the Shellcracker

FLORIDA CHAPTER OF THE AMERICAN FISHERIES SOCIETY

http://www.sdafs.org/flafs

April, 2011

President's Message:

Greetings from South Florida, folks.

For those of you who weren't able to attend in January, you missed one heck of a Southern Division meeting in Tampa. With 408 attendees and over 200 individual oral and presentations, we're still getting complements on how well it turned out. I appreciate all of the help that folks around the chapter offered, but special thanks need to be given to Eric Nagid, Linda Lombardi-Carlson, Kerry Flaherty, Andy Strickland, Wes Porak, and the rest of the planning committee for their tireless efforts to make this meeting a success.

As many of you know, or perhaps are fast learning, this is a challenging time to be involved in fisheries science. Federal and state employees are both facing such issues as departmental hiring freezes, field and travel budget reductions, and an increasing individual workload. On the academic side, many colleges and universities are choosing to not back-fill positions upon retirements and are similarly increasing individual workloads on remaining faculty, not to mention the general decrease in external grant and contract funding that served in the past to support many of us and our research in graduate school. We may find our work personally fulfilling, and we often get to see things during our careers that would make many people envious, but I wish sometimes I knew where the public got its perception of the cushy life of the fisheries biologist!

Now, it's one thing to complain and yet another to offer solutions, as many of us likely heard from our parents growing up. I would suggest that this is the time to seek out alternative strategies to achieving your project results. One method could be by increasing your recreational angler or commercial fisher outreach to provide samples in a collaborative effort. My own research group has been going to recreational tournaments and out to sea on commercial boats since its inception, and we find that both recreational and commercial fishing participants are often quite willing to help with research. (It has the secondary advantage of pointing out the importance of funding scientific research on their favorite targets.) Another method is to increase your collaboration with your fisheries colleagues. Many external grants now provide preference to proposals involving more than one institution, for example. For marine fisheries, examination of a topic among the various regions of Florida would likely result in stronger conclusions and the ability to examine more complex fisheries questions.

Institutions like the Florida Chapter provide an easy means to build those very collaborations. I've been talking with the incoming President of the Student Sub-Unit, and we'll be working together to find ways to increase student involvement. In the coming months, I'll also be personally contacting the various academic institutions around the state to see how we could increase participation beyond the five or six "usual suspects" that we see at the annual meeting. I've also been talking with Dr. Tolley at Florida Gulf Coast University to see if there might be ways for the Florida Chapter of AFS and the Florida District of the American Institute of Fisheries Research Biologists to collaborate on specific projects. Please feel free to contact me at any time if you have any suggestions on how the Chapter might facilitate student and professional fisheries networking – the Chapter and its officers are here to serve you, not the other way around.

Best wishes on your current work,

Dave Kerstetter
FL AFS President

Getting in Touch

President
David Kerstetter
Nova Southeastern University
Oceanographic Center
8000 North Ocean Drive
Dania Beach, FL 33004
Phone: (954) 262-3664
Email: kerstett@nova.edu

President-Elect
Kerry Flaherty
FWC/FWRI
100 8th Ave. SE
St. Petersburg, FL 33701
Phone: (727) 896-8626 ext. 2118
Email: kerry.flaherty@myfwc.com

Secretary/Treasurer
Travis Tuten
FWC/FWRI
7922 N.W. 71st Street
Gainesville, FL 32653
Phone: (352) 955-3220 ext. 113
Email: travis.tuten@myfwc.com

Newsletter Editor
Kevin Johnson
FWC/FWRI
2595 McGraw Ave.
Melbourne, FL 32934
Phone: (321) 752-3268
Email: kevin.johnson@myfwc.com

Past President
Linda Lombardi-Carlson
NOAA/NMFS/SEFSC
3500 Delwood Beach Road
Panama City, FL 32408
Phone: (850) 234-6541 ext. 213
Email: linda.lombardi@noaa.gov

Upcoming Events

May 2 – 4, 2011: Instream Flow Council, FLOW 2011: Instream Flow Valuation in Public Decision-Making. Nashville, Tennessee.

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

New Titles

Inland Fisheries Management in North America, Third Edition. Wayne A. Hubert and Michael C. Quist, editors. 736 pages. Published by the American Fisheries Society. October 2010.

Sustainable Fisheries: Multi-Level Approaches to a Global Problem. William W. Taylor, Abigail J. Lynch, and Michael G. Schechter, editors. 377 pages. Published by the American Fisheries Society. March 2011.

Interested in contributing something to the Shellcracker? Email Kevin Johnson at *kevin.johnson@myfwc.com* 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, 2011, so start fishing...

Feature Article

Identifying American Shad spawning habitats in the St. Johns River

Drew Dutterer, Mike Allen, and Bill Pine
University of Florida

Introduction

Water management in Florida requires science that links biological and ecological processes to water level and stream flow and fluctuation. Need for this type of information makes logical sense as we confront finite freshwater sources with the growing human populations of our state. For instance, due to recent and projected growth, Orlando and its surrounding area must obtain additional sources of freshwater. The St. Johns River passes in close proximity and presents a potential solution to the water supply needs of the city. As it is mandated in Florida law to uphold ecosystem health in pursuing water needs, we are led to questions like: What environmental parameters and species are possibly affected and in what ways? How much water can be safely diverted without negative effects to the river's ecosystem? Where in the river should water be withdrawn? As a species that receives national conservation and restoration focus, American shad *Alosa sapidissima* are at the forefront as one of several species of special interest within the St. Johns basin that may provide guidance in addressing water use and regulation.

The American shad is one among a trio of anadromous shads that can be found seasonally in Florida's St. Johns River. Adult American shad, along with adult congeneric hickory shad *A. mediocris* and blueback herring *A. aestivalis*, return to their natal St. Johns River to spawn each spring. American shad are native to the east coast of North America ranging from the St. Lawrence River, Canada in the north to the St. Johns River, Florida in the south (Limburg et al. 2003). Within this latitudinal range, the species exhibits diverse life history characteristics, such as varying degrees of iteroparity (number of reproductive events within a lifetime) (Facey and Van Den Avyle 1986), age and size at maturity (La Pointe 1957), and variation in other similar aspects of life history and reproduction. Because of this gradient in life history strategy, historic commercial overfishing, and recreational fisheries, American shad have received considerable research interest across the eastern seaboard.

Historically, *Alosa* spp. have supported commercial fisheries that included ocean intercept netting in the Atlantic Ocean along the US continental shelf and in-river netting that targeted mature adults during the onset of spawning migrations. However, due to declining stock sizes, in 2005 the mixed-stock ocean intercept fishery was closed, and prior to that, the 1995 net limitation amendment was enacted within Florida waters, eliminating Florida's in-river seine haul fishery. The end of commercial fishing for Florida's American shad left only a highly regulated recreational fishery. However, stock size remains low for the St. Johns and many natal river stocks along the US Atlantic coast (McBride 2005).

This slow recovery of American shad stocks after cessation of commercial fishing has caused scientists and managers to question whether the quality or quantity of freshwater spawning and larval/juvenile habitats has become a limiting factor. Previous studies indicate that American shad spawn in areas of relatively high and turbulent flows [after fertilization, American shad eggs are slightly negatively buoyant and necessitate flows to keep them from settling in the substrate (Facey and Van Den Avyle, 1986)]. These areas typically coincide with the fall line of the Atlantic slope, where the rolling hills of piedmont regions transition into the coastal plain. In many river systems dams, water control structures, and water withdrawal compromise or eliminate access to these habitats for adults making upstream spawning migrations. Thus, the lack of access to favorable spawning habitats as an obstacle to American shad stock recovery has received increasing attention in recent times.

Past research to address American shad spawning locations in the St. Johns River has been somewhat limited. Williams and Bruger (1972) provided the primary authority to spatial and temporal analysis of shad spawning when they deployed dozens of plankton nets over a large portion of the upper basin to collect shad eggs during the spawning seasons of 1969 and 1970. In general, they collected some eggs at many locations [Crows Bluff (rkm 237) upstream to Hwy 192 (rkm 432)] but noted high catch rates, indicative of intensive spawning, at only a few locations. Their findings implied that there were many places within the river that might support limited American shad spawning, but only a few that attracted the interest of large numbers of adults. Furthermore, they found areas of highest catch rate to be somewhat transient from year to year. Since river levels were markedly different in 1969 and 1970, they surmised stream flow was likely influential in the year to year primary spawning areas. In providing additional analysis to Williams and Bruger's (1972) data, Harris and McBride (2004) identified a positive relationship between catch of American shad eggs and river flow velocity. In other words, the most American shad spawning activity appeared to take place in areas of highest flow.

Stream flow velocities in the St. Johns are slow in comparison to nearly all other river systems north along the Atlantic coast that support American shad spawning. This occurs because gradient in the St. Johns River is low, and it actually falls less that 8 m from headwaters to its union with the Atlantic Ocean in Jacksonville. The channel braids wildly over much of the uppermost 100 river km, and all along its length the channel intermittently widens and expands into large lakes. Because of the low slope of the river channel, spatial and inter-annual variation in flows can be subtle and difficult to detect.

To better understand the dynamics of American shad spawning in the St. Johns River we at the University of Florida, in collaboration with the St. Johns Water Management District and the Florida Fish and Wildlife Conservation Commission, have launched a multi-year effort (2009-2011 spawning seasons) to monitor in-river migration of American shad via acoustic telemetry. It is hoped that over multiple years we will encounter varying levels of river stage and discharge during which we can track shad movements to potentially important spawning habitat. In turn, this information will help to inform water use policy in the upper St. Johns River basin.

Methods

To telemeter American shad, we intercepted up-migrating adults via electrofishing during January and February. We collected them between Palatka and Lake Monroe (downstream of perceived historic spawning area) and fitted them with Vemco® V-13 ultra-sonic transmitter tags that emit uniquely identifiable signals. Our tags had an approximate operational lifespan of 3 months, allowing us to monitor shad movements during February – April which covered the expected lifespan of spawning adults. We tracked the movements of tagged individuals within the river via a manually operated hydrophone and a network of fixed position autonomous hydrophones. Our fixed position hydrophones (19 VR2 or VR2W omnidirectional hydrophones) served as check stations for tagged shad from Palatka to State Road 520 (approximately 253 river km), and they allowed us to continually log the large-scale movements of tagged individuals within the river. With the manually operated hydrophone (VR-100 directional hydrophone), we searched the river for tagged shad and then triangulated on tag signals to produce precise locations of fish within the channel. By relocating tagged shad throughout the duration of the spawning season, we could identify areas of high or low use. To describe habitat, we recorded depth, flow velocity, and substrate measurements.

Preliminary Results and Discussion

Results from tracking American shad through the previous two spawning seasons (2009 and 2010) showed that shad made lengthy migrations through much of the upper St. Johns and the Econlockhatchee Rivers. Interestingly, both years had similar patterns of highest use between Lake Monroe and Lake Jesup (Figure 1), and many individuals remained in this section of river only, with little or no movement to other areas

of the river during much of the spawning season. This range of high use was very similar to patterns observed by Williams and Bruger (1972) during 1970 when they experienced highest catch rates of American shad eggs between Lakes Monroe and Harney. As the 1970 spawning season experienced relatively high flows, they surmised that the stretch of river between Lakes Monroe and Harney was favorable to shad spawning primarily during high flow years. Though the movements of many adults in our study during 2009 and 2010 were concentrated between Lake Monroe and Lake Jesup, we observed tagged shad movement throughout the upper St. Johns and as far upstream to Lake Winder (Figure 1). Similarly, Williams and Bruger (1972) found American shad eggs as far upstream as Hwy 192 (rkm 432), indicating that some portion of spawning shad will migrate as far as upstream as passage will allow. Widespread use of the upper St. Johns basin by spawning run American shad is also consonant with annual electrofishing catch of adults, which routinely indicate shad presence from Lake Monroe to Lake Poinsett (McBride and Holder 2009).

In preliminary analysis of habitat data, we divided tag relocations into two groups. One represented shad and habitat for the highest use section between Lake Monroe and Lake Jesup, and the other represented shad and habitat from the rest of the basin upstream of Lake Jesup. Flow and depth parameters from these two categories were very similar (Figure 2), and showed that shad used similar habitats regardless of position within the basin. Future habitat study will focus on determining the overall availability of these types of habitats.

At the time of writing, we are at the onset of the 2011 American shad spawning migration. Water levels and discharge in the St. Johns River are low as precipitation has been scarce in recent months. If these conditions persist, we will likely experience conditions of lower flows that will be similar to those during 1969 of the Williams and Bruger study. During their low flow year they experienced highest American shad egg catch rates well upstream of patterns in 1970, the high flow year. It suggests that we could observe an increase in use of areas from Puzzle Lake to Lake Poinsett during this spawning season. Needless to say, the present scenario of contrasting flows will allow for interesting comparisons with the work done by Williams and Bruger 40 years ago.

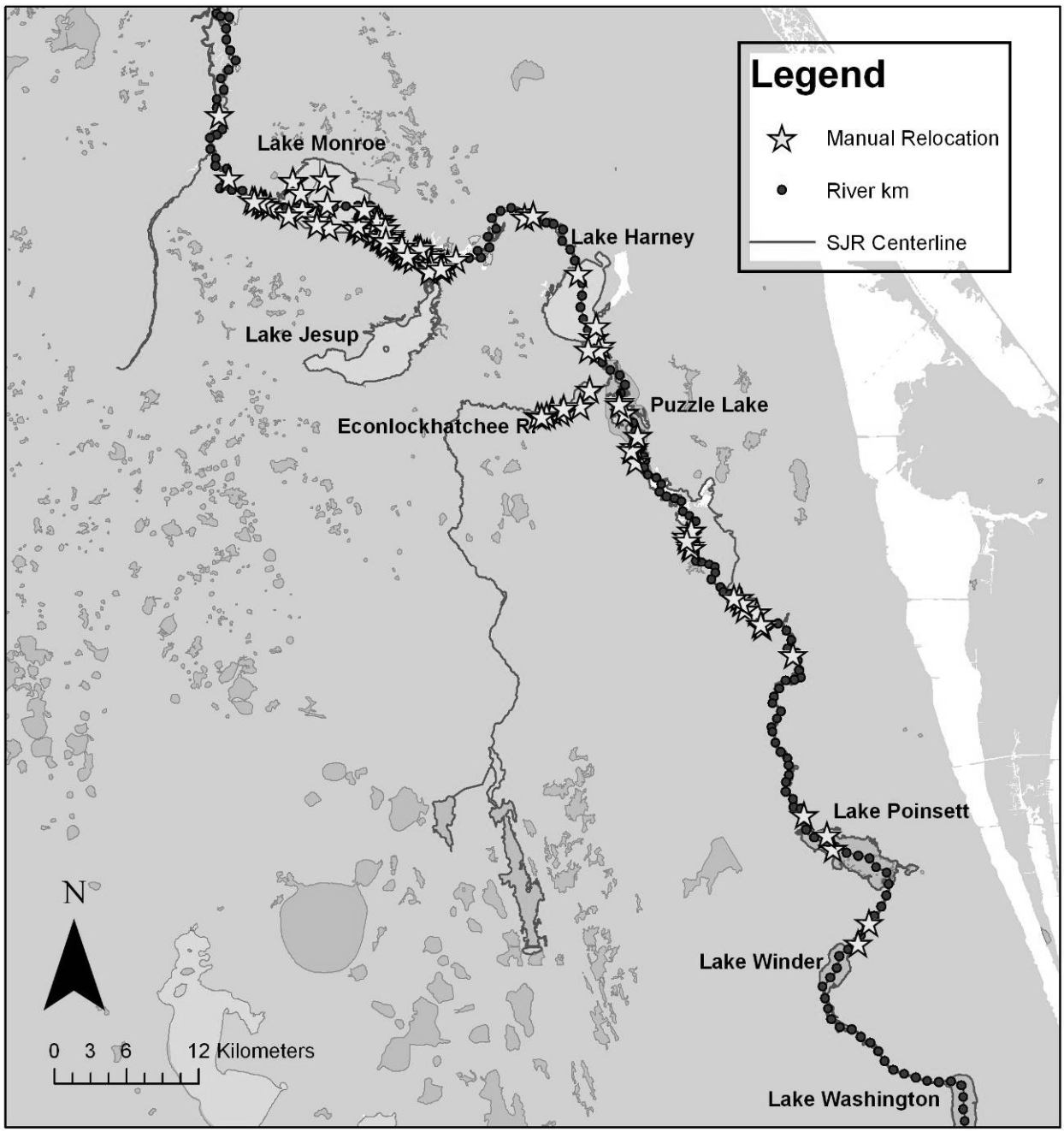

Figure 1. Relocations of tagged American shad (stars) via manual searches during the 2010 spawning season. Tagged individuals used habitat from Lake Monroe to Lake Winder. However, the area of highest use was between Lake Monroe and Lake Jesup and was similar to spatial use patterns observed 40 years ago by William and Bruger (1972).

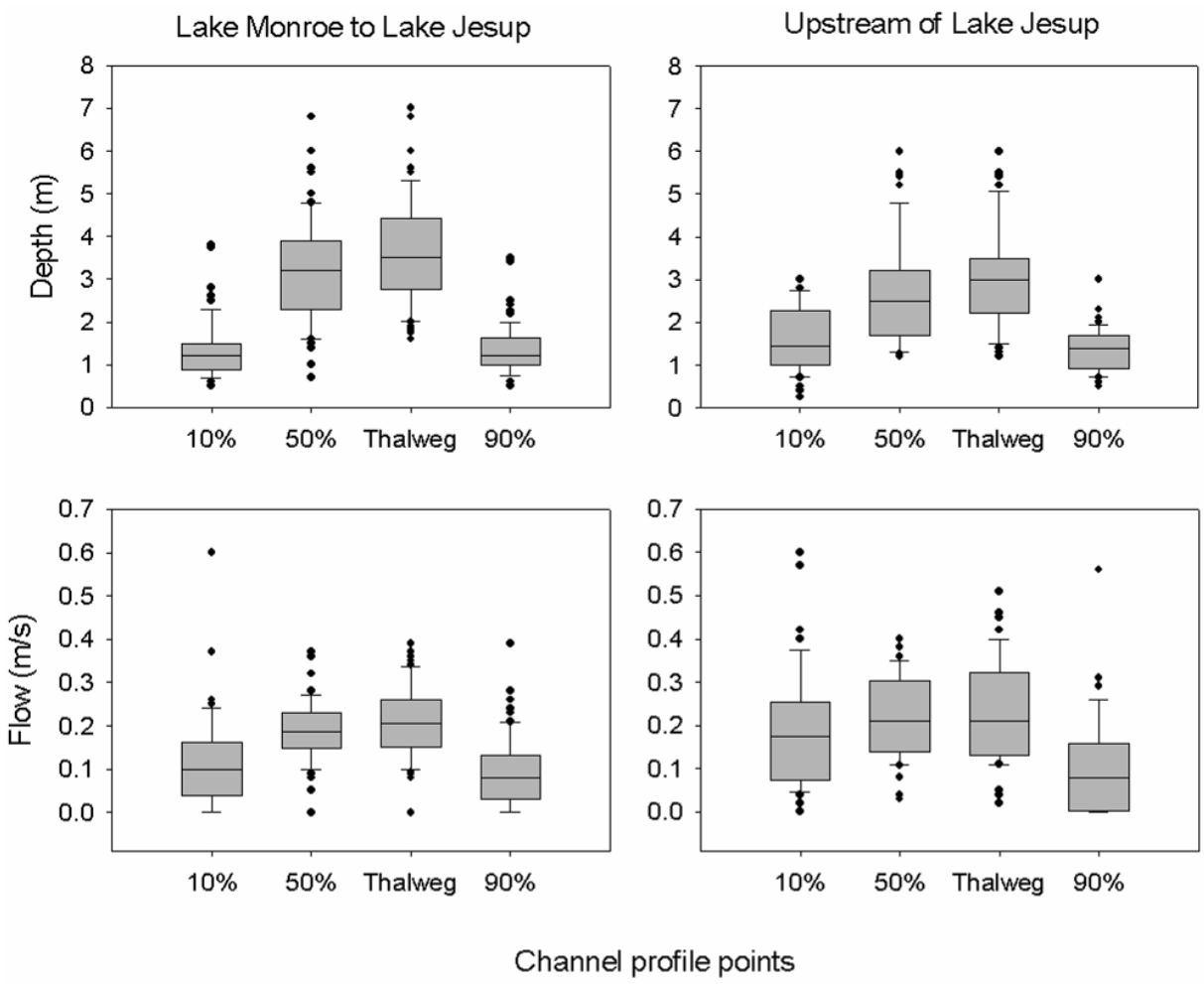

Figure 2. Box plots of depth (top panels) and flow (bottom panels) profiles that correspond to American shad manual tracking relocations. Shad relocations were categorized spatially as corresponding to the majority of shad that primarily used river channel between Lake Monroe and Lake Jesup (left panels) or to shad that migrated extensively beyond the majority (right panels). Channel profile points refer to points at 10%, 50%, and 90% of the wetted channel width. Measurements were also taken at the channel thalweg (deepest point in the channel profile).

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Thanks to the following 2011 meeting raffle prize donors:

Whippoorwill Sportsman's Lodge – Lake Talquin - (850) 875-2605; Talquin's First Cast (850) 627-LURE; D.O.A. Lures; Smith Root; Winterplace Ski Resort – Flat Top, WV; Tennessee Aquarium – Chattanooga, TN; South Carolina Aquarium – Charleston, SC; Bell and Bate's Home Center – Quincy, FL; Sunrize Tackle; Bass Assassin; Lake Talquin Lodge – Lake Talquin, FL; Bronson Ace Hardware – Eustis, FL (352) 357-2366; Joe Tomelleri (www.americanfishes.com); Crum's Bait and Tackle – Panacea - (850) 984-5501; Ingram's Marina - Lake Talquin - (850) 627-2241; Biomark (www.biomark .com); Angie's Marine Supply – Crawfordville – (850) 926-3114; Fred Fisher (www.aquatic-impressions.com); Diane Peebles – Artist – St. Petersburg, FL; Owens Fishing and Marine, 935 N Bay St, Eustis, FL (352) 357-3030; Joe Budd Aquatic Education Center; Osprey Motel – Panama City Beach, FL; Marriott Resort – Panama City Beach, FL (East on the Bay); American Museum of Science and Energy – Oak Ridge, TN; The Farmhouse Restaurant – Etowah, TN; The Lost Sea Adventure – Sweetwater, TN; Savannah Oaks Winery – Delano, TN; Larry Connor; Gulf World Marine Park – Panama City Beach; FSU Coastal and Marine Lab; Mineral Springs Seafood – Panacea, FL; Capt. Anderson's Restaurant – Panama City Beach; Paul Brent, Artist (www.paulbrent.com); The Canoe Shop – Panama City; Panama Marine – Panama City; Captain's Table Restaurant – Panama City; Sam's Club - Panama City; Wal-Mart – Lynn Haven and Panama City Beach; Jerry Anderson's Fishing Fleet – Panama City Beach; Jubilee Deep Sea Fishing – Panama City Beach; Lasso Net Company; Captain Redbeard's Hot Sauces; Black Hawk Fly Fishing – Clarksville, GA; Sports Authority – Panama City, FL; Half Hitch Tackle – Panama City Beach, FL; The Kayak Experience – Destin, FL; Panama City Marina; Southern Sportsman Aquatics and Land Management; ProSource One; Vemco; The Bait Box – Sanibel Island, FL; Gulf Specimen Marine Lab – Panacea, FL; The Shoe Box – Tallahassee, FL; Reel Angling Adventures – Guide Bill Stranahan – Hiwassee River, TN; J. Micheal's Restaurant – Panama City Beach; Auburn Chapter AFS; The Florida Aquarium – Tampa, FL; Lehr's Economy Tackle – N. Fort Myers, FL

Minutes of the 31st Annual Meeting of the Florida Chapter American Fisheries Society
Business Meeting
January 15, 2011
Grand Hyatt Tampa Bay, Tampa, Florida

President Linda Lombardi called the business meeting to order at 5:38pm and established a quorum.

Past-presidents of the Florida Chapter who were in attendance at the meeting were acknowledged and included: Wes Porak, Ron Taylor, Larry Connor, Kathy Guindon, Mike Allen, Rich McBride, Chuck Cichra, Eric Nagid, Will Patterson, and Deb Murie. Officers and Past-presidents of other AFS organizations who were present at the meeting were acknowledged.

Travis Tuten (Secretary/Treasurer) asked and received approval of the 2010 business meeting minutes and then presented the 2010 Treasurer's Report. Larry Connor mentioned the "Credits" in the Treasurer's Report includes the Rottmann Scholarship reimbursement which comes from the Rottmann Scholarship Fund. John Benton pointed out the year was listed as 2009, not 2010, which was later corrected for the Report that is found in this newsletter.

Larry Connor gave the current balance of the Rottmann Scholarship Fund. Assets of the Rottmann Scholarship Fund increased from $22,152.65 on December 31, 2009 to $24,017.50 on December 31, 2010, which is a $1,864.85 increase. Since the funds inception the Fund has shown a 8.76% annual rate of return, and Larry did not recommend any changes to the Rottmann Scholarship at this time.

Deb Murie (Past-president) spoke about elections and discussed some of the difficulties in finding candidates to agree to stand for nomination. She then introduced Kerry Flaherty and Andy Strickland as the nominees for the incoming President-elect. Both Kerry and Andy stated a few things about themselves. Ballots were passed out and a vote was taken.

Kevin Johnson agreed to stay on as Newsletter Editor for another year, but asked that someone would consider taking over after next year. He mentioned that if anybody has any pertinent information to pass out or advertise that they should email him.

Andy Strickland (Raffle Coordinator) informed the members on the status of the raffle ticket sales and mentioned that there was still plenty of time to buy tickets and that all Student-Subunit members who received a travel grant were expected to sell tickets at the banquet. He recognized the quality of the prizes that were donated for the raffle and also recognized Alan Collins for his hard work and time in obtaining many of the raffle items.

Larry Connor reported on the 2010 membership roster. The Florida Chapter membership increased by 27 members since 2009, with a total of 208 members in 2010. He mentioned that 61 of the 208 members were students. He suggested that the increase in membership was probably due to the improved economy.

Chuck Cichra announced the recipients of 2011 Travel Grants and Rottman Scholarships. A total of 24 students applied for Travel Grants and all 24 individuals were awarded grants, which covered the student's early registration cost ($85). Each of the 24 recipients were enrolled at one of six Florida universities including Eckerd College (Rachel Harbeitner, Ashley Hibbard, Kelsey Kappler, Robert Little, Lillian McCormick, Zachary Means, and Nathan Van Bibber), Florida Institute of Technology (Matt Badolato), Florida State University (Mollie Taylor), Nova Southeastern University (Kerri Bollow, Amanda Karch,

Travis Moore, and Tiffany Weidner), University of Florida (Chelsey Campbell, Felipe Carvalho, Amanda Croteau, Patrick Gardner, Matt Hangsleben, Janice Kerns, Matt Lauretta, Geoffrey Smith, and Jakob Tetzlaff), and University of West Florida (Rachel Scharer, Joseph Tarnecki). Student travel grant funds are raised through the previous year's raffle profits and the Florida Chapter only made $1,257 from the 2010 raffle, which was enough money to cover 14 student awards. However, Jon Shenker with Florida Institute of Technology made a $200 donation from his personnel funds to provide additional support to students and the Florida Chapter gave $583 of additional funds from the Chapter's budget so that funding to all 24 student applicants could be provided.

Chuck Cichra announced the 2011 recipients of the Rottmann Scholarship along with their credentials. Carla Garreau (University of Florida) was given the Master of Science level Scholarship. Janice Kerns (University of Florida) was given the Doctor of Philosophy level Scholarship. Each recipient was given a certificate and a $500 check.

Eric Nagid came to the podium to present the Rich Cailteux Award. Eric first went over the purpose of the award, including who Rich Cailteux was. Alan Collins was then named the 2nd recipient of the Rich Cailteux award and was asked to step to the podium. Eric read the nomination and presented Alan with the award.

Tiffany Weidner (2010 Student Sub-unit President) gave a report for the Student Sub-unit and mentioned that the Sub-unit plans to hold a workshop at the start of the 2012 Chapter Meeting prior to the start of the contributed papers. Newly elected officers included Matt Badolato (Florida Institute of Technology) as President, Matt Dancho (Nova Southeastern University) as Vice President, and Bob Ellis (Florida State University) as Treasurer.

Linda Lombardi returned to the podium and gave recognition to the organizational Committee of the 2011 SDAFS Meeting. These included Eric Nagid (General Meeting Chair), Dave Kerstetter (Program Chair and Abstract Submissions), Deb Murie (Posters), Wes Porak (Fund Raising/Sponsorship), Kerry Flaherty (Local Arrangements), Linda Lombardi (Registration), Travis Tuten (Finances), Kevin Johnson (Advertising/Communication), Chris Bradshaw (Audio/Visual), Andy Strickland and Alan Collins (Raffle), Janice Kerns (Continuing Education Workshops), and Bob Wattendorf and Jerry Finke (Webmasters).

Linda asked about old business and it was mentioned that Tom Maher, a past member of the Florida Chapter had recently passed away.

Deb Murie returned to the podium to give the result of the vote and announced Kerry Flaherty as the new President-elect and mentioned that Travis Tuten was continuing on as Secretary/Treasurer.

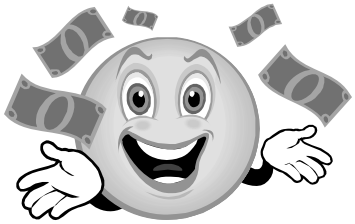
Linda announced Dave Kerstetter as the new President and handed the meeting over to Dave. Dave presented Linda a plaque for recognition of her service as President of the Florida Chapter. Dave presented Tiffany Weidner a plaque for recognition of her service as President of the Student Sub-unit of the Florida Chapter.

Dave asked Linda Lombardi to return to the podium to inform the Chapter about hosting the 2015 AFS Annual Meeting. Linda suggested that we should allow ourselves more time to make any decisions about hosting a national meeting. A motion was made and seconded to postpone a decision to a later date. The vote was unanimous to postpone the decision at this time.

Dave then brought up whether the Chapter should sponsor the 2011 AFS Meeting in Seattle, WA. A motion was made and seconded to postpone a decision of sponsorship for the 2011 AFS Meeting to a later date. The vote was unanimous to postpone a decision at this time.

Dave asked if there was any other new business and Ron Taylor yelled out "War Eagle".

Dave then adjourned the meeting.



Treasurer's Report Florida Chapter AFS
Travis Tuten
1 January 2010 to 31 December 2010

	Checking	Mutual Funds	Total
January 1, 2010	$ 7,096.12	$ 10,155.94	$ 17,252.06
December 31, 2010	$ 65,599.17	$ 11,743.34	$ 77,342.51
Difference:	$ 58,503.05	$ 1,587.40	$ 60,090.45

Credits:

Deposits (Morgan Stanley Smith Barney)	$ 47,502.68
Dividend Income	$ 674.50
Deposits (Wachovia)	$ 21,831.41
PayPal	$ 1,034.58
Total:	$ 71,043.17

Debits:

Annual Meeting vender & supplies	$ (8,926.28)
Rottmann Scholarship	$ (955.00)
Raffle costs	$ (662.70)
Dividend Reinvestments	$ (673.21)
Annual bank fees	$ (300.00)
AFS Liability Insurance	$ (150.00)
2010 SDAFS Meeting Travel (Deb Murie)	$ (587.91)
2011 SDAFS Meeting Materials	$ (106.27)
State of Florida Business (Sunbiz) Application Fee	$ (78.75)
Wachovia Bank Account	$ (100.00)
Total:	$ (12,540.12)

2010 Balance	**$ 58,503.05**

Major Expense Categories:

Annual Meeting, including Raffle	76.5%
Student scholarships	7.6%

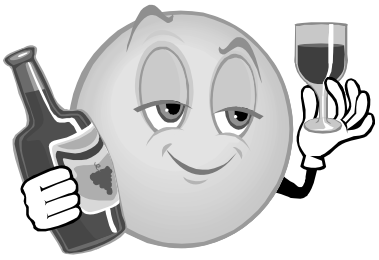
Rich Cailteux Award:

Alan Collins (right) presented with the second Rich Cailteux Award, which recognizes individuals for their career long contibutions to the fisheries profession. Alan began his career with National Marine Fisheries Service in St. Petersburg, Florida in 1971. Over the next thirty-two -plus years Alan worked on the early life history of fish and the reproductive biology of reef fish, publishing in the peer-reviewed literature and contributing to stock assessments. Alan retired from federal service in January 2006. Alan has spent his career working on the life history of fish, in addition to selfless contributions to others in the field and to the local community. Alan has been an active member of the American Fisheries Society-Florida Chapter for many years and has remained active with the organization into his retirement. In most recent years, he has solicited donations of merchandise and fishing trips from local vendors, and he is one of the main reasons the Florida Chapter continues to have successful raffles.

Chapter Membership -

Please Pay Dues!

With our chapter hosting the Southern Division meeting, paying your chapter dues may have been overlooked. Florida chapter AFS dues are still $10.00, and can be paid one of two ways: by (1) check, cash, or money order mailed to Travis Tuten, or by (2) credit/debit card through our new PayPal account. Prior to payment you first need to fill out and submit your membership information found on the "Become a Member—Sign Up here" link on the front page of our chapter's website, http://www.sdafs.org/flafs. The PayPal link for credit/debit card payment is also found on the front page of the chapter's website.



Special Thanks to the committee chairs, committee members, numerous volunteers, and sponsors who helped to make our hosting of the 2011 Southern Division meeting a great success!

Eric Nagid, *General Meeting Chair*
David Kerstetter (Chair), *Program Committee*
Deb Murie, *Posters*
Janice Kerns, *Continuing Education Workshops*
Kerry Flaherty (Chair), *Local Arrangements Committee*
Chris Bradshaw, *Audio/Visual*
Linda Lombardi, *Registration*
Kevin Johnson (Chair), *Advertising and Publicity Committee*
Travis Tuten (Chair), *Finance Committee*
Wes Porak (Chair), Kathy Guindon, Linda Lombardi, David Kerstetter, Nick Trippel, Mike Allen, Deb Murie, Chris Bradshaw, Steve Crawford, Bruce Jaggers, Ron Taylor, Paul Zajicek, Rick Stout, Kerry Flaherty, *Sponsorship and Tradeshow Committee*
Andy Strickland (Chair), Alan Collins, Eric Sawyers, Wes Porak, Kim Bonvechio, *Raffle Committee*
Jerry Finke, *SDAFS Webmaster*
John Jackson, *Student Affairs*
Steve Lochmann (Chair), *Oversight Committee*

Highlight pictures from the 2011 Southern Division AFS meeting:

Eric Nagid (w/Jack Dequine) receiving the 2010 SEAFWA conference best presentation award.

Mike Allen (middle) (w/Jack Dequine and Larry Connor) being inducted as the new SDAFS Vice-President.

Eric Nagid and Wes Porak (w/Fred Janssen) receiving resolution of thanks plaques for hosting the 2011 Southern Division meeting.

Student Section

Student Research Highlight

Matt Badolato –Student Subunit President

Here's the short story of how I learned that raising cool fish—like cobia and pompano—wasn't as glorious as I'd expected.

Five days a week I wake up an hour early. Lie in bed longer than I should have. Chug a cup of coffee as I grab my schoolbag, a banana and rush out the door.

I hop into my pickup and drive to school, wiping crust from my eyes and trying not to spill my coffee—there's no one to sue if it spills in my lap. My tires squealing, I slide into a parking space at Florida Institute of Technology and head for the aquaculture lab.

It's quiet—and by quiet I mean there are no people talking, no blaring car horns—just the trickling sounds of pumps, filters and circulating pipes. I take a deep breath before getting to work, inhaling a briny, sweet, fishy smell that only a sea-person really appreciates.

But unfortunately, that inglorious odor isn't emanating from shiny, white filets behind a glass counter at the local seafood market. It's not the smell of a harbor after fishermen have unloaded a fresh catch. Nope.

It's actually just baby cobia poop.

I put on my headphones, crank up Bob Marley in my iPod and get to work siphoning all the little gifts the 800 juvenile fish have left behind over night.

A couple other guys trod on in, Carter Davis and Andrew Richard, both aquaculture majors. While I suck the muck from the deep, circular tanks, they get busy straining and collecting artemia (brine shrimp) from a big, bubbling cone.

The larval cobia are like baby humans. They need constant care and monitoring. But feeding time is a whole 'nother story.

Babies will eat mashed up peas and bananas that come in a little jar. Cobia must be fed live food, rotifers for the first week or so, and then artemia. There is always an algae colony growing to feed the microscopic rotifers, and there must always be a rotifer tank going to feed the fish. Artemia take 24 hours to hatch, so each day we must get a new crop hatching for the next day's feeding. As the cobia grow, we'll feed them 48-hour old artemia and eventually move them up to solid (i.e. easier for us) foods.

While Carter and Andrew are busy feeding the fish, I get to work on "greening up" the larval fish tanks. To feel safe, the fish need dark, turbid water. (I don't know too much about cobia life cycles, I'm assuming they spawn near river mouths or estuaries?) I take a big tablespoon of frozen algae past, mix it up in some water and rig a drip tube into the cobia tanks. In 10 minutes the tanks look like Dagobah, where Yoda lived in that movie you may have heard of, I think it was called Star Wars or something like that.

While I'm doing all this work in the lab, I receive a very thoughtful text message from another friend. He's out fishing today. "SLAYIN THE COBIA DOOD!" is the message I receive. I realize the sacrifice I'm making. Here I am playing with 4 millimeter long cobia while my friends are out reeling in forty pounders off Port Canaveral in central Florida.

So what exactly are we trying to do?

I guess you could call it practice. We're trying to develop our own protocol for raising these fish from egg to a more hardy-sized juvenile that can be transported, sold or released. In these times of explosive human populations, tighter fishing regulations and worldwide food shortages, fish are a healthy protein source that should be taken seriously the world over.

And people are taking it seriously. At Florida Tech's lab in Vero Beach, biologists (pretty much just fish fanatics) are working with broodstock cobia and have great success breeding the adults. Some pairs of fish spawn each month and their eggs are shipped to colleges throughout the US to other universities looking to expand their knowledge of raising these fish for commercial aquaculture.

On their three-week birthday, we throw a party for our baby cobia. And by party, I mean we wipe the sweat off our brows and celebrate not having to feed them live prey anymore. They've graduated to saltwater flake food which contains the essential amino acids they need to grow and further develop.

The fish are also beautiful. A couple weeks prior, they literally looked like sticks just floating around in the water. Not anymore. They are starting to look a lot like cobia—actually more like tiny remoras. Their snouts are coming to a point, heads are flattening, brown pigments are filling in nicely and their eyes are a deep blue. What's most impressive are their tails. They're delicate brown and gold fans, not the forked and sturdy keels present in their adult forms. Like the tropical freshwater betas, their undulating fan-tails gracefully ripple as they rear their little heads back to suck in some food. As I look down into the tank, I can't help feeling like a proud father.

I plug my earbuds back into my head, press play on Bob Marley's "Jammin," and head into the lionfish room to clean up their poop—a fish I'm a bit less excited to be keeping alive.

Picture of larval cobia.

ROTTMANN SCHOLARSHIP RECIPIENTS!!!

The Doctoral-level recipient was Janice Kerns (left). The Masters-level recipient was Carla Garreau (right). Both are students at the University of Florida, School of Forest Resources and Conservation, Program in Fisheries and Aquatic Sciences. Janice is a student of Mike Allen working on mortality components of largemouth bass, while Carla is a student of Ruth Francis-Floyd & Louis Guillette working on a health assessment of red drum in NASA's KSC no-take reserve.

YOUNG PROFESSIONAL TRAVEL AWARD

The Education Section is glad to announce the 'Young Professional' travel grant for the 2011 annual meeting of the American Fisheries Society in Seattle Washington. The award is designed to promote meeting attendance of young professionals who have made substantial contributions to the field through continued education, outreach and AFS service. The award provides up to $850 in travel support and a 1 year membership to AFS. Preference will be given to individuals presenting at the meeting, those involved in continuing education or outreach and those in need of financial assistance for travel. All young professional members (within 3 years of graduation), including agency biologists, post-docs, and faculty are encouraged to apply. The award winner will be required to attend the Education Section business meeting to receive the award and contribute to the Section's winter 2012 newsletter.

Information of the application can be found at the Education Section website:
http://www.fisheries.org/units/education/
A direct link to the pdf file can be found at:
http://www.fisheries.org/units/education/documents/YPTA_2011.pdf
Applications should be submitted in electronic format (PDF or Word) to Mark Fincel mark.fincel@sdstate.edu and must be received by May 2nd, 2011. The recipient will be notified in early June.

Florida Outdoor Writers Association (FOWA)

2011 Scholarship for Outdoor Communicators

Eligibility

As part of its conservation mission, FOWA motivates and encourages young people to enter outdoor communication fields by awarding scholarships to deserving young college students. FOWA Scholarships are competitive and open to students at Florida colleges and universities, or to any student whose application is endorsed by a FOWA member or a faculty advisor. FOWA Scholarships range from $500 to $1,000.

These scholarships are intended for students whose career goals are to communicate to the public a love and appreciation for hunting, fishing and other aspects of the outdoor experience. Preference will be given to journalism and communications majors.

All applications must include the following items:

1. Cover page, including:

Name:

Address:

Phone:

Email:

School, College or University:

Major, or degree emphasis:

2. An essay of 500 to1000 words that expresses your appreciation for the outdoor experience.
3. An up-to-date resumé.
4. A letter of endorsement from a FOWA member or faculty advisor.
5. Any other supporting materials you would like to include.

Selection

Scholarships are selected by the following criteria:

1. Applicant's essay.
2. Endorsement of the applicant's faculty advisor or FOWA member.
3. Scholastic merit and extracurricular activities as indicated inapplicant's resumé or supporting materials submitted.
4. Preference will be given to journalism and communications majors.

Application

Applications may be submitted electronically or by mail.
Send application materials by May 2, 2011 to either FOWA contact:

Dorothy Zimmerman
FOWA Scholarship Committee
PO Box 110409
Gainesville, FL 32611-0409
352.392.2801
dozimmer@ufl.edu

Tommy Thompson
FOWA Executive Director
24 NW 33rd Court, Suite A
Gainesville, FL 32607
352.284.1763
info@fowa.org

www.fowa.org