



AFS Estuaries Section Newsletter

Summer 2001

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President's Message

Earlier this year I mailed out a letter to most members of the Estuaries Section to introduce myself, outline my goals for the Estuaries Section, and ask for your help. Looking back on that letter, I am happy to see that most of my modest goals have been accomplished due to the enthusiastic support of talented and dedicated section members.

The Estuaries Section is poised to resume regular officer elections beginning with the upcoming 2001-2002 term (see the enclosed ballot), and I hope the eventual establishment of

a Nominations Committee will produce many more excellent candidates for future elections. I hope you all vote to confirm or elect the nominees listed on the ballot for 2001-2002 officers, or write in your preferred choice.

The Estuaries Section could still use a dedicated newsletter editor and a website developer to ensure excellent and frequent communication of section news and activities. I was happy to receive email addresses from several members since mailing my letter of appeal earlier this year.

Thanks to the leadership of Stephen Jordan, it looks like the Estuaries Section will be able to make a big splash at the AFS 2002 Annual Meeting in Baltimore with a major symposium. A prospectus for the symposium is included in this issue. I also have been heartened to see the development of some possible collaborations between the Estuaries Section and organizations like the Estuarine Research Federation, the Atlantic Estuarine Research Society, and the New England Estuarine Research Society. Additional collaborative relationships will certainly enhance the effectiveness of our section.

I appreciate your patience during this rebuilding season. I am confident that the best is yet to come for the Estuaries Section!

—Lee Benaka

Secretary's Report

The Estuaries Section consists of 120 individuals from 25 different U.S. states, along with Puerto Rico and Canada. Of the 61 members for whom I have information about professional affiliation, 23 members work for nongovernmental organizations or consulting groups, 16 members work at universities, 14 members work for the federal government, 6 work for state government, and 2 work with Native American/tribal groups. I only have email addresses for 42 members, but perhaps the

section's Secretary can use the online AFS membership directory to root out the missing email addresses. Obviously, we need to increase our membership to attain 200 members, the number required for a vote on the AFS Governing Board. Also, it seems that the Executive Committee should in the future try to obtain work affiliations for all section members so that the Estuaries Section can do a better job of meeting member needs. Of course, your communications and suggestions to the Chapter President would be even more helpful.

–Lee Benaka

Treasurer's Report

Business Checking Account (Suntrust Bank):

<i>Beginning Balance (4/9/01)</i>	\$1,585.00
President's letter mailing	- 43.92
<i>Ending Balance (6/30/01)</i>	\$1,541.08

In addition, I expect that an expenditure of around \$50.00 will be incurred for the mailing of this newsletter, as well as \$25.00 for co-sponsoring the July 26 ANS Forum (see below).

–Lee Benaka

August 19 Section Meeting in Phoenix

The Estuaries Section will meet during the AFS 2001 Annual Meeting in Phoenix, AZ, on August 19. The meeting will take place in the Gila Room of the Crowne Plaza from 5:00pm to 6:30pm. Although Phoenix is a long way from an estuary, it too is in area of gradients and transitions. Here the transitions and gradients are altitude and precipitation rather than salinity and temperature. So don't be "stuck in the mud"—come to Phoenix for the Estuaries Section meeting. This will be an opportunity to get together, make and renew acquaintances and conduct some important business. You can provide much-needed input to our symposium proposed for 2002 and to the resurrection of the Estuaries Section. You need to let us, your Executive Committee, know what is on your

mind, what is important to you, and, basically, how the section can better meet your needs. Come to the section meeting so we can meet you and your needs!

–Linda Bireley

July 26 ANS Forum in Washington, DC

The AFS Potomac Chapter, the AFS, the Northeast Midwest Institute, and the AFS Estuaries Section will sponsor the second of our series of fora highlighting issues of importance to federal agencies that manage fisheries. This forum, which will take place July 26 in Room 2105 of the Rayburn House Office Building from 8:30am to 12 noon. is entitled "Aquatic Nuisance Species (ANS) and Fisheries." We are honored that AFS President **Carl Burger** will be able to attend and make the opening remarks. In addition, AFS Executive Director **Gus Rassam** will close the session with his remarks.

Presenters include **Allegra Cangelosi** of the Northeast Midwest Institute, **Cathleen Short** of the U.S. Fish & Wildlife Service, **Greg Ruiz** of the Smithsonian Environmental Research Center, **Pam Fuller** of the U.S. Geological Survey, **Ken Turgeon** of the U.S. Minerals Management Service, **Ann Barse** of Salisbury University, **Roger Mann** and **Juliana Harding** of the Virginia Institute of Marine Science, and **Richard Everett** of the U.S. Coast Guard.

Presentation topics include the reauthorization of the National Invasive Species Act, coordination of the federal response to aquatic nuisance species, an overview of fish introductions in the U.S., offshore oil and gas platforms and ANS, an introduced nematode parasite of American eels, the invasion of the Chesapeake Bay by a predatory marine snail, and the U.S. Coast Guard program to prevent ship-mediated introductions of nonindigenous species.

As you can tell, this forum should be a fascinating combination of cutting-edge ANS policy and science. I hope as many of you as possible can make it! The next issue of this newsletter will report on this event.

–Lee Benaka

Profile—The Paul S. Sarbanes Cooperative Oxford Laboratory

<http://www.dnr.state.md.us/fisheries/oxford>

That's a big name for a small laboratory! The Oxford Shellfish Laboratory was established in 1960 by the U.S. Bureau of Commercial Fisheries to investigate oyster diseases that struck Chesapeake and Delaware Bays in the late 1950s. It became the Cooperative Oxford Laboratory in 1987 through an agreement between the Maryland Department of Natural Resources and the National Oceanic and Atmospheric Administration to share the facility and to cooperate in research. In 1998, the newly renovated and expanded facility was dedicated to Senator Paul S. Sarbanes, a friend and mentor to the lab throughout his service in the U.S. Senate.

On the Chesapeake Bay's Eastern Shore in Oxford, Maryland, the Laboratory has over 17,000 square feet of lab and office space. Necropsy, histology, immunology, and experimental labs are available for work on fish, shellfish, and wildlife. The R/V Laidly, a 55' research vessel equipped with modern navigation and computer mapping gear, serves in-house research and may be chartered by scientific and educational groups.

Scientists at the Oxford Laboratory investigate health problems of fish, shellfish, and wildlife in Maryland, the Chesapeake Bay region, and along the Atlantic Coast. They collaborate with scientists nationally and internationally to improve understanding of aquatic animal health and develop management strategies to prevent and mitigate diseases. The Laboratory participates in the National Marine Mammal and Sea Turtle Stranding Network, sharing information, samples, and expertise with other institutions and coastal states. Innovative techniques for classifying and mapping critical reef habitats in Chesapeake Bay, developed at the Laboratory, are being applied in Maryland's oyster restoration efforts.

Some current research priorities at SCOL include the following:

- Investigations of ulcerative diseases in Atlantic menhaden and striped bass, in collaboration with the University of Maryland Horn Point Laboratory (HPL).
 - Tagging of sea turtles in Chesapeake Bay to learn more about their distribution, migrations, and mortality rates (with the National Marine Fisheries Service).
 - Field experiments with specific pathogen free oysters to determine rates and environmental correlates of disease acquisition, in collaboration with the Academy of Natural Sciences.
 - Simulation modeling of diseased oyster populations, in collaboration with Old Dominion University, Rutgers University and the Virginia Institute of Marine Science.
- Scientists at Oxford also are investigating disease problems in blue crabs and other crustaceans, commercially important clam species, and pond turtles. Baseline health studies on black bear and white-tailed deer are being conducted in cooperation with Maryland's Wildlife Division. We also are cooperating with other agencies in surveillance and monitoring related to harmful algal blooms (for example, *Pfiesteria piscicida*) and West Nile virus.
- The Oxford Lab is represented by its Director in the Southern Association of Marine Laboratories, the National Association of Marine Laboratories (<http://www.NAML.org>), and the Chesapeake Bay Technical Center of Excellence. Please stop by if you're in the neighborhood—visit our Laboratory and the scenic, historic fishing village of Oxford.
- Dr. Stephen J. Jordan, Director, SCOL

AFS 2002 Estuaries Section Symposium Prospectus

Dr. Stephen J. Jordan, Director of the Paul S. Sarbanes Cooperative Oxford Laboratory, has graciously offered to organize a major symposium on behalf of the Estuaries Section for the 2002 AFS Annual Meeting in Baltimore. Dr. Jordan has submitted the following prospectus for the planned symposium, entitled "Bays, Sounds, Gulfs, Lagoons: Estuarine Fisheries in the 21st Century," to the AFS 2002 Program Committee:

Estuarine-dependent species of fish and

shellfish account for at least 50% of recreational and commercial fisheries landings in North America—90% or more in some coastal regions. Some of the most valuable estuarine fisheries are being challenged by increasing fishing effort, decreasing catches, habitat degradation, and epizootic diseases, among other negative impacts.

The symposium has two goals: (1) to increase participation and visibility of estuarine fisheries scientists and the Estuaries Section at AFS meetings; and (2) to advance a more comprehensive understanding of current and future challenges and opportunities in estuarine fisheries. We will emphasize new and developing approaches to management, population biology and stock assessment. Papers will be organized into broad thematic sessions (e.g., multi-species management and assessment, fisheries in coastal lagoons, the role of fisheries in estuarine ecosystems), each with a core of invited speakers. One or two prominent keynote speakers will be invited to set the theme of the symposium. All abstracts, along with selected full papers, will be published in a peer-reviewed journal or special volume with an introductory chapter synthesizing the proceedings.

We anticipate a 2-day symposium, with 5-10 invited papers and about 25 contributed papers. Time will be allotted for a moderated discussion of emerging issues and strategic approaches to assessment and management in estuarine fisheries.

Sponsors: American Fisheries Society Estuaries Section, others to be determined

Organizer and editor of proceedings: Steve Jordan, Maryland Department of Natural Resources (sjordan@dnr.state.md.us)

The Executive Committee of the Estuaries Section will continue to update section members on developments related to this exciting symposium.

—Lee Benaka

Fish with Lesions in an Estuary on the East Coast of Florida

In November 1996, the Southeast Fisheries Science Center of NOAA Fisheries (National Marine Fisheries Service) initiated fish sampling in the St. Lucie (Florida) estuarine system to document the type and prevalence of externally visible abnormalities and determine spatial and temporal variation. Sampling is done with hook

and line, and over 50 species have been caught, including many popular sport fish species.

Abnormalities include fin erosion, skin ulcers, and other types of lesions, as well as skeletal and fin anomalies (i.e., stunted, missing, or misshapen fin rays or missing fins). Initiation of the sampling effort was followed by expression of local concerns about the health of the fish (in newspaper reports and contacts with the public and fishers).

The St. Lucie system is considered to be a stressed ecosystem. It has been exposed sporadically since 1924 to artificially high freshwater discharges from Lake Okeechobee through a canal that is part of the regional water management system (The Central and Southern Florida Project). Peak flows as high as 7,000 cubic feet per second have been injected into the South Fork of the St. Lucie estuary to lower lake stages. The estuary also receives storm water discharge from channelized local watersheds in which farms and small towns are located. Sugar cane, citrus, and vegetable crops are the principal agricultural pursuits. The discharges cause rapid and extreme changes in salinity and transport sediments, eutrophy-provoking nutrients, and toxicants into the estuary. Fish-health sampling is providing baseline conditions and perspective for developing fish-based performance measures needed to evaluate recent new efforts (as part of the St. Lucie Issues Team Initiative and the Comprehensive Everglades Restoration Plan) to improve environmental conditions in the estuary. Statistical and histological analyses will be conducted in an effort to relate abnormality prevalence to specific potential causal factors. —Drs. Joan Browder and Joan Bernstein

Habitat Protection Activities at NMFS

The National Marine Fisheries Service's habitat programs emphasize protection as the most cost-effective tool to conserve the productivity of our nation's marine, coastal, and riverine waterways. Current priorities include: efforts to identify and protect "essential fish habitats" of more than 700 marine and anadromous species caught commercially or recreationally; collaborative efforts with other agencies and the hydropower industry to streamline hydroelectric dam licensing procedures and reduce adverse effects on migrating fish; inter-agency policy efforts to improve decision-making processes to

protect wetlands; cooperative work with all sectors to implement President Clinton's May 2000 Executive Order on "marine protected areas;" and heightened work on dredging and related marine transportation issues that affect our nations ports, harbors, and estuaries.

Through these efforts, the agency's habitat protection programs seek to minimize the effects of human actions on finfish and shellfish habitats. The work is conducted by more than 100 NMFS scientists and resource management specialists located at more than 20 laboratories and field stations around the country and at the agency's headquarters in Silver Spring, Maryland, all working in partnership with state colleagues, academia, and the many associations representing various stakeholder interests.

Key projects now underway include: developing web-based GIS applications to display essential fish habitat for each life stage of each species covered by a federal fishery management plan (due to be released by early fall 2001); an interagency policy on fish passage at hydropower facilities (due to be published in late 2001, in partnership with U.S. Fish and Wildlife Service); continued guidance on marine protected areas (updates at www.mpa.gov); and background "white" papers and agency recommendations on issues such as submerged aquatic vegetation, gravel mining, acid drainage from hard-rock mining, and habitat values from shellfish reefs (due out by early 2002).

For more information, please contact Tom Bigford of the NOAA/National Marine Fisheries Service's Office of Habitat Conservation at 301/713-2325 or thomas.bigford@noaa.gov.
-Tom Bigford

2001-2002 Officer Elections

This year's officer elections are unusual because they follow a couple of years wherein no elections occurred. The problems that led to a lack of elections will hopefully be solved through the imminent creation of a Nominations Committee. If you would like serve on the Nominations Committee for the Estuaries Section, please email Nominations Committee Interim Chair Bonnie Ponwith at Bonnie.Ponwith@noaa.gov

Several months ago long-time member **Linda Bireley** agreed to serve as President-

Elect for President Lee Benaka after a letter was sent out soliciting interest in serving in the section. This would seem to make Linda the President for 2001-2002, but the Nominations Committee would still like to invite votes of confirmation for Linda. Currently, **Stephen Jordan** is running unopposed for President-Elect, **Kurt Kline** is running unopposed for Secretary, and **Lee Benaka** is running unopposed for the position of Treasurer. Write-in candidates for the preceding positions are also acceptable. Please email your selections by Wednesday, August 8, to Bonnie.Ponwith@noaa.gov or fax the enclosed ballot to Bonnie Ponwith at 301/713-1875. Biographical sketches of the candidates follow:

Dr. Linda Bireley was, until her June 2001 retirement, a Senior Scientist with Northeast Utilities, the largest electric utility in New England. Dr. Bireley's career encompassed collecting, enumerating and identifying planktonic organisms in cooling water drawn from Long Island Sound through a steam electric generating station; developing methods to assess all the impacts of power generation on ecosystems, including fisheries resources; and managing processes associated with utility company environmental compliance and developing and implementing a corporate-wide environmental management system.

Dr. Bireley joined the AFS in 1980 and has served the Society in many roles, including President of the Southern New England Chapter (1993-1994) and President of the Northeastern Division (1998-1999). In addition, she initiated the effort to bring the 1998 annual AFS meeting to Hartford and was instrumental in its success. Dr. Bireley is also active in the New England Estuarine Research Society, Estuarine Research Federation and the Ecological Society of America. As a vision statement, Dr. Bireley offered the following:

"I think there is a large constituency of individuals who are outside the circle of professionals that comprise the AFS, but who are interested in issues that relate to fisheries and estuaries. These individuals are from non-profit and non-governmental organizations as well as from industry, consulting firms and other scientific disciplines. AFS has not always recruited or embraced these groups as well as we might for our mutual benefit. The Estuaries

Section has an opportunity to "grow" our base of members by recruiting and mentoring students, and perhaps expanding our focus to include adult and high school educators. We must nurture the public's interest in, and understanding of, science and aquatic resources. In particular, the Estuaries Section can enhance the distribution of information to and education of various non-traditional constituencies especially through the proposed 2002 Symposium planned for the annual AFS meeting in Baltimore."

Dr. Stephen J. Jordan has been Director of the Sarbanes Cooperative Oxford Laboratory, Maryland Department of Natural Resources (MDNR), since 1992. Prior to that, Dr. Jordan served as Chief of MDNR's Habitat Impacts Program. In addition to his memberships with the National Shellfisheries Association, the Estuarine Research Federation,, and the Atlantic Estuarine Research Society, Dr. Jordan serves on the Executive Boards of the Southern Association of Marine Laboratories and the National Association of Marine Laboratories.

As a vision statement, Dr. Jordan offered the following: "The Estuaries Section of AFS has the potential to be the principal national forum for promoting and communicating the science and management of estuarine fisheries. The role of fisheries in estuarine and coastal ecosystems is an emerging issue with biological, social, and physical dimensions. Through symposia, annual or biennial meetings, newsletters, a comprehensive web site, outreach to fisheries professionals, and partnerships with organizations such as the Estuarine Research Federation and the National Shellfisheries Association, the Section should become a focal point and provide new leadership for estuarine fisheries issues."

Dr. Kurt Kline has over twenty-eight years of professional consulting and teaching experience and has been involved in a wide variety of environmental projects. His primary interests have been in the area of aquatic ecology in both marine and freshwater environments; with specific experience in water quality analysis, hydrology, fisheries biology including population dynamics analysis, and wetland ecology. He has managed and participated in the preparation of hundreds of environmental documents including

Initial Studies, Environmental Assessments, Environmental Impact Reports and Environmental Impact Statements. His experience also includes extensive interaction with state and federal regulatory agencies, preparing cost-effective mitigation measures to reduce environmental impacts and monitoring those mitigation programs. Currently, Dr. Kline is Project Manager for the environmental assessment of the expansion of the Coleman National Fish Hatchery on Battle Creek (Northern California). He also serves as President of the Pacific Fisheries Biologists.

Lee Benaka has worked as a Program Analyst in the National Marine Fisheries Service's Office of Sustainable Fisheries since 1999. He also was the first-ever Sea Grant Fellow with the AFS in 1997 and 1998. Benaka's AFS experience also includes serving as President of the Potomac Chapter (2000-2001) and President of the Estuaries Section (2000-2001).

2001-2002 ESTUARIES SECTION OFFICER ELECTION BALLOT

If you do not vote via email to Bonnie.Ponwith@noaa.gov,
please fax this ballot to Bonnie at 301/713-1875 or mail it to Bonnie
by Wednesday, August 8, at the following address:

Bonnie Ponwith
NOAA, NMFS, F/ST2
1315 East-West Highway, Room 12639
Silver Spring, MD 20910-3282

President *Linda Bireley* *Other* _____

President-Elect *Stephen Jordan* *Other* _____

Secretary *Kurt Kline* *Other* _____

Treasurer *Lee Benaka* *Other* _____

Voter's name

Date

Thank you for voting!!!