## the shell-cracker FLORIDA CHAPTER OF THE AMERICAN FISHERIES SOCIETY



### April, 2004

The 2004 Annual Meeting was, once again, a big success! First, I would like to congratulate our student presenters. Immediately after our meeting, I went to the Southern Division meeting in Oklahoma City, and I (as well as other Florida Chapter members) felt that the student presenters in Florida were well above average compared to the Division as a whole. Congratulations to the poster and presenter award winners (listed on page 9), and to all student presenters, great job!

Our symposium assessed the use of harvest restrictions to manage recreational fisheries, and speakers included fishery managers from both state and federal agencies. The biologists provided a number of casehistory type papers detailing with changes in fisheries after use of harvest restrictions. There was some good news! We had several examples of fish populations improving after the use of harvest restrictions, especially weakfish, striped mullet, yellowtail snapper, and largemouth bass. We also had examples of very restrictive regulations for redear sunfish and black crappie, and those regulations caused declines in fishing effort. The symposium showed that harvest restrictions are a tool that can work. However, in other cases such as some reef fishes (e.g., red snapper), populations have continued to be overfished despite highly restricted harvest. Although harvest restrictions will remain a valuable tool, they represent only one tool in a tool box that includes habitat improvement, marine protected areas, and stock enhancement strategies. All of these topics have been discussed at FL Chapter meetings over the past several years. Thus, it seems that as a professional organization, we are doing our job in addressing the current resource management challenges for Florida.

Significant accomplishments this year also include the allocation of \$15,000 from our general account to the Roger Rottmann Memorial Scholarship, proposed by President-Elect Rich McBride. This will insure that the Fund will remain stable over the long-term, and it was a great move for the Chapter (see page 5 for this years' Roger Rottmann Scholarship winner).

Over the coming year, one of my goals for the Chapter is to help our students initiate a Student Subsection for our Chapter. At the meeting this year, the students agreed to form a statewide subunit that will allow students to interact across universities (see article page 7). This is an exciting development for the Chapter and will provide a great forum for students to be professionally active, in addition to fostering better communication among students in Florida's fisheries programs. If you are a student, I urge you to get involved in this effort.

On a final note, I would like to congratulate one of our very own, Larry Conner, on becoming the Southern Division AFS President. At his introductory speech in Oklahoma, Larry talked about the mentors in his life as he moved through AFS. It was a great speech, and Larry has certainly been a mentor to me over the last six years. Congratulations, Larry, we know you'll do a terrific job!



#### President

Mike Allen, Ph.D. University of Florida Department of Fisheries and Aquatic Sciences 7922 N.W. 71st St. Gainesville, FL 32653 phone: (352) 392-9617 ext. 252 email: msal@mail.ifas.ufl.edu

#### **President-Elect**

Richard McBride, Ph.D. Florida Marine Research Institute 100 8th Ave. S.E. St. Petersburg, FL 33701 phone: (727) 896-8626 ext. 1506 email: richard.mcbride@fwc.state.fl.us

#### *Secretary/Treasurer* Eric Nagid FWC

7922 N.W. 71st St. Gainesville, FL 32653 phone: (352) 392-9617 ext. 242 email: eric.nagid@fwc.state.fl.us

#### Newsletter Editor

Kim Tugend FWC 601 W. Woodward Ave. Eustis, FL 32727 phone: (352) 742-6438 email: kimberly.tugend@fwc.state.fl.us

#### Past President

Wayne Bennett, Ph.D. University of West Florida Department of Biology 11000 University Pkwy. Pensacola, FL 32514 phone: (850) 474-3362 email: wbennett@uwf.edu

## Upcoming Events

May 2-6, 2004 - 4th World Fisheries Congress, Vancouver, British Columbia.

May 23-27, 2004 - 28th Annual Larval Fish Conference, Clemson, SC.

June 7-10, 2004 - 15th Annual Florida Lake Management Society Meeting, Tampa, FL.

July 11-16, 2004 - Third International Symposium on Fish Otolith Research and Application, Queensland, Australia.

June 13-18, 2004 - American Society of Limnology and Oceanography Summer Meeting: The Changing Landscapes of Oceans and Freshwater, Savannah, GA.

August 1-5, 2004 - AFS Internation Congress on the Biology of Fishes, Manaus, Brazil.

August 21-26, 2004 - AFS 134th Annual Meeting: The Gathering: Leopold's Legacy for Fisheries, Madison, WI.

October 31-November 3, 2004 - Annual Meeting of the Southeastern Association of Fish and Wildlife Agencies, Hilton Head, SC.

November 5-7, 2004 - 4th Annual Fisheries Student Colloquium: Migrate South this Winter, Marineland, FL.

November 9-11, 2004 - Fifth Florida State University Fisheries Symposium: The Good, the Bad, and the Ugly: Integrating Marine and Human Ecology in Fisheries Management, Sarasota, FL.

Check out our Parent Society's calendar at http://www.fisheries.org/Calendar.shtml for other events not listed here!

#### Long term Fish Population Trends in Florida Lakes: When Agencies Work Together

David Watson and Mark Hoyer Florida LAKEWATCH Department of Fisheries and Aquatic Sciences Institute of Food and Agricultural Sciences University of Florida

In a time when the State is asking for more efficient work and cooperation between its many agencies, the recent cooperative project between Florida LAKEWATCH (FLW), the Department of Fisheries and Aquatic Sciences at the University of Florida/Institute of Food and Agricultural Sciences (FAS/UF) and the Florida Fish and Wildlife Conservation Commission (FWC) stands out as an example of what can be done when agencies work together.

The FLW program is extremely successful with data obtained from over 1000 lakes in more than 50 Florida counties. Currently FLW is maintaining about 600 active lakes in the program with over 800 active citizen volunteers. One major concern of the citizens involved with FLW is the status of the fish populations in their lakes. To help get more information on fish and long-term trends in fish populations, FLW is partnering with FAS/UF and FWC in the collection of fish data on 32 water bodies. Most of these lakes have public access and have been in FLW for at least three years yielding good background information on water chemistry and aquatic plants. This project is expected to run over a ten-year period.

Lakes for the long-term fish sampling program were selected to cover most of Florida, thereby spreading the work load to different regional personnel. The lakes were also selected to cover a wide range of lake trophic states and aquatic macrophytes abundances, because these are major factors impacting fish populations in lakes. The goals of this project are three fold: 1) to examine the long-term variation in fish populations from a range of lakes in relation to water chemistry, lake trophic status, aquatic macrophyte abundances, and lake morphology, 2) educate citizens in the functioning of Florida fish populations and 3) facilitate the interaction and cooperation among Florida citizens, the FAS, UF/Institute of Food and Agricultural Sciences, and FWC.



Claude Brown, the Florida LAKEWATCH regional coordinator for northeast Florida counties, collecting samples at an urban lake.

To accomplish these goals:

<sup>1</sup>FLW and FWC personnel collect electrofishing samples from late February through June. The rationale for spring to early summer sampling is to assess age-1 sportfish abundance after their first winter and presumably after they have recruited into the stock. Also, this time period should provide a good sample of adults. Up to six transects (10 minutes each) are collected at fixed stations spaced uniformly around the lake.

- <sup>1</sup>FWC and FAS/UF personnel collect trawl samples during the fall (September December), primarily to estimate year-class strength of black crappie in each lake. The trawls used for this project are otter trawls that are fished near the lake bottom. Catch rates of age-0 black crappie appear to be high and relatively precise during this time of year. Seven to fifteen trawls (3 to 5 minutes each) are collected from fixed sites (marked with GPS or landmarks) in open-water areas of each lake. For smaller lakes the number of trawls are reduced to prevent trawling the same area twice.
- FLW citizen volunteers use their own boats to collect surface water samples from one to six midwater locations (depending upon water body size). Water samples for total phosphorus and total nitrogen are collected at each sampling station in the lake. Citizens also measure water clarity at each sampling location with a Secchi disc and collect additional surface water at each location in 2-L, plastic jugs. These samples are used to estimate the concentration of planktonic algae at each sampling station.
- FLW personnel sample the abundance of aquatic macrophytes every other year in each lake. The percent volume infested with aquatic macrophytes (PVI) and the percent area covered by macrophytes (PAC) are determined according to the methods of Maceina and Shireman (1980) using a Raytheon fathometer depth sounder. The aboveground standing crop of emergent, floating-leafed, and submerged vegetation is measured along uniformly placed transects (9 to 30 depending on the size of the water body) around the water body. Average standing crop (kg/m<sup>2</sup>) for each vegetation zone is calculated by averaging samples from each transect. The combined width (m) of the floating-leafed and emergent zones is also estimated at each transect and then averaged for each water body. All plant species seen while sampling are also listed according to the frequency that they occurr in evenly spaced transects around the water body.
- FLW personnel created bathymetric maps for each lake. The maps were created using differentially a Trimble Unit Pro XRS with a TSC1 data logger and a Lowrance depth finder (LMS-350A). Map contours are generated using the kriging technique in Surfer® software package (Golden Software, Golden CO).

The recent severe drought has provided the opportunity to examine the impact of water level fluctuations on fish populations in Florida lakes that was not originally anticipated. Our sampling efforts began in 1999 when there was abundant water in most of the lakes, and sampling has continued through severe drought conditions between 2000 and 2002 and now continues as water returns to the lakes in most parts of the state.

The benefits of this cooperation and partnerships between agencies are many. Data will finally be available to assess long-term variability of fish populations and recruitment of sportfish among lakes varying in lake trophic status, aquatic macrophyte abundance and lake morphology. The extent of this long-term variability is currently unknown. These data may also point to factors affecting recruitment of sportfish especially black crappie, which is a species notorious for boom and bust cycles. This project should yield a good evaluation of how natural lake drawdowns impact Florida fish populations. The FWC utilizes these data to report to the legislature each year on the statewide health of fish populations. Finally, throughout this project all partners will have many opportunities to interact and educate citizens living on

Footnote:

<sup>&</sup>lt;sup>1</sup> Only fish length is measured on all of the fish collected during this study to minimize the amount of time needed to work up fish and to expedite live releases. However, to examine weights in relation to 60 other Florida Lakes studied by Canfield and Hoyer (1992), weights were calculated using unpublished lengthweight data (FWC).

#### Watson and Hoyer-Long term Fish Population Trends...

these lakes. This line of communication and education is truly desired by the citizens and essential for the future development of Lake Management Plans across the State of Florida.

#### Literature Cited

- Canfield, D. E. Jr., and M. V. Hoyer. 1992. Aquatic macrophytes and their relation to the limnology of Florida lakes. Final Report to Bureau of Aquatic Plant Management. Florida Department of Natural Resources. Tallahassee, FL 32303.
- Maceina, M. J., and J. V. Shireman. 1980. The use of a recording fathometer for the determination of distribution and biomass of hydrilla. Journal of Aquatic Plant Management. 18: 34-49.

If you would like to contact David Watson, he can be reached by email at dlwatson@ufl.edu.



The Florida Chapter AFS created the Roger Rottmann Memorial Scholarship in 1997 in the memory of Roger Rottmann, one of the first fisheries biologists hired by the State of Florida University System. Roger conducted fisheries and aquaculture research for more than 20 years at the University of Florida, producing numerous scientific journal articles, educational publications, and videos. Roger was a founding member of the Florida Chapter and played an important role in the early development of our Chapter. Additionally, he remained an active member of our Chapter and other professional societies dealing with fisheries and aquatic resources until his untimely death in 1994. The scholarship was established to recognize outstanding graduate students enrolled in Florida universities and colleges.

This year's recipient of the Roger Rottmann Memorial Scholarship was **Elizabeth (Liz) Berens**, a Master's student at the University of Florida, IFAS, Department of Fisheries and Aquatic Sciences. Liz's thesis topic is entitled "Digestion rates and consumption estimates of gag grouper <u>Mycteroperca microlepis</u> consuming fish and crustacean prey in the eastern Gulf of Mexico." Her graduate advisor is Dr. Debra Murie, assistant professor.

Liz received her B.S. degree in 1998 from Grand Valley State University in Allendale, Michigan. In 1999, she worked for the Conservancy of Southwest Florida, Collier County Natural Resource Department, conducting research and monitoring loggerhead sea turtles on sections of Naples City Beach and Key Island, Florida. From November 1999 to April 2002, Liz worked for the Kiawah Island Community Association Lakes Management Department, Kiawah Island, South Carolina. Liz monitored water quality, answered wildlife calls, and assisted property owners with aquatic weed problems and mosquito control. She also organized Kiawah Island's annual Earth Day Festival in 2001 and 2002.

Since May 2002, Liz has been a Graduate Research Assistant for Dr. Debra Murie. Besides her own research, Liz has been working a minimum of 20 hours per week assisting in examining the bioenergetic responses of gag grouper to reef habitat configuration, growth and mortality of clams and oysters in the eastern Gulf of Mexico, physiology and ecology of Gulf of Mexico sturgeon in the Suwannee River, and the influence of saltwater intrusion on the fish communities in Sulfur Springs, Florida.

Liz has been an active volunteer, judging at county science fairs and conducting fishing programs for youth. Liz is an active member of SURF (Students United in the Research of Fisheries) at the University of Florida, being a past treasurer and helping to develop a successful bid to host the Fourth Annual AFS Fisheries Student Colloquium.

Liz may someday pursue a Ph.D. degree. Currently, she believes that working after she receives her Master's degree would be her best option. Ideally, she hopes to have opportunities to work on many different species and ecosystems throughout her career.



Elizabeth Berens receiving her award from Dr. Cichra.

Minutes of the Florida Chapter's 2004 Annual Business Meeting Brooksville, FL February 24<sup>th</sup>, 2004



President Wayne Bennett established that a quorum was present and called the meeting to order at 6:43 pm.

Pres. Bennett recognized the service of past FAFS presidents.

The passing of three FAFS members was noted. Rich Novak, Gus Antoninni, and Don DeSilva.

Larry Connor provided a membership update. The chapter stands at 228 paid members, which is down a bit from previous years.

John Benton gave the Treasurer's Report for the 2003 fiscal year. The chapter began the year with a balance of \$28,332.00 (all funds) and closed the year at \$30,492.81. The annual meeting constituted 58% of the annual budget, the newsletter 11%, and student awards approximately 18% (includes Rottman expenditure). Rich McBride made a motion to accept the treasurer's report. The motion carried by acclamation.

Dr. Chuck Cichra gave the student travel awards report. There were 15 applications, totaling \$1,350 for full \$90 grants. The executive committee voted to fund the difference between the available balance (\$1,200) and the full request. The awards application for 2005 will be modified to include arrival/departure dates & times and detail work requirements (if any) for the meeting.

Kathy Tisdel introduced Courtney Wellington, who was a recipient of a 2003 Hutton Scholarship, and presented to her a plaque for this achievement. Courtney was selected from a nationwide application process and received a stipend for working with fisheries biologists during the summer of 2003. Kathy Tisdel and Rich McBride mentored Courtney in aspects of fish biology at the FWC-FMRI St. Petersburg lab. The Hutton Junior Fisheries Biology Program is a mentoring program for high school students organized by the American Fisheries Society. In total, fifty-four students worked alongside their mentors in 23 states and Puerto Rico in the 2003 Hutton Program. Courtney's parents were also in attendance.

Cont'd on Page 8

ANNOUNCEMENTS Og

 $\Rightarrow$  New AFS Book Releases:

The Development of Form and Function and the Question of Larval Adaptation by John Jeffrey Govoni (editor)

*Geographic Information Systems in Fisheries* by William L. Fisher and Frank J. Rahel (editors)

 $\Rightarrow$  Student Section Added to Newsletter

Starting with this issue, the Shell-Cracker will contain a student section, which will include news pertinent to students in the Chapter as well as updates on student research and other student-authored articles. If you are a student and would like to contribute something to this section of the newsletter, please contact Jeff Grim at jmgrim@bellsouth.net.

#### $\Rightarrow$ Preliminary Budget Update

A preliminary budget update for the Florida Chapter AFS meeting in February was compiled by John Benton. A total of \$1,469 dollars was raised from donations. Prize costs and mail costs associated with prize solicitation totaled \$619.51, for a net revenue of \$849.49. Total expenses for the meeting were \$8,996.29 (\$7,988 for the facility and \$1,008.29 for meeting supplies). Revenue for the meeting, in turn, equaled \$10,314.56 (including \$743 received in cash, \$4,569 received by check, and \$5,184 received in charges minus an est. \$181.44 for AFS administrative fees). So, the net amount back to FAFS was \$1,318.27. All in all, we did OK, even with the new card system. With the extra money allocated to student travel, it was about as close to a revenue neutral meeting as is possible. Good work meeting team!

Interested in contributing something to the Shell-Cracker? Email Kimberly Tugend at *kimberly.tugend@fwc.state.fl.us* with any articles or information that you would like to be included in the next issue. The deadline for the next issue is June 30th, 2004, so start fishing...

# Student Section

#### **Progress, Progress, Progress...** (of the Student Subunit) Jeffrey M. Grim and Mark Butler

For those of you who weren't able to attend the 2004 Annual Meeting, I am happy to inform you that student representatives from Florida State University, The University of West Florida, University of Florida, and University of South Florida voted to request permission from the general membership to form a statewide Student Subunit of the Florida Chapter open to any student member. The idea was presented to the membership during the Business Meeting, and members unanimously approved it! As requested by the Chapter and student representatives, Mark and I have begun composing and revising by-laws for the subunit. Once completed, these by-laws will be reviewed by student representatives and then passed on to Chapter members for final revisions and approval. Should the Chapter approve, the subunit will immediately elect officers and assume regular duties as stated in the by-laws. Questions, comments and/or interest regarding the Student Subunit or other student concerns can be addressed to Jeff Grim at jmgrim@bellsouth.net or (850)-474-2748 OR Mark Butler at scubadiv@ufl.edu or (352)-392-9617 ext. 237.

\*ATTENTION STUDENTS – If you did not attend the Annual Meeting, please send us your e-mail address so that we can add you to the student e-mail list! This list will be used for communication between student members from across the state.

### JOB LISTINGS

AFS Job Center Online: http://www.fisheries.org/jobs.html

ASLO Job Listings: http://www.aslo.org/jobs.html

**Texas A & M University Job Board:** http://wfscnet.tamu.edu/wfscnet/jobs/jobs.htm

> USA Jobs - Federal Job Listing: http://www.usajobs.opm.gov/

#### Distribution of Three Common Species of Damselfish on Patch Reefs Within the Dry Tortugas National Park, Florida. by

Heidi L. Wallman, Katie J. Fitchett, Cheyenna M. Reber, Christopher M. Pomory, and Wayne A. Bennett. Student Research Highlight

Damselfishes (family Pomacentridae) are common residents on coral reefs from south Florida throughout the Caribbean and into the Bahamas (Lieske and Myers, 1999). Of the 16 species known to occur throughout North America (AFS, 1991), fewer than one-half are gregarious schooling fishes; the remainder are solitary species that generally confine their movements to well-defined territories, which they vigorously defend (Sweatman and St. John, 1990). Of the solitary damselfishes, the dusky damselfish (Pomacentrus fuscus), cocoa damselfish (Pomacentrus variabilis), and yellowtail damselfish (Microspathodon chrysurus), are the dominant species found in the northern Caribbean and Florida Keys (Emery, 1973). All three damselfish species are sympatrically distributed among massive coral patches as well as branching coral formations on the reef's outer fringe (Sweatman and St. John, 1990). Typically, more than one of these principal species can be found inhabiting a given patch or fringe reef area, leading to interspecific competition for space and resources within the reef.

During the late 1970s and 80s an extreme cold front followed by an outbreak of White Band Disease destroyed most of the staghorn reef formations in Dry Tortugas National Park (DTNP), Florida, and dramatically altered the reef structure. We studied damselfish assemblages on patch reefs off Loggerhead Key in DTNP during April 2002. We found that dusky, cocoa, and yellowtail damselfishes were common on patch reefs and had respective densities of 0.33, 0.32, and 0.06 fish/m<sup>2</sup>. Cocoa damselfish was the most widely distributed species, possibly due to its ability to recruit to the reef as juveniles, and to colonize more demanding reef habitats. Spatial partitioning across reefs was observed among the three damselfishes with monospecific aggregations occurring on 55% of plots and multi-species aggregations on 45% of plots and, weak vertical partitioning patterns were only observed for dusky damselfish.

Cont'd on Page 8

#### Wallman et al. —Distribution of Three Common Damselfish....

Branching coral formations in the Dry Tortugas have been slow to recover from the catastrophic cold and disease events of the late 1970s and 80s. More than ten years later, most of the once extensive staghorn coral formations on the reef's outer margins are still little more than expanses of broken coral rubble. Although estimates of damselfish densities from DTNP are nonexistent, studies from the Florida Keys may provide useful comparative insights. Emery (1973) reported respective dusky, cocoa, and yellowtail damselfish densities on Alligator and Looe Key reefs of 0.33, 0.11, and 0.01 fish/m<sup>2</sup> from reef habitats similar to those we studied in the DTNP. Respective densities for these same fish in patch reef formations off Loggerhead Key in 2002 were 0.33, 0.32, and 0.06 fish/m<sup>2</sup>. Although statistical comparisons between the two data sets could not be made, it is clear that cocoa and yellowtail damselfish densities were higher in DTNP than those reported by Emery (1973). The massive loss of branching coral habitat could account for the increased densities we observed, but without pre-impact data from DTNP, this hypothesis could not be tested. However, the substantial alteration of reef habitat has almost certainly impacted damselfish populations in the Park.

Literature Cited

American Fisheries Society (AFS). 1991. Common and Scientific Names of Fishes, American Fisheries Society Special Publication 20, 5<sup>th</sup> ed., Bethesda, MD.

Emery, A.R. 1973. Comparative ecology and functional osetology of fourteen species of damselfish (Pisces: Pomacentridae) at Alligator Reef, Florida Keys. Bulletin of Marine Science. 23(3):649-770.

Lieske, E., and R. Myers. 1999. Coral Reef Fishes, Princeton University Press, Princeton, NJ.

Sweatman, H.P.A. and J. St. John. 1990. Effects of selective settlement and aggression by residents on distribu tion of young recruits of two tropical damselfishes. Marine Biology 105:247-252.

*If you would like to contact Heidi Wallman about this research, she can be contacted by email at wallmahl@hotmail.com.* 

#### 2004 Business Meeting Minutes—J. Benton

The Rottman Scholarship winner was announced. There was no PhD candidate this year. The Masters Candidate award of \$500 went to Elizabeth Berens of UF.

Larry Connor gave the account performance of the Rottman Fund during 2003 (attached). The fund closed the year with a balance of \$8,025 (current balance \$8,121). The St. Pete Underwater Club donated \$500.

Rich McBride outlined the proposal to move \$15,000 in chapter assets to the Rottman fund, which included a callback provision for up to \$10,000 with a 2/3 vote of the membership, and provisions for repayment of that loan to the Rottman Fund over ten years. Rich made the motion for passage as presented in the January 2004 newsletter. The motion was seconded and carried unanimously.

Larry Connor presented a report from the Southern Division. He reported on a planned upgrade to the Southeastern Association meeting in November 2004 at Hilton Head. The next midyear meeting will be in Virginia Beach in 2005, then Texas for 2006, then possibly Memphis for 2007. Society dues have remained the same. Students were urged to consider the Young Professional category, which keeps dues at a low rate during the first few years out of school.

Kim Tugend agreed to continue as newsletter editor during 2004.

The formation of a Student Subunit was discussed. Mark Butler circulated a draft copy of bylaws for the formation of a student subunit with statewide membership. The formation of a student subunit will require a bylaw change for FAFS and must be published to the membership at least 30 days prior to a vote. There was broad agreement that this was a concept the Chapter would consider next year.

There was no Legislative update. Bob Wattendorf outlined some proposed legislation affecting FWC, which included the FWC internal reorganization, licensing fee changes for non-resident fishermen, and a vessel licensing program for freshwater.

#### 2004 Business Meeting Minutes-J. Benton

New officers were elected. Rich McBride was selected for the office of President-elect. Eric Nagid was voted in as the new Secretary-Treasurer. Mike Allen assumed the office of President from Wayne Bennett.

Bob Wattendorf reported that the FAFS website has been functioning well since its move to the Southern Division server in March 2003.

Tom Maher, reporting as Raffle Chair, noted of the steep decline in raffle prize donations and encouraged people to ask their local vendors for something next year. Bridgett Tiffany will work with Tom to remind members to solicit donations prior to next year's meeting. Solicitation of vendors by mail has not produced significant response.

Tom Maher promoted the upcoming World Fisheries Best Student Poster Congress and encouraged people to go.

which will include students and make a recommendation to the membership regarding changes to the bylaws.

President Mike Allen assumed the chair of the meeting at this point and brought up a request for a statement of support for revising and republishing the Florida Aquatic Habitat and Fishery Resources book in a new the Fish Conservation Foundation.

President Allen established a time and place committee to investigate alternatives venues for the annual meeting.

The meeting adjourned at 8:13 pm.





## AWARD WINNERS

#### Congratulations to all of our

award winners from the Florida AFS Annual Meeting in Brooksville. To you and all of the other presenters and contributors, great job!!!

#### **Best Student Paper**

Effects of artificially introduced groundwater on fish assemblages in Central Florida lakes by Patrick Cooney and Mike Allen

#### Runner Up:

Challenging van't Hoff's Rule: Paradoxical Q<sub>10</sub> responses of fishes from hyperthermic environments on Hoga Island, Sulawesi, Indonesia by John Eme and Wayne Bennett

Wetlands initiative at Merritt Island National Wildlife Refuge: *V. Ichthyofaunal community structure under three differing* Peter Hood is chairing a bylaws review committee water management strategies by Eric Reyier, Russell Lowers and Douglas Scheidt

#### Runner Up:

Spatiotemporal variation in ichthyoplankton communities of the northern Indian River Lagoon Complex with emphasis as to the importance of a no-take fisheries reserve by Eric Revier and Jon Shenker

#### **Best Professional Paper**

format. Robin Lewis is seeking primary funding from An overview of changes in data and techniques used to prepare stock assessments for Florida's marine resources by Mike Murphy

#### Runner Up:

Managing largemouth bass fisheries with length limits in Florida by Wes Porak

#### **Best Professional Poster**

Mapping Tampa Bay Cynoscion nebulosus spawning habitat using passive acoustic surveys by Sarah Walters, Susan Lowerre-Barbieri, David Mann, and Joel Bickford

#### Runners Up:

Preliminary results of a catch and release mortality study of tarpon in Boca Grande Pass, Florida by Christopher Powell, Kathryn Guindon-Tisdel and Luiz Barbieri

The distribution and seasonality of juvenile gag, Mycteroperca microlepis, in Charlotte Harbor, Florida by J. Patrick Casey, Gregg Poulakis and Philip Stevens

**Power-Tie Award** (for the most professionally outspoken individual) Steve Bortone

Lamp Shade Award o Eric Nagid and Bob Wattendorf

Florida Chapter AFS 601 W. Woodward Ave. Eustis, FL 32726

**VDDBESS CORRECTION REQUESTED** 

Non-Profit Organization Bulk Rate U.S. Postage PAID

Eustis, FL Permit No. 4