

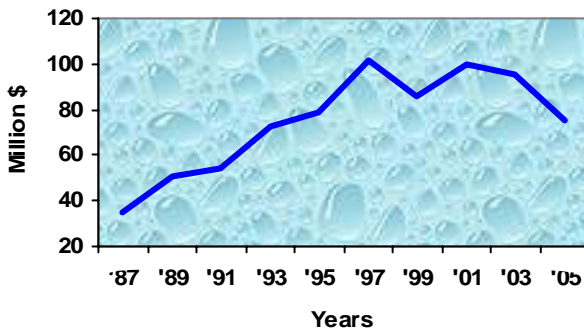
# Florida Aquaculture

## 2005 Florida aquaculture survey released

Florida aquaculturists reported sales of \$75 million from 401 farms during 2005 in a survey conducted by the United States Department of Agriculture, Florida

Agriculture Statistics Service, and Florida Department of Agriculture and Consumer Services. This result is below sales of \$95.5 million in 2003, due in large part to the severe hurricane losses of 2004 and 2005.

Florida aquaculture statistics have been reported since 1987 when 342 growers reported \$35 mil-



lion in sales. The highest year was 1997 when 552 growers reported \$102 million in sales.

Industry segments reporting number of farms and sales were: ornamental fish—133 farms and \$33.3 million; aquatic plants—19 farms with \$17.6 million; clams and oysters—154 farms and \$10.7 million; alligators—14 farms and

\$4 million; catfish—23 farms and \$1.4 million; tilapia—18 farms and \$477,000; live rock—6 farms and \$341,000; sportfish—8 farms and \$191,000; and a miscellaneous category of an unreported number of farms with \$5.2 million in sales (includes crustacean, frog, and snail farms).

During 2005, 1,055 people worked on 359 farms with a payroll of \$12.4 million from 195 farms. The other 158 farms utilized family members or partners as unpaid labor with all farms averaging 31 hours per work week.

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## Operation *Clam-Up* targets illegal shellfish activities

The Florida Department of Agriculture and Consumer Services has partnered with the Fish and Wildlife Conservation Commission in a state-wide enforcement strategy targeting persons and businesses violating shellfish laws.

Commission and Department investigators routinely work covertly to apprehend unli-

censed commercial harvesters and dealers illegally selling or buying shellfish. Often information is received from the public and industry implicating businesses and harvesters that are illegally selling or buying oysters or clams. When this information is received, investigators may pose as harvesters or patrons and make sales or pur-

chases. After the illegal activity is documented, charges are usually filed and arrest warrants served.

During covert investigations, unsanitary conditions, improper handling or relaying, mislabeling of products and other violations are passed on to the appropriate partnering agency for their ex-

pertise. Shellfish law enforcement yields a win-win result: the commercial oyster and clam harvester receives a fair market price and the consumer enjoys a quality oyster or clam.

Operation "Clam-Up" began on October 1 and will continue for several months. If you have information about illegal shellfish activities, call 1-800-342-5869.

## Wildlife and aquaculture: Part II by Suzie Hershberger, DACS-Bartow Office

Several species of wildlife are notorious for causing damage at aquaculture facilities. This article will discuss some of the major culprits, along with recommendations for effective control of each species. For detailed information on handling specific situations, contact the USDA-APHIS Wildlife Services program at 352-377-5556 or read through the Prevention and Control of Wildlife Damage Handbook at: <http://icwdm.org/handbook/index.asp>.

**Birds:** As mentioned in Part I of this article, lethal control of fish-eating birds at aquaculture facilities is prohibited without a permit from the U.S. Fish and Wildlife Service. Nonlethal methods are always the first and preferred courses for managing bird damage; of those methods, total exclusion is the only one that provides absolute, long-term control. Exclusion is the complete enclosure of ponds and/or raceways with screen or net, and is practical for many facilities, particularly those with pond areas under five acres.

Nonexclusion techniques include using wire or perching impediments, implementing sound facility design and fish management, and frightening (pyrotechnics, distress calls, auto-



matic exploders). For example, part of the facility design could include maintaining slopes and minimum depths of three feet in ponds to discourage wading birds such as herons and egrets. When trying to disperse birds through frightening techniques, the keys to success are:

- *Timing*- Birds are easier to frighten at certain times (e.g. when they are flying).
- *Persistence*- Once frightening begins, continue each day until birds are dispersed.
- *Organization*- One person should be in charge of all dispersal activities.
- *Diversity*- Use several methods. No single technique can solve the problem.

**River otters:** At small facilities, fencing raceways, tanks, or ponds with a 3 x 3-inch wire can effectively prevent otters from causing damage. At larger facilities, where fencing may not be as feasible, trapping or shooting may be the best way to handle nuisance otters. In Florida, no license or permit is required for a property owner to take any mammal, except deer or bear, that are damaging personal property, provided that they be taken only within the immediate locality where damage is occurring.\*

**Raccoons:** The best method for preventing raccoon damage is to physically exclude them from production facilities, with heavy screening or electric fencing. Frightening methods are only effective for a short time, and removing attractive food sources is not always feasible at aquaculture facilities. In Florida, property owners may live-trap or humanely destroy raccoons causing damage to their property.\* However, it is illegal to transport wild-trapped raccoons off-property, except by Florida Fish and Wildlife Conservation Commission (FWC) permit.

**Alligators:** Where practical, fences at least five feet high with 4-inch mesh will exclude large alligators, especially if the top of the fence is angled outward. In Florida, alligators are considered a nuisance when they are more than four feet in length, and are determined to be a threat to the welfare of the public, or the public's pets, livestock, or property. If you need to report a nuisance alligator, call 1-866-FWC-GATOR (1-866-392-4286).

\* This does not authorize the use of a gun and light at night, steel traps, or poison to take wildlife unless a Depredation Permit is obtained from an FWC regional office. For assistance with trapping, FWC permits approved nuisance wildlife trappers to remove nuisance animals for a fee.

## 2005 Hurricane Aquaculture Grant update

The U.S. Department of Agriculture provided a \$3,662,500 grant to Florida aquaculturists effected by the 2005 hurricanes to reestablish purchasing power. Commissioner of Agriculture Charles Bronson asked the Division of Aquaculture to administer the grant as specified by USDA.

On August 23rd, 665 grant applications were sent via certified mail to aquaculturists that possessed the Aquaculture Certificate of Registra-

tion and were located in Bay, Brevard, Broward, Calhoun, Charlotte, Collier, Dixie, Escambia, Franklin, Gadsden, Glades, Gulf, Hardee, Hendry, Highlands, Holmes, Indian River, Jackson, Jefferson, Lee, Leon, Levy, Liberty, Martin, Miami-Dade, Monroe, Okaloosa, Okeechobee, Palm Beach, Santa Rosa, Sarasota, St. Lucie, Taylor, Wakulla, Walton, and Washington counties.

By the application deadline on October 6th, 5:00 PM, the Division received 175 applications with an estimated \$9.14 million in stock loss, damage repair and cleanup expenses. Applicants provided sufficient out-of-pocket expense documentation (paid receipts or statements) for \$4.4 million.

2005 hurricane damage assistance checks for the entire grant amount were mailed on November 9th to 139 farms.

## Albert Greenberg named to 2006 Florida Agriculture Hall of Fame

Commissioner Charles H. Bronson announced that Albert Greenberg will be inducted into the Hall of Fame in February 2007 with four other agricultural pioneers. "Florida agriculture owes an immense debt of gratitude to these outstanding leaders," Bronson said. "Their dedicated service in the areas of research, education, business and government helped make Florida agriculture into the remarkable industry that is known and admired around the world."



Mr. Greenberg will be inducted into the Florida Agricultural Hall of Fame on February 13, 2007, during the Florida State Fair in Tampa.

Mr. Albert Greenberg demonstrated that Florida's abundant water, mild climate, and native fauna and flora could support a thriving business producing aquarium fish and plants. His vision and hard work created a demand for aquatic plants and tropical fish in the northern states, and put Florida on the map as a location

to purchase product. His openness and willingness to share information led to the success of numerous farms in the Tampa area, even though some of them became direct competitors. His dignity and esteem within the community is evident in the plants named after him, and the position he retains in the history of this unique aspect of Florida agriculture.

In 1931, Mr. Greenberg established Everglades Aquatic Nursery in Tampa.

He and his employees dug several small ponds by hand, until he had enough money to buy a mule. He also built several greenhouses with concrete tanks to house both his aquatic plants and tropical fish. Mr. Greenberg developed shipping procedures for the product that relied primarily upon railroads to northern cities such as New York and Chicago. He named his property Eureka Springs, because it contained 11 free flowing, crystal clear springs that served as his water source.

Albert Greenberg is known as a pioneer that introduced several new species of aquatic plants to the aquarium hobby, including hybrids that he developed on the farm. Never married, Albert Greenberg considered his employees as family members, and upon retirement gave a portion of his property and the business to his "family," most of whom had worked for him for 20 to 30 years. He also carved out 31 acres in the center of the property which contained the springs, and donated it to Hillsborough County for a park. Eureka Springs is widely known today as a botanical oasis within the heart of Tampa's bustling urban growth. Mr. Greenberg died in 1993.

Mr. Greenberg was nominated by James Thiele, Naranja Tropicals, Homestead, Florida. Our thanks to Mr. Thiele and Craig Watson, UF-Tropical Aquaculture Laboratory, for providing the information and image of a Florida aquaculture pioneer and admirable gentleman.

## 2006 FFA Officers tour aquaculture

The Department of Agriculture and Consumer Services hosted the State of Florida's Future Farmers of America (FFA) State Officers to learn more about the department, agricultural careers and participate in the department's divisions' activities.

The 2006 officers are: President Sarah Burlison from Osteen; Area I Vice President Karen Vincent from Molino; Area II Vice President Jaime Spivey from Bronson; Area III Vice President Joe Guevara (clam farmer) from New Smyrna Beach; Area IV Vice President Lauren Lewis from Haines City; Area V Vice President

Joshua Cribbs from Plant City; Area VI Vice President Ashley Young from Miami; and State Secretary Michael Rogalsky from Valrico.

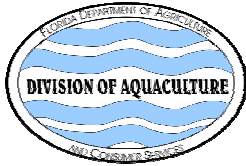
The Division of Aquaculture staff explained its five basic programs and then headed out on the road to Apalachicola. In Apalachicola, the officers visited an oyster shucking facility, enjoyed a fresh seafood lunch, toured the department's water quality testing labora-



tory, and went out on the water to see how Shellfish Harvest Areas are managed. The officers interacted one-on-one with division staff to learn more

about the division's responsibilities and the great job diversity and opportunities that exist in the department.

**Charles H. Bronson**  
**Commissioner of Agriculture**



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