the shell-cracker



http://www.sdafs.org/flafs

FLORIDA CHAPTER OF THE AMERICAN FISHERIES SOCIETY

January, 2004

The hustle and bustle of the holiday season is behind us, time now to look ahead to a new and hopefully, productive year. I usually take this time to enumerate my professional achievements over the past year, sort of like keeping score with myself if you will. If I accomplish more than I had expected, I win, less and I lose. I suspect that most of us undergo some related form of self-assessment. The problem with this system is that no matter what "wish-list" of tasks I set for myself in the new year, my expectations always exceed my actual output. Consequently, I end the year feeling as though I somehow haven't lived up to my real potential. Renewed commitment to work harder in the new year just results in another list to beat myself up with next New Year's Day. Even though it has been clear to me for some time that this system is somewhat less than ideal, I've really had a hard time leaving it behind. Maybe it's the *Old Dog-New Tricks Syndrome*, I don't know. In any event, this year I'm convinced that a new approach is in order.

Now it seems to me that the biggest impediments to our daily "progress" are the unpredictable events that pop up as the day evolves. Perhaps you have found this to be true as well. An enormous number of things happen during the course of our day that we couldn't possibly foresee, let alone put on our yearly to-do list. Unless you are a lot luckier than I am, your workday isn't a predefined set of tasks (how boring would that be anyway?), but rather a sequence of events, some planned, others not, that often take on a direction of their own. Not that we lose control entirely, but there are some pretty good chunks of time where we are just along for the ride. I think it is just human nature to view these unexpected tasks as distractions from our defined goals, and therefore obstacles to our progress, especially if they don't contribute directly to our personal list of accomplishments. Perhaps herein lies the fatal flaw in the traditional "yearly accounting system."

I wonder, however, if we should be so quick to judge these duties as trivial and not deserving of large amounts of our time. In fact, is there a better way to spend an hour than composing a reference letter for deserving students or colleagues? After all, a first job, a promotion, or appointments to graduate school all have life-changing implications. And what about all those hours spent on peer review of manuscripts or research proposals of others? Each of these represents huge investments of time and resources by their authors, and our input may determine if they are disseminated to the intellectual community or simply relegated to a dusty space on office shelves. Indeed, to some limited extent, the writer's career is linked to our willingness to spend our time reviewing their work. Even seemingly small tasks such as career counseling or giving advice are hugely important to the students or interns under our patronage. These are not commitments to be taken lightly but may in fact comprise the most important and far-reaching of our yearly accomplishments. For my part, these are the very reasons I entered this field to begin with. So this year, in addition to listing the achievements that glorified our professional standing, how about making a second list of all the things we did to help others? Here's hoping that both your lists will be long ones in the New Year.

All the Best, Wayne A. Bennett, President FL AFS



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Upcoming Events

February 15-20, 2004 - American Society of Limnology and Oceanography and the Oceanography Society 2004 Ocean Research Conference, Honolulu, HI.

February 23-25, 2004 - Annual Meeting of the Florida Chapter AFS, Brooksville, FL.

February 26-29, 2004 - Midyear AFS Southern Division Meeting: Warmwater Streams Symposium, Oklahoma City, OK.

March 7-9, 2004 - Southeastern Lake Management Conference: Working Together— Sharing Resources, Isle of Palms, SC.

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

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.

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.

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!

The Sportfish Research Institute at Florida Tech

Jon Shenker Department of Biological Sciences Florida Institute of Technology

Many recreational anglers are utterly fascinated with the biology and ecology of their favorite sport fishes, and they can provide tremendous energy and support for research on ways to best manage and preserve vital species and habitats. As fishery biologists, our willingness to reach out to this support can greatly enhance our ability to conduct research targeted on critical fishery issues.

The Sportfish Research Institute (SRI) was created in 2002 at the Florida Institute of Technology to focus the enthusiasm of recreational anglers toward fishery research. By drawing together faculty in fish biology, marine biology, oceanography, ocean engineering and other disciplines, along with a large "herd" of graduate students and undergraduate research assistants, the SRI is developing a multidisciplinary approach to three programmatic goals: conducting fishery research, training the next generation of fishery scientists, and conducting extensive public outreach efforts for recreational anglers and school groups.

The Tarpon Project is one example of our multifaceted approach where research is greatly enhanced by participation of recreational anglers. Our previous research on the Silver King examined larval recruitment and utilization of mangrove marshes as nursery habitats (Shenker et al. 2002) and the biomechanics of feeding (Guigand and Turingan 2002). Based on our work in the Indian River Lagoon and similar surveys throughout the Gulf States, Florida appears to have the only significant nursery habitats for tarpon in the U.S. Successful preservation and management of these marshes is clearly a major objective in any long-term fishery management strategy for tarpon.

To date, we have pretty well mapped out nursery marshes in the Indian River Lagoon (IRL) region. Anglers, fishing guides and personnel from the Florida Marine Research Institute are helping us identify similar nursery habitats in south and southwest Florida (and we'd greatly appreciate any help from AFS members who can point us to estuarine or coastal marshes that support juvenile [<15 cm] tarpon). These volunteers are also helping us collect DNA samples (from the tip of the dorsal fin filaments of adult and juvenile tarpon) for a study of population genetics. A group of military personnel and their families from the Guantanamo Naval Base in Cuba are also volunteering their time to go tarpon fishing and collect DNA samples for the SRI. Rocky Ward and Ivonne Blandon at the

Texas Parks and Wildlife Department will perform the mtDNA sequencing and microsatellite analyses, and will incorporate the Florida and Cuba data into their Gulf and Caribbean tarpon DNA data base.

In association with Kathy Tisdale and FMRI, and tarpon fishing tournaments, we've begun

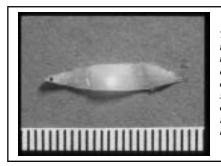
Graduate student Matt Scripter is working on a juvenile tarpon taken from an Indian River Lagoon mangrove marsh. Matt is testing the hypothesis that fatty acids from different prey species are incorporated into tarpon muscle tissue, and hopes to ultimately develop a technique to assess the recent feeding history of a fish by using a non-lethal needle biopsy of muscle tissue and subsequently characterizing the fatty acid composition of the biopsy tissue.



collecting otoliths from adult tarpon. The microchemistry signatures of the otolith cores will be compared with the otoliths from juvenile tarpon collected around Florida and the Caribbean in an attempt to discern the types of nursery habitats that gave rise to Florida's adults. We are particularly excited about our upcoming trip to the Guantanamo Naval Base to meet with our volunteer DNA

collectors, and to collect otoliths from juveniles living in the marshes around "Gitmo." Our biggest worry is that we will apparently need a military escort on our sampling trips into the marshes to keep us from wandering into mine fields.

The First Annual Indian River Lagoon Tarpon "Fishing for Science" Tournament, scheduled for July 2004, will utilize the efforts of a large group of anglers to provide a synoptic assessment of tarpon throughout the IRL and coastal waters. Fin clips (for DNA extraction) will be taken from all fish to permit a very detailed evaluation of the genetic structure of all age classes of tarpon in the Indian River Lagoon, and comparisons with populations in other regions. FMRI will assess mortality rates associated with capture and release of adult tarpon, and a network of hydrophone data loggers will be used to track sonically-tagged tarpon as they move throughout the central



The leptocephalus larvae of tarpon move through inlets towards nursery habitats in mangrove marshes – storm-driven currents, even those caused by hurricanes, may help drive their entry into estuaries. Doctoral student Scott Taylor is studying the ontogeny of the visual systems in tarpon and their relatives. Perhaps he'll use his research to help invent the perfect tarpon lure.

portion of the Lagoon. In addition to the sonic tracking, we hope to have Bonefish and Tarpon Unlimited use the tournament as a chance to deploy several of their Popup Archival Tags on large tarpon to determine their long-distance movements over a 3-6 month period.

Local fishing clubs, guides, news media and a wide variety of sponsors are

extremely interested in participating in this tournament. Donated prizes (art work and other items, not large cash prizes) will be awarded for capture and release of juvenile and adult tarpon. If you're a tarpon angler, or would like to be one, join us for what promises to be an interesting event! Details and entry forms will be uploaded onto our web site in mid-winter (http://www.fit.edu/biology/sportfish) or contact me directly for more information. Another area of research at the SRI is a series of 7 large artificial reefs in 70' of water 10-15 miles east of Sebastian Inlet. These reefs were designed and deployed in 1999-2000 by Florida Tech and the Sebastian Inlet Sportfishing Association (SISA), with support from the Florida Artificial Reef Program and Indian River County. Each reef is constructed of 1500 concrete railway ties, dropped into piles 100 feet long by 80 feet wide by 10-15 feet high. Situated on a 5-mile wide swath of bare sand substrate, and looking like huge piles of "pick-up-sticks," the reefs quickly developed tremendously abundant and diverse populations of fishes.

One of our experimental objectives was to test the "production vs. attraction" hypothesis about the role of artificial reefs. We publicized the coordinates of two reefs and moored buoys over them so anglers could target those habitats. Two other reefs were to remain hidden throughout the 3-year assessment of fish abundance and diversity. SISA members generously provided vessel support for diving and survey operations, and they happily fished on the marked reefs.

Papers on the results of this effort are currently being produced, but here are some of the bottom lines: These reefs supported such abundant and diverse (70+ species) assemblages of fishes that even the "hidden" reefs were quickly detected – schools of baitfish were often so thick that they completely filled the water column above the reefs and attracted anglers seeking bait. Diving on the reefs through the complete darkness created by 50' thick schools of clupeids, with thousands of them bouncing off you every minute, is a very strange experience. Despite the locations of all reefs being known to anglers, the sites were used primarily for catching baitfish for use elsewhere. The reef structures are so complex that it proved difficult for hook-and-line fishermen to successfully get gag grouper and big snapper fish out of the reef matrix. The most intriguing inhabitants on the reefs turned out to be Goliath groupers, with up to 15 huge fish being seen on a single reef. The abundance of the Goliaths increased each year, with some of the same fish being found on the same reef for up to 3 years (fish could be identified by diagnostic pigmentation patterns). Images and video clips of the fishes on the reefs are available on the SRI web site listed above and on http://www.fishsisa.com.

It's that time again!

This year's annual meeting of the Florida Chapter
American Fisheries Society will be held February 23-25,
2004 at the Withlacoochee Training Center. Join us for the
symposium (announcement below) as well as contributed papers and
posters, the famous FL AFS Raffle, bonfire social, business meeting,
and the adventures that ensue!



Our meeting starts at 1 PM on Monday and ends at lunch Wednesday because of the Southern Division meeting February 26-29 in Oklahoma City.

If you are still interested in participating in the symposium, we have room but please act quickly! Call or email Mike Allen at 352-392-9617 ext. 252/msal@ufl.edu. The preliminary list of symposium speakers include Janaka DeSilva, Beacham Furse, Jay Holder, Behzad Mahmoudi, Mike Murphy, and Jim Estes.

The deadline for contributed paper abstracts has been extended to <u>January 26, 2004</u>, so you still have time to submit one!! Please keep all abstracts to less than 200 words (refer to the Florida Chapter's website for other details about abstract and presentation formats). Student travel grant forms are also available online (deadline: February 1, 2004).

Improving Recreational Fisheries with Bag Limits and Size Limits: Effective Fisheries Management in Florida?

Marine and freshwater fisheries management strategies have changed greatly over the last 15-20 years. Prior to the late 1980's, simple harvest restrictions were used to manage most of Florida's recreational fisheries (e.g., statewide size limits and liberal bag limits). In response to increased fishing effort, diverse harvest restrictions have been implemented including species-specific bag limits, size limits, and fishing seasons. The Florida Chapter of the American Fisheries Society will be hosting a symposium to assess the effectiveness of the state's harvest restrictions. Topics will include:

- How do stock assessment methods differ between marine and freshwater fisheries managers? What can we learn from each other?
- Have fish population parameters such as abundance, growth, mortality, recruitment, and population size structure changed in response to changes in harvest restrictions?
- Have harvest restrictions reduced the extent of overfishing in Florida?
- What factors influence the success/failure of a harvest restriction?
- From the recreational angler perspective, how should regulations be used in marine and freshwater systems?

This will be a half-day session with invited speakers from marine, freshwater, and the recreational angler groups. Presenters will describe examples of how changes in harvest restrictions influenced, or failed to influence, Florida's fish populations and fisheries.

Florida Chapter of The American Fisheries Society – Brooksville FL Annual Meeting Registration: February 23 to 25, 2004

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601 W. Woodward Ave. Eustis, FL 32726	Fax:	(850) 742-6461 Email: john.benton@fwc.state.fl.us	
John Benton c/o FWC Eustis Lab		Phone: (352) 742-6438	
lease Make Checks Payable to Florida Chapter, AFS	and mail to		
Nessa Maka Chasha Dawahla ta Flanida Chantan AFC	and mail 4a.		
advance. Please respond promptly if you need so			
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FL Chapter dues (calendar year 2004)		(\$10.00)	
Full Meals and Lodging:		(\$90.00)	
Wednesday: 25 February, 2004	Breakfa Lunch		
	Lunch Dinner	(\$10.00)	
Tuesday: 24 February, 2004		st (\$5.00)	
	Lodging	(\$21.00)	
Partial Meals and Lodging Monday: 23 February, 2004	Lunch Dinner	(\$6.00) ₋ (\$10.00)	
Full Registration:		(\$25.00)	
Please select one of the following Registration Fees: One-day Registration:	(\$17.00)		
This address will be used in our mailing list and should be	be the one wh	ere you wan	t to receive newsletters and other mater
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Other SRI research projects include studies on the biomechanics of larval fish feeding and the implications for aquaculture and restocking programs, the reproductive biology of tripletail and yellowtail snapper, and recruitment of ladyfish. While the general public may not participate in all of these studies, many people

thoroughly are intrigued by the work. As part of our outreach efforts, we frequently give talks to public and school groups, a n d invariably find the audience be fascinated by the information. This



One of the many Goliath grouper living on the artificial reefs.

stimulates a

wonderful synergy – the SRI has an active group of supporters and research assistants; anglers of all ages learn about their favorite fishes and enjoy participating in the projects; and fish populations will ultimately benefit from the increased research and attention. In the long run, it's a win-win-win situation for all of us.

Literature Cited

Guigand, C. and R. Turingan. 2002. Feeding Behavior of Tarpon (*Megalops atlanticus*). *Contrib. Mar. Sci.*

Shenker, J.M, R. Crabtree, E. Cowie, H. Patterson, C. Stevens, K. Yakubik. 2002. Recruitment of tarpon (*Megalops atlanticus*) leptocephali into the Indian River Lagoon, Florida. *Contrib. Mar. Sci.* 35:55-69



If you would like to contact Dr. Jon Shenker, he can be reached via email at shenker@FIT.EDU.



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:

Candidates for Upcoming Election for Florida Chapter President-Elect!!!



This year's candidates for President-Elect are: **Dr.** Richard McBride and Dr. Stephen A. Bortone. Each candidate's biography is included in this issue of the newsletter, so please read each and be prepared to vote at the Business Meeting to be held during the Florida Chapter's Annual Meeting in February.

Richard McBride, Ph.D. I have been an AFS member since 1986 (now a life member) and a Florida Chapter member since 1995. During the last several years, I have been active in a number of Chapter activities, most recently to help with fund-raising and stewardship of the Rottmann Memorial Scholarship. I have also served on AFS national and section committees; for example, I am nearing the end of my term as the Secretary of the AFS Early Life History Section.

What I like about the Florida Chapter is that it connects fisheries scientists from government, academic, industry, and other groups, and thereby facilitates interactions and a sharing of perspectives on regional issues. I learn a great deal and I have made valuable networking contacts at our annual meetings. I also think the Chapter does an impressive job in fostering the career development of its members, particularly students. My goal as president will be to maintain that kind of environment for all members.

If elected, I will serve to lead the next annual meeting, to represent the Chapter as appropriate, and to meet the needs of the Chapter's membership. A consistent duty of all Chapter president-elects is to plan a symposium for the next annual meeting. I would like to plan a symposium that highlights diadromous fishes in Florida, in terms of the biological, ecological, and management issues. This topic should be of interest to both freshwater and marine-oriented scientists; there are a number of interesting fisheries and ecosystem issues related to diadromous fishes as well. I will also work to generate interesting contributed paper and poster sessions, and engage in social activities.

Stephen A. Bortone, Ph.D. I am the Director of the Marine Laboratory at the Sanibel-Captive Conservation Foundation. Formerly, I served as Director of Environmental Science at the Conservancy of Southwest Florida. I hold administrative appointment to the Graduate Faculty at the University of South Alabama, courtesy

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The Rottmann Memorial Scholarship Fund (Rottmann Fund) was established by the Florida Chapter of the American Fisheries Society in 1996. This fund quickly became a centerpiece to demonstrate the Chapter's commitment towards supporting career development of its students. The Rottmann Fund awards two scholarships each year (1 M.S. level, 1 Ph. D. level) if qualified students apply. In 2001, these awards were \$250 a piece, but this amount has been increasing each year and will level out at \$500 by 2005. During the last two years we have had a successful fundraising campaign, and at the time this article was written, the Fund now has \$7,829.70 in its account!

There will be a very important motion for the membership to vote on at the 2004 business meeting. I am proposing that we, as a Chapter, transfer \$15,000 from the Chapter's General Fund to the Rottmann Fund. If this motion passes, the Chapter's General Fund

will still have sufficient funds to hold the annual meeting, but extraneous charitable or business activities may be limited for the near future. This motion will be presented formally at the business meeting, along with a review of the financial statements of the General Fund and the Rottmann Fund.

Discussion among the EXCOM members regarding such a motion has centered on whether to transfer this amount as a gift, as a loan, or as a combination gift/loan. A gift-like transfer certainly demonstrates the Chapter's commitment to the Rottmann Fund, but some people may be concerned that this is too limiting for future Chapter activities. In the interest of demonstrating the commitment that I believe all Chapter members have to the Rottmann fund, while maintaining some fiscal flexibility in the short term, the motion will be presented in the following form. The Florida Chapter will transfer outright \$5,000 from the General Fund to the Rottmann Fund in 2004. At the same time, another \$10,000 will be transferred from the General Fund to the Rottmann Fund, and this latter amount can be called back at anytime (once) in the next 10 years under the following conditions. A supermajority (66% of a quorum) approves this for a special purpose and a specific plan is set for returning the same amount to the Rottmann Fund before the 10-year period ends (2015). After 2015, the total of \$15,000 transferred in 2004 becomes a permanent gift from the Chapter's General Fund to the Rottmann Fund.

If this motion passes, the Rottmann Fund will have a sufficient endowment to support two \$500 scholarships annually, in perpetuity (assuming a conservative 5% return on the principal). The most compelling reason to vote in support of this proposal is to complete the fiduciary responsibility that the Chapter accepted when they voted to establish the Rottmann Fund. The Rottmann Fund has provided – and can continue to provide – students access to much needed funds, the opportunity to build valuable grant-writing skills, and the prestige that comes with a competitive award.

Note that while this proposal will firmly establish a self-sustaining Rottmann Fund, there is still room for more fund-raising drives to increase the principal in the future. For example, it may be expected that the amount of each award will need to be increased over time to maintain its value, at least in terms of inflation. Also, there has been interest in adding an undergraduate category, which seems to be a worthy goal to set for the Chapter in the long-term.

We are ending our 'charter' fund-raising drive for the Rottmann Fund, which has been successful in substantially increasing the Rottmann Fund principal over the last two years. Remember your donations will still be matched by the Chapter if received by the end of the 2004 business meeting. Also, if you donate before the end of the 2004 business meeting then you are considered a 'charter' donor to the Rottmann Fund and your name will be listed prominently in the next newsletter and on the web (unless you give anonymously). There are three levels of donations that will be recognized: bronze (<\$100), silver (\$100-499), and gold (≥\$500). If you are interested in donating, or know someone who is, please contact Larry Connor (larry.connor@fwc.state.fl.us). If you have other, general questions about the Rottmann Fund, please contact someone on the Rottmann Fund Committee (Chuck Cichra, Larry Connor, Rich McBride, and Kathy Tisdel).

ANNOUNCEMENTS



New AFS Student Subunit

The Graduate Student Fisheries Association at UF voted unanimously to become a sub-unit of the Florida AFS Chapter and are now completing the paperwork which will hopefully be an action item at this years' FL Chapter meeting.

► 4th Annual Student Colloquium

The Graduate Student Fisheries Association at UF also received word that they were selected as the host of next years' Southern Division AFS Student Colloquium. They checked on availability and it looks like they will be able to hold the Colloquium in Brooksville in November!! (As a reminder, the Student Colloquium is a student-run meeting with participants from around the Southern Division. It includes technical sessions where students are able to present anything from proposal ideas to completed work.)

► Information Circular 107: A Beginner's Guide to Water Management - Fish Kills

In an effort to alleviate concerns voiced by the general public and their water monitoring volunteers, the Florida LAKEWATCH (FLW) program has recently published a 16-page booklet that discusses five of the most common natural causes of fish kills in Florida: low dissolved oxygen, spawning fatalities, mortality due to cold temperatures, diseases, parasites and toxic algae blooms. Human-induced events are also covered along with a section on fish stress—a component of virtually every fish-kill situation. The last section of the circular provides steps one can take to help biologists determine the cause of fish mortality. This includes a listing of fish health diagnostic laboratories for those who want to take a more active role and are willing to collect fish and/or water samples for analysis.

Copies can be obtained by calling or e-mailing the FLW office, or by downloading a free copy (a PDF file) off the website:

http://lakewatch.ifas.ufl.edu/LWcirc.html

Phone: 1-800-LAKEWATCH (1-800-525-3928)

E-mail: lakewat@ufl.edu

► New AFS Book Releases:

The Ecology and Management of Wood in World Rivers by Stan V. Gregory, Kathryn L. Boyer and Angela M. Gurnell (editors)

Proceedings of the Third World Fisheries Congress: Feeding the World with Fish in the Next Millenium: The Balance between Production and Environment by Bruce Phillips, Bern Megrey and Yingqi Zhou (editors)

Investigation and Monetary Values of Fish and Freshwater Mussel Kills by Robert I. Southwick and Andrew J. Loftus (editors)



President-Elect Candidates..Cont'd

faculty appointment at the Florida Gulf Coast University and research professor at the Florida Atlantic University and its Florida Center for Environmental Studies. Previously I was professor at the University of West Florida where I also served as Director for the Institute for Coastal and Estuarine Research. I received a B.S. degree from Albright College in Reading, PA; a M.S. degree from Florida State University, Tallahassee; and a Ph.D. from the University of North Carolina, Chapel Hill.

For the past 35 years, I have conducted research on the life history of estuarine organisms, especially fishes and seagrasses, chiefly in the southeastern U.S. and the Gulf of Mexico. I have published over 130 scientific articles on the broadest aspects of Biology, including such diverse fields as Anatomy, Behavior, Biogeography, Ecology, Endocrinology, Evolution, Histology, Oceanography, Physiology, Reproductive Biology, Sociobiology, Systematics and Taxonomy.

I am widely traveled in conducting my research and teaching activities. I have served as Visiting Scientist at The Johannes Gutenberg University (Mainz, Germany) and conducted extensive field surveys with colleagues from La Laguna University in the Canary Islands. I was Mary Ball Washington Scholar at University College Dublin, Ireland. I have received several other reaching and research awards, including the title "Fellow" from the American Institute of Fishery Research Biologists.

I have served as scientific editor and reviewer for numerous organizations, such as the National Science Foundation, the Environmental Protection Agency, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service, and several journals, including the *Bulletin of Marine Science*, *Copeia*, *Estuaries*, and *Transactions of the American Fisheries Society*.