

CHARLES H. BRONSON  
Commissioner of Agriculture

Florida Department of  
Agriculture and  
Consumer Services

# Florida Aquaculture

March 2004, Issue No. 30

Division of Aquaculture

## Highlights:

- Mote tackles tough technical innovations
- Are you ready?! The Florida Legislature begins the 2004 session
- Glofish™ gets Task Force nod
- Florida Sea Grant funds *V. vulnificus* health professional education

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## Mote's Innovative Aquaculture Research by Jim Michaels, Mote Marine

In May 2001, Mote Marine Laboratory began construction of Mote Aquaculture Park on 200-acres of land 20 miles inland from Sarasota. The purpose of the Park is to demonstrate new, innovative and cost effective system and husbandry techniques to raise high-value marine and freshwater fishes and invertebrates. Aquaculture is a technically challenging and often capital intensive venture. Mote's Center for Aquaculture Research and Development is working to develop new system technologies and husbandry techniques that will contribute to the economical sustainability of emerging aquaculture candidates.

One research area is to develop innovative ways to reduce water use through the development of efficient filtration systems. Other research areas include the implementation of

new filtration designs combining both mechanical and biological filtration into one unit, assessing the effects of various ultraviolet sterilizers on turbidity and bacterial loads, and the development and testing of denitrification systems (nitrate removal) for fresh and marine systems.

The Sturgeon Commercial Demonstration Project has conducted experiments evaluating first feeding regimes of Siberian sturgeon fry. These experiments demonstrated this species does not require live feeds (*Artemia*) for adequate growth and survival and that traditional practices of over-

feeding at early stages may not be necessary given proper tank design.



Diet studies evaluating the effects of various readily available commercial diets on growth and feed con-

version of 6-month old sturgeon have allowed us to determine what feeds are most appropriate and cost effective.

Refining commercial production practices through research will ultimately lead to elucidating whether new species can not only be technically feasible, but economically feasible as well.

Contact Jim Michaels, 941-378-1217, for additional information.

## Florida Legislature set to Convene

The 18th Legislature of Florida under the Constitution as revised in 1968 is set to officially begin on Tuesday March 2, 2004. Committees have been meeting since September, but the pace has picked up considerably. State agencies submitted their budget requests to the legislature and Governor on September 15 of this past year and the Department of Agriculture and Consumer Services requested full funding of the Division of Aquaculture. The Governor released his recom-

mendations for the budget on January 20<sup>th</sup> and recommended reducing the Division by \$16,800. However, he did recommend cutting the Department by 95 positions and approximately \$8 million in General Revenue. The Department has made a counter offer to the legislature of roughly 40 positions and around \$6 million. It will be April before we have any real sense of what the budget will look like. General Revenue receipts are, at the moment, higher than last year. Conse-

quently, both the Senate Appropriations Subcommittee on General Government and the House Appropriations Subcommittee on Agriculture and Environment are not showing any inclination to cut the Department any more than we were cut last year. We will keep you posted as the session moves through its 60 days.

For additional information contact Sherman Wilhelm at 850-488-4033 or wilhels@doacs.state.fl.us.

## Transgenic Aquatic Species Activities

The Division of Aquaculture recently mailed a letter to all certified aquaculturists requesting a response back to the Division on whether a transgenic aquatic species is present on the farm. This request comes on the heels of an acknowledgement of the pace of technological development in the aquarium trade.

The Division hopes farmers will provide timely information so that the Division can assess its rules and the facilities in which the species are being produced to see if changes are needed in the BMP manual. Currently the Division anticipates creating a new BMP chapter entitled "Transgenic Aquatic Species"

much like it has done for sturgeon and shrimp.

The Division's Transgenic Aquatic Species Task Force met again on February 13 to evaluate the proposed process for reviewing requests to produce transgenic aquatic animals in Florida. The Task Force did not suggest changes to the process outlined in the last edition of this newsletter. Essentially, a farmer would request approval to produce a transgenic species and the Division, upon receipt of the request, will send the farmer an application requiring several pieces of information. That information will be forwarded to the Task Force as an initial

screen. The Task Force will provide recommendations to the Division as to whether to approve, approve with conditions or empanel a risk assessment group and develop risk mitigation options.

The Task Force recommended that the transgenic zebra fish, marketed under the brand name Glofish™, continue to be farmed. Future transgenic species or alterations of an existing transgenic species will have to be reviewed on their own merits.

For additional information contact Sherman Wilhelm at 850-488-4033 or [wilhels@doacs.state.fl.us](mailto:wilhels@doacs.state.fl.us).

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## Emerging Diseases of Koi: Workshop Summary Available

In late October 2003, aquatic animal health veterinarians from the University of Florida/IFAS, DACS/Div. of Animal Industry and USDA-APHIS-VS presented several emerging diseases of koi workshops/seminars in Florida. The purpose of the workshops was to inform Florida koi producers of important issues related to Spring Viremia of Carp (SVC) and Koi Herpes Virus (KHV), to provide an update on the status of state diagnostic laboratory capabilities of these viral diseases and to discuss related Federal regulations and programs. A question and answer period followed a visual pres-

entation and fact sheets were provided to the workshop participants.

The workshop presented five general topics. These topics were: 1) the collaborative entities in Florida, 2) emerging koi diseases, 3) in-state diagnostic capabilities, 4) biosecurity control points, and 5) an overview of the National Aquatic Animal Health Plan.

A Spring Viremia of Carp fact sheet is available from the web at two addresses:

<http://edis.ifas.ufl.edu/VM106> or [http://www.aphis.usda.gov/vs/ceah/cei/sv\\_us0702.htm](http://www.aphis.usda.gov/vs/ceah/cei/sv_us0702.htm).

Kathleen Hartman, USDA-APHIS-VS, Roy P.E. Yanong, Ruth Francis-Floyd, Allen Riggs, University of Florida/IFAS, and Denise Petty, DACS, Division of Animal Industry, have collaboratively written an in-depth workshop summary with answers to frequently asked questions. Copies are available from the UF-Tropical Aquaculture Laboratory (813-671-5230), Ruth Francis-Floyd (352-392-9617 ext. 229), Denise Petty (863-519-8663) or Division of Aquaculture (Bartow Office - 863-519-8459 or Tallahassee Office - 850-410-0849).

## 2004 Gulf and South Atlantic States Shellfish Conference

The Gulf and South Atlantic States Shellfish Conference will be held at Jekyll Island Georgia during April 18-21, 2004. Attendees will benefit from updates on the activities of the state shellfish programs, Inter-

state Shellfish Sanitation Conference, FDA, EPA, *V. vulnificus* education efforts, water quality and red tide monitoring technologies, developments in post harvest treatment, and a variety of related topics.

Visit <http://www.issc.org> for conference and registration information or contact David Heil at 850-488-5471 or [heild@doacs.state.fl.us](mailto:heild@doacs.state.fl.us).

## Get the Facts: Aquaculture Science Advisory Panel

The Aquaculture Science Advisory Panel (ASAP) is a coalition of scientists and aquaculture producers striving to provide truthful, unbiased, research-based information about U.S. aquaculture and its products. ASAP members believe that public policy decisions, as well as individual consumer choices, should be based on sound science and supported facts.

ASAP was formed through the efforts of the National Aquaculture Association and the U.S.

Chapter of the World Aquaculture Society. Currently, ASAP has posted three white papers at <http://www.aquanic.org> entitled: Fish Meal in Aquaculture, Animal Welfare and Aquaculture Research, and Drugs Used in the U.S. Aquaculture Industry. The papers are available to educate producers, policy makers, media and the public and are freely available for download and quotation.

Papers will be added as completed and reviewed by a broad coalition of U.S. aquaculture

scientists and producers.

Visit <http://aquanic.org/asap/asap.htm> and *Get the Facts: ASAP*.



## Division Receives *Vibrio vulnificus* Training Grant

The Division of Aquaculture, in cooperation with the Florida Department of Health and the Interstate Shellfish Sanitation Conference, has received funds from the Florida Sea Grant Program to conduct a train-the-trainer workshop.

Health educators in Texas, Louisiana, Mississippi, Alabama and Georgia will attend an all day session on April 13, 2004 in New Orleans. Entitled, "*Vibrio vulnificus*: Infection, Pre-

vention and Treatment for Health Care Professionals," this workshop is designed to provide the curricula for uniform training of health care professionals who treat and counsel at-risk patients. The workshop prepares participants to directly conduct this training as well as to conduct train-the-trainer workshops for other health care professionals. It is hoped this workshop will result in health care professionals providing this information di-

rectly to at-risk patients so that they can make better choices concerning consumption of raw oysters and, hopefully, lead to a reduction in *V. vulnificus* illnesses.

For additional information, contact David Heil at 850-488-5471 or [heil@doacs.state.fl.us](mailto:heil@doacs.state.fl.us).

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## Chris Brooks Joins Division's Tallahassee Office

Chris Brooks has moved from the Division's Bartow office, where he served as a BMP Compliance Officer, to a Biological Administrator I position in Tallahassee. Chris will be working to complete several on-going applied research projects and formulating grant applications to answer regulatory and biological questions pertinent to the Division's mission.

Chris completed a double ma-

ior Bachelor of Science in biology and fishery from Colorado State University in 1993 and a Master of Science in fisheries from Oregon State University in 1999. He is well-known to the tropical fish farmers of Southeast Florida where he worked 1.5 years as a Aquaculture Extension Agent and to aquafarmers throughout South Florida where he served as a



Division of Aquaculture Compliance Officer for almost three years.

Chris and his wife, Mary, are the proud parents of three very active children.

Please join us in welcoming Chris to his new position.

Chris can be contacted at 850-488-4033 or [brooksc@](mailto:brooksc@)

We're on the Web!  
[www.FloridaAquaculture.com](http://www.FloridaAquaculture.com)



Florida has 50,000 miles of rivers and streams, 7,800 lakes, 4,000 square miles of estuaries and 1,180 miles of coastline (excluding the Keys).

The Division of Aquaculture's responsibilities include certifying all legitimate aquaculturists through an annual registration, implementing on-farm Aquaculture Best Management Practices to meet the State of Florida's environmental goals, managing 1.4 million acres of coastal waters for the harvest or culture of wholesome shellfish, implementing the National Shellfish Sanitation Program through periodic inspection of shellfish processing plants and product, and managing submerged sovereign land leases for aquacultural purposes.



Additional information about Florida aquaculture or Division programs can be obtained from the following offices.

<b>Apalachicola Shellfish Center:</b>	<b>850-653-8317</b>
<b>Bartow Field Office:</b>	<b>863-519-8459</b>
<b>Cedar Key Field Lab:</b>	<b>352-543-5181</b>
<b>Murdock Field Lab:</b>	<b>941-255-7405</b>
<b>Palm Bay Field Lab:</b>	<b>321-984-4890</b>
<b>Panama City Field Lab:</b>	<b>850-747-5252</b>
<b>Tallahassee Office:</b>	<b>850-488-4033</b> <b>or 488-5471</b>

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