American Institute of Fishery Research Biologists

...BRIEFS...

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MORE HONOR FOR PRESIDENT HUBBS

Dr. Clark Hubbs, Emeritus Regents Professor of Zoology University of Texas-Austin was named 1998 Texas Distinguished Scientist by the Texas Academy of Sciences.

Dr. Hubbs was born on March 15, 1921 in Ann Arbor, Michigan. Dr. Hubbs received his A.B. degree from the University of Michigan in 1942 and his Ph.D. from Stanford University in 1951. Three and one-half years of service in the U.S. Army Infantry during World War II provided a short distraction from academia. Dr. Hubbs began his academic career in Texas in 1949, as an Instructor in the Department of Zoology at the University of Texas-Austin. He became a full Professor in that department in 1963, and served as Chair from 1978-86. He was also Chair of the Division of Biological Sciences from 1974-76. He was awarded Regents Professor in 1988, and Regents Professor Emeritus in 1991. Dr. Hubbs is a member of numerous scientific societies and has held offices in many of them. Of special note is his service to the Texas Academy of Science as President (1972-73), Journal Editor (1957-61), and long-time advocate. His interest and research in fishes has resulted in more than 100 of his own scientific publications and spawned 43 zoology graduate student research projects. Numerous awards attest to Dr. Hubbs' research achievements. These include the Award of Excellence from the American Fisheries Society (1988); the W. Frank Blair Eminent Naturalist Award from the Southwest Association of Naturalists (1990); a Lifetime Achievement Award from the American Society of Ichthyologists and Herpetologists (1992); and Golden Membership in the American Fisheries Society (1997). Dr. Hubbs' excellence in research has not waned as indicated by his winning of the 1997 George M. Sutton Best Paper Award from the Southwestern Association of Naturalists.

NEWS FROM THE DISTRICTS

TEXAS

Election Results

Lance Robinson has been elected new Vice-Director for the Texas District in a close election. He joins District Director Jim Nance in managing the district efforts and representing the members to the parent institute. Lance has been employed by Texas Parks and Wildlife Department's (TPWD) Coastal Fisheries Division since 1991 and has held the position of

Galveston Bay Ecosystem Leader since 1992. Prior to coming to Texas Lance worked for four years as a Senior Research Associate for Auburn University's Department of Fisheries and Allied Aquacultures conducting applied research on marine fisheries issues.

He received his B.S. degree in Zoology (Marine Biology) from Auburn University and M.S. in Biology from Fairleigh Dickinson University and the West Indies Laboratory in the U.S. Virgin Islands. With TPWD, Lance and his staff are responsible for the collection of fisheries data from the Galveston Bay ecosystem, including the Texas territorial sea in the Gulf of Mexico and the compilation of commercial landings statistics for Texas.

Lance has been a member of AIFRB since 1994. He also holds membership in the American Fisheries Society (Parent Society, Texas Chapter, Marine Fisheries Section and Computer Users Section) and the National Shellfisheries Association. He holds a position on the Special Mackerel Scientific and Statistical Committee for the Gulf of Mexico Fishery Management Council.

District Hosts Symposium

The Texas District is again hosting a symposium at the annual meeting of the Texas Academy of Science. The symposium is on "Mercury in Texas Waters and Fish" and discusses the issues surrounding the increase of consumption advisories and closures for mercury in fisheries resources throughout the southeastern U.S. and particularly in Texas. The list of speakers is as follows:

Mercury in Texas Waters and Fish

Moderator: David Sager

Speakers: **David Sager** (Texas Parks and Wildlife Department) - Expanding concerns with mercury in aquatic ecosystems; **Kirk Wiles** (Texas Department of Health) - Mercury and fish consumption advisories in Texas; **Roxie Cantu** and **Randall Moss** (Texas Parks and Wildlife Department) - Mercury concentrations in fish tissues from east Texas reservoirs, 1985-1989; **Stephen Twidwell**(Texas Natural Resource Conservation Commission) - Bioaccumulation of mercury in selected east Texas water bodies; These presentations will be followed by a panel discussion with the presenters.

FLORIDA

The Florida District held its first meeting in over 10 years on January 15 at the University of Miami's Rosenstiel School of Marine and Atmospheric Sciences (RSMAS) located on Key Biscayne. A meeting announcement was e/snail mailed to all District members prior to the holidays. Dr. Gerald Ault,

AIFRB Member and Assistant professor of Fisheries and Marine Biology at RSMAS served as our guest speaker. He provided a very stimulating, multimedia/slide presentation on Fisheries and "habitat" linkages: coastal bays to coral reefs. Jerry described how quantitative fishery-independent data from reef fish visual surveys conducted by SCUBA divers from 1979-1996 and fishery-dependent head boat catches were used to develop estimates of population abundance, assemblage composition, and stock structure in relation to key physical and habitat factors. It was found that 13 of 16 groupers (Epinephilinae), 7 of 13 snappers (Lutijanidae), one wrasse (Labridae), and 2 of 5 grunts (Haemulidae) are below the 30% SPR overfishing minimum. The Florida Keys reef fishery exhibits classic; serial overfishing; in which the largest, most desirable and vulnerable species are depleted by fishing.

Twenty-seven members and non-members were treated to this early afternoon program followed by a short informal business meeting. Several graduate students indicated that they will be applying for membership and were particularly interested in the Research Assistance Awards. Topics discussed included the formation of joint symposia with the Florida AFS Chapter which normally meets annually in Brooksville in central Florida, the lack of interest in dividing the District between North and South Florida, and fishery issues pertinent to the restoration of South Florida's everglades. Our next meeting was proposed for scheduling during the Florida Bay Science Conference which will be held during the second week of May at the Knight Center in downtown Miami.

Other news of interest about our members... Dr. Al Jones (AIFRB Fellow) retired January 2 from federal service following 32 eventful years with NOAA's National Marine Fisheries Service, Southeast Fisheries Center, Miami.

T.W. Schmidt, Florida Director

A HISTORIC NOTE - The Origin of Briefs

I can tell you where we got the name "Briefs" as I was the one who fought to start an AIFRB newsletter, and suggested the name. It went like this:

During my tenure on the board of control I brought up the question of a newsletter at every meeting and it was talked down by a very thrifty Secretary-Treasurer. At my last meeting of the Board I finally was able to get enough votes to carry a motion to have a newsletter on a trial basis. In the discussion, I used the term "Briefs" as a name to give the connotation of low cost and thriftiness.

The then Secretary-Treasurer was the one to compile and distribute the newsletter which he reluctantly did on an irregular schedule. It's name was "Briefs" but I am not sure that was part of the motion, and the newsletter was, in fact, very brief.

I believe he was relieved as editor when Bernie Skud took over as President, and Ollie Cope became editor which resulted in *Briefs* coming out on a regular schedule.

There was no thought of underwear in the whole process, and if it were not for the word "briefs" we might not have had a newsletter as early as we did. But it would be interesting to know what led to the association with underwear.

Stan Smith

EDITOR'S NOTE:

Many thanks to Stan for responding to my facetious query as to why our newsletter was named after underwear.

The American Institute of Fishery Research Biologists:

RESEARCH ASSISTANCE AWARDS \$100-\$350*

*Range of past awards

PURPOSE

To provide travel assistance for graduate students and other associate members to present papers at scientific meetings.

ELIGIBILITY

All AIFRB professional and student associate members in good standing are eligible to receive awards for a maximum of two years.

APPLICATION Submit:

- written request for the award
- letter of support from your research mentor or supervisor
- name of the meeting
- abstract of the paper to be presented
- notification of the paper's acceptance for presentation

To: Thomas R. Lambert
Pacific Gas and Electric Co.
3400 Crow Canyon Road
San Ramon, CA 94583
trl2@pge.com

If you are not a member, please request a membership application from:

John L. Butler P.O. Box 271 La Jolla, CA 92038 jbutler@ucsd.edu

DEADLINE

April 1 preceding the meeting.

NOTE The name of research assistance award recipients and abstracts of their papers will be published in *BRIEFS*.

EDITOR'S NOTE:

Committee chair Lambert reports that only five awards were given in 1997, although more funds were available. A member pointed out that selecting awardees twice annually would more realistically reflect the timetable of acceptance of papers for presentation. Many students presenting papers late in the annual cycle of awards cannot possibly comply with the acceptance requirement under the current schedule. Tom and your District Director would appreciate your comments on this subject.

A Future For AIFRB Within AFS

By Carlos Fetterolf

8200 Pine Cross Ln, Ann Arbor, MI 48103, ph/fax: 313-426-2975 (AC changes to 734 in July)

I recently read the July-August *Briefs* and, as a 25 year AIFRB Fellow and supporter, was sorrowed, as I'm sure others were, by the generally negative reports filed by the District Directors. I'm certain the Directors will consider many alternatives to invigorate the Institute, but perhaps the time has come to reconsider the alternative that AIFRB become the Research Section of the American Fisheries Society.

Briefs contained upbeat, positive reports from the Northern California, Southern California, and Texas Districts; and there were some positive events reported by Florida, Great Lakes, and New England.

Unfortunately, the upbeat reports were outnumbered and offset by several discouraging reports (excerpts below).

Oregon-Southwest Washington, "Following one last attempt (to recruit a District Director) I did receive three nominations -. All - - were retired and 70 years old or older. Each refused my invitation to run - -. --I am struggling to fill the office and to determine what can be done to breathe new life into this District. I am hoping we can achieve some joint membership agreement with the Portland Chapter of AFS - -

However, in the past, AIFRB members did not volunteer to participate in the AFS Annual (Chapter) Meeting."

Northern Alaska, "This period continues a state of dormancy within the ---- District. ---- AIFRB members ---- here are also members of a very active chapter of the AFS. (They) have made the choice of being active in only one organization and being content with little activity in the other. (They) have chosen the AFS Chapter as the forum where they direct most of their energy. Therefore, AIFRB activity is limited to providing displays at local AFS meetings, sponsoring student papers, monitoring fishery research, and generally assisting AFS in meeting preparation."

Southeast Alaska, "Since my appointment I have been trying to obtain volunteers for (several offices). Everyone is 'meeting weary' and no one wants to take the responsibility of driving to another series of meetings. Finding potential speakers or programs for meetings has been difficult. - - - Like the other Districts, I am finding that a large proportion of our membership is retired and inactive." On the upside, Bruce Wing reported that several "past due" members have recently paid back dues.

Keystone, "--- no formal activities this period. (Efforts) to organize district meetings have been unsuccessful. Most of the members are involved in their local chapter of AFS and find that the cost and time involved in traveling to 'one more meeting' is just too much of a burden." On the upside, Barbara Warkentine reported that members are supportive financially.

<u>Capital</u>, "Approximately 35 applications were handed out to students and professionals interested in the benefits of membership. Very few of these individuals knew of the Institute and its purposes and, to date, no applications have been received from prospective District members."

<u>Florida</u>, "Our total membership in Florida is 73 with nearly half delinquent" -- "Since the organization of the AFS Florida Chapter in the '80s, most (AIFRB) members -- seem to focus their in-state activities around AFS Chapter meetings --."

Great Lakes, "---- worked to provide the first active year in this District after an inactive period of about 15 years." ---- "The very active Michigan Chapter of AFS with over 300 members and about a dozen committees bleeds off some of the potential members and time for AIFRB in this area."

<u>Southwest</u>, "AFS has an active chapter on the campus of NMSU, but, again, students seems to have little or no interest in AIFRB, at least not enough interest to join. I am perplexed at the lack of interest young faculty and researchers have in professional societies."

New England, Respondents to efforts by Jack Pearce to revitalize AIFRB "--- almost to a person felt - - there are already plenty of meetings of AFS --, chapters, districts, and (that many other institutions) offer an endless array of courses and conferences on a range of fisheries and general marine science topics. There would appear to be little interest in more of these, especially when there was little likelihood of improving on or surpassing what is already offered. Moreover, many members note declining agency support for attendance at supernumerary meetings."

Many members of AIFRB have seen, for a number of years, the writing on the wall which is reflected in the Directors' reports. During my term on the AFS Executive committee ('89-'94) I mentioned to several AIFRB Directors and officers the potential inherent in merging AIFRB into AFS via the establishment of an AFS Research Section. Such a Research Section would immediately be one of the largest and most influential. The Section could carry out many, if not all, of AIFRBs current activities. Which would be eliminated?

I have always been an active participant in AIFRB activities, but never a leader. I am not a research scientist, but an advocate of research and researchers, and, most importantly, I am a 50 year user of research findings in the aquatic sciences. As such, I am honored to be an AIFRB Fellow, especially so because I was recruited by one of my heroes, Fred Fry. I believe in AIFRB's mission and our code of ethics. However, we all have the knowledge that change is a constant and that organizations wax, wane, and have uncertain futures.

I spoke of the possible merger to the AIFRB Board of Directors at its meeting in San Antonio, TX in 1991. The Board considered my proposal seriously, but at that time many of the long-time AIFRB members were present and still active. They, of course, very naturally wanted to stay the course. Perhaps times and leadership have changed in the intervening 7 years to the point that reconsideration of restructuring is timely. If I'm not drummed out of AIFRB before the Hartford meeting, I'd like to hear the discussion by the Board. I look forward with great interest to the new reactions and viewpoints the foregoing generates. I know some of the old ones by heart, but do they still hold water? Combined with Editor Huntsman's contest to find the "Ten Worst Instances of Fishery Management," upcoming issues of *Briefs* should provide us with stimulating reading. •

I'm sure Carlos, President Hubbs, and your District Director would appreciate your opinion on this issue, or better still, WRITE TO <u>BRIEFS</u>. Editor

AIFRB DIRECTORY PUBLISHED -

Are Your Listings Correct?

The new AIFRB Directory is either in your hands or about to be. PLEASE REVIEW YOUR LISTING! Proper mailing of *Briefs* and other material depends on correct addresses. Especially needed are correct abbreviations for your employing agencies. If you wish to have your telephone number or email address added to the directory please provide the needed information to our treasurer Joseph W. Rachlin, Dept. of Biological Sciences, Lehman Collee, 250 Bedford Park Blvd. W., Bronx, NY 10468-1589. Phone: 718-960-8239; fax: 718-960-8929; jwric@cunyvm.cuny.edu or rachlin@alpha.lehman.cuny.edu.

IS YOUR MEMBERSHIP CATEGORY CORRECT?

Many of our members are not currently accredited with the full rank in AIFRB that their accomplishments will support. It is the member's responsibility, and to her/his advantage, to ensure that their membership status is correct. If you are eligible for a promotion [see bylaws or make a good guess] provide a CV and other pertinent documentation to our membership chair: John Butler, NMFS Southwest Fisheries Science Center, 8604 La Jolla Shores Drive, P.O. Box 271, La Jolla, CA 92038.

ESA Annual Meeting

The Ecological Society of America will hold its 83rd Annual Meeting jointly this year with the American Institute of Biological Sciences in Baltimore, Maryland, 2-6 August. As usual, the meeting will feature hundreds of paper and poster sessions, numerous field trips and 17 symposia. Symposia topics include: Linkages between Human Health and Ecological Change, Wholesale Transformation of Coastal Ecosystems by Human Action, Results from Creative Cross-disciplinary Collaborations, and Urban Ecosystems. For further information contact Marilynn Maury, AIBS, (703) 834-0812; mmaury@aibs.org or Ellen Cardwell ESA, 202-833-8773, ellen@esa.org.

First Call for Contributions: ERF '99 Program

DEADLINE APRIL 15, 1998

Where the River Meets the Sea

NEW ORLEANS, SEPTEMBER 1999

Please contact Robert Twilley if you are interested in contributing to the ERF '99 Program:

Dr. Robert R. Twilley
Department of Biology
P.O. Box 42451
University of Southwestern Louisiana

Lafayette, LA 70504

Phone: 318-482-6146; Fax: 318-482-5834 email: rtwilley@usl.edu

web site: www.ucs.usl.edu/~rrt4630.html

NEW NOMINATIONS - Ten Worst Instances of Fishery Management Since 1977

- 11. White abalone, Haliotis sorenseni, deepest living north American abalone first described in 1940, in 1970's produced 270 mt commercial landings over seven year period in California and an unknown amount in Mexico. Fishery remained open 15 years after last significant landings —population density dropped from 10,000 ha ⁻¹ in 1970's to < 1 ha ⁻¹ in 1990's—appears to be on brink of extinction, now a candidate for endangered species list, 57 years after its discovery.
- 12. Ocean sport fishery for chinook salmon off California predicated on "mooching". Size limit in place with a 90 percent mortality on released undersized salmon hooked by mooching.
- 13. Introduction of <u>Mysis Reclicta</u> (opossum shrimp) into many western lakes and reservoirs in the 1960's and 1970's to boost trout and salmon growth rates. These introductions have had disastrous effects on lotic and lentic food webs and have contributed to many fishery crashes.
- 14. Overfishing and collapse of the east coast striped bass fishery, mid 1970's-80's. Routine population monitoring indicated the stocks were being depleted, but it took Congress getting involved to put a stop to the overharvest. The states could not agree on any management. The one good point: since Congress did get involved, we have the ASMFC and the Coastal Fisheries Management Act.
- 15. Despite being almost fished to extinction in the early 1900's, the Atlantic sturgeon population was slowly rebuilding. When the Russian/Iranian source collapsed in the mid-80's, U.S. fishermen began targeting our few remaining sturgeon. Before the ASMFC closed the fishery in 1994, we had wiped out the population gains made since the turn-of-the -century.

A review: Previous Nominations

- 1. Atlantic Salmon interbasin transfer
- 3. Atlantic Bluefin tuna
- 5. Pacific Salmon general
- 7. Zander introduction
- 9. Northwest Atlantic ground fisheries
- 2. Steelhead restoration
- 4. Deep reef groupers Atlantic
- 6. George's Bank herring
- 8. Atlantic Large Coastal Sharks
- 10. Gag Gulf of Mexico

EDITOR'S NOTE: Still plenty of time to get your nominations in by phone, mail, email, fax, columbiform carrier.

Ten Worst Fishery Management Solicitations: One of Ten Worst Ideas for AIFRB John P. Wise

Solicitation of nominations for the ten worst instances of fishery mismanagement in AIFRB *Briefs* struck me as not a good idea when it was done some months ago. Publication of the "First Listing of Candidates" in the latest issue confirms my feeling that dissemination of such a list is in fact a very bad idea. Describing the projects as "egregious folly" is insulting and could in the worst instance lead to lawsuits against AIFRB. It certainly will result in hard feelings.

As we all know, there are and have been outstandingly bad single-instance and continuing mistakes in fisheries management. For example, the Columbia River salmonid restoration project has consumed more money and manpower with no substantial positive result than any other fishery management project, in my opinion.

But publishing such a list without specifying who nominated each project and what criteria were used by whom in selecting items is at best mean-spirited. Allowing the originators and executors of the chosen projects a chance to respond in *Briefs* would be only fair and decent.

I suggest that the editor of *Briefs* be encouraged to admit in the next issue that proposing such a list was not a good idea, and also to apologize to those who may have suffered personal and/or professional embarrassment by publication of the preliminary listing in the November-December 1997 issue.

EDITOR'S RESPONSE: The giant awakes - or at least grunts and rolls over.

Jack [whom I have called friend for over 30 years] raises some points so interesting that I could not resist responding. The first point is whether or not we can or should develop a list of bad management efforts. AIFRB put itself in the business of judging effectiveness of programs years ago by giving "best" awards [see Briefs Nov. - Dec. 1997]. Is it not logical that if our intellects can operate at one end of the spectrum by choosing best programs that it can operate equally effectively at the other end of the spectrum and decide which programs are without merit? Further it is an interesting philosophical question as to whether negativity attaches to selection of ineffective programs. Does not selection of best programs imply that many, if not most, other programs are worse, whereas selecting the bad programs identifies many, if not most, other programs as better? Which approach is more negative?

Anonymity has been provided to nominators, whether or not they asked for it, for the same reason that peer review is, by and large, anonymous. Not everyone can accept criticism of their work in a dispassionate manner. Further, those connected with controversial projects surely know that detractors exist.

And now to the really important issue Jack raises, that everyone should have a chance to respond, disagree etc. in *Briefs*. YES!! This "ten worst" project, is in no small part, a device to nudge the dozing giant mentioned above. And better than the wheedling, whining, shameless snivelling and pleading that I've displayed in most editions of *Briefs*, the device has worked. Jack's letter is an excellent example. *Briefs* is *YOUR* publication. Fill it up! Disagree! Tell us

what's going right and wrong in your part of the world, your agency, your river!

For the time being the ten worst project continues. The mail interested and supportive far outweighs the negative. But again I thank Jack. I learned a third of a century ago in Miami that Jack will never, ever, call a ball (as seen from his angle to the plate) a strike and that his criticisms are intended to produce positive results.



In Search of History - Fish and Wildlife Service Badges -

Can anyone help?

I'm a U.S. Fish and Wildlife Service Officer attempting to put together a complete history of the badges worn by the Service since it's beginnings with the U.S. Dept. of Commerce, Bureau of Fisheries. I have over thirty of these badges and am looking for a contact where I might learn more about the series of badges issued by the Bureau of Fisheries up to the current NMFS. I have several examples of early badges but am sure I am missing others. Can you point me in the right direction? Perhaps a person who has written of the history of the Agency?

I have seen several examples including a "Black Bass" Inspector Badge from Commerce but of an unknown date.

Jonathan Schafler 1390 Buskin river Rd. #4 Kodiak, Alaska 99615 (907) 487-2600 refuge@ptialaska.net

CONFERENCES OF NOTE

SECOR Coastal Ocean Boundaries and Interactions and Assessments (COBIA)

Conference on Southeast Coastal Ocean Research Savannah, Georgia April 7-10, 1998

Crossing Disciplines/Crossing Boundaries: Research in the South Atlantic Bight

This meeting will focus on current research efforts in the South Atlantic Bight, with the goals of fostering cross-disciplinary connections among investigators in the region and facilitating the development and unitization of regional scientific resources. Scientists working in all nearshore environments in the South Atlantic Bight, from the continental shelf to the estuaries, are invited to attend and participate.

Contact: SECOR, c/o S.C. Sea Grant Consortium, 287 Meeting Street, Charleston, SC 29401, Phone: (803) 727-2078; Fax: (803) 727-2080;

E mail: knightel@musc.edu.

International Congress on the Biology of Fish

This is the final call for papers for the International Congress on the Biology of Fish, to be held at Towson University, Baltimore Maryland, USA on July 26-29, 1998, sponsored by the AFS Physiology Section. For more details, visit our Web site at www.helix.net/~macwat/congress.html or send us an e-mail requesting the full information package. The Web site also lists our previous 10 published proceedings.

This year, the Congress will be composed of the following twelve Symposia:

Biology and Management of the Burbot Lota lota Cardiovascular Function in Fishes: Control Mechanisms and Environmental Influences, Fish Food Webs: Gutshop '98, Physiological Approaches to Fish Stress, Special Adaptations of Tropical Fish, Smolt Physiology and Behavior, Fish Incubation Biology, Ammonia Toxicity and Excretion in Fish, Review of Fish Condition Indices, Fish Response to Toxic Environments, Molecular Endocrinology in Fish, Studies in Fish Biology (Contributed papers).

This is a very international meeting (last time 30 countries were represented) and a good forum to see a side variety of biological research being reported.

Contact: Don MacKinlay, Fisheries & Oceans Canada,

555 West Hastings Street Vancouver V6B 5G3 CANADA,

Phone: 604-666-3520, Fax: 604-666-6894;

E-mail: mackinlayd@dfo-mpo.gc.ca

AIFRB Members at Work RARE FISH TALE MAKES HISTORY

Scientists find four new species among 'mother lode' Miami Herald, January 12, 1998

Phil Long - Herald Staff Writer

Nearly a half mile below the surface of the Caribbean off Cuba, American and Cuban biologists in a tiny submarine glided through pitch-black water chasing an inch-long, oneounce fish the likes of which nobody had ever seen.

During a historic 30-day mission, researchers eventually caught the tiny member of the "goby" family, as well as three other species never before recorded and 26 more species that had never been found in Cuban waters.

The expedition, a \$1 million project underwritten by the Discovery Channel, marked the first time a U.S. research vessel has been allowed into Cuban waters since Fidel Castro took power 39 years ago.

"It was like going into an underwater museum" said the expedition's leader, Grant Gilmore (AIFRB Member) of the Harbor Branch Oceanographic Institution near Fort Pierce.

"We saw living fossils. We saw fish that have not changed in millions of years. We found the richest marine fish fauna in the Western Hemisphere. It was the ultimate experience for a scientist. We hit the mother lode."

The mission captured the fascination of Cuban President Castro, who made a surprise two-hour visit to the research vessel Seward Johnson the day after the New Year's. The vessel is owned by Harbor Branch.

While Gilmore and others looked for rare fish and studied the undersea environment, Edith Widder, also of Harbor Branch, gathered rare, bioluminescent deep-sea animals and transparent jellyfish. She hopes to learn whether some of the jellyfish contain a natural poison that may fight cancer in humans.

The scientists returned to Harbor Branch and the Instituto de Oceanologia, near Havana, last week with more than fish. They came back convinced that the survival of South Florida's fisheries is critically linked to the continuing health of a 350mile-long swath of water along the Cuban coast.

"The area is a virtually untouched marine nursery," Gilmore said. Development has polluted Florida Bay and the Florida Keys, making the area steadily less suitable as a marine breeding ground. Thus, Cuba becomes more and more important as a nursery for fish and other marine creatures that would drift to Florida waters.

Image of older Florida?

Gilmore described Cuba's southern coast as "Like what Florida may have been years ago. We saw hundreds of times more fish and lobsters than you would see in the same space in the Keys or Florida Bay.

"The marine organism knows no political boundaries," Gilmore said. "The ocean carries them hundreds to thousands of miles. Whatever happens in Cuba is extremely important to Florida."

In 50 three-to four-hour dives, the scientists explored nearly 700 miles of Cuban coast. The researchers left most of the specimens in Cuba. Some were brought back for study in the United States and elsewhere.

Besides two newly discovered "goby," divers caught a new member of the "brotula" family and another that may be a member of the "duck bill" Chrionema family.

26-ton submersible used

The dives were made aboard the Johnson Sea-Link, the only submersible in the world capable of capturing live fish at that depth and returning to them the surface for study. The Sea-Link, with its powerful lights and sophisticated sonar, was the sub that found the crew cabin of the ill-fated space shuttle Challenger, which exploded in 1986.

Gilmore said the high-tech expedition had its light moments. "You had four men in a 26-ton submarine trying to outmaneuver, then capture, a four-ounce eight-inch -long fish in a two-foot by three-foot trap," he explained with a laugh.

"We saw the fish time and time again, but we could never catch any of them," Gilmore said. Mostly, they tried to suck the fish into a small trap. That didn't work. Then their luck changed one morning.

"It was a 30-minute cat-and-mouse game with one fish," Gilmore said. Finally, the fish drifted above the sub.

Reason to celebrate

Driver Don Liberatore pointed the sub straight up, following directions from Dick Robins (AIFRB Fellow) a fish biologist who recently retired from the Rosenstiel School of Marine and Atmospheric Science in Miami to join the University of Kansas. They opened the trap and the fish disappeared.

"More than 2,000 feet below the water's surface, there was screaming and yelling and celebrating like you'd never heard before," Gilmore said. • (Obviously Grant has never attended an AIFRB Board of Control Meeting, Editor)

GRAND OLD LADY LEAVING FISHERY SERVICE? Gene R. Huntsman

Only a year from her one hundredth birthday the venerable Beaufort (NC) Laboratory of the National Marine Fisheries Service (NMFS) appears for the first time to be leaving the control of agencies in the clear lineage of the old Bureau of Fisheries. Instead most of the lab's personnel and hard resources (buildings, vehicles, etc.) will be under control of the National Ocean Service (NOS), until now principally the mapping and ship operating arm of the parent National Oceanic and Atmospheric Administration (NOAA). The genesis for the transfer appears double-barreled. First there was apparent dissatisfaction in NOAA and Congress with NMFS attention to research on fishery habitat issues. The NOS, now employer of former NMFS habitat doyen and high level executive Nancy Foster, was deemed more likely to give habitat issues top billing than was NMFS, perennially awash in fishery management controversies. Secondly, the transfer offered an effective, if sacrificial, scheme for relieving NMFS of an intense debt burden. The Southeast Fishery Science Center of NMFS, which oversaw the Beaufort operation and is directed by Brad Brown, has been so strapped for cash in recent years that Brown was requiring his personal approval for purchases over \$200, less than the value of a single refueling for one of the Center's small vessels.

The Beaufort Laboratory was established in 1899 and is

the second oldest (after Woods Hole) of the Nation's marine fishery laboratories. Although originally established, like Woods Hole, to provide facilities for summer researchers from academia, the Beaufort Laboratory was relatively early provided with a permanent staff. The facility over the century has established a formidable reputation for research on fishery management issues and has been home to investigations on diamondback terrapins, American shad, striped bass, blue crabs, Atlantic and Gulf menhadens, and more recently has been the lead research facility for management issues concerning the diverse reef fisheries of the Atlantic coast of the southeastern U.S. Dr. Rachel Carson is one of the foremost alumnae of the facility.

As a result of internal reprogramming only 23 of 66 (down from 120) employees of the laboratory were identified as sufficiently oriented toward traditional fishery management to merit retention as NMFS employees. They will remain at Beaufort.

As one might expect, opinions about the transfer vary widely. Certainly research on fishery habitat issues needs the better support that NOS is committed to provide. But as anyone who has worked in the Federal fishery management arena knows, research on basic fishery biology and population structure, as well as measurement of catches, is also grossly underfunded, at least in the southeastern U.S. Thus extracting a facility with the demonstrated potential to support traditional fishery management - oriented research from the arsenal of the NMFS in order to jump start a new fisheries habitat program seems to some the worst kind of robbing Peter to pay Paul, and that the NMFS has done itself an extraordinary disservice by relinquishing control of one of its flagship facilities with little if any protest. Other observers wonder how well an organization whose main mission has been drawing maps will fare in the very different world of science administration. Within the laboratory many employees, especially those retained by NMFS, are confused. They fail to comprehend how they can be properly supervised by superiors in the employ of, and with principal allegiance to, the NOS. Will hard resources, space, vehicles, administrative support, almost all of which were originally acquired in the service of fishery management, be adequately allocated by the present controllers, habitat researchers beholden to the NOS?

To some who view the Beaufort facility as one of the shrines of American fishery management (Ray Beverton first exposed his and Holt's treatment of population dynamics to Americans in Beaufort in lectures in 1954) the loss of the Beaufort Laboratory from the continuity of lineage begun by Spencer Baird seems a grievous injury!



Peer Review Finds Gulf of Mexico Red Snapper Severely Overfished

A consolidated report from three independent peer review panels recently provided to the Gulf of Mexico Fishery Management Council concludes that the red snapper stock in the Gulf of Mexico is severely overfished. The report states that the number of juvenile red snapper caught as bycatch in shrimp trawls and the number of adults harvested in the directed red snapper fishery must be decreased in order to reduce overfishing. The report is the result of a review of the scientific and management basis for conserving and managing the red snapper fishery in the Gulf of Mexico and is a requirement of the 1996 Magnuson-Stevens Act [MSA §407(a)]. The findings of the three panels also call for improving management measures to recover the Gulf red snapper fishery.

The peer review noted that NMFS assessments are sufficient to make sound management decisions, but that there are some weaknesses in red snapper data collection that need to be addressed. The report's authors cautioned that despite uncertainty over some of the data used in stock assessments, action is needed now to rebuild this valuable resource. The report found that current data collection techniques used to estimate shrimp bycatch need to be improved and management measures need to be strengthened in order to assure the eventual recover of the fishery. The report also concluded that the burden of recovery cannot be placed solely on the directed fishery. Even a closure of the red snapper fishery would not achieve rebuilding, and therefore the panel recommended that management strategies such as the use of bycatch reduction devices (BRDs) timearea closures, bycatch quotas or other effort/capacity reductions in the shrimp fishery be considered.

NMFS anticipates the report will be available soon on the SFA Website <http://kingfish.ssp.nmfs.gov/sfa>. For further information, contact John Witzig, NMFS Office of Science and Technology, 1315 East-West Hwy., Silver Spring, MD 20910.

From SFA Update, January 1998

PA Riparian Reforestation Grants

The Pennsylvania Streamside Forest Fund is accepting applicants for \$500 mini-grants designed to encourage environmental organizations, conservation districts, schools and civic organizations to establish riparian forest buffers along small streams in their communities.

The fund will award 25 grants, with the highest priority being given to those projects that meet Pennsylvania's buffer dimension guidelines (width of 35 feet or more); promote volunteer involvement; have a high probability for success; and emphasize appropriate plant communities. Projects must be scheduled to begin during the spring of 1998. A 25 percent (\$125) match is required; in-kind labor will qualify for the match.

For information write: Alliance for the Chesapeake Bay, 225 Pine St., Harrisburg, PA 17101, or call: 717-236-8825

From Bay Journal, December 1997

Federal Northeast Stock Assessments' Science Valid, Advice Sound

Federal assessments showing declines in Northeast groundfish stocks are sound according to a report, "Review of the Northeast Fishery Stock Assessments," released January 7, 1998 by the National Academy of Sciences (NAS). The report further concludes that there is "no scientific basis to support assertions that the regulations imposed by Amendment 7 [of the Northeast Multispecies Management Plan] are too severe from a biological perspective" and agreed that strong management actions taken by NMFS and the New England Fishery Management Council were warranted.

The report is the result of a Congressional mandate that the NAS conduct a peer review of Canadian and U.S. stock assessments that were used as the basis for conservation and management of the Northeast groundfish fishery [SFA—§210]. The panel that authored the NAS report focused its review on stock assessments for cod, haddock, and yellowtail flounder. The review confirmed NMFS conclusion that severe management measures were required to prevent collapse of the stocks. The report concurs that the stock assessments showed "fishing mortality was high, and not sustainable, whereas spawning stock biomass [(as indicator of a stock's ability to reproduce and maintain itself)] was low and decreasing."

Copies of "Review of Northeast Fishery Stock Assessments" will be available in February from the National Academy Press, 2101 Constitution Ave., NW, Washington, DC 20418 at a cost of \$35.00 plus shipping.

From SFA Update, January 1998

MOST AGREE STRIPED BASS ARE STRESSED; QUESTION IS WHY

Striped bass in the Chesapeake Bay may be stressed out, but scientists studying the fish have no clear explanation as to what factor — or combination of factors — is bothering the prized species.

Fall surveys by the Maryland Department of Natural Resources found about 11 percent — nearly 500 of about 4,300 adult rockfish — had lesions, some of which were unusually extensive.

"It's a concern," said Reginal Harrell, (AIFRB Fellow) a scientist with the University of Maryland's Horn Point Laboratory. "It's enough to raise flags. Probably yellow flags. I don't think red flags."

About 700 people called the state's fish health hotline from mid-September to mid-October to report sores on fish, mostly striped bass. Striped bass with lesions have also been reported in Virginia and Delaware.

The sores do not appear to be related to this summer's Pfiesteria outbreaks, officials say. But some of the reports, they say, probably arise from heightened public awareness after publicity over Pfiesteria-related fish kills involving about 20,000 menhaden in lower Eastern Shore rivers.

Sores on striped bass in late summer and early fall are not unusual, though many say the number observed this year appears high. Several scientists have suggested that an ailment afflicting 1 in 10 striped bass throughout the Bay could be of more ecological concern than Pfiesteria,

outbreaks of which were geographically confined. The issue has raised enough concern among scientist to spur a late November meeting on the subject.

The lesions themselves are caused by bacteria infections. But scientists say some type of stress was probably necessary to weaken the fish to make them susceptible to such invasions.

A host of factors, ranging from unusual environmental conditions, catch-and-release fishing, increasing numbers of rockfish, reduced availability of food or more virulent bacterial diseases could cause increased stress.

One area of particular concern to some is that the overall health of striped bass may be declining because of a decline among the fish they "forage" on in the Bay. The two highest striped bass spawns on record were in 1993 and 1996. The 1993 fish are now becoming adults with voracious appetites.

"The fish are showing signs of starvation and malnutrition," said Jim Price, president of the research-oriented Chesapeake Bay Acid Rain Foundation, who has studied the Bay's striped bass for years. "The effects of the loss of the Bay's forage fish will impact the ecology of the entire Chesapeake Bay."

Price cited data from the Maryland Department of Natural Resources that shows the numbers of menhaden and bay anchovy — two of the most important food sources for striped bass — have declined in recent years while the rockfish stock has increased dramatically.

Price, who has been analyzing the stomach contents of the fish for years, said few of the adult striped bass that he examined this year contained bay anchovy or menhaden — the main food source for adult rockfish. Instead, he said, blue crab and white perch — which are not as desirable because they contain less fat — have become more prevalent in their stomachs.

"There is evidence that points to a lack of adequate nutrition," agreed Eric May, chief of the Aquatic Animal Health Program at the Cooperative Oxford Laboratory, a joint operation of the DNR and the National Marine Fisheries Service. "Whether it is strong and compelling, I don't know."

May, who himself considers a lack of food a plausible explanation, said there is a need to study the forage base to see whether the striped bass are finding enough fish to prey upon.

It is a tricky question. When there are more fish in a population, they tend to grow slower and weigh less because of competition for food. That doesn't necessarily mean the fish are unhealthy.

But May said there are some troubling indications that the physical condition of the striped bass — mainly as measured by fat reserves — is also declining. "We need to look at what is happening to the energy reserves of the striped bass on a Baywide scale," he said.

The diet, though, is a chicken-andegg-situation. Are the fish not eating because there is a lack of food? Or do they stop eating because they are sick?

"With many infections in fish, one of the first things that happens is they stop eating," said Vicki Blazer, a fish pathologist with the National Biological Service, who has examined several of the fish taken from the Bay this year.

Wolfgang Vogelbein, a fish pathologist at the Virginia Institute of Marine Science, said the fish he inspected that were only mildly infected appeared to have fairly good overall body condition. Only those with the worst infections, and which appeared to have been infected the longest, showed evidence of reduced body condition, he said.

Both Vogelbein and Blazer have tentatively identified a naturally occurring pathogen, mycobacterium, as the disease agent that appears to have caused many — though not all — of the striped bass lesions seen during 1997. Both agreed the lesions were likely triggered from any of a side variety of potential stresses that weakened the fishes' immune systems.

"Diseases in cold-blooded animals are generally associated with stress," Vogelbein said. The Chesapeake, like other bodies of water, is filled with many types of naturally occurring pathogens that can attack fish if their defenses are weakened, "If the fish is healthy, feeding well and isn't stressed by other environmental variables, they pretty much don't come down with disease, even though these organisms

are present in the water around them," Vogelbein said.

Vogelbein and Blazer said it was critical for future monitoring efforts to include detailed histopathological and microbiological exams of healthy looking fish to determine whether they are infected, and whether the percentage of infected fish changes over time. Mycobacterium, for example, can be present in fish at low levels but not cause noticeable harm until the fish is subjected to increased stress. Therefore, the pathologists said that it is possible that even apparently healthy animals may be carriers of the infection which could, in turn, contribute to the reduced body condition observed by Maryland scientists.

Because such expensive exams have not been routinely conducted in the past, the pathologists said it's impossible to tell how much of the population is at risk, or whether the incidence of infection has been changing over time.

"I'm not hopeful that we'll get a lot out of the historical data," Blazer said. "What needs to happen now is to start collecting that data, and doing it right."

That's important not only for fish health, they said, but also to monitor potential risks to humans as some fish pathogens, including certain types of mycobacterium, have in some cases been transmitted to humans who handle sick fish.

But scientists do agree that sorting all this out and determining what is affecting the striped bass will be challenging.

A wide variety of natural factors may play contributing roles.

Three of the past five years in the Bay have been characterized by unusually high flows into the bay — 1996 was the highest flow on record — which altered water salinities, temperatures, oxygen contents and other variables which could add stress to fish. In addition, the huge striped bass spawns of 1993 and 1996 could contribute to crowding — major stress for fish — in certain habitats.

"We recognize that it's an issue," Harrel said. "How much of an issue remains to be seen. Is it just part of a natural cycle, or is it something that we should start being concerned about?"

From Bay Journal, December 1997

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BRIEFS, the newsletter of the American Institute of Fishery Research Biologists, is published six times a year. It is intended to communicate the professional activities and accomplishments of the Institute, its District, and Members; the results of research: the effects of management; unusual biological events; matters affecting the profession; political problems; and other matters of importance to the fishery community. Comments and contributions should be sent to the Editor, Dr. Gene R. Huntsman, 205 Blades Road, Havelock NC 28532. Subscription \$30 a year to Institutions and Non-Members. Officers-Clark Hubbs, University of Texas, Department of Zoology, Austin, TX 78712, President; Barbara Warkentine, 1329 Balcom Ave., Bronx, NY 10461, Secretary; Joseph Rachlin, Lehman College Bio., Bedford Park Blvd. West, Bronx, New York 10468, Treasurer.

ISSN-8755-0075

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Vacant

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...BRIEFS...

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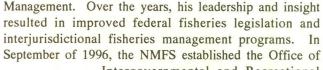
Who's Who in AIFRB Richard "Dick" H. Schaefer

Dick Schaefer, elected to membership in AIFRB in 1971 and promoted to Fellow in 1978, has been an active and involved member of AIFRB for more than a quarter of a century. A graduate of Rutgers University, Mr. Schaefer is presently the Chief, Office of Intergovernmental and Recreational Fisheries Affairs for the National Marine Fisheries Service in Silver Spring, MD. Dick's fisheries career includes 10 years with the New York State of Department Environmental Conservation where he worked as a Fisheries Biologist in the Marine Fisheries Research Program on Long Island and later as the Director of the Department's Marine Fisheries Laboratory in Setauket, NY. During this period, he contributed

substantially to our knowledge of several important marine fishes including striped bass, northern kingfish, and summer flounder. His early work to survey and document the coastal fishes of Long Island resulted in the first records for several species in New York waters.

In 1972 Dick joined the National Marine Fisheries Service where he served as the Chief of the Office of State-Federal Relations and later in 1976, as the Chief of the Fisheries Management Operations Division in Washington, DC. As a result of these positions, he had the opportunity to help craft and implement the provisions of the Magnuson Fishery Conservation and Management Act. In 1979 he was assigned as the Acting Regional Director of the Northeast Region in Gloucester, MA where he served as a voting member of the New England and Mid-Atlantic Fisheries Management Councils. In this capacity, Dick had the opportunity to lend his energy and talents to the task of the interjurisdictional management of his favorite marine sportfish - the striped bass. Dick's work with the States through the Atlantic States Marine Fisheries Commission contributed to the successful recovery of striped bass stocks and the Mid-Atlantic fishery.

After testing his mettle in Gloucester, Dick returned to NMFS Headquarters in Silver Spring, MD in 1987 where he took up the reins of the Office of Fisheries Conservation and



Intergovernmental and Recreational Fisheries Affairs and named Dick Schaefer as its first Chief. The mission of this new office is to implement the Atlantic Striped Bass Conservation Act, Atlantic Coastal Fisheries Cooperative

Management Act, the Interjurisdictional Fisheries Act, and the Anadromous Fisheries Conservation Act in the federal zone, to build cooperative partnerships with other fisheries management agencies at the interregional and national level, and to work with the marine recreational fishing community to increase fishing opportunities. The office represents the NMFS Administrator as the co-chair of the National Recreational Fisheries Coordination Council and is responsible

for NOAA's implementation of Executive Order 12962 on Recreational Fisheries. Under Dick's continuing leadership, the office has expanded NOAA's recreational fisheries program on the Atlantic, Gulf, and Pacific coasts.

Throughout his career Dick has maintained a strong professional advocacy for coordinated State and Federal management of interjursdictional fishes as the only rational approach to achieving success. He is a long standing member of the American Fisheries Society and the Potomac Chapter, a member of the International Association of Fish and Wildlife Agencies, the Izaak Walton League of America, the Atlantic Salmon Federation, Trout Unlimited, and Ducks Unlimited. An avid hunter and angler, Dick is well known among his colleagues for his enthusiasm and support of outdoor recreational opportunities. As such, he remains a strong advocate for traditional uses of fish and wildlife and the need to raise public awareness on the values of fishing and hunting in America's heritage. He lives with his wife Ann in Bethesda, MD.

Dr. Frank M. Panek Director - Capital District

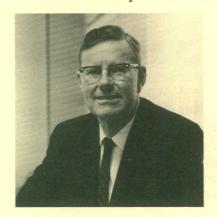
Certainly any listing of Dick's accomplishments would be incomplete without reference to his nationally recognized prowess with a guitar and his melodious renditions of countrywestern standards. Watch your step, Garth Brooks! Editor



Farewell To Colleague And Friend Richard S. Croker (1907-1998)

×

Richard S. Croker (AIFRB Fellow 1959, Emeritus 1983) died on January 3, 1998 at the age of 90 in Laguna Nigel, California. Dick (as he was known to his many friends and colleagues) was a fisheries scientist, conservationist, environmentalist (before the term became popular). Administrator, international diplomat and former president of the American Fisheries Society (1961-62). His career covered



six decades and included state, interstate, national, international, military and private sector service. After graduation from Stanford University in 1929 he began his career as a fisheries biologist serving as a railroad fish car attendant husbanding the delivery of fish eggs and fry from California fish hatcheries throughout the state. Over the years he progressed through the ranks of state service to become senior marine biologist in the Marine Fisheries branch at the California State Fisheries Laboratories at Terminal Island. There he developed his biological skills, wrote many publications and was appointed editor for Department of Fish & Game publications, ensuring the quality of the department's quarterly magazine, the Fish Bulletin series and assisted in the preparation of professional quality manuscripts for many colleagues before submission to other publications.

From 1942 through 1946 he served in the Air Force, SCAP, with final duty as Fisheries Officer in Japan with General Douglas McArthur's

occupation military forces following World War II. He assisted the government of Japan in the redevelopment of its fisheries sector, and made many friends among the Japanese fisheries communities. After discharge he returned to the Department of Fish and Game where he was appointed Chief of the Marine Fisheries Branch later to become the Marine Resources Branch.

Dick retired from the department to become the Executive director of the Pacific Marine Fisheries Commission for 1962-63. His professional and international skills were rewarded by appointment to Regional Fisheries Officer for Latin America for the U.S. Department of State with headquarters based in the U.S. Embassy in Mexico City for five years. In this position he was responsible for the fisheries and wildlife sectors covering diplomatic and technical duties throughout the region.

Following his tour of duty with the state Department, Dick was retained as consultant to the Administrator of the United Nations Development programs (UNDP) to review and advise on U.S. projects in over 10 countries, often having to exert firm diplomacy in order to accomplish his assignments. Dick was a tall and imposing figure and with his affable but strong demeanor and voice could often accomplish in a personal visit to a project what written communications could not. Interspersed with his assignments with the UNDP he served as consultant to individual foreign governments, the International Service Corps and the Resources Development Associates.

All throughout his life besides being a professional fisheries scientist he was also an ardent amateur fisherman. He kept detailed scientific records of his fishing and catches. He often professed chagrin at being bested by his constant fishing companion and first wife Annie, expressing, with his tongue in his cheek, concern that his reputation as fisheries official might be diminished were it to become widely known that Annie could catch more fish than he did.

Richard S. Croker was a prolific correspondent writing in a left handed classic script of his observations of his travels, activities, feelings and his fishing successes, always with humor and accuracy. He authored numerous articles and papers on fisheries, and wrote hundreds of reports, reviews and comments on the technical matters of his consultancies.

He was a member or former member of the American Fisheries Society; American Society of Ichthyologists and Herpetoligists, American Institute of Fishery Research Biologists (Fellow); Gulf and Caribbean Fisheries Institute; California Fish and Game Biologists, Pacific Marine Fisheries Biologists; Sierra Club; Nature Conservancy.

All his life Dick gave a superb measure of enthusiasm to all that he engaged in, was a scientist of distinction, a statesman, and a genial colleague. He was the devoted father of Kenneth Croker and Cathy Dolbear. He is survived by his widow Arlene Croker of Laguna Nigel, California.

W.M. Ellis Ridley

Condolences may be sent to Ms. Dolbear at: Cathy Dolbear 23050 Aspen Knolls Drive Diamond Bar, CA 21765



NEWS FROM THE DISTRICT: NEW ENGLAND

The New England district is a bit more alive this year. Firstly, of a score of nominations for the W.F. Thompson Award, I got a dozen worthy of consideration. These have been sent to reviewers to select the best paper for 1996. With a bit of luck I will have the winner by mid to late May.

Assuming it will be OK with the Board of Control, I have started announcing a call for nominations for the best student paper for 1997. I want this process to be well underway when we convene in Hartford.

Secondly, the announcement of the AIFRB multi-district sponsored program for the Northeast Fish and Wildlife Conference was (see attached) sent to all members of the New England District to encourage their participation in AIFRB activities. I hope it spurs a few to action. I used the new distribution/membership list recently forwarded to all District Directors.

Thirdly, the AIFRB display sits neatly in my office ready for transport to the AFS National in Connecticut. It needs an upgrade, however; especially in reference to the list of officers for 1998-99, etc, I will make copies of subunits and send them to Barbara Warkentine for redoing. She can then revise them and send them to me to affix on the display prior to its transport to AFS in August.

Director, Jack Pearce

Joint Northeast States and **Eastern Canada Meeting**

The Directors of the Capital, Keystone and New England District sponsored a Northeast States and Eastern Canada Regional Meeting at the Northeast Fish and Wildlife Conference in Camp Hill, PA, May 3-6, 1998 The AIFRB meeting was Tuesday, May 5th from 1:00 - 4:00 p.m. and featured the theme Looking to the 21st Century - Challenges in Fisheries Science and Management in the Northeast. Dr. James Geiger, Assistant Regional Director - Fisheries for the U.S. Fish and Wildlife Service in Hadley, MA and Dr. John Boreman, Deputy Director, National Marine Fisheries Service, Northeast Fisheries Science Center in Woods Hole, MA were guest speakers and shared with AIFRB members their insight and visions for fisheries for the upcoming century. A facilitated discussion followed the formal presentations. A synopsis of the meeting will be published in subsequent issues of Briefs. A short business meeting followed the program. AIFRB members in the Northeastern States and Canada were invited to attend and participate in the facilitated discussion and business meeting.

The American Institute of Fishery Research Biologists: Announces the W. F. THOMPSON BEST PAPER AWARD, 1997 \$750 (U.S.)

PURPOSE

To recognize excellence in student research and encourage student professionalism in fisheries and publication of research results.

ELIGIBILITY All scientists, so long as the senior author conducted the research while a student of fish, or some biological aspect of aquatic or marine science.

> Papers nominated must have been accepted for publication in a recognized scholarly journal or as part of a book within three years of terminatin of student status.

APPLICATION For papers published in 1997 send a resume with details of student author's educational and employment history, as well as six copies of the paper to:

> Dr. John B. Pearce, Editor Fishery Bulletin Northeast Fisheries Science Center 166 Water Street Woods Hole, MA 02543-1026 Questions: Fax: 508-495-2258

DEADLINE

15, December, 1998 (for 1997 papers)

CALL FOR REPORTS AND AGENDA ITEMS

President Hubbs has called for all District and Committee reports to be submitted to him by July 1, 1998. Any member wishing to have business placed before the Board of Control should contact President Hubbs or the appropriate Director by July 1 as well.

(I recall one member's concern about the timing of student travel awards and the possibility of improving the award program by having the awards issued twice annually. Editor)

Quixotic Editor Trys Again; Assignments to District Directors: WHO'S WHO IN AIFRB

As a reminder to District Directors who have misplaced (= don't remember ever seeing, totally forgotten, disposed of immediately, etc.) original assignments (February 1997) to produce copy for Who's Who in AIFRB. I am reprinting and slightly modifying the assigned dates. Who's Who is a very popular feature and I need the Directors' help to continue it. Don't view this assignment as work; see it as a way to get even with some deserving AIFRB member.

On't view this assignment as work; see it as a way to get even with some deserving AIFRB member.

The truth is appreciated but not required and is rarely as enjoyable as artful fabrication. Please have your assigned date attooed on somebody part you view daily and engraved on your bathroom mirror. Pass along the mirror, and a skin graft with the tattoo to your successor should you leave the Board of Control. The assignments are:

Wing, June 10, 1998; Davis, July 15, 1998;

Warkentine, August 30, 1998; Nance, Nov. 1, 1998;

Pearce, January 3, 1999; Palmisano, March 1, 1999;

Donnelly (or successor), May 1, 1999; Passino-Reader, July 1, 1999;

Southward, September 1, 1999; Hill November 1, 1999

Moore, January 1, 2000; Schmidt, March 1, 2000; Panek, May 1, 2000; Collins, July 1, 2000.

My spear may be bent but it ain't broken, giddyup Rocinante. tattooed on somebody part you view daily and engraved on your bathroom mirror. Pass along the mirror, and a skin graft with the tattoo to your successor should you leave the Board of Control. The assignments are:

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My spear may be bent but it ain't broken, giddyup Rocinante.

AIFRB Members at Work: Current Status: Atlantic and Gulf Menhadens

(Brevoortia tyrannus, and B. patronus) By: Douglas Vaughan and Joseph Smith

Introduction

Menhaden are a herring-like species found in coastal and estuarine waters of the U.S. Atlantic and Gulf of Mexico. They form large schools at the surface which are located by aircraft and are harvested by purse seines to produce fish meal, fish oil, and fish solubles. An active baitfish fishery along the Atlantic and Gulf coasts harvests about 5-10% of the amount landed by the industrial fishery. These fisheries are managed by individual states, with interstate coordination handled through the Atlantic States Marine Fisheries Commission (ASMFC) and the Gulf States Marine Fisheries Commission (GSMFC). Menhaden are prey for many fishes and sea birds.

In the Atlantic area, the resource is fully utilized with a long term potential yield of (LTPY) 480,000 t per year and a recent average yield of (RAY) 330,000 t per year (Table 10-1). In the Gulf of Mexico, the menhaden resource is fully utilized with LTPY of 660,000 t and RAY of 550,000 t.

Atlantic Menhaden

Atlantic menhaden occur from Nova Scotia, Canada, to West Palm Beach, Florida. As coastal waters warm in April and May, large surface schools form along the coasts of Florida, Georgia, and the Carolina's. The schools move slowly northward, stratifying by age and size during summer, with the older and larger fish generally moving farther north.

The southward migration begins in early fall with surface schools disappearing in late December or early January off the Carolinas. Atlantic menhaden may live 10 years, but most fish caught are 3 years of age or younger.

Menhaden landings rose during the 1940's and early 1950's, peaking at 712,100't in 1956 (Fig. 10-1). Landings remained high during the late 1950's and early 1960's, droppped precipitously during the middle 1960's. and remained low, bottoming out at 161,600 t in 1969. Since 1970, landings have improved but not to the levels of the late 1950's. Landings peaked in 1983 at 418,600 t. Landings have been relatively stable in recent years at about 300,000 t. While spawning stock biomass recently peaked in 1995 at about 70,000 t, recruitment to age-1 has declined over the last decade to recent lows. The commercial ex-vessel revenue of Atlantic menhaden for 1993-96 averaged \$42.7 million per year. In 1997, three menhaden reduction or processing plants were in operation, two in Reedville, Virginia, and one in Beaufort, North Carolina: the industrial purse-seine fleet was comprised of about twenty vessels.

The stock decline in the 1960's drove fishing effort southward to Virginia and North Carolina where menhaden are generally younger and smaller than those in the north. Over-utilization owing to "growth overfishing" (catching too many fish before they grow to full size) has been a prime management concern for this stock. While maximum spawning potential estimates have been low (10%), estimates of spawning stock biomass have rebounded from the very low levels of 1965-75, although not to the very high level of the late-1950's. A new management plan was adopted by the ASMFC in September 1992 which provided for an annual review of six "trigger" variables (landings in weight, percentage of age 0 and adults in numbers in the landings, recruits to age 1, spawning stock biomass, and maximum spawning potential). Exceeding pre-specified levels of trigger variables in conjunction with ancillary information will determine the need for specific management actions.

Gulf of Mexico Menhaden

Gulf menhaden are found from Mexico's Yucatan Peninsula to Tampa Bay, Florida. They form large surface schools that appear in the nearshore Gulf waters from April to November. Although no extensive coast-wide migrations are known, some evidence suggests that older fish move toward the Mississippi River delta. Gulf menhaden may live to age 5, but most of those landed are ages 1 and 2. In 1997, active Gulf menhaden reduction plants were located in Moss Point, Mississippi, and in Empire, Morgan City, Intracoastal City, and Cameron, Louisiana; about fifty purse-seine vessels operate in the Gulf.

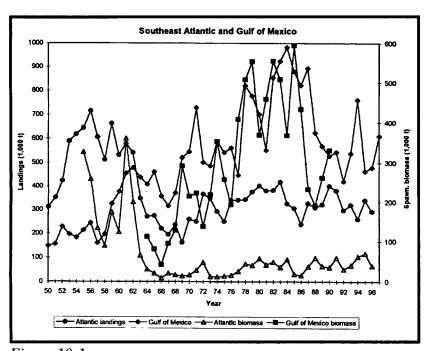


Figure 10-1

Historically, landings rose from after World War II to a peak of 982,800 t in 1984 (Fig. 10-1). Landings were generally high during the mid 1980's (greater than 800,000 t for 1982-87), but they declined steeply from 894,200 t to 421,400 t between 1987 and 1992. During this period (1987-92), the number of processing plants declined from eight to six, and vessels from 75 to 51. Although catch per unit of effort (expressed as t per vessel-ton-weeks) showed a similar decline (1.48t/vtw in 1987 to 1.03 t/vtw in 1992), CPUE is not useful as an index of population abundance for menhaden. The commercial ex-vessel revenue for Gulf menhaden for 1993-96 averaged \$63.5 million per year. Landings during 1993-97 have averaged 571,000 t. Landings in 1994 of 761,600 t were the greatest in the past ten years.

Because Gulf menhaden has a short life cycle and a high natural mortality, "growth overfishing" has not been a management concern. Management is coordinated through the GSMFC, and consists of a 28-week fishing season (mid-April through November; recommended in fall 1992) and closure of inside waters across the northern Gulf of Mexico. The most recent revision to the Gulf menhaden FMP was completed in 1995.

Issues

Management Concerns

Atlantic menhaden continue to be growth overfished, which reduces the opportunity for greater weight production. Of greater concern is the decline in recruitment noted since 1989 (1988 year class). This is somewhat tempered by the recent high estimates for spawning stock biomass (peaking in 1995). Additionally, social concerns have resulted in numerous area closures along the Atlantic coast. Gulf menhaden landings have declined greatly since the mid

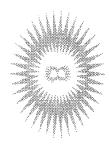
1980's, however, estimates of maximum spawning potential remain high (about 40%).

Transboundary Stocks and Jurisdictions

Because this resource migrates long distances along the coast, interstate coordination of menhaden management is required for Atlantic menhaden along the U.S. Atlantic coast and Gulf menhaden along the northern Gulf of Mexico through the marine fisheries commissions. During the late 1980's and early 1990's, fish at processing plants in New Brunswick and Nova Scotia, Canada, were caught off Maine by U.S. vessels and transported to Canada for processing.

Bycatch and Multispecies Interations

Two Saltonstall-Kennedy studies funded in 1992 that investigated by catch in the Atlantic and Gulf menhaden perse-seine fisheries showed very low by catch incidence (<0.1% of other species). The importance of menhaden as prey for other species should be considered with respect to multispecies resource management. •



The Second William R. and Lenore Mote International Symposium in Fisheries Ecology Essential Fish Habitat

Essential Fish Habitat and

Marine Reserves

November 4-6, 1998 Sarasota, Florida

Sponsored by

- ♦ The Florida State University Mote Endowment
- ♦ The Institute for Fishery Resource Ecology (a partnership between Florida State University and the The National Marine Fisheries Service Southeast Fisheries Science Center)
- National Marine Fisheries Service, Office of Habitat Conservation
- U.S. Fish and Wildlife Service Southeast Region
- ♦ The Curtis and Edith Munson Foundation
- ♦ Marine Fisheries Section of the American Fisheries Society
- ♦ Center for Marine Conservation
- ♦ Environmental Defense Fund

Symposium Format and Topics

Invited and contributed papers in the symposium will address the following areas:

Selection of essential fish habitat and marine reserves including:

- · site protection
- conservation
- · enforcement issues influencing site-seleciton

Management of essential fish habitat and marine reserves including:

- · habitat requirements
- site location changes in response to environmental factors
- site enhancement
- human impact on chosen sites

Function of essential fish habitat and marine reserves including:

- establishing the goals of marine reserves
- how marine reserves function in the context of their ecosystems
- assessing the success of designated essential fish habitat and established marine reserves

Population-level effects of essential fish habitat and marine reserves including:

- the consequences of altered selective regimes
- the impact on recruitment dynamics
- whether marine reserves should include source, sink, and delivery habitats

Social aspects of essential fish habitat and marine reserves including:

- cost-benefit analyses
- legal issues

Invited Papers: Featured Speakers

The following is a partial list of speakers to be featured at this year's conference.

Callum Roberts, University of York, England Colin Buxton Australian Maritime College, James Bohnsack, National Marine Fisheries Service Robert Warner, University of California, SantaBarbara, Carl Walters, University of British Columbia, Larry Crowder, Duke University, Dan Simberloff, University of Tennessee Tundi Agardy, Conservation International, Marc Mangel, University of California, Santa Cruz, Robert Holt, University of Kansas, Tony Pitcher, University of British Columbia, Joshua Nowlis, National Marine Fisheries Service, Dan Pauly, University of British Columbia, Alison Rieser, University of Maine, Christopher Koenig, Florida State University, Charles Peterson, University of North Carolina, David Evans, National Marine Fisheries Service, J. Walter Milon, University of Florida

Contributed Papers or Posters

There will be a limited number of contributed paper and poster sessions.

Abstracts and Abstract Deadline

Abstracts should reflect work in one of the topic areas and be no longer than 250 words in length. The deadline for submission is June 1, 1998. Submit by email, or send a copy on computer disk to: Dr. Felicia Coleman, Institute for Fishery Resource Ecology, Department of Biological Science, Florida State University, Tallahassee, FL 32306-1100. Voice: (850) 644-2019, FAX: (850) 644-9829, email: coleman@bio.fsu.edu. Please include full contact information for all peresenters (name, affiliation, address, phone number, and e-mail).

Second Mote Symposium Steering Committee:
David Conover, FSU Mote Eminent Scholar (SUNY Stony Brook), James Bohnsack (National Marine Fisheries Service), Paul Dayton (University of California, San Diego), Churchill Grimes (National Marine Fisheries Service), Christopher Koenig (Florida State University), Kenneth Leber (Mote Marine Laboratory, John Ogden (Florida Institute of Oceanography), Joseph Travis (Florida State University), Felicia Coleman, Chair (Florida State University)

Registration Information

The registation fee is \$185. Make checks payable to Florida State University. For registration information call the center for Professional Development Registrar at (850) 644-3806.

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SPEAKING FOR THE FISH A One-Day Workshop for the Citizen Conservationist

A workshop on the citizen's role in U.S. Marine Fisheries Management Presented by the Center for Marine Conservation in cooperation with the Environmental Defense Fund and the National Audubon Society

Hotel Ponce de Leon St. Augustine, Florida June 6, 1998

Announcing

A workshop on the citizen's role in reversing the decline of U.S. marine fish populations through the management process

Well over a third of the commercial fish populations off the U.S. coastline are being overfished beyond their capacity to sustain themselves. Entire ecosystems are being altered and fishing communities face a difficult and uncertain future. According to the United Nations Food and Agriculture Organization, some species of marine fishes are in danger of biological extinction due to overfishing and habitat destruction. Together, we must bring a long-term sustainable approach to fisheries management before it is too late.

This workshop will feature group discusions and presentations by fishery experts.

The cost of the workship is \$20.00. This includes the registration fee, meals, and workshop materials. If you would lke to register, or have any questions, please call our conference coordinator, Sharon Tryon at 202-857-5561.

The Peter A. Larkin Memorial Fund

The Peter A. Larkin Memorial Fund was festablished in memory of Peter Anthony Larkin, C.M., O.B., F.R.S.C.; M.A. (Sask.), D. Phil. (Oxon), D. Sc. (UBC), University Professor Emeritus, renowned leader in fisheries science, and an active and honored member of the AFS. The fund provides annual travel support awards for deserving graduate or exceptional undergraduate students from Canadian universities to atend the Annual Meeting of the AFS. Students who are active in aquatic science are welcome to apply. Successful applicants will be chosen by the Canadian Aquatic Resources Section (CARS) of the AFS based on academic qualifications, relevance of their research to current fisheries issues in Canada, their intention to present a paper or poster at the conference, and their written response to the question of why they wish to attend. Support for travel shall not exceed \$500.00 (U.S.) per award. Interested students should forward their application by May 15 to the President of the canadian Aquatic Resources Section of AFS, listed in the AFS Membership Directory and Handbook, the CARS newsletter or on our WEBSITE: www.umanitoba,ca/outreach/cars From Fishing Lines II(3) - March, 1998

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Atran finds Wise Wise

I am writing to express my complete agreement with the letter from John P. Wise in the January-February issue of Briefs, expressing opposition to the "Ten Worst Instances of Fishery Management" list. This has no scientific basis whatsoever. It encourages participants to take complex fishery management issues and reduce them to one or two sentence sound bites, often without a full comprehension of the issues involved. Furthermore, it encourages anonymous contributors to push their personal agendas at the expense of fishery managers who are attempting to deal with complex management issues in a responsible manner.

Let me give you one example. Gulf of Mexico gag are on the list of nominations. As a biologist with the Gulf of Mexico Fishery Management Council, I am directly involved in management of this stock. anonymous contributor of this nomination stated as his reason for making this submission, that there is "no protection for highly vulnerable spawning aggregations". inference is that this shows the stock is being mismanaged. Not only is this incorrect, it is an outright lie. The largest gag spawning aggregations are well offshore and out of range of many fishermen. Gag, along with other groupers in the Gulf of Mexico, are actively managed with a minimum size limit, a recreational bag limit, a commercial quota, a moratorium on issuing of additional commercial permits, mandatory logbook reporting, gear restrictions, and periodic stock assessments. Both of the last two gag stock assessments show the spawning of potential ration above the overfishing threshold.

(The SPR as used in the Gulf evaluations has never been proven

useful for sex switching species like gag. The current proportion of males for gag in the Gulf is less than five percent whereas the proportion for unfished populations is over [probably substantially over] 20 percent, Editor.)

There has recently been concern about an observed reduction in the proportion of males in the population and legitimate debate as to how much of a problem this may be to the stock. There is also concern that the minimum size limit, which is currently below the size at 50 percent maturity, should be increased. However, the most recent gag stock assessment from NMFS has not yet been subjected to a peer review by a Reef Fish Stock Assessment Panel and Scientific and Statistical Committee. That review is scheduled for this summer. Following the peer review and Panel recommendations, the Gulf Council will decide whether additional management measures are needed. The Florida Marine Fisheries Commission, less burdened with bureaucratic overhead, is already proceeding with action to increase the size limit and reduce the bag limit for gag in state waters, and the Gulf Council may well follow suit once it has all the information.

A possible spawning area closure, which is the personal agenda of the nominator, is also under consideration, but such action may be deferred while the Council develops criteria for establishing marine reserves as part of a whole ecosystem approach to management. The gag stock in the Gulf of Mexico may be in need of some additional management measures, but it is far from being mismanaged. On the other hand, if the Council were to accede to the nominator's wishes and rush in with new management measures without a peer review of the scientific analyses, that would be mismanagement.

In looking over the list of nominations in the last two issue, it is innuendo, peppered with unsubstantiated statements, and personal pet peeves. Statements such as "apparent severe overfishing", "apparent elimination of the stock", and "appears to be on the brink of extinction" appear throughout the list. One nomination resulted because the nominator doesn't like bag limits, another because the nominator doesn't like size limits. Disagreeing with one management measure out of an overall plan, and pointing out only the bad and not the good that may result from one measure, does not make an overall fishery management plan a case of bad management. There are multiple approaches to management for any given stock, and each has its good and bad points. Without a thorough evaluation of a fishery and the circumstances surrounding it, it is impossible to make an objective and professional judgement as to the adequacy of that management program. This irresponsible list reflects poorly on the professionalism of the AIFRB and its membership, and has no business appearing in the newsletter of a supposedly responsible scientific organization.

For examples of scientifically valid reviews of fishery management, one need only look on page 8 of the January-February issue of Briefs, which contains articles on recently completed evaluations of Gulf of Mexico red snapper and Northeast groundfish management. A series of international scientific panels spent several weeks evaluating management of Gulf of Mexico red snapper and, while finding the data and methods used to be basically sound, produced

a detailed report with recommendations for improvement. In the Northeast, the National Academy of Sciences (NAS) reviewed recent management of the Northeast groundfish stocks, and found that strong management actions taken by NMFS and the New England Fishery Management Council were warranted.

Interestingly, this finding is reported in the same issue of *Briefs* that list Northeast groundfish as one of the worst instances of management. Are you saying that correcting past mistakes and following a course of actin endorsed by the NAS is an example of bad management?

Enclosed with my copy of the January-February issue of *Briefs* was the AIFRB code of conduct. Principles in that code include: 3) Uphold the honor and dignity of the profession and avoid all conduct likely to injure it;

8) Discourage anonymous reports to allow proper credit and define responsibilities; and 10) Discourage the spreading of untrue, unfair, and exaggerated statements with respect to fishery biology. This list is a violation of all these principles, and an attack on those of us working for responsible fisheries management. I call for an immediate cessation to this egregious and malicious activity.

Sincerely, Steven M. Atran Population Dynamics Statistician Gulf of Mexico Fishery Management Council cc: Clark Hubbs

Editor's Response: My thanks to Steve for having the gumption to disagree and for taking the time to write. I would dispute a majority of the arguments Steve has made but Briefs should not be a vehicle for excessive display of the Editor's opinions. Two points deserve clarification. The nominations for the "ten worst" list were reduced to

"one or two sentence sound bites" by me not the nominators who often provided substantial documentation. The listings to date were only of nominations - not of a final selections and were only to allow the membership to see what ideas were on the table - thus short and sweet (on apparently, a little acrid). As for dishonoring our profession, I hope Steve and others see clearly the distinction between our profession, fishery research biology, (horrible noun string) and the practice of fishery management which is all too often conducted or heavily influenced by people who are not researchers or biologists and who neither understand nor appreciate research or biology. Witness, in Steve's own bailiwick, the recent decision of the Gulf Council to maintain the red snapper catch at (as I recall) nine million pounds despite the findings of a congressionally mandated expert review, with concurrence from the Council's own stock assessment panel and statistical and scientific committee that the catch be reduced to two thirds or less.

The committee evaluating the nominees for "ten worst" has yet to conclude its work. It will continue to accept nominations, criticisms and encouragement.

Exotic Of The Month — Mud Snail In Lake Ontario

To the confusion of contaminants such as PCBs, PBBs, Mirex, Dieldrin, Dioxin, and dozens of others, must be added an ever-growing list of exotic invaders. Keeping informed of the latest impacts on the Great Lakes is no easy task.

A recent arrival is the New Zealand mud snail, which has shown up in great numbers in Lake Ontario sediments. The mud snail has some significant advantages in terms of survival and propagation. Not only are natural predators lacking, but if the snail is eaten by a fish, it is indigestible and passes through the gut intact. the snail is also parthenogenic - females do not require a male to reproduce, and 95% of the snails are female.

The snail's presence in the Great Lakes was first discovered by Danuta Zaranko, an environmental consultant from Guelph, Ontario. Zaranko says the snail first appeared in sediments from Wilson, New York, 18 miles east of the Welland Canal. The exotic appeared in samples from 7 of 26 sites. Speculation is that the mud snail entered the Great Lakes in the ballast of a freighter from Europe.

The snail has already infested U.S. waters in the Rocky Mountains, in Idaho's Snake River where it now reaches densities of 40,000 per square yard, comprising more than 85% of all the river's snails. The mud snail has since jumped the Continental Divide and now infests the Madison River, which runs through Montana and Wyoming.

Mud snail densities in Lake Ontario have increased, but it has not spread to the other lakes and densities are less than those in the Snake River or in Europe. Zaranko said the mud snail might be limited to water less than 82 feet deep, with greater success in rivers and streams.

Less prolific than zebra mussels, the mud snail also lacks the ability to attach to hard surfaces and accumulate into thick mats. It will, however, compete with indigenous mollusks for food and crowded them out of their habitat. It could also interfere with spawning by covering the surface of spawning beds.

Reprinted from The Great Lakes Fisherman, November - 1997 and from Fishing Lines II (3) - March, 1998

Life is Never Simple... is it? The catch: clean water, disappearing lobsters

funny thing happened when new secondary sewage treatment plants went on line several years ago in Salem and Lynn (MA) and dramatically cleaned up the human waste pouring into their harbors: the lobster disappeared, according to lobstermen who once filled their traps.

Now the leader of the state's lobstermen and a leading marine advocate fear the same thing will happen in a prime lobstering ground as a result of the biggest secondary-treatment plant in the country, the \$3 billion Deer Island plant that later this year is set to start discharging highly treated effluent nine miles into Massachusetts Bay.

Although their concern seemingly turns the logic of the epic Boston Harbor restoration project on its head, lobstermen say they have good cause to fear that the cleanup will ravage the state \$100 million lobstering industry.

At an Environmental Protection Agency hearing scheduled tonight in Nahant, lobstermen and others from groups such as Nahant-based Safe Waters in Massachusetts will be urging the EPA to ensure that the new outfall pipe's impact on lobsters is carefully watched and corrected.

Until several years ago, lobstermen reaped bountiful harvests from waters off Deer Island, Lynn, and Salem. But "since the late 1980's, those areas have become dead, totally dead, for lobster," said William Adler, executive director of the Massachusetts Lobstermen's Association, which represents 1,000 fishing crew members and dealers.

"We're saying go find out what's wrong in those places before you turn on this big pipe, the mother of all pipes, make them do the tests," said Adler. "Make them fix what is wrong and then they can open the valve."

Joseph Ayers, director of Northeastern University's Marine Science Genter in Nahant, said, "We do know that in every place where they run a secondary-treatment, plant, it wipes out the lobsters. Why, we really don't know."

Ayers said researchers can rule out the possibility that the tasty crustaceans had been feasting on human wastes removed from the sea once the plants started operating.

The more likely explanation, Ayers said, may lie in the toxic effects of dechlorinating chemicals used to purify the treated water leaving the plants. Or it could be related to the small particles produced by secondary-treatment. "You very quickly have a situation where the bottom of the ocean looks like the surface of the moon" near an outfall poipe, harming lobster habitat, Ayers said.

Although the impact on lobsters has been most pronounced off Lynn and Salem, Adler said he also has heard reports from lobstermen working waters near Hull and Scituate that secondary-treatment plants there seemed to wipe out lobster grounds.

Thomas B. Powers, deputy director of the Massachusetts Water Resources Authority, which operates the Deer Island plant and outfall pipe, said the agency is willing to consider closer monitoring to reassure lobstermen.

"We find it puzzling because the water is going to be dramatically cleaner, the effluent is going to be dramatically more diluted, and there should be 90 to 99 percent less chlorine coming out" once the outfall pipe is operating, Powers said.

"We're pretty confident that this is not going to harm lobster, but we agree that only a fool is positive, and you've got to monitor and make sure."

The EPA hearing at Nahant Town Hall at 6 p.m. has been scheduled to allow citizens to suggest changes to the conditions the agency has propose for the outfall pipe's operations. It will take comments through May 4 and issue the license in July.

Already, the EPA has called for \$2.5 million-a-year scientific monitoring effort by the MWRA, including taking data from 43 buoys to track the movement of 158 pollutants. An independent advisory board will be created to review the data and recommend changes in MWRA operations to reduce problems.

However, Adler and Ayers are critical of the EPA's proposal to use proxy organisms, such as tiny shrimp, to judge whether effluent is harming marine life. They are urging specific monitoring of lobster larvae and tagging of egg-bearing female lobsters near the outfall pipe diffusers to see how their migration and survival are affected.

However, some MWRA advisers have been reluctant about running tests of impact of effluent water on lobster eggs because such a large number of lobster eggs naturally die off regardless of the presence of treated sewage.

Powers said some MWRA officials think the question of how to test impacts on eggs should be left to the science panel that would be formed.

In 1996, Massachusetts lobstermen brought in more than 15 million pounds of lobster with a dock value of \$50 million. The economic benefits to processors, fish shops, and restaurants are generally estimated to add at least \$50 million more.

As fishing grounds on Georges Bank have been harvested to near depletion, lobsters have come to be the state's most lucrative marine species, Adler said.

By some estimates, a third to a half of the state lobster catch comes from or migrates through areas that may be affected by the plume from the outfall pipe. Lobstering fleets from Beverly, Boston, Gloucester, Hingham, Lynn, Manchester-by-the-sea, Nahant, and Saugus - all of which typically land more than 100,000 pounds every year could particularly suffer if the new outfall pipe harms their catches, Adler said.

"There are profound and dangerous ecological changes going on in New England coastal waters," said Polly Bradley of Safe Waters in Massachusetts. "Our lobster industry could be the next fishery to crash," doing severe damage to an industry that is a major part of the region's cultural identity and tourist appeal.

Bradley said the added costs of the monitoring she and other environmentalists want "would pale in comparison to the potential economic consequences of making a profound error."

error."
From Boston Globe - April 16, 1998
Thanks to Jack Pearce for this submission

Virginia acts to protect SAV beds

Chincoteague Bay site to be off-limits to clam dredging by Karl Blankenship

Underwater grasses have been given a safe haven in Virginia's part of Chicoteague Bay.

The Virginia Marine Resources Commission in January agreed to set aside 14 square miles of underwater grass beds on its side of the state line as a sanctuary from commercial clam dredging.

Though not in the Chesapeake, it was the first time either Bay state had set aside an area specifically to protect grasses, which are increasingly being recognized as some of the most important aquatics in the world.

"Virginia bit the bullet and should be commended for their action,", said Bob Orth, an expert on sea grass at the Virginia Institute of Marine Science who has been urging both Maryland and Virginia to take stronger measures to protect grass beds.

VMRC's action came as protection for underwater grasses — known as submerged aquatic vegetation, or SAV for short — is getting increased attention. Legislation is pending in both the Maryland and Virginia — General Assemblies that would lead to further protection for grass beds. Also, the Maryland Department of Natural Resources has a special task force studying the issue that could make management recommendations this spring.

Grass beds are important because they provide critical habitat for crabs and many types of juvenile fish. Studies, for example, have found that juvenile blue crab density is about 30 times greater in grass beds compared to nearby unregulated areas. Grasses also provide food for waterfowl, help to filter the water and buffer shorelines from erosion.

But grasses in the Chesapeake cover only about 64,000 acres, about one tenth of their historical abundance. Most of the decline stems from water pollution, which clouds the waters—especially algae blooms caused by excess nutrients— and prevents the grasses from getting sunlight.

In recent years, the Bay Program has adopted policies stressing the importance of protecting grass beds. Many activities that disturb the bottom, such as pier construction and channel dredging, are regulated by the states. But fishing activities that disturb grass beds typically are not regulated.

The clamming issue arose when Orth

discovered heavy damage in grass beds on Virginia's side of Chincoteague Bay while examining aerial photos taken as part of an annual survey, funded by the Bay Program, to track grass bed trends in the Chesapeake and behind barrier islands on the Atlantic Coast.

Though taken from 12,000 feet, the photos clearly show huge, donut-shaped scars where dredges had ripped up the grasses on Virginia's side of Chincoteague Bay, which is between the Delmarva Peninsula and Assateague Island.

The photos also show long, snake-like trails through hundreds of acres of grass beds on Maryland's side of Chincoteague Bay — as well as parts of Chesapeake Bay — which appeared to have been caused by hydraulic clam dredging.

Orth and other scientists have been calling for the states to take action to protect the grass beds from such impacts. They say the dredging not only rips up the grasses, but also disturbs the sediment, possibly hindering grass recovery in the area.

The VMRC responded in January, when it unanimously voted to set aside 9,000 acres — about half of Virginia's portion of Chincoteague Bay — as a grass bed preserve in which commercial clam and crab dredging would be banned.

Commercial clammers agreed to the plan after an earlier proposal, which would have closed an even larger area, was scrapped. The adopted plan would protect all the grass beds, as well as a 200-meter buffer zone.

The sanctuary will be reexamined in a year to see how the protection is working and whether the borders should be changed, Orth said. "We know that these beds are expanding, so obviously what we would want to do is protect all the new areas."

VMRC members noted that it would be difficult to enforce the sanctuary's borders, and said that clammers would be on the "honor system." But they noted that any damage to the beds would likely be spotted in this year's aerial survey, and could trigger further restrictions.

"The pictures are worth a thousand words," said Mike Barnette, a member of the VMRC staff who worked on the issue. "We have the regulations there, and we're just going to see if that is sufficient, or if more or less action needs to be taken next year."

One of the tough issues will be helping clammers identify where the grass beds are. Orth said that turbid water conditions could easily obscure the grasses.

"We're going to have to work with the VMRC to help the watermen better locate

where these areas are, so they can stay out," he said. Eventually, he said, clam dredgers may need to be outfitted with Global Positioning System devices, which are becoming less costly, along with accurate maps of SAV distribution to help them locate grass beds.

Orth said the Chincoteague beds are especially important because, ultimately, they will provide the seed source for new grass beds in other areas nearby, which have lacked SAV for decades. "If sea grasses are going to really return to the other areas south of there, these beds are going to be the donor beds for plants to spread," he said.

Meanwhile, lawmakers are eying a variety of potential actions to further bolster grass bed protection, largely stemming from interest by members of the Chesapeake Bay Commission, an advisory panel made of legislators from Maryland, Virginia and Pennsylvania.

In Virginia, a bill introduced in the House by Del. Tayloe Murphy would request the state's delegation to the Chesapeake Bay Commission to study ways to protect grass beds and make recommendations next year. An area of particular concern is how to resolve conflicts between grass bed recovery and the aquaculture industry, which leases some of the same shallow water habitats from the state for their operations.

In Maryland, legislation in the state Senate would require the DNR to identify grass beds and close them, along with a 150-foot buffer zone, to hydraulic dredging for soft clams.

Also in Maryland, a special task force of environmentalists and watermen convened by the DNR is trying to reach agreement over what recommendations for grass protection they should make.

The panel probably won't make Baywide recommendations before spring, but members are seriously studying maps to identify areas that could be singled out for immediate protection, said Mike Naylor, a member of the DNR team a working with the task force.

"There are some lines being drawn on maps and getting moved back and forth, and that's a rally encouraging sign," Naylor said.

In addition, the Bay Program is working on letters to send to the states encouraging the development of such policies. "The responsible thing for the Bay Program, which has promulgated numerous program policiting the importance of grass beds, the governors themselves have sign say something forceful to the states aid.

From Bay Journal

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...BRIEFS...

JULY-AUGUST, 1998

AIFRB Distinguished Service Award — To: Joseph Rachlin



Professor Joseph Rachlin

The Board of Control, at its August 1997 meeting in sunny Monterey, California voted to award its third AIFRB Distinguished Award to Dr. Joseph W. Rachlin, Treasurer since 1987. The Award will be formally presented at the 1998 Board of Control Meeting in Hartford, Connecticut. Joe, currently the Dean of the Division of Natural and Social Sciences in Lehman College of C.U.N.Y., joined AIFRB as a member in 1973 and was promoted to Fellow in 1976. His distinguished service to AIFRB is noted by his continuous involvement with this Institution. From 1986 to 1992 Joe held the position of District Director of the NY-NJ District (currently the Keystone District). While performing the duties of this position, Joe agreed to chair the Travel Assistance Award, a position he held from 1987 to 1993. During his tenure as chair of this committee, he worked toward changing its structure from that of a Travel Award to one of being a Research Assistance Award. One would think that this would be enough to keep him busy, but not Joe. In 1987, when then Treasurer Dr. Charles (Pete) Cole announced that he could no longer continue on as treasurer, Joe Rachlin gladly stepped in. Working closely with Pete, Joe was able to assume this responsibility with minor difficulty. As many of you know this is not any easy job, but Joe continues in this capacity and performs his duties with a smile and a frugal hand. By working with and advising Board of Control members on the state of the budget, Joe has worked hard at keeping the Institute in the black. Anyone who has attended AIFRB Board of Control meetings or has read the abbreviated minutes of those meetings, as published in BRIEFS, can not help but notice that Joe is a man willing to work for the Institution. He continually agrees to serve on ad

hoc committees and take his role on these committees seriously. He doesn't just stand by but helps get things done.

With such involvement in the Institute's life you would think that Joe would have little time for anything else. Well think again. Let's take a minute to look at the professional life of Joe Rachlin outside of AIFRB. Joe received the BS degree in 1957 from The City College of New York. After graduation, Uncle Sam called him into the Army. So with advanced degrees placed on the back burner for two years Joe shipped off to Kentucky where he served in the US Army Medical Research Laboratory as a microbiologist. He was stationed for a time in Greenland where he studied and published on the E. coli problem at Camp Tuto at the base of the ice cap. After his tour of duty, Joe returned stateside and enrolled at New York University where he earned the MS degree in 1962 and the Ph. D in 1967 in biology with a specialization in fishery science. Upon completing his doctorate, Joe joined the faculty of the Department of Biological Sciences at Lehman College (CUNY) at the rank of Instructor. Ten years later, having moved quickly through the Professorial ranks, he was enjoying the privileges of Full Professor. Joe attributes his academic success to his love of teaching, research, and diversity of his research interests. To date Joe has published over 50 papers in peer reviewed journals and as many abstracts. His research has and continues to focus on such topics as: fish ecology - population dynamics and niche overlap; fish systematics, phylogeny and cytogenetics; aquatic toxicology; fish tissue culture; diet of fishes; and life history of marine invertebrates. Within the last year Joe has added a new dimension to his research interests by evaluating subfossil fish and invertebrates from a third millennium BC site at Gahzi Shah, Pakistan. When asked why so many different interests, Joe simply responds by saying "My eclectic research interests help keep me from being bored. It also gives my students the opportunity to explore many different aspects of research during their graduate training so that when they finish up and leave my lab they are much more marketable."

Joe has also been very successful in obtaining funds to support his research. Throughout his career Joe has had well over 3/4 million dollars in grant support. In recognition of his expertise in his field, or should we say fields, Joe had been elected Adjunct Professor of Environmental Medicine of NYU College of Medicine and Adjunct Curator at the NY Botanical Gardens. He is also a Research Associate in the Department of Ichthyology at the American Museum of Natural History. In addition, Joe is a fellow of the International Academy of Fishery Scientists headquartered in Rome, Italy and is listed on the F.A.O. United Nations

(Continue on page 4...)

WHO'S WHO IN AIRFB STEVEN K. DAVIS

Steve Davis is a long-standing member of the Northern Alaska District. Elected to the AIRFB in 1983, he was later promoted to Member in 1993, Steve has been active in fisheries management off Alaska and has become an accomplished expert in evaluating environmental impacts of industrial development on fisheries, fish and other natural biological resources, and the subarctic ecosystem. A graduate of the University of Puget Sound, his professional career began following completion of his M.S. degree from the University of Washington School of Fisheries in 1981. Fortunate enough to have two job offers, he selected Alaska and a job with the North Pacific Fishery Management Council over a research position in Texas in part due to his love for climbing the mountains. His mentor was Jim H. Branson, the Council's first Executive Director. Steve's first assignment was to develop a fishery management plan (FMP) for the Bering Sea and Aleutian Islands king crab fishery. Steve quickly learned how to work within the delicate political environment that surrounds Alaska fisheries, and he was very successful bridging the gaps between the scientific community and the fishing industry. Working closely with Alaska Department of Fish & Game biologist Fred Gaffney and National Marine Fisheries Service biologist Jerry Reeves, Steve developed a "frameworked" FMP that avoided the necessity of frequent amendments (a long and tedious regulatory process), a major pitfall of all other FMPs. This framework FMP was the first of its kind in the country and was the first federal plan that delegated regulatory authority to a single state. It won accolades from both fishery managers and the industry alike.

Following this success, Jim Branson tasked Steve to lead an interdisciplinary team to overhaul the Council's Gulf of Alaska Groundfish FMP, one of the oldest federal fishery management regimes in the country. With NMFS's Jim Balsiger, Ron Berg, and Joe Terry, the team in 1985 developed management measures that were far ahead of their time. Such concepts as frameworked fishing seasons; an overall Total Allowable Catch, with speciesspecific "target quotas" and "bycatch quotas"; and "no-fishing" thresholds based on evidence of poor recruitment and low estimates of biomass, were not widely accepted by the Council or the fishing industry at the time, yet, all have become important principles and management tools in U.S. fisheries during the 1990's. During this period Steve Davis served as a technical advisor for the International North Pacific Fisheries Commission and in 1988 was its Groundfish Committee Chairman. Steve also participated in a number of US-Japan, US-USSR bilateral meetings where considerable information was exchanged pertaining to the status of stocks and the results of fishery research in the North Pacific Ocean and in the Bering Sea.

It was in 1984 that Steve Davis realized that the incidental take of fish species in commercial operations (i.e. bycatch) would eventually become the primary issue facing fishery managers in Alaska and around the world. He developed the first model for estimating bycatch of halibut in the Gulf of Alaska groundfish fisheries. This model was used extensively by the Council for many years in setting annual fishery quotas. Mr. Davis went on to promote solutions to the "bycatch problem" by developing new management measures aimed at reducing bycatch. He has worked

to share this experience by serving on several international bycatch committees and has assisted in organizing a number of important symposia on this issue.

In 1988, he was promoted to Deputy Executive Director and he worked with Clarence Pautzke (the Council's new Executive Director) to usher in a new era of fisheries management in Alaska; one dominated by allocation issues among domestic fishermen. In 1991, Mr. Davis joined LGL Alaska Research Associates, a small ecological consulting firm. Much of his work centered on Council-related activities and



Steve Davis (*left*) with former US Ambassador for Fisheries, Edward Wolfe on the summit of Mt.Baker, WA (10,250') in 1996.

analyses as well as addressing regulatory issues facing industry sectors from Alaska to Texas. Bycatch remained at the forefront, and he published several papers on the subject. Two other projects particularly stand out. The first focused on finding a better way to communicate (if not evaluate) fishery data. Based on his exposure to LGL's use of geographical information systems (GIS) technology in studying the ecological impacts of oil development in the Arctic, he won a Saltonstall-Kennedy Grant to develop an integrated fisheries GIS. His prototype system demonstrated the utility of such a tool in stock assessment, in evaluating bycatch management alternatives, and for in-season management.

The second project of note was Steve's appointment to the National Research Council's Bering Sea Ecosystem Committee. This committee, chaired by University of Washington's Robert Francis, prepared a very thorough review of the state of knowledge on the Bering Sea ecosystem and they identified several areas of concern. This study has since been used by the NMFS, the US Department of State, and Congress in updating laws, treaties, and research programs. Steve's role on the committee was to serve as its fishery and marine policy expert.

In 1997, Steve Davis joined the Anchorage office of Dames & Moore, a large international environmental and engineering consulting firm. With his considerable experience with fishery, marine mammal, and other environmental laws and policies, he continues to assist both government agencies and industry in search of acceptable solutions to natural resource issues. Currently he is part of a large team conducting an environmental impact analysis of the first federal offshore oil development in Alaska history. The potential impacts of the development on coastal fish resources and marine mammals are major issues undergoing investigation. When not too busy with work or raising a family, he still climbs mountains and currently serves as the AIRFB's Alaska and Western Canada Regional Director and Northern Alaska District Director.

PROMINENT SEATTLE BIOLOGIST PASSES: DR. ROBERTR. RUCKER

Dr. Robert R. Rucker, (member, 1959; Fellow 1973; Emeritus, 1974) internationally known fishery biologist and former Center Director (1950-1973) of the U.S. Geological Survey, Biological Resources Division, Western Fisheries Research Center in Seattle, WA., died on July 16, 1998, at the age of 86.

Dr. Rucker was born January 23, 1912, in Goodhue, Minnesota and received a doctorate in fisheries biology from the University of Washington in 1944. Due to war-time necessity, he initially conducted microbiological research at the Technological Laboratory, U.S. Fish and Wildlife Service, College Park, Maryland. In 1945, Rucker transferred to the Montlake Laboratory of the US Bureau of Fisheries in Seattle. Here, he developed a pioneering fish disease research program to provide the scientific information needed to improve the survival of Pacific salmon released from federal and state hatcheries then being built to mitigate the loss of salmon runs caused by dams on the Columbia, Williamette, and other pacific northwest rivers.

In 1950, Dr. Rucker established the Western Fish Disease Laboratory at the College of Fisheries, University of Washington where he was an adjunct professor. He and his staff continued their pioneering research, developing several new and improved diagnostic and control methods for the infectious and non-infectious diseases limiting the success of the federal and state hatchery system. In 1957, Rucker moved the laboratory to the Sand Point Naval Air Station. The improved scientific capabilities of the new facility allowed the development of advanced research information in fisheries biology that is still in use today and to international recognition of both Rucker and his staff by the scientific community.

Although he retired from active research in 1973, Rucker was well known to the current staff of the USGS Western Fisheries



Research Center because he often stopped by the laboratory to see how the place was holding up without him. As stated by Dr. Frank Shipley, present Center Director, "Dr. Rucker was a pioneer in the field of fish disease research. Under his direction the laboratory grew into an internationally know fish health research organization. He was a friend to us all and foremost among the Center's emeritus scientists. His memoirs appear on the Center's home page at http://biology.usgs.gov/wfrc/.">http://biology.usgs.gov/wfrc/."

In addition to his scientific work, Rucker was an accomplished musician and played first flute in the Emeritus Symphony for many years after his retirement. He and his wife were regular supporters of both the Seattle Symphony and Seattle Opera.

Dr. Rucker is survived by his wife, Harriet Ruth; children, Richard, Frederic, and Martha; six grandchildren, and one great granddaughter.

Submitted by Gary Wedemeyer

Other Losses...

SHELBY G. GERKING 1918-1998

Fellow 1959, Emeritus 1984

Shelby D. Gerking passed away on 11 January 1998 in Tempe, Arizona after a prolonged illness. Born in Elkhart, Indiana on 16 November 1918, Shelby received his A.B. degree in Zoology from DePauw University in 1940 and his Ph.D in Zoology, under the direction of W. E. Ricker, from Indiana University in 1944. He then spent two and a half years engaged in a war research project for the U.S. Army on the effects of heat stress on men working in extreme environments. Upon returning to Indiana University as an Assistant Professor, he rose through the ranks to Professor in 1959. In the same year he became the Director of the Indiana Aquatic Research Unit, as well as the Director of the Indiana University Biological Station. Shelby moved to Arizona State University in 1967, as Professor and Chair of the Department of Zoology, serving as Chair until 1974. He retired as Professor Emeritus in 1983.

Shelby's career centered on basic and applied aspects of fish production and physiological responses to extreme environments. He started with field studies of fish movement and homing in streams, population dynamics, food supply and consumption, and nitrogen budgets, many of which are classic studies combining careful laboratory analyses of sunfish (*Lepomis*) with field observations. At the same time, he also published several papers on human physiology that derived from his World War II-related research. Later in his career he worked with his graduate students on desert pupfish (*Cyprinodon*), damselfishes (*Microspathodon* and *Stegastes*), and topminnows (*Poeciliopis*).

Over nearly a half-century, he wrote and edited three books (two with multiple editions), authored a laboratory manual, produced four movies, and published 70 research articles. Shelby served as Associate Editor of three international journals in fish biology and marine ecology (*Journal of Fish Biology, Environmental Biology of Fishes, Transactions of the American Fisheries Society*). He served as President of the American Fisheries Society in 1986-1987, as well as Treasurer of the Ecological Society of America from 1969 to 1972.

In 1955 Shelby received the Mercer Award from the Ecological Society of America for his work on food turnover in a bluegill sunfish population.

Robert J. Naiman - School of Fisheries, University of Washington

James P. Collins - Department of Biology, Arizona State University Condensed from: Bulletin of the Ecological Society of America 79 (3). July 1998



Roy Nakatani (Early 1998) Associate, 1959; Member, 1960; Fellow, 1972;

Emeritus, 1993

Donald G. Watson (Spring 1998) Member 1960, Emeritus 1997 1604 Woodburg Richland, WA 99352

Obituaries for these comrades are being sought.



(...Continued from page 1 "Rachlin")

Register of Experts on Marine Pollution. Joe served as a member of the editorial board of the *J. Freshwater Ecology* from 1988-1991 and is currently on the editorial board of *The Archives of Environmental Contamination and Toxicology*.

In 1993, the same year he was awarded the faculty research and scholarship award by his colleagues at Lehman College, Joe took on a higher administrative role at The College. He was asked to serve as the Acting Dean of the Division of Natural and Social Sciences. This administrative role put him in charge of 10 Departments (approximately 100 faculty members) and a budget of over two million dollars (excluding faculty salaries). In May of 1998, after a national search was conducted for a permanent Dean for this Division, Lehman College President Ricardo Fernandez offered the position to Joe. At this time, with the inclusion of the Departments of Health Services and Nursing, his division has become the largest academic unit at the college.

The increase in responsibilities given to Joe from all aspects of his professional life has never caused him to falter. He does it all and does it well. The old adage that says "if you want something done look for a busy person" truly applies to Joe Rachlin. He has clearly done his all for AIFRB and continues to keep us afloat by keeping a watchful eye on our treasury.

Submitted by —Barbara Warkentine,

Director - Keystone District

AIFRB Members at Work

NMFS Scientists Write Detailed Swordfish Study

More than two years of effort went into a six-volume study by Staff members of National Marine Fisheries Service's International Science and Technology Division on commercial taking of swordfish by fishermen from every nation in the world where they are caught in significant numbers.

At least seven full-time NMFS staffers and several summer interns put more than 24 months of effort into researching the fisheries of every key swordfish taking nation and compiling the results.

Staffers and their fields of expertise included:

Karyl Brewster-Geisz, United States; William B. Folsom, Africa, Middle East, North America, Western Europe; Dennis M. Weidner, Latin America; Mark R. Wildman, Asia; Frederick H. Beaudry, division chief, managed the project; William W. Fox Jr., (AIFRB fellow), Director of the Office of Science and Technology, provided fiscal; program and directorate support; Paul Lineberger of Research and Data Systems, produced graphics. The project involved much work with Commerce's Foreign and Commercial Service consulate officers overseas as well as talking with foreign government officials, business people, scholars and fishermen.

The publications carry information about such elements as catch, fishing grounds, fishing fleets, markets, bycatch and international relations.

Swordfish are what is known as a "highly migratory" species and subject to international management policies of interest to the United States.

The study is designed to accomplish two purposes: help U.S. negotiators understand the dynamics of swordfish fisheries and thus promote conservation efforts; provide data useful for assessing impact of longline and driftnet fishing methods on other fish stocks, marine mammals and sea turtles.

From: Commerce People - July-August, 1998

DISTRICTS IN ACTION

S. CENTRAL GREAT LAKES

The South Central Great Lakes District co-hosted an evening seminar with the Frank Hooper Aquatic Seminar series of the School of Natural Resources and Environment, University of Michigan, and with the USGS, Great Lakes Science Center, Ann Arbor, Michigan, on Nov. 24, 1997. Dr. Michael Jech, NOAA, Great Lakes Environmental Research Laboratory, Ann Arbor, presented the seminar titled "Fisheries and plankton acoustics: Where do we go from here?" The seminar was a broad overview of the theory and applications of fisheries acoustics in the aquatic environment. Dr. Jech recently joined the GLERL laboratory along with the new Laboratory Director, Stephen Brandt, both of whom transferred from the SUNY College at Buffalo, New York. The AIFRB hosts were Drs. Dora Passino-Reader and Neal Foster, officers of the South Central Great Lakes District. Refreshments were enjoyed after the seminar.

An abstract of Dr. Jech's seminar is below:

The use of underwater acoustics is gaining wide acceptance by fisheries scientists, ecologists, and managers for estimating abundance, density, and distributions of commercially, recreationally, and ecologically important fish species. Sound propagates through water quickly and efficiently. As sound travels through water, it scatters from objects and these echoes are used as quantitative measures of target location and size. Management applications require accurate and precise estimates of local and regional standing stocks for decisions on stocking rates and harvest quotas. Integration of trawl and acoustic survey data currently provides the best means to obtain fisheries information. Vertically and horizontally continuous maps of spatiallyindexed density and sizes are used to estimate fish abundance and to investigate spatial relationships between fish distribution and the physical (e.g., temperature, salinity, or conductivity) and biological (e.g., zooplankton distribution) environments.

Amplitude of the received echo depends on fish size, swimbladder shape, location in the acoustic beam, orientation of the fish relative to the transducer, and the insonifying frequency. Aquatic organisms are complicated scatterers by nature of their shape and composition (exoskeleton, muscles, bone, fat, presence and shape of swimbladder). These anatomical attributes coupled with behavior complicate the calculation of true fish size from acoustic measurements and will influence the precision of density or biomass estimates. Acoustic measurements alone do not ensure accurate conversion of acoustic echoes to fish length. Theoretical acoustic models of fish are needed to explain variability in back scatter measurements, to improve estimation of target size, and to improve target recognition and discrimination among types of acoustic targets. The long-term goal of our acoustic research program is to continue development of theory and measurement technology needed to identify fish species. The use of

multiple sonar frequencies greatly increases the ability to resolve echo amplitude variability inherent with acoustic measurements of aquatic organisms. State-of-the-art digital echosounders and quantitative analysis techniques are being investigated to characterize sound scattering by fish at multiple frequencies.

Submitted by Dora Passino-Reader, Director

MEMBERSHIP COMMITTEE REPORT 1998

Members: John L. Butler, Membership Chairperson; Martin Golden; John R. Moring; Bruce Wing; Barbara Warkentine; Sammy M. Ray.

The Membership Committee reviewed 30 new applications for membership and 17 requests for promotion. All new applicants were accepted and assigned a rank. All but one promotion were granted. The Board of Control (1995 meeting) assigned rank to three new to the membership. Of the 44 accepted and assigned rank, 25 have paid dues, 16 are only recently accepted and three are long overdue for dues. A breakdown of the ranks assigned follows:

associates (student) - 10; associates (professional) - 5; members - 10; fellows - 5.

The new membership was recruited by the following means: 20 verified as nominated by membership; 23 used applications on brochure along with CV.

The new membersip came from the following areas of

employment: 25% U.S. Government; 19% State; 6% Local Government; 9% Private; 9% University Employed; 31% Graduate Student.

The regions and districts of the 44 new to the membership are listed below: Alaska and Western Canada Region: Northern Alaska District--0; Southeast Alaska District--0, Northwestern States Region: Northwest Washington District--10; Oregon Southwest Washington District--3; Southwestern States and Western Mexico Region: Northern California District--2; Southern California District--4; At Large--1, Central States and middle Canada Region: At Large--3, Northeastern States and Eastern Canada Region: Capital District--1; Keystone District--1; New England District--3, Southeastern States and Eastern Mexico Region: Carolina District--3; Florida District--2, Texas District--5

PROMOTIONS GRANTED

Members: Joseph P. Foy, Gary A. De Brosse, John J. Mello Fellows: Dr. Arlo W. Fast, Dr. Mary C. Fabrizio, Dr. John J. Magnuson, Dr. John L. Butler

Emeritus: Douglas B. Jester, OK; Dr. Ronald R. Garton, OR; Dr. Janice S. Hughes, LA; Dr. Frederick A. Copes, WI; Dr. E. J. Crossman, ONT; Dr. John M. Neuhold, UT; Dr. Gene R. Huntsman, NC; Thomas F. Waters, MN; Donald J. Watson, WA; Gordon J. Peltonen, WA; Dr. Theodore Kersteter, NY; Dr. John Fryer, OR; Dr. John E. Thorpe, UK; Richard F. G. Heimann, CA; Dr. Joseph B. Hunn, MO; Dr. Phyllis B. Cahn, NY; Dr. Jack Van Hyning, AK; Richard A. Ryder, ONT

This table below summarizes by year the number of persons asigned to each category for new membership and promotions.

MEMBERSHIP SUMMARY 1979 TO 1996

(1979-80 may be incomplete)

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Year	Associate	Member	Fellow	Total	Member	Fellow	Emeritus	Total
1979	3(21%)	10	1	14	13	37	15	65
1980	13(22%)	29	7	59	4	11	4	19
1981	13(23%)	40	4	57	4	10	5	19
1982	31(69%)	12	2	45	2	3	2	7
1983	41 (59%)	27	2	70	5	7	21	33
1984	47(67%)	19	4	70	6	13	18	37
1985	26(55%)	19	2	47	10	11	12	33
1986	23(53%)	19	1	43	3	2	8	13
1987	16(35%)	28	2	46	8	10	12	30
1988	20(56%)	15	1	36	8	8	19	35
1989	12(46%)	13	1	26	2	6	15	23
1990	18(69%)	7	1	26	8	21	14	43
1991	10(43%)	9	3	23	3	2	8	13
1992	9(50%)	7	2	18	1	2	5	8
1993	11(50%)	9	2	22	10	10	16	36
1994	20(49%)	17	4	41	16	26	10	52
1995	22(69%)	8	2	32	3	2	9	14
1996	20(45%)	19	5	44	4	2	18	24
1997	9	-	-	9	_	-	-	-
1998	16	10	5	31	3	4	10	17

I want to again remind the district directors that the bylaws state "The district Directors shall be responsible for the recruitment of new members and the advancement in rank of members in their districts and shall report annually theron to the Board of Control."

ANNUAL REPORTS:

DISTRICTS

Editors Note—Not all reports were available at press-time. The remainder will be in the next issue of <u>Briefs</u>.

CAROLINAS

While informal AIFRB district meetings were held in conjunction with other events, no formal meeting was held. However, a significant proportion of district members regularly interact at these other events, which include meetings of two fisheries organizations in South Carolina (South Carolina Fishery Workers Association, South Carolina Chapter of the AFS) and one in North Carolina (North Carolina Chapter of the AFS), in addition to major research program reviews that draw scientists from the Carolinas and other states.

Efforts to expand membership continued, primarily by distributing brochures at state and regional fisheries-related meetings and through personal contacts. In addition, it was pointed out to a number of graduate students that Research Assistance (travel) Awards were available to associate members. Although no recently updated district membership count is presently available, my impression is that any successful recruitment would have been of associate members (graduate students) with financial interests in membership.

Subjective information for the Board's consideration:

Although hesitant to appear negative or pessimistic, I feel obligated to point out to the Board that fisheries scientists in the Carolinas seem to be overwhelmed with meeting and organizational commitments. A number of potential AIFRB members have stated to me that it is already impossible for them to deal with the number of state/regional, national fisheres-related annual meetings and special workshops. Further, some feel that the goals and meetings of many of the organizations are overlapping and repetitive. There is presently an effort underway to merge the two major fisheries organizations in South Carolina, primarily for this reason. My impression is that there is little chance that Carolinas District membership will increase significantly in the near future.

Mark Collins-Director

NORTHERN CALIFORNIA

The district held its last meeting of the spring on May 14 at the Gulf of the Farallones National Marine Sanctuary facility at Fort Mason in San Francisco. Members and guests partook pizza and liquid refreshments and were treated to a stimulating presentation given by Dave VenTresca (California Fish and Game) on marine reserves.

California has numerous marine reserves in which take of certain species are allowed in some preserves; in others, take is prohibited except for approved scientific purposes. Dave and his group have developed methods to assess resources in a no-take preserve and in similar areas outside the preserve. Several new marine reserves have been established as the result of legislative acts; the Big Creek Ecological Reserve is the one Dave spoke about. Dave illustrated his talk with slides. A summary of his talk is as follows (provided by Dave):

Marine reserves have been reported to enhance fisheries in other parts of the nation and world. Limited information is available to evaluate their effectiveness relative to California's sport and commercial rockfish (Sebastes) fisheries. The establishment of the Big Creek Ecological Reserve (BCER), approximately 50 miles south of Monterey, California, presents a unique opportunity to evaluate the effects of a reserve on the rockfish resource. The first step for determining future benefits to adjacent and distant fisheries is to obtain baseline information on species composition, densities, and biological properties of populations within and adjacent to BCER. This information will allow resource mangers to evaluate marine reserves as an alternative management tool for rockfish populations. We are presently assessing population parameters of fishes (primarily rockfishes) in nearshore habitats within and adjacent to BCER.

It's noteworthy that the second symposium on essential fish habitat and marine reserves was reported in the last copy of the *Briefs*.

The district will go into aestivation until fall when we will have a business meeting and begin another series of dinner and banquet meetings.

Tom Jow-Secretary/Treasurer

SOUTHERN CALIFORNIA

On October 22, 1997, a business meeting was held at the El Adobe restaurant in San Juan Capistrano, CA. Twenty-four members and guests were present. During this meeting, a panel was formed to judge student posters at the annual CalCOFI conference. Biennial district elections were held, and Dr. Kevin Hill (California Department of Fish and Game, CDFG) was elected District Director, Ms. Shelly Moore (Southern California Coastal Water Research Project, SCCWRP) was elected Vice Director, and Mr. Larry Cooper (SCCWRP) was elected Secretary-Treasurer. Dr. Barry Costa-Pierce, University of California at Irvine, made a presentation entitled, "The Fisheries Ecology of the Salton Sea: California's Forgotten Coast".

At the end of October, 1997, several district members attended the annual CalCOFI conference held at Lake Arrowhead, CA. The district panel awarded Ms. Kyra Schlining, Moss Landing Marine Laboratories, with \$200 for the best student poster. Ms. Schlinings' poster was titled, "The spot prawn *Pandalus platyceros* trap fishery in Carmel Submarine Canyon."

On December 16, 1997, the district co-sponsored a presentation by Dr. Bill Ballantine, University of Auckland, New Zealand held at the Cabrillo Marine Aquarium in San Pedro, CA. Dr. Ballantine, a recognized leader in the area of marine reserves, gave a talk entitled, "Marine Reserves: Lessons from the New Zealand experience". Dr. Ballantine's efforts have resulted in establishment of 13 no-take marine reserves in New Zealand since 1981.

On April 15, 1998, the district held a business meeting at the El Adobe restaurant in San Juan Capistrano, CA. At the meeting, a panel was formed to judge papers at the annual meeting of the Southern California Academy of Sciences. A presentation was given by former district director Dr. John Butler of the Southwest Fisheries Science Center. His presentation was entitled, "The

Fishery for Blackgill Rockfish in Southern California". Dr. Butler reviewed life history characteristics of this long-lived species (up to 80 years), described fishing methods used to target blackgill, and discussed some preliminary stock assessment work.

A panel of five district judges awarded Mr. T.J. Even, University of California, Santa Barbara, \$200 for the best student paper in fisheries biology presented at the Southern California Academy of Sciences meeting held May 1-2, 1998. Mr. Even's paper was entitled, "The effects of trout predation on the structure of a lotic macroinvertebrate community".

The district continues to maintain a web site, which is sponsored by the Southern California Coastal Water Research Project. Mr. Larry Cooper (District Secretary-Treasurer) developed the site for the Southern California District, but has modified it to reflect the national organization. He is waiting for contributions from other districts, and welcomes all comments and suggestions. Let's take advantage of this opportunity to advertise the AIFRB! Please visit the site at http://www.sccwrp.org/aifrb.

The district is proud to announce five new national members:

- Ms. Shelly Moore, SCCWRP
- · Ms. Marci Yaremko, CDFG
- Ms. Robin Gartman, City of San Diego
- Mr. Larry Cooper, SCCWRP
- Dr. Blaise Eitner, CDFG

The district's current treasury balance is \$5,400.

Kevin T. Hill-Director

TEXAS

Membership:

New officers were appointed this past year. Jim Nance moved from the Vice-Director position and started his 2-year term as the Director for the Texas District. An election was held to appoint the new Vice-Director. In a very close race between Lance Robinson and George Guillen, Lance Robinson was elected Vice-Director.

There are still 21 members in the Texas District. Of these, 3 are at the associate level, 3 are emeritus, and 4 are at the fellow level. Increasing the membership will be a goal of the District this next year.

Activities:

The Texas District again organized and hosted a symposium at the annual meeting of the Texas Academy of Science (TAS). The symposium's topic was "Mercury in Texas Waters and Fish" and discussed the issues surrounding the increase of consumption advisories and closures for mercury in fisheries resources thought the southeastern U.S. and particularly in Texas. David Sager (Past-Director Texas District) served as the symposium moderator. The speakers were drawn from several Texas State Agencies. Speakers included: David Sager (Texas Parks and Wildlife Department), Kirk Wiles (Texas Department of Health), Roxie Cantu (Texas Parks and Wildlife Department), and Stephen Twidwell (Texas Natural Resources Conservation Commission).

The AIFRB display was set up at the TAS meeting and pamphlets were distributed to interested individuals. District members were involved in other aspects of the TAS meeting giving presentations and receiving recognition for contributions to the academy. Dr. Clark Hubbs (AIFRB Fellow), Emeritus Regents Professor of Zoology, University of Texas at Austin, was honored as the Academy's 1998 Texas Distinguished Scientist.

Jim Nance—Director

OREGON-SOUTHWEST WASHINGTON

In an attempt to bolster sagging attendance at our monthly meetings, and to encourage interest and participation in District activities, the Oregon-Southwest Washington District of AIFRB joined forces in 1997-98, with the Portland, Oregon, Chapter of the American Fisheries Society. I became an "Invited Member" of the PDX-AFS Executive Committee, which met on a monthly basis, and together we scheduled four bimonthly, joint-meeting: November 1997, and January, March, and May of 1998. I informed our membership of this arrangement in our October 1997 Newsletter and in subsequent 1998 Newsletters. Unfortunately, no AIFRB member attended any of the four meetings.

The May meeting was the Fourth Annual Symposium held by the PDX-AFS. As in the past, it was an all-day affair with invited speakers from Oregon and Washington, and was co-sponsored by our district of AIFRB. AIFRB Members were informed of this meeting in our Newsletters, and were invited to attend, present a paper, and help plan the meeting. With the assistance of John Merriner, who sent me several back issues of Briefs that pertained to our District, I prepared an AIFRB display, complete with membership applications, our Code Of Ethics, and other materials. To provide an AIFRB presence as co-sponsor of the AFS Annual Meeting, I participated in the Poster Session and volunteered to present an oral paper when one of the invited speakers from Washington State was unable to attend. To encourage participation from local undergraduate students who are interested in the fisheries profession, I offered to provide one-year memberships in AFS, from my own funds - in the name of AIFRB, to the first ten students to register for the Annual meeting. It appears that at least four students took advantage of my offer.

The apparent lack of interest by the AIFRB Membership in the co-sponsored Annual Meeting, and in the bimonthly meetings, was matched by their failure to answer my repeated requests for nominees for District Office, or for a volunteer to succeed me after my third appointed Directorship exprires in August of 1999. Until then, I will continue to schedule joint meetings with the PDX-AFS, and to encourage the interest and participation of our Membership in District activities.

John F. Palmisano—Director

SOUTH CENTRAL GREAT LAKES

The South Central Great Lakes District co-hosted an evening seminar with the Frank Hooper Aquatic Seminar series of the School of Natural Resources and Environment, University of Michigan, and with the US Geological Survey, Great Lakes Science Center, Ann Arbor, Michigan, on November 24, 1997. Dr. Michael Jech, National Oceanic and Atmospheric Administration, Great Lakes Environmental Research Laboratory, Ann Arbor, presented the seminar titled "Fisheries and plankton acoustics: Where do we go from here?" The seminar was a broad

overview of the theory and applications of fisheries acoustics in the aquatic environment. Dr. Jech recently joined the GLERL laboratory along with the new Laboratory Director, Stephen Brandt, both of whom transferred from the SUNY College at Buffalo, New York. The AIFRB hosts were Drs. Dora Passino-Reader and Neal Foster, officers of the South Central Great Lakes District. Refreshments were enjoyed after the seminar.

An informal barbeque was held July 24, 1998, for AIFRB members and other "fishy types" from the Ann Arbor and East Lansing, MI, area.

The SCGL District submitted news items to AIFRB *Briefs*.

The treasury balance is \$26.45, which includes a \$100.00 loan from the personal purses of the officers. The officers also partially underwrote the cost of refreshments at the fall seminar. We are looking forward to another infusion of funds from the parent AIFRB to cover postage, etc.

Dora Passino-Reader-Director

Thanks for the Smallmouth News!

Gerry Bouck, Carlos Fetterolf and Jack Wingate generously shared their knowledge of small mouth bass fishing with the editor. Thanks!

Herke: LED = past tense LEAD = Pb

Sharp-eyed Bill Herke captured the editor in a lapse on page 1 of *Briefs*, May-June, 1998. My apologies to Bill's pet peeve and fie on homonyms.

RESEARCH FACILITIES:

OUT WITH THE OLD— IN WITH THE NEW

USGS Awards Contract for New Lake Superior Fisheries Research Vessel

The U.S. Geological Survey (USGS) has awarded \$2,825,000 contract to Patti Shipyard, Inc., in Pensacola, Fla., to build a new vessel for Lake Superior fisheries research.

The new vessel will replace the *Siscowet*, which is now the oldest (built in 1946) and slowest (maximum speed 8.7 knots) vessel in the USGS Great Lakes research fleet. The new vessel will be larger and faster that the *Siscowet* and will allow for an expanded research program on Lake Superior by USGS scientists and partners.

The new research vessel, to be homeported near Bayfield, Wis., will provide a mobile base for research, monitoring and assessment of fish populations and their habitats throughout Lake Superior, the world's largest lake by surface area. Scientists with the USGS Great Lakes Science Center in Ann Arbor, Mich., and its Lake Superior Biological Station in Ashland, Wis. will use the vessel to expand long-term research on Lake Superior fish populations in partnership with state, tribal, provincial, and other federal agencies.

Although the new vessel's home port will be near Bayfield, Wis., it will operate out of ports throughout Lake Superior as dictated by fishery and habitat research needs. Construction should be completed in June 1999, and the vessel is expected to be delivered to Lake Superior in November, 1999.

Work Starts on NMFS California Salmon Laboratory

Construction is underway on a \$19.4 million research facility in Santa Cruz, Calif., for the National Marine Fisheries Service to study salmon and West Coast groundfish. It will replace an obsolete lab facility in Tiburon, Calif.

The 53,400 square foot Santa Cruz

laboratory will be located adjacent to the University of California Long Marine Laboratory, and the University's Marine Discovery Center currently under construction.

The California coastal salmon fishery is important to recreational and commercial fishermen alike. The need for salmon-related research has increased with the reduction of stocks along the West Coast and listing of several salmonid species under the Endangered Species Act.

From: Commerce People— July-August, 1998

NOAA's Chapman Decommissioned After 19 years

Nineteen years of NOAA Corps service ended with decommissioning of the fisheries research vessel *Chapman*, in June. The *Chapman* supported a number of marine resource assessment surveys—along with related biological and physical oceanographic research—in the North Pacific, Gulf of Mexico, U.S. East Coast waters and Caribbean.

Her decommissioning ceremony was held at her homeport, Pascagoula, Miss., and attended by representatives from NMFS Southeast Fisheries Science Center, Office of NOAA Corps Operations, the ship's crew, family and friends. Andrew Kemmerer, administrator of NMFS Southeast Region spoke.

The Chapman will be replaced by the NOAA ship Relentless, which will be renamed the Gordon Gunter, scheduled to complete shipyard modifications and begin operations for the NMFS Southeast Fisheries Science Centers in late June.

The 127-foot *Chapman*, built by Bender Shipbuilding Co. of Mobile, Ala., was commissioned July 11, 1980, at NOAA's Pacific Marine Center in Seattle, Wash. The vessel was named after Wilbert McLeod Chapman, a West Coast fisheries scientist.

From: Commerce People— July-August, 1998

MIEIEUNGS OF NOTE

FOURTH INTERNATIONAL SYMPOSIUM ON FLATFISH ECOLOGY

18-23 October 1999

Atlantic Beach, North Carolina

- Objectives: By building upon the themes of the first three International Flatfish Symposia—Life Cycles (1990), Recruitment (1993), and System Dynamics (1996)—the fourth symposium will involve a critical evaluation of the extent and reliability of our knowledge of flatfish biology. The objective is to develop a framework in which we can apply that knowledge to understanding the factors regulating recruitment variability, the implications for future fluctuations in population abundance, and how the information can be used to develop sustainable management perspectives. Such knowledge could form the basis for advice to managers and legislators on the impacts of climatic and anthropogenic factors on flatfish populations.
- Scientific Program: Symposium topics will include hydrodynamics, trophodynamics, habitat quality, evolutionary biology and systematics, and recruitment and management perspectives. The meeting will mainly focus on keynote, oral and poster presentations that address the questions underlying these topics. In addition, a number of contributed presentations will be selected. Students are particularly encouraged to take part in the meeting.
 - Participants will be asked to develop their presentations to attempt to reject the following null hypothesis and support the alternatives as they can be applied to the symposium topics:
- H₀: Our knowledge of flatfish biology and ecology does not provide a basis for understanding recruitment variation or population fluctuations nor does it direct us to improved management approaches.
- H₁: Our knowledge of flatfish biology and ecology provides a basis for making qualitative predictions concerning recruitment variation, population fluctuations or alternative management approaches.
- H₂: Our knowledge of flatfish biology and ecology provides a basis for making quantitative predictions concerning recruitment variation, population fluctuations or alternative management approaches.

- Proceedings: All manuscripts submitted by 1 August, 1999 will be considered for publication and submitted to the normal review process, whether presented orally or by poster. Accepted papers will be published in the *Journal of Sea Research*. Author instructions can be found in previous symposia proceedings: *Neth J. Sea Res.* 27 (¾), 32 (2, ¾) and *J. Sea Res.* 37 (1); 39 (1-2). The journal has no publication fee.
- The Steering Committee: K. Duchon (USA), R. Gibson (Scotland), J. Miller (USA), P. Pepin (Canada), J. Rice (Canada), M. Tanaka (Japan), H. Van der Veer (The Netherlands).
- Participation: The symposium will be limited to about 175 participants. Preference will be given to early registrants and previous Flatfish Symposium participants. The fee of about \$250 includes the proceedings, conference dinner, field trips and social events, not lodging and meals. Students and participants from tropical and subtropical countries are especially encouraged to attend.
- Location: The symposium will be held 18-23 October, 1999 in Atlantic Beach, NC, USA. For information on the area, visit the Web site, http://www.sunnync.com, or write to Carteret County Tourism Development Bureau, P.O. Box 1406, Morehead City, NC 28557 USA. Telephone: 800-786-6962.
- More Information: Visit the symposium Web site at http://www.cals.ncsu.edu/flatfish or contact Susan Marschalk, Flatfish Symposium, NC State University Zoology Department, Box 7617, Raleigh, NC 27695-7617 USA. Tel:(int-1)919-515-2741; Fax: (int-1)919-515-5327; E-mail: flatfish@ncsu.edu
- The 2nd Announcement: Additional information—including the preliminary program, deadline for abstracts and information about accommodations, travel and special events—will be mailed and posted on the symposium Web site by October 1998. To remain on the mailing list, or to indicate intention to register, return the attached form by 1 August, 1998.

FIRST NATIONAL CONFERENCE ON MARINE BIOINVASIONS

January 24-27, 1999 Cambridge, Massachusetts, USA

Contact: Judith Pederson, MIT Sea Grant College Program
292 Main Street E38-300
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Record 30 million American shad fry released in Bay tributaries

The new annual ritual of shad stocking hit record levels this year, as more than 33 million tiny fish were released in Chesapeake Bay tributaries this spring as part of an effort to rebuild the Chesapeake diminished American shad population.

That far exceeds the Bay Program's annual goal of stocking between 20 million and 25 million annually.

"We had a crackerjack year," exclaimed Tom Gunter, a biologist for the Virginia Department of Game and Inland Fisheries, who oversees the state's restoration program.

The migratory fish, which spawns in freshwater rivers but spends most of its life swimming along the Atlantic Coast, was once the most valuable species in the bay. But the shad population plummeted in recent decades as a result of overfishing, pollution and the construction of dams and other blockages that closed their historic spawning grounds.

Maryland closed its portion of the Bay to shad fishing in 1980, the Potomac was closed in 1989, and Virginia closed its part of the Bay in 1994.

Restoring shad has been a major Bay Program priority in recent years with two components: stocking shad to help rebuild their population in historic spawning rivers, and building fish passages past dams that block their migration to those spawning grounds.

Stocking efforts this year were the best ever, far surpassing the 21 million young shad, or "fry," released last year:

- In Virginia, state and federal hatcheries produced about 14 million fry, of which 10 million went into the James River and 4 million into the Pamunkey—the river from which the eggs were taken.
- The Pamunkey Indians released between 6 million and 7 million fry from their hatchery into the Pamunkey River The hatchery was renovated during the past year with funds from the Bay Program and other state and federal agencies.
- In Pennsylvania, 11.7 million fry were stocked in tributaries to the Susquehanna, the highest amount in years.
- ❖ In the Potomac River, 1.6 million shad were stocked.
- In Maryland, the Department of Natural Resources stocked more than 300,000 fry each in the Choptank and Patuxent rivers.

The Pamunkey Indians have been stocking shad in their river since 1918, when they opened a hatchery as part of their philosophy that they should return something to the river to make up for what they took. Today, the Pamunkey River is considered to have the healthiest shad population in the Bay watershed.

Hatchery efforts began in the Susquehanna basin in the 1970s. And, in the past few years, efforts have begun in Virginia, Maryland and the Potomac River, involving a host of

partnerships among federal and state agencies, non-profits, commercial and recreational fishermen, businesses and others.

Still, there are concerns about the future of the stocking efforts. The Atlantic States Marine Fisheries Commission, which is responsible for managing migratory fish, is considering closing or restricting the catch of shad in the ocean—an action that could increase pressure to open rivers to fishing.

Virginia could be under particular pressure to open its rivers. If that happens, Gunter said, the stocking program in Virginia's rivers would end. Based on a study that suggests only 1 of 400 stocked fry survive to return to spawn, Gunter estimated that each returning shad represents an investment of \$13-15.

"To have a \$13 fish sold on the market for \$3 or \$4 just doesn't make too much sense," he said. "So we would cease the restoration effort if there was an open season."

While releasing fish from hatcheries, biologists were also monitoring shad that returned to the rivers. Hatchery-raised fish are treated with tetracycline, in a process that creates a unique mark for each hatchery on the ear bone of the fish so their origins can be traced.

On the James River, biologists from Virginia Commonwealth University collected shad which, when analyzed, found that 89 percent of fish returning to spawn were hatchery-raised shad from 1994 and 1995.

"The hatchery adults are starting to show up on the spawning grounds," Gunter said. "They're doing what we wanted them to do."

On the Susquehanna River — once the largest spawning ground for shad on the East Coast — 46,481 shad were passed beyond the Conowingo Dam this year. That was the third best year, following 103,000 in 1997 and 61,000 in 1995, for passing fish beyond the dam, which is the first of a series of large hydroelectric facilities that closed the river to migratory fish since the early part of the century.

Richard St. Pierre, Susquehanna River Coordinator for the U.S. Fish & Wildlife Service, said the number of fish passed was good news, considering that fish lifts were closed during the entire month of April because of high river flows.

"We lost five weeks out of a 10 week season. All of our programs were just about stalled," St. Pierre said. "At the end of April, we had about 2,000 shad, which is just pitiful."

Fish lifts have been completed at two upstream dams from Conowingo — Safe Harbor and Holtwood — and a fish ladder is scheduled for completion at a fourth, York Haven, in 2000. At that point, hundreds of miles of the Susquehanna and its tributaries will be opened to spawning.

On the James River, a passage at the last blockage — Boshers Dam outside Richmond — will be completed this fall. That means next spring, returning shad will be able to swim all the way to Lynchburg, a destination that has been out of reach since 1803 because of downstream blockages.

Bay Journal — July-August, 1998

Westslope Cutthroat Trout Restoration

In mid-August 1998, an agreement was reached among Earth Search Sciences Inc. (ESSI), MT Dept. of Fish, Wildlife, and Parks, Turner Enterprises, and NASA TechLink to conduct a restoration project for westslope cutthroat trout on 50 miles of the Cherry Creek drainage on Turner Enterprises' Flying D Ranch. The project will focus on removal of nonnative fish and reintroduction of genetically pure westslope cutthroat trout in this drainage above a 30-foot waterfall that isolates the drainage from natural immigration by nonnative fish. [ESSI Press release]

Bluefin Tuna Quota Revisions

On August 19, 1998, NMFS announced that a new analysis of 1997 Atlantic bluefin tuna recreational landings indicated that more fish had been caught than previously reported. Thus, 1998 quotas were to be reduced or modified to account for the amounts taken in excess of 1997 quotas -- 16 metric tons for school size fish and 19 metric tons for large school/small medium fish. [NOAA press release]

Florida Requests Revision on Greater Amberjack

Measure in Snapper Grouper Amendment 9

Last August in Charleston, South Carolina the South Atlantic Fishery Management Council finalized SnapperGrouper Amendment 9 after three years of working on this document. One of the measures approved by the council would implement an April closure for greater amberjack with a 1,000 pound trip limit and an annual quota to achieve a reduction in fishing mortality for this species.

The creation of any management action on greater amberjack was controversial with fishermen in South Florida, who quickly pointed out amberjack's high 84% SPR, making it 'on paper' one of the healthiest fish stocks in the South Atlantic.

The assessment which concluded that high SPR for greater amberjack did not include pertinent data necessary to calculate an accurate SPR, so the council voted last August to request a new assessment incorporating more data, and decided to implement conservation measures in the interim as part of Amendment 9.

Last year the state of Florida was completing new management for greater amberjacks as well, and finalized a plan that will close the commercial fishing season for the three months of March, April and May in Florida waters. The three month closure was included in the council's original proposal for amberjack management, but the final result was a compromise with fishermen from South Florida to achieve the fishing reduction while allowing the fishery to remain open eleven months of the year in federal waters.

Citing inconsistencies with its Coastal Zone Management Program, Florida has delayed the NMFS review process of Amendment 9 by asking for a continuance on the comment period, and has now asked the South Atlantic Council to reconsider the greater amberjack measure.

Below is an excerpt from a conversation with Dr. Russell Nelson (AIFRB Fellow), Executive Director, Florida Marine Fisheries Commission, on why Florida feels so strongly about this issue:

"In Florida we see the same signs of overfishing in amberjack which were apparent a decade ago in Spanish and king mackerel stocks. Once a stable and predictably available species which provided charter and recreational anglers with a fallback opportunity to make for a successful fishing trip, this

fish stock has been almost destroyed in Florida by large scale and unrestricted harvest on springtime spawning aggregations in the southern part of the state.

As one who played a primary role in developing the initial management plans which have been adopted in Florida, the Gulf, and the South Atlantic, I know that we failed to provide adequate protection for this species. Catch and catch-per-effort indices in Florida continue to drop.

I spoke with a group of charter and headboat operators in Southeast Florida in June, and was informed that they were simply not seeing any amberjack in the places and season in which they were once abundant. The NMFS stock assessment on greater amberjack is critically flawed. I don't believe there will be much controversy over this in Florida (with the exception of a handful of commercial harvesters in Monroe County) because everyone I hear from agrees the stock has collapsed.

This is simply another example of a predominately recreational fishery being displaced by the development of a market and the resulting increased competition from the much more efficient commercial sector. Fisheries managers never made a decision to allocate amberjack to the commercial sector, and during the late 1980's when the first management plan was developed, most thought the plan would stabilize the fishery and retain the historical allocation patterns. Neither occurred.

The stocks declined and the recreational sector has been denied its historical opportunity to partake of this fishery. I don't believe allocation decisions should be made so haphazardly - such decisions are among the most important available to managers and we must begin to address them in a direct and decisive fashion."

The South Atlantic Update —July, 1998

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BRIEFS, the newsletter of the American Institute of Fishery Research Biologists, is published six times a year. It is intended to communicate the professional activities and accomplishments of the Institute, its District, and Members; the results of research: the effects of management; unusual biological events; matters affecting the profession; political problems; and other matters of importance to the fishery community. Comments and contributions should be sent to the Editor, Dr. Gene R. Huntsman, 205 Blades Road, Havelock NC 28532. Subscription \$30 a year to Institutions and Non-Members. Officers-Gary Sakagawa, P.O. Box 271, La Jolla, CA 92038-0271, President; Barbara Warkentine, 1329 Balcom Ave., Bronx, NY 10461, Secretary; Joseph Rachlin, Lehman College Bio., Bedford Park Blvd. West, Bronx, New York 10468, Treasurer.

ISSN-8755-0075

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American Institute of Fishery Research Biologists

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...BRIEFS...

VOL. 27, NO 5

SEPTEMBER - OCTOBER, 1998

BOARD OF CONTROL — 1998 Annual Meeting

Sheraton Hotel/Hartford Convention Center Hartford, Connecticut 22-23 August 1998

MINUTES

Condensed by Editor

The 42nd annual meeting of the American Institute of Fishery Research Biologists (AIFRB) was held at the Sheraton Hotel/Hartford Convention Center in Hartford, Connecticut on August 22-23, 1998.

President Hubbs called the meeting to order at 9:00 a.m. on Saturday, August 22, 1998.



Proof positive: Your Board of Control really did assemble at Hartford, Connecticut, August 1998. Rear, left to right: Tom Schmidt, Gary Sakagawa, John Palmisano, Jim Nance, Kevin Hill, Bruce Wing, Clark Hubbs. Front: Jack Pearce, Barbara Warkentine, John Butler, Vaughn Anthony, John Merriner, Joe Rachlin, Mark Collins, Dora Passino-Reader, Jack Helle.

APPROVAL OF MINUTES

A motion by Treasurer Joseph Rachlin to accept the minutes of the 1997 Annual Meeting was seconded and unanimously approved by the BOC.

TREASURER'S REPORT (RACHLIN):

A. Review of Assets and Investments

Treasurer Rachlin distributed an updated version of his report (Aug. 7, 1997 - Aug. 7, 1998; Appendix B). The books were closed on August 7, 1998. Total income was \$28,034.05 (compared to \$23,370.66 for virtually the same period in 1997), this value reflects a balance forwarded from fiscal 97 of \$3,805.84 and a transfer of money from the sale of investment holdings of \$4,087.09. Therefore, the total income generated in fiscal 98 was \$20,141.12 (compared to \$19,563.00 in 1997). Total expenses were \$24,706.16 (compared to \$19,153.82 in 1997). Assets totaled \$57,868.46 from various money market funds, stocks, and mutual funds. The checkbook showed a balance of \$3,327.89 as of 7 August

(SEE ITEMIZED REPORT, FOLLOWING MINUTES)

A motion by District Director Wing to have the Board of Control function as the official auditing body was **seconded** and unanimously **approved** by the BOC.

A **motion** by District Director Wing to accept the Treasurer's report (pages 4-8) was **seconded** and unanimously **approved** by the BOC.

B. Membership and Dues Payment

Treasurer Rachlin informed the BOC that as of the close of the books on 7 August 1998 AIFRB membership stood at 919. Of these 224 are Emeritus members. Treasurer Rachlin further noted that our Emeritus members have continued to support AIFRB by their contributions, which totaled \$1,585 for fiscal year 1998. These contributions, which average \$7.07/Emeritus member, nicely covers costs attributed to producing and sending BRIEFS to them.

With regard to the 695 paying members 134 are in arrears, with 62 (including 8 student associates) owing for one year, 58 (including 12 student associates) for two, and 14 (including 4 student associates) for three. These delinquents are being subsidized by AIFRB at a cost of \$6,160.

(Continued...)

C. Delinquent Members

Treasurer Rachlin distributed to the BOC a list of members who are currently not in good standing. With regard to those that are three years in arrears the BOC was reminded that in accordance with the bylaws (page 7, Sec 7, Fees and Dues): "A member in arrears for three years for all or part of dues shall be dropped from membership". The current list of three year delinquent members stands at 14. The list was reviewed by the BOC.

A motion by Past President Helle to discontinue the membership of those members that are three years in arrears was seconded and unanimously approved by the BOC.

D. Reimbursement for BOC Members

Treasurer Rachlin reminded that BOC that there is a cap on reimbursement for BOC members, who are not otherwise covered, which is set at \$550. This is to cover only travel expenses and hotel costs for the BOC meeting. For those BOC members requesting reimbursement original receipts must submit along with your request to the Treasurer.

E. Address Changes and Emeritus Status

Treasurer Rachlin expressed a need to have members inform both the Membership Chair and the Treasurer of their address changes. Also it is up to the individual to inform the Membership Chair and the Treasurer that they are retiring and would like to request Emeritus Status. Emeritus Status is not automatic and one must be in good standing to apply for it.

F. Tax Exempt Status

District Director Passino-Reader asked why the Institute does not have a 501 C3 status. Treasurer Rachlin stated that in order to hold this status we would have to be a church or an educational facility, of which we are neither. And since our articles of incorporation set us up as a "scientific society" we do not fall under the category of an educational institute. Treasurer Rachlin and former Treasurer Cole looked into this and subsequently applied for 501 C3 status. AIFRB was denied this status by the IRS because of how we were incorporated. As of 14, January 1993 we are a 501 C6 Institution holding federal tax exempt status. Our tax exempt number is EIN-61-6050711.

W. F. THOMPSON AWARD (PEARCE)

SEE ANNOUNCEMENT ELSEWHERE IN BRIEFS

MEMBERSHIP COMMITTEE REPORT (BUTLER) SEE BRIEFS JULY - AUGUST, 1998

BRIEFS EDITOR'S REPORT (MERRINER FOR HUNTSMAN)

The *Briefs* Editor needs to have input from all members of AIFRB.

PRODUCTION EDITOR'S REPORT (MERRINER)

The AIFRB directory, articles of incorporation and principles of professional conduct were mailed out. Membership brochures have been updated and were made available for distribution at this meeting and for District Directors use.

The Production Editor keeps an archives of *Briefs*, which consists of 25 copies per issue.

RESEARCH ASSISTANCE AWARD PROGRAM (RACHLIN FOR LAMBERT)

This year 6 Associate members received this award in the amount of \$350 for a total of \$2,100.

After a lengthy discussion the BOC generally agreed that a cap value of \$350 represents a reasonable amount. The Committee Chairman does have the latitude to award an individual more than this amount. This has been done in the past particularly with respect to foreign travel, which can be considerably expensive. The published award cap can be changed by the BOC at any time.

REPORTS FROM DISTRICT DIRECTORS -

(ABBREVIATED)

Northern Alaska: No Report

Southeast Alaska District: Director Wing plans to set up an archives of district activities. He continues to seek out new members. The District revenue stands at \$240.

Northwest Washington: No report. Due to changes in employment status the current District Director could no longer continue on in this capacity. Therefore this district is without an active Director. The district requests that an interim Director be appointed by the President until an election can be held.

Oregon/Southwest Washington District: Director Palmisano informed the Board that this district has joined forces with the Portland, Oregon, Chapter of AFS in an attempt to increase attendance at its meetings. Despite this action attendance remains low. Oregon State University hosted a reception at which Bill Pearcy (1997 AIFRB Outstanding Achievement Award Recipient) was presented his award plaque. The University graciously paid for the reception. Director Palmisano agreed to stay on as District Director for another year since there doesn't seem to be anyone in his district interested in assuming that role.

South Central Great Lakes District: Director Passino-Reader indicated that her district continues to build through the recruitment of new members. This district, which was founded by Stan Smith, has a very active core. Over the years, however, it had waned but is now growing nicely. The district has had many successful functions. Director Passino-Reader indicated that she communicates with her membership by e-mail on a regular basis. This reduces postal costs and disseminates information quickly. Director Passino-Reader will be working

on putting her district on the AIFRB web-page. Local dues are \$5 and the district's revenue stands at \$26.45

Northern California District: No report.

Southern California District: Director Hill reported that this district continues to maintain a website. Built into this site is the "National AIFRB web-page." The site is found at http://www.sccwrp.org/aifrb. All District Directors are encouraged to submit information to Larry Cooper (new recruit to AIFRB), our web-page manager. This district maintains a high level of activity. Their meetings are well attended and recruitment efforts are successful. The district awarded a number of prizes (\$200 each) for best student paper presentations. Future goal is to have a short course or workshop in the spring of 1999. Director Hill reported that the District's revenue stands at \$5,400.00.

Capital District: District Director Panek could not attend this years BOC but forwarded his report for distribution. The Northeast Region of AIFRB (Capital, Keystone, & New England Districts) sponsored a regional meeting in conjunction with the Northeast Fish and Wildlife Conference in Camp Hill PA in May of 1998. The region was able to get two guest lectures, however, sparse attendance at the meeting caused it to be canceled. This was the regions first attempt at such a meeting.

The Capital District has a total membership of 56. Richard "Dick" Schaefer was featured in Who's Who in AIFRB.

Keystone District: Director Warkentine reported that membership in her district remains level at 49. Joseph Rachlin (Treasurer of AIFRB and member of this district) received the 1998 AIFRB Distinguished Service Award. His biographical sketch appeared in the August issue of *Briefs*. Future plans will be to hold a local meeting in the spring.

New England District: Director Pearce reported that he continues to communicate with his membership. He attends the AFS Southern New England Chapter meetings as the official AIFRB/SNEC liaison. Director Pearce has sent many articles to *Briefs* and Fisheries.

Carolina District: Director Collins reported that the district holds informal meetings which gives AIFRB members the opportunity to interact. Effects to expand membership is on going, however, due to the overwhelming number of societies that many of the Carolinas' fishery biologists already belong to, growth may be slow.

Florida District: Director Schmidt reported that his district held its first formal meeting in January. This meeting was well attended and attracted the attention of several potential new members. Future plans are in the works to co-sponsor a symposium during this upcoming year.

<u>Texas District:</u> Director Nance reported that the district organized and hosted a symposium on "Mercury in Texas Waters and Fish" at the annual meeting of the Texas Academy of Science (TAS). At this meeting the AIFRB display was setup and membership brochures distributed. Having an AIFRB

district sponsored symposium at the TAS meetings has proved to be quite successful. Clark Hubbs, (member of this district) was honored as the TAS's 1998 Texas Distinguished Scientist.

Arizona-New Mexico: Director Southward (who was not present) forwarded his report to the BOC. The district has continued its recruiting efforts but finds it difficult to organize meetings as its membership is so widely dispersed.

AWARDS

A. Outstanding Achievement Award - Individual

A **motion** by Treasurer Rachlin to give Dr. Douglas Blaxter the Outstanding Achievement Award - Individual was **seconded** and unanimously **approved** by the BOC.

Dr. Blaxter will be attending the Early Life History Conference in Beaufort, North Carolina this coming April. This award will be presented to him at the meeting.

OUTSTANDING ACHIEVEMENT AWARD - GROUP

A **motion** by President-Elect Sakagawa to give the Illinois Natural History Survey the Oustanding Achievement Award - Group was **seconded** and unanimously **approved** by the BOC.

<u>Discussion</u> Production Editor Merriner suggested that we review the procedure associated with Outstanding Achievement Awards. He suggested that there should be a request for nominations placed in *Briefs* and that a committee be set up to review them. The committee, after reviewing all submissions, would bring to the BOC their top choices along with a brief summary as to why they should be considered for the award.

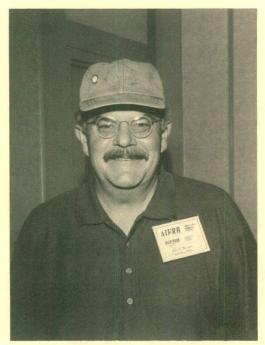
A **motion** by President-Elect Sakagawa to have the procedure (once formalized) for the Outstanding Achievement Awards placed in the "Procedures Document" was **seconded** and unanimously **approved** by the BOC.

A motion by Past President Helle that a committee of three (3) be appointed to solicit and evaluate nominations for the Outstanding Achievement Awards (Group and Individual) and that the committee bring to the BOC up to five (5) names was **seconded** and unanimously **approved** by the BOC.

B. Distinguished Service Award

A committee, consisting of V. Anthony, J. Helle, and J. Rachlin was appointed by President Hubbs to consider nominations for this award. The committee selected as this years award recipient Production Editor Merriner. J. Rachlin and B. Warkentine will make up the plaque and G. Huntsman will write up J. Merriner's biographical sketch for publication in *Briefs*.

Editor's Note: Well earned, congratulations to my co-worker John. However, this is the first I've heard of the writing assignment. Write-up will be in next issue.



John Merriner, recipient of 1998 Distinguished Service Award, models new AIFRB cap with logo.

1998 SYMPOSIUM (NANCE)

The AIFRB sponsored symposium was set up by G. Sakagawa, J. Nance, and D. Sager. This day long symposium entitled "Fishing with Diversity: Problems and Solutions" was held on Wednesday 26, August 1998 in the Sheraton Hartford Hotel/Convention Center.

1998 AIFRB RECEPTION (WARKENTINE)

Director Warkentine made the arrangements for this years AIFRB reception. This years reception consisted of hor'dourves and a cash bar. It took place on the 23rd of August from 6:00 to 7:30 pm.

OLD BUSINESS

a. Ad Hoc Committee Reports:

1. President Elect Term of Office

A committee consisting of J. Helle and B. Warkentine reported on their review of the question "Should there be a President Elect in place coincident with the three year term of the president?" The ad hoc committee felt that this was not necessary. The BOC, after discussing this issue, agreed to keep the current executive officer structure.

2. Delinquency Status Among Research Award Recipients

A committee consisting of B. Warkentine, F. Panek and M. Collins reported on their review of the question "Should Associate members of AIFRB be in good standing for one year before they can be considered for a research award?" After evaluating the number of recipients that have received this award and have failed to pay dues soon after receiving this

award against those that have remained in good standing, the committee agreed that the implementation of a one year waiting period would not benefit the Institute. The committee sees this program as a valuable recruitment program, one which may be substantially reduced in effectiveness by a "waiting period" requirements. Research Award Chairman Lambert was consulted regarding his opinion on the issue and he agreed that the current structure is best for all.

3. Professional Development Award

A committee consisting of F. Panek and M. Collins was appointed to design a proposal for an AIFRB Professional Development Award. This award has as its target audience members of AIFRB holding the rank of Member or Fellow. Since full details were not available for discussion at this years BOC meeting, this item was tabled for discussion at the next BOC meeting.

b. Logo

At the 1997 BOC meeting \$2,000 was allocated for the purchase of caps embroidered with the Institute's logo. The logo could not be reproduced by any vendors solicited. Therefore it had to be modified to meet their requirements. After getting quotes from four different vendors the job was given to Sew Fine Embroiderers (NY). Two hundred fifty (250) caps were produced at a cost of \$1,834.50. Price per cap is set at \$12. These caps were made available for purchase at this meeting and 10 hats were distributed to each BOC member for sale in their respective districts. Residual caps are being held by Secretary Warkentine. Anyone needing more should contact her.

c. Display

The display was updated by Director Pearce. President Hubbs and members of the BOC arranged to have the display set up in the exhibition area. After this meeting the display will go to Director Nance (N. Calif.) for use at upcoming meetings. Requests for the display must be made through the Secretary.



John Merriner and Clark Hubbs with the AIFRB traveling display.

d. Procedures Document

Past President Anthony, appointed last year to update the procedures, will continue his work on this project. President-Elect Sakagawa agreed to assist Past President Anthony with this effort. The updated document will be forwarded to the Secretary for binding and distribution to all BOC members. Until this document is in place the Secretary will distribute the old version to all BOC members.

e. Award Plaques

Past President Helle informed the BOC that we will have 12 totem fish plaques on hand after giving out this years awards.

f. AIFRB Website

AIFRB has a national home-page. Its address is www.sccwrp.org/aifrb All District Directors are encouraged to prepare their own district page and have it linked to the national page. Secretary Warkentine forwarded to Larry Cooper (web-page keeper) information about our award programs.

New Business

A. Research Award

The BOC reviewed the criteria for this award in great detail. In the discussion two questions came up;

- 1) Since this is a research award can it be applied for research activities?
- 2) Using the deadline criterion are we not cutting off those individual that will be presenting at meetings for which acceptance letters would not be available until after the deadline date? After discussing these points in detail the BOC agreed that the published criteria should be modified to reflect the following information:
- a) Someone may apply for this award for a research activity. (Instead of for presenting a talk.)
- b) An individual need not be going to a scientific conference to present a paper but may use the award to go to an off site research station.
- c) Individual need not have acceptance of a paper before the application deadline date but can submit in anticipation of acceptance. An award can be granted contingent on the papers acceptance at the future date.

BOC recommended that this program be placed on the AIFRB web-page.

B. Thompson Award

A motion by President-Elect Sakagawa to increase the Thompson Award from \$750 to \$1,000 was seconded and unanimously approved by the BOC.

<u>Discussion</u> It was noted by some board members that if you allow a student to get two research awards at a cap of \$350 for a total of \$700 then a Thompson Award winner is only getting \$50 more. In discussing this issue it was pointed out that the monetary portion associated with the Thompson Award is of less importance that the award itself. This award is in recognition of quality work; the other is to help an individual get a start in their career.

A motion by Treasurer Rachlin to have the monetary portion of the Thompson Award occur coincident with the 1998 award was seconded and unanimously approved by the BOC.

C. Association with AFS

A letter written in *Briefs* (Vol 27#1) by Carlos Fetteroff (AIFRB Fellow) regarding merging AIFRB into AFS via the establishment of an AFS Research Section was discussed in great detail by the BOC. Dr. Fetteroff requested that he be allowed to speak on this issue to the board and was graciously invited to do so. After reviewing his letter for the Board, a lively discussion ensured. The pros and cons of incorporating AIFRB into AFS were explored by the BOC in great detail. This issue of merging AIFRB into AFS is not a new one. It has been discussed many times before. Many of the views and opinions expressed this time once again pointed to the desire for AIFRB to maintain its autonomy. Details of some of the views expressed by BOC members will be written up for presentation in *Briefs*.

Membership Chairman Butler introduced for discussion the idea of affiliating with other Institutions or Societies for the purpose of holding our annual meeting. Director Hill indicated that ASIH would be a good group to meet with as this Society has a rich pool of graduate students. Meeting with ASIH would also allow us to stand out as a more distinct group. President-Elect Sakagawa reminded the BOC that many of its members, especially those that are affiliated with government agencies, must be able to justify their time away in order to get reimbursement. If AIFRB completely breaks from AFS we could potentially lose BOC members. To address this concern Director Palmisano suggested that the BOC consider meeting every other year with AFS and some other Society on the alternate year. The BOC did, however, agree that next years board meeting would be held in conjunction with the AFS annual meeting.

AWARD PRESENTATION

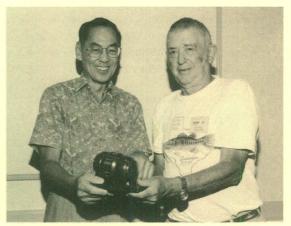
President Hubbs presented the 1997 AIFRB Distinguished Service Award plaque to Treasurer Joseph W. Rachlin.



Joe Rachlin accepts plaque representing the 1997 Distinguished Service Award from President Clark Hubbs.

TRANSFER OF THE PRESIDENCY

President Hubbs transferred the gavel to President-Elect Sakagawa, who will hold the office of President until the conclusion of the 2001 BOC meeting. President Sakagawa, in addressing the BOC, outlined some of his plans and goals for the coming year.



Clark Hubbs conveys gavel of Presidency to Gary Sakagawa, President until conclusion of BOC meeting.

AUTHORIZATION OF THE TREASURER

A motion by Past President Hubbs to appoint Joseph W. Rachlin as Treasurer for the forthcoming fiscal year 1998-1999 (from the AIFRB Annual Meeting in 1998 to the AIFRB Annual Meeting in 1999), which authorizes Treasurer Rachlin to conduct all of the Fiscal Year 98-99 financial business of AIFRB, was seconded and unanimously approved by the BOC.

APPOINTMENTS

- 1) In accordance with the AIFRB by-laws (Article III, Sec. 4 pg. 8) President Sakagawa made the following appointments:
 - (a.) Secretary Barbara Warkentine
 - (b.) Treasurer Joseph Rachlin
 - (c.) Chair Membership Committee- John Butler
 - (d.) BRIEFS Editor Gene Huntsman
 - (e.) Production Editor John Merriner
- 2) In accordance with the AIFRB bylaws (Article III, Sec 6, pg 9, Regional Directors) Present Sakagawa made the following appointments:
 - (a.) Bruce Wing Alaska & Western Canada
 - (b.) John Palmisano NW States
 - (c.) Thomas Moore SW States & Mexico
 - (d.) Dora Passino-Reader Central States & Middle Canada
 - (e.) Barbara Warkentine NE States & East Canada
 - (f.) Mark Collins SE States & East Mexico
- Jack Pearce was appointed by President Sakagawa, as Chair of the 1997 W.F. Thompson Award Committee

4) John Palmisano was appointed by President Sakagawa, as District Director for the Oregon-SW Washington District for a one year term.

AWARDS COMMITTEES

- 1) Outstanding Achievement Award (Group and Individual): A committee consisting of V. Anthony (Chair), J. Palmisano, and D. Passino-Reader was appointed by President Sakagawa to solicit nominations for each of these awards. The committee will evaluate all candidates and present their top candidates for each award to the BOC at its next annual meeting.
- 2) AIFRB Distinguished Service Award: A committee consisting of C. Hubbs, V. Anthony, and J. Helle was appointed by President Sakagawa to evaluate candidates for this award and to present their findings at the next BOC meeting.

COUNCIL OF AQUATIC SCIENCES

Treasurer Rachlin inquired of the BOC if they wished to continue as a member of the Council of Aquatic Sciences. The cost is \$250/year. The BOC wanted to know how this affiliation benefits us. Past President Hubbs informed the BOC that this body is composed of societies not individuals and that we serve as a voting member of the board. President Sakagawa asked Treasurer Rachlin to look into this affiliation more closely to find out just what benefits we get out of being a member of the council. Treasurer Rachlin will report his findings to the BOC at its next annual meeting.

Symposium Sponsorship

Past President Helle informed the BOC that the International Society on Biotelemetry will be holding its 15th International Symposium on Biotelemetry in Juneau, Alaska from 9-14 May 1999. He asked if AIFRB would be interested in being a sponsor. The BOC expressed an interest but would like to have our sponsorship noted not just by our name but with our logo as well.

Amotion by Past President Helle to have us contribute towards sponsorship of the 15th International Symposium on Bioteletry, was seconded and unanimously approved by the BOC.

A motion by Past President Hubbs that the amount of the donation be decided between the Treasurer, President Sakagawa, and Past President Helle, was seconded and unanimously approved by the BOC.

1999 AIFRB SYMPOSIUM

Production Editor Merriner has agreed to Chair the 1999 AIFRB Symposium. He asked the BOC for suggestions on topics and many were given. John will decide on a topic and will organize this symposium.

ARRANGEMENTS FOR THE 1999 AIFRB BOC MEETING

The District Director for the Carolinas District will be the coordinator of the 1999 AIFRB meeting, which will be held in conjunction with AFS in Charleston, South Carolina.

ADJOURNMENT

President Sakagawa adjourned the meeting at 3:00 on Sunday 23, August 1998.

23, August 1998 Barbara Warkentine, Secretary

nota bene: Treasurer Rachlin requested that the final cost of the AIFRB social, on Sunday evening 23, August 1998, of \$415.73 be added to these minutes.

TREASURER REPORT - Abridged

Cash Flow Report 8/7/97 Through 8/7/98

8/7/97 Category Description 8/7/98

INFLOWS	
Balance Forward	3,805.84
Ck Recovery	125.12
Dues Receipts	19,916.00
List Rental	100.00
Transfer Funds	4,087.09
TOTAL INFLOWS	28,034.05

OUTFLOWS	
AIFRB Social	1,045.98
Bank Serv. Charge	125.82
Bd. of Control	3,902.31
Bounced Check	110.00
BRIEFS	1,661.87
Collection	30.00
District Reimbur.	188.08
Dist. Serv. Awrd.	126.60
Honorarium	1,400.00
OTHER	2,084.50
Pr-Prof-Conduct	163.29
Production	9,475.51
Reimbursement	434.02
Res. Award	2,100.00
Salmon Plaques	909.00
Secretary Exp.	193.66
Travel Display	52.00
Treasurer's Exp.	703.52

	2000
TOTAL OUTFLOWS 24,706.1	200
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IOIAL COILLOID 27.700.1	•
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	8833
	2000
OVERALL TOTAL 3,327.8	40
OVERALE IDIAL 3.327.0	
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	900 B

Comparison Report 8/13/96 Through 8/7/98

	8/13/96-	8/8/97-	Amount
Category Description	<u>8/6/97</u>	<u>8/7/98</u>	<u>Difference</u>
INFLOWS			
Balance Forward	0.00	0.00	0.00
Ck Recovery	125.00	125.12	0.12
Dues Receipts	18,996.00	19,916.00	920.00
JWR CK Deposit	32.00	0.00	-32.00
List Rental	0.00	100.00	100.00
Transfer Funds	0.00	4,087.09	4,087.09
TOTAL INFLOWS	19,153.00	24,228.21	5,075.21
OUTFLOWS			
AIFRB Computer	1,291.05	0.00	1,291.05
AIFRB Social	1,120.66	1,045.98	74.68
Bank Serv. Charge	130.85	125.82	5.03
Bd. of Control	4,308.52	3,902.31	406.21
Bounced Check	30.00	110.00	-80.00
<u>Briefs</u>	4,390.85	1,661.87	2,728.98
Collection	0.00	30.00	-30.00
Correction	10.00	0.00	10.00
District Reimbur.	360.40	188.08	172.32
Dist. Serv. Awd.	0.00	126.60	-126.60
Honorarium	1,250.00	1,400.00	-150.00
License	32.00	0.00	32.00
Membership	1,247.86	0.00	1,247.86
OTHER	0.00	2,084.50	-2,084.50
Pr-Prof-Conduct	0.00	163.29	-163.29
Production	1,750.00	9,475.51	-7,725.51
Reimbursement	0.00	434.02	-434.02
Res. Award	1,500.00	2,100.00	-600.00
Salmon Plaques	0.00	909.00	-909.00
Secretary Exp.	278.00	193.66	84.34
Stationary	294.94	0.00	294.94
Travel Display	0.00	52.00	-52.00
Treasurer's Exp.	819.69	703.52	116.17
W.F. Thompson	750.00	0.00	750.00
TOTAL OUTFLOWS	19.564.82	<u>24,706,16</u>	<u>-5.141.34</u>
OVERALL TOTAL	<u>-411.82</u>	<u>-477.95</u>	<u>-66.13</u>

AIFRB Current Portfolio Status — as of 31 July 1998

<u>Name</u>	Quantity	•	Ma	arket Value			
Money Funds							
Smith Barney Funds Cash Port CL A	733.79	Shares @ 1.00	\$	733.79			
Stocks (Close End Funds)							
Putnam Managed Mun Income	1,550	Shares @ 11.313	\$	17,535.15			
Municipal Income Trust II	1,500	Shares @ 9.625	\$	14,437.50			
Mutual Funds							
Aim Equity FDS Inc.	673.759	Shares @ 23.43	\$	15,786.17			
Franklin Tax Free TR-High	722.785	Shares @ 11.62	\$	8,398.76			
Morgan Stanley Fund Inc.							
(Asian Growth CL C)	154.768	Shares @ 6.30	\$	975.04			
Accrued Money Fund Dividends			\$	2.05			
Cash Balance			\$	0.00			
Total Value of Portfolio= \$57,868.46							
Total Value of Portfolio at end of Fiscal Year 1997			\$	58,557.95			
Total Value of Portfolio as of 28 June 1998			\$	57,868.46			

NOTES:

Net Loss (1.18%)

Portfolio diminished by \$4,087.09, which was transferred to checking account on 6 April 1998 to cover Institutes expenses resulting from dues shortfall which is estimated this year to be \$6,160.

Respectfully submitted — Joseph W. Rachlin, Treasurer

689.49)

1996

W. F. THOMPSON AWARD

TO: Stephen J. Newman

Dr. Stephen J. Newman of the Western Australia Marine Research Laboratories, Fisheries Department of Western Australia has received the AIFRB W. F. Thompson Award for the best paper published by a student in 1996. The paper, "Variability in the population structure of Lutianus adetii and L. quinquelineatus among reefs in the central Great Barrier Reef, Australia" appeared in Fishery Bulletin 94 (2): 313-329. Dr. Newman received \$750.00 and an award certificate from AIFRB. Approximately 40 papers were evaluated by the Award Committee which consisted of Jack Pearce (chr.), Richard Langston and Robert Olson.

W. F. THOMPSON **AWARD** — 1997

The W. F. Thompson Best Student Paper Award (for 1997) is given by the American Institute of Fishery Research Biologists (AIFRB) annually to recognize excellence in research as well as to encourage student professionalism in fisheries and aquatic sciences and publication of research results. The award includes a plaque and a cheque for \$1,000.00 U.S.

All scientists are eligible so long as the senior author conducted the research while a student of fish or some aspect of aquatic science.

Papers nominated for the Best Student Paper Award must have been accepted for publication in a recognized scholarly journal, or as part of a book or proceedings, within three years of termination of student status.

For papers published in 1996 and to be nominated for the Award, send a resume with details of student author's educational and recent employment history, as well as six copies of the paper to:

Dr. Jack B. Pearce, Chair

W. F. Thompson Best Student Paper Award c/o Fishery Bulletin

NOAA-NMFS

Woods Hole, MA 02543-1026 USA To be eligible, papers must be received by 31 January 1999. Major advisors, supervisors, and mentors should ensure that eligible papers by their associates are submitted.

A PROPOSAL-AIFRB Professional Development Award

Members Comments Desired

Program: AIFRB Professional Development Award

Purpose To provide financial support for members to

participate in training courses, to attend national and international symposia or conferences, to obtain inservice training not supported by an employer, or to otherwise engage in programs and activities for the purpose(s) of professional development in fisheries

science and management.

Eligibility Any Member and Fellow with three (3) years or more

> of membership in good standing can apply for financial support. No member shall be eligible to receive assistance more than once in any 5-year

period.

Annual Awards Up to \$1,000 per recipient as determined by need.

A total of no more than \$3,000 shall be set aside annually by the BOC to grant awards in this program.

Nominations and Applications for financial assistance must be received

Review Process by the Secretary no later than April 1st of each year.

Applications will be reviewed by a committee consisting of the Secretary, Past-President, and Regional Directors. Decisions will be based on the merits of the proposed activity to the member's professional development. Award recipients will be

notified by the Secretary no later than June 1st.

Applicants must submit a written request for financial **Application**

assistance. The request must describe the professional development opportunity, how this opportunity will assist in career development or enhance research or management capabilities of the member, and must include a statement of the

total costs of the proposed activity, and the amount

of financial assistance requested.

Awards shall not represent more than 50% of the total cost.

As an organization, we tend to focus on providing for the professional development of young and aspiring fisheries researchers by providing financial assistance through the Research Awards Program and the W. F. Thompson Best Paper Award. However, we do little for the rank and file AIFRB Member other than to provide them with a copy of Briefs. This award, which is aimed at the established, mid-level professional, offers members an opportunity to take advantage of available programs and symposia for professional development.

Members should respond to committee members Frank Panek or Mark Collins (addresses on back panel of Briefs) or to the Editor.

AIFRB - Procedures Manual Being Revised - Available for comment

President Sakagawa is overseeing revision of AIFRB Procedures. Copies are available from Secretary Warkentine. Comments to Sakagawa or your District Director would be appreciated.

RECENT LOSSES

Roy E. Nakatani — December 15, 1997 Associate 1959, Member 1960 Fellow 1972, Emeritus 1993

oy Nakatani is recognized by the scientific community for his studies of fish diseases and for research that took him from the Hanford nuclear reservation in southeastern Washington to such far-flung regions as the Aleutian Islands of Alaska and the South Pacific. But if you asked Roy what his greatest contribution was, he would have said it was as an educator.

The youngest of four children and son of immigrant parents, Roy E. Nakatani was born in Seattle in 1918. He received all his education—from k-12 through graduate school—in Seattle. As was the case for many second-generation Japanese, he also attended Japanese school each day after American school.

Washington (UW) in 1938, but left in 1941 to serve in the U.S. Army for five years, where as Staff Sergeant he received a number of honors including the Victory Medal, American Theater Service Medal, and the American Defense Service Medal.

Roy returned to the UW in 1946 and graduated Cum Laude with a Bachelor of Science in Fisheries in 1947. Upon graduating, he immediately went to work for the newly formed Fisheries Research Institute (FRI), conducting research for the Alaska Salmon Program. Long-time colleague and former FRI director Robert Burgner recollects, "We worked together conducting biological field studies on sockeye salmon in the Bristol Bay area of Alaska, where Roy got his first solid taste of scientific research and displayed his talents."

fter a bout with tuberculosis that put his career on hold from 1948 to 1952, he returned to the UW to undertake graduate studies at the then College of Fisheries. In 1960, he earned his Ph.D., which was focused on changes in blood chemistry of Columbia River blueback salmon during the upstream migration to spawn.

Roy and his wife moved to Richland in 1959, where he worked as a Biological Scientist for the General Electric (GE) Lab, which was responsible for biological monitoring at the Hanford Military Reservation. From 1962 to 1966, he managed GE's Aquatic Biology Program at Hanford, and he stayed on with Battelle Northwest after it took over the Hanford Labs from GE in 1966. He managed Battelle's ecology studies at Richland until 1970.

In the 1960s, Roy also became involved with the Atomic Energy Commission. He participated as a

Visiting Scientist in research at the Christmas Island nuclear bomb test site and also served as Chief Scientist for Project Longshot, the underground nuclear bomb test at Amchitka Island in the Aleutians. Despite the active schedule Roy maintained throughout the '60s, he found time in the latter half of that decade to contribute to the College of Fisheries as an Affiliate Faculty.

In 1970, Roy and his family returned to Seattle, where he took the position of Associate Professor at the School of Fisheries, with the additional responsibility of Assistant Director of FRI and Program Director of Living Resources for the Washington Sea Grant Program. In 1973, he became a full Professor and Associate Director of FRI, positions that he held until he retired in 1988. As a Professor Emeritus, Roy continued to actively participate in research until 1996, drawing no salary during this time.

Roy's research focus was fish diseases, but he also conducted research on water quality and the effects of radiation and oil pollution on aquatic life. He authored or co-authored roughly three dozen manuscripts that were published in journals, books, and proceedings of scientific symposia. He also authored or co-authored over 100 reports on aquatic biological subjects. He was a technical advisor, consultant, panel member, and scientific reviewer for government agencies, corporations, conservation groups, and professional societies. Burgner noted, "The list is a page long, in small print, and not all inclusive."

Roy's professional society memberships included the American Association for Advancement of Science, the American Institute of Fisheries Research Biologists (AIFRB), the International Academy of Fisheries Scientist, and the American Fisheries Society.

espite extensive research activities at the UW and elsewhere, Roy considered himself an educator first and foremost. "That was No. 1 with my father: education and family," said his son, Scott; "he went out of his way working with students." Roy was very active on graduate student supervisory committees, and was especially adept at obtaining financial support for graduate student research. In just one year—1974—Roy served as committee chairman for 3 Ph.D. and 2 M.S. students, and was a committee member for 12 additional Ph.D. and 10 M.S. students. By any standards, this was a very heavy academic load, but Roy always managed to make time to advise his students, whether he was in the office or in the field.

Roy's reputation as a scientist with high professional standards contributed to his remarkably successful grantsmanship, and much of the funding he obtained supported the research that graduate students conducted in pursuit of their degrees. Burgner observed,

"In 1984...Dr. Nakatani was funded on nine research projects totalling nearly \$2 million." At the time, this represented nearly 40% of the total research dollars coming from grants and contracts.

In recognition of his accomplishments as an exemplary scientist and research administrator, Roy became the first member of the AIFRB to be featured in their *Briefs* series, which highlights noted AIFRB scientists.

Roy's friends and colleagues (often one in the same) remember Roy for his love of fishing. Two points illustrate this: School Director and long-time friend and colleague Ken Chew observed that "In 1970, we wooed Roy back from Battelle to the UW with the most wicked weapon we had: we invited him on a couple of salmon fishing trips, which he loved so dearly."

ore poignant, however, was an event that occurred not long after Roy retired from the UW. Chew and several colleagues conspired to persuade Roy to come to FRI without telling him why. On rounding up his fellow confederates and meeting Roy in the FRI lounge, Ken unveiled a large photograph of Roy, Ken and another friend in a fishing boat on Puget Sound (an exceptional photo in that it showed Roy holding his catch—pompano—which was almost unheard of in that area). The point of this event was for Roy's colleagues, in their own informal way—no panel, no nominations, no ballots—to recognize his years of service and dedication to UW Fisheries. Dr. Nakatani continued to enjoy fishing and going out on Lake Washington or Puget Sound with his students.

¶¶ He also loved to read—research, mysteries, anything he could get his hands on," said his wife of 42 years, Harue Nakatani of Redmond. "And he was an avid sports fan, especially of UW basketball and football. We had season tickets for over 30 years...A highlight was seeing the Huskies win the national championship."

Roy E. Nakatani was a dedicated family man, and is survived by his wife, Harue; his 4 sons, Scott, Ron, Dale, Mark, and daughter, Mika; sisters, Helen and Kinuko; brother, Kenny; and eight grandchildren. He will be missed by colleagues, former students, friends and family alike.

From (mostly) Research in Fisheries 1995-96
Biennial Report University of
Washington School of Fisheries

John Laurence Kask—August 8, 1998 Fellow 1956—Emeritus 1988



r. J.L. Kask, a Founding Fellow of AIFRB, died in San Diego, California, on August 8, 1998 at the age of 92.

Tr. Kask was born, of Estonian immigrant parents, at Sylan Lake, Alberta, Canada, in 1906. In his youth he worked as a commercial fisherman in British Columbia. He earned his B.A. degree at the University of British Columbia in 1928 and his Ph.D. degree at the University of Washington in 1936.

uring his long professional career he held a large number of important jobs. His positions included the following: Assistant, Biological Board of Canada, 1928; Assistant Scientist, International Fisheries Commission (now the International Pacific Halibut Commission), 1929-1938; Associate Scientist and Assistant Director, International Pacific Salmon Fisheries Commission, 1939-1943; officer, U.S. Army, 1943-1945; Curator of Aquatic Biology, California Academy of Sciences, 1945-1948; Chief Biologist, FAO, 1948-1950; Chief Investigator and Assistant Director, Pacific Oceanic Fisheries Investigations (U.S. Fish and Wildlife Service, Hawaii), 1951; Chief Officer of Foreign Activity and Assistant Director of Fisheries, U.S. Fish and Wildlife Service, Washington, 1951-1953, Chairman and Science Administrator, Fisheries Research Board of Canada, 1953-1963, Director, Inter-American Tropical Tuna Commission, 1963-1969. During 1947, while employed by the California Academy of Sciences, he served as a consultant for the government of Costa Rica and during 1947-1948 he served as a consultant for the U.S. Department of State, where he helped rehabilitate the Japanese fisheries, which were in need of assistance after the second World War. After his retirement he did consulting work on fisheries and biological oceanography for FAO.

r. Kask will perhaps be most remembered for his accomplishments as Chairman and Science Administrator for the Fisheries Research Board of Canada from 1953 to 1963. When he accepted that position there were about a dozen research stations scattered around Canada, which operated more-or-less independently. He was instructed by the Minister of Fisheries to coordinate the work of these stations and make them more responsive to problems besetting the fishing industry. He succeeded in doing this, and also in making the Fisheries Research Board of Canada one of the finest fisheries research organizations in the world. His prophecies during this period about the dangers of overfishing and pollution proved to be correct. He predicted the decimation of Atlantic cod and Pacific salmon.

Pr. Kask was an excellent speaker and writer, and he had the ability to handle people well. During his varied career he influenced dozens of people who eventually attained positions of great responsibility. Vice-President Gore was counseled by Kask on world conservation. All of those who knew him respected and

admired him greatly. An opera and poetry aficionado, Dr. Kask had a knack for reciting poetry. "He knew operas backwards and forward -- and classical music, too," according to Jim Joseph, IATTC.

He is survived by his wife, Vida, two daughters, two granddaughters, and one great-grandson. Daughter Janet is a writer in Montreal, while daughter Melanie is an author in Oakland, Ca.

Richard Michael Stanely—June 18, 1998

ichard Michael Stanley was elected to the Institute as a Student member on June 1, 1998. Mr. Stanley held a Bachelor of Arts degree from West Virginia University in 1997 and was working on his Master's degree in Wildlife and Fisheries Management at the same university. He had already published one peer reviewed paper and was beginning a promising career in fisheries biology. Unfortunately, Richard died in a boating accident while conducting research on the Hudson River.

Ocean Fund Grant Awards

On October 1, 1998, The Ocean Fund (Royal Caribbean Cruises Ltd.) announced the award of \$537,000 in grants to 10 organizations working to protect the marine environment. Projects include research on endangered fish and sea turtle populations, protection of coral reefs, and various education projects, including teacher training in marine science.

Royal Caribbean Cruises Ltd., Press Release

PEARCE ON MEMBERSHIP

"Ouo Vadis"— or whither I wander!

The American Institute of Fishery Research Biologists (AIFRB) was incorporated in 1956 "to establish and maintain high professional standards of recognition of achievement and competence". This has continued to be a major thrust of the organization and its membership. Moreover, there is little doubt that throughout the 30's, 40's and 50's many fisheries professionals often entered the field with very little formal academic training or experience. Certainly I entered the field of wildlife management in 1949 with one course in range

management and another in soil science. Period! While I would not say that my job was profound it, today, would call for more training or experience than I had in 1949.

Game management and fisheries science are not the only disciplines which called upon relatively naive, untrained persons to be "professionals". Moreover, many of my early colleagues went on to become leaders in the fields *sans* degree. Some of the leading physical oceanographers were individuals who were relatively inexperienced, or untrained at all, in the discipline; never-the-less during a national—yes worldwide-crisis (WWII) they learned a sufficient amount to climb to the highest rungs of the profession.

It is no wonder then that the founders of the AIFRB and their followers believed that fishery research biologists should somehow be certified as to their competency. But how? And by what criteria? Should all certified fishery biologists have to pass a test involving basic statistics? Or the taxanomy of key species? Or rather could a panel of peers pass on the adequacy, training, and experience of a professional? As we know, AIFRB chose the latter, as has almost every promotion or tenure committee that I am aware of. Another huge issue is that AIFRB includes the words "fishery RESEARCH biologist," with emphasis on the second. Yet a fair number of our membership are or have become managers, and some gained membership almost solely on their managerial competency! Perhaps the matter cannot be easily, or ever, straightened out. Yet if one of the AIFRB's raison d' etre is to judge the worthiness of the fishery research biologist, with emphasis on the first word, there must be an acceptable scheme, one that will carry the AIFRB objectives into the 21st century.

A final confusing matter is that, as an editor of three marine science journals I increasingly note that papers submitted to <u>basically</u> fisheries journals are being authored by



Jack Pearce court Philosopher to AIFRB and frequent contributor to <u>Briefs</u>. Were all AIFRB members as committed as <u>Dr. Pearce</u>. Thanks again Jack.

zoologists, geneticists, biochemists, and others having no particular connections to the fisheries research communities as typically defined by AIFRB or AFS. While these scientists are at the forefront or cutting edge of marine science, and fisheries research, are they to be welcomed into the AIFRB fold? I hope so, since, in fact, the direction of much of what was typically thought of as fisheries research will be done by persons working in institutes for modeling, centers of genetic research, and departments of biochemistry and physiology. For various reasons they will want to publish in the Fishery Bulletin, Journal of Aquatic Animal Health, or the Transactions, yet will they find a seat among their more fishy brethren? We should consider this issue thoroughly and decide our actions on fair and objective criteria. The futures of a number of associations and institutions ride on the counsel of wise boards.

By Jack Pearce

Native Fish Found in U.S. Lake Ontario for First Time in 50 Years

A little five and a half inch fish is causing a whale of a delighted stir since USGS scientists hauled the fish up from depths of nearly 500 feet in April. It marked the first time the deepwater sculpin, a species once abundant in Lake Ontario, had been seen in the U.S. waters of the lake in more than 50 years.

"The reappearance of deepwater sculpin is one of many recent signs that a general recovery of Lake Ontario's native fish community is under way," said Mr. Robert O'Gorman, head of the USGS Lake Ontario Biological Station in Oswego, NY.

The fish, a mature female, was caught in a trawl net towed along the lake floor 492 feet below the surface, said O'Gorman. It was identified by USGS scientists working aboard the USGS Research Vessel <u>KAHO</u> during a spring fishery investigation.

Despite annual surveys by USGS and the New York Department of Environmental Conservation from 1978-1997, the deepwater sculpin had not been captured in the U.S. waters of Lake Ontario since 1942. Likewise, exploratory fishing in the U.S. waters of southern Lake Ontario during 1964 and 1972 failed to capture any specimens. In the Canadian portion of Lake Ontario, the fish is extremely rare--only six deepwater sculpin have been reported in Canadian waters since 1972-three in 1972 and three in 1996.

Deepwater sculpin are abundant in Lakes Huron, Michigan, and Superior and rare in Lake Ontario. O'Gorman said that although the fish was plentiful in Lake Ontario in the early 1900s, its populations plummeted in the 1950s, most likely because of predation on their young by alewife, a non-native fish that invaded Lake Ontario from the Atlantic Ocean via navigation canals.

Deepwater sculpin are native in the Great Lakes where, as their name implies, they occupy the deepest waters. The small scaleless fish have a broad, flattened head and a long slender body. Deepwater sculpins are an important link in the offshore food chain, eating bottom-dwelling invertebrates and, in turn, being eaten by lake trout, historically the lake's top predator.

O'Gorman said the capture of this fish is another indication that Lake Ontario is becoming much healthier. The numbers of two other formerly abundant native fishes--burbot and emerald shiner--are increasing in survey catches. Also, hatchery lake trout are beginning to successfully reproduce after more than a decade of failure.

"All of these positive signs appear linked to a decline in the abundance of non-native alewives and a shift in their distribution to deeper water," said O'Gorman. "Because the larvae of many native fishes, including larvae of the deepwater sculpin, occupy shallow water, these changes have helped reduce predation on the young of native fishes, allowing their populations to start recovering."

USGS Press Release - October 1998

CHESAPEAKE BAY BLUE CRAB CONSENSUS

The panel of scientist that advises the Bi-State (VA-MD) Blue Crab Advisory Committee reviewed the most recent surveys at its September 3rd meeting. They developed the following statements of consensus:

- Overall abundance for all age groups of blue crabs is down.
- Fishing mortality is increasing.
- Fishing effort is at near-record levels.
- Spawning stock biomass (an estimate of the total population's reproductive potential) is below the long-term average.
- The average size of crabs is decreasing. The workgroup suspects that once crabs molt to more than 5 inches (the minimum legal size for hard crabs), most are harvested and do not have a chance to grow more than 6 inches.
- Fishery-independent surveys show a decreasing percentage of legal size crabs.
- The reproductive potential of crabs may be compromised because of the smaller males and lack of mature females.
- Fishery-independent surveys are important and the long-term data obtained from each is essential in assisting management.
- Funding for blue crab management, especially the fishery-independent surveys, is a high priority and needs to be maintained and expanded.

From Bay Journal-October 1998

ECOLOGICAL SOCIETY OF AMERICA

Call for Posters and Papers: 1999 Annual Meeting in Spokane, Washington 8-12 August 1999 Deadline for Abstracts is January 31, 1999

The Ecological Society of America will hold its 84th Annual Meeting on 8-12 August 1999 at the Spokane Convention Center, Spokane, Washington. The meeting will include symposia, contributed papers and poster sessions, workshops, field trips, social events, and business meetings.

Abstracts for contributed poster or paper sessions should be sent to the Program Chair, Dr. Elaine R. Ingham, Department of Botany and Plant Pathology, Cordley Hall 2082, Oregon State University, Corvallis, OR 97331-2902. Phone: 541-752-5066. E-mail: inghame@bcc.orst.edu

Abstracts may also be submitted on fully labeled computer disks. Abstracts can be submitted as hard copies if absolutely no computer access is possible. Instructions for preparation of abstracts are available from Ingham.

THE FIRST NATIONAL CONFERENCE ON

Marine Bioinvasions Cambridge, MA January 24-27, 1999

Sponsored by the MIT Sea Grant College Program, this conference will be held at the Massachusetts Institute of Technology in Cambridge, Massachusetts, USA from January 24-27, 1999. The conference focuses on the incidence, effects and management of exotic species in coastal, estuarine and marine ecosystems. Topics will include ballast water research and management; ecological and genetic consequences of invasions; patterns of invasions in time and space; transport vectors (unintentional and intentional); status of control factors and predictive options for assisting managers; and economic impacts.

The conference brochure, with information on abstract submission and conference registration, is available at: http://massbay.mit.edu/exoticspecies/conference.html

National Conference on Marine Bioinvasions

MIT Sea Grant 292 Main Street, E38-300 Cambridge, MA 02139 Fax: 617-252-1615

E-mail: exotics@mit.edu

THE FOURTH INTERNATIONAL CONFERENCE ON

The Mediterranean
Coastal Environment and
The Fourth International
Conference on

The Environmental Management of Enclosed Coastal Seas

Land-Ocean Interactions:

Managing Coastal Ecosystems
Antalya, Turkey
November 2-6, 1999

Abstract submission deadline:
November 30, 1998

Medcoast Secratariat

Middle East Technical University
06531 Ankara, Turkey
E-mail:
medcoast@rorqual.cc.metu.edu.tr

Canadian Lobster Conservation

On October 20, 1998, Canadian Fisheries Minister David Anderson announced new conservation measures for lobster off Nova Scotia and in the Bay of Fundy. Aimed at doubling lobster egg production, fishermen face a series of lobster size increases and/or requirements for V-notching tails to mark female lobsters. Fishermen protested that they had agreed to a one-year plan as opposed to the federal government's four-year plan for the fishery.

Associated Press

Atlantic and Gulf Coast States Fail to Enforce Federal Protection of Sharks, Says New Report

A failure to enact state regulations by U.S. Atlantic Coast and Gulf Coast states is seriously undermining federal efforts to protect sharks, according to a report by Dr. Merry Camhi of the National Audubon Society's Living Oceans Program.

Her report, entitled Sharks on the Line, was released by the Ocean Wildlife Campaign, a coalition of five major national environmental groups. Severely threatened shark populations in the Atlantic and Gulf of Mexico are decreasing by as much as 85% over the last two decades. Five years ago, the National Marine Fisheries Service (NMFS) instituted a fishery management plan to prevent over-fishing of sharks in federal waters of the Atlantic and Gulf.

As noted by Dr. Camhi, sharks unfortunately don't recognize human political boundaries. They move in and out of federally controlled waters and are increasingly falling prey to overfishing in state waters where federal rules don't apply. Many sharks are caught indiscriminately in gill nets and longlines of commercial boats targeting other species.

"Juvenile mortality must be reduced to speed the recovery of large coastal sharks," says Dr. Camhi. "The best way to do this is to reduce fishing in nursery grounds, which primarily occur in state waters."

Sharks on the Line rates each Atlantic Coast and Gulf Coast state based on the size of their shark fisheries and includes the following criteria: closing state waters to shark fishing during federal closure periods; imposing bag and size limits; prohibiting catching or possession of species protected in federal waters; and explicitly banning finning (cutting off shark fins to market as a delicacy in some countries).

Florida, with the largest and most active commercial shark fishery of any Atlantic or Gulf state, received the highest rating as its restrictions actually surpass federal regulations. Nevertheless, the report noted that additional measures such as establishing minimum catch sizes and reporting by-catch mortality would further improve Florida's shark conservation practices.

At the other end of the spectrum, New Jersey and Louisiana have two of the largest shark fisheries and no shark management plan whatsoever. Louisiana landed more than 1.6 million pounds of shark in 1996. Other coastal states with relatively small shark fisheries and no regulations are Maine, Massachusetts, New Hampshire, Rhode Island and Connecticut.

"States must act now to implement the policies that are vital to the recovery of sharks," said David Wilmot, director of the Ocean Wildlife Campaign. "Failure to do so could result in the loss of important shark fisheries in the near future."

Sharks on the Line recommends six measures for every state management plan:

- —Require all state commercial shark fishers to hold federal shark permits.
- —Establish size limits for sharks in state waters in commercial and recreational fisheries.
- —Close state waters to shark fishing during the pupping season.
 - —Require the use of devices that reduce shark by-catch.
 - -Ban finning of all sharks.
 - -Improve reporting of species catch and landings data.

Note: For a full copy of *Sharks on the Line* or for report cards for any of the 18 Atlantic and Gulf states, contact Kawana Lloyd at Fendon Communications, (202) 822-5200 extension 218.

From International Angler 60 (5) Sept-Oct 1998

From: The Shark Tagger 1997 Summary NMFS, Narragansett, RI 1997 Blue Shark Recaptures Distance Travled > 1000 Miles N = 112 (Also 370 lesser movements)

USF & WS rejects requests to add Atlantic sturgeon to endangered list



The National Marine Fisheries Service and the U.S. Fish & Wildlife Service have rejected a request to list the Atlantic sturgeon—the largest native fish in the Chesapeake Bay—under the Endangered Species Act.

But the decision will almost certainly trigger a legal challenge from the group that petitioned to have the sturgeon, whose populations have plummeted all along the coast during the past 100 years, listed as a threatened species.

"I'd say there's a 99 percent chance we're going to challenge them in federal court," said Jasper Carlton, director of the Colorado-based Biodiversity Legal Foundation. "It's critically endangered. To say it not even biologically threatened is incredulous."

The Atlantic States Marine Fisheries Commission, which is responsible for managing migratory species along the East Coast, in June closed the Atlantic sturgeon fishery for the next four decades to allow the population to rebound.

Federal officials said that action contributed to their decision.

"There is no doubt that Atlantic sturgeon have been severely overfished," said John Rittgers, acting NMFS Northeast regional administrator. "But the range-wide prohibition on harvest and possession in all the coastal states recently formalized as a long-term moratorium by the Atlantic States Marine Fisheries Commission has removed that threat to the species."

Ron Lambertson, USF & WS Northeast regional director, said that "with the complete closure of the fishery, we are confident that populations will be increasing. Restoration of this slow-maturing fish will be a lengthy process, and firm commitments to the necessary long-term protections are already in place."

But Carlton said the ASMFC's action, by itself, would do little to help the sturgeon because it failed to improve habitat by curbing pollution in spawning areas, or limit the bycatch of sturgeon in fisheries targeting other species.

"If you're not going to list the Atlantic sturgeon and the Atlantic salmon under the Endangered Species Act, at least as threatened, you might as well not have an Endangered Species Act," said Carlton, whose organization has also been active in seeking to have the Atlantic salmon listed in New England.

"They're just not going to list anything that's waterrelated because water is the big issue," he said. "They don't want to have to address water pollution, habitat destruction and overfishing, and all three of those apply to the Atlantic salmon and the Atlantic sturgeon." Sturgeon can grow up to 14 feet long, weigh more than 800 pounds and live up to 60 years. They are an anadromous fish, spawning in freshwater rivers but spending most of their lives swimming along the coast until returning to their native rivers to spawn. They were once one of the most important fisheries in the Bay and along the coast, but sturgeon take so long to reproduce — females don't mature for more than a decade — that their population was unable to withstand fishing pressure and was nearly wiped out in the early part of this century.

Although sturgeon fishing has essentially been banned in the Bay for years, scientists have observed no evidence of a population rebound. The only river that has shown evidence of occasional spawning is the James.

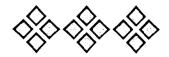
Nonetheless, a status review team with biologists from USF & WS, NMFS and three state agencies, concluded that the species is neither threatened nor endangered. The team concluded that spawning populations remained in 14 East Cost rivers, and possibly five more. Historically, the fish spawned in 34 rivers. Also, the team said habitat conditions in the rivers were gradually improving.

Carlton expressed doubt about the conclusions. "I'd be amazed if they can back this up," he said.

He said a river that occasionally has a sturgeon spawning in it—as may be the case in the James—is no indication of a healthy, abundant stock. "I'd be delighted if indeed they can show me they have two or three healthy viable populations."

Carlton said the failure to list the sturgeon and improve its habitat conditions would lead to more species becoming imperiled. He said his organization may seek to have a dozen East and Gulf coast species listed under the Endangered Species Act in the next two years. "This is going to initiate fish wars on the Atlantic Coast," he said.

From Bay Journal, October 1998



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...BRIEFS...

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NOVEMBER, DECEMBER 1998

JOHN V. MERRINER—RECEIVES DISTINGUISHED SERVICE AWARD FOR 1998

Tohn Vennor Merriner, Production Editor for AIFRB, was awarded J the Institute's Distinguished Service Award at the Board of Control meeting in Hartford, Connecticut on August 23, 1998. As Production Editor since 1988, John has been responsible for numerous labors associated with the physical production and distribution of Briefs and other Institute publications. Until the recent contracting for addressing and mailing services for Briefs, one of John's most onerous tasks was the application of addresses and postage to every copy. But John gave a licking and kept on sticking. John also supervised an inordinately difficult gestation and delivery of the 1998 version of the AIFRB Membership Directory. He had previously developed the 1992 Directory, various versions of membership brochures, and fabricated the AIFRB traveling display. John recently prepared the new version of the AIFRB bylaws and our Code of Conduct and distributed both. John was instrumental in the distribution of the AIFRB symposium publication on old growth forests and fisheries. He served as Carolina District Vice-director and Director from 1986 to 1989.



John was born and raised in and around Winchester VA, in the Shenandoah Valley. With a B.S. from Rutgers, and an M.S. and Ph.D. from North Carolina State (under Bill Hassler) John joined the staff at the Virginia Institute of Marine Science (VIMS) where he worked from 1970 to 1980. Realignment of Virginia's marine research led to affiliation of VIMS with the College of William and Mary and a faculty appointment (Associate Professor) there for John. In 1980 John moved to Beaufort, NC to become Director of the Division of Fisheries at the Beaufort Laboratory of the Southeast Fisheries Science Center, National Marine Fisheries Service (NMFS). Currently John serves as liaison to various fishery management councils, interstate and intergovernmental bodies for the Center. In 1998 John became Science Editor for *Fishery Bulletin* and the NMFS Technical Report Series.

As a co-worker-supervisee I found myself frequently in awe of some of John's intellectual traits. No pachyderm that ever trumpeted over the veldt has a memory to rival John's. Minute parcels of fisheriana and obscure references are recalled in seconds. Further, John's associative powers are incredible. His ability to sort through the volumes of facts in his noggin and to apply those to each other and to some problem at hand is extraordinary and has led to many innovative research approaches and insights. On the downside, don't expect ever to decipher one of John's handwritten notes detailing one of these revelations. A few words, maybe. A whole sentence, in fact a rare occurrence, never!

Never pass up an opportunity to dine with John! A man with Faustian appetites and, apparently, one of those rare controllable glottises, John is the man that made Milwaukee wealthy! Good food and drink are savored, perhaps revered. Warmth and fellowship abound. John and I made a second career of ethnic foods. On post business hours while traveling, when other biologists might frequent bars or girly, (perhaps boyly, as the situation required), shows, John and I would prowl ethnic grocery stores and acquire condiments and ingredients that are still mystifying our wives. Diamond-in-the-rough restaurants were our specialty. You know, those which cater to upperclass winos and down-on-their-luck pawn brokers. But such pearls as we sometimes found in those muddy oysters! Only once did I see John falter in our search for gastronomic Nirvana. San Antonio. An early A.M. beanery in a down-at-the-heels warehouse area. But wonderful fresh hot flour tortillas. And John ordered such a promising repast. Huevos con chicharrones. Sounded great. Crunchy pork skins with fluffy scrambled eggs --- we thought! Pork skins yes, but boiled and gray and slithery and au jus, with here and there jaundiced curds of scrambled eggs bobbing about in the gray slithery broth, and all appearing like much overused dishwater. John's fork repeatedly took a trajectory towards the plate only to veer off at the last minute. For JVM, breakfast that day was coffee and tortillas. Buy hey, I thought the stuff was good — just close your eyes.

Not only for long service, but for intense dedication and assiduous application of energy and intellect towards the work of the AIFRB, John Merriner is a most-deserving recipient of the Distinguished Service Award. ~ The Editor



ANOTHER ACCOLADE FOR HUBBS:

Honorary Membership in the Ichthyological Society of Mexico

Dr. Clark Hubbs, immediate Past-President of the AIFRB, was inducted as an honorary member of the Ichthyological Society of Mexico at a reception held October 23, 1998 in Tuxpan de Rodriguez. Dr. Savador Contreros Balderos, President of the Ichthyological Society noted that Clark was honored "por su brilliant trayectoria y valiosas aportaciones en el campo de la ictiologica".

(Editors note: this is what Clark sent, I have no idea what it means, but it looks like good stuff!)

Congratulations again, Clark!

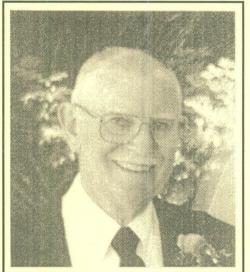
WHO'S WHO IN AIFRB —

Carl E. Bond

arl E. Bond is a very respected participant in the Oregon-Southwestern Washington District of the American Institute of Fishery Research Biologists, and a highly regarded member of the scientific community. He has excelled in the disciplines of fisheries conservation, science, communication, education, and mentorship. Dr. Bond obtained his B.Sc. in 1947 and M.Sc. in 1948, both from Oregon State University, following a 4-year stint in the U.S. Navy. His M.Sc. was the first graduate degree in fisheries given by OSU's Department of Fish and Game Management. Carl was

awarded a National Science Foundation Faculty Science Fellowship for study in ichthyology at the University of Michigan in 1959-60, and received his Ph.D. from UM in 1963, the same year that he became a member of AIFRB. Later Carl served a 3-year term as District Director in Oregon, and member of the Board of Control. He became an AIFRB Fellow in 1973, and an Emeritus member in 1988. As the first specialist in fisheries, Carl joined the faculty of OSU as Professor of Fisheries in 1964, and continued in that position until his retirement in 1985, when he became Professor Emeritus.

Professor Bond, both as a teacher and researcher, has contributed enormously to the conservation and management of fishes in Oregon and the nation. He was a skilled teacher who provided generations of students with his uncommon knowledge of the fishes



of the Pacific Northwest. served as major professor to 65 graduate students that included 15 doctoral students. His productivity in teaching and training graduate students has not been matched in the history of the Fish and Game Department at OSU. Carl regularly taught three courses per term and supervised up to 13 graduate students. His courses covered a broad spectrum that included under graduate and graduate-level ichthyology, fishery management, hatchery practices, and limnology. Carl's personal research was also exceptionally broad based and included aquatic weed control, farm

pond management, aquatic toxicology, and taxonomy of Oregon fishes. Carl is considered a national authority on sculpins and a regional expert on lampreys, two difficult genera often avoided by fisheries biologists. Carl has published nearly 100 articles and research reports that include several with the OSU cooperative Extension Service. publications include marine, estuarine, freshwater, and desert fishes. His landmark text, Biology of Fishes, first published in 1979, and revised in 1996, has served countless students of fish biology and management. Carl's interest and knowledge of Oregon fishes have made him a key scientist in evaluating the status of rare and endangered species in the state; his research has contributed substantially to conservation of aquatic life in Oregon.

From 1955 to 1969, Carl focused much of his research efforts on aquatic weed control. Eutrophication was a substational problem at that time, and aquatic weed growth and subsequent decay - as well as herbicide applications, seriously limited Oregon fishes. During the same period, he investigated the effects on fishes of two widespread and unregulated discharges; pulp mill waste and wood preservatives. His research and publications led to improved waste treatment and state regulations, well before the Clean Water Act was passed. And his research on the water quality effects on both warm water fishes and salmonids was one reason that the Federal Water Pollution Administration (predecessor to the Environmental Protection Agency) located its water quality research laboratory in Corvallis. Like his mentor, Reeve Bailey, Carl is widely recognized as proponent of desert fishes conservation, and his work in that field provided information needed for listing ten Oregon desert species as sensitive, threatened, or endangered by the U.S. Fish and Wildlife Service and the Oregon Department of Fish and Wildlife.

Dr. Bond has conducted fisheries science research in marine and freshwater systems, and in cold and warm waters. In 1962 and 1964, Carl conducted fisheries research on fish distribution and coho salmon in Alaska for the Fisheries Research Institute of the University of Washington and the Bureau of Commercial Fisheries (now the National Marine Fisheries Service). In Oregon, he has investigated the kokanee (land-locked sockeye salmon) fishery of Crater Lake, Chinook salmon in reservoirs, and fisheries on the Colville Indian reservation. restricting himself to the more temperate climates western Oregon, Carl has also published on the desert fishes of eastern Oregon, including papers on chubs, suckers, and fossil salmonids. Carl single-handedly began building the OSU Ichthyological Museum in 1949, and computerized it in 1982. Over the years it has become one of the top regional fish museums in North America.

Carl has served the scientific community nationally and internationally in the areas of fisheries and aquaculture. For many years he was one of a small number of members of the Committee on Names of Fishers of the American Fisheries Society and the American Society of Ichthyologists and Herpetologists. Carl has conducted research and education evaluation in several foreign countries. He evaluated the usefulness of Peace Corps fishery programs in India and Iran; studied fisheries programs in Thailand, Hong Kong, Taiwan, and Japan; was a visiting professor at

Tokyo University of Fisheries; and taught fishery courses in Chile.

Dr. Bond's service to the fisheries community throughout his long career has been recognized with numerous honors and awards. In honor of his many years of work with desert fishes, Carl was honored by the desert Fishes Council in 1984, received an Award of Merit from the High Desert Museum in 1986, and was given an Award of Recognition by the University Autonima of Baja California in 1990. In recognition of his contributions to fisheries science, he was awarded Scientist of the Year by the Oregon Academy of Science in 1983, received an Award of Merit from the Western Division of the American Fisheries Society in 1984, and was given the Golden Beaver Award for Scientific Achievement by the Isaac Walton League in 1986. In 1998, these honors culminated with the American Fisheries Society's Award of Excellence that recognized Carl as "an outstanding leader and mentor for numerous fisheries professionals and students"... and for "his contributions to ichthyology and fisheries science [that] serve as an important foundation for researchers and fisheries managers." Carl continues to be active in his scientific pursuits today. Despite being slowed by a stroke, he is currently collaborating with a group to preserve his incredible breadth of knowledge of the state's ichthyofauan in a new book, The Fishes of Oregon.

> Submitted by John F. Palmisano, Director— Oregon SW Washington (information provided by Robert M. Hughes, Hiram W. Li, and James D. Hall)

What is a fishery biologist? Wise responds to Pearce

Dear Jack,

Delighted to see that you are attempting to deal with the question: What is a fishery biologist?

It's one that has bothered me (and others) for years. One approach is the negative — what, or who, is *not* a fishery biologist. In my not all that humble opinion, it has been a mistake to enroll taxonomists, endocrinologists, and the like in organizations of fishery biologists just because they work in institutions related to fisheries or with the word "fish" in the title, or even because they have done some work involving fish. Don't get me wrong. Some of my best friends are taxonomists.

Good luck with the question.

Sincerely, John P. Wise

Recent Losses—

L. EUGENE CRONIN

Fellow 1960, Emeritus 1983 and first President of the Estuarine Research Federation (ERF) passed away Friday, January 1, 1999.

Gene was the author of over 130 scientific publications and had studied the Chesapeake Bay since 1940. He was an expert on the fish and shellfish of the bay, as well as on pollution problems and resource management issues.

Chris D' Elia, also a former ERF President spoke for all of us when he said: "We will all miss him so much. Those who got to know him well and worked with him over the years know how very special he was. It is so nice that he had a chance to be honored by ERF in Providence last year."

Chris was referring to the Cronin Award which was created by the Federation in 1997 to recognize outstanding contributions to estuarine research by a young scientist. Gene thoroughly enjoyed having the opportunity to present the first Cronin Award to Samantha Joye before hundreds of ERF members at our conference.

From Don Boesch, also a former president of ERF, we received the following statement that was addressed to Don's colleagues at the University of Maryland:

I have the unfortunate duty to inform the UMCES family that earlier today Professor Emeritus L. Eugene Cronin passed away at the age of 81. A native of Aberdeen, Maryland, Gene Cronin's association with this institution began in 1943 when he was appointed a biologist at the Chesapeake Biological Laboratory (CBL). During the early 1950's Gene worked at the University of Delaware, where he established the marine laboratory at Lewes that subsequently evolved as the UD College of Marine Studies.

He returned to CBL, succeeding its founder Reginald Truitt as Director and oversaw the move into the University of Maryland, becoming also the first director of the UM Natural Resources Institute (NRI). In the later role he was directly responsible for establishment of the University of Maryland's Appalachian Laboratory. In 1975 the NRI was merged into the newly created Center for Environmental and Estuarine Studies (CEES) and Gene served for a while as the CEES Associate

Director for Research and then as Director of the Chesapeake Research Consortium.

For many years Gene Cronin was one of the most influential scientists in the Chesapeake Bay region as well as a leader in the field of estuarine science nationally and internationally. He had major influence on environmental and fisheries policies in Maryland and in the influence on environmental and fisheries policies in Maryland and in the formation of what became the Chesapeake Bay Program. For his many contributions to Bay science he was the second recipient (in 1994) of the Mathias Medal.

Gene remained active in his retirement, participating last month in the "Across the Generations Dialogue" held at Washington College. Just days before his death, Gene was actively working on a treatise on the blue crab, which he and Professor Vic Kennedy were editing. Interestingly, although he worked on many things over the years, blue crab biology was Gene's first love and the subject of his Masters thesis.

Gene's wife, Alice, was once a chemist at CBL and their CBL romance produced three sons.

In lieu of flowers, memorial contributions may be made to the Bay Ridge Trust, P.O. Box 4096, Annapolis, MD 21403, or to Friends of Foundation, 162 Prince George St., Annapolis, MD 21401 or Friends of the Chesapeake Biological Laboratory, P.O. Box 38, Solomons, MD 20688.

Vice Kennedy sent the following message to the authors of the book he and Gene were working on: When they hold that memorial service, it will have to be in a very large place. Gene Cronin touched the lives of large numbers of citizens in the Chesapeake Bay community, from graduate students like me 30+ years ago, to faculty and staff in various components of the University of Maryland, to watermen and seafood processors, to resource managers, to politicians... one could go on. May he rest in peace.

Joy Bartholomew, President, Executive Director, ERF Nancy Rabalais, Estuarine Research Federation

ROBERT JENKINS (AR)

Member 1961, Fellow 1979, Emeritus 1989

MILO C. BELL (WA)

Fellow 1973, Emeritus 1987

Spotlight on Dr. Russell Nelson:

A Decade of Leadership for Marine Conservation in Florida

Dr. Russell Nelson, (AIFRB Fellow) Executive Director of the Florida Marine Fisheries Commission. has been a member of both the Gulf South Atlantic Councils representing the State of Florida for 11 years. As Florida's chief marine fisheries scientist, Dr. Nelson works within the state by coordinating and supervising his staff's development of management plans for Florida's marine fisheries. He also interacts with federal and international fisheries management agencies organizations. His day to day tasks are varied and wide-ranging. On any given work day he may meet with a group of commercial fishers, talk with a sport fishing club, attend council meetings, serve as a state negotiator with an offshore oil and gas production company, or serve as a U.S. delegate to an international fisheries management organization.

Dr. Nelson chose a career in marine biology so he could work outdoors and devote his life to doing something he felt passionately about: advocating the conservation of marine fisheries.

For seven years he conducted research on reef fish community ecology, population dynamics and coastal pelagic trophic dynamics with the National Marine Fisheries Service before he decided to further his education and become a policy maker.

"My experience as a researcher had convinced me that management lacking decisive action to develop recovery plans of our saltwater fish stocks was leading to extreme jeopardy of those stocks, " he said. Combining his scientific expertise with his communications skills, he set out to promote decisive action in marine resource conservation.

Florida's unique marine environment leaves the Commission open to debate and controversy over fishery management decisions. The agency is aggressive in its conservative management strategies and led the effort to require turtle excluder devices in the shrimp fishery and to ban the commercial net fishery in Florida.

"Florida prides itself on being a leading state in the development and promotion of strong, conservation-oriented management plans for all marine resources in state and federal waters. Given the largest coastline and the greatest number of anglers in the region we accept our responsibility to set harvest levels which will assure the protection of these resources," Dr. Nelson said.

Fishery resource managers continue to work out allocation-driven conflicts between the recreational and commercial fishermen in Florida. Dr. Nelson believes commercial industry leadership is strong and feels there is an artificial division between these sectors in Florida because there are several examples where fishermen are working harmoniously in the same areas.

One issue he is at personal odds with is the council's decision to continue allowing recreational fishermen to sell their catch. "We should leave the commercial fisheries in the capable hands of the professional commercial fishermen. Recreational fishing is a sport, a viable past-time and people should be doing it for the experience rather than financial gain, "he said.

Until very recently coastal populations were most concerned with ocean issues, while the rest of the population was virtually unaware of the ocean and its vast resources.

"The ocean has always been a mysterious place, but people are becoming slowly aware of what the oceans mean to us," said Dr. Nelson. His first introduction to the undersea world as a child growing up in the

EDUCATION

B.A. Degree - UNC Chapel Hill
Majors - English & Philosophy
M.S. Degree - North Carolina State
University
Major - Fishery Biology
Minor - Statistics
Ph.D. - North Carolina State University
Major - Marine Fisheries Ecology
Minors - Ecology & Statistics

mid-west came from television programs such as Jacques Cousteau, Flipper and Sea Hunt.

"Television has helped raise awareness to the general American public about the ocean and has drawn them into the debate about the health of the ocean," he said, "This debate has created a new conservation ethic in America and spawned the creation of national parks and wildlife refuges." He said there is still motivation for further conservation because people are now seeing what is happening to our marine resources.

The South Atlantic Council has historically taken a conservative approach to management, but Dr. Nelson said recent changes to the Magnuson-Stevens Act have mandated fishery managers to err on the side of leaving fish in the water. This means finding ways to eliminate waste in fisheries and prevent overfishing.

"We must continue to mandate means and methods of fishing which reduce bycatch as much as possible. The reef fish assemblage in the South Atlantic as a whole is severely overfished, and I don't believe we have yet to come upon a successful strategy for managing these species," he said.

He believes the council should pursue effective effort limitation strategies in its commercial fisheries and work to communicate more effectively with the millions of recreational anglers in the Southeast.

Dr. Nelson says the real constituency fishery managers serve today has not yet been born. They cannot attend

Continued page 6...

(...Continued from page 5)

public hearings and participate in the decisions which will ultimately affect their quality of life. This leaves fishery managers with the responsibility of making decisions which will affect present fishermen and benefit future ones. When asked where he sees Southeast fisheries heading in the future, Dr. Nelson gives the following predictions:

- ♦ We will see an increasing emphasis on the quality of fishing in the recreational sector, such as lower harvest levels but higher levels of stock abundance and encounter rates..
- ♦ Catch and release fishing will become the norm in most recreational fisheries.
- ♦ Limits on effort and entry in commercial fisheries will produce a smaller and more profitable sector with increased responsibility for management decisions and highly professional attitudes towards that management.
- ♦ We may see increased conflicts over allocations among various sectors of these fisheries.

"I am very satisfied that I have chosen the right career. I have been able to work with outstanding people from all over the Southeast and Caribbean who have committed their lives to making the world a better place," he said.

Russell lives in Tallahassee, Florida with his wife and two teenage daughters. In his free time he enjoys fishing, diving, golfing and cooking.

From: The South Atlantic Update
November 1998

Editor's Note: While I am admittedly a member of the Russ Nelson admiration society, the appearance twice in recent <u>Briefs</u> of articles on Russ is a function of opportunity rather than of focus. Florida's marine fisheries and associated problems are, arguably, the Nation's most diverse and Russ does deserve great credit for accomplishment and political survival in the Bosnia of fisheries management.

NMFS Proposes Ban On Small Swordfish

The National Marine Fishery Service (NMFS) in October proposed a ban on the sale and import of undersized Atlantic swordfish. The proposal implements a 1995 recommendation of the International Commission for the Conservation of Atlantic Tunas (ICCAT) that controls the harvest of undersized Atlantic swordfish.

The proposal would ban imports of Atlantic swordfish less than 33 pounds dressed weight (without head, fins, entrails), and would require seafood dealers to obtain permits to import swordfish.

"This action is another tool for fisheries managers to more effectively manage swordfish stocks," said Rolland Schmitten (AIFRB Member), fisheries director.

Earlier, NMFS decided not to reopen the 1998 Atlantic Swordfish Pelagic Driftnet Fishery due to the large numbers of sea turtles, dolphins and whales caught during the 14-day season in August.

Fishery service managers had predicted that 10 vessels from Rhode Island, Massachusetts and Florida that fish the south side of Georges Bank for swordfish would catch their 41.6 metric ton quota within the 14-day period in August. The fishermen managed to catch only two-thirds of the quota within that time.

However, fishermen also snared 34 endangered or threatened sea Turtles including two green, five leatherback and 27l loggerhead turtles. Preliminary data indicated that there were 293 marine mammals taken in 109 hauls which translates to nearly three mammals killed per haul.

From The International Angler, Nov-Dec, 1998

WHIRLING DISEASE

Alberta Environmental Protection closed the borders to imports of live salmonids (trout) effective October 1, 1997. This measure was taken to minimize the risk of exposure of Alberta trout to whirling disease in the province's world-class trout fishery. The ban does not affect imports salmnid eggs. For the present, however, the sole exception to the ban is the importation of live fingerlings to bioassay labs for the monitoring of water quality. These fish will be confined to laboratory aquariums; once they are destroyed, all remains will be incinerated.

To date, whirling disease has not been reported anywhere in Canada. Further testing of wild salmonids and trout reared in provincial brood stations will continue this fiscal year. Concurrently, AAFRD is committed to initiate some screening for *Myxobolus cerebralis* at private aquaculture sites.

In Alberta, all stakeholders, including Trout Unlimited, the Alberta Fish and Game Association and majority of the members of the Alberta Fish Farmers Association, support closing the border to live importations of trout. The Department, in consultation with DFO (Department of Fisheries and Oceans) and CFIA (Canadian Food Inspection Agency) is conducting a risk assessment on the potential of transferring whirling disease with importation of fish.

To address whirling disease at a strategic level, a task force has been formed consisting of 12 members appointed from industry, government and related non-government associations. The two co-chairmen are Duane Radford of Alberta Environmental Protection and Duncan Lloyd of Agriculture, Food and Rural Development. An expert panel of seven scientists, including biologists and veterinarians has also been assembled to provide information and advice to the task force. Contacts: Bev Larson, Tel: 403-427-8288 or Eric Hutchings, Tel: 403-381-5574.

From Fishing Lines 12 (1) October, 1998

MEDINGS OF NOTE

SEVENTH INTERNATIONAL CONFERENCE ON ARTIFICIAL REEFS AND RELATED AQUATIC HABITATS

October 7-11, 1999 San Remo • Linguira • Italy

The Seventh International conference on Artificial Reefs and Related Aquatic Habitats (7th CARAH) seeks to promote an international exchange of information of the use of artificial reefs to enhance and manage marine and freshwater resources (such as fisheries) and protect the natural environment. The main current sponsors and organizers are: ICES (International Council for the Exploration of the Sea), SIBM (Italian society for marine biology), EARRN (European Artificial Reef Research Network), San Remo Congressi Turisom (San Remo Tourist office) and the University of Genoa. Other sponsors are pending.

Objectives:

- -To provide an international forum for the exchange of new technical information on all aspects for artificial reefs and related habitats.
- -To promote new research, programmes and policies which advance artificial habitat enhancement and management technologies.
- -To summarize existing programmes on artificial habitat technology, including evaluation of effectiveness at the international level.

Conference Presentations Include:

A. TECHNICAL SESSIONS:

Planning; Function and Ecology; Options for Designing Habitat Systems; Habitat Protection; Evaluation of Reef Performance; Artificial Substrata Reefs; Monitoring and Assessment; Artisanal Fishing; Other Habitat Enhancement; and Mariculture.

- **B. POSTER SESSION**
- C. PLENARY SESSION
- D. EXHIBITS
- E. FIELD TRIPS AND RELATED ACTIVITIES

Call For Abstracts - (submission and review of abstracts):

Prospective authors are invited to submit abstracts for papers and posters for the Seventh International Conference on Artificial Reefs and Related Aquatic Habitats. Selected papers will be presented by the author(s) at the conference in San Remo, Italy, October 7-11, 1999. Papers will be presented in the technical, special or poster sessions noted. Authors should indicate the intended session. Posters will have a special session and remain on display throughout the meeting. Please use format for abstracts shown below or/and see Web Site. Poster will not exceed 120x150 cm.

Sample format for abstracts:

See Web site: http://www.soc.soton.ac.uk/SUDO/DEPT/7CARAH/7carah.html

The Title of the Abstract should be all 14 Point Capital Letters and Centered

Charles A. Wilson, Coastal Fisheries Institute, Louisiana State University, Baton Rouge, Louisiana 70803 USA

> Tel: 504-388-6283, E-mail: Wilson@aol.com

Presenter: 10 point and centered William Seaman Jr., Florida Sea Grant College Program, Building 803 Room 4, University of Florida, Gainesville,

> Florida 32611 USA Tel: 904-392-5870,

E-mail: seaman@gnv.ifas.ufl.edu Co-author: 10 point and centered

The abstract should be in English and include a summary of objectives, methodology, results and significance of research. Please, include quantitative information as far as is possible. Abstracts should be brief and concise, yet permit objective evaluation for the selection of papers. Papers and posters will be selected by members of the Steering Committee. Abstracts should be typed single space, fully justified, using 12 pt Times New roman font, not exceed one A4 page and be less than 400 words. Do not indent but skip a line between paragraphs. Please, use 2.5 cm (1 inch) margins left, right, top & bottom. Indicate the session most appropriate for your subject matter and preference, if any, for a poster session or presented paper session, and audio visual aids required (eg. 35 mm slides, video and format, over-head transparencies, 2x2 slide).

DEADLINE: Abstracts Must be received by the end of February 1999

Dr. Anthony Jensen
7th CARAH Conference Vice-Chair
School of Ocean and Earth Science,
University of South Hampton
South Hampton Oceanography Centre,
South Hampton, SO14 3ZH - U.K.

Tel (direct): +44 1703 593428 Fax (direct): +44 1703 596642

E-mail: a.jensen@soc.soton.ac.uk

Abstracts should be submitted in electronic format (word or wordperfect) and be sent by air-mail or E-mail. If electronic format is not possible —abstracts should be typed on good quality white paper and mailed. These will be scanned. Acceptances and session assignments will be mailed before June 1999. For further information, contact any Steering Committee member.

Publication of Conference Proceedings:

Conference proceedings will be published as a special issue of the *ICES Journal* of Marine Science. All abstracts will be published. Authors who wish to publish complete papers in the conference proceedings must submit manuscripts one month before the conference. Only those manuscripts receiving acceptable peer review by the Conference Steering Committee and by the *ICES Journal of Marine* Science will be published in their entirety. Instructions for preparing manuscripts will be forwarded with acceptance of abstracts and may be found in "Information for Contributors" of a recent *ICES Journal of Marine Science*. All abstracts will be collected in a volume distributed during the Conference.

International Co-ordinators:

Colleagues in over 20 countries already have agreed to serve as International Coordiantors for the Conference They are publicizing the programme, helping to identify presentations, and developing information about regional activities. Please, visit the 7th CARAH webpage (http://www.soc.soton.ac.uk/SUDO/DEPT/7CARAH/7carah.html), contact a member of the organizing committee or steering committee for the names of co-ordinators in your area.

Registration: \$180.00 U.S. before March 30, 1999 and \$210.00 thereafter

EPRI CONFERENCE ON POWER PLANT IMPACTS ON AQUATIC RESOURCES CONFERENCE/CALL FOR PAPERS

Environment Division
316 (a) & (b) Fish Protection Issues Target
April 12-15, 1999
Renaissance Waverly Hotel • Atlanta, Georgia

Background and Objectives:

A period of instability and change is affecting the electric power industry. Power demand is getting ahead of construction, varied permits and operational licenses are coming due, deregulation and a developing world economy have increased competitive pressures, and a potential new wave of regulatory requirements (i.e., Clean Water Act§ 316(b) are evolving. Instability and changes are circumstances that emphasize the need for renewed dialog among participants.

Relative to new regulatory requirements, under an October 1995 Consent Decree, the U.S. EPA is revisiting Clean Water Act Section 316(b) and how it applies to cooling water intake structures (CWIS). As part of that effort, EPA is developing a draft rule to be published by June 1999. The proposed reguations will, in part, address the meaning of "adverse envionmental impact" (AEI), approaches for assessing the potential for AEI, and measures for minimizing AEI. These measures may include requirements affecting the design, construction, and location of CWIS that are determined to reflect the "best technology available" (BTA). Potentially impacted are all power plants and industrial facilities withdrawing cooling water. EPA must take final action on a rule by August, 2001.

The objective of the conference is to renew the communication and information exchange on power-plant impacts on aquatic resources established by similar conferences and workshops in the late 1970s and early 1980s.

Call for Papers:

The conference will focus on technical issues relating to the assessment of power-plant impacts on aquatic resources. Session topics may include:

- Regulatory issues (e.g., §316 (a&b), NPDES permitting, Endangered Species Act, state permitting, and water quality certification)
- Approaches for assessing power-plant impacts (biocriteria methods, use of fishery management data, population level vs. community/ecosystem level assessments, impingement/entrainment monitoring)
- Biological integrity of aquatic habitat -emerging biocriteria methods (monitoring, data analysis, and interpretation)
- Conduct of entrainment/impingement monitoring
- Studies of the compensatory reserves of fish populations in response to power plant-induced mortality
- Modeling methods (population-level and individual-based)
- Use of remote-sensing and GIS data in impact assessments
- Engineering aspects of entrainment and impingement
- Intake design technologies
- Physical and behavioral barriers for reducing impingement/entrainment
- Thermal plume analysis/modeling
- Approaches for mitigating impacts (e.g., environmental enhancements such as wetland restoration, fish stocking, fish passage restoration)
- Cumulative impact assessment issues and approaches
- Adaptive management strategies and approaches

Papers on both power-plant specific case studies and generic power-plant related studies and assessment methods are requested. The conference will cover two to two and one-half days of technical presentations with concurrent sessions.

Who Should Attend:

The intent of the conference is to bring together electric utility industry personnel and scientists, educators, representatives of environmental organizations, practitioners and Federal and state resource managers with a common interest in the effects of power-plant impacts on aquatic resources for applied monitoring, impact assessments and restoration programs.

Registration and Logistical Information:

Cindy Layman, EPRI Conference Manager Tel: 650-855-8763 Fax: 650-855-2166

E-mail: clayman@epri.com

Population Viability Analysis: Assessing Models for Recovering Endangered Species March 15-16, 1999 • San Diego, CA

Sponsored by the University of California Berkeley and the Western Section of The Wildlife Society.

Contact William Hull Tel: 510-465-4962

whull@cgbd.org

www.cccweb.com/tws~west/pva

On the Frontiers of Conservation: Discovery, Reappraisal, and Innovation May 22-26, 1999 • Asheville, NC

The George Wright Society's 10th Conference on research and Resource Management in Parks and on Public Lands. For more information, visit www.portup.com/~gws/gwsgg.html

International Symposium on Biotelemetry May 9-14, 1999 • Juneau, AK

Wilderness Science in a Time of Change May 23-27, 1999 • Missoula, MT

Contact Clare Kelly, Natural Resource Management Division, Center for Continuing Education, The University of Montana, Missoula, MT 59812 Tel: 888-254-2544 ckelly@selway.umt.edu

North American Benthological Society's 47th Annual Meeting May 25-28, 1999 • Duluth, MN

Contact Program Co-Chairs, Carl Richards Tel: 218-720-4332; Anne Hershey Tel: 336-334-5839

American Society of Ichthyologists and Herpetologists Annual Meeting June 24-30, 1999 State College, PA

http://www.outreach.psu.edu/c+I/ASIH/ or 800-PSU-TODAY (outside U.S.: 814-865-6585. Ask for ASIH operator)

Where the River Meets the Sea September 25-30, 1999 New Orleans, LA

15th Biennial International Estuarine Research Federation Conference. Contact Robert Twilley, Department of Biology, P.O. Box 42451, University of Southwestern Louisiana, Lafayette, LA 70504 Tel: 318-482-6146 Fax: 318-482-5834 rtwilley@usl.edu; www.erf.org.

TEAMWORK PLEDGED TO PROTECT SPORT FISHING IN CENTRAL AMERICA

Recognizing the billion-dollar -plus value of sport fishing to central America, the first Sport Fishing Economic Conservation Conference was held on September 30 in Panama City, Panama. Thirty concerned business owners, government officials, academic leaders, and angling enthusiasts from Panama, Costa Rica, El Salvador, Guatemala, Venezuela and the United States laid the groundwork to take the sport fishing industry to a higher level in Central America.

Presiding over the meeting was Marcos Ostrander, an attorney and International Game Fishery Association representative who wrote Panama's 1997 sports fishing regulation. He called for international cooperation to preserve a common resource. "Fish don't have passports or visas," he said. "The most important thing to remember is that all of us here are part of a team."

Texas A & M professor, Dr. Robert Ditton, a New York City native, used a personal anecdote to stress just how important fishing is to economy.

He said he began his career at Texas A & M teaching the business of tourism. "I realized that many tourism students never get a background in wildlife management, while many of those studying fisheries management can't even spell tourism," Ditton explained.

[Come on Bob, go easy on us fish squeezers! After all how many soshiologists can spell physoclistic? -Editor]

He created a field of study that now has a name of its own, integrated fisheries management.

"When we started," he said, "if anyone wanted to say anything intelligent about the dollars and cents of billfishing, there would have been little data available. That has changed."

Joan Vernon, who organized the Presidential Challenge of Central America fishing tournaments which sponsored this meeting, agreed with Ditton about data.

"We know that in the United States sports fishing is a \$108 billion industry whose value has surpassed that of the commercial fishery," Vernon said. "Our aim is to promote local economies. The value of a sports fishing population is growing. Business growth resulting in job creation is a major factor in protecting the environment."

IGFA Trustee Terri Andrews, who runs Panamas' Tropic Star Lodge with her husband Mike, called Panama a regional leader in sports fishing conservation. However, Andrews said that all is not well. She noted, for example, that when the country's coast guard, the National Maritime Service goes on anti-drug patrols, they tend to ignore illegal fishing. "All laws must be enforced, and we need tougher laws to confiscate the boats of repeat offenders, and to confiscate poachers' catches," she urged. Anderews pointed out that during the Presidential Challenge at Pinas Bay, an illegal commercial longliner was operating right off the fishing resort's dock. She advocates the deputizing of police who now patrol the land, but are not allowed to pursue or arrest maritime law violators, so they could take action.

The man whose job is to impose penalties on illegal fishing, the National Maritime Authority's Amulfo Franco, reasoned, "The maximum fine for most offenses is \$1,000 which means a lot to some people but very little to others. We're a third-world country and our resources are limited."

The countries attending agreed that the future of sport fishing in Central America is dependent on the unification of all Central America Tourism officials. This geographical area must be marketed as a region such as "Europe" to create a strong vocal force in dealing with the fishery departments in each country. By working together the countries of Central America can continue to develop sport fishing and fight to conserve the species people pay top dollar to catch, the conference concluded.

From The International Angler, Nov-Dec, 1998

A European Perspective on Fishery Publications: by Harald Rosenthal

(Introduction by Jack Pearce)

The following letter (see page 11) was recently received from a German colleague, Prof. Harald Rosenthal, Institute für Meereskunde, Universität Kiel. He has several thoughts which are important in regard to future research on marine fisheries and aquaculture and on increased multi-disciplinary research and publication. Because of his broad international approach the readers of *Briefs* should be glad to hear his thoughts.

November 26, 1998 Dear Jack,

I am in receipt of your circular to the Editorial Board members of FB. I wish to respond to several of the points raised and to share my thoughts with you — and, if you wish - with the rest of the editorial board.

First of all let me congratulate you in doing an outstanding job to maintain the quality of the journal and also widen its scope and coverage. Although it is called the "US Fishery Bulletin", fishery science is in principle an international discipline, and outreach to problem areas of global mutual interest would be a most welcome and legitimate complementary objective of the journal. I agree therefore, that the inclusion of papers from other parts of the world should be promoted.

Now some specific responses to your questions.

Should we broaden the content?

I do not think that the journal should limit its options by "culling" disciplines. To do so might forego unique opportunities to address new concepts and strategic research topics, where fisheries and aquaculture development and sustainability will become critical if interactions with other stakeholders and resource users are not adequately addressed.

Fisheries science is in a transitional state and certainly in need of restructuring its interactions and cooperation with other scientific disciplines (ICES for example tries to cope with the changing demand by restructuring step by step). Most of the fishery conflicts are in the coastal and shelf areas and fisheries management will no longer be adequately guided alone by good stock assessment and TAC values or recruitment studies. The recognition of the increasing environmental and human population pressures on coastal zones and coastal resources (particularly on fisheries) need new forms of multi-disciplinarity and this means fisheries research in terms of developing scientific criteria for multi-use purposes with other stakeholders. The multiplicity of uses provides a hedge against any one failure of a resource use and also provides opportunities for sustainability of uses in the face of uncertainty of the resource availability, or market demand. The journal would be well advised to try to reach out to these issues, including socio-economics and other forms of interactions between fisheries and aquaculture and with all stakeholders in the coastal zone. We have to accept that both, natural scientist and those in socio-economics, do speak different languages while both employ scientific criteria. To merge these disciplines (or others) with fisheries science has long been neglected (or even rejected) by natural scientists. This luxury of ivory-tower behavior can no longer be afforded. My plea would therefore be to bridge this gap; Fishery Bulletin and other journals could take the lead and become a unique forum for a new "breed" of scientists which - in my opinion - will emerge during the next 3-6 years.

The second problem I wish to address relates to the issue of editing what you called "foreign" papers, i.e.: manuscripts from non-english speaking societies. This is indeed a problem. First let me say that I am on the editorial board of several international journals and for one of these (J. applied Ichthyology) I am Editor-in-Chief (as you know). I have made a particular effort in having better coverage of Asia and the Pacific. Having been for many years on the Board of the journal "Aquaculture" it has always bothered me that about 80% of the papers published in this journal originated from the UK or the US, while 85% of the aquaculture activity an accompanying research takes place in Asia and the Pacific Region (about 10 years ago this was true, today the situation has slightly improved.) The main reason was that manuscripts of non-english speaking scientists need a lot of assistance in restructuring and re-writing. This takes quite some effort by editors and referees. In my journal I have managed to change this ratio to 50% and you certainly know the effort required to achieve this. You would be surprised that many of the papers rejected by "western" journals do have good scientific quality but poor presentation. This must be changed, to the benefit of both, the scientific community in english speaking as sell as non-english speaking countries and regions.

There is yet another side to the coin. Native English-speaking **editors** (or editorial board members) who do not speak at least one foreign language have a very difficult time to understand fully the meaning of text written by foreigners who use a limited vocabulary. Because the language forms not only the culture but also the way of thinking, it would be advisable to have some foreigners on the Editorial Advisory Board who are not native english speaking but fluent in english. They certainly can - with some ease - assist quickly in "translating" some poorly written text into something meaningful while thereafter the "english" editor does the final polishing. I recommend strongly to enlarge the Editorial Advisory Board by at least one or two foreigners.

With my best regards, Harald Rosenthal

SHAD FISHING TO BE PHASED OUT ALONG COAST

Shad are the first major fish species to enter the Chesapeake Bay and its rivers to spawn each spring. Historically, their arrival was eagerly awaited by hungry colonists after lean winter rations, sometimes saving them from starvation. Now, East Coast fisheries officials want to try to save depleted shad populations in the Bay and other coastal rivers by ending shad fishing in the ocean. The Shad Management Board of the Atlantic States Marine Fisheries Commission — the multistate body responsible for managing migratory fish species — voted in August to reduce the coastal shad catch 40 percent in the next three years, and to close it completely in five.

Shad fishing has been closed in the Bay for years, but both Virginia and Maryland have allowed a coastal "intercept" fishery. The ASMFC action allows river-based fisheries to continue — and even be expanded — as long as evidence shows stocks in targeted rivers are healthy. Maryland officials said they had no plans to reopen any part of the Bay to shad fishing. Virginia officials said it was possible a small fishery could be restored in the York River.

The ASMFC action was a victory for the Bay Program, which had long urged that the coastal intercept fishery be closed to support multimillion dollar shad restoration efforts in Chesapeake tributaries. "It's about time," said Bill Matuszeski, director of EPA's Bay Program Office. "And you can bet we had better keep our eyes on the ASMFC, because given half a chance they will back off." But the action, expected to win final approval from ASMFC's top decision making panel in October, will likely be challenged by fishermen who say the commission's own scientific studies failed to show that the coastal fishery was hurting the stock.

"I'm sure we're going to fight this thing in court," said Ernie Bowden, a fisherman based in Chincoteague, VA, who quit his position on the ASMFC shad advisory committee after the action. "We're just not being treated fairly and we're certainly going to fight."

Shad spend most of their lives migrating along the coast, but they return to their native rivers to The ocean fishery has long been spawn. controversial because it "intercepts" fish as they migrate along the coast, and fishermen cannot distinguish whether they are catching fish from rivers with healthy, or depleted, stocks. But a recent ASMFC review of the shad from seven rivers found no evidence that ocean fishing was harming any population that was studied. "You would think if the intercept fishing was going to have an impact, it would at least show up in one or two of these stocks, but it doesn't," said Jack Travelstead, chief of the Virginia Marine Resources Commissions' Fisheries Management Division. He called the closure the "wrong decision". Because of the lack of evidence, Travelstead said he preferred an option that would have capped the ocean catch at current levels and prohibited new fisherman from entering the intercept fishery. That would allow more study to take place while the fishery was controlled and -if necessary—phased out. "I agree there is the potential for the intercept fishery to affect a stock," Travelestead. "I just we had more evidence before we start eliminating fisheries and peoples' livelihood."

Critics of the intercept fishery say that taking even a few fish from severely depleted stocks—like those in many other the Bay's tributaries—can be harmful. In June, the ASMFC's Shad Management Board put the issue out for public comment. Its August vote came after opinion strongly favored closing the ocean fishery. "How can you continue to justify the moratorium in the Bay and the millions of dollars being spent on fish passages and water quality upstream, and turn around and continue to allow an ocean fishery to sell the fish for 5 cents a pound?" asked Bill Goldsborough, senior scientist with the Chesapeake Bay Foundation. "To me, that's a no-brainer."

During the early part of this century, shad were the Bay's most valuable fishery, but over the years, shad stocks dramatically declined because of overfishing, pollution and the construction of dams that blocked access to their spawning grounds. Maryland closed it portion of the Bay to shad fishing in 1980, the Potomac river was closed in 1982, and Virginia closed the rest of the Bay in 1993.

In recent years, restoring shad populations has been a major goal of the Bay Program. Efforts are under way by all the Bay states to stock depleted rivers with hatchery-reared fish, while tens of millions of dollars are being spent on fish passages at dams.

Despite the efforts, there has been no clear sign of recovery. Populations are slowly rebuilding in the Susuehanna and the upper Bay, but remain far below historic levels. Recent surveys by the Virginia Institute of Marine Science found that the James — historically the location of Virginia's strongest shad population — and the Rappahnnock were severely depleted. Only the York, where Pamunkey Indians have been stocking a tributary since 1918, appeared to have a healthy population.

The study contracted Virginia fishermen to stake a single gill net in the lower reaches of each of the three rivers to compare the catch rates with those at the same sites before 1993, when the fishery was closed. No other data exists on shad in Virginia for the last five years.

"We're tending to believe that yes, York River stocks are reaching a point now where they may be commercially viable," said John Olney (AIFRB Fellow), the VIMS scientist who conducted the study. "But we have to be careful because there is only one year of data from one net. And in the presence of an active, offshore fishery, you can't really be certain of what the total exploitation rate is on the stocks,"

Many critics of the ocean fishery support riverbased fishing because managers can set harvests based on the health of the spawning population native to a particular river. But the potential of opening — and in some places enlarging — river fishing was troublesome to Bowden, particularly with the lack of concrete evidence showing harm was caused by the coastal fishery. He argued that if striped bass were managed the same way, they would only be harvested in the Chesapeake, where 85 percent of them spawn.

"Every management plan the ASMFC has ever done, even if we

don't like them, are fair across the board and had some scientific merit," Bowden said. "This has none."

Richard St. Pierre, Susquehanna River Coordinator for the U.S. Fish & Wildlife Service, agreed that closing the intercept fishery did not guarantee that shad stocks would recover. But, he said, it would end a potential obstacle to its recovery. "It removes one of the things that we had no control over," St. Pierre said.

But Bowden said the action could hurt fishermen without helping the shad. That's because the shad is part of a "mixed stock" fishery along much of the coast. Much of the shad season overlaps with the weakfish and striped bass season, and fishermen sometimes use the same gear to catch each species. The result of the ASMFC's action, Bowden said, is that he would still catch shad when he was targeting weakfish—he just couldn't sell them. "I don't think is will reduce mortality very much," he said.

Travelstead agreed that the fact the intercept fishery is a mixed stock — rather than species-specific—fishery was ignored by ASMFC. "While you eliminate people from the fishery and the legal landing of shad from the ocean, I don't know that you will see an equal decrease in the mortality for shad," he said.

Goldsborough said if that is the case, other steps may need to be taken to protect the shad. Travelstead, though, said the ASMFC action made no mention of altering other fisheries to benefit shad.

Bowden predicted that, ultimately, the commercial shad fishery would die out on its own because sales, and prices, have been falling for years. Historically—before the days of freezers—shad were valuable because they were the first major fish catch of the year. But most young people don't eat the bony fish, Bowden said. The main market that remains are older people who grew up eating shad in the spring when they were young.

Bowden said on Chincoteague Island, where he lives, "I don't think you could give a hundred pounds of them away to people under 60. We've

kind of gotten out of eating fish with a lot of bones in it."

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