinion in regard to the particular engagement's objectives. A consulting service is an advisory and client assistance service, the nature and scope of which is agreed upon with the client for each particular engagement.

Internal Audit activities are performed in accordance with the Standards for Professional Practice of Internal Auditing published by the Institute of Internal Auditors, Inc. Audit projects involving information technology are also conducted in accordance with Standards for Information Systems Auditing published by the Information Systems Audit and Control Association.

During fiscal year 2005-2006, 38 assurance engagements were conducted covering performance measures, revenue collection, other financial matters, and information technology processes. In 72 percent of those engagements, the Department was recognized as having implemented Best Management Practices in select areas of risk management, controls, and governance processes. The auditing section also participated in 16 consulting services and coordinated 12 external audits or reviews by federal and other state agencies.

Investigation Section

The OIG investigation section handles administrative and criminal complaints. These complaints are received from a wide variety of sources. OIG investigations may fall into one of two categories. One type would be a preliminary inquiry, which may be conducted in circumstances when it is necessary to determine the validity of a complaint prior to the initiation of a formal investigation.

The other type would be an Inspector General investigation which is a formal investigation conducted inaccordance with Florida Statute and/or Department policy and procedures. The following are the OIG's key investigative responsibilities:

- Initiate, conduct, supervise, and coordinate investigations designed to detect, deter, prevent, and eradicate fraud, waste, mismanagement, misconduct, and other abuses in the Department.
- Receive complaints and coordinate all activities of the Department as required by the Whistle-blower's Act.
- Receive and consider the complaints and conduct, supervise, or coordinate such inquiries, investigations, or reviews as the Inspector General deems appropriate.
- Conduct investigations and other inquiries free of actual or perceived impairment to the independence of the Inspector General when it is necessary to determine the validity of a complaint prior to the initiation of a formal investigation.

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