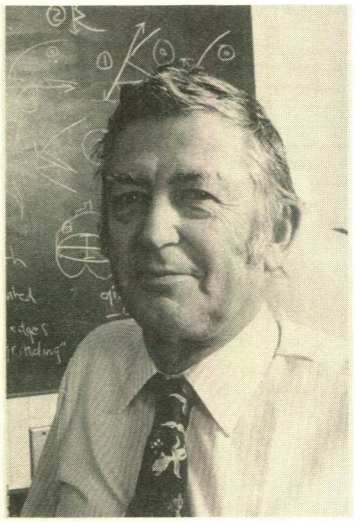
American Institute of Fishery Research Biologists

. . . BRIEFS . . .

VOL. 26, NO. 1 JANUARY-FEBRUARY 1997

President's Message



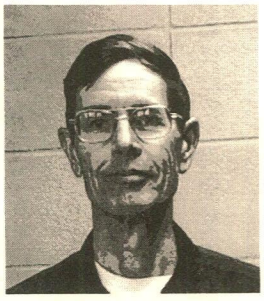
The Board of Control will discuss dues at the Dearborn meeting on August 24 and 25. This is the last time members can provide their thoughts for this issue. My few responses so far can be summarized by "yes, raise them, but not too much." We need to maintain a budget balance, etc.

I hope to continue on Gil Radonski's good work with symposia during the next two years. Please provide insight. My thoughts are to alternate a catch type symposium (1996, 1998) and an environmental/ethical one (1997). I trust that suits the membership. Maybe it will also stimulate new membership.

Our editor commented on the twice-used photo of me and hoped for a replacement. I suspect I could dig one up from way back, i.e. 1930's, or perhaps resurrect a class photo after sampling Red Creek, a Red River tributary even more silt laden than the Red River. My clothes are still red-brown more than ten years later.

Clark Hubbs
President

Who's Who in AIFRB
Dr. Charles A. Barans



Charlie Barans entered this world on February 27, 1942, grew up in the Midwest "corn belt" and experienced a brief post-high school stay on board an aircraft carrier. Fortunately guided away from Forestry as a career early at Ohio State University, where he talked them out of a BS degree, his interest in fish populations and communities intensified through further educational experiences (and more fast talking) at Virginia Institute of Marine Sciences, for a MA in Marine Fisheries, and back to OSU, for a Ph.D. An early exposure to the excitement of environmental consulting outside of NY City and drinking Malox from the bottle before and after staff meetings convinced him to pursue marine fisheries with the South Carolina Department of National Resources until the present. He and his sparkling wife, Allene, have two wonderful daughters and are enjoying being "empty nesters". He has proudly displayed the AIFRB membership certification since the very early 70's.

Charlie has always believed that seemingly impossible fisheries research could be completed through team efforts. Positive attitudes among coworkers could be encouraged through camaraderie, encouragement and matching personal skills and interests with a program's direction. He likes to promote laughter as a step toward group mental health.

For over 23 years, he assisted in guiding a dynamic team that developed fishery independent research and assessments for the NMFS' largest continuous contract (MARMAP) in the Southeast. The resulting long-term data bases were created with standardized techniques for detection of future changes in species relative abundances and fish communities in several important habitats. Also, production scale processing of life history materials was established and several assessment techniques, including routine use of underwater television, were developed.

Presently continuing his long quest for a rapid and remote fishery assessment technique, he has focused on the application of multifrequency acoustics to studying plankton transport through inlets. Strong belief in collaborative approaches and a wealth of great coworkers have assisted in the formation of interdisciplinary teams including the opportunity to help develop an expanding mentor based project to train minorities in marine and environmental science. Recent crusades include the establishment of marine fisheries reserves as ecosystem management tools.

Mark Collins, Director
Carolina District

Editor's note: Dr. Barans also is a practicing tree farmer. Just what the South needs! Another hundred acres of pine trees.

Who's Who in AIFRB Assignments

Having located several bushels of hens teeth, and extracted multiple gallons of turnip blood, the editor is still, and nonetheless, struggling to acquire adequate novel material for Briefs. To that end I hereby make the following assignments to district directors to provide copy for one of the more popular BRIEFS's features, Who's Who in AIFRB:

Schmidt, April 10, 1997; Donnelly, June 1, 1997;
Passino-Reader, July 30, 1997; Southward, September 20, 1997
Butler, November 30, 1997; Howard, January 30, 1998
Panek, March 30, 1998; Wing, April 30, 1998
Davis, June 30, 1998; Warkentine, July 30, 1998
Sager, September 20, 1998; Pearce, November 30, 1998
Palmisano, January 30, 1999.

Assignments were made randomly and should be passed to your successor should you leave office. Articles may be about members living or dead.

All AIFRB members are urged to contribute to this feature. Articles may be of any reasonable length. Photos are needed.

The Editor

The American Institute of Fisheries Research Biologists

Research Assistance Awards

$100 to $350*

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 Rd.
San Ramon, CA 94583

If you are not a member, please request a membership application from:
Dr. Sammy M. Ray
Membership Chairperson
Texas A & M University
5007 Avenue U
Galveston, TX 77551

Deadline: April 1 preceding the meeting.

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

**Range of past awards*

Members – Please announce this program at any appropriate circumstance.

Dr. David Farris Memorial

It is with a deep sense of loss that we announce the passing of one of San Diego State University's great educators and supporters, Dr. David Farris, Professor Emeritus of Biology.

David Farris was born in Bloomington, Indiana and attended Indiana University for his undergraduate degree. He earned his Ph.D. in Biology from Stanford University in 1958 and was a research fisheries biologist in the Bureau of Commercial Fisheries from 1955 to 1960, after which he joined the faculty at San Diego State University.

Dr. Farris was an important contributor to the Department of Biology at SDSU for over 30 years. His academic interests were in fisheries biology and statistics. His work was widely regarded and earned him the "Outstanding Professor" Award from the Institute of Marine Science in 1967. During the 1970's Professor Farris served as Secretary and Faculty Chair of The SDSU Senate. He was an extremely upbeat colleague with a deep interest in ecological science. Dr. Farris was a strong advocate and participant in graduate education. He was Graduate Advisor in Ecology prior to his retirement from SDSU in 1991. Following his retirement, Dr. Farris took pleasure in foreign travel particularly enjoying recent trips to China and Africa.

Dr. David Farris died at his home in San Diego on December 28, 1996. He is survived by two adult children, a son and a daughter. Dr. Farris will be greatly missed as a former colleague, advisor and educator.

Graduate students in the Deparment of Biology will continue to benefit from Dr. Farris' support and advocacy. Prior to his death, Dr. Farris established and generously endowed a fund in his name to assist ecology graduate students to attend scientific meetings. The Farris Travel Fund provides support to qualified graduate students in the Ecology Program Area to present a talk or poster on their research conducted at SDSU or to attend a scientific meeting whose focus is especially relevant to their thesis topic. Support from the Farris Travel Fund provides graduate students with educational opportunities they could not otherwise afford.

Contributions in memory of Dr. Farris should be directed to the Farris Endowment in care of the San Diego State University Foundation, Office of University Advancements Services, 5250 Campanile Drive, San Diego, CA 92182-1931.

John L. (Slim) Funk Remembered

John Leon Funk died January 8, 1997, at the Candlelight Lodge in Columbia, Missouri. He was born in Coshocton, Ohio, November 15, 1909, and married Ruth Eleanor Blue on December 23, 1933 in Fort Wayne, Indiana. She preceded him in death July 1, 1987. John graduated cum laude from Kent State University in 1932 and received his M.S. from the University of Michigan in 1939. John taught in the public schools of Coshocton and Portage counties in Ohio, and was employed as an aquatic biologist by the Institute for Fisheries Research in the Michigan Department of Conservation and the Washington State Pollution Control Commission before serving as an officer in the U.S. Ordinance Department in the European-African Theater during World War II.

John Funk, known as "Slim" to his colleagues, was hired as a biologist with the Missouri Department of Conservation in 1945 and worked there for 29 years before retiring in 1974. He served as Superintendent of Fisheries Research from 1959 until 1972. He was a member of the American Fisheries Society (AFS) since 1939 and a Certified Fisheries Scientist since 1969, the first full year of the certification program. He was elected an Honorary Member in August 1983, and became a Golden Member in 1989.

His AFS accomplishments and involvement are exemplary. He was a primary force in AFS changing to a mail ballot for electing officers so that all members could actively participate. He also helped organize the North Central Division (NCD), did organize the Missouri Chapter, served as President of both, received a special Honor Award from the NCD in 1973, and the Missouri Chapter's first Award of Excellence in 1974. He was very active in the Parent Society. He served as committee chair for: Program Planning in 1963, Resolutions in 1964, Nominating in 1965, Publication Policy in 1965, and Awards in 1969. He was candidate for 2nd Vice-President in 1967 and 1968 and served as Constitutional Consultant from 1970-1972. In 1972, then President Campbell appointed John to revise the Society's Constitution and Bylaws.

His strong interest in professionalism among his staff, in the Society and in the fisheries field in general led to a professional biologist training program within the Missouri Department of Conservation. He authored several articles on the subject in AFS newsletters, stressing that recognized professionals act and dress like professionals. Slim's primary research interest was the management of warm water streams although he published many articles on a wide variety of fishery subjects. He wrote a chapter on warm water streams for the Society's book, "A Century of Fisheries in North America", chaired and edited the NCD's "Stream Channelization Symposium", and edited the NCD's "Symposium on Overharvest and Management of Largemouth Bass in Small Impoundments".

During his career, he was also active in the American Institute of Fishery Research Biologists (Fellow), the Upper Mississippi River Conservation Committee (Chair 1971 and Chair of the Publication Committee in 1969), and the American Society of Limnology and Oceanography.

Survivors include a son, Jack, of Sydney, Australia; a brother; two sisters; and two grandchildren.

Losses

Charles J. Campbell, June 22, 1996, Member 1963

David Farris, December 28, 1996, Member 1961, Emeritus 1983

John L. Funk, January 8, 1997, Fellow 1959, Emeritus 1979

Richard A. Schoettger, Fellow 1977

Hope For A "Vanished" Taxon? Blue Pike May Not Be Extinct

A Great Lakes fish once popular with anglers could be on the verge of making the ultimate comeback-from extinction.

Just a generation ago, the blue pike was a staple of fish fry dinners in western New York and accounted for the majority of commercial catches from Lake Erie. But in 1975, the blue pike was declared extinct after years of extensive fishing and pollution made it disappear from the Great Lakes region, its only known habitat.

Now mounting evidence suggests that stocks of the blue pike may have survived in northern Canadian lakes, raising hope that the fish could someday be returned to Lake Erie.

"We get maybe 6 to 10 calls a year from people who have been to Canada asking us if these are blue pike or blue walleye," said Dieter Busch, head of the federal government's Lower Great Lakes Fishery Resources Office.

Anglers have brought in samples of what he calls the "blue pike suspects" for DNA testing, but finding a genetic sample from an old pike for comparison has been difficult.

"We have pickled fish at various locations, but the formaldehyde destroys structure, so they can't be used," he said. "Fortunately, though, agencies have samples from the past of scales taken to determine aging-and there would have been DNA in the mucous on the scales."

Meanwhile, Busch's office has developed drawings of the blue pike for anglers to use in identifying the species in the wilderness.

From: Associated Press Reports

Upcoming Meetings

June 6-9, 1997

Victoria, BC, Canada

Annual Meeting of the Society for Conservation Biology

Contact: Pat McGuire, Conference Coordinator, Division of Continuing Studies, University of Victoria, Box 3030, Victoria, BC, Canada V8W 3N6. (604) 721-8470; SCB97@uvcs.uvic.ca.

June 26-July 2, 1997

Seattle, Washington

77th Annual Meeting

American Society of Ichthyologists and Herpetologists

University of Washington, Seattle. For more information on all aspects of the Seattle meetings, please consult the ASIH-1997 Web site at http://artedi.fish.washington.edu/asih97.html

June 20-25, 1998

Bergen, Norway

2nd International Symposium on Fish Otolith Research and Application

For more information, point your browser to: www.imr.no/sear/oto98.html

Publications of Note

Walleye Culture Manual

This manual is now available for purchase. The 415 page book has 17 chapters and 47 case studies. In total, there are 89 authors from 14 states and two Canadian provinces (Ontario and Manitoba). The North Central Regional Aquaculture Center (NCRAC) funded this project to address the following objective: "To develop a walleye culture manual consisting of chapters covering all phases of walleye culture including spawning, hatching, intensive culture of fry on formulated feed, pond-culture of fry to fingerlings, training pond-reared fingerlings and economics and marketing".

This book is available as a perfect bound version (EDC-79A) or as a 3-hole punch notebook insert (EDC-79). Either version may be obtained for $24.95 ($19 plus $5.95 s&h) from ISU Extension Distribution. For international orders, either version is $34 ($19 plus $15 s&h).

Contact: ISU University Extension Distribution, 119 Printing & Publications Building, Iowa State University, Ames, IA 50011-3171, Telephone (515) 294-5247; Fax (515) 294-2945; email publish@exnet.iastate.edu.

Reef Fisheries

N.V.C. Polunin, Dept. of Marine Sciences and Coastal Management, U. of Newcastle upon Tyne, UK

C.M. Roberts, Dept. of Environmental Economics and Environmental Management, U. of York, UK

Reef ecosystems extend throughout the tropics. Exploited by small-scale fishers, reefs supply food for millions of people, but, worldwide there are growing worries about the productivity and current state of these ecosystems. Reef fish stocks display many features of fisheries elsewhere. However, habitat spatial complexity, biological diversity within and among species, ecosystem intricacy and variable means of exploitation make it hard to predict sustainable models and levels of fishing. *Reef Fisheries* is the first book to give a comprehensive account of the subject. Starting with the biological basis of reef fish productivity it explores patterns and effects of exploitations before examining available means of stock assessment, management and recovery. Specialist authors with extensive experience of tropical reef fish and fisheries have contributed to this valuable work. The range of perspectives on reefs, their biota, their exploitation and fisheries management make *Reef Fisheries* a useful text for upper level students of fish biology, fisheries researchers, ecologists, conservation biologists, social scientists and fisheries policy makers.

Chapman & Hall Fish & Fisheries Series 20, Series Editor: T.J. Pitcher. June 1996: 234x156: 496 pp: 69 line illus., 4 halftone illus., hardback: 0-412-60110-9: £75.00

Handbook outlines how to become wetland stewards

The Izaak Walton League of America has released the "Save Our Streams Handbook for Wetlands Conservation and Sustainability" for citizens, planners, government agencies and businesses interested in taking a more active role in restoring wetlands.

The 235 page book details the various features that are unique to wetlands and their importance, as well as offering options for monitoring and restoring wetlands and waterways.

And a Video, too! – Stream Restoration Video

"Restoring America's Streams" is the title of the new video put out by the Izaak Walton League, which is designed to help people learn how to stabilize eroding streambanks and restore degraded streamside forests.

The 28 minute video is part of the League's Stream Doctor Project, which helps volunteers diagnose stream problems, write a prescription for recovery and institute a long-term care program. It is a companion to "A Citizens Streambank Restoration Handbook."

The book was produced with grants from the Moriah Fund and the David and Lucille Packard Foundation. To order the book ($18) or video ($20), send a check made payable to: Izaak Walton League of America, Save Our Streams Program, 707 Conservation Lane, Gaithersburg, MD 20878-2983 or call 1-800-BUG-IWLA for an order form.

1996 Chesapeake Bay and Atlantic Coast Black Sea Bass Fishery Management Plan

In the mid-Atlantic region, black sea bass are overfished and populations are currently at low abundance. This new fishery management plan (FMP) for the Chesapeake's black sea bass populations, recently adopted by the Chesapeake Executive Council, will reduce fishing rates and improve protection of the spawning stock in the Bay and along the Atlantic Coast. The new black sea bass FMP contains an enhanced habitat section, including recommendations to protect important nursery habitat in the Bay. Other management actions include a minimum size limit, gear restrictions and the promotion of better black sea bass research.

Removing Impediments to Migratory Fishes in the Chesapeake Bay Watershed, 1995 Annual Progress Report

Removing blockages that prevent migratory fish from reaching historic spawning grounds is proving successful. By the end of 1995, a total of 216 miles had been opened in the Chesapeake Bay watershed. Thirty projects are under design or construction. The 1995 Annual Report details accomplishments and future endeavors.

For a copy of either of the two books above, contact Karen Hester, EPA Chesapeake Bay Program Office, 410 Severn Ave., Suite 109, Annapolis, MD 21403, or call 1-800-968-7229.

Red Drum Stocking Studied

The effectiveness of stocking red drum in South Carolina coastal waters is being evaluated in a multi-year study underway in the Colleton River area of Beaufort County.

A million red drum fingerlings, 1 to 2 inches long, have been stocked since May 1995 in Callawassie Creek, a suitable nursery habitat upstream from the Waddell Mariculture Center where the fish were produced. All stocked fish have been marked to identify them from native fish in the area.

"We are trying to determine the relative contribution that stocked red drum can make to the natural population and whether stocking fish in the spring or fall is most productive," said Wallace Jenkins, fisheries biologist with the Marine Resources Division of the S.C. Department of Natural Resources (DNR).

Marine Resources Division biologists have collected several hundred red drum using a special trammel net set at random locations around the stocking area.

"Trammel nets are an efficient way to collect fish repeatedly without harming them," said Dr. Charlie Wenner, a fishery scientist at the DNR's Marine Resources Research Institute in Charleston. "This gear has been used to sample the same schools of red drum throughout the state without adversely affecting the behavior or causing mortalities."

Preliminary results indicate that about 20 percent of the fish caught to date were hatchery-reared and that the percentage decreases in samples taken farther from the stocking area, Jenkins said.

During the spring of 1997, another half-million fingerlings are scheduled to be stocked. These fish will be monitored until they migrate from the area to the spawning grounds. A sub-sample of fish in the size range of 10 to 20 inches are sacrificed in order for researchers to determine ages from otoliths.

"We are also collecting DNA samples and scales samples from each fish in order to develop non-lethal methods of identifying hatchery-reared fish," Jenkins explained.

"We hope eventually to get a better understanding of red drum behavior and utilization of nursery habitats, and whether fish stocked at a small size will make a significant contribution to local populations.

From: Charleston S.C. Post and Courier, Dec. 28, 1996

Gulf of Mexico Management

Council Approves Shrimp Trawl Bycatch Reduction Requirements

At their November 14, 1996 meeting, the Council gave final approval to Shrimp Amendment 9 which has been commonly referred to as the "bycatch amendment". The purpose of the amendment is to reduce the bycatch of juvenile red snapper from shrimp trawls in order to allow the red snapper stocks to rebuild above the overfishing threshold of 20% spawning potential ratio (SPR). This approval comes approximately five months after the Council first reviewed a draft of the amendment in May 1996. Since that time, Amendment 9 has been reviewed once by the Socioeconomic Panel (SEP), twice by the Scientific Statistical Committee (SSC), and twice by the Shrimp Advisory Panel (AP). The amendment has also been scrutinized by the National Marine Fisheries Service and other agencies. Additionally, public hearings were held in fourteen locations across the Gulf from Key West, Florida to Brownsville, Texas. Other written comments were received until the Council meeting, and comments on the Supplemental Environmental Impact Statement (SEIS) were received until December 12, 1996.

The following are the major actions taken by the Council with regard to the management alternatives of Amendment 9. For further detail of these actions or additional information on the amendment, please contact the Council office at: The Commons of Rivergate, 3018 Hwy. 301 North, Suite 1000, Tampa, Fl. 33619-2266, Phone: 813-228-2815

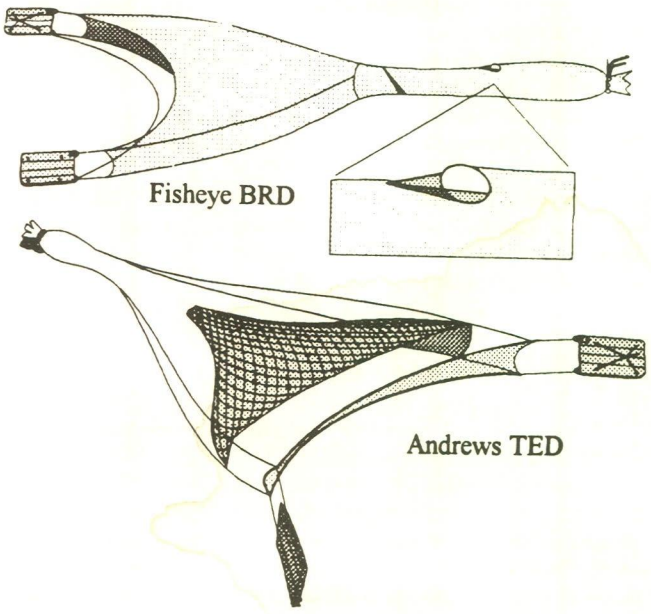
Action. Require the installation of NMFS-certified Bycatch Reduction Devices (BRDS) that meet or exceed the bycatch reduction criteria established by the Council in each net used aboard vessels trawling for shrimp in specified areas of the Gulf of Mexico EEZ. Exempted are vessels trawling for royal red shrimp beyond the 100-fathom contour and vessels trawling for groundfish or butterfish. A single try net with a headrope of 16 feet or less per vessel and no more than two rigid-frame roller trawls limited to 16 feet or less such as those used in the Big Bend area of Florida are also exempted.

Action. Require the use of the NMFS-certified BRDS in shrimp trawls in the EEZ of the Gulf of Mexico within the 100-fathom contour west of Cape San Blas, Florida.

Action. Bycatch reduction devices must reduce the bycatch mortality of juvenile red snapper (age 0 and age 1) by a minimum of 44 percent from the average level of mortality on those age groups during the years 1984-1989. Any bycatch reduction contributed by a TED within the net is included as a part of an overall BRD reduction in the bycatch.

Action. Establish framework procedures for modifying bycatch reduction criteria and establishing BRD certification criteria and a BRD testing protocol for certifying additional BRDS. (Note: These framework procedures will allow the Council to modify the bycatch reduction criteria as needed , and on a timely basis, based on red snapper stock assessments and other data. It will also allow the Regional Administrator of NMFS to certify additional BRDs as soon as they are tested and determined to meet the bycatch reduction and testing criteria.)

From: Gulf Fishery News, Nov./Dec. 1996



Next the Presidency!

Fishery biologist named new Forest Service chief

Mike Dombeck, a fishery biologist who has been acting head of the federal Bureau of Land Management, was named the next U.S. Forest Service chief Dec. 20.

Dombeck, 48, will become the 14th chief of the 91-year-old Forest Service. He succeeds Jack Ward Thomas, who resigned in November.

His appointment was welcomed by environmental groups who like his experience in fisheries work. The impact of logging and livestock grazing on fish populations is a growing environmental concern, especially in the West.

Dombeck said his first priority as chief will be to "build on the rich tradition of working closely with local communities to restore and maintain productive, healthy and diverse ecological systems."

Dombeck attended the University of Wisconsin and the University of Minnesota before earning a Ph.D. in fisheries biology at Iowa State University. A Forest Service worker for 12 years, he left his job as the manager of the agency's national fisheries program in 1989. He joined the BLM as a science adviser, working his way to the acting director's job in February 1994.

From: Associated Press Reports

Synthesis of Hard Mineral Resources on the Florida Panhandle Shelf: Spatial Distribution, Subsurface Evaluation, and Sediment Budget

This study, awarded in early April 1996, is being done by Dr. Mark Byrnes and Mr. Randall McBride of Louisiana State University's Coastal Studies Institute. The principal research goal of this project is to produce regional baseline information about the hard mineral resources, geologic framework, and long-term sediment dynamics of the Florida Panhandle shelf (Mobile Bay, AL to Choctawhatchee, FL). The information will be used to evaluate the potential use of the offshore area as a source area for beach nourishment and construction material. The study will examine within the designated study area: the primary sedimentary environments associated with hard mineral resource accumulation, the main sediment transport pathways, the processes that control the spatial distribution, concentration, and geometry of hard mineral resources, the role of long-term sea level change in controlling the occurrence of hard mineral resources, and if suitable quantities of economically viable hard mineral reserves exist for beach replenishment and other uses in the study area.

Important objectives are:

1. Quantify hard mineral resource deposits.

2. Establish the regional three-dimensional architecture of hard mineral resource deposits.

3. Produce seafloor elevation models (i.e., bathymetric surfaces) to determine volume change using historical hydrographic data.

From: Current Activities Update
Minerals Management Service, USDI, Fall 1996

Quotas Stir Up Pretty Kettle Of Fish

Striped bass' recovery creates a public relations nightmare for management officials

by Karl Blankenship

A decade ago, when fishery managers were making hard and unpopular decisions about cutting-even closing-striped bass seasons, they could only dream about what has happened the last few years.

From the brink of collapse, striped bass have had record spawns in the Bay 2 of the last 4 years. Coastwide stocks have been officially declared "recovered." But that dream hasn't turned out to be all pleasant.

"You would think it would get easier when you get more fish, right?" asked Bill Goldsborough, a fisheries scientist with the Chesapeake Bay Foundation.

Think again.

Only weeks before the new year begins, the inter-jurisdictional board that sets fishing quotas in the Bay and along the coast has failed to agree on the 1997 striped bass catch.

Instead, their actions have sparked a heated debate that has pitted state against state and recreational fishermen against commercial fishermen.

The debate won't be ended until late January when the Atlantic States Marine Fisheries Commission-which tries to promote cooperative fisheries management - figures out how to resolve an issue in which biology and politics are intertwined. The ASMFC is made up of representatives from all the East Coast states and cooperates with 2 federal agencies, the National Marine Fisheries Service and the U.S. Fish & Wildlife Service.

The controversy, fishery managers say, illustrates that problems with abundance are often more difficult than those dealing with scarcity. "I suspect this is just the tip of the iceberg," predicted John Field, anadromous species coordinator for the commission.

Since the striped bass fishery was reopened in 1990, the ASMFC striped bass plan has allowed a gradual increase in fishing pressure as the stock has grown. When the fishery was first reopened, fishing quotas and regulations were designed to keep the annual fish kill at 22% of the available legal size fish. That grew to 28% for 1995 and 1996, and was to increase to a maximum rate of 33% in 1997.

The actual catch amount, which is allocated among coastal states and to commercial and recreational fishermen, is determined by applying those rates to elaborate models that estimate the size of the striped bass stock.

A new, improved model was to be used for the 1997 allocation, but it has not yet been completed. Without the model, the ASMFC's striped bass management board decided to take a "conservative" approach to managing the 1997 stock which keeps next year's fishery at this year's level.

But holding the line at 1996 levels is easier said than done. It could mean keeping the 1997 *catch* at 1996 levels, or it could mean holding the fishing *rate* at 1996 levels.

"You take one of those options and it's good for the Bay and bad for the coast," said Goldsborough, a member of the ASMFC striped bass board who was appointed by the Maryland governor. "You take the other one, it's the other way around. So you have a political difficulty here."

The discrepancy between the Bay and the coast has to do with the striped bass life cycle, managers say.

The Chesapeake is the largest spawning area for striped bass. Young fish typically stay in the Bay until they are 3 or 4 years old, reaching lengths of 18 inches or a little longer. After that, the fish begin leaving the Bay to migrate up and down the coast.

In 1997, the huge number of fish spawned in 1993 – the largest spawn on record at that time – will start reaching the legal catch size of 18 inches in the Bay.

As a result, if fishing levels were set at the same fishing rate as 1996 – 28% mortality – the potential Bay catch would increase dramatically because so many more striped bass are entering the "fishable" population.

cont. on page 7

On the coast, the minimum catch size is larger – 28 inches – to help make sure enough fish reach maturity to return to the Bay and spawn. But fish don't reach that size for another two or three years after leaving the Chesapeake.

So, while the same fishing rate allows a surge in catches for the Chesapeake and Delaware bays, it does nothing for coastal fishermen who are still catching fish spawned in the late 1970s, 1980s and early 1990s when production was lower.

"They don't see them on the coast until five or six years after the big spawns occur in the Bay," said Pete Jensen, deputy director for fisheries withe the Maryland Department of Natural Resources. "It'll be another few years before they see the benefits of these record years that we've had."

And this year, the situation is even worse for the coastal states.

Scientists reviewing annual catch data concluded that slightly more fish had been caught in recent years than previously thought. Even small changes in fishing-related mortality have a great impact on the sensitive model used to project future quotas. The result: Some quotas for coastal states were projected to fall by 40% in 1997.

In other words, because of a change in the coastal stock estimate –which exists more on paper than in reality – maintaining the 1996 *rate* would result in a dramatic drop in the ocean catch. By contrast, coastal states would benefit by keeping the 1997 *catch* the same as in 1996.

That disparity, though, is a public relations nightmare for fisheries managers.

"Here we were telling fishermen on one hand that stocks were at an all-time high and continuing to grow like crazy, and on the other side of our mouth we're saying that quotas are coming down – and by a lot in some jurisdictions," Field said. "That just doesn't make sense to people, and not without reason."

The issue also raised the ire of some sport fishermen. Different calculations are used to determine the sport and commercial catches. Because the commercial catch is capped at a certain level, it can vary greatly from year to year in response to the health of the stock. When a state's commercial quota is hit, it closes its commercial fishery.

The recreational fishery, controlled by adjusting season length and catch limits, is not so responsive to changing conditions. Because there is so much more "killing power" in the sport fishery – which accounts for about 75% of total striped bass take – annual adjustments are managed more conservatively to protect the stock, and there is less variation from year to year. "It's a lot easier to limit the commercial kill than it is the recreational kill," Field said.

That means that by keeping fishing rates the same as 1996, the commercial catch in the Bay would increase greatly while the coastal commercial catch would drop. Meanwhile, the recreational catch would have little change.

"The recreational guys are crying foul," said Goldsborough. "It's a difficult situation to say the least."

In September, the striped bass board voted 9-8 – which mainly pitted coastal states against the Bay states and the federal agency representatives – to keep the quotas, not the fishing rate, the same for 1997 and 1996.

Officials from the Bay states were furious, arguing that not only were they being penalized, the coastal states would be overfishing the stock.

"It was a knee-jerk reaction," Jensen said. "A lot of [state] directors found that explaining what we were doing at ASMFC was just too difficult and said 'Let's freeze it, period,' and avoid all these other complications."

After strong protests were made by the Bay states and concerns were raised about the voting process, the board in October withdrew the September action. Instead, a range of policy options are being drafted and will go out for public comment in December and January. The board (was) scheduled to make its final decision the last week in January.

Ultimately, fishery managers hope some of the complications will be resolved for 1998 as the new model – called the Virtual Population Analysis – is completed. With information from the new model, they anticipate that catch limits will better reflect the overall health of the stock, and avoid sharp year-to-year fluctuations.

But even with the new model, allocations decisions will remain controversial, especially within the states. Rather than the ASMFC setting commercial quotas and recreational seasons and bag limits, the VPA may give each state a total allocation and leave fishery managers within the states the politically sensitive job of deciding how that total should be divided among user groups.

Maryland is already doing that, and recreational fishermen in the state are upset about the relatively high allocation of the total striped bass catch fishery managers make to the commercial fishery – about 42.5% – compared with the 25% coastwide average.

And Virginians are presently debating a new state plan to allocate the catch among various users. The allocation debates are a sign of things to come, said Jack Travelstead, chief of the fisheries management division of the Virginia Marine Resources Commission.

"It becomes much more difficult to manage a healthy fishery than one that's collapsed because when it's collapsed, there's only one way to go, and you know what you have to do," he said.

"When it's healthy, there's a lot of different directions you can go, and you get into less of the biological needs of the resource and more into how you are going to allocate this among the user groups," he said. "And those questions are a lot harder to answer."

From Bay Journal, December 1996. Copies of a draft addendum to the ASMFC Striped Bass Fishery Management Plan, which outline a range of 1997 options, was to be available in early December. For a copy, contact John Field at the ASMFC, at 1444 Eye St., N.W., 6th Floor, Washington, DC 20005, or call (202) 289-6400.

After the addendum is released, states are expected to hold public hearings on the options. For information, contact the Maryland Department of Natural Resources or the Virginia Marine Resources Commission.

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VOL. 26, NO.2 MARCH-APRIL 1997

REEVE BAILEY RECEIVES AIFRB OUTSTANDING ACHIEVEMENT AWARD

Dr. Reeve M. Bailey received the Institute's most prestigious award, the AIFRB Outstanding Achievement Award for Individuals in a ceremony at Ann Arbor, Michigan, November 1, 1996. The award, given only eleven times previously, was presented by President Clark Hubbs at a dinner meeting hosted by the South Central Great Lakes District, AIFRB. The physical award was, in this case, a carved wooden salmonid executed in the style of Native Americans of the Pacific Northwest.

Reeve Bailey (presently, Professor Emeritus, Fish Division, Museum of Zoology, University of Michigan) served in 1938-1944 on the Zoology faculty at Iowa State University and from 1944 to 1981 on the curatorial staff of the Fish Division of the Museum of Zoology of the University of Michigan as well as on the Zoology faculty there. Reeve has contributed over 150 articles, bulletins, and reviews to professional journals on ichthyology and herpetology. In addition to extensive ichthyological studies in the United States, he has led ichthyological expeditions to Bermuda, Bolivia, Guatemala, Paraguay, and Zambia. He is a Fellow of the Iowa Academy of Sciences, served on the editoral board of COPEIA and as Vice President and President of the American Society of Ichthyologists and Herpetologists (ASIH), and received the R.H. Gibbs Memorial Award from ASIH in 1995. He served as President of the American Fisheries Society in 1974, and later received an honorary AFS membership and both the Award of Excellence and the Meritorious Service Award from AFS, as well as the Justin W. Leonard Award of Excellence from the AFS Michigan Chapter.

The event honoring Dr. Bailey was held in the Vandenberg Room of the Michigan League on the central campus of the University of Michigan in Ann Arbor. Dr. Barry Chernoff, Chair, Dept. of Zoology, Field Museum of Natural History, Chicago, presented a dinner address on "Conservation of South American Biodiversity: Importance of the Aquatic Rapid Response Team." Graduate student, Christine Thacker, presented a dinner address on "Paedomorphosis and gonad evolution in the gobioid fish *Schindleria*". Ms. Thacker is the recipient of the Carl and Laura Hubbs fellowship at the Museum of Zoology, University of Michigan. The dinner program was well attended and generated substantial camaraderie among new and old fishy professionals.

Submitted by Dora Passino-Reader

EDITORS NOTE: Dr. Passino-Reader might also have mentioned that Dr. Bailey is one of fishery science's truly nice people. Reeve was one of a handful of penitents who suffered through the Editor's first presentation at a national scientific meeting. Reeve's kind and encouraging words uttered at the ASIH meetings in Lawrence KS - about 1966 - have never been forgotten.

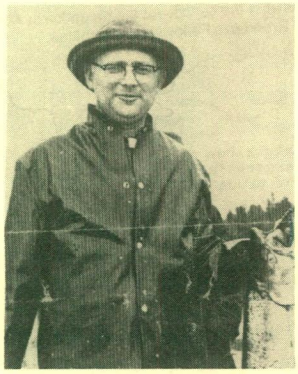
President's Message
Clark Hubbs

The Council of Aquatic Sciences has organized to coordinate research and exchange information. The society annual dues structure is <500 members = $100; 400 - 999 members = $250; 1,000 - 2,999 members = $500; > 3,000 members = $1,000. All member societies here vote, but attendance is at individual society expense.

An anonymous donor has provided the initial costs for AIFRB; thus, we are a charter member society. Membership confirmation and potential future membership will be determined at the next Board of Control meeting in Monterey, California. Presuming Board confirmation, AIFRB can have a vote at the next Council of Aquatic Sciences meeting on 12 October, 1997 in conjunction with the Fourteenth International Estuarine Research Federation Conference at the Westin Hotel, Providence, Rhode Island. Our delegate will have a vote equal to that of AFS or the 15,000-member American Society of Microbiologists.

I attended the 14 February CAS meeting and was impressed with the diverse societies interested in aquatic sciences. At times we may agree with individual society policies and at other time disagree. Nevertheless, AIFRB should understand the other society interests and coordinate activities. The diversity of societies is indicated by the diverse acronyms: AGUOS, AGUHS, SCL, NABS, TOS, NALMS, AIFRB, ASLO, WEF, ASM, SWS, ERF, DFC, SFC, AES, FBS, PSA, AFS, ESA, AMS, and W-AAS.

SMOKER, FOUNDING FELLOW PASSES



Founding Fellow Dr. William A. Smoker died March 6, 1997 at Saint Anns Care Center in Juneau, Alaska. A 40 year resident of Juneau, he was the former director of the Auke Bay Fisheries Laboratory (NMFS).

He was born in 1915 in Ishpeming, Michigan where his father Roy Simon Smoker and mother Agatha Zarua (Wickham) Smoker, were dairy farmers. In 1925 his family moved to San Jose, California where Bill completed high-school and entered college. He completed his bachelor's degree in forestry at the University of California Berkeley in 1939 and entered Graduate school at the University of Washington School of Fisheries. He met his wife Margaret at the University of Washington student infirmary where she was a nurse.

Bill was drafted into the U.S. Army in 1941 and served as a scout/observer in Papua New Guinea during 1942-1943 and was awarded two bronze metal battle stars. In 1943 he was commissioned second lieutenant in Australia and assigned to the U.S. Army Corps of Engineers Map Service. He completed his military service in 1945 in Washington, D.C. and returned to graduate school.

In 1955 he completed his Ph.D in Fisheries at the University of Washington while working on the early freshwater life history of coho salmon. During the 1950's he was a research biologist with the Washington State Department of Fisheries. He investigated the role of stream flows in coho year-class strength. He also studied effects of passage over and through hydroelectric dams on downstream migrating sockeye salmon smolts.

In 1956 he accepted the position of Director of Research for the Alaska Territorial Department of Fisheries (headed by C.L. Anderson) and moved his family to Juneau, Alaska. In 1961 he joined the U.S. Fish and Wildlife Service Bureau of Commercial Fisheries as the Assistant Director of the then new Auke Bay Fisheries Laboratory. He was Director of the Auke Bay Laboratory from 1967 until his retirement in 1981. During his years at the Auke Bay Laboratory, biological research was conducted on salmon throughout Alaska and on marine fish and commercial shellfish in Southeast Alaska, the Gulf of Alaska, Cook Inlet, and the Bering Sea. The Laboratory was also involved with establishing environmental baseline data in the Beaufort Sea, Bering Sea, Gulf of Alaska and Prince William Sound in anticipation of oil development on the continental shelves.

During retirement Bill and Margaret enjoyed their grandchildren and home on Auke Bay, fishing, weekly swimming, attending meetings of retired federal workers and teachers, and annual trips to the Seattle Opera Festival. Bill frequently visited the Auke Bay Fisheries Laboratory and was actively pursuing his interests of hydrology and climatic effects on coho salmon survival until shortly before his death. He was preceded in death by his wife Margaret, who died in February.

He is survived by his son Bill (University of Alaska Fisheries School of Fisheries and Ocean Sciences) and daughter-in-law Janet (independent fisheries consultant) and their children Rhys and Alice of Juneau; son Andrew (National Marine Fisheries Service Regional Office-Juneau), partner Lauren Rogerson and grandson Tyler of Juneau, and daughter Sylvia and son-in-law Michael Shafto and grandchildren Jay and Meredith of San Jose, California; sister Dora and brother Sam and their families of the San Francisco area and sister Helen of Salt Lake City.

A W.A. Smoker Scholarship in Fisheries Fund has been established in the **University of Alaska Foundation, Box 7530, Fairbanks, Alaska 99775-7530.** The fund will annually support the work of a deserving university scholar engaged in research or study related to the conservation of Alaska's diverse fish resources.

W.W. Smoker Recalls his Father and Origins of AIFRB

I remember a meeting circa 1955 of state fish biologists in our Seattle living room in which my dad phoned the governor to tell him they'd all resigned over being assigned to distribute election campaign literature on streetcorners. I believe they won, at least the governor didn't accept their resignations. He told me once that that struggle was part of the impetus for the formation of AIFRB and its establishment of standards of professionalism.

William W. Smoker, PhD

Professor of Fisheries, University of Alaska, Fairbanks

REVIEW: FOUNDING MEMBERS

Clint Atkinson, F. Heward Bell, Kenneth D. Carlander, Frederick Cleaver, Al Collier, Henry Dunlop, Donald Fry Jr., John Glude, Herbert Graham, J. A. R. Hamilton, John Hart, Clarence Idyll, Donald Johnson, John Kask, Carl Lagler, Don McKernan, James Moffett, Edward Raney, Milner Schaefer, Oscar E. Sette, William W. Smoker, Gerald Talbot, Albert Tester, William Thompson, Richard Van Cleve, Lionel W. Walford.

As evident the Institute's founders included the glitterati of fishery science. If any surviving founding member would care to recount his remembrances of the founding, or to document the present status of the founders, or both, I am sure ***BRIEFS*** readers would enjoy the information.

New Publication: The Northeast Shelf Ecosystem: Assessment, Sustainability, and Management

By Kenneth Dherman, Norbert A. Jaworski, Theodore J. Smayda

The Northeast Shelf ecosystem is one of 49 large marine ecosystems (LMEs) located around the coastal margins of the world's ocean basins. It extends from the Gulf of Maine South to Cape Hatteras and from the coast seaward to the edge of the continental shelf. The Northeast Shelf ecosystem is one of the most productive LME's in the world, but it is under considerable stress. This volume carefully examines the unprecedented changes that have occurred in the Northeast Shelf ecosystem over the last 30 years and the actions underway to alleviate the resulting ecological damage.

Decades of overfishing, pollution, and habitat degradation have significantly impacted the biological cycles of the Northeast Shelf ecosystem. Studies on the physical and biological dynamics of the Northeast Shelf ecosystem recognize the need to reduce stress on fish, water, and benthic quality as critical to its long-term productivity and stability. This unparalleled reference collects in a single volume the results of many multidisciplinary studies of the Northeast Shelf ecosystem. It also presents a sound scientific foundation for guiding the development of governing bodies to oversee sustainable management of marine ecosystems worldwide.

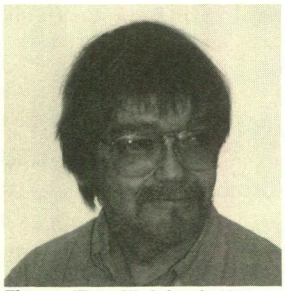
The Northeast Shelf Ecosystem: Assessment, Sustainability, and Management is ideal for students, researchers, and policy makers.

The Northeast Shelf Ecosystem 1996, 608 pages, 115 illustrations, paperback, 0-86542-468-3 $59.95. To Order:

Blackwell Science • 350 Mail Street • Commerce Place • Malden, MA 02148 USA • Phone: 800-215-1000 • Fax: 617-388-8270.

WHO'S WHO IN AIFRB

By Thomas (Tom) Schmidt



Thomas (Tom) W. Schmidt, New District DirectorFlorida

I was born and raised on the "Bay" (Chesapeake) in Annapolis, Maryland, where as a youngster I spent many summers collecting fossilized shark teeth on southern Maryland beaches of the Chesapeake (an indication of things to come?).

Following graduation form Marietta College (Ohio) with a bachelors degree in Biology, I spent several years teaching biology and ocean science at secondary school level in Miami, Florida and attended part-time Florida Atlantic University in Boca Raton. It was after spending some time in Vietnam during the late 60's as a Combat Artillery Medical specialist that I decided marine ichthyology is what I really wanted to pursue as a career, so I reentered Florida Atlantic and completed my Master's work in Marine Biology. Began my professional career, in 1971, as Fishery Biologist for the U.S. Environmental Protection Agency, in Naples, Florida working as a part of the South Florida Ecosystem Study team to complete the first ecosystem study of the lower southwest coast of Florida in what is now part of the Big Cypress Preserve of the National Park Service (NPS) and the Fahkahatchee strand of Florida's Parks system. In this position, I identified over 200 species of freshwater, estuarine, and coastal marine fish, evaluated their abundance and distribution, and along with P.Fore (AIFRB member), identified for the first time, habitats of juvenile snook, one of the most sought after sportfish in south Florida and was awarded the EPA's Silver Medal for contribution to the scientific knowledge of SW Florida.

I continued my work in estuarine/marine fish biology by accepting a position with the NPS as an Aquatic Research Biologist and started working on a project to describe for the first time fish distribution, water quality characteristics, and benthic habitats across Florida Bay. The results of this work were accepted as a Ph.D. dissertation by Pacific Western University in 1980. During the 70's to 90's as a certified NPS SCUBA diver I conducted reef fish surveys along Florida's Reef Tract form Biscayne NP to Dry Tortugas National Park. I have been a member of AFS and AIFRB since the mid-70's. I have over 20 South Florida fisheries related scientific publications including those on sport fish (snook, red drum, spotted seatrout, gray snapper), lemon sharks, pink shrimp, blue crab and various forage fish/coral reef species et al., and served as an adjunct instructor in Marine Biology for Florida Keys Community College.

Currently involved in marine recreational fisheries management; serves as National Park Service fisheries representative as committee member to the cooperative state-federal marine Recreational Fisheries Information Network for the S.E. United States [RecFIN(SE)], Commercial Fisheries Information Network (ComFIN), and Fisheries Information Network (FIN). My current position as Marine Biologist is project manager of Everglades National Park's Gamefish Harvest Monitoring Program, one of the longest running (1958-present) marine creel census surveys in the US.

Outside Interests - Have recently closed a sometimes too long (according to my wife: 1) chapter in my life on amateur racing (Porsche 924/44) activities, and tennis (except doubles!), and I've quietly moved on to the subdued (?) sport of... GOLF. One daughter (still!) lives at home while attending college in Miami, son recent computer engineering graduate of SMU, Dallas Texas.

EDITOR'S NOTE: Thanks to Tom for a timely response to my request for material. Bob Donnelley has the next Who's Who assignment-June 1. Passino-Reader is next. Earliness is never penalized.

Fifth Symposium on the

BIOGEOCHEMISTRY OF WETLANDS

September 16th - 19th 1997

Royal Holloway College

University of London

Co-Sponsors: Louisiana State University - Wetland Biogeochemistry Institute, Baton Rouge, LA

University of Florida - Institute of Food and Agricultural Sciences, Gainesville, FL

The impressive Royal Holloway campus is located at the western margin of London. The site is extremely accessible, both nationally and internationally, situated close to good train and road services, and 20 minutes from Heathrow International Airport.

In conjunction with the symposium there will be a workshop sponsored by the Organization for Economic Co-operation and Development on the topic: The Effect of Climate change on the Stability of Coastal Wetlands. This workshop will consist of approximately 10 invited papers to be presented in two general sessions.

The Symposium will address a broad range of subject areas, but we would particularly welcome papers on the following topics:

- Functional assessment of wetland ecosystems
- Nutrient cycling in saltmarshes
- Plant-soil interactions of wetlands
- Modelling of wetland biogeochemical processes
- Toxic chemicals in wetlands
- European wetlands
- Tropical wetland ecosystems
- Water quality
- Freshwater biogeochemistry
- The effects of climate change on wetlands
- The role of wetlands in global nutrient cycles
- Carbon dynamics
- Land-use and wetland conflicts
- Wetland biodiversity

For information contact: Royal Holloway Institute for Environmental Research, Royal Holloway University of London, Huntersdale, Callow Hill, Virginia Water, Surrey, GU25 4LN,UNITED KINGDOM OR FAX TO +44(0)1784 477427 *Or* EMail at rhier@rhbnc.ac.uk

WRECKFISH TAC

The total allowable catch (TAC) for wreckfish *Polyprion Americanus* in 1997 has been set at two million pounds by the South Atlantic Fishery Management Council (SAFMC) for the eighth year. The wreckfishery is one of the U.S.' newest and most enigmatic. Prosecuted by hook and line in waters greater than 375 m on the Blake plateau, the fishery depends entirely on adult fish which attain 75kg or more. Juveniles are found associated with floating debris at the surface, thus the species name. The source (s) of recruitment to the Blake plateau population is unknown. Fisheries for adult wreckfish occur off the Azores, the Iberian Peninsula, New Zealand and other scattered locations around the globe. The two million pound TAC is believed to maintain the mean spawning potential at 0.30 or greater. For more information contact the **SAFMC One Southpark Circle, Suite 306, Charleston SC 24407.**

DEEP SHELF FISHERY CONFERENCE

A conference on the science and management of deep shelf species and fisheries will be sponsored by the Southeast Fisheries Science Center, NMFS, NOAA. September 22-24, 1997, Miami, Florida. The conference had been previously delayed by a funding interruption. Fisheries for such species as wreckfish, orange roughy, alfonsins etc., will be discussed.

For more information contact Charles S. Manooch, Beaufort Laboratory: *SEFSC NMFS 101 Pivers Island Road, Beaufort NC 28516-9722, 919-728-8716, fax 919-728-8784. cmanooch@hatteras.bea.mmfs.gov*

NOAA STRATEGIC PLANNING WORKSHOP

Environmental Stewardship Mission, February 11-12, 1997

Summary of Workshop Conclusion

Build Sustainable Fisheries (BSF)

The break-out group ranked the relative importance of each of the five BSF objectives with respect to the overall goal as follows: 1) manage for economic growth; 2) ensure adequate compliance; 3) advance fishery predictions; 4) assess the status of stocks; and 5) provide research and services. There was some consensus within the group that the most cost effective new investments, on the margin, would be within the "manage for economic growth" and "advance fishery predictions" objectives.

Specifically, within the "manage for economic growth" objective, the group recommended implementing the major components of this objective (found on pages 96-97 of the current NOAA Strategic Plan); following up with initiatives to implement the Magnuson-Stevens Act; deriving economic indicators as measures of performance; conducting research focused on shifting burdens of fisheries management between resource users and the government, and examining distributional impacts, especially among the non-harvest sectors. Within the "advance fishery predictions" objective, the group recommended developing fisheries oceanography models which improve our understanding of the sensitivity and response of varying fishing mortality to interannual variability; predation rates of marine mammals on fish; and varying levels of fishing effort across fisheries. Within the "assess the status of stocks" objective, the group recommended further education and outreach to nonscientists and peer review to improve the credibility and legitimacy of NOAA stock assessments, and investments in cost effective alternatives to stock assessment. Within the "ensure adequate compliance" objective, the group recommended evaluating the potential opportunities, impediments and incentives for self-governance in fishery management regimes, and using workshops and other means to better educate those in the judiciary about marine resources management. Within the "provide research and services" objective, the group recommended additional NOAA efforts in biotechnology, fish aggregating devices, artificial reefs, and establishing property rights or "harvesting privileges."

Recover Protected Species (RPS)

Attendees identified three priority areas where NOAA should focus near-term activities:

1) implementation of recovery/conservation plans for those species on the brink of extinction; 2) establishment of explicit criteria for deciding which species are targeted for recovery and conservation and; 3) development of methods for predicting species that will need attention in order to undertake conservation actions prior to the need for listing . The need for a better balance in program funding, in comparison to the other NOAA goals, to ensure that adequate resources are devoted to the recovery and conservation of highly endangered species was highlighted. In addition, the current emphasis on Pacific salmonid recovery was questioned. Constituents stated that a better understanding of the rationale for NOAA's decisions in determining priorities for species recovery, and anticipated results, would strengthen support for actions. The group felt strongly that focusing on species protection *before* listing is necessary and identified marine fishes and coral ecosystems as targets for proactive species conservation measures.

The group offered a number of other general observations regarding the overall RPS program and specific budget priorities. For, example, there needs to be more integration across environmental stewardship goals and NOAA units because fisheries and habitat issues are intertwined with those of protected species. Attendees stated that NOAA must place more recognition on the international actions necessary for the conservation of protected species, since many are transboundary and domestic conservation measures alone are usually not sufficient, NOAA needs to shift funding to those species in greatest need of action. Steller sea lions and Pacific leatherback turtles were species identified where NOAA might be able to effect a change in current species declines.

NOAA should expand efforts on determining the impacts of fishery interactions with turtles and marine mammals, and from human-caused sources such as commercial fishing and shipping. NOAA decision-making and should take into account the effects they might have on the ecosystem in which they occur. NOAA should clearly articulate its guiding philosophy and principles with respect to environmental stewardship, and apply them in its decision-making.

Sustain Health Coasts (SHC)

A diverse group of constituents discussed the current status and possible future directions of NOAA's coastal stewardship activities within the SHC goal. Participants had a number of comments on the content and direction of the FY98-2002 Implementation Plan. Some of the frequent suggestions were to:

1) clearly identify the stewardship problems and define NOAA's roles and capabilities; 2) focus on NOAA's strengths and leverage others' capabilities; 3) make better use of the information highway for data access, dissemination and assimilation; 4) coordinate federal activities to minimize inefficiencies and build on partnerships; 5) provide information and tools to meet users' needs; 6) not neglect NOAA's research and scientific foundation/ partnerships; 7) show better linkages between information production programs (research), management and outreach efforts; 8) optimize existing and new partnerships; 9) make better use of all of NOAA's resources and abilities in solving coastal problems and ; 10) develop best possible measures of the state of the coast.

Participants suggested that the top priorities for additional development were (not in and order):

1) increasing availability, accessibility, and dissemination of NOAA products and information (emphasis on electronic tools; 2)increasing public outreach and education on ocean/coastal issues; 3) developing a coordinated, interagency initiative on coastal natural hazards; 4) improving support structures (data, tools, services) for decision-making at regional and local levels; 5) enhancing capabilities for using high resolution satellite information to help model, predict and solve coastal issues; 6) enhancing bathymetric and sediment mapping of coastal areas; 7) enhancing monitoring and synthesis of information of the state of the coast and; 8) enhancing coastal change analysis capabilities. Participants suggested the following were the best direction for new initiatives in FY 1999: a cross-NOAA natural hazards initiative and a cross-NOAA habitat initiative. Participants strongly supported NOAA's continued development of a "State of the Coast" report as a powerful tool for communicating the condition of the coast and providing direct access to NOAA and other data sources.

EDITOR'S NOTE: As a cynical survivor of the "Master Plan" of The Bureau of Commercial Fisheries in the late 1960's and of several similar grand planning schemes of NOAA thereafter I believe that the real allocation of always-scarce resources results from upshot political and social exigencies rarely envisioned in the super-plans. Such emergencies whittle away at execution of the "plan" until only the name remains at about which time a national election is held, new agency leadership is installed , and , shortly, the process begins again with a new name. The real waste is of the truly capable and intelligent personnel who could be working on serious problems in fisheries science but instead are deluded (or self deluded) into believing that such planning actually is accomplishment. Anyone want to argue?

Border Closure To Live Salmonids

Effective October 1,1997, Alberta will close all borders to the importation of live salmonids (other than eggs) to minimize the risk of introducing Whirling Disease into the province. In view of contracts and deposits already made on orders for 1997, the deadline of October 1,1997 has been established to allow fish farmers more time to increase fish hatchery capability to supply local needs. ***Contact: Morley Barrett: 403-427-6730. From AFS Fishing Lines 10 (3).***

Pacific Sardine Recovery

by John Butler Fishery Biologist, Director Southern California District

The history of the pacific sardine fishery off the west Coast of North America is well known. At its peak in 1936-1937 more than 700,000 metric tons of sardines were landed, and the population biomass was estimated to be 3.6 million tons. The population and fishery collapsed in the 1950's and 60's due to environmental conditions and high harvest rates. A moratorium was placed on fishing in 1974, and landings (as bycatch with other species) dropped to a low of 3 tons in 1976.

The ocean environment off California warmed considerably in the late 1970's and, in the absence of fishing, the sardine population began to recover. Biomass during 1996 was estimated to be about 454,000 tons by the California Department of Fish and Game (CDFG). The National Marine Fisheries Service and the CalCOFI program provide much of the data for the stock assessment and work cooperatively with CDFG. Since the population now extends to British Columbia, this estimate has a large uncertainty. The data used for this estimate only covers Central and Southern California, the population may be larger.

Since the recovery began, the sardine population has grown at a nominal rate of at about 22% per year even though fishing has occurred. If the population continues to grow at this rate, the population will reach one million tons by the year 2000 and will approach it's historic peak of 3.6 million tons within 10 years. That may be optimistic, but the Japanese sardine experienced a similar expansion in the early 1980's.

The current resurgence of pacific sardine is linked to climate change. As described above the present warm regime off California is in part responsible for the population growth. How long the regime will continue is unknown, but sea surface temperatures off California during 1996 and 1997 remain above the long term average.

Pacific sardines extend along the West Coast of North America from Mexico to Canada. The sardine fishery in the US is now managed by the California Department of Fish and Game with technical assistance from NMFS. The sardine fishery in Mexico is managed by Instituto Nacional de Pesca (INP). There is a small fishery in British Columbia. Management is independent among political entities although scientists for each nation share data and ideas.

In 1996, sardine landings were 35,000 tons in California and 25,000 tons in Mexico. U.S. fishers earned about $2,450,000 from sardine in 1996. The quota for the fishery in California in 1997 is 49,000 tons. About 14,000 tons were exported in 1995. The top three importers of frozen Pacific sardine are the Philippines, Australia and Japan. Sardines are canned for human consumption and re-exportion in the Philippines. Australia imports sardine to feed to southern bluefin tuna in aquaculture facilities. Japan imports sardine for domestic consumption, because sardine catches in Japan have declined in this decade.

EDITOR'NOTE: A great thank you to John for this unsolicited and very timely and interesting contribution. I need more Pacific Coast material for Briefs so that the organ reflects its continent-broad basis. All members are encouraged to provide news notes. Even a page is useful and will be appreciated by readers.

Alberta Sturgeon Management Plan

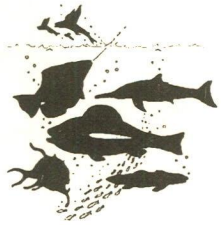
Alberta's Lake Sturgeon Management Plan was approved in November 1996, to take full effect on April 1, 1997. Lake sturgeon (*Acipenser fulvescens*) in Alberta is a unique species consisting of only two populations--one in the S Saskatchewan (SK) River system and one in the N SK River system. Population in the S Sk system is relatively stable; however, it has been estimated at less than 5000 fish. Population in the N SK system is in a vulnerable state, consisting of possibly fewer than 1000 fish.

Lake sturgeon are slow growing, but because they can live beyond the age of 80, they can weigh more than 45 kg. Historical records refer to lake sturgeon in Canada weighing over 100 kg and being more than 150 years old. The Alberta angling record for lake sturgeon is 47.7 kg. In Alberta, sturgeon generally reach a length of 100 cm, roughly 5-9 kg, between the ages of 8 and 12. A length of 130 cm, about 10-14 kg, is generally reached between the ages of 20 and 25. Most females do not reach spawning age until between the ages of 25 and 30, which would put these fish between 130 and 140 cm in length. Not all sturgeon spawn for the first time at the same age and, after reaching maturity, most females only spawn once every 4-6 years.

Heavy harvest by gill net and long line before 1940 caused sturgeon populations in Alberta to almost disappear. A fishing closure from 1940 to 1968 helped populations recover enough to support a sport fishery under special regulations. However, the cumulative sportfishing harvest since 1968 has influenced the numbers of sturgeon that survive to older ages. Although the sport fishery still occasionally produces sturgeon over 27 kg, the majority of sturgeon caught are immature, weigh less than 9 kg, measure less than 100 cm and are under the age of 12.

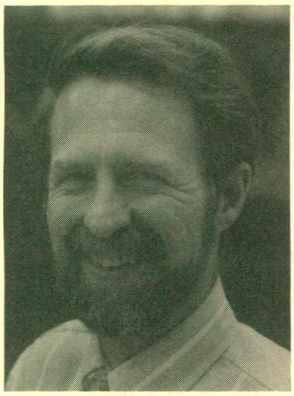
Anglers who wish to keep lake sturgeon are required to hold a Sturgeon Fishing License. This license is not required for anglers who practice catch-and-release sturgeon fishing. The existing regulation of two sturgeon per year over the length of 100 cm has been working to maintain populations; unfortunately, this regulation is no longer promoting population recovery because of increased fishing pressure. Lake sturgeon in Alberta are vulnerable to sportfishing harvest at least 10 years before reaching maturity and 50 years before reaching old age. In 1996, sturgeon anglers were surveyed for their opinions on sturgeon management in Alberta. Strong support (79.3%) was given to the following management objective: to manage sturgeon populations to continue their recovery to produce more fish, as well as larger sizes and older ages of fish than there are now. The intrinsic enjoyment of fishing is becoming a high priority with anglers and many emphasize the importance of the sturgeon fishery and the need to provide better protection.

New regulations for lake sturgeon were developed based on angler survey results and population status of sturgeon in Alberta. Starting in 1997, the Sturgeon Fishing License will be valid only for the keeping of one sturgeon over 130 cm in total length from the S SK River system and only during the time period of June 16 to March 31. Fishing opportunities for sturgeon during their spawning period (April 1 to June 15) and in the N SK River system throughout the year will be catch and release only (0-limit). For information on regulation changes that will be implemented on April 1, 1997: Contact: *David K. Berry Tel: 403-427-6730 From AFS Fishing Lines 10 (3)*



UPCOMING ELECTIONS
AIFRB PRESIDENT-ELECT CANDIDATES

WILLIAM J. WILSON



Bill Wilson is the manager of the Alaska office of LGL Alaska Research Associates, Inc, a biological research firm. He primarily conducts marine fisheries research and monitoring of arctic fish populations for the oil and gas industry on Alaska's North Slope. Bill was educated at Gonzaga University and has an M.S. from Oregon State University. He conducted fisheries and marine biological research in Oregon and spent nearly 23 years working as a fishery research and management biologist in Alaska.

From 1974 through 1988 Bill was a fishery scientist and faculty member at the University of Alaska where he conducted various instream flow studies associated with hydropower development in Alaska, marine and freshwater fishery assessments for timber and oil and gas developments, and salmon censusing and impact assessments throughout the state. He directed the first hydropower related instream flow study in Alaska, which led to successful licensing for the Terror Lake Hydroelectric Project on Kodiak Island with instream flows specified for salmon habitat maintenance. He published several papers from that work dealing with physical habitat preferences of Pacific salmon and effects of altering streamflow on pink and chum salmon populations.

Prior to joining LGL in 1990, Bill was a fishery biologist for the North Pacific Fishery Management Council,where he was responsible for Council activities in the Gulf of Alaska groundfish fisheries, the offshore troll salmon fisheries, and the North pacific halibut fishery, and also worked on bycatch control and fishery quota allocation. Since 1990, Bill has conducted research and monitoring studies of oil and gas development activities on Alaska's North slope. He is Program Manager for the fish and oceanography monitoring program for the Endicott Oil and Gas Development, one of the largest oil and gas fields in the United states. Studies include effects of gravel causeways on nearshore fish populations of the Alaskan Beaufort Sea.

Bill is a life member of the American Fisheries Society, (AFS), is an AFS Certified Fisheries Scientist, and a charter member of the Alaska Chapter of AFS.He was President of the Chapter in 1985-1986, and served as co-chairman of the Local Arrangements Committee for the national AFS meeting in Anchorage in 1989. Bill received the Chapter's Meritorious Service Award in 1993 for his work on Arctic Alaskan oil and gas fishery research and assessment, and presently serves as Chairman of the Chapter's Fish Key Committee which oversees a multi-year program to publish a comprehensive Key to the Fishes of Alaska.

In 1978, Wilson joined AIFRB as an Associate and in 1983 was promoted to Member. He has been an active member of the Alaska District. He became the first Director of the Northern Alaska District in 1988, and represented Northern Alaska AIFRB members for the next four years. He continues to work on AIFRB issues, and frequently represents the Northern Alaska District at Board of Control meetings. Bill was promoted to Fellow of AIFRB in 1993.

GARY T. SAKAGAWA

Gary T. Sakagawa is a fishery research biologist wtih experience in fisheries research administration. He is Chief of the Pelagic Fisheries Resources Division of the Southwest Fisheries Science Center, National Marine Fisheries Service in La Jolla, California. As Chief he is responsible for research programs for stock assessment of highly migratory species of the Pacific and Indian Oceans and for providing advice on tuna fishery management issues. To carry out his responsibilities, he works with a small staff of 14 professionals and has established alliances and agreements with other researchers for collaborative research to achieve shared objectives.

Gary was born in Honolulu, Hawaii and earned degrees at the University of Hawaii (B.A. in Zoology), University of Michigan (M.S. in Fisheries) and University of Washington (Ph.D. in Fisheries). From 1971 to 1979 he held several research positions dealing with fisheries assessments. During the next eight years, he managed a diverse scientific team that was responsible for stock assessment research on tuna and tuna-like species of the Atlantic Ocean and stock assessment and protection of marine mammals of the eastern Pacific Ocean. Accomplishments of this team contributed to scientific knowledge and in resolving many fisheries management issues including conservation of Atlantic bluefin tuna and protection of dolphins in the eastern tropical Pacific. In 1986 he moved into his current position.

Throughout his career, Gary has demonstrated leadership and promoted professionalism in fishery science. He has served as a scientific advisor and expert on U.S. delegations to international meetings, and as an expert, convener, chairperson, or rapporteur on international committees and at events organized by ICCAT, IATTC, IPTP, FAO, SPC, IOC and others concerned with tuna and tuna-like species. His recent leadership efforts have been in promoting international collaborative research on tunas in the central-western Pacific Ocean through the informal international research organization, Western Pacific Yellowfin Tuna Research Group, and assisting in developing operational plans for the new international organization, Interim Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean , that was created through an agreement with Japan and the U.S. in 1995.

Also, throughout his career, Gary has supported services to professional organizations and the local community. His services to professional organiztions include serving as AIFRB District Director (1977-1979), President of the AFS Marine Fisheries Section (1981-1982), President of the AFS International Fisheries Section (1991-1993), and the Associate Editor of the Transactions of the American Fisheries Society (1986-1988). He is active in promoting fisheries as a profession to minority students, particularly with the Environmental Science Program at California State University, Los Angeles. He continues to support the local community of San Diego through contributions to local charity organizations and, specifically, the Store Front that helps run-away teenagers. Gary is an author of over 60 research publications and reports and received the Award for Best Paper, Fishery Bulletin Volume 72.

AN ESSAY: Peer Reviewed Fisheries Journals at Risk? by Jack Pearce

Jack again provides provocative reading for AIFRB members. Would a NMFS representative respond?

As Scientific Editor for Fishery Bulletin, and North American Editor of Fisheries Research and the Marine Pollution Bulletin, I have had numerous opportunities to meet with colleagues having similar interests in the publication process. Of perhaps greater import, many of my colleagues share certain of my views about scientific writing and publishing today. There is a growing concern that, for various reasons, there is a decreasing interest on the part of sponsoring resource and environmental institutions and agencies to support the publication process. In part this is a result of a fairly level budget today, but to a greater degree many agencies now seem more interested in dealing with the politics and associated social phenomenon of declining fisheries resources and less inclined to ensuring that new knowledge is expressed on the printed page. As most know, however, the results of well-planned, well-expedited fisheries research are essential to the management strategies of the moment and will be even more important to resolving complex problems which loom on the horizon.

For instance, during the past four days I have participated in the annual meetings of the American Association for the Advancement of Science (AAAS). Several of the principal sessions dealt with aquatic resource and environmental issues. These sessions were a forum for scores of young scientists addressing the key issues of resource management now and in the future: how real are the problems as seen today in the introductions of marine species, and their effects on biodiversity? Can we in any way control or manage introductions, and if so what are the consequences? If the reduction of populations and removal of species of fish and invertebrates by fishers is affecting marine ecosystems, how can we protect the ecosystems in the future? Perhaps more important, what have been the physical effects of dredging and trawling gears on these species and their habitats? Are refuges an answer? Can habitat restoration correct the abuses of past decades and even centuries? While such topics are being discussed within the AAAS sessions (and similar meetings organized by scores of other societies and organizations), without a commitment to permanent publication salient points, ideas, and hypotheses are lost or remain untested.

As I review the various literature cited sections of papers, I find many new journals referenced, but I find many older runs which have disappeared or which lie comatose. Increasingly, younger fisheries scientists working with DNA probes and markers, and other seemingly esoteric techniques, publish in journals unrelated to the fisheries research endeavor. To some degree this is healthy but it is also important that such new information be forcibly paraded before the nation's fisheries scientists and managers at some point so as to increase support for and use of new ideas in fisheries. By and large this can only be done via published papers in fisheries journals.

The facts are that these journals and the associated peer reviewed technical memos and reports (for more lengthy or data rich papers) are not well supported. The various scientific and technical editorial offices essential to the publication process remain understaffed,and often unrecognized by related agency personnel and even by researchers which publish in a particular journal. More important, the authors themselves often are unwilling to complete thorough reviews of contributed papers sent to them. Periodically the research community within any discipline should be reminded that while it is "publish or perish", the publication process must be recognized as the final step in the complex scientific endeavor. It is, in fact, the crucial point in the process where a new idea is literally carved in stone for future review, use, and modification.

Given the foregoing, what are the "new ways ahead"? First, scientists must be fully involved in the publication process, in the beginning as authors but later as reviewers and critics. Also, senior scientists, well published themselves, should serve as mentors to younger researchers and those scientists who are attempting to write in English when that is not their first language. Second, chair-persons, senior managers, and agency heads, as well as the membership of fisheries societies and associations, must use their good offices to influence the bureaucracies to ensure adequate support for the publication process from the scientific editorial steps through the technical editing and printing phases. There is continuing hyperbole about the importance of science in understanding our world and its contained living resources. Without a peer reviewed publication process in place for agency and societal journals we will find ourselves at the mercy of profit-making commercial journals and presses, a situation inimical to the scientific process.

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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.
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Address Correction Requested

26

American Institute of Fishery Research Biologists

. . . BRIEFS . . .

VOL. 26, NO 4 JULY - AUGUST 1997

Greetings from the new president-elect Gary Sakagawa

A surprise call the other day from Gene Huntsman, notifying me of the AIFRB election results and requesting a statement caused my mind to go blank. After a second, I recovered and had a reasonably coherent conversation with him. This incident reminded me of how easily the unexpected can create a mental block and how quickly the human brain can operate "smarter" to recover. Don't we all wish having this split-second ability to recover from mental blocks while puzzling through research questions..

Gary Sakagawa, New president- elect.

I wish to take this opportunity to thank the membership for electing me to serve as the next president of the AIFRB. In the months ahead, I will be working as an understudy of President Clark Hubbs and with other members of the Board of Directors in serving your interests. I plan to contact members to listen to their concerns and gather suggestions on how the Institute can better serve members and on how the Institute can better promote our objectives of advancing the theory, practice and application of the science of fishery research biology, as well as in advancing high professional standards. Finally, I shall be calling on Bill Wilson for advice and involvement in developing my agenda. I look forward to working with the membership and hearing from you. I can be reached by phone at (619) 546-7177, fax: (619) 546-5653, or e-mail: Gary.Sakagawa@noaa.gov.

Another Pioneer Passes

Chester (Chet) R. Mattson died July 28, 1997, at Bartlett Regional Hospital, Juneau, Alaska. Survivors include his wife Jean, presently at the Ketchikan Pioneers Home, sister Shirley Sansburn of Seattle; sons and daughters-in-law Richard and Peggy, Kenneth and Ann, Robert and Maria of Juneau, and Michael and Rilla of Puyallup, Washington, and ten grandchildren.

Chet was born and raised near Seattle, WA and entered the School of Fisheries at the University of Washington in 1940. He worked at summer fisheries jobs in Alaska during his undergraduate years. He joined the U.S. Army in 1943 and served as an infantry sergeant. He was captured in northern Italy by the German army in 1944 and held prisoner until the end of the war.

He completed his B.S. in Fisheries in 1947 and began work on salmon spawning and freshwater rearing habitats for the Oregon Fish Commission. In 1957 he accepted employment with the U.S. Fish and Wildlife Service and moved to Juneau, Alaska. During his career at the Auke Bay Laboratory he supervised early life history studies of pink and chum salmon at the Traitors Cove Field Station near Ketchikan, Alaska, and in Port Valdez, Prince William Sound, and participated in intertidal baseline surveys throughout coastal Alaska for the Outer Continental Shelf Environmental Assessment Program (OCSEAP), and in ichthyoplankton surveys of southeast Alaska for the Marine Resources Monitoring, Assessment, and Prediction Program (MARMAP). He had special assignments as an advisor for salmon and trout enhancement to the U.S. Forest Service and Bureau of Indian Affairs.

Chet was active in many local community and professional organizations and served on the Douglas City Council, and several advisory committees for the Douglas City Council and later the City/Borough of Juneau. He was an active member of the Douglas Community United Methodist Church, Douglas Lions Club, Sons of Norway, Pioneers of Alaska, Alaska Territorial Sportsmen, and National Ski Patrol. Chet was an early 1960's advocate of short skis. He received the Silver Beaver Medal for over 20 years service to the Boy Scouts of America. He joined the American Institute of Fishery Research Biologists in 1959 and was elected Fellow in 1976 and Emeritus in 1983. He was the 1971-1973 Alaska District Secretary-Treasurer. He had a long standing as a "mossback" in the Pacific Fisheries Biologists.

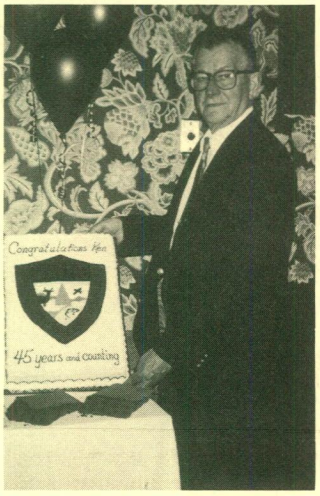
Chet was a people person and enjoyed a great many activities before and following his retirement. He liked raising things, be it fish, gardens, Christmas trees, sons or grandchildren. He could converse in six languages. He learned Finnish, Swedish, and English as a child, German in college and Norwegian and Russian after his retirement. He was an avid traveler and enjoyed visiting, and reminiscing with friends and acquaintances. Fishing, hunting, photography, card games, and skiing were all important parts of his active social life.

by Bruce L. Wing —Director, Southeast Alaska.

THANKS TO BILL WILSON

The officers and members of AIFRB sincerely thank Bill Wilson for his participation as a candidate for President-Elect. Both the winning and losing candidates make the same *a priori* commitment of their time, energy, and private lives to the AIFRB, and both candidates were extremely well qualified (see biographies, *Briefs* March-April 1997, and May-June 1997) Nominating Committees rarely pick duds. It's a pity that we can have but one winner. We look forward to continued leadership from Bill in the AIFRB. Again, *Thank you Bill.*

A Lifetime of Service - Ken Warner



Congratulations Ken! 45 Years and Still Counting...

Kendall Warner (Member, 1970, Fellow, 1971) was recognized this spring at a surprise dinner celebration hosted by his family at Miller's Restaurant in Bangor, ME. The event marked Warner's 45th year of service to the Maine Department of Inland Fisheries and Wildlife. Family members, past and present colleagues, and other professional associates gathered to share memories and honor the veteran fisheries biologist. Warner works out of the Maine Department of Inland Fisheries & Wildlife's headquarters in Bangor as supervisor of the Fisheries Research and Management Section.

He is the recent recipient of several professional awards such as the 1987 Professional Award of merit and the 1994 Presidential Award both presented by the Northeastern Division of the American Fisheries Society, the 1992 Silver Trout award presented by the Sunkhaze Stream Chapter of Trout Unlimited, and the 1994 Thomas S. Pinkham Award from Atlantic Salmon for Northern Maine.

Warner graduated from the University of Maine in 1950 with High Distinction earning a Bachelor of Science in Wildlife Management. He is also a 1952 graduate of Cornell University with a Master of Science in Fisheries Biology. Warner's first association with MDIF&W was in 1948 when he worked as a wildlife aide. His permanent career began in 1952 when he was assigned regional fisheries biologist in Ashland.

Currently, Warner has the greatest longevity of any biologist ever employed by the Department. Warner has no immediate plans regarding retirement.

AIFRB ANNUAL REPORT 1996-1997

Treasurer's Report - Abridged Category Description 8/13/96 - 8/7/97

INFLOWS	
Ck Recovery	125.00
Dues Receipts	18,996.00
JWR CK Deposit	32.00
Bal Fwd-1197 Ckng-AIFRB	4,217.66
TOTAL INFLOWS	**23,370.66**
OUTFLOWS	
AIFRB Computer	1,291.05
AIFRB Social	1,120.66
Bank Serv Chg	130.85
Bd of Control	4,308.52
Bounced Check	30.00
BRIEFS	4,390.85
Correction	10.00
Distrct Reimbur	360.40
Honorarium	1,250.00
License	32.00
Membership	1,247.86
Production	1,750.00
Res. Award	1,500.00
Secretary Exp.	278.00
Stationary	294.94
Treasurer's Exp	819.69
W.F. Thompson	750.00
TOTAL OUTFLOWS	**19,564.82**
OVERALL TOTAL	**3,805.84**

AIFRB Current Portfolio Status as of 27 July 1997

Name	Quantity	Market Value
Money Funds		
Smith Barney Funds Cash Port CL A	2,495.91 Shares@ 1.00	$2,495.91
Stocks (Closed End Funds)		
Putnam Managed Mun Income	1,550 Shares @ 11.50	$17,825.00
Municipal Income Trust II	1,500 Shares @ 9.75	$14,625.00
Mutual Funds		
Aim Equity FDS Inc.	574.803 Shares @ 22.961 ..	$13,197.48
Franklin Tax Free TR-High	681.835 Shares @ 11.43	$7,793.37
Morgan Stanley Fund Inc. (Asian Growth CL C)	154.433 Shares @ 16.48	$2,545.06

Accrued Money Fund Dividends ..... $ 4.88
Cash Balance ..... $ 71.25

Total Value of Portfolio = $ 58,557.95

Total Value of Portfolio at end of Fiscal Year 1996 ..... **$51,143.82**
Total Value of Portfolio as of 27 July 1997 ..... **$58,557.95**

Net Gain (14.5%) ..... **$ 7,414.13**

by J.W. Rachlin, Treasurer — 7, August 1997

MEMBERSHIP COMMITTEE
MEMBERSHIP REPORT TO THE BOARD OF CONTROL
1997

Sammy M. Ray, Chairman
Texas A&M University-Galveston

Martin Golden
Huntington Beach, CA 92649

Kendall Warner
Maine Inland Fish & Wildlife

Dr. Bruce Wing
Auke Bay Laboratory, NMFS
Juneau, AK 99801

Dr. Barbara Warkentine
SUNY, Maritime College
Bronx, NY 10465

Since 1982, there have been 82 reviews for membership by Sammy Ray's Membership Committee. We are proud of the expeditious manner in which these were handled. Judy Wern apologizes to the Board of Control for not being able to handle the 83rd review with the same standards. After November business began to pile up, Judy had every intention of taking care of it, but she assumed so many extra duties at the university that she did not have time. In May, she hired a graduate student to help with the business, but the latter progressed no further than organizing and making copies of curricula vita.

Judy will no longer be able to assist with Membership. She is willing to train her and Sammy's secretary to do the job, but there will be a problem from April through mid-August when our busiest time of the year comes along. We may have to hire help during that time period.

At this time, all the business has been addressed. The Membership Committee has been sent 15 applications for new membership and 6 petitions for Emeritus.

I have accepted into the membership the following: **ASSOCIATES (Student) 9**

MEMBERSHIP SUMMARY 1979 TO 1997
(1979-80 may be incomplete)

	NEW MEMBERSHIP				PROMOTIONS			
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	-	-	-	-

by Sammy M. Ray - Chairman

THE 1997 RESEARCH ASSISTANCE AWARD PROGRAM

Five AIFRB associate members received Research Assistance Awards in 1997. All received $300 awards for a total award of $1,500, well below the $4,000 annual cap for the program. Two applicants were turned down because they are not AIFRB members and two others did not receive awards because they had received two previous awards. Attached is a listing of each award recipient, their affiliation and sponsor, the meeting they attended and the abstract of their presentation.

Thanks to the generosity of my employer, Pacific Gas and Electric Company, I again had no expenses for administering the program.

Thomas R. Lambert, Chair
Research Assistance Award Program

1997 RECIPIENTS OF AIFRB RESEARCH ASSISTANCE AWARD

Lisa M. Kerr, is a graduate at Boston University's Marine Biological laboratory at Woods Hole, Massachusetts. Lisa in conducting studies with her sponsor, Professor Les Kauffman. She presented her paper at the American Society of Ichthyologists and Herpetologists meeting in Seattle.

Embryonic abnormality rates for the damselfish, *Abudefduf sordidus* (Pomacentridae), relative to polychlorinated biphenyl (PCB) contamination at Johnston Atoll, Central Pacific Ocean

Rates of developmental abnormalities in the embryos of a demersal spawning fish were measured to determine if adverse effects due to anthropogenic contamination could be detected at Johnston Atoll. *Abudefduf sordidus* embryos were taken from four spawning colonies that occured in areas with differing polychlorinated biphenyl (PCB) sediment concentrations. Two of the colonies occured in areas with low PCB concentrations while two occured in areas with intermediate and high PCB concentrations (both exceeding ecological screening levels). Early stage embryos were examined for abnormalities defined as deviations from normal developmental stage or morphological differentiation. Mean abnormality rates for both colonies occuring at low PCB concentration areas (1.4%, n=15,593 and 2.8%, n=10,141) were significantly different from the mean abnormality rate at the site with the highest PCB concentration (9.3%,n=11,870); (ANOVA P=0.002). Linear regression analysis indicated a significant relationship between mean abnormality rate and mean sediment PCB concentration (r^2=0.86, P=0.048). Reproductive output, in terms of number and size of clutches spawned, was not significantly different among colonies. These results indicate that while embryonic abnormality rates were elevated at the high PCB concentration area, adult reproductive processes were not affected.

Tein M. Lin, is a post-doctoral research associate at the Department of Food Science, University of British Columbia. He was sponsored by his former major professor, Jae W. Park of the Department of Food and Technology at Oregon State University. Tein presented his paper at the Institute of Food Technologist's annual meeting in Orlando, Florida.

Solubility of Fish Myosin as affected by Conformational changes at various Ionic Strengths and pH

During surimi seafood manufacturing, fish proteins are subjected to various physical and chemical reactions which might induce changes in protein conformation that subsequently affect their solubility. Our previous studies have shown that myosin is fairly soluble at certain washing conditions. As part of our continued effort to control the solubility of myosin during surimi processing, this study was designed to investigate the effect of salting in, salting out, and pH on the changes of surface hydrophobicity, reactive sulfhydryl content, and a-helicity; and to further elucidate the relationship between these conformational changes and the solubility of fish myosin.

Two ml of myosin, extracted from Chinook salmon (*Oncorhynchus tshawytscha*) within 2 hr post harvest, was mixed 18 ml of the following solutions: (1) 0, 0.2, 0.3, 0.4, 0.5, 1.0, 1.5, 2.0, 3.0, 3.5, and 3.8 M KCl; (2) pH 2, 3, 4, 5, 6, 7, 8, 9, and 10. The homogenates were then set in a cold room (5C) for 6 hr and centrifuged at 17,540 x g for 20 min. Myosin solubility was defined as the fraction of total myosin remaining soluble after centrifugation. Soluble myosin was further analyzed for surface hydrophobicity, sulfhydryl content, and a-helicity in relation to its solubility.

Adding salt or shifting pH away from the isoelectric point of myosin increased surface hydrophobicity and decreased a-helicity. A slight increase in reactive sulfhydryl content was also observed. The increased solubility of myosin was corrected to the increased surface hydrophobicity and the decreased a-helicity. These results indicated that the increased solubility was caused by unfolding of protein structure. At salt concentrations above 1.0 M, myosin regained its helix structure with a concomitant loss of solubility. The salting out effect was probably due to the dominant hydrophobic interaction among nonpolar amino acid residues.

Kevin L. Pope, is in the Ph.D. program at South Dakota State University, working with major advisor and sponsor David W. Willis. Kevin presented his paper at the American Fisheries Society's annual meeting in Monterey, California.

Yellow Perch and Black Crappie: Are Larval Interactions Similiar to Gizzard Shad and Bluegill?

Relations between environmental variables and subsequent recruitment or year-class strength of yellow perch *Perca flavescens* and black crappie *Pomoxis nigromaculatus* typically are complex. Part of this complexity may be attributable to differential spawning times for these two species, as has been demonstrated for gizzard shad *Dorosoma cepedianum* and bluegill *Lepomis macrochirus*. In studies of early life history of yellow perch and black crappie in South Dakota waters, we found a difference in the time at which year-class strength may be

established. Peak larval abundance of yellow perch was correlated with late summer abundance of age-0 perch, perhaps indicating that year-class strength may be established early in the year. However, we found no relation between larval abundance and subsequent fall abundance of age-0 crappie. Perhaps not coincidentally, yellow perch spawn before black crappie in South Dakota waters. Thus, we wonder whether earlier appearance of larval yellow perch affects subsequent growth and survival of sympatric black crappie, while yellow perch recruitment is more related to environmental variation among years. In our single case history, abundance of age-0 black crappie and yellow perch was inversely related over a 9-year period. Therefore, we believe that further investigation of this phenomenon is warranted.

Douglas J. Snyder, is a M.S. student working at the University of Southern Mississippi Institute for Marine Sciences Gulf Coast Research Laboratory with his sponsor Mark S. Petersen. Doug presented his paper at the American Society of Ichthyologists and Herpetologists meeting in Seattle.

Life History of a Peripheral Population of Bluespotted Sunfish.
***Enneacanthus gloriosus*, in Coastal Mississippi**

The bluespotted sunfish utilizes coastal plain drainages from New York to Florida and west along the Gulf of Mexico to Mississippi. Little is known about this centrarchid, especially in the southwestern periphery of its range. Monthly collections of bluespotted sunfish were made from October 1995 to October 1996. The maximum TL was found to be 44.0 mm, in contrast to 85.0 mm in its northern range. This is consistent with latitudinal differences seen in other species. An evaluation of their fecundity and seasonal spawning preparedness indicated that the diameter of ripe eggs was 0.68 $\pm$ 0.06 mm with the number of ripe eggs per female being 128.0 $\pm$ 41.6 (n=18). The egg diameter of other *Enneacanthus* species ranges from 0.3 to 0.9 mm, with the largest being E. *gloriosus* from New Jersey. The sex ratio was found to be 1:1 (Chi Square=0.007, p=0.93). There was no difference in the slope of dry somatic weight/TL relationship between males and females (ANCOVA, p>0.5,n=111). Because of the various egg sizes found and sporadic changes in GSI values, they were assumed to be batch spawners. The maximum age was 6 yrs (44.0 mm TL). The bluespotted sunfish utilize epiphytic, planktonic and benthic food resources associated with SAV.

Cynthia A. Taylor, is working at NOAA's Southwest Fisheries Science Center in La Jolla, California while completing a Master's thesis at San Diego State University. She is studying with Russell D. Vetter at the Science Center. Cynthia presented her paper at the American Society of Ichthyologists and Herpetologists meeting in Seattle.

Larval Identification Of Rockfishes Using Mitochondrial DNA Techniques

Rockfishes (genus *Sebastes*) comprise the most species rich genus of fishes on the west coast of North America. They occupy a variety of niches, ranging from demersal and solitary to schooling and pelagic. The same species richness that makes *Sebastes* a fascinating group to study makes them extremely difficult to manage. Few records have been kept on rockfish abundance or harvest due in part to the difficulty in identifying adults to species. This problem is compounded in larval and juvenile morphological indentification. As a consequence, there are many gaps in our knowledge of species-specific reproductive biology of these livebearers. An inability to identify larvae and juveniles has also hampered use of fishery independent stock assessment techniques based on larval or juvenile abundances. To address these issues, we analyzed DNA sequence data (800 base pairs of the cytochrome b gene) for a group of 7 species which can be united morphologically at small standard lengths. These sequence data have provided enough apparent species-specific variation for differentiation using Restriction Fragment Length Polymorphisms (RFLPs) in a triple digest of the 800 bp Polymerase Chain Reaction (PCR) product. This is a promising and economical method of species identification using molecular techniques in fisheries management.

Editor's note: This valuable program is not fully utilized. Encourage applicants in 1998.

AIFRB Sponsors Symposium at AFS Meeting

Wednesday, August 27, 1997

1997 American Fisheries Society Annual Meeting

Protecting Vulnerable Species: on the edge between biological need and the demands of the real world.

AGENDA

Welcome--Clark Hubbs, President AIFRB

Intro to Topic--Cindy Deacon Williams, Pacific Rivers Council

What's Wrong with Current Law?

Point: An Ark a Few Cubits Short: Shortcomings in Existing Laws to Protect Vulnerable Species. Adam Berger, Sierra Club Legal Defense Fund.

Counterpoint: Protecting Vulnerable Species: Problems with Conservation Laws. Michael Brennan, Holland & Hart.

Point/Counterpoint Debate

What's the Biological Need?

It takes a Landscape to Recover a Species: Concepts for Conservation. Paul Angermeier, Virginia Tech.

The Normative River: a New Ecological Basis for Recovery of Columbia River Salmon. Rick Williams, Clear Creek Consulting

Community Based Recovery Planning in the Owens Basin, Inyo County, California. Don Sada

(continued on page 6...)

(...*cont. from page 5*)
Freshwater Mussels in a Fragmented Stream-scape: the Challenge of Maintaining Diversity--Mel Warren and Wendell R. Haag, USDA Forest Service

Biological Needs Panel Discussion

What are the Demands of the Real World?

Protecting Public Resources with Private Interests: an Application of Conservation-Based Development Through the Willapa Fisheries Recovery Strategy. Allen Libowitz, Willapa Bay Alliance.

Application of the Habitat Conservation Plan Process to Private Forests: Overview of Weyerhaeuser's Willamette HCP. Robert Bilby, Weyerhauser

How to Make Conservation Acceptable: the Quincy Library Group Example, Mike Jackson.

A State of California Example: the Natural Community Conservation Program. Doug Wheeler, Secretary of Resources.

Real World Needs Panel Discussion

How Do We Make It Work?

Pulling it Together: a Biologist's Experience with the Oregon Business Council. Jim Lichatowich, Alder Creek Consulting.

DISTRICT ANNUAL REPORTS

Northern California

Membership

The Northern California District will hold elections in the fall to fill the positions of vice director and secretary-treasurer. Dan Howard will be vacating as director after serving two years and will be replaced by Tom Moore of the California Department of Fish and Game.

Activities

The District continued with its annual schedule of get togethers and meetings during the year. This included a business and planning meeting to start the year in September, a dinner meeting with guest speaker in November, a social get together and holiday banquet in January, followed by two more dinner meetings with speakers in March and May.

The annual business and planning meeting was held around the swimmng pool at Secretary-Treasurer Andy Jahn's house. The aquatic setting inspired a focused and intense business portion of the meeting. Dan Howard started by reporting on the Board of Control meeting in Dearborn, Michigan. Following that, topics and speakers for the year's dinner meetings were selected. A pot luck meal completed the days activities.

The first dinner meeting in November was held in Oakland and featured Andy Cohen who provided a look at the history of introduced species into San Francisco Bay. An ongoing problem as alien species are continually being imported, Andy started in the mid 1800's with the introduction of ship worms and concluded with some of our most recent invaders - the Asian clam (*Potamocorbula amurensis*) and the green crab (*Carcinus maenas*).

In January, thirty five members and guests gathered for the annual Chinese holiday banquet. Once again, AIFRB member Tom Jow selected the restaurant and the menu, as always, seafood was the theme and the fare was plentiful and delicious.

Our guest speaker at the March meeting was biologist and photographer David Behrens who presented some on his work on the world's nudibranch fauna. Dave focused on evolutionary relationships that have developed between nudibranchs and other organisms in tropical and temperate marine environments. A fascinating presentation with one knockout slide after the other. Twenty two people attended this meeting at Jack London Square in Oakland.

Our spring meeting was held at the Marine Sanctuary Office in San Francisco. Our speaker was Chris Dewees a marine advisor for the California Sea Grant extesion program. Chris has spent several years looking at economic and management concerns related to Individual Transferable Quotos (ITQs) in their many evolving forms. Chris presented survey results comparing the Canadian halibut fishery with ITQs in place to the Alaskan derby fishery and to the Alaskan fishery after implementation of a modified ITQ. He also presented data looking at the evolution of the ITQ system in New Zealand.

Daniel F. Howard - District Director

Southern California

On September 4, 1996 the chapter held a meeting at San Clemente CA. During this meeting, a committee was formed to judge student posters at the CalCOFI meeting. Ms. Kimberly McKee-Lewis of the California Department of Fish and Game made a presentation entitled "Rapid Changes and Growth of California's Live Finfish Fishery." In recent years a rapidly growing fishery has provided live fish to restaurants in Southern California. The fishery exploits species that were previously only taken by sportfishers.

On November 2, the chapter awarded $200 for the best poster to Korie Ann Johnson entitled "Rockfish (*Sebastes spp.*) recruitment to soft bottom habitats in Monterey Bay, CA" at the CalCOFI meeting held at Pacific Grove, California.

On December 18, 1996, the chapter held a meeting in San Clemente, CA. The upcoming increase in dues was discussed, and all present felt that it was overdue. Dr. Roger Hewitt of the Southwest Fisheries Center gave a discussion on "Management of the Antarctic Krill Resource: the Role of Acoustic Sampling."

On March 5, 1997, the chapter held a meeting in San Clemente. The annual workshop was postponed until January 1998, due to scheduling conflicts between the annual Tuna Conference and classes at California State University at San Marcos. Dr. Mia Tegner of Scripps Institution of Oceanography and Peter Haaker of the California Department of Fish and Game presented a talk entitled "Are abalones manageable? Thoughts as the white abalone approaches extinction."

The District awarded, D. Mason Posner, Natural History Museum of Los Angeles County, $200 for the best student paper in fisheries at the Southern California Academy of Sciences meeting May 2-4, 1997. Mr. Posner presentation was entitled "The concentration of pigment molecules by the fish ocular Iens: Biochemistry and Ecology"

The District awarded, Dr. Richard Brill, University of Hawaii, $200 for the best paper at the 48th Annual Tuna Conference held at Lake Arrowhead, CA. Dr. Brill's presentation entitled "Evolution of the cardiorespiratory system of tunas and billfish" was considered a landmark paper by the panel of judges. This was the first time that the chapter had presented awards at the Tuna Conference, and the first time an award was made to a professional fishery biologist.

John Butler, Director

Oregon - Southwest Washington

The Oregon-Southwest Washington District of AIFRB is again without a Director. My appointed position as District Director, by past President Vaughn Anthony, expired in August of 1996. During the last two years, no one has nominated a new Director, nor has anyone volunteered to run for office. Thus, we have been unable to hold a District election.

At the 1996 Annual Meeting in Dearborn, Michigan, present AIFRB President Clark Hubbs requested that I remain acting director until elections could be held in 1997. There were no scheduled meetings this year as I attempted to find a new Director. Although I telephoned several members and asked them to nominate members for District Director or volunteer to become Director, an election has still not been held and the office remains open. Following one last attempt in our April Newsletter, I did receive three nominations for Director. All three nominees were retired and 70-years-old or older. One was no longer an AIFRB member, and another was a past District Director. Each refused my invitation to run for office.

Even at this late date, I am still struggling to fill the office and to determine what can be done to breed new life into this District. I am hoping that we can achieve some joint membership agreement with the Portland Chapter of the American Fisheries Society, either by holding joint bi-monthly or monthly meetings, or by co-sponsoring the Portland Chapter's Annual Meeting. However, in the past, AIFRB members did not volunteer to participate in the AFS Annual Meeting.

John F. Palmisano, Director

Northern Alaska

This period continues a state of dormancy within the Northern Alaska District. As mentioned in my last annual report, AIRFB members that live and work here in the District are also members of a very active chapter of the American Fisheries Society. Members here have made the choice of being active in only one organization and being content with little activity in the other. In this case they have chosen the AFS Chapter as the forum where they direct most of their energy. Therefore, AIRFB activity is limited to providing displays at local AFS meetings, sponsoring student papers, monitoring fishery research, and generally assisting AFS in meeting preparation.

As a result, I have defined my role as District Director to being to keep members well informed through a newsletter of AIRFB activities which is intended to compliment *Briefs*, as well as co-sponsor scientific workshops and conferences with AFS and other organizations when I find projects that share a common goal with AIRFB. The membership residing in this district seem satisfied with this approach.

Steven K Davis, Director

Southeast Alaska

Activities

When Director Babbcok announced her plans to retire, Past President Helle asked me to consider being recycled as the Southeast Alaska District Director. I received confirmation of my appointment as Southeast Alaska District Director and Western Regional Director late October 1996. Since my appointment I have been trying to obtain volunteers for Deputy District Director, District Secretary, District Treasurer and Program Committee, etc. Everyone is "meeting" weary and no one wants to take the responsibility of driving another series of meetings. Finding potential speakers or programs for meetings has been difficult. With the many other meetings, workshops, etc., many members just do not feel they have the time to prepare another talk. I am seriously considering a "SOB" approach. Seminars Over Beer worked well in graduate school (There was another translation for the acronym depending on the amount of beer and personalities).

Past President Helle and I are planning to sort through several boxes of AIFRB files that have accumulated at the Auke Bay Laboratory. This should provide several organized files for our archives at UW. We hope to do this before the Board of Control meeting.

Treasury

Among the first tasks I attempted was to determine the financial status of the Southeast Alaska District. Inactivity of the account for over three years had caused the bank to declare it dormant and subject to appropriation by the State of Alaska. After some correspondence and many telephone calls and visits to the local branch offices, I determined that I was still a valid signatory for the account and was able to recover the balance of the account. The District has $253.28, which is about $37.00 more than the available records indicated.

Membership

Like the other Districts, I am finding that a large proportion of our membership is retired and inactive. We are trying to recruit new members and reactivate the interest of present members.

In March 1997, at the request of Drs. Rachlin and Warkentine, I sent notices of delinquent dues to nine members in Southeast Alaska. Several responded by paying back dues and others had paid shortly before I sent out the notices.

Bruce L. Wing, Director

Keystone

As of June 1997 the current membership for the Keystone District is 54. This represents a loss of one member from last year. The District has 15 Fellows, 14 Members, 6 Associate-Professional, 12 Associate-Student, and 7 Emeritus members.

Promotion to the status of Fellow was granted to Dr. Dean E. Arnold (PA).

The District had no formal activities during this period. Trying to organize district meetings have been unsuccessful. Most of the membership 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. Letters are periodically sent to the membership encouraging them to seek promotion, attend our Board of Control meetings, recruit new members, and to pay their arrears dues.

Although the district is relatively quiet its members are quite supportive of AIFRB. During this year our Emeritus members donated a total of $130.

Barbara E. Warkentine, Director

Capital

District Newsletter Initiated to Increase Communications

A Capital District AIFRB newsletter was developed and distributed to all members in May 1997. The second edition of this newsletter will be distributed in September to provide information and updates to the members resulting from the Board of Control Meeting in Monterey, CA. The purpose of the newsletter is to convey information on member's activities and accomplishments and to bring the members news from within the district. Reminders on arrears dues and promotional opportunities were also included. Future issues will feature short articles about research and or other programs being conducted by members and their institutions.

E-mail Directory of District Members

An e-mail directory of members is being developed to increase communications. While not all district members have access to e-mail many of them do and the distribution of messages and notes among members may provide a forum for the exchange of information and ideas on local fisheries issues. E-mail addresses have been compiled for about 25% of the District membership.

North American Wildlife and Natural Resources Conference, Washington, DC

The Capital District set-up and staffed the Institute's exhibit at the North American Wildlife and Natural Resources Conference held in March at the Omni-Sheridan Hotel in Washington, DC. 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.

1988 N.E. Fish and Wildlife Conference

The Symposium at the 1996 AFS Meeting was exceptionally successful in bringing AIFRB members together to discuss fisheries research and management issues. The Capital District has proposed to co-sponsor either a paper session or symposium with the Keystone District and New England District at the 1988 N.E. Fish and Wildlife Conference. No topic has been selected at this time and Directors Panek, Warkentine, and Pearce will be solicting ideas from their respective memberships. A committee will be established to develop a topic for the session sometime after the Board of Control Meeting.

Frank M. Panek, Director

Carolinas

An AIFRB district meeting was held in Beaufort, NC on 9 September 1996. Topics covered at the 1996 Board of Control meeting were discussed, and a slate of candidates for District Director and Vice-Director was developed. Doug Vaughan "turned over the reins" on 1 January 1997 to Mark Collins (Director) and Robert Dixon (Vice-Director). A less formal meeting also took place in conjunction with a research program review in Charleston, SC on 30 January 1997.

The previous Director's efforts to expand district membership were continued. All delinquent members were contacted by mail with a reminder to bring their dues up to date, and AIFRB membership brochures were made available to attendees of several state and regional fisheries-related meetings. These efforts were essentially unsuccessful. District membership continued to decrease, dropping from 34 in 1995 to 33 and 31 in 1996 and 1997, respectively.

Mark R. Collins, Director

Florida

This letter serves as the Annual Report for the newly reactivated Florida District which was in a state of dormancy for about 10 years. I assumed an "active" position of District Director in early 1997 following an appointment in fall 1996. I received a list of members and delinquent members along with a copy of the duties of District and Regional Directors from Barbara Warkentine in January. By way of introduction to the membership as the new Florida District Director, I provided Gene Huntsman with my autobiography for a *Who's Who in AIFRB* article in March-April *Briefs*.

Our total membership in Florida is 73 with nearly half delinquent. As per my request, John Merriner provided me with AIFRB stationery and new updated application forms.

Most of my activities have centered on recruiting new members and contacting the delinquent membership. I have formally nominated a number of scientists from south Florida for membership. Ex. Director of the Estuarine Research Federation (ERF), Joy Bartholomew was recently contacted for a display of the AIFRB poster at the Annual ERF meeting in Rhode Island this fall. A fee of $300 may be assessed. Would this fall under the jurisdiction of the New England District?

Since the organization of the AFS Florida Chapter in the 80's most members from central and northern Florida seem to focus their in-state activities around AFS Chapter meetings which unfortunately (but, for one exception!) are always held north of the "Lake" (Lake Okeechobee) in Brooksville, historically the dividing line between north and south Florida, a good 8-hour drive for the remainder of the membership in south Florida!.

At any rate there seems to be an interest in reviving AIFRB activities particularly in the extreme south Florida area, again, perhaps because of my contacts in Miami and southward through the Florida Keys. A planning, mid-summer meeting (to be held in conjunction with a fisheries-

related workshop) has been moved to fall due to the postponement of the upper-trophic level modeling workshop planned for in Miami. This workshop's location (probably in Miami, on Key Biscayne) should provide many local members and perspective members with the opportunity to gather and discuss important fishery as well as AIFRB issues/ activities as part of the environmental restoration program for south Florida and the Everglades.

Thomas W. Schmidt, Director

Great Lakes

Dr. Neal Foster, Secretary-Treasurer of the District, and I have worked to provide the first active year of this District after an inactive period of about 15 years. The District sponsored a highly successful event: a banquet dinner to honor Dr. Reeve Bailey, recipient of the AIFRB Outstanding Achievement Award for Individuals. Dr. Clark Hubbs presented the award to Reeve, and the program included two well received papers. The dinner program was well attended and generated substantial camaraderie among new and old fishy professionals. The event was featured in the March-April 1997 issue of *Briefs*.

The treasury balance is $26.45, which includes a $100.00 loan from the personal purses of the officers. Money advanced from AIFRB was used to pay for the dinners ($32 each) of the honored guests and speakers at the banquet. A misunderstanding about the tax exempt status of AIFRB led to the unexpected requirement to pay state tax for all the dinners, which explains the $74 deficit.

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. However, we are planning one or more speaker programs for this academic year. The following would be helpful (necessary) for promoting the District: 1) E-mail addresses of all members (who have it), 2) more funds for postage, and 3) a copy of the constitution and by-laws of AIFRB. This is a grassroots organization, so that generating members in the District will enlarge AIFRB.

Dora R. Passino-Reader, Director

Texas

Membership

The Texas District officers are: David Sager, Director, and Jim Nance, Vice-Director. The district has 21 members. Of the members 3 are at the associate level, 3 are emeritus, 4 are at the fellow level.

Activities

There were two major events in the district during this year. The Southern Division of the American Fisheries Society (SDAFS) held its mid-winter meeting in San Antonio during February. Also, the district presented a symposium at the Texas Academy of Science (TAS) Centennial Meeting in Huntsville during March.

At the SDAFS meeting, the AIFRB display was prominently situated during the student/professional mixer. Numerous members were active during this meeting participating in several committee meetings and symposia. Examples of activities include the Instream Sand and Gravel Mining Symposium presented by the Warmwater Streams Committee and the Instream Flow Workshop and technical session offered by the Instream Flow ad hoc committee.

The symposium the district organized for the TAS meeting built upon the subject of instream flows initiated at the SDAFS meeting. The symposium's topic was "Freshwater Inflows" with presentations and a panel discussion on the importance of freshwater inflows into the state's estuaries to maintain these vital ecosystems. Jim Nance (Texas District Vice-Director) served as moderator for the session. The speakers were drawn from experts with state agencies, federal agencies and university researchers to give a well rounded picture of regulatory and ecological issues relevant to freshwater inflows. The panel discussion generated some very interesting insights and an exchange of ideas.

The AIFRB display was set up at the TAS meeting and pamphlets were distributed. District members were involved in other aspects of the TAS meeting giving presentations and receiving recognition for contributions to the academy. Dr. Clark Hubbs was recognized for his service as a past president of the academy. The Texas District has enjoyed a good relationship with the academy and hopes to continue to offer symposia at future meetings.

David R. Sager, Director

Southwest

There is not much to report from the Southwest District (Arizona and New Mexico). The number of members in the District is small. Last year Dr. Coleen Caldwell and Dr. Richard Cole, both of the Department of Fisheries and Wildlife at New Mexico State University (NMSU), joined the society.

As you know there are few fisheries biologists in Arizona and New Mexico. Also, there is very little research on fish in these states. There is some research on desert pup fish on the White Sands Missile range, but the principal investigators tend to come from federal agencies on the East Coast. The American Fisheries Society has an active chapter on the campus of NMSU, but again students seem 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. I have noticed the same lack of interest in statistical societies. I wish I had an answer to these problems, but I don't. Sometimes I believe that the demands universities place on young faculty take all of the spare time that in another time period was devoted to growth of professional societies.

We will continue to recruit in the State Department of Game and Fish and in Arizona's Game Department.

G. Morris Southward, Acting Director

New England

Following the Annual Board of Control Meetings in Dearborn, I wrote to all members of the District attempting, in a short memo, to inform them of some of the new ideas to increase member participation. I noted that there was some enthusiasm for T-shirts and caps, as well as the development and use of new logos, etc. I also brought up the matter of recognizing past contributions of members, old and new, as well as recognizing student achievements. Finally, I raised the issue of holding special meetings of the AIFRB, within each District, as well as offering "courses" and workshops.

The response to this early letter, and others later in the

year, did not result in crescendo of input but several District members did respond. Almost to a person respondents felt that in the northeast there are already plenty of meetings of the AFS and in its chapters and district sessions. Also, institutions such as the New England Aquarium, Northeast Fisheries Center, Estuarine Research Federation, Woods Hole Oceanographic Institution, MIT Sea Grant, and others 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.

There were new ideas about involving AIFRB persons in the more philosophical aspects of fisheries. Communication about ethics, and "what is an outstanding, honored fisheries scientist supposed to be and do" were topics seeming important to tackle.

One person said that it would be important to have the recipient of the annual Thompson Award (more on this) attend the annual meeting, and even to give an evening address to the Board, and the AFS collectively. Another idea was to have local, District meetings involving a presentation(s), similar to those sponsored annually by local chapters of Sigma Xi Society. Moreover, we might solicit student presentations by fairly advanced graduate students, to be rewarded by a District honorarium.

There certainly was a consensus that the AIFRB should move to promote the profession in a responsible way, advocating educational tracts that would lead to improved professionalism. So, what are the big issues today? Can these be addressed by science and scientists? Or are they strictly in the realms of management and politics? As I write, the national papers are full of UN reports blasting the subsidies given to the world's fishing industry as the one big cause of overfishing! Such thoughts are obvious grist for the mills at annual and District meetings. Anything that can be done to increase the involvement of the AIFRB membership in the big issues are worthy of the attention of the Institute. My reading of the aforementioned inputs to this District Officer is that we must place new emphasis on direction and leadership as well as professionalism, education, and reaching out to the general public with regard to real solutions to key fishery problems and issues.

In terms of combining the strengths and interests of the AIFRB with those activities of the Southern New England Chapter (SNEC) of the AFS, I brought up the matter at the June 1997 meeting of the Chapter. In fact, the Chapter is exploring how it can relate to other societal and federation meetings to get the "biggest bang for the dollar" spent on meeting attendance. I will report on the outcome of these discussions at the AIFRB meetings in August.

During the past year as District Director I drafted three articles for the *Briefs;* one on the early contributions of a "founding father", Lionel "Bert" Walford; another on the "way ahead for AIFRB, 2001!"; and a third on publication in fisheries and marine sciences today. Interestingly, each of these engendered sometimes long, critical rejoinders; generally they paralleled the thoughts above and those which have evolved at previous AIFRB sessions.

Jack B. Pearce, Director

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THOMPSON AWARD FOR STUDENT PAPERS

My solicitations for best student papers eligible for the Thompson Award was a failure this year. I sent out notices twice to a list (200+ recipients) that, in previous years, had resulted in as many as two score titles. This year only one exceptional paper was nominated, even though I contacted the various schools and individual researchers twice. Once more, this suggests to me, as a scientific editor for three journals, that present "cutbacks" have affected the enthusiasm, available time and energy, and inclination of mentors, thesis directors, and program managers. In my five years (in different decades) as a person responsible for managing the Thompson Award process, there have been ups and downs but invariably we received eight to ten papers. One can only hope that 1997-8 will be a better year.

Jack B. Pearce

Another Vanishing Species? Cephalopods Disappear during AIFRB Reception

The annual reception for members and prospective enrollees in the AIFRB was held August 24, 1997 as part of the American Fishery Society Meeting in Monterey, CA. Extremely well attended, the reception offered one free beverage per attendee and an extensive selection of savory Mediterranean-style snacks, that reflected the rich Portuguese-Italian heritage of California's fishing communities. While the existence of fried calamari at the reception was hinted to the late-arriving Editor, neither specimens nor photographic evidence verified that occurrence. The sighting will be regarded as problematic until a DNA characterization of minute, crumb-like fragments found at the sighting area are completed.

NOMINATIONS NEEDED

Ten Worst Instances of Fishery Management!

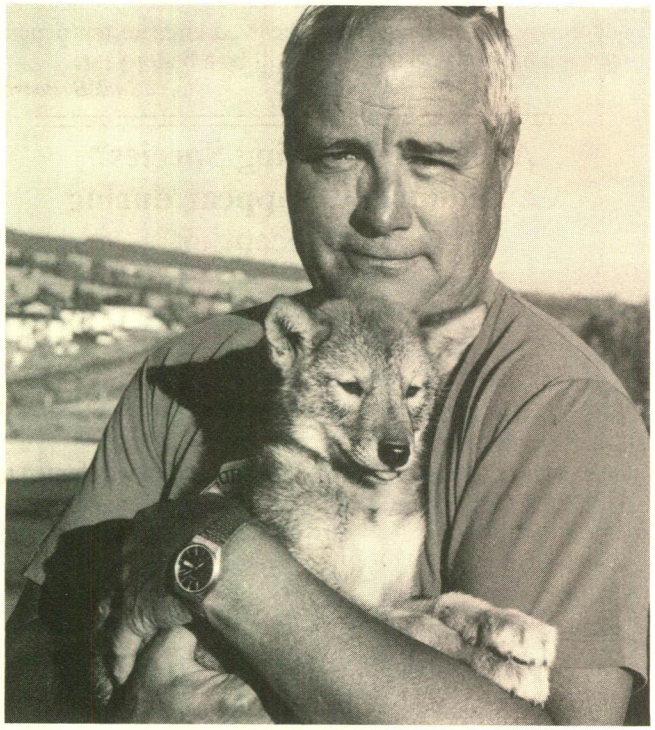
While rewarding meritorious achievement is a valuable function of the AIFRB, the press and the public often respond more strongly to accounts of negative performance, (e.g. Mr. Blackwell's list of the ten worst dressed is almost certainly more widely read and certainly more titillating, than his list of the best attired). To inspire interest by the general public in the arena of fishery management, *Briefs* will assemble a list of the ten worst performances of fishery management since 1977. While we prefer that the nominations deal with North America, we will consider examples from throughout the world. Freshwater and marine examples are welcome. We will accept as given that circumstances in the Northwest - Atlantic groundfishery will make the list. A sentence will suffice to establish a nomination. A paragraph is better. A more or less impartial panel of judges will make the final selection.

• Send nominations to: *Editor, Briefs, 205 Blades Road, Havelock, North Carolina, 28532.*

Who's Who in AIFRB

Tom A. Edsall

Tom Edsall, AIFRB Fellow, research fishery biologist, administrator, master angler, and coyote handler, became a Member of AIFRB in the 1960's and a Fellow in 1977. Tom has been a regular participant in the meetings of the Great Lakes South Central District of AIFRB, and has served as Program and Activities Co-chair and as a member of the Steering Committee for the district. His more than 40 years of government service have been distinguished by contributions to rehabilitation efforts for the native lake trout, *Salvelinus namaycush,* in the Great Lakes and elucidation of fish life history, fish physiology, fish bioenergetics, and fish-habitat interactions in more than 50 peer reviewed publications, in addition to 35 technical reports. He has served in leadership roles as project leader, section chief, acting center director, and is currently Branch Chief at the Department of Interior's Great Lakes Science Center in Ann Arbor, now part of the U.S. Geological Survey, Biological Resources Division. As Branch Chief for Western Basin Ecosystems, he directs research in Lakes Superior and Michigan, as well as in National Parks and Lakeshores in the Laurentian Great Lakes basin.



Thomas Edsall, with wild coyote pupnear Spearfish, SD

Tom was born in Glastonbury, a small town south of Hartford, Connecticut. His early interest in fisheries began developing under his grandfather's tutelage at the tender age of four, when he landed his first fish--a large American eel taken with simple gear--willow branch, cotton twine, a bent pin, and angleworm. During 1952 to 1954, Tom served in the U.S. Army's 10th Special Forces Group (Green Berets) with active duty in Europe. Tom attended college in Yankee country, at the University of Connecticut (Storrs), where he graduated in 1956 with a major in Fisheries and Wildlife. During that summer, he worked with the New York Department of Environmental Conservation in the Watertown District. In the fall of 1956, he enrolled in the Master's program at the University of Michigan, School of Natural Resources (Fisheries) where he studied under Drs. Karl Lagler (a founder of AIFRB) and John Bardach. While a student at the University of Michigan, Tom began work at the U.S. Fish & Wildlife Service's Great Lakes Fishery Laboratory, where he stayed for the remainder of his career. In 1960, he completed his M.S. degree on age and growth of lake whitefish, *Coregonus clupeaformis*, in Munisung Bay, Lake Superior.

Tom's research has encompassed fish-habitat interactions in the Great Lakes including habitat requirements of fish and benthic organisms; effects of oil, metals, and other pollutants on aquatic biota; vulnerability of larval fish to entrainment; effects of thermal pollution from power plants; aquatic macrophyte distribution; and aquatic nuisance species in the Great Lakes, especially parasitic sea lampreys. He has pioneered the development and use of state-of-the-art systems to explore underwater habitat using ROVs and side-scan sonar to map and assess offshore spawning reefs of lake trout. His comprehensive and insightful publications on the connecting channels of the upper Great Lakes and Lake St. Clair have advanced our knowledge of the role of these systems in ecosystem productivity and transportation of nutrients, sediments, and contaminants. Tom recently completed a number of synthesis papers including one on the status and trends of biological resources in the Great Lakes Basin for the National Biological Service and another on nearshore aquatic habitats for the 1996 State of the Lakes Ecosystem Conference Proceedings.

Tom has received numerous awards and professional recognition for his achievements. He twice received the Great Lakes Science Center's publication award, in honor of James W. Moffett (a founder of AIFRB). In recognition of his tenure as co-editor of *Transactions of the American Fisheries Society* from 1992 to 1995, Tom received the Meritorious Service Award of the American Fisheries Society at the 127th Annual Meeting in Monterey, California, August 1997. Tom has served as Associate Editor for the *Journal of Aquatic Ecosystem Health* (1990-present) and the *Journal of Great Lakes Research* (1992-1996). In his spare time, Tom is known to lead fishing trips to secret steelhead fly-fishing spots throughout Michigan, Alaska, and British Columbia, and he has a singular reputation as one of the Center's most ardent and successful fly fishermen. His youngest of five children recently enrolled at the University of Colorado and promises to follow in his Dad's footsteps as an avid angler.

Contributed by Drs. Dora Passino-Reader and Mary Fabrizio, U.S.G.S., Great Lakes Science Center, Ann Arbor, MI

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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

American Institute of Fishery Research Biologists

. . . BRIEFS . . .

VOL. 26, NO 5 SEPTEMBER - OCTOBER 1997

Who's Who in AIFRB: H. Geoffrey Moser

By John L. Butler

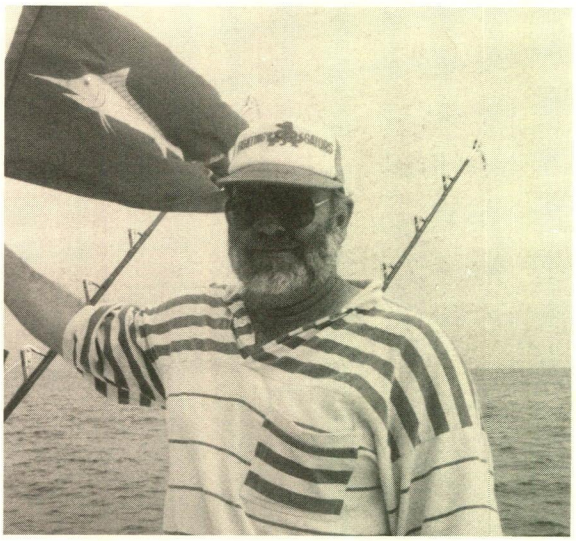
Director, Southern California District

H. Geoffrey (Geoff) Moser is a long-standing member of the Southern California District. Geoff works at the Coastal Resources Division of the Southwest Fisheries Science Center of theNational Marine Fisheries Service in La Jolla, California. Geoff and his colleagues have recently completed several monographs that describe the early life stages of fishes in the California Current region and their distribution and abundance.

Geoff grew up in Pennsylvania and learned to hunt and fish at an early age. His love of the outdoors led him to major in biology at Dartmouth where he graduated in 1960. Geoff started working for the Bureau of Commercial Fisheries in 1962 while a graduate student at the University of Southern California. His doctoral dissertation in 1966 was on the reproductive biology of the boccacio, *Sebastes paucispinus*, and other species of rockfishes. Material for his research was obtained from cruises on the laboratory's ship, the *Black Douglas* and from weekly sampling of the dory fishery in Newport Beach, California.

Geoff has excelled in the science of egg and larval identification, tracing the identity of specimens from large individuals where identification is certain using known adult characters, through a series of smaller and smaller specimens, until the youngest, and most difficult stages, can be identified; stages in which a few strategically placed pigment spots may be the only character available to distinguish one species from another. Thanks to the pioneering work of Geoff and his colleagues, William Watson, David Abrose, Elaine Sandknop, and Sharon Charter, virtually all of the species in the California Current region are known and their identifying characters described. This work was published in a 1517 page monograph in 1996. This remarkable book is a comprehensive guide to the eggs, larval and juvenile fishes of the California Current, treating a total of 586 species, with more than 2500 illustrations.

Geoff has been a key scientific leader at the Southwest Fisheries Science Center, and the world in general. Geoff was awarded the Wildlife Society's Outstanding Fisheries Paper in 1970. In 1983, with colleagues from each NMFS center, he organized an international symposium, "The Ontogeny and Systematics of Fishes" as a tribute to the work of Elbert "Ahlie" Ahlstrom. For this and the landmark symposium volume published in 1984, he and the symposium organizing team were awarded the Department of Commerce Silver Medal. Geoff's keen insight and understanding of the biology of fishes is highly valued by his colleagues. For example, it was his idea that the rate a fish spawns could be estimated from histological analyses of their gonads. This idea lead to the development of the daily egg production method of fish biomass estimation which has been applied to provide fishery-independent estimates of biomass from plankton surveys of fish populations around the world.



Who's Who...Geoff Moser

Butler Replaces Ray: New Membership Chair

John Butler has accepted chairmanship of the Membership Committee. The rest of the committee remains in place. Please direct membership communications to:

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

Many, many thanks to Sammy Ray for decades of service.

BOARD OF CONTROL MEETING: 1997

Monterey, CA 23-24 August 1997

Minutes (much abridged)

Because much of the business of the Institute was presented in reports in the July-August issue, I herein present only the most significant actions of the Board of Control, and issues not covered earlier.

I. A Motion by Past President Helle to have a letter sent to each author who submitted completed manuscripts for the 1996 AIFRB symposium encouraging them to submit their papers for publication in a peer reviewed journal; and that AIFRB would cover the cost of page charges with the understanding that the authors acknowledge the AIFRB symposium in their papers was **seconded** and unanimously **approved** by the BOC.

II. A ***motion*** by Treasurer Rachlin to discontinue the membership of those members that are three years in arrears was ***seconded*** and unanimously ***approved*** by the Board.

Director Passino-Reader asked if the members are dropped with the motion. Treasurer Rachlin informed her that yes they are but if they pay quickly they will be maintained.

Ed. Note: "Quickly," was left undefined. Delinquents may still have time.

III. **Reimbursement for Board of Control (BOC) Members** Treasurer Rachlin reminded the 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. Reimbursement may be slow as Treasurer Rachlin indicated that he must wait for 1998 dues receipts before he can begin issuing checks to BOC members.

IV. **Authorization of Treasurer** A ***motion*** by Past President Anthony to appoint Joseph W. Rachlin as Treasurer for the forthcoming fiscal year 1997-1998 (from the AIFRB Annual Meeting in 1997 to the AIFRB Annual Meeting in 1998), which authorizes Treasurer Rachlin to conduct all of the Fiscal Year 97-98 financial business of AIFRB, was **seconded** and unanimously **approved** by the BOC.

V. A ***motion*** by President-Elect Sakagawa to have The Articles of Incorporation and the bylaws bound separately from the membership directory was **seconded** and unanimously **approved** by the BOC. Members will receive two separate documents when printing is completed.

VI. **Corporate Sponsors:** Editor Huntsman raised the issue of possibly having corporations sponsor some of our publications. This raised a flurry of arguments for and against the idea. A ***motion*** by Treasurer Rachlin to solicit outside support for the new directory, with the understanding that AIFRB would acknowledge the donor in its publication was **seconded** and **not approved** by the BOC.

Discussion: Finding sponsors to cover our current directory project was not favored by the BOC as this would further delay a much needed document. However sponsors should be approached to underwrite costs of future publications and symposia. The final position was that if we do pursue this further that AIFRB must 1) make money on the deal, but not too much so that our tax exempt status isn't revoked; 2) inform the sponsor that we are not an advocate for them; 3) hold to publishing an acknowledgement to the sponsor but not their logo; and 4) have an outside audit of our books.

Editor's Note: Directors and officers would like to hear members opinions on this issue.

VII. A motion by Treasurer Rachlin to keep the Thompson Award for the Best Student Paper at $750 was ***seconded*** and unanimously ***approved***.

VIII. **Outstanding Achievement Award - Group**

Past President Anthony along with J. Helle, J. Rachlin, and J. Pearce met as a committee to bring forth to the BOC the name of a group to receive this award. The committee after considering many groups suggested to the BOC that this years award be given to the North Pacific Anadromous Fish Commission (NPAFC). A ***motion*** by Past President Anthony to give NPAFC the Outstanding Achievement Award- Group was seconded and unanimously **approved** by the BOC.

Discussion Director Wing stated that in the presentation of the award, a totem fish plaque, to NPAFC mention should be made to the fact that their receipt of this award is due to the results of the work done by the International North Pacific Fisheries Commission (INPFC). Past President Helle suggested that the award be presented at a meeting to be held in Vancouver this coming October.

President Hubbs instructed the BOC and members to think of groups that could be considered for this award and to forward those names to the AIFRB Secretary.

IX. **Distinguished Service Award**

A committee, consisting of J. Pearce, B. Wing, and J. Butler was appointed by President Hubbs to consider nominations for this award. The committee selected as this years award recipient Treasurer Rachlin. Past President Anthony stated that a biographical sketch, photo, and plaque will need to be prepared. Secretary Warkentine was appointed by President Hubbs to take on this assignment. *Members are urged to submit nominations.*

X. A ***motion*** by Past President Anthony that a committee, consisting of J. Rachlin, B. Warkentine, F. Panek, J. Butler, T. Schmidt, and D. Sager, look at the production of hats, cups, and tee shirts with the name &/or logo printed on it for a cost of no more than $2,000 and that this committee produce items for the next BOC meeting in Hartford, CT was **amended** by Director Butler to have the committee focus on one item, caps, was **seconded** and unanimously **approved** by the BOC.

XI. A motion by Treasurer Rachlin to maintain

membership in the Council for Aquatic Sciences for a second year (1997-1998) at a cost of $250 was **seconded** and unanimously **approved**.

XII. Past-president Anthony moved that we purchase 12 hand carved totem fish plaques to be used for future AIFRB awards. Seconded and unanimously approved.

XIII. 1998 Symposium: Chair: President elect Sakagawa, Co chair: David Sager, Subject: By catch. Approval moved by Rachlin. **Seconded** and unanimously **approved**.

XIV. President-Elect: President Hubbs stated that he would like to have a President-Elect in place during the three year term of the President. Secretary Warkentine stated that this would require a change in our bylaws. An *ad hoc* committee consisting of Past President Helle (Chair) and Secretary Warkentine was established to review the pros and cons of this for presentation at the next BOC meeting.

XV. Appointments: 1) In accordance with the AIFRB bylaws (Article III, Sec. 4 pg.8) President Hubbs made the following appointments:

a) Secretary - Barbara Warkentine
b) Treasurer - Joseph Rachlin
c) Co-Chairs Membership Committee - Sammy Ray **
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) President Hubbs made the following appointments:

a) Steven Davis - Regional Director Alaska & Western Canada
b) John Palmisano - Regional Director NW States
c) G. Morris Southward - SW States and Mexico
d) Dora Passino-Reader - Central States and Middle Canada
e) Frank Panek - NE States and East Canada
f) Thomas Schmidt - SE States and East Mexico

3) Jack Pearce was appointed by President Hubbs, as Chair of the 1997 W.F. Thompson Award Committee.

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

XVI. **Arrangements for the 1998 AIFRB Board of Control Meeting**

President Hubbs appointed Keystone District Director Barbara Warkentine as coordinator of the 1998 AIFRB meeting, which will be held in conjunction with AFS in Hartford, Connecticut.

1997 BOARD OF CONTROL

(*Editor's Note: Clearly a slight overstatement*)

Rear: *left to right*

1. John Palmisano
2. John Butler
3. Frank Panek
4. Tom Schmidt
5. Vaughn Anthony
6. Jack Helle
7. Gene Huntsman
8. Pete Cole
9. Bruce Wing
10. David Sager
11. Tom Lambert

Front: *left to right*

1. Jack Pearce
2. Dora Passino-Reader
3. Barbara Warkentine
4. Joe Rachlin
5. Clark Hubbs
6. Gary Sakagawa
7. Mark Collins
8. John Merriner
9. Sammy Ray
10. Dan Howard

SECOND CALL—NOMINATIONS NEEDED
Ten Worst Instances of Fishery Management!

While rewarding meritorious achievement is a valuable function of the AIFRB, the press and the public often respond more strongly to accounts of negative performance, (e.g. Mr. Blackwell's list of the ten worst dressed is almost certainly more widely read and certainly more titillating, than his list of the best attired). To inspire interest by the general public in the arena of fishery management, *Briefs* will assemble a list of the ten worst performances of fishery management since 1977. While we prefer that the nominations deal with North America, we will consider examples from throughout the world. Freshwater and marine examples are welcome. We will accept as given that circumstances in the Northwest - Atlantic groundfishery will make the list. A sentence will suffice to establish a nomination. A paragraph is better. A more or less impartial panel of judges will make the final selection.

• Send nominations to: *Editor, Briefs, 205 Blades Road, Havelock, North Carolina, 28532.*

Several nominations have been received but more are needed. From over 900+ members I would hope for 90 nominations. A postcard will do. You may nominate any number. Remember, think cynically!

The American Institute of Fishery Research Biologists
W.F. THOMPSON
BEST PAPER AWARD -- $750

Purpose: To recognize excellence in 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 aspect of aquatic science.

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

Application: For papers published in 1996 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 St.
Woods Hole, MA 02543-1026
Questions? (Fax) 508-495-2258
EMAIL: jackpierce@noaa.gov

Deadline: 15 December 1997 (for 1996 papers)

Editor's Note: This award is underutilized. It was not awarded in 1996-97 because of lack of nominations. AIFRB members are failing incoming members of our profession if suitable candidates are not nominated. Get to work! Send Nominations!

Pearce appointed as Liaison between southern New England AFS and AIFRB

Chris Powell, President of the Southern New England Chapter, American Fisheries Society appointed Jack Pearce as Member at Large of the Chapter Board of Directors. One of Jack's principal duties will be to serve as liaison to and for AIFRB. Could there be a similar role established in your geographic area that would enhance the influence of AIFRB? Please investigate and report please.

■

An Important Meeting

With the meeting theme of "The Land-Water Interface: Science for a Sustainable Biosphere," the American Society of Limnology and Oceanography (ASLO) and the Ecological Society of America will meet jointly from 7-12 June, 1998 in St. Louis, Missouri. Focusing on research at the land-water interface of both fresh-and salt-water systems, with a goal of strengthening connections between research and management, this meeting will give ESA members a chance to more closely interact with colleagues from the oceanographic and limnologic sciences. The format will be different from the norm, creating a unique opportunity for group interaction and discussion. A full day of plenary addresses will be follwed by three days of concurrent sessions, each beginning with a plenary address followed by panel discussions and synthesis. Poster presentations will be on view throughout the meeting with formal poster sessions after the concurrent oral sessions.

Confirmed plenary speakers include:

JoAnn M. Burkholder, North Carolina State University—*The Land-Water Interface: Aquatic Ecosystems in the Increasingly Urbanized Coastal Setting*

Theo Colborn, World Wildlife Fund—*Aquatic Ecosystems: Harbingers of Endocrine Disruption*

Jane Lubchenco, Oregon State University—*Science and Society: A New Social Contract*

David Pimentel, Cornell University—*Water Resources, Agriculture, and Ecological Systems*

Sandra L. Postel, Global Water Policy Project—*Water and Sustainability: The Challenges Ahead*

Robert J. Naiman, University of Washington—*Fresh Water and Ecosystems: A Future Perspective*

Garth W. Redfield, South Florida Water Management District—*Ecological Science, Land-Water Interactions, and Aquatic Ecosystem Management*

Ivan Valiela, Boston University—*Integrating Ecosystem Concepts across Terrestrial, Marine and Freshwater Systems: New Paradigms for Sustainability.*

Special session themes include:

Aquatic Ecosystems in the Urban Landscape: Into the Foreseeable Future

Science-Management Connections at the Land-Water Interface

Ecosystems Impacts from Harmful Algal Blooms

Fisheries Ecology: From Lakes to Oceans

Global-Scale Effects of Hydrological Alterations: What We Know and What We Need to Know

Limitation of Primary Production Across Ecosystems

Contributions from all areas of terrestrial and aquatic science are welcomed, but topics dealing with the land-water interface will have priority for oral presentations. The abstract deadline for oral and poster sessions is 5 January, 1998. For additional details, call:

(800) 929-ASLO;
business@aslo.org.

Editor's Note: Simultaneously reviled and revered, suspected and praised keynote speaker JoAnn Bunkholderhas perhaps more than any single person in history brought the issue of estuarine water quality to the forefront of the political arena. Her message is worth your attendance and serious consideration.

A LITTLE KNOWN PUBLICATION

The *Darter* is a bimonthly publication of the North American Native Fishes Association (NANFA). Topics reported in this newsletter include fish studies, rare or unusual occurrences, management and recovery programs, environmental issues, trivia, collecting trips, meetings, aquarium care, and breeding accounts. A Trading Post section is also provided for members to sell or trade fish, plants, books, and merchandise. Send news items, want ads, comments, changes in address, and membership dues ($15/yr.: North American residents - $17/yr.: other continents) to Konrad Schmidt, Darter Editor at the return address, phone: (612) 776-3468, or email: schmi144@tc.umn.edu.

NEW BIBLIOGRAPHY ON THE EFFECTS OF FISH IN LAKES

Field surveys and experiments conducted over several decades have shown that fish can directly or indirectly affect virtually all biological and chemical components of lake ecosystems. Despite the publication of several excellent reviews and books on aspects of fish effects, a comprehensive bibliography has not been available. Dr. Ray W. Drenner, a professor of biology at Texas Christian University, has recently compiled and installed on his home page a 1500-reference bibliography on the effects of fish on lakes (http://www.bio.tcu.edu/bio/drenner.html). The bibliography covers a wide range of topics including: feeding behavior and selectivity of freshwater fish; factors controlling prey availability and fish feeding rates; niche partitioning and competition; effects of fish removal for renovation of fish communities; fish polyculture; effect of species introductions; biomanipulation; and direct and indirect effects of fish on physical, chemical, and biological components of lakes. The literature published on this ecologically important topic has grown rapidly since 1960 (Fig. 1). The bibliography is organized by year of publication, and then by author, to give users a sense of how the field has developed and changed through time. It is hoped that this bibliography will assist new researchers to find their way into this large literature.

Ray E. Drenner
Department of Biology
Texas Christian University
P.O. Box 32916
Fort Worth, TX 76129

From: Ecological Society of America, Bulletin; 78(3) July 1997

SWORDFISH EDUCATION AND AWARENESS CAMPAIGN (SEA) BEGINS!

Protecting the world's dwindling stocks of swordfish is the goal of a new education campaign developed by the Coastal Conservation Association of North Carolina. It intends to involve restaurant owners in the educational effort.

The project, Swordfish Education and Awareness, will begin in the Wilmington area.

SEA is intended to educate restaurant owners, chefs, anglers and the public about our rapidly diminishing swordfish stocks. It's important that all parties involved realize that our swordfish stocks are diminishing and need protection.

Project SEA will encourage restaurants:

- to temporarily discontinue serving swordfish,
- educate their patrons of their exemplary decision until the stocks are returned to healthy levels and
- to promote public awareness on the importance of protecting, preserving and enhancing the remaining swordfish stocks

Swordfish are a highly migratory fish prized by anglers and commercial fishermen and enjoyed by consumers throughout the world. Swordfish occur throughout the world in tropical, temperate and, sometimes, cold waters of all the major oceans and migrate to temperate or cold waters for feeding in the summer, then return to warmer waters in the autumn for spawning and overwintering.

Between 1960 and 1996, the fishable amount of Atlantic swordfish has declined by 68 percent and nearly all of the adults have been removed from the population. Since 1982, the number of swordfish aged 10 and older have decreased by 68 percent and those aged 15 and older have decreased by an alarming 73 percent, according to the National Marine Fisheries Service and International Commission for the Conservation of Atlantic Tunas (ICCAT) data.

From: Newsletter The Raleigh Salt Water Sportfishing Club

Landmark Great Lakes fisheries management plan signed in Ottawa

Agencies with Great Lakes fishery management authority have officially endorsed an updated version of A Joint Strategic Plan for Management of Great Lakes Fisheries, the landmark plan under which the Great Lakes fishery is collectively managed as an ecosystem.

To enhance cooperative fishery management, the new plan provides for:

- an expanded commitment by fish managers to work together to influence all management activities that affect fish;
- stronger links with environmental management agencies;
- establishment of a Council of Great Lakes Fisheries Agencies; and
- a revised mechanism to resolve interjurisdictional disputes.

Since its development in 1980, the plan has been the blueprint for fishery management agencies in both Canada and the United States to cooperate on common objectives. The plan identifies the Fishery Commission's lake committees as the major action arms for the agencies to achieve their joint objectives.

The plan is available online at:
www.glfc.org. Contact: Marc Gaden, 313-741-2010, mgaden@glfc.org.

From: Great Lakes Commission ADVISOR July/August 1997

NUMBER OF ANGLERS FALLS SIGHTLY IN 1996; HUNTER NUMBERS STABLE

The number of anglers who bought fishing licenses fell by just over 1 percent in 1996 while the number of hunters who purchased licenses remained constant, the U.S. Fish and Wildlife Service announced today.

There were 29.9 million paid fishing licenses holders in 1996 compared with 30.3 million in 1995. These anglers paid $447 million for their licenses compared with $448.6 million in 1995. Meanwhile, 15.2 million hunters bought licenses in 1996, the same as the year before. They spent $542.8 million on the licenses, $10.2 million more than in 1995.

The number of hunting license holders has declined from a record high of 16.7 million in 1982. Meanwhile, the number of fishing license holders has been about the same during that time.

•••

American Institute of Fishery Research Biologists

Principles of Professional Conduct for Fishery Biologists

In Professional Life

1. Promote conservation of fishery resources through development of scientific knowledge.
2. Use knowledge and skills for the benefit of society as a whole.
3. Uphold the honor and dignity of the profession and avoid all conduct likely to injure it.
4. Extend the effectiveness of the fishery profession by designating and conducting investigations in conformity with scientific methods.
5. Report, in full, results of investigations, basing conclusions solely upon an objective interpretation of the evidence.
6. Do not publish or otherwise disclose data, new techniques or new theories which have been given in confidence.
7. Give due credit to all who aid in the research.
8. Discourage anonymous reports to allow proper credit and define responsibilities.

Relations With the Public

9. Endeavor to disseminate information to the public concerning the science of fishery biology.
10. Discourage the spreading of untrue, unfair, and exaggerated statements with respect to fishery biology.
11. Advertise your work in a dignified manner only, with truthful statements about the services that you can render.
12. Indicate the extent to which your statements are speculative.

Relations Between Employers and Employees

13. Act forthrightly in professional matters for each employer, and to the very best of your ability. Report the pertinent facts to the employer, but resist publication of premature or misleading statements.
14. Recognize an obligation to complete, to the satisfaction of each, the analysis and reporting of information when leaving such employment and realize that data, records, and reports obtained while under employment, belong to the employer.
15. Realize an obligation to serve as a consultant provided it does not (a) involve the biologist or the employer in unwholesome controversy, (b) subject other professionals to unfair competition, (c) interfere with normal duties, or (d) involve anyone in unethical conduct.
16. As an employer, do not suppress findings of employees except for legitimate security reasons.

Relations With Fellow Scientists

17. Strive to prevent admission to the profession all who lack good character, and challenge illegal or unethical conduct of fellow members of the profession.
18. Recognize that the proper forums for scientific debate are professional journals and scientific meetings.
19. Seek consultation of qualified experts in situations requiring specialized knowledge or skills beyond those normally required of a fishery biologist.
20. Uphold as being in the public interest, the principle of adequate compensation for all fishery biologists comparable with that for positions in other sciences requiring similar education, experience, and responsibility.
21. Encourage the professional development and advancement of fishery biologists. Be fair in all recommendations concerning the ability of others.
22. Resist the continued employment of professionally educated competent biologists in sub-professional positions; and conversely, resist the continued employment of professionally uneducated incompetent persons in professional positions.

MARINE KUDZU Just What We Need

DELICATE SEAWEED A MONSTER OF THE DEEP

Experiment a toxic nightmare

No one remembers quite what happened in the tropical aquarium of a German zoo two decades ago, but its experiments with an exotic Pacific seaweed, biologists say, have unleashed a monster that has escaped and is threatening marine life in the western Mediterranean.

The biological alien looks rather delicate. It is made up of elegant bright green fronds and it has spawned luxuriant-looking meadows along the sea floor, crawling into ports, coves and straits. What makes *Caulerpa taxifolia* a menace is that it appears toxic to many Mediterranean creatures and has been suffocating everything in its path.

A gift from the German zoo to several other institutions, it is thought to have gotten into the Mediterranean some 15 years ago, when the aquarium of the Oceanographic Museum in Monaco emptied its tanks. Since then, the invader has proliferated wildly along the French Riviera around the Spanish island of Majorca and off the coast of Italy, and has shown up as far away as Croatia.

Mutant

By many estimates, it already occupies more than 8,000 acres. Researchers say that in the past three years, it has been more than tripling annually.

In the consternation over the seaweed, some scientists have described the plant as an aggressive mutant of a far more discreet tropical cousin.

Wherever the newcomer has established itself, it has crowded out most other plants and animals, and, most worrying to biologists, it has smothered the beds of native sea grass that serve as the nurseries for many species of the Mediterranean.

"It's like a tumor that can't be stopped and that chokes everything around it," said Alexandre Meinesz, a professor of biology at the University of Nice-Sophia Antipolis, and part of a team researching the problem.

A professor of marine biology at the University of Marseilles, Jean-Francois Boudouresque, said, "The worst is that it produces a monoculture that threatens the whole Mediterranean ecosystem."

No way to kill it?

Marine scientists disagree on how to deal with the colonizer. Amateur divers and professionals from the French and Spanish navies have tried destroying the smaller patches by hand or by using suction pumps, only to see the stands bounce back and spread soon after. Some scientists propose bringing in a predator; some say the plant cannot be fought at all.

The rampant seaweed fits into a form of globalization that worries biologists, that is, the inadvertent spread of plants and animals to distant places where nature did not intend them to be and where they manage to overpower native species.

These creatures may hitch rides on the ever-growing flow of human traffic. Alien snakes have crossed the ocean in the landing gear of airplanes. The zebra mussel, a native of southern Russia, entered the Great Lakes by ship and spread to the Hudson River, clogging up U.S. and Canadian municipal water systems.

A small ribbed jellyfish from the American Atlantic Coast traveled in ballast water to the Black Sea. Unfettered by a predator, it boomed and ate so much plankton, fish eggs and larvae that in the early 1990's many fisheries had to close.

Scientists stumped

The case of the warm-water weed now running amok in the cool Mediterranean continues to puzzle scientists.

"It adapts to anything-rocks, sand, mud, " said Meinesz. "It thrives equally well in agitated currents and quiet inlets and in polluted and pristine waters."

The seaweed's arrival has been traced to the Wilhelminia Zoo, in Stuttgart, Germany, which in the 1970s imported different kinds of tropical seaweed for its tropical aquarium. "It grows very well, it looks nice and it's the ideal seaweed for an aquarium," said Isabel Koch, the zoo's curator of fishes and reptiles.

Zoo officials said their *Caulerpa taxifolia* came from the Pacific but they could not reconstruct exactly what happened next, except that the seaweed was subjected to ultraviolet light, aquarium chemicals and human selection.

French and Italian biologists who have studied the plant in its Pacific and Caribbean habitats are convinced that the German zoo, perhaps inadvertently, created a powerful hybrid.

Grow bigger, faster

Most astonishing, he said, the plant now grows up to six times the size of the tropical one, spreads faster and quickly dominates its surroundings, whereas in the tropics it forms only small, discreet clusters.

After breeding it for several years, the Wilhelmina Zoo gave portions of the pretty seaweed to other aquariums, including one in Paris and one in Nancy. Nancy sent some to the Oceanographic Museum of Monaco. Most researchers believe that it was the Monaco institution that let the plant out into the Mediterranean when cleaning out its tanks. It was here, beneath the seaside Oceanographic Museum, that marine biologists spotted the Mediterranean's first *taxifolia* plants in 1984.

Now there appears to be no stopping it.

Although not toxic to people, the plant's toxin appears strong enough to deter most Mediterranean creatures. In one experiment, Boudouresque found that sea urchins ate their own waste and resorted to pieces of plastic, rather than touch the seaweed.

By Marlise Simons
From: Santa Rosa, CA The Press Democrat, Sunday, August 17, 1997 •

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. . . BRIEFS . . .

VOL. 26, NO 6 NOVEMBER - DECEMBER 1997

A Lifetime of Achievement
Honored by AIFRB:
Dr. William Pearcy

William G. "Bill" Pearcy was chosen by the American Institute of Fishery Research Biologists (AIFRB) in August to receive its Outstanding Achievement Award for 1997, the seventeenth such award in the series. President Clark Hubbs journeyed to Oregon and made the presentation to Dr. Pearcy on November 3, 1997, at Oregon State University in Corvallis. Local AIFRB members and Bill's family, friends, colleagues, and students were in attendance for the presentation of the award, an engraved "Totem Fish Plaque", and for a mid-afternoon reception held by the OSU College of Oceanic and Atmospheric Sciences.

Bill Pearcy, a native of Park Ridge, Illinois, and recently semi-retired from OSU, is one of the most productive and effective marine fisheries biologists of our time. For more than thirty years he has demonstrated sustained excellence as a rigorous researcher, outstanding educator, and concerned advisor to the marine fishing community. Bill's contributions on diverse aspects of marine biology, ecology, and fisheries oceanography have made him a leader in ocean science at local, national, and international levels. Those who recently presented Bill with the American Fisheries Society's Oscar E. Sette Outstanding Marine Fishery Biologist Award stated that "This scientist is not about self-promotion, but seemingly has devoted his career to understanding the marine environment, developing innovative methods to study fisheries problems, and sharing his knowledge through publications and teaching. Perhaps unbeknownst to Bill, he serves as an inspiration to decades of marine fisheries biologists, from students, to colleagues, to public officials."

Bill received his Bachelor and Master of Science degrees from Iowa State University in the 1950's, and his Ph.D. from Yale University in 1960. He has been a professor of Oceanography in the College of Oceanic and Atmospheric Sciences at OSU since 1960. During this time he has been the major advisor to more than 30 graduate students in both Master's and Ph.D. programs, and has served on the committees of at least 50 additional students, including several from foreign countries. Many of Bill's former students now contribute to marine fisheries science as educators, federal and state biologists, and resource administrators. The

Dr. William Pearcy (left) holding the AIFRB Outstanding Achievement Award presented by AIFRB President Clark Hubbs (right) at a ceremony at Oregon State University, Corvallis, OR, November 3, 1997.

highlights of Bill's career to date, the breadth of his research interest, and the number of his scientific publications are truly impressive. His 140+ scientific papers (many co-authored with graduate students) have been published in many major U.S. and international fisheries journals, as well as in leading journals of ecology, oceanography, and general science, for example, *American Naturalist, Nature,* and *Science.* Bill's published works represent a lasting contribution, and include such topics as: early research into the application of remote sensing and acoustics to fisheries oceanography; innovative gear development for fisheries research; ecology and biology of deep-sea fishes; distribution patterns of many species of marine fisheries (larval, juvenile, and adult stages) and their associated physical habitat; trophic dynamics of marine fishes; and pollution and trace metals in the environment and food chain. Many of his earlier publications, e.g., *Ecology of an estuarine population of winter flounder, Pseudopleuronectes americanus* (1960), remain well-cited today.

One of Bill's most recent accomplishments is a compilation of his knowledge and experience studying all species of Pacific salmon during their ocean migration *(Ocean Ecology of North Pacific Salmonids* 1992, A Washington Sea Grant Publication). Bill helped organize and spoke at the 1996 conference on Estuarine and Ocean Survival of Northeastern Pacific Salmon that was held in Newport,

(continued on page 2)

(continued from page 1)

Oregon, and was the editor of the proceedings of a similar conference held 13 years earlier in Oregon. Bill was recently appointed by the Governor and legislative leadership as one of seven members of the Independent Multidisciplinary Science Team, charged with auditing the implementation of Oregon's Coastal Salmon Restoration Initiative. Fittingly, Bill was the keynote speaker at the joint meeting of the Washington and Oregon Districts of AIFRB held in Chehalis, Washington, in May of 1996. There he discussed the relationships between ocean environment and salmon survival, and the four categories of major changes that have influenced our thinking on salmon survival: *El Níno* events, interdecadal climate shifts, hatcheries, and ocean carrying capacity. Though semi-retired, Bill continues to pursue his many research interests in marine fisheries science with occasional trips to sea and frequent visits to the library. In his spare time he still pursues his interests in fishing and hunting, interests in his natural environment that brought him to his lifelong studies of marine fishes.

John Palmisano, Director of OR-SW WA District

Outstanding Group Achievement Award to International North Pacific Fisheries Commission

The Board of Control of the AIFRB at it's 1997 Annual Meeting in Monterey, California, voted unanimously to present our highest group award, the OUTSTANDING GROUP ACHIEVEMENT AWARD, to the International North Pacific Fisheries Commission, now replaced by the North Pacific Anadromous Fish Commission.

The AIFRB presents this award to a group or agency whose efforts exemplify outstanding contributions to fisheries research or fisheries resource policy. Our award is presented to the International North Pacific Fisheries Commission for their outstanding scientific contributions to understanding the life history of Pacific salmon on the high seas. The award is represented by a wooden salmonid, hand-carved in the totemic style of Native People of the Pacific coast of North America with an engraved plaque attached. An embossed certificate also accompanies the award.

On June 12, 1953, ratifications were exchanged between Canada, Japan, and the United States to create the International Convention for the High Seas Fisheries of the North Pacific Ocean. The purpose of the convention was to ensure the maximum sustained productivity of the fisheries resources of the Convention area. The convention established the International North Pacific Fisheries Commission to promote and coordinate the necessary scientific research and to recommend the required conservation measures to secure the maximum sustained productivity of fisheries of joint interest.

Prior to 1953 and the creation of the International North Pacific Fisheries Commission, very little was known about the geographic limits and life history of salmon on the high seas. During the more than 40 years of the Commission's existence many hundreds of scientific documents were produced including 53 volumes of the prestigious Bulletin of the International North Pacific Fisheries Commission. Research showed clearly that salmon from North America and Asia intermingled on the high seas. This finding made it apparent to all parties that international cooperation in research and management was imperative to conserve the Pacific salmon on the high seas.

On February 11, 1992, the Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean was signed at Moscow by Canada, Japan, the Russian Federation, and the United States, and this Convention replaced the trilateral Convention signed in 1953. The new Convention established the North Pacific Anadromous Fish Commission (NPAFC) to replace the International North Pacific Fisheries Commission (INPFC) to promote the conservation of anadromous stocks of salmon in the North Pacific Ocean and its adjacent seas and serve as a forum for the cooperation and coordination of scientific research and enforcement activities. We are pleased to present the physical award to the new NPAFC for the extraordinary achievements of its parent and predecessor organization, the INPFC.

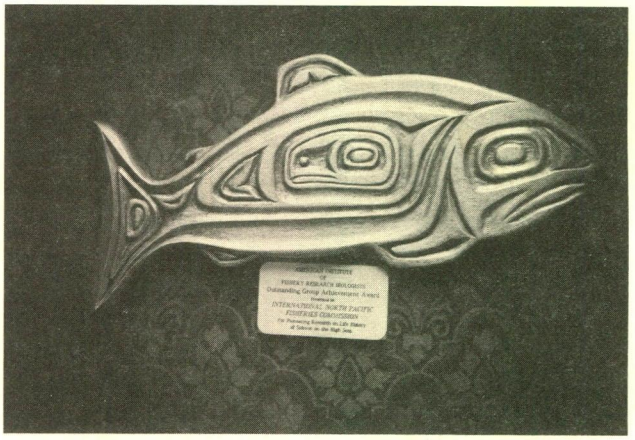
The AIFRB recognizes the outstanding contributions to fishery science made by the International North pacific Fisheries Commission. Its work was truly pioneering science accomplished under very harsh conditions during all seasons of the year far from land. We applaud all who were involved in this research and wish we could recognize all of you. The replacement organization, the North Pacific Anadromous Fish Commission, is continuing the tradition of promoting and coordinating scientific research on salmonids on the high seas so impressively accomplished by the International North Pacific Fisheries Commission.

Clark Hubbs, President

Dr. Koji Imamura (right) President of the North Pacific Anadromous Fisheries Commission (NPAFC) accepts from Jack Helle (left) Past-President AIFRB the 1997 AIFRB Outstanding Group Achievement Award. The award recognizing accomplishments of the International North Pacific Fisheries Commission, parent organization to the NPAFC, was presented during the opening ceremonies of the NPAFC, Victoria, B.C., October 29, 1997.

AIFRB AWARDS - Nominations Needed
- No shortage of Wooden Fish -

The AIFRB Board of Control very much desires that candidates from throughout the U.S. and Canada, as well as overseas, are considered for the individual and group outstanding achievement awards. Despite your location, inland or coastal, Atlantic or Pacific, you are almost certainly aware of candidates deserving consideration. A telephone call or postcard will begin the evaluation. Contact any officer, Director, or the Editor of Briefs (phone 919-447-4061 or e-mail: shuntsman@hatteras.bea.nmfs.gov. Addresses on back cover), and we will get your nominations to the committee chairs. Documentation will be needed sooner or later. The Board of Control voted in August to purchase 12 more carved salmon to ensure a supply of this truly attractive award.



Twelve new fish ordered, nominees for awards needed.

CAN YOU TOP THESE?

First Listing of Candidates:

Ten Worst Instances of Fishery Mismanagement

Since 1977

Final Selection - April 1, 1998

Submitted so far are the following candidates for the AIFRB "Ten Worst" listing. The nominations to date are excellent, but I'm sure you can list even better examples of egregious folly. Submit to Editor by phone, mail or email.

1. Transfer of resistant Baltic Atlantic Salmon to North Atlantic drainages of Norway - Spread of *Gyrodactylus* parasite.

2. Steelhead salmon restoration - Columbia River, USA - $3 billion cost claimed, 2,000 employees engaged.

3. Atlantic Bluefin Tuna - ICCAT and U.S. political delegation ignores U.S. and other scientists - apparent severe overfishing.

4. Deep reef (>60m) grouper management U.S. South Atlantic region - Bag limit of one - who catches one? Virtually all released fish die; Populations at < 10 percent of 1973 levels.

5. Pacific Salmon management: "undue" reliance on hatchery fish and consequent over exploitation of wild stocks in mixed stock fisheries.

6. George's Bank herring *(Clupea)* Miscalculation of population size and, despite criticism by state of Maine and others, granting of quota of 15K metric tons. 3K metric tons harvested. Apparent elimination of the stock.

7. Introduction of zander, *Stizostedion lucioperca,* into North Dakota. Disease concerns, failure to consult adjacent states and provinces.

8. Atlantic Large Coastal Sharks - Excessive quota allocations despite biological evidence to contrary, several species severely reduced.

9. Northwest Atlantic Ground Fisheries - Political concerns fostered risk-prone management; most optimistic interpretation of stock assessments. Fishery for gadids and others collapsed.

10. Gag - Gulf of Mexico. Only fish >900 mm likely to be male in this sex - switching grouper. Males now only a few percent of population. No protection for highly vulnerable spawning aggregations.

JOINT NORTHEAST STATES AND EASTERN CANADA MEETING

The Directors of the Capital, Keystone, and New England Districts have agreed to sponsor a symposium and meeting of the Northeast States and Eastern Canada Region of AIFRB at the upcoming Northeast Fish and Wildlife Conference in Camp Hill, PA, May 3-6, 1998. The theme of the half-day session will be *Looking to the Year 2100 - Challenges in Fisheries Science and Management in the Northeast.* AIFRB Regional Director Panek has assumed the lead in planning for this session.

RECREATIONAL FISHERIES

On December 9, 1997 the National Recreational Fisheries Coordination Council (NRFCC), established under Executive Order 12962 on Recreational Fisheries, agreed to participate in recreational fisheries roundtables as a means to implement the Order. Conducted at the watershed or state level, recreational fisheries roundtables will provide a forum to identify top fisheries opportunities and issues, to determine what is needed to address them, and to encourage participants to take near-term actions to improve recreational fisheries.

The roundtables are a broad-based national effort resulting from input by the International Association of Fish and Wildlife Agencies, the Sport Fishing and Boating Partnership Council, the Fisheries Administrators Section of the American Fisheries Society, and the American Sportfishing Association. The States of Arkansas, Colorado, Maryland, and Vermont will initiate pilot roundtables during January through early March, 1998.

(Source: USFWS/NMFS)

ANNOUNCEMENT:
Diversity of Fishes

A new core text in ichthyology, **The Diversity of Fishes** (G.S. Helfman, B.B. Collette, and D.E. Facey, Blackwell Science, 1997; ISBN0-86542-256-7). Extensively illustrated and thoroughly referenced (over 1,800 citations through 1996), **The Diversity of Fishes** is by far the most complete and detailed ichthyology textbook available according to the publisher.

Throughout the book, adaptation and diversity are emphasized. Thorough coverage is given to systematics, anatomy, physiology, ecology, and zoogeography of fishes worldwide, but the book is unique in its extensive treatment of fish evolution, early life history, functional morphology, behavioral ecology, and ecosystem ecology. Conservation is stressed throughout. More information can be obtained from Nancy Duffy, Blackwell Marketing, nduff@blacksci.com Copies can be ordered directly from Blackwell Science, 350 Main St., Malden MA, 02418 for $69.95 plus $4.50 postage/ handling (=$74.45). AND PLEASE SEE WEBPAGE for corrections and additions: htttp://sparc.ecology.uga.edu/ ~helfman/fishes.html

Editors Note: I, like you, receive many listings of new fisheries publications. Unless (1) a book is of truly extraordinary significance to the profession, and/or (2) an author is an AIFRB member (as is Bruce Collette), I am unlikely to provide notice of the publication in Briefs fodder, would be overjoyed to publish the review and a publication announcement regardless of the authorship of the tome.

VII
INTERNATIONAL
CONGRESS OF ECOLOGY
"New Tasks for Ecologists after Rio 1992"
19-25 July 1998, Florence Italy

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ALBERTA TIGHTENS THE SCREWS

A high priority has been placed by the Fisheries Management Division of Alberta Environmental Protection to address management needs of species of special concern which are considered "vulnerable". Since 1995, species management and recovery plans have been prepared for the following key species in this category, with zero or reduced limits: bull trout, golden trout and lake sturgeon. While not considered "vulnerable", a management plan was also prepared for walleye and restrictive regulations came into effect in 1996. A management plan is in preparation for arctic grayling. To address perceived over-harvest of yellow perch the limit was reduced from 30 to 15 in 1996. Staff and the public are concerned about the status of eastern slopes stream fisheries. A public consultation process was instituted in 1997 to formulate new management regulations for streams in this area where angling pressure has doubled from 400,000 to 800,000 angler days between 1990 and 1994. Changes in regulations will be made in 1998 which will include increases in the minimum size limit, more catch and release streams, and changes in the season length. Staff from the Northeast Boreal Region are assessing creel survey data for northern pike populations in that area which indicated relatively low catch rates from what should be highly productive lakes.
Contact: Laverne McAthey - (403) 427-8136.

From AFS Fishing Lines 11(2)

Wilderness Meeting in '99

May 23-27, 1999 Missoula, MT
Wilderness Science in a Time of Change, Contact Natural Resource Management Division, Center for Continuing Education, University of Montana, Missoula, MT 59812. (406) 243-4623; ckelly@selway.umt.edu.

Land Acquisition Provides Habitat Protection in Florida

by James A. Farr
Community Program Administrator
Florida Coastal Management Program

The Magnuson-Stevens Act requires the National Marine Fisheries Service to identify essential fish habitat and develop strategies for protecting that habitat to maintain viable fish populations. One means of protecting habitat for any species is through public acquisition of lands that are essential for maintaining biodiversity. The State of Florida has been a national leader in environmental land acquisition. Much of the land protected under its many programs plays an important role in maintaining habitat quality for saltwater fisheries.

Florida has exhibited stunning population growth over the past three decades. In 1970 there were fewer than 6.8 million people inhabiting the state's 34.6 million acres, with 5.4 million people living in 35 coastal counties; there are 67 counties in the State of Florida. Today the population along the coast and in Florida has more than doubled, and by the year 2000 where will be a projected 15.5 million inhabitants , almost 12 million of whom will live in coastal counties. This phenomenal growth has resulted in a decline in both quality and quantity of habitat for native species of plants and animals, many of which are endemic to Florida.

During the past 25 years Florida has embarked on an ambitious and popular series of programs for the purchase of lands important to conservation and natural resource-based recreation. The State's leaders have recognized the wisdom of protecting the natural lands that attract and support its multimillion dollar tourism industry and that underlie many substantial commercial and recreational pursuits of its residents. Florida's premier land acquisition program, the Conservation and Recreation Lands (CARL) program began in 1979. It replaced the Environmentally Endangered Lands (EEL) program that was implemented in the early 1970's. In 1990 the Florida Legislature was urged by Governor Bob Martinez to increase the amount of money available for land acquisition. It responded by passing the landmark Preservation 2000 Act, which provides $300 million per year for land acquisition through the year 2000 for a total of $3 billion.

Florida has over eight million acres of land managed for conservation. This includes over four million acres in federal ownership (national parks, national forests, national wildlife refuges and large tracts of military land), over 3.5 million acres in state or water management district ownership, and over 120,000 acres owned by local governments (more than 20 local governments have voter-approved acquisition programs funded by increased sales or property taxes). In addition, almost 100,000 acres are held by private entities such as The Nature Conservancy, the Florida Audubon Society and the National Audubon Society. The CARL and EEL programs alone are responsible for the acquisition and protection of over one million acres of land since 1974 at a total cost of over $1.5 billion. Of that total, almost $900 million has come from Preservation 2000 funding since 1991.

While Florida has not purchased land with the primary intent of protecting its commercial and recreational saltwater fisheries, many of the areas targeted for acquistion have been significant in maintaining water quality and habitat integrity along the coast. In fact, the legislature has required that at least 20 percent of all expenditures of funds through the CARL

(continued on page 6)

(cont...from page 5)
program go toward the purchase of coastal lands. Land surrounding most of Florida's significant esturarine systems has been the target of its acquisition programs.

It is easy to understand how many of these coastal acquisitions can benefit the state's saltwater fisheries. It is also important to note, however, that almost any acquisition anywhere in the state also has a beneficial effect. There is no part of the state farther than 60 miles from the coast. Florida has scores of rivers that flow into estuarine and coastal areas bringing runoff from the entire surface of Florida. It has been the primary goal of the five water management districts' Save Our Rivers programs and significant emphasis of the State's programs to protect the floodplains and watersheds of its largest river systems. There have been substantial acquisition efforts along the St. Johns River and its many tributaries (the Wekiva, Oklawaha and Econlockhatchee rivers), the Suwannee River and its tributaries, the Peace River, the Kissimmee River, the Apalachicola River, and many others. All of these rivers ultimately flow into productive coastal areas important to saltwater fisheries.

Land acquisition in Florida has cost the state hundreds of millions of dollars. What economic benefits has the state received in return? Recent estimates revealed that the Florida Park System directly contributed $201 million to local economies throughout the state in a single year. In addition, the park system was responsible for the creation of over 6,000 jobs and resulted in the contribution of approximately $14 million to the general revenue fund through state sales taxes. In one year Floridas's three most active recreational trails alone generated an additional $17.9 million in visitor expenditures, $1.3 million in sales tax and created 570 new jobs. Saltwater recreational fisheries, which are dependent on clean water and undisturbed coastal and estuarine systems, are responsible for annual expenditures of $1.3 billion in Florida, which in turn supports 23,500 retail and service jobs and $235 million in wages. The value of commercial finfish and shellfish landings in Florida exceeds $200 million annually; this number does not include the total contribution of the commercial fishing industry to Floridas's economy or the number of jobs it creates statewide. Beach tourists in Florida spend $7.9 billion annually, with a ripple effect throughout the economy of $15.4 billion and creation of almost 360,000 jobs. Finally, a single resource-based activity, bird-watching, in one year was estimated to result in $477 million in retail sales with an $897 million economic impact and creation of 13,880 jobs related to bird-watching. Public land acquisition for conservation continues to be supported by a wide majority of Floridas citizens. It accomplishes much more than can be done through regulation of development.

In addition to continuing with acquisition of the most important undeveloped areas of the state, land managers are now embarking on greater efforts to restore the natural values of areas that have been degraded in the past. They are now placing a greater emphasis on managing the acquired lands, removing exotic species, restoring altered hydrology, beginning prescribed burning programs for fire-dependent natural communities, and monitoring native plant and animal populations.

Finally, Florida is beginning a serious effort to enter into conservation easements with large landowners and to purchase development rights to protect natural values of land without the need for complete ownership. All of these efforts will ultimately be extremely important in maintaining or restoring water and habitat quality necessary for fisheries and all other components of Florids's natural heritage.

From: The South Atlantic Update, October 1997, South Atlantic Fishery Management Council

Saskatchewan:
FISH EGGS FOR THE WORLD

During the 1997 season, in addition to raising approximately 33 million fish for use at home, Saskatchewan fish culture staff provided over 22 million fish eggs to three separate jurisdictions. A cisco spawn camp operated on Echo Lake in November 1996 provided 5.7 million eyed eggs for Montana and 2.2 million eyed eggs for China, in March 1997. The May 1997 walleye spawn camp at Lake Diefenbaker was very successful with 11.6 million green eggs shipped to Alberta for incubation at their Cold Lake hatchery. China was also supplied with 3.1 million eyed walleye eggs. Although egg shipments to China pose unique problems, Saskatchewan's staff have worked out a reliable technique over the past few years to keep the eggs viable during the 40 hour trip. Currently, Saskatchewan is planning to operate another cisco spawn camp in November 1997 to provide Montana with additional cisco for stocking in Fort Peck Reservoir. Contact: Jerry Banks (306) 332-3201.

From: AFS Fishing lines 11(2)

Sportfishing and Stream Corridor Management in New York State

Flood control measures, municipal, agricultural, and industrial uses have a significant impact on the quality and stability of many river systems in New York state. These practices have serious implications for the often overlooked sportfishing industry, as New York is one of the top six states for recreational fishing.

Many picturesque Catskill towns providing high quality sport fishing opportunities are profitable sport fishing destinations, as they are in close proximity to population centers such as New York City, Binghampton, and Albany. For example, a 1994 economic study revealed that towns such as Roscoe and Livingston Manor benefited to the tune of $10 million from anglers fishing on the Beaverkill and Willowemoc Rivers.

ASA/TU Delaware River Study

The Upper Delaware Tailwaters in New York consists of three river segments: the East Branch of the Delaware form Pepacton Reservoir Dam at Downsville to the Village of Hancock (32 miles); the West Branch of the Delaware from Cannonsville Reservoir Dam at Deposit to the Village of Hancock (18 miles); the main Delaware River from Hancock to Callicoon (27 miles). Tailwaters of the Upper Delaware River are famous for wild brown and rainbow trout fisheries, which are dependent on water releases from Pepacton and Cannonsville reservoirs.

In 1998, a statewide angler survey revealed that 33,000 anglers spent 260,000 days fishing in this river system. A large portion of the expenditures made by these anglers occurred in the local areas surrounding the Delaware River. Since 1988, New York State Department of Environmental Conservation (NYSCED) aerial survey and creel census records indicate that angler participation has increased. This increase in participation is important for the local towns that depend on sport fishing related expenditures. Thus, conservation of this watershed's trout habitat will serve the interests of many local businesses.

To better understand the economic impact of the Delaware River, the American Sportfishing Association (ASA) is conducting a joint study with Trout Unlimited (TU) in cooperation with NYSDEC. The project aim is to estimate the sport fishing economic impact, and generate information that can be used to manage this watershed in order to maintain and improve this profitable local trout fishery. To generate useful economic data, project staff is working with local chambers of commerce and other local experts to help develop and carry out a survey of local businesses.

Thus far, we are finding that the impact of anglers on these Catskill towns is recognized not only by fishing tackle shops but also by other local business owners. The proprietor at the Delaware River Inn commented that anglers are very important to her business. Even the owner of the Radio Shack store noted that business was better when anglers are in town; her friends who own other businesses do well and those added dollars in the business community trickle into her store.

There is no doubt that sport fishing is important to these rural towns. And by generating data that more precisely measures the economic impact of the fishery, we hope to utilize the data to advocate better stream management practices that will improve recreational fishing. Results of the ASA/TU Delaware River Economic Study will be available later this fall.

From ASA Bulletin 465, Fall 1997

EDITOR'S APOLOGY: *I hope you notice that your Briefs (why did we name our newsletter after underwear?) is late. Don't blame the printer or the post office. I just ran out of 1997 before I ran out of 1997 jobs. Sorry for the delay. But there is good news. With the truly crummy woodcock and quail hunting that 1998 is providing —the next issue ought to be on schedule (unless, of course, it is unseasonably warm, and spring crappie fishing begins).*

Getting an issue out on time is a big bunch easier if I have plenty of material (AIFRB related, and regional and national fishery news) with which to fill the pages. ***HELP ME!*** *If you send it, I will print it (almost always). I'll even provide stamps and envelopes to faithful contributors. Thanks to the many that helped with this issue and, again, I regret the delay.*

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