American Institute of Fishery Research Biologists

Promoting excellence in fishery science

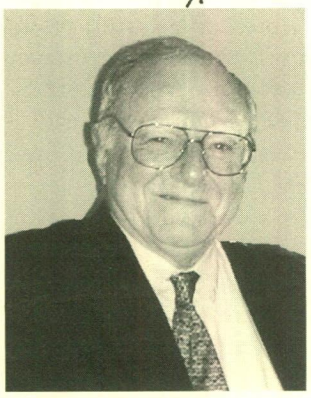
. . . BRIEFS . . .

Website: www.iattc.org/aifrb/

VOL. 33, NO. 1 JANUARY, FEBRUARY 2004

Outstanding Achievement Awards 2003

Rothschild receives award for individual accomplishment



The recipient of the AIFRB Outstanding Achievement Award (Individual) for 2003 was Brian J. Rothschild, Dean, Graduate School of Marine Sciences and Technology at the University of Massachusetts. Dr. Rothschild has worked in fisheries for one-half century. He began his career conducting ice-fishing surveys in the winter of 1953-1954 for the New Jersey Division of Fish and Game. He worked his way through Rutgers University as a student in wildlife conservation and management.

His achievements have been truly outstanding. He has published over one hundred papers and chapters in books. He has edited eight books and is the author of "Dynamics of Marine Fish Populations" published by Harvard University Press (1986). His own research is considered seminal. He is one of the most cited fishery scientists in North America. His work on stochastic processes and operation research, recruitment theory, and biological physical processes are widely cited. His paper "Small-scale turbulence and plankton contact rates" (written with T. R. Osborn, 1988, *J. Plank. Res.*) is a citation classic and has resulted in several hundred research papers advancing the Rothschild-Osborn theory.

He has been the acknowledged leader in bringing together the study of ocean physics, biological oceanography, and recruitment research. His work involved the founding of important international programs in linking ocean physics and fish population dynamics. He formulated the concept of GLOBEC and was the first Chairman of the international GLOBEC Scientific Committee. He was responsible for GLOBEC becoming part of the core program of the International Geosphere Biosphere Program (IGBP). He was instrumental in founding a number of other national and international programs such as the ICES Cod and Climate Program and the French National Program on Determination of Recruitment.

He has been involved in forwarding the fishery scientific and management agenda globally and has represented the U.S. at many international meetings. He was responsible for developing the scientific management of ICCAT. He worked with others to develop global fishery management policy and planning at FAO, and he has served on many national committees, including chairing the National Academy of Sciences Fisheries Committee.

His service to education has also been outstanding. As Dean of the Graduate School of Marine Sciences and Technology at the University of Massachusetts, he has developed a new and innovative program in oceanography and resource management. His graduate students have had outstanding careers. His PhD student Bill Fox has been the recipient of the AIFRB Outstanding Achievement Award. His PhD student Gary Sakagawa is a past President of the AIFRB.

Brian's book, "Dynamics of Marine Fish Populations," was the first to comprehensively address the abundance of fish populations in historical, life-history and modeling contexts. His approach shed critical new insights into the density-dependent processes of recruitment, growth, and reproduction of fish populations.

Dr. Rothschild's early career work in Hawaii for Jack Marr at the Bureau of Commercial Fisheries, commenced after his doctoral and post-doctoral studies at Cornell, where he was a student of Ed Raney and Doug Robson. His field studies on the population dynamics of alewife in Cayuga Lake, New York, smelt in Maine and summer flounder at Beaufort with Earl Deubler at the University of North Carolina and strong training in biometrics and fisheries theory were fundamental to his research success in Hawaii on the biology of Pacific tunas. His first significant contributions to fishery science delineated the cross-Pacific migrations of skipjack and albacore. This work was important from both biological and fisheries exploitation standpoints and was done during the five years that he was Chief of the Skipjack-Yellowfin Tuna Ecology Program. The skipjack publication was the first work demonstrating

The AIFRB is a 501(c)(3) tax-exempt nonprofit organization (EIN 61-6050711).

the migration patterns of these tunas, and thus, constituted a critical component of effective stock management. Between 1965 and 1970, he published nine papers on skipjack and albacore, as well as analyses of the Japanese long line fleet in the Central Pacific, tuna abundance in the Indian Ocean, and oceanic tuna resources of the Pacific.

His next significant publications concerned the application of systems analysis and linear programming to fisheries management. This work occurred during his tenure as Associate Professor, then Professor in the College of Fisheries at the University of Washington, Seattle, and following appointments as Deputy Director at the newly organized NOAA Northwest Fisheries Center in Seattle, and Director of the NOAA Southwest Fisheries Center in La Jolla. He tackled the problems of high-sea salmon management innovatively with these tools, at the beginning of the computer quantitative age in 1971. He continued to find fruitful applications through the 1970s, 1980s, and 1990s in general strategic approaches to fisheries management, including complex multiple species fisheries and the design of fishery management systems. While at La Jolla, Rothschild's tuna studies shifted to eastern Pacific yellowfin migrations and Atlantic bluefin migrations. During this time he became Chairman of the Standing Committee on Research and Statistics of the International Commission for the Conservation of Atlantic Tunas (ICCAT), a post to which he was elected for two terms, from 1973 to 1976. His 1974 paper on migration and mortality of Atlantic bluefin tuna, co-authored Frank Mather, Gerry Paulik and Bill Lenarz, was highly significant to the interpretation of Atlantic bluefin stock structure and the issues of international management at the time of its publication and has remained important up to the present. In 1976, he received the NMFS Outstanding Publication Award for the 1974 paper, "An examination of the yield-per-recruit basis for a minimum size regulation for Atlantic yellowfin tuna, *Thunnus albacores*," co-authored with Bill Lenarz, Bill Fox, and Gary Sakagawa. In 1986, he was the invited keynote speaker at the ICCAT Conference on the International Skipjack Year Program, an acknowledgement of his important contributions to skipjack biology and ecology. His topic "Tuna research in the 1980s" reflected his continuing expertise on tunas. A decade earlier, he and A. Suda of Japan co-authored the authoritative "Population dynamics of tuna" in John Gulland's classic, "Fish Population Dynamics."

His senior policy appointments at the national level in NOAA and his stewardship of the implementation of the extended fisheries jurisdiction policy of the U.S. and the 1976 Fisheries Conservation and management Act expanded his contributions to public policy and global fisheries. In 1983, he edited "Global Fisheries: Perspectives for the 1980s," bringing together internationally recognized experts to produce a classic in fisheries policy perspectives-the global outlook in the extended jurisdiction framework of the 1980s. In 1972, he had edited "World Fisheries Policy: Multidisciplinary Views". For students of fisheries these two volumes provide valuable insights into marine fisheries policy during an important decade from the experts who shaped it. Rothschild's own contributions to those books (1972) "The Need for Analysis in the Development of United States Fisheries Policy" and (1983) "Achievement of Fisheries Management Goals in the 1980s" provide a detailed description of successful fishery management systems in various policy contexts.

Throughout his career, he has published papers that address statistical problems in fisheries estimation procedures and provided guidance or solutions for practicing biologists. These are important because inappropriate or biased procedures lead to biased estimates that can have serious economic and social ramifications in applied fisheries work. These papers include effects of gear competition on catch-per-unit effort estimates (1967), use of concentration indices (1972), the use of linear programming techniques for stock-and-recruitment relationships (1985), source of errors in recruitment-spawning stock estimation (1989), impact of variable natural mortality rates on estimates of recruitment from virtual population analysis (1992), and use of times-series techniques in fisheries population assessment (1995, 1996). His work on the crab, oyster and finfish fisheries (such as striped bass) of Chesapeake Bay and on scallop and groundfish fisheries of the Northwest Atlantic is characterized by the development of innovative sampling techniques and population estimation procedures. This work, such as the development of FISHMAP, a sampling expert system for fish stock assessment in Chesapeake Bay, is described in many technical reports to sponsoring organizations. His chapter, "Fishing Effort" in John Gulland's 1977 "Fish Population Dynamics" is a classic for students of fishery science. In 1996, he co-edited and authored three chapters of the CRC handbook, "Stock Assessment: Quantitative Methods and Applications for Small-Scale Fisheries," a resource oriented to the problems faced by fishery managers in less-developed countries.

In 1988, while Professor at the University of Maryland's Center for Environmental and Estuarine Studies in Solomons, MD, Rothschild and Tom Osborn of Johns Hopkins University published "Small-scale turbulence and plankton contact rates." This paper revolutionized ideas about zooplankton production, linking for the first time the dynamics of physical scales and biological rates. The importance of this paper can be assessed by the number of papers in which it has been cited. According to the Science Citations Search, as of May 2003, the paper received 268 citations in refereed literature (about 10 or 15 citations is "good"). Rothschild furthered the theory linking physics and biology in the ocean and its importance in understanding ocean productivity as editor and contributor to the 1988 650-page book, "Toward a Theory on Biological-Physical Interactions in the World Ocean." He followed his chapter, "Biodynamics of the sea: the ecology of high dimensionality systems" with publications collaborating this theme, including food-signal theory

(1991), application of stochastic geometry to plankton ecology (1992), and physical forcing effects on nutrient microclouds (1999). Since 1996, Rothschild has served on the editorial board of the prestigious John Wiley & Sons series "The Sea: Ideas and Observations on Progress in the Study of the Seas." In 2002 and 2003, Rothschild has been a co-editor with Jim McCarthy and Allan Robinson on Volumes 12 and 13. His 2002 chapter, "Population Dynamics and Physical Forcing," is the state-of-the-art reference for this topic, extending ideas presented in many of his previous papers concerning fish stock fluctuations and the environment. This approach offers the possibility of a physically-based axiomatic formulation of ocean productivity, bringing biological oceanography into the rigorous framework needed for the future of multidisciplinary ocean studies. His 2003 chapter for Volume 13, "Multiple Scales in Time and Space," integrates and extends the current thinking on how physical and biological processes interact within and across spatial and temporal scales of the ocean.

Throughout his career, Rothschild has served the fishery profession at local, state, national and international levels within professional societies and organizations and in public service roles. Rothschild has served in many positions in BCF, NMFS, and NOAA. He was Deputy Director of the Northwest Fisheries Center, the Director of the Southwest Fisheries Center, Director of the Office of Policy and Planning in NMFS Washington, and Senior Policy Advisor to the Administrator of NOAA. During his stint in Washington, he had the direct responsibility for implementing the Fishery Conservation and Management Act of 1976. This included establishing the administrative framework for the eight regional Fishery Management Councils. At the beginning of his career in Hawaii, he was Local and State Chairman of the American Fisheries Society. In 1987, he was an organizer and convener of the session, "Tomorrow's Models-Today's Data," and was appointed to a three year term as a Lecturer in the AFS Lecture Program. He has remained an active member of the AFS. Rothschild has served on editorial boards of the American Society of Ichthyologists and Herpetologists (1964-1968), Fishery Bulletin (1970-1975), Marine Resources Economics (1984-1987) and the series "The Sea" (1994-present).

Rothschild's service on national organizations encompassing fisheries issues include the Ocean Studies Board (OSB) of the National Academy of Sciences (NAS) and the National Research Council (NRC). He was Chair of the Fisheries Committee OSB/NAS (1992-1994 and 1983-1985), and Chair of the Human Effects Workshop (1983-1994), he was a member of the Ocean Studies Board (1991-1996), Board on Ocean Sciences and Policy (1983-1984) and Ocean Sciences Board (1981-1984), Ocean Policy Committee (1974-?) and Committee on Oceanography (1972). In his most recent tenure as Fisheries Committee Chair, the Committee published reports advising the government on fishery management. He also served on the NRC Ad Hoc Panel of the Committee on Global Change, and co-authored the Panel's 1990 report, "Biogeochemical Dynamics in the Ocean." He participated in the 1988 Global Change Workshop. In 1977, he was a member of the Post-IDOE Planning Steering Committee of the Ocean Science Board.

Rothschild has served on fisheries-related working groups, committees and panels of many international organizations. These include the International Commission for the Conservation of Atlantic Tunas (ICCAT), the Food and Agricultural Organization (FAO) of the United Nations, the United Nations Development Program on Fisheries Resources (UNDP), the International Council for the Exploration of the Sea (ICES), the North Atlantic Treaty Organization (NATO), the International Standing Committee on Oceanic Research (SCOR), and the Global Ocean Ecosystems Dynamics Research and Monitoring program (GLOBEC). His work with ICCAT as the Chairman of the Standing Committee on Research and Statistics for four years was noted above. In addition, he was the Convener of the Tuna Population Dynamics Working Group (1973).

He has many associations with FAO. As a tuna expert, he served on two Working Groups of the Panel of Experts for Facilitation of Tuna Research: Tuna Taxonomy and Tuna Tagging in the Pacific and Indian oceans from 1962 to 1968, and on the Working Party on Tuna Stock Assessment for the Atlantic and Indian Oceans in 1972. During this time, he was also a member of the Panel Experts on the economics of the Peruvian Anchovetta Fishery (1971). In 1981, he and John Gulland convened the international workshop on the Scientific Basis for the Management of Penaeid Shrimp. Their editorial efforts resulted in the first book on the subject, "Penaeid Shrimp: Their Biology and Management," which was published in 1984 and became a unique resource concerning these highly valuable fisheries. Rothschild has been associated with several aspects of fisheries development for FAO or UNDP. These efforts concerned the development of fisheries resources of Korea (1968), a review of the Egyptian high seas trawl fleet (1975), the development of fisheries policy for Namibia (1980), and the development of the plan for FAO's Indian Ocean Program (1971). Further, he was a Convener of the Symposium on Economic and Social Aspects of Fishery Development sponsored by the Indo-Pacific Fisheries Council (1975). In 1987, he chaired the Fisheries Committee, Workshop on the development, management and utilization of marine resources in Indonesia's deep waters. He also chaired two FAO Working Parties for the Advisory Committee on Marine Resources Research (ACMRR): Scientific Basis of Determining Management Measures (1979-1980) and Principles for Fisheries Management in the New Ocean Regime (1982-1983).

He has had a long association with the International Council for the Exploration of the Sea, the oldest organization in the North Atlantic concerned with fishery issues. Beginning in 1984, he has participated in the Annual Science Conferences held at the September Statutory Meetings, and in ICES Symposia and Working Groups.

Since 1997, he has been a member of the Resource Management Committee and Multispecies Assessment Working Group. At the 1989 annual ICES meeting, Rothschild drafted the proposal for a subgroup of the Demersal Committee to study cod stock fluctuations. In 1991, ICES officially adopted the program as "Cod and Climate Change" and Rothschild chaired the Steering Group for the Cod and Climate Change. In 1994, the program's first symposium was published as a ICES Marine Science Symposia Number 198, underlining the programs scientific importance. With the now precarious states of many cod fisheries, this program is a critical component of international research efforts to understand the causes of cod declines in the north Atlantic.

Brian formulated the GLOBEC concept and was first chairman of its scientific committee. GLOBEC's overall goal includes, "understanding the structure and functioning of the global ocean ecosystem, and its major subsystems. He was the Chairman of the first organizing meeting for GLOBEC held in La Jolla in 1987, at which he presented the paper, "Biological Oceanography in the Next Two Decades. In 1988, he chaired the Global Ecosystems Dynamics Workshop and from 1988 on made many presentations to the scientific community in the U.S. and abroad that developed collaboration with the initiative. He was Principal Investigator of the GLOBEC Planning Grant awarded by NSF from 1990-1992. In 1991, he co-authored "Theory and Modeling in GLOBEC: a First Step," as member of the Working Group on Theory and Modeling. From 1991 to 1995, he was Chairman of the Scientific Steering Committee and remained a member up to 1999. He was an organizer of the U.S. GLOBEC Steering Committee in 1993, from which the U.S. program emerged. He was an organizer of International Scientific Steering Committee and served as its Chairman beginning in 1994.

From 1992 to 1996, Rothschild was Secretary of the Scientific Committee on Oceanic Research (SCOR) and from 1996 to 1998, he served as a Co-opted Member of the Executive Committee. SCOR, founded in 1957 by the International Council for Science (ICSU), promotes international cooperation in oceanography via large-scale research projects, working groups and advisory and planning bodies.

In addition to the above activities, Rothschild was a co-convener with Claus Rooth of the fish Ecology III Workshop (1982). He was an organizer of Southern Ocean Working Group meeting (1993), the Numerical Modeling Working Group meeting (1993), the PDPV Working Group meeting (1993) and the Sampling and Observation Working Group (1993). He has also served on International Scientific Organizing Committee for the 28th International Liege Colloquium on Ocean Hydrodynamics (1995). His work with U.S. Agency for International Development concerned artisanal fisheries in 16 less-developed countries. This 6-year program matched technical needs with U.S. expertise; one of the results was the publication of a CRC Handbook on fishery stock assessment, along with training and exchange programs.

Rothschild has also served fisheries as in many program reviews over his career. He has served as Advisor to the American Section, International North Pacific Fisheries Commission; the U.S. Delegation, Indo-Pacific Fisheries Council; the U.S. Delegation, ICCAT; U.S. Commissioners, IATTC; Indian Ocean Fishery Commission; and to NOAA concerning National Marine Fisheries stock assessments. In 1968, he was a member of the Team to develop cooperation between the U.S. and Ryukyu Islands on Fisheries. In 1987, he reviewed the research program of the Inter-American Tropical Tuna Commission. In 1991, he chaired the Review Panel for the Benguela Current Program of the Union of South Africa. During most of 1984, he was affiliated with the Project National de Recherché du Recrutement, a fisheries project of IFREMER, France. He also served as an expert for the U.S. Justice Department concerning the Exxon Valdez oil spill (1989), and later as a peer reviewer for the State of Alaska Department of Natural Resources on the oil spill restoration efforts (1994). From 1998 to the present, he has been a member of the Permanent Scientific Advisory Board for the Institute of Marine Science of Portugal.

Rothschild has continued to be actively involved in local and regional fisheries management. He served on the Steering Committee of Northeast Fisheries Management Task Force (1980-1982). He was member of the Maryland Oyster Roundtable, the Blue Crab Advisory Board of the Maryland Dept. of Natural Resources, the Chesapeake Bay Stock Assessment Committee, and the Mid-Atlantic Fisheries Management Council during his tenure at the University of Maryland. Rothschild has been a key player in Massachusetts and New England fisheries. In 1997, he was appointed Co-chair of the Massachusetts Fisheries Recovery Commission by former Governor William Weld. Since 1998, he has been a member of the New Bedford Fisheries Task Force, and a member of the Research Steering Committee and the Scientific and Statistical Committee of the New England Fishery Management Council. His perspective of good science as a prerequisite to good management has led to clarification of many issues and succeeded in bringing them into the appropriate science and policy arenas for solution.

Rothschild has been the major advisor of students during his academic tenures at the University of Washington and at the University of Maryland. His doctoral students at University of Washington include William Fox, former Director of the National Marine Fisheries Service, NOAA and Gil Robinson, Head of the National Parks Service, Union of South Africa. At the University of Maryland, he supervised doctoral and master's candidates from Canada, Japan, China, and Taiwan. He has served as external examiner on doctoral committees at the University of Bergen, Norway, Dalhousie University, Canada and the University of British Columbia. Also, he has supervised many post-doctoral students from abroad, including Dr. Qisheng Tang, now Professor and Director General of the Yellow Sea Fisheries Research

Institute in Northeast China Fisheries, and Dr. Phillippe Goulletquer, an oyster specialist of IFREMER.

Another aspect of Rothschild's contributions to students are his many invited lectures and seminars. These include the Columbus O'Donnell Iselin II Lecture at Harvard University entitled "Fishery Management and Variability in Fish Population" (1983), and the Jane Globus Lecture at Baruch College, New York, entitled "Fisheries policies for the 1980s" (1983).

He was elected a Fellow of the American Institute of Research Fisheries Biologists in recognition of his contributions to fishery science. In 1965, he was elected a Fellow of the American Association for the Advancement of Science.

Rothschild has also contributed to student training through his several long-term adjunct and shorter visiting faculty positions. He was Visiting Professor at the Institut fur Meereskunde at the University of Kiel, Germany (1984-1985), Visiting Scientist in the Biology Department at Woods Hole Oceanographic Institution (1986-1987), and Visiting Scholar in the Department of Earth and Planetary Physics, Harvard University (1994). While a chief scientist at the Bureau of Commercial Fisheries in Hawaii, he was an Affiliate Graduate Faculty member and Lecturer in Zoology at the University of Hawaii from 1963-1969. At La Jolla, while Director of the NMFS Southwest Fisheries Center, he was an Adjunct Professor of Oceanography at Scripps Institution of Oceanography (1974-1976). From 1975 to 1978, he served on the Advisory Council, Institute of Marine Resources, at the University of California. From 1986 to 1989, he was Principal Research Scientist at the Chesapeake Bay Institute, Maryland. Presently, he is an Adjunct Professor and Senior Fellow at the Rosenstiel School of Marine Science and Atmospheric Science, University of Miami (since 1981). Since 1998, he has also been an Adjunct Professor in the Department of Natural Resources Conservation at the University of Massachusetts Amherst.

Presently at University of Massachusetts Dartmouth, he has instituted an exchange program with the University of the Azores, and is pursuing the establishment of a Fisheries Institute. The latter is a collaborative effort between the State of Massachusetts, NOAA, and University of Massachusetts Dartmouth to insure that the highest research standards are brought to bear on management of the valuable northeast fisheries through training of students and upgrading of skills of working professionals. Further, his success at University of Massachusetts Dartmouth to create the Graduate School of Marine Sciences and Technology, which received accreditation by the Massachusetts Board of Higher Education to award doctoral and masters degrees, emphasizes his commitment to higher education and to giving students access to a broad range of learning opportunities to engender their success.

Since 1999, he has been Governor of the Board of 2000, the Consortium for Oceanographic Research and Education, Inc. and also been a member of its Research Committee since 2000.

Submitted by: Vaughan C. Anthony
Abridged by Editor (and even in abridgement the document and career remain awesome and intimidating)

Ecotoxicology Research Team
Northwest Fisheries Science Center
Group Award 2003

The Northwest Fisheries Science Center's (NWFSC) Ecotoxicology Research Team has been studying contaminants for over 30 years. Over this period of time, this team has continued to conduct the highest quality of research, which has led to hundreds of contributions in well regarded scientific journals, including *Aquatic Toxicology, Environmental Science and Technology, Environmental Toxicology and Chemistry, Environmental Health Perspectives, Journal of Aquatic Animal Health, Marine Biology,* and *Transactions of the American Fisheries Society.* In 1998, the paper "Increased Susceptibility of Juvenile Chinook Salmon from a Contaminated Estuary to *Vibrio anguillarum*" received the American Fisheries Society's "Most Significant Paper" award in the journal Transactions of the American Fisheries Society. The NWFSC's Ecotoxicology Research Team has also published many technical memoranda that are widely used throughout the fishery science community in assessing the impacts and remediation possibilities of contaminants in the marine environment. In many cases, published research from this team on analytical techniques, sublethal effects of toxic chemicals, and quantitative relationships between contaminant exposure and biological effects has set the precedent for other research in specific areas, such as the biological effects of oil-related compounds, contaminant effects on outmigrant juvenile salmon, and the impacts of pesticides on fish. The Ecotoxicology Research Team has made it a priority to work across disciplines, such as biology, chemistry, fish physiology and math, to improve its contributions to the fishery profession.

Since its inception, the NWFSC's Ecotoxicology Research Team has valued its role as a public servant. Sharing knowledge and explaining research results to partner institutions, and affected communities, etc., has always been a priority for this team. For example, during the 1989 *Exxon Valdez* oil spill in Alaska, the NWFSC's Ecotoxicology Team provided critical information to fishermen and Alaska natives about the fate and effects of petroleum on fish and shellfish; real-time analyses allowed a vitally important halibut fishery to continue in the aftermath of the spill, the willingness to share information in a timely manner helped fishermen and Alaska natives better understand what was happening to the fish and whether or not it was safe to harvest

and eat them. As a result of this work, a former Ecotoxicology Team scientist recently edited a book entitled, "Evaluating and Communicating Subsistence Seafood Safety in a Cross-Cultural Context: Lessons Learned from the *Exxon Valdez* Oil Spill." This book received the Society of Technical Communication's 2000 Excellence Award.

The NWFSC's Ecotoxicology Team has also made educating the next generation of scientists a priority. Over the last several decades, this team has developed a strong cooperative relationship with local universities team members, served on graduate committees around the U.S. and in Europe. Several team scientists serve as adjunct faculty members. Team scientists also provide opportunities for undergraduate and graduate students to work and learn at the Center, and willingly give presentations to local K thru 12 schools.

In addition to its other activities, the Ecotoxicology Team has also provided technical guidance and assistance to other scientists and managers, both nationally and internationally, addressing various contaminant issues. For example, team scientists have participated in panels to advise former member countries of the Soviet Union, worked with scientists in the middle east following the Persian Gulf oil spill, advised a committee of the European Union in establishing a standard reference material for the analysis of fish bile for metabolites of petroleum-related compounds, and served as panelists on the intergovernmental committee on contaminants in the Great Lakes.

The NWFSC's Ecotoxicology Team has made many valuable contributions to fisheries management in the Pacific Northwest, the nation, and the world. Two key examples include:

1. In the 1970s, scientists thought that point sources, like factories and oil refineries, were the major sources of contaminants in streams, rivers, and coastal waters. Throughout the nation, there was much concern about oil and gas development and the potential impacts that oil and industrial chemicals might have on fish and other marine species. At that time, scientists knew practically nothing about how, or whether, contaminants got into fish, and what impacts they might have. Center scientists conducted research to answer some critical questions about oil and its impacts on fish. Ecotoxicology researchers provided comprehensive data establishing that fish do not accumulate hydrocarbons in their bodies, but process them in their livers for removal. They also found that the liver can change a small amount of polycyclic aromatic hydrocarbons (PAHs) to a more toxic form that can cause disease in the liver and other organs. These studies on mechanisms led to the development and refinement of techniques to measure hydrocarbon metabolites in bile and damage to DNA in wild fish. The ability to effectively measure exposure to PAHs and initial effects related to chemical carcinogenesis in wild fish paved the way to a full understanding of the cause and effect relationship between PAH exposure and lesions in wild fish. This research made an important contribution to fisheries science-it opened up a whole new field of research on the effects of petroleum and petroleum-related compounds on fish. It also led to the development of a new analytical technology to rapidly assess exposure of fish to oil-related compounds. This research and new technology had a significant impact on the nation's response to environmental incidents, such as the *Exxon Valdez* and North Cape oil spills. It allowed for a "real-time" assessment of seafood quality and also served as a monitoring tool to test whether conditions had improved. Scientifically, this new technology was incredibly valuable; it is now used around the world and has become a standard method of the European Union, and has led to the development of other rapid assessment techniques for screening tissues for PCBs, and organochlorine, and sediments for PAHs.

2. Ecotoxicology scientists began to apply their rapid assessment technique (described above) to better understand the impacts of contaminants on fish. Though their research, team scientists showed that certain tumors in fish are caused by exposure to chemical contaminants in their environment. This research led to the start of a national coastal monitoring program to monitor contaminants and their effects on fish. Through this monitoring program, scientists sampled hundreds of sites around the nation. This program helped the fisheries science community, as well as decision-makers around the nation, understand the scope of marine and coastal pollution, which helped lead to restoration of many polluted sites. The combination of this monitoring data and the research on cause and effect has made liver lesions in certain marine fish a very useful management tool to assess status and trends in environmental contamination by PAHs and to measure the effectiveness of remediation actions. The approach pioneered by the Ecotoxicology Research Team is used by state and other agencies to monitor the health of marine environments, assess biological injury from specific pollution events, and to monitor the effectiveness of restoration actions. Further, the information from over a decade of monitoring focused field studies were synthesized and published in the peer-reviewed journal, Aquatic Conservation: Marine and Freshwater Ecosystems, to document thresholds for carcinogenic and reproductive effects in wild fish exposed to sediment associated PAHs. This was groundbreaking because the thresholds were established entirely from data on wild fish and their direct exposure history and did not rely on bioassay information, which is one step removed from what organisms actually experience in the environment.

The NWFSC's Ecotoxicology Program is continuing its forward-thinking research. While team scientists are continuing their research on industrial chemicals and chemicals in urban runoff, they have also begun to focus on the impacts of agricultural runoff on fish populations. Moreover, the studies now include critical questions of how to integrate sublethal effects on critical physiological processes into assessment of population effects. Physical degradation of habitat is a critical issue for fisheries management. Degradation of chemical habitat quality is

also very important. Having a common currency to evaluate effects of impacts to both physical and chemical habitat quality will be important in conserving and restoring at-risk fish populations. These studies are at the forefront of fisheries science addressing anthropogenic effects and will help management agencies to critically determine the impacts of degraded water quality on fish.

Nominations NEEDED for 2004 Awards — It's never too early to submit nominations to Dick Schaefer, Linda Jones, or the Editor of *Briefs.*

Capital District Elects District Director and Secretary Treasurer

The members of the Capital District have completed their first ever election for a District Director and Secretary-Treasurer. Results of the recent vote were certified by AIFRB Secretary Allen Shimada on February 2, 2004. The Capital Districts officers for 2004-2005 are:

District Director Dr. Frank M. Panek
U.S. Geological Survey
National Fish Health Research Laboratory
11649 Leetown Road
Kearneysville, WV 25430
(304) 724-4430
frank_panek@usgs.gov

Secretary-Treasurer Dr. Shawn K. Alam
Minerals Management Service
Environment Division
381 Elden Street
Mail Stop 4042
Herndon, VA 20170
(703) 787-1690
Shawn.Alam@mms.gov

No Atkins Diet for Northern California District

Multi-ethnic venues spur attendance at two events

The Northern California District held its Winter Season Banquet on Saturday, January 24th, 2004 at the Mandarin Restaurant in Ghirardelli Square, San Francisco. A social hour preceded dinner which included: mandarin lettuce wrap, hot & sour soup, prawns a la Szechwan, Mongolian beef, cashew chicken, sweet & sour pork, mixed vegetable sauté, asparagus with mushrooms, steamed rice, jasmine tea, Mandarin flamed bananas, and fortune cookies.

On Thursday, February 19th at the Gulf of Farallones National Marine Sanctuary following a pizza feast, Lenny Grimaldo , affiliated with the California Department of Water Resources, San Francisco State University, and the Romberg Tiburon Center presented a talk entitled *Restoring the Sacramento-San Joaquin Delta: Can the opportunities meet expectations?*

The AIFRB subsidized the meal cost for students. In order that cost was not a determinant to attendance the District subsidized half of the dinner cost for students, and for any other member that requested.

Submitted by: Tom Keegan and Michelle Barlowe

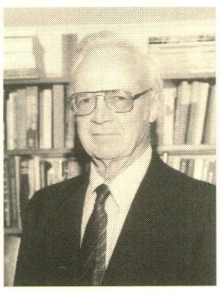
Losses

Ed Grossman

December 21, 2003

William F. Royce

January 5, 1916 - January 26, 2004



William Francis Royce, Professor Emeritus, University of Washington, passed away peacefully in Seattle of Alzheimer's disease on January 26, 2004, at age 88. A brilliant scientist, Dr. Royce was widely recognized by his peers as an expert in the marine fishery sciences. He was well known nationally and internationally for his academic research and publications, his work with the University of Washington College of Fisheries, the U.S. Fish and Wildlife and National Marine Fisheries Services, and as a consultant to the United Nations and numerous foreign governments on fishery management issues.

Bill Royce was born in De Bruce, New York in 1916 and completed his education in that state. The son of a trout hatchery manager, he took an early interest in fishery biology and obtained his PhD at Cornell University in 1943 on lake trout reproduction and life history. While undertaking his university studies he worked summers with the hatchery system of the New York Conservation Department and as a biologist with the New York State Biological Survey. He conducted some of the earliest studies of lake trout populations in upper New York State and devised an ingenious underwater camera housing to photograph spawning fish on the lakebeds. In 1942 he

began employment with the U.S. Fish and Wildlife Service in Massachusetts and from 1947 to 1951 he served as Supervisory Fisheries Research biologist in charge of North Atlantic trawl fishery investigations at Woods Hole, focusing on halibut and flounders. He then transferred with his family to Hawaii to become Senior Fisheries Research Biologist with the Pacific Oceanic Fishery Investigations, where he worked on tuna and marlin biology. During his four years in Hawaii he conducted studies of tropical fish populations, making several long research voyages throughout the South Pacific. In 1955 he transferred to Juneau, Alaska where he was Assistant Administrator in charge of research for the regional office of the Fish and Wildlife Service.

In 1958, Royce succeeded founder W.F. Thompson as Director of the University of Washington Fisheries Research Institute (FRI), which was joined with the School of fisheries to form the then College of Fisheries. He successfully directed studies of salmon and the aquatic environment and was instrumental in tracing North Pacific salmon oceanic migrations in connection with the International North Pacific Fisheries Commission research program. He was widely recognized for boldly predicting an enormous 1960 resurgence of the sockeye salmon population in Bristol Bay based on FRI research findings. His advanced warning prevented a greatly excessive spawning escapement in 1960 and helped to revitalize the commercial salmon industry in southwestern Alaska. In January 1967 he was appointed Associate Dean of the College of Fisheries and shortly thereafter took a year's sabbatical to serve as Fisheries Officer with FAO based in Rome, Italy, and to work on publications. In 1972 his seminal work, "Introduction to Fishery Science" was published. Also in 1972, he took leave of absence from the College of Fisheries to serve for two years as Associate Director in Charge of Research for the U.S. National Marine Fisheries Service in Washington, D.C.. He returned to the University of Washington and retired in 1976, continuing to engage in writing and consultant work.

Dr. Royce advised many foreign governments on aquatic environmental problems and fishery development. Working with the Fisheries Department, United Nations Food and Agriculture Organization, he contributed to their programs on fishery development and education in Africa, South America and Asia. He also served as advisor to the U.S. Section, International North Pacific Fisheries Commission.

Dr. Royce was an outspoken champion of the management of important fish populations such as tuna, marlin, flounder, haddock and salmon. Between 1935 and 1994, he wrote over 116 important professional papers, books and other scientific articles on many fishery-related subjects to include biology, research, history, fishing methods, fish population studies, conservation and aquaculture. His several textbooks on fishery science are still in use by many university programs.

Dr. Royce was a fellow member of numerous professional societies, including American Fisheries Society (AFS), American Institute of Fishery Research Biologists (AIFRB), Biometric Society, American Society of Limnology and Oceanography, International Academy of fishery Scientists, and American Association for the Advancement of Science. He was awarded AFS Honorary Membership for outstanding service to the Society and professional attainments, and in 1987 received the AIFRB Outstanding Achievement Award-Individual, the Institute's highest award to fishery scientists for achievement and the advancement of fishery science.

Bill had a lifelong love of the sea and sailing, and in 1976 sailed his boat *Mermaid II* with his wife Mary and son Jim from Annapolis, Maryland, through the Panama Canal to his Seattle home. He was a skilled craftsman, having remodeled several homes and built numerous items of furniture. His sons recall him as a consummate do-it-yourselfer. He also thoroughly enjoyed tennis, skiing, and bird hunting.

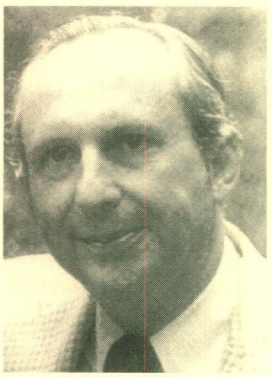
Bill's wife of 55 years Mary Hertzel Savage Royce and grandson Bryan preceded him in death. He is survived by three sons, James and partner Alex, William and his wife Lynda, Andrew and his wife Joyce, and two grandchildren, Matthew and Casey. A remembrance and celebration of his life was held at son Andrew's home in Seattle on January 31, 2004.

Submitted by: Robert Burgner

One of Professor Royce's favorite social activities was the fisheries faculty monthly poker game. " I think our maximum bet was 25 cents," Burgner said. "But we played just as hard as if we were playing for big money."

Ralph William Yerger, Sr.

July 31, 1922 – May 11, 2003



Husband, father, grandfather, colleague, friend – the eight decades of Ralph William Yerger's life were filled with living, learning and loving.

One could have guessed his destiny from early on – valedictorian of his Pennsylvania high school class; an eighteen year old who journeyed with three buddies 9,000 miles for 6 ½ weeks to the far west and Mexico at a total personal cost of $125; distinguished World War II army officer (discharged as captain) in the Battle of the Bulge; his B.S. and M.S. from Penn State; a prestigious PhD in vertebrate Zoology from Cornell University. All these led to Florida State University in the fall of 1950 where he found his real home both professionally and personally.

Professionally he rose in rank from assistant to full professor in the short span of eleven years. During his 38-year teaching career, 10 of his students were awarded doctorates and an additional 19 completed master's degrees – most in ichthyology, the study of fish, his chosen specialty in the Department of Biological Science where he headed Florida State University's Fish Collection for 32 years. In fact one species was named for Ralph. Moreover, he was selected as the first recipient of the Margaret Menzel Teaching Award in Biological Science. Further one of his grateful former students, Gwynn Aiken, endowed the Yerger Lectureship in Biological Science – a permanent testimony to his distinction as a scholar and teacher.

Perhaps the greatest tribute to his teaching was his personal appeal to a young coed, namely Frances Irene Winterle. Her taking his introductory course eventually led to their 1954 June wedding which in turn led to their splendid children – Paula, Rachelle, Loreen and Ralph, Jr. and in turn to four wonderful grandsons Brian, Keegan, Hans and Chase.

The privilege of knowing Ralph well occurred for me when he became my colleague in the College of Arts and Sciences where Ralph served as associate dean or acting dean from 1977-83.

As a person, Ralph was not complex. Some would say he was "matter of fact," not given to expressing emotions, "a man of few words." All true and yet, what do you make of that twinkle in his eyes? He did so enjoy life.

Surely this man was organized. Irene recalls the first day of that introductory class, Dr. Yerger walked to the lectern in the classroom, opened his folder of notes, and immediately the bell rang for class to begin. At the end of class, he closed his notes and immediately the bell rang for class dismissal. At Christmas, each of the children's gifts were carefully arranged by father Ralph in predetermined spaces. On Sundays after church, the children recall, there was a regular routine – lunch at a fast food place and then a drive out in the country, the area where Killearn Estates now stands. That was one routine and another was he never raised his voice to children or wife, except when he snored.

When grading papers he was notorious for making a big red X wherever there was a mistake or error. Irene recalls saying something to the effect, "Don't you think that will make your students feel bad?" To which Ralph replied, "I want them to feel bad!"

Ralph (and Irene) was a traveler, for research and pleasure. Besides many of the states, they traveled in 17 other nations. And though the University Club interest group Globetrotters, there were other places they visited as well.

One passion, not to be overlooked, was Ralph's love of eating. During their courtship days Ralph impressed his future wife's mother at Thanksgiving by consuming three helpings of turkey with all the trimmings. They say that the way to a man's heart is through his stomach and for many the way to a woman's heart is through is stomach. A colleague, knowing of his impending marriage and capacity for eating, asked him, "Can she cook?" Ralph replied, "Would I be marrying her if she couldn't?"

As some of you know, after retirement Ralph became interested in genealogy – as he put it "a frustrating and never ending venture." Bob Short, Ralph's colleague and friend – they both came to FSU in 1950 – tells this story on Ralph. It seems he was lecturing, later in life, on the three effects of the aging process. After declaring that the first thing to go was memory, he paused and paused some more and, lamented, "I've forgotten the other two."

Memorial contributions may be made to Big Bend Hospice, 1723 Mahan Center Blvd., Tallahassee, FL 32308.

The Ralph Yerger I Knew

By Tom Lewis

I first met Ralph in August of 1969. I had just arrived in Tallahassee from Boston to begin graduate work at FSU and was in cultural and climatic shock! What I remember about that meeting was the bandaged hand. Ralph had been injured by a madtom, a small catfish with venomous pectoral fin spines. Little did he know that he was encountering a new, and perhaps even more painful, mad tom; mad Tom Lewis, the graduate student who wouldn't go away. I was certainly not his first graduate student and I don't believe I was his last, but I was certainly one of his longest. It was Ralph's patience and kind heart that got me through graduate school.

As I struggled and struggled to come up with my topic for my Master's thesis, in desperation, Ralph tried to get me to work on the taxonomy of freshwater gobies from Panama by looking at differences in their teeth! That was what I needed. The thought of working on the teeth of gobies, teeth so small that you had to use a scanning electron microscope to see them, so terrified me that I immediately settled to working on several off-shore species of searobins. For my dissertation, again after an agonizingly long period of time, I picked a topic that Ralph felt was somewhat out of his area of expertise. But he stuck with me and was a tremendous help both in the research and writing, man could he take a blue pen to your manuscript, and more importantly he helped me settle on a committee that would assist me greatly. Ralph demonstrated a fierce loyalty to his graduate students. He stood beside me and may have even saved my career at one point when Hal Beecher and I had the unfortunate experience of destroying two outboard motors in a two-week period. Others felt we had been careless, and the Department Chair called us in to account for our actions. Ralph went with us and I believe it was his unequivocal support that got Hal and I through this uncomfortable event.

During my many, many, many years as a graduate student under Ralph I came to know him as a warm, caring teacher and mentor. His field trips to West Florida, Alligator Point and Panama City were legendary. The fish populations in these areas are only now beginning to recover from the zealous collecting of his ichthyology students. His comparative anatomy class was the introduction to anatomy for many a future MD, or the catalyst for a new career direction for others. Outside of the classroom we experienced many adventures as well as misadventures in the field while collecting and cataloguing fish in the Apalachicola National Forest and in the Kissimmee River basin. I have seen Ralph walk on water! Although I must give a large part of the credit for his feat to the alligator we managed to infuriate with our seine net. I learned, at the same time, how hard it is to climb and balance in mid air on the long thin pole that was attached to that seine net.

I always had the impression that, although very capable, Ralph was somewhat of a reluctant researcher. His true passion was teaching and working with students, both graduate and undergraduate. It is in this area that he most influenced me. I have spent more than 25 years in education, in large part, because of Ralph. His style of teaching, the animation, the excitement, the attention to detail and research, that was the hallmark of his classes is what I remember and strive to emulate every time I step in front of a class. Through his many graduate students, myself included, Ralph continues to teach and inspire new students. This is the legacy of a great teacher.

Schuck Responds to Recruitment Committee Report – What's in a name?

To: AIFRB Editor
From: Howard A. Schuck

The following responds to *Briefs* of Sept./Oct. 2003 which asks for comments on the Role of AIFRB and also ideas as to attracting new members.

Although as a disciple of Will Thompson I had discussions with him, I have no insight as to his rationale for defining the role of the new institution or for selecting its title "American Institute of Fishery Research Biologists."

I am not a grammarian, or usually a commentator on how leaders organize or administer the organizations I belong to. But selecting a title for my forthcoming book has forced me to examine the meaning of some important words. As a member of AIFRB, I looked to its title for ideas. Merely changing an organization's title can lead to and imply a change in role and can also define what types of people are appropriate for membership. The three words of AIFRB (American, institute, and fishery) seem highly appropriate. But the last two words might be considered for change.

One alternative would be to end the title at the word "research" (dropping the term biologists).

A result would be diminution of the perception (which seems implied by the present title) that most or all members are biologists. I doubt that this is true. Dropping the misnomer might make some fishery professionals doing research feel that they need not be a biologist in order to join and participate in the Institute.

The new title could become "American Institute of Fishery Research", or AIFR.

Pros and cons exist, of course, for any new idea and there are also pros and cons for leaving any situation unchanged. I personally am too far removed from contemporary fisheries activities to be qualified to judge whether this change in orientation would benefit our organization enough to warrant the disruption necessary to make it happen.

Thus I am merely suggesting an idea that perhaps could be evaluated by those more affected.

Howard A. Schuck

Recruitment Committee Chairs Gil Radonski and Marty Golden would appreciate comments from other members. –Ed.

Aron, Daniel Find EDF "Good Fish" List Fishy

Louis Daniel wrote:

We hold the key to setting the record straight.

I received the Nov.-Dec. 2003 AIFRB newsletter and was disappointed to see the article from Environmental Defense "You hold the key to a healthy ocean." For a sporting or nature magazine to publish this information is understandable, not a newsletter of professional fishery biologists. The article is misleading and continues to misrepresent fact. I was particularly surprised to see an un-cited reference to the Myers and Worm article that has been heavily criticized by our colleagues as flawed. Yet the statement that "commercial fishing has wiped out an estimated 90% of the large predatory fish" lives on in our pages as fact?

The assumption made when reading this article is that Best Choice seafood are those species that are farmed responsibly (how is this defined?) or well managed, while the Worst Choices presumably are not. I disagree with some of the species on the Best Choices list, as several are either not being managed at all or harvest practices result in significant habitat damage. I take great exception, however, to several of the Worst Choices as a fishery biologist for the state of North Carolina and as Chair of the South Atlantic Fishery management Council's Snapper-Grouper committee. Many of the species on the Worst Choice list are well managed and many are either recovering or recovered. For example, the Snapper-Grouper fishery in the south Atlantic is well managed through limited entry, spawning season closures, size limits, bag limits, trip limits, etc. In addition, gear types that have been shown to result in high levels of bycatch or habitat destruction (e.g., fish traps, entanglement nets, and fish trawls) have been prohibited in our Snapper-Grouper Fishery Management Plan amendments for a decade. Few of the snapper and none of the grouper species in the south Atlantic have undergone a peer-reviewed assessment. Based on the best available data, however, the shallow water grouper complex in the south Atlantic is not considered overfished or undergoing overfishing and independent survey data indicate upwards trends in abundance and size. What justification exists for a blanket listing of snapper and grouper on this list? And how about tilefish, shark, and skate? What species? While there are some species (e.g., golden tilefish, dusky shark, barndoor skate) that may indeed be overfished in many locations, we have no assessments on most of these grouped species and have no clue as to their current status.

These lists unjustifiably affect an already ailing fishing industry that receives enough negative press as it is and the questions raised above should be answered before being published as fact in a professional newsletter whose mission is to promote sound fisheries science.

Ed. – Bill Aron, in a briefer statement, concurred with Louis. I explained to Bill that as I perceive the modern arena of fishery management, I see major environmental groups, because of their political acumen and huge memberships, as likely to influence fishery issues as much or more than science. Thus it is important for fishery professionals to be aware of the efforts and "thinking" of environmental groups. The EDF list was published in Briefs with full attribution as to source so that AIFRB members, my audience, could make their own decisions as to the legitimacy of the document. Mere publication of material in our non-peer reviewed newsletter hardly constitutes a stamp of approval by fishery science. I will conclude by stating that Louis Daniel's portrayal of the state of the snapper-grouper (actually about 70 species of about 10 families) resource would be regarded by many as overly rosy.

Recent or Upcoming Meetings of Note

55th Annual Meeting

American Institute of Biological Sciences

March 16-18, 2004

Westin Grand Hotel, Washington, D.C.

Invasive Species: The Search For Solutions

6th International Congress on the Biology of Fish

This meeting will be held August 1-5, 2004 in Manaus, Brazil. Titles and a short abstract should have been submitted by March 10, 2004. Take advantage of this once-in-a-lifetime opportunity to see the heart of the Amazon and catch up on the latest advances in fish biology. Complete travel packages from the USA start at less than $1000 U.S. for airfare, hotel, and all meals. Student travel grants are also available. All the details can be found on the Congress web site at: www.fishbiologycongress.com.br

Don MacKinlay
Chair, Fish Biology Congress
C/o Habitat & Enhancement Branch
Fisheries & Oceans Canada
Suite 200 – 401 Burrard Street
Vancouver, BC V6C 3S4 Canada
(604) 666-3520; Fax (604) 666-0417
mackinlayd@pac.dfo-mpo.gc.ca

EPA Money Available for Florida Keys National Marine Sanctuary

Available: "Announcement of Opportunity for Federal Funding" associated with the Water Quality Protection Program (WQPP) for the Florida Keys National Marine Sanctuary. The announcement describes the funding opportunities that the U.S. Environmental Protection Agency (EPA), Region 4 is offering to continue the long-term status and trends monitoring projects (water quality, coral reef, and seagrass), data management program, and special studies program established by Region 4.

The Florida Keys National Marine Sanctuary was created with the signing of Public Law 101-605, The Florida Keys National Marine Sanctuary and Protection Act of 1990. The 1990 Act directed EPA and the State of Florida, in consultation with the National Oceanic and Atmospheric Administration, to develop a WQPP for the Sanctuary. The National Marine Sanctuaries Program Amendments Act of 1992 requires that EPA and the State of Florida implement the WQPP. In addition, the monitoring projects and special studies included in the announcement support EPA's 2003 Strategic Plan, Goal 4: "Healthy Communities and Ecosystems – Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and

comprehensive approaches and partnerships."

Funds for the monitoring projects and data management are anticipated to be about $1,090,000 for FY 2005 activities. Funds for special studies are anticipated to be about $200,000 for FY 2005 through FY 2006. All federal funds will be awarded under the authority of Section 104(b)(3) of the Clean Water Act, which authorizes federal assistance agreements for conducting or promoting the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys and studies relating to the causes, effects, extent, prevention, reduction, and elimination of pollution. Final decisions on the amount of each award will be dependent on sufficient funding in EPA's annual appropriations and the amount of funds made available to the Region 4 South Florida Geographic Initiative and the WQPP.

Federal assistance agreements for the monitoring and data management projects will be awarded for two years, FY 2005 and FY 2006, with the project and budget periods beginning on October 1, 2004 and ending on September 30, 2006. Federal assistance agreements for the special studies projects will be awarded for FY 2005 with the project and budget periods beginning on October 1, 2004. However, special studies may cover one or two years and therefore, the project and budget periods may end on September 30, 2005, or September 30, 2006.

If you have questions or require additional information, please contact Mr. Fred McManus at (404) 562-9385, email at mcmanus.fred@epa.gov; or Dr. Bill Kruczynski at (305) 743-0537/(850) 934-9298, email at kruczynski.bill@epa.gov. The subject announcement and associated attachments have been posted on the Region 4 Website at www.epa.gov/region4/water/nep/nepindex.html.

Ed.- unfortunately this announcement arrived too late for our Nov.-Dec. issue. Deadline for preproposals was February 25, 2004.

New Tournament Records set during 67th annual Silver Sailfish Derby

January 8-10, 2004

West Palm Beach Fishing Club, West Palm Beach, FL

1. Best first day ever of 3-Day Derby – 155 sailfish releases
2. Best second day of 3-Day Derby – 373 sailfish releases
3. Best single day Derby total ever (Day #2) – 373 sailfish releases
4. Best 3-Day Derby total ever – 636 sailfish releases
5. Best single day total posted by one boat in Derby – *Cookie* with 30 sails Day #2
6. Best tournament total by a Derby boat ever – *Get Lit* with 45 sailfish releases
7. Most individual sailfish releases in 3-Day Derby – Peter Miller of Miami with 26 aboard *Get Lit.*
8. Most ever boats to score double digits in 3-Day Derby – 28 boats caught 10 or more sails during this year's Derby (just under ½ of the tournament fleet)
9. Most ever individuals to catch at least one sailfish during Derby – 177 anglers
10. Best catch/per boat day average for 3-Day Derby – 3.6 sails per boat day (historical tournament average is 1.5
11. Best ever single day catch/per boat day average for entire Derby fleet – Day #2 with an incredible 6.3 sails per boat (59 boats fished Day #2)
12. Most ever sailfish released on circle hooks in any tournament held in United States – 636 sailfish releases all on non-offset circle hooks (Tournament approved hooks were: Eagle Claw Laser Sharp L2004EL and Penn International Billfish hook P170)
13. Could be the most ever Atlantic sailfish releases posted by any 3-Day tournament anywhere, anytime (according to Dr. Eric Prince @ NMFS Miami)

Submitted by: John Jolley

White Marlin I:

Lawsuit filed to Protect Atlantic White Marlin from Longline Fishing

January 14, 2004

Popular sport fish threatened with extinction due to agency mismanagement

Washington, D.C. – Two environmental organizations filed suit in Federal District Court today seeking to protect the Atlantic white marlin under the Endangered Species Act (ESA). The suit, filed by the Center for Biological Diversity and Turtle Island Restoration Network was brought against the National Marine Fisheries Service (NMFS), an agency within the Department of Commerce charged with managing fisheries and protecting marine species under the ESA. The lawsuit seeks to overturn a previous determination by NMFS that protecting the white marlin under the ESA was "not warranted." The agency reached this conclusion despite the findings of its own scientists that current harvest levels are unsustainable and that, even under the most optimistic management scenarios, the species would continue to decline to dangerously low levels. "In rejecting ESA listing for the white marlin, NMFS ignored the science and it ignored the law," said Brendan Cummings, an attorney with the Center for Biological Diversity. "We're confident the courts will overturn this unlawful decision."

The primary threat to the white marlin is commercial fishing, which accounts for over 99% of the reported mortality for the species. Over 90% of this mortality is as bycatch in longline fisheries seeking protection of the white marlin under the ESA. The commercial fisheries that are the primary culprit in the decline of the white marlin are managed by NMFS and the International Commission of the Conservation of Atlantic Tuna (ICCAT). "Longline fishing is not just bad for white marlin, but it is devastating marine biodiversity – wiping out endangered sea turtles, sea birds and marine mammals, all of which are unnecessarily killed by this destructive fishing gear," said Todd Steiner, Executive Director of the Turtle Island Restoration Network.

According to scientists advising ICCAT, white marlin have been reduced to 6% of their pre-exploitation levels. The species has declined consistently at about 3% each year since the mid-1980s. While the species is impacted by numerous countries' fishing fleets, because primary spawning and feeing habitats are in U.S. waters, restrictions on longline fishing in these marlin "hot spots" would go a long way towards protecting the species and reversing its decline. "We may not be able to save the South Atlantic white marlin (which would require international agreement), but we can save the North Atlantic population since it spends much of its adult life in U.S. waters" said Mr. Chambers. "Doing so will also help restore healthy populations of North Atlantic blue marlin, swordfish and sailfish since they use the same 'hot spots' for spawning and feeding."

"NMFS has the authority and the obligation to proactively close important marlin spawning and feeding grounds to longline fishing," said Mr. Cummings. "If NMFS fails to do so, the species will continue to decline and listing under the ESA will be unavoidable."

A copy of the original petition to list the white marlin under the ESA, as well as additional information of the status of the species can be found at www.BigMarineFish.com.

A copy of complaint filed today in Federal Court can be found at www.biologicaldiversity.org.

The organization filing suit are represented by attorneys Brendan Cummings of the Center for Biological Diversity and Jay Tutchton of the Environmental Law Clinic at the University of Denver, College of Law.

White Marlin II: A Local View

White marlin may land on federal endangered species list

Distinction could affect blue marlin fishing in state

By Patricia Smith, Freedom ENC

Morehead City, NC – Should a judge rule that white marlin must be put on the federal endangered species list, it could affect recreational blue marlin fishing in North Carolina.

But what might happen is still so obscure and likely so far down the road that officials with the Big Rock Blue Marlin Tournament said they will only monitor the situation, for now. "If it looks like it may become a reality then we will come up with a plan," said Carol Lohr, a Big Rock board member. Currently, white marlin fall under a tournament tag-and-release competition. "I don't know of anyone that's killed one in years," Lohr said.

Two environmental groups, Colorado-based Center for Biological Diversity and California-based Turtle Island Restoration Network, filed suit in federal District Court Jan. 14 against the National Marine Fisheries Service seeking protection of the Atlantic white marlin under the Endangered Species Act. The organizations named the commercial longline fishery, which targets swordfish and tuna, as the primary culprit for the decline since white marlin is an incidental catch in these fisheries. The group claimed that sports fishing is not a serious threat to the species.

NMFS Director Bill Hogarth said that if a judge orders the agency to list white marlin as an endangered species it would have to look closely, not only at the longline fisheries, but at billfish tournaments, as well. The same gear and bait used to catch white marlin is also used to catch blue marlin, sailfish and tuna, he said.

North Carolina does support a small longline fishery, mainly out of Hatteras and Wanchese. In 2002, 54 fishermen on 36 vessels made 572 longline fishing trips that yielded a catch of 2.6 million pounds, according to the N.C. Division of Marine Fisheries.

From: Sun Journal, New Bern, NC, January 28, 2004

International Game Fishing Association (IGFA) View: Fish Conference Fails to Hook Sport Fishers

"Managing our Nations Fisheries Past, Present and Future," was the first of its kind conference sponsored by the eight U.S. Regional Fisheries Management Councils and NOAA Fisheries. The conference held in Washington, DC, in November unfortunately gave little time to the concerns of recreational anglers who represent the largest part of the U.S. fishing industry.

During the three-day event there were 11 separate sessions held with over 90 panelists. However, there was only one panelist representing the interests of sport fishers. The lone panelist from the sport fishing community was a last-minute addition due to pressure from a sport fishing lobbyist organization. Speakers included politicians, bureaucrats, representatives from the eight regional management councils, scientists, lawyers, representatives and consultants for the commercial fishing industry, university professors, and a few token environmentalists.

When given a chance to speak, the environmentalists brought a fresh breath of reality to an otherwise general message that fish stocks are in pretty good shape and getting better and fishery managers are doing a good job. Many outside of Washington strongly disagree with that message. Each of the eight regional councils made a presentation to the gathering of over 700 conference participants. A considerable amount of emphasis was given to the management of pollock and crab fisheries in the North Pacific. These two fisheries are managed by the North Pacific Fisheries Management Council, and were referred to several times as shining examples of successful fishery management, but attendees saw little relationship between pollock in Alaska and the depleted grouper, snapper, marlin, shark and other species in the regions to the south.

There was considerable discussion about keeping the already subsidized commercial industry profitable and how to get the message across to the public to eat more seafood. There was no mention of the impact on the recreational fishing industry of fewer fish to catch.

From: International Angler: 66(1) Jan.-Feb. 2004

Nature Strikes Back

Giant sperm whales have figured how to pluck cod from fishing lines

The Associated Press

Anchorage, Alaska – Sperm whales have the largest brain of any animal and some in the Gulf of Alaska are proving it at mealtimes: letting humans do all the work.

Researchers are now investigating what commercial fisherman have long noticed, that whales have learned to pluck sablefish off hooks attached to their longlines. "They somehow just pick them off like grapes," said fisherman Dick Curran, who has fished the Gulf's deep waters for decades. "I don't know how they do it."

No one knows how the whales have come to target sablefish, also called black cod, whose oily, rich flesh has become a lucrative product in Japanese markets. So a coalition of commercial fishermen and biologists has begun to investigate with about $200,000 from the North Pacific Research Board. "We don't want the fishermen to have an economic loss. Plus it's a biological loss, because we don't know how many sablefish are being taken," said whale specialist Jan Straley, a lead investigator in the project.

To harvest black cod, fishermen sink a 2-mile longline with baited hooks every 3 to 6 feet. Each end is anchored to the sea floor along the continental slope and buoyed at the surface. After an 8- to 12- hour "soak," fishermen haul the line, sometimes harvesting hundreds of sablefish in a single set. Over the past few decades, some of the gulf sperm whales apparently realized that fishermen were bringing this deep food source to the surface, and learned to remove 20- to 30-inch fish from hooks.

From: Sun Journal, New Bern, NC, February 4, 2004

Aleutian Islands Pollock Fishery

In a recent action by the U.S. Congress, the North Pacific Fishery Management Council was directed to apportion quota to the Aleut Corporation for a directed pollock fishery in the Aleutian Islands. The intent of the legislation is to provide for economic development in the community of Adak. The Council approved proceeding with analysis of a set of alternatives related to opening the Aleutian Islands to a pollock fishery. The Council's intent is that the quota for an AI pollock fishery will not result in exceeding the 2 million mt OY cap in the Behing Sea-Alevtian Islands groundfish fishery. The text of the motion is posted on the Council's website. NMFS and Council staff will prepare an EA/RIR/IRFA for initial review at the April meeting. At that time the Council intends to release the EA for public review and take final action in June, to allow for a potential 2005 fishery.

The Council also asked its Steller Sea Lion Mitigation Committee to review the current Steller sea lion protection measures in the Aleutian Islands region, and to informally discuss with NMFS the potential issues associated with an Aleutian Islands pollock fishery. As this directed fishery develops, the Congressional action requires 50 percent of the pollock harvest be by vessels less than 60 feet by the year 2012. The Council requested a review of how the geographic closures in the Adak area may affect small vessel operations. Staff contact is Bill Wilson.

From: North Pacific Fishery Management Council, News and Notes, February 2004

Salmon Season Update

The 2003 West Coast salmon fishery was again one of the best seasons in recent history for most sectors, following a very successful 2002 season. Commercial catches were up for all three states (CA, OR, WA) and only slightly lower for the Treaty Indian fishery. Recreational fisheries in Washington and Oregon exhibited greater effort than in 2002, and similar or greater effort than 2001. Chinook catch was down from 2002, but the coho catch was substantially higher. For California recreational fisheries, catch and effort were down in most areas, due primarily to a more northern and offshore distribution of chinook this year. The exception was the Fort Bragg area, where catches were good this year.

TOTALS THROUGH OCTOBER 15	Effort[a/]			Chinook Catch			Coho Catch		
	2003	2002	2001	2003	2002	2001	2003	2002	2001
TROLL									
Treaty Indian	281	286	540	34,674	35,997	25,406	8,392	8,145	36,769
Washington Non-Treaty	1,666	1,338	764	55,585	53,819	21,229	8,548	180	4,984
Oregon	10,889	9,483	10,125	290,692	231,720	259,449	6,439	1,500	9,367
California	9,640	17,000	13,900	459,970	386,700	193,100	0	0	0
Total Troll	22,476	28,107	25,329	840,921	708,236	499,184	23,379	9,825	51,120
RECREATIONAL									
Washington	124,139	95,200	126,400	34,260	57,821	22,974	139,453	74,134	168,062
Oregon	142,398	94,536	113,530	39,576	45,307	27,104	113,234	36,102	94,342
California	129,990	206,700	162,600	92,150	179,300	97,800	0	0	0
Total Recreational	396,527	396,436	402,530	165,986	282,428	147,878	252,687	110,236	262,404
PFMC Total	NA	NA	NA	1,006,907	990,664	647,062	276,066	120,061	313,524

a/ Treaty troll effort is reported as landings, other troll effort is days fished. Recreational effort is angler trips.

Bycatch Reduction Devices (BRDS) Required in the Shrimp Fishery of The Eastern Gulf of Mexico (Small Entity Compliance Guide)

The National Marine Fisheries Service (NOAA Fisheries) has published a final rule requiring the use of bycatch reduction devices (BRDs) in the Gulf of Mexico shrimp fishery east of 85°30'W. longitude (east of Cape San Blas, Florida). This requirement applies to the exclusive economic zone (EEZ), which includes all waters between 9 and 200 miles off the west coast of Florida.

Beginning February 9, 2004, a NOAA Fisheries certified BRD must be installed in each net rigged for fishing aboard vessels trawling for shrimp in the eastern Gulf of Mexico EEZ. Try nets with a headrope length of 16 feet or less are exempt from this requirement.

A shrimp trawler fishing for royal red shrimp is exempt from the BRD requirement, as are vessels using rigid-frame roller trawls that are 16 feet or less in length.

This requirement would complement existing federal regulations requiring the use of BRDs in the western Gulf of Mexico EEZ (west of Cape San Blas, Florida), as well as Florida regulations that require the use of BRDs in their territorial waters. This compatibility of regulations throughout the Gulf of Mexico will ease enforcement issues.

BRDs approved for use in the eastern Gulf of Mexico EEZ include the "Fisheye," "Gulf Fisheye," "Jones-Davis," "Expanded Mesh" and "Extended Funnel." The "Extended Funnel" BRD is certified for use in Florida territorial waters, along with the "Florida Finfish Excluder" (equivalent to the NOAA Fisheries certified "Gulf Fisheye").

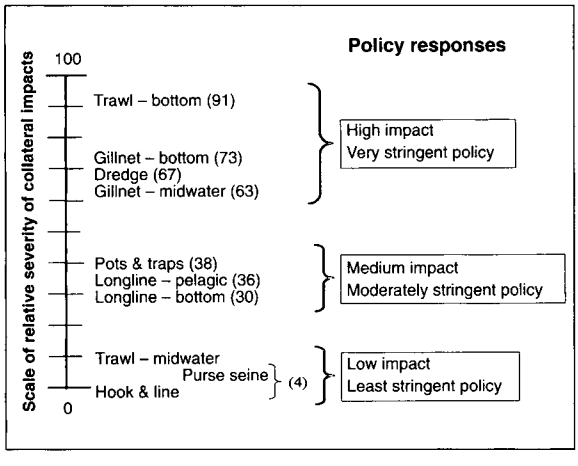
From: Gulf Fishery News, Jan.-Feb. 2004

Collateral Damage of Fishing Gear

Figure 6: Scale of relative severity of collateral impacts of ten fishing gears, and possibly policy responses. (Based on responses of fishers, scientists, and managers)

From: Shifting gears: Assessing collateral impacts of fishing methods in U.S. waters.
Chuenpagdee, R.; L. Morgan, S. Maxwell, E. Norse and D. Pauly. Frontiers in ecology and the environment 2003: 1(10) 517-524

Of course, it all depends on where the fishing occurs. Heavy sinkers on the "zero impact" hook and line hear, when dragged through the extremely fragile and slow growing Oculina coral colonies of the South Atlantic region are, in aggregate, devastating. –Ed.



Benson seeks specification

of AIFRB Response to growing public involvement in fishery issues

Norm Benson wrote asking if the Institute has a planned response to the growing interest of the press and the public in general in fishery problems, given that the prestigious Wall Street Journal (among many press organizations) as well as National Public Radio and even commercial television news now regularly feature segments on fisheries. Norm has a good point. Would any of our Officers, Directors, or Members prepare for *Briefs* a document suggesting the best means for the Institute to inject its expertise and rationality into the public debate? —*Ed.*

District Directors

Alaska, Northern
Joseph F. Margraf, Jr.
University of Alaska
P.O. Box 757020
Fairbanks, AK 99775-7020
ffjfml@uaf.edu

Alaska, Southeast
Bruce Wing
P.O. Box 210265
Auke Bay, AK 99821-0265
bruce.wing@noaa.gov

Arizona - New Mexico
G. Morris Southward
Statistics and Res. Inst.
New Mexico State University
Box 30003 Dept. 3130
Las Cruces, New Mexico 88003-8003
southward@nmsu.edu

California, Northern
Diana Watters
California Dept. of Fish and Game
350 Harbor Blvd.
Belmont, CA 94002-4018

California, Southern
Raymond R. Wilson
CSULB Biol Sci
1250 N. Bellflower Blvd.
Long Beach, CA 90840
rwilson1@csulb.edu

Capital
Frank M. Panek
National Fish Health Research Laboratory
1705 Leetown Rd.
Kearneysville, WV 25430

Carolinas
Robert L. Dixon
NOAA, 101 Pivers Island Road
Beaufort, NC 28516
robert.dixon@noaa.gov

Florida
Thomas W. Schmidt
USDI Nat'l. Park Service
Everglades Nat'l. Pk., S. Fla. Res. Ctr.
P.O. Box 279
40001 State Rd. 9336
Homestead, FL 33014
tom_schmidt@nps.gov

Great Lakes, South Central
Dora R. Passino-Reader
National Fish. Center
1451 Green Road
Ann Arbor, MI 48105-2897
dora_reader@usgs.gov

Gulf of Mexico, Northeast
Vacant

Keystone
Joseph W. Rachlin
Dean of Nat. & Soc. Sci.
Lehman College of CUNY
250 Bedford Pk. Blvd. W.
Bronx, NY 10468-5189
rachlin@alpha.lehman.cuny.edu

New England
Kevin D. Friedland
Director, UMass/NOAA CMER Program
Blaisdell House
University of Massachusetts
Amherst, MA 01003-0040
friedlandk@forwild.umass.edu

Oregon-SW Washington
Vacant

Texas
Lance Robinson
Texas Parks and Wildlife Dept.
Seabrook Marine Lab
Seabrook, TX 77856

Washington, NW
Bruce S. Miller
School of Aqu. & Fishery Sci.
University of Washington
Box 355020
Seattle, WA 98195
bsm@u.washington.edu

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, feeshdr@starfishnet.com Subscription $30 a year to Institutions and Non-Members. Officers-Richard Schaefer, 6211 Madawaska Rd., Bethesda, MD 20816,dickschaef@aol.com - President; Barbara Warkentine, SUNY-Maritime College, Science Dept., 6 Pennyfield Ave., Fort Schuyler, Bronx, NY 10465-4198, synodus@aol.com - Secretary; Allen Shimada, NMFS, Office of Science and Technology, 1315 East West Highway, Silver Spring, MD 20910, allen.shimada@noaa.gov -Treasurer. ISSN-8755-0075

American Institute of Fishery Research Biologists

Promoting excellence in fishery science

. . . BRIEFS . . .

Website: www.iattc.org/aifrb/

VOL. 33, NO. 2 MARCH, APRIL 2004

Nominations Needed Now!

Outstanding Achievement Awards

Members have a responsibility for recognizing excellence. By providing nominations for the Outstanding Achievement Awards you enable the AIFRB to recognize individuals and organizations that are making outstanding contributions to our science. Two awards are given each year.

Individual Achievement Award for 2005: The Individual Achievement Award will be given to an individual who has made significant lifetime contributions to the advancement of fishery science. This is the highest award for achievement. Candidates will be rated on the following criteria: 1) significant publications, 2) exceptional service to the profession, 3) outstanding teaching or training of students, 4) important discoveries or inventions, and 5) significant contributions to the advancement of fishery science.

It is important that you address each of the criteria thoroughly in your nomination. The nominating letter should include name, address, telephone number and email address of nominee, a short resume of the nominee and a letter fully describing how the nominee meets the criteria above. Please include your name, address, telephone number and email address so we can contact you if additional information is needed.

Group Achievement Award for 2004: The Group Achievement Award will be given to an organization or a group with an outstanding record of scientific contribution to fishery science or fishery resource policy. It is the Institute's highest award for achievement and recognition of organizations that nurture excellence in fishery science. The organization will be rated on the following criteria: 1) sustained contribution of significant publications, 2) exceptional service to the fishery profession, 3) outstanding teaching or training of students, 4) important discoveries or inventions, and 5) significant contributions to the advancement of fishery science.

It is important that you address each of the criteria thoroughly in your nomination. The nominating letter should include name, address, telephone number and email address of the group leader, a short resume of the nominee and a letter fully describing how the group or organization meets the criteria above. Please include your name, address, telephone number and email address so we can contact you if additional information is needed. Also, please include a list of all the group nominators along with a short paragraph addressing how each nominator contributed to the Group Achievement Award nomination.

Deadline: Nominations for these two awards are due by close of business June 25, 2004.

Fishery scientists whose names were submitted and selected as runner-ups last year will also be considered. Submit nominations to: Dr. Linda Jones, Northwest Fisheries Science Center, 2725 Montlake Boulevard East, Seattle, WA 98112-2097. For your information and help in considering nominees, attached are the lists of Individual Achievement Awards 1979-2004 and Group Outstanding Achievement Awards 1982-2003.

If you have any questions, please contact Linda Jones, Awards Committee, at Linda.Jones@noaa.gov or committee members Jack Helle at Jack.Helle@noaa.gov or Bill Taylor at Taylorw@msu.edu.

Previous Recipients: Individual Outstanding Achievement Award

1979 – Elbert H. Ahlstrom, 1980 – James E. Sykes, 1981 – F. Heward Bell, 1982 – Richard H. Stroud, 1983 – Kenneth D. Carlander, 1984 – David W. Schindler, 1985 – Peter Larkin, 1986 – William G. Gordon, 1987 – William F. Royce, 1988 – Reuben Lasker, 1991 – Robert L. Burgner, 1992 – William W. Fox, 1993 – Arthur D. Hasler, 1994 – William E. Ricker, 1995 – Raymond J.H. Beverton, 1996 – Reeve M. Bailey, 1997 – William G. Pearcy, 1998 – John H.S. Blaxter, 1999 – Saul B. Saila, 2000 – John R. Hunter, 2001 – Kenneth E. Wolf, 2002 – Fred Utter, 2003 – Howard Bern, 2004 – Brian Rothschild

Previous Recipients: Group Outstanding Achievement Award

1982 – Canadian Journal of Fisheries and Aquatic Sciences, 1983 – Great Lakes Sea Lamprey Control Program, 1984 – Harvesting Technology Division, NMFS, Pascagoula, MS, 1985 – Sport Fishing Institute, 1986 – International Pacific Halibut Commission, 1988 – Southwest Fisheries Center, NMFS, La Jolla, CA, 1992 – Cooperative Fish & Wildlife Research Units Center & Related Coop Units, 1997 – International North Pacific Fisheries Commission, 1998 – The Illinois Natural History Survey, 1999 – National Fish Health Research Laboratory, USGS, Kearneyville, WV, 2000 – International Pacific Halibut Commission, 2002 – The Great Lakes Fishery Commission, 2003 – Northwest Fisheries Science Center Ecotoxicology Research Team

The AIFRB is a 501(c)(3) tax-exempt nonprofit organization (EIN 61-6050711).

President-Elect Jones Chosen

A total of 662 ballots were mailed out to AIFRB Members, Fellows, and Emeritus. Of these 261 ballots were returned. This represents a response of 39.4%. The winner of the election for President-Elect of AIFRB is Linda Jones. Verification of ballot counts was conducted by Ms Linda Lalicata (Graduate Student). The ballots will be held for one year should there be any challenges to the counts.

Linda Jones will take office as President-Elect immediately upon announcement of these results and will assume the role of President at the end of the 2005 Board of Control Meeting. At this time Dick Schaefer will assume the role of Past-President.

The Institute should be honored to have had two very impressive candidates running for the President-Elect position. We are immensely grateful to Doug Vaughan for his willingness to stand as a candidate for President-Elect. Dr. Jones is Deputy Science Director of the Northwest Fisheries Science Center, NOAA Fisheries (aka NMFS).

Carlander Endowment Completed

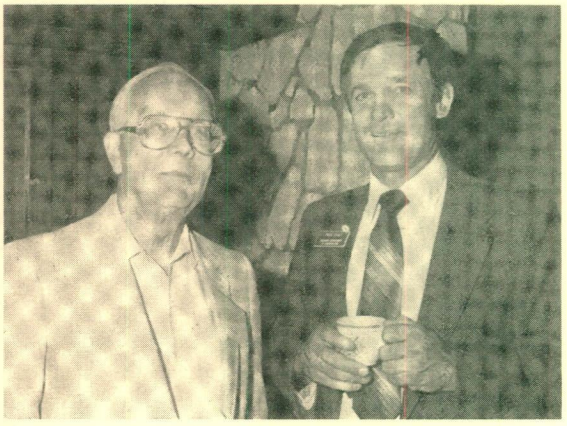
Thanks to the generous support of the former graduate students of Dr. Kenneth Dixon Carlander the Ken Carlander Graduate Scholarship Endowment has now been established. This new endowment will provide an annual scholarship award to a fisheries graduate student of at least $1000. The Department of Natural Resource Ecology and Management of Iowa State University is extremely grateful to those former students that answered the call to help us realize endowment status. Ken devoted his life to his students and the university was pleased to have the support needed to continue his tradition of giving for future generations of graduate students. The endowment principle now stands at $29, 025. We would welcome any further contributions for those that want to help build the endowment. Make your check out to the Carlander Scholarship Endowment and send it to the department address: Department of Natural Resource Ecology and Management, Iowa State University, 253 Bessey Hall, Ames, IA, 5011-1021.

From: Dept. of Natural Resource Ecology and Management, Iowa State University, Alumni Newsletter, Winter 2004

Carlander II: Carlander-Vasey Undergraduate Fisheries Scholarship Established

Fred Vasey, a student of Ken Carlander has provided the resources needed to create a $500 annual scholarship for undergraduate students pursuing a degree in fisheries at Iowa State Universtiy. The scholarship is need-based and is targeted to students in their junior year. Fred is very appreciative of the support, both professional and financial, that Dr. Carlander provided during the time he was a graduate student. Fred spent most of his career with the Missouri Department of Conservation and wanted to create a scholarship focused on developing the next generation of fisheries undergraduates that will move on to graduate studies or into professional management positions. The University and Dept. of Natural Resource Ecology and Management greatly appreciate Fred's interest in helping to insure the creation of a new generation of natural resource managers and scientists.

From: Dept. of Natural Resource Ecology and Management, Iowa State University, Alumni Newsletter, Winter 2004



Ken Carlander & Fred Vasey
Photo Circa 1985

Northern California District Chooses New Officers

The new Director for the Northern California District is Diana Watters of the California Department of Fish and Game. She will be assisted by Vice-Director Dan Howard, Secretary-Treasurer Michele Barlow and Membership Committee Chair Tom Keegan.

Northern California District Achieves Another MSG High

Crab on the menu; Trout on the agenda

The Northern California District met Thursday, March 18th at Ping's Mandarin Restaurant in San Rafael to listen to a talk presented by Kristy Deiner of Sonoma State University. Kristy's talk was entitled The Effect of Landscape Features on the Genetic Structure and Diversity of Steelhead and Rainbow Trout in the Russian River Watershed.

A social hour preceded the dinner. The following is a subset of the menu that was available at a cost of $15 per person: crab puff, pot stickers, won ton soup, prawns with honey pecan, dry sautéed green beans with chicken, and Mongolian beef.

Submitted by: Michele Barlow

Menzel Takes Permanent Post in Washington, DC

Dr. Bruce Menzel is the new Fish and Wildlife National Program Leader in the Natural Resources and Environment unit at the Cooperative State Research, Education and Extension Service, Washington, DC. He took early retirement from Iowa State University to take the new job. Bruce had been serving a one-year Intergovernmental Personnel Act assignment in the same position. He was a faculty member at Iowa State University for 33 years, including 17 years as the Chair of the Animal Ecology Department.

From: Dept. of Natural Resource Ecology and Management, Iowa State University, Alumni Newsletter, Winter 2004

Dombeck Honored

AIFRB Member and former Director of the U.S. Forest Service Mike Dombeck, PhD was recently recognized as the 2003 Recipient of the Renewable Natural Resource Foundation Award for Sustained Achievement. Dombeck's achievements include a lifelong commitment to conservation. He is recognized for his partnerships between government and conservation organizations.

From: Dept. of Natural Resource Ecology and Management, Iowa State University, Alumni Newsletter, Winter 2004

Recent Losses

Dr. E.J. Crossman – December 21, 2003
You can contact Mrs. Margaret Crossman at Royal Ontario Museum, Department Ichthyology, 100 Queens Park, Toronto, ONT Canada, M5S 2C6

Joseph H. Rose – December 2, 2003
908 Meadowview Drive, Nampa, ID, 83651

Member Missing:

John J. Geibel

Anyone know of Mr. Geibel's Whereabouts? Last address known as Calf Fish Game, 350 Harbor Blvd., Belmont, CA, 94002. Please contact Barbara Warkentine, Alan Shimada, or Gene Huntsman.

Members at Work: Chasing a Fish-Farming Dream

Brooklyn College Professor Sees a City of Tilapia Tanks

By Corey Kilgannon

It takes a tough borough to breed a tender fish, AIFRB Fellow Dr. Martin P. Schreibman likes to say. And the roughly 3,000 Brooklyn-bred tilapia Dr. Schreibman grows in tanks in his aquaculture lab grow up hardy and with the requisite dose of attitude. To prove it, Dr. Schreibman, a biology professor at Brooklyn College, grabbed a handful of food pellets the other day and tossed them into a tilapia tank. The plump, purple fish gulped at the food in a frenzy that made the tank look like a Jacuzzi. But once on the dinner plate, they are sweet and flaky, said Dr. Schreibman, a Brooklyn native himself. "Two things Brooklyn water is good for," he said, reciting another of his catchphrases. "Making bagels and growing fish."

Dr. Schreibman, 68, has been preaching the virtues of tilapia for years – and growing them, too – in the lab he founded and runs as part of the Aquatic Research and Environmental Assessment Center on the college's campus in Flatbush. And now that tilapia have become popular in restaurants and seafood stores, Dr. Schreibman's vision of widespread tilapia-farming in New York City may finally have a chance of becoming a reality. "A few years ago, you mention tilapia and people's eyes glaze over," he said. "Now everyone's talking about it."

In addition to appearing on menus, the fish can cure a variety of urban ills, according to Dr. Schreibman. Promoting urban aquaculture in New York City and setting up fish farms can help feed the homeless, ease environmental problems and provide jobs, he said. He maintains that setting up a fish farm is simpler, less expensive and more profitable than one may think. "You could set a tank up in your basement and grow enough fish to pay your rent," he said, noting that most tilapia are imported from South America and Asia. "Why import fish from countries thousands of miles away when we can grow it all in-house?"

Inside the lab, in a building called Ingersoll Hall Extension, are 14 large tanks, with capacities ranging from 300 to 900 gallons. Some hold other kinds of fish, like platy and swordtails, used for biomedical research, but most contain tilapia, a hardy and fast-growing breed popular with fish farmers. Water conditions are controlled carefully, with extensive filtration systems and computerized climate and chemical controls.

Dr. Schreibman said that tilapia farming could become a thriving business in New York State, and that he hoped consumers would turn to the fish because of a recent study saying that farm-raised salmon had more contaminants than wild salmon. He would like tilapia farming to become associated with New York the way catfish farming is with Louisiana and salmon farming is with Maine.

Although he acknowledges that his plan is a pipe dream, it is gaining momentum. A "Brooklyn Tilapia" T-shirt is in the works. With help from Cornell University biologists, industry leaders, and local environmentalists and politicians, Dr. Schreibman is drafting a study promoting Brooklyn aquaculture to submit to city, state and federal officials. The plan calls for fish farms to be created at Brooklyn sites like Floyd Bennett Field, Coney Island, Red Hook and the Brooklyn Navy Yard, and from these places the tilapia could easily be distributed locally. "If we can just train the fish to swim to Fulton Street, we'd be all set," Dr. Schreibman said, "but we don't have a gene for that yet. But at least you could get fish on the table that was swimming a couple of hours earlier."

Fish farming is not new in and around New York City. Until a few years ago, residents in Morris Park, the Bronx, bought tilapia from a small fish farm in the basement of a commercial building, and a small tilapia farm is tended by inmates in the Bayside State Prison in Leesburg, NJ. But Dr. Schreibman has grander dreams. "I envision fish farms all over the city," he said. "The city is losing out. We have to wake up and see this could be an economic boon. It could create jobs."

Fish farming also provides environmental benefits, he said, since species are less likely to be over-fished in the wild. The farms could be used like culinary or hotel management schools, to train students to be fish farmers, he said, and to grow other types of fish for bait shops, pet shops and medical research. Farms could be built on a smaller scale, in basements of apartment or office buildings, he said.

But not everyone shares Dr. Schreibman's vision of tilapia utopia. "Growing our own fish in the city would be a wonderful thing, but is it economically viable, given the city's competitive disadvantage?" asked Roger Tollefsen, president of the New York Seafood Council, an industry group based on Long Island. "You have higher labor and utility costs than most other areas of the country. Tilapia can be farmed anywhere, and transportation has come down in cost. Why produce it in our own backyard if transportation advances can bring a better product to our front door for cheaper? "Rather than give up on the ocean," Mr. Tollefsen continued, "we should invest in cleaning it up, especially when the only thing we eat today that's not farmed is wild-caught fish." Dr. Schreibman said fish farming would complement, not supplant, the commercial fishing industry.

Before he settled on tilapia, Dr. Schreibman tried growing other types of fish. He experimented with flounder, but had a hard time working with saltwater tanks, and pike grew too slowly. Tilapia take about six months to reach market size. Tilapia, a freshwater fish also known as St. Peter's fish, was harvested from the Sea of Galilee and is thought to have been served at the Last Supper. It is the sixth most popular fish in the United States, after tuna, salmon, pollock, catfish and cod, said Kevin Fitzsimmons, secretary-treasurer of the American Tilapia Association. About 412 million pounds of tilapia were consumed last year in this

country, up from 340 million in 2002, he said, and about 20 million pounds were raised in domestic fish farms.

Since the college is prohibited from selling the fish, Dr. Schreibman donates hundreds of pounds at a time to local homeless shelters. He also uses it to curry support for his tilapia dream, donating filets to political events and restaurant chefs, as well as to his students and colleagues and anyone who visits the lab.

Dr. Schreibman grew up in Brooklyn, fishing off the Canarsie piers. He lives near the ocean, in Belle Harbor, a Queens neighborhood in the Rockaways. A graduate of Brooklyn College, he received graduate degrees from New York University. He said he began working with fish because "I started with hamsters, but kept getting bit." Dr. Schreibman has helped Israel set up fish farms in the desert, and has experimented with growing fish with enlarged ovaries, for caviar production. He has also cultivated seaweed for sushi and helped put fish in space, sending 200 swordtails to the space shuttle Endeavour in 1998 to study the effects of weightlessness on the development of their reproductive systems. A neuroendocrinologist, he studies environmental damage to the marshland and wildlife in Jamaica Bay and grows horseshoe crabs in the lab from fertilized eggs. His favorite time of the year is the week in spring when the crabs crowd beaches to mate. "Have you ever seen them having sex?" he said, smiling. "It's incredible."

These days, very little of the fish eaten in New York city comes from the once-thriving fishing ports in the New York area, but if Dr. Schreibman has his way, New Yorkers will be liberated from the tyranny of imported seafood.

While in Cuba to lecture on benefits of a soy diet for farmed fish, Dr. Schreibman received an award, showing up to the formal ceremony in shorts and his "So Many Fish, So Little Time" T-shirt. "They asked me, 'Didn't you know you'd be on the podium?'" he recalled. "I said: 'What do I know? I'm from Brooklyn.'"

From: New York Times, March 22, 2004
Submitted by and thanks to: Joe Rachlin

Another "Bad Fish" List

Children, some women should limit their fish intake, government asserts

By Randolph E. Schmid
The Associated Press

Washington – Americans should eat their fish but be wary of it, too. Government guidelines issued warn that high levels of mercury in some fish can pose a hazard for children and for women who are pregnant or nursing. At the same time, fish represent an important part of a balanced diet, said Lester M. Crawford, Deputy Commissioner of the Food and Drug Administration.

Americans hear conflicting information about what they should eat, and they have pressed for straight forward guidance on fish. "This advice is uniform, simplified and useful," said Benjamin Grumbles, acting Assistant Administrator of the Environmental Protection Agency. Crawford listed the three-part guidelines for women and children as: 1) do not eat shark, swordfish, king mackerel or tilefish because they contain high levels of mercury, 2) eat up to 12 ounces – two average meals – per week of fish that are lower in mercury, such as shrimp, canned light tuna, salmon, pollock and catfish, 3) check local advisories to determine the safety of fish caught by family and friends. If no such advice is available limit such fish to one six-ounce portion a week and don't consume any other fish that week. Children should be served smaller portions than adults, the agencies said, but they did not offer any age-specific guidelines.

While the report praised the benefits of light tuna it said albacore tuna should be limited to one serving a week because these older fish can be higher in mercury than the young tuna that go into the light version. FDA scientist Dr. David Acheson said the method of preparing foods makes no difference in its mercury level. He also noted that processed fish such as fish sticks and fast-food sandwiches are usually made of pollock, which is low in mercury. Women who are pregnant, nursing or may become pregnant should limit their mercury exposure because it can affect the developing brain and nervous system of their children. Pollution from industry and other sources contaminates water and small fish that are then eaten by larger fish, concentrating the mercury that then may affect people who eat the fish.

Sen. Patrick Leahy, D-VT, criticized the report, saying that the administration is "only making mild gestures to a problem that demands strong action. The scientific evidence by now is clear and undeniable about the risk of mercury exposure to women and children." The Environmental Working Group, a consumer advocacy group, contended the guidelines favor the interests of the coal and seafood industries at the expense of children because they are not stringent enough. The Natural Resources Defense Council criticized the guidelines as not adequately warning parents of the danger of albacore tuna for children. It said the warnings are proof of the need to remove mercury from commerce. Rebecca Goldburg of Environmental Defense agreed, saying that previous EPA testing methods would have indicated that children should eat albacore tuna just once a month, not once a week.

People not singled out in the guidelines, such as men, should include fish in their diets because of its health benefits including being a good source of protein and heart-beneficial omega-3 compounds, said Crawford. Fish has become increasingly

popular in recent years because of these benefits. The American Heart Association recommends that people eat fish at least twice a week, even more often for those diagnosed with heart disease.

On the Net: Food and Drug Administration: http://www.fda.gov; Environmental Protection Agency: http://www.epa.gov; Environmental Defense: http://www.environmentaldefense.org; Natural Resources Defense Council: http://www.nrdc.org

From: Sun-Journal, New Bern, NC, March 20, 2004

2005 Federal Budget Cuts Funding for Chesapeake Bay-Related Programs

Congress stepped up spending for Chesapeake Bay-related activities when it approved funding for the current year in January, including more funds for oyster restoration and the National Park Service's Chesapeake Bay Gateways Network. But funding may be more problematic next year, as the Bush administration would sharply reduce spending for some Chesapeake activities in its $2.4 trillion 2005 budget, which was released in February.

While it's not unusual for an administration to propose less funding than Congress ultimately approves, the administration is seeking strict caps on most domestic spending programs as it seeks to rein in a staggering federal deficit expected to top $500 billion. Overall, it seeks to limit spending on those programs to 0.5 percent, less than the rate of inflation. If Congress abides by those caps, it could make it difficult to restore funding for the 2005 Fiscal Year, which begins Oct. 1, to the levels approved by Congress for this year.

Further, figures from the administration's Office of Management and Budget indicate that continued long-term cuts in those programs would be needed in the future to reduce the deficit. Although the current fiscal year began last October, Congress did not finalize its spending bills until January – just weeks before the President Bush released his 2005 budget proposals.

For the EPA's Bay Program Office, which supports the core efforts to coordinate the Chesapeake Bay cleanup effort, the president's budget would slightly increase spending, from the $20.77 million approved this year to $20.81 million in 2005. Next year's budget does not include $2 million that Congress had approved for the Small Watershed Grants Program, which provides funding for local restoration efforts.

But the administration did propose a one-year, $10 million competitive grants program to support innovative cleanup and restoration efforts within the watershed. It is a pilot program that would provide grants ranging from $300,000 to $1 million. EPA officials say the program will be rotated among various watersheds across the nation each year. "This selection of Chesapeake Bay for this pilot reflects the urgent need to protect the health of this national treasure that just happens to be in our front yard," said EPA Administrator Mike Leavitt.

At the same time, the administration calls for cutting the EPA's Clean Water State Revolving Loan Fund by $492 million from the $1.34 billion approved by Congress this year. Under the formula used to distribute funding, that would cost the Bay states nearly $50 million in money used to support wastewater treatment plant upgrades and other water quality improvement projects. The administration proposed a nearly identical cut last year, but funding was restored by Congress.

The office of U.S. Sen. Paul S. Sarbanes, D-MD, released a statement calling Bush's budget "simply a bust for the Chesapeake Bay." Last fall, a bipartisan group of 22 federal lawmakers from the Bay watershed sent Bush a letter asking him to commit $1 billion a year to help meet bay restoration goals.

The President requested $2 million in 2005 for the National Oceanic and Atmospheric Administration's Chesapeake Bay Office, which supports fish monitoring programs, Bay grass restoration, fisheries research and ecosystem management planning in the Bay. That was the same as the administration's proposal for this year, but less than the $3.5 million approved by Congress.

The administration did support $500,000 for NOAA's work on developing multi-species management programs for Bay fisheries, the same as was approved by Congress. The budget includes no funding for NOAA's Bay education program; (Congress approved $2.5 million for the current year), and it proposed $600,000 for next year's blue crab research; (Congress approved $2 million for this year).

While most of the administration's requests are in line with its original proposals from last year, some are actual cuts. For instance, the budget calls for eliminating funding for the National Park Service's Chesapeake Bay Gateways Network. For the current year, it proposed spending $798,000 for the program, and Congress approved $2.5 million – the most ever for the program.

It would also slash almost all Army Corps of Engineers oyster restoration money for the Bay, although it had supported the initiative in earlier years, and Congress had approved about $5 million for this year – the most ever.

In agriculture, the administration would increase spending for conservation, but not to the levels approved in the 2002 Farm Bill. Instead, some of the conservation funds are being routed to programs emphasizing food and agriculture safety to address concerns such as mad cow disease.

Farm Bill conservation programs are the largest single source of funding to support a variety of programs that help reduce runoff from agricultural lands.

From: Bay Journal, March 2004

The Ultimate Emeritus Status: How to recycle old fish biologists with a splash!

Eternal Reefs (888-423-7333, www.eternalreefs.com) in Atlanta, Georgia, mixes cremated human remains with pollutant-free concrete to make three-foot-high, bell-shaped artificial reefs. In three years the reefs, which are placed along the eastern seaboard, teem with coral, mussels, and seaweed. (Cremation lacks most, but not all, of the land-use, chemical, and resource-consumption problems of conventional burial, provided the body's not embalmed.)

From: On Earth, Winter 2004

Water Waste in Eastern Washington to Be Challenged

In Eastern Washington, the Twisp and Methow Rivers are home to threatened or endangered chinook salmon, bull trout, and steelhead trout. The Twisp River is also important for spring chinook salmon because it has the highest density of spawning nests remaining in the Methow Basin. According to Washington state water officials, the Methow Valley Irrigation District draws more water from these two rivers than it needs, wasting up to half by transporting it through unlined ditches. Low flows left in the rivers heat up to levels unhealthy for the salmon. The state of Washington has told the irrigation district to stop the waste and bring its water withdrawals in line with what it can efficiently use. The irrigation district has sued to challenge the state's authority to issue such an order.

Earthjustice attorney Amy Williams-Derry successfully convinced the court to allow Earthjustice to intervene in the case on behalf of the Okanogan Wilderness League. Earthjustice will argue the state has the authority not only to order an end to the water wasting practices, but that it also has a duty under state law to curtail that waste to the maximum extent possible. As a result, the rivers will provide better habitat for threatened and endangered salmon, bull trout, and steelhead.

From: In Brief, Spring 2004

Suit Challenges Pollution Levels in Lake Okeechobee

Suit Presses the Government for Stringent Pollution Limits

The 750-square-mile lakebed of Florida's Lake Okeechobee is covered with a two-foot layer of muck, resulting from phosphorous-laden runoff from surrounding dairy farms. The highly elevated phosphorus levels in Lake Okeechobee means that the lake may soon cross the threshold into hypereutrophication. This would result in increased algal blooms and massive fish kills, devastating to the Lake Okeechobee ecosystem.

Total maximum daily loads (TMDLs) of phosphorus for Lake Okeechobee and its tributaries were set as a result of Earthjustice litigation under the Clean Water Act. TMDLs are intended to reduce nutrient pollution down to naturally occurring levels. The settlement required the first TMDL to be set for the tributary basin of the lake that contributes the majority of the phosphorus-laden dairy farm runoff. However, instead of requiring a reduction to natural levels, the new TMDLs would allow discharges of almost 20 percent of the total phosphorus limit for the entire lake even though this basin contributes only five percent of lake inflow. In addition, the concentration of phosphorus that would be allowed to flow into the lake is four times the phosphorus concentration established for Lake Okeechobee. This new TMDL effectively insures that the TMDL for the entire lake will continue to be exceeded.

Because these proposed TMDLs fail to protect Lake Okeechobee, Earthjustice's David Guest and Monica Reimer have filed suit on behalf of the Environmental Confederation of Southwest Florida, Save Our Creeks, and Florida Wildlife Federation, to demand effective protection of Lake Okeechobee from further phosphorus contamination.

From: In Brief, Spring 2004

Tidegates Threaten Puget Sound Chinook

Irrigation District Exemption Sets Bad Precedent

In the Skagit Valley of northwestern Washington, adjacent to Puget Sound, farmers have constructed tidegates to keep salt water out of farmlands. The result has been the loss of large portions of the brackish water estuary needed by juvenile salmon in the spring to grow large enough to survive in the ocean. The tidegates are flaps that allow farm runoff to drain out into the salt water while blocking the saltwater from flowing into the rivers. But the gates also render unusable much of the historic estuary in the Skagit River delta that is important habitat for young chinook salmon. The Puget Sound chinook have declined to the point where they are now on the endangered species list. Their survival depends on more prime estuary habitat. Tribes dependent on local salmon since time immemorial have appealed to farmers for years to work with them to modify the gates to accommodate the needs of baby salmon, to no avail. So in September Earthjustice attorneys, representing the Swinomish Tribe, notified an irrigation district that it intends to sue if the tidegates are not made more hospitable to salmon.

From: In Brief, Spring 2004

Swordfish Fishery Plan Receives Waves of Support

At its 121st meeting in November, the Western Pacific Fishery Management Council unanimously approved a plan to re-establish Hawaii's swordfish industry with a model fishery that includes new measures to protect endangered sea turtles. Under the plan, Hawaii's longline fleet would be required to apply specific fishing technologies to decrease the accidental hooking of sea turtles. In addition, conservation measures would be implemented at beaches in the Western Pacific region where the highly migratory turtles have important nesting grounds.

Concern over the impacts of commercial fishing on endangered populations of sea turtles has led the National Marine Fisheries Service (NMFS) to keep Hawaii's swordfish fishery virtually closed since 2000. The new plan would re-open the fishery by allowing a yearly total of 2,120 days of fishing. This number constitutes approximately half of the annual fishing effort expended prior to the closure of the Hawaii-based swordfish fishery. The plan provides that all interested members of Hawaii's longline fleet would be eligible to receive an equal share of swordfish fishing days, which would be distributed by NMFS. No new limits would be applied to tuna longlining; however, a recent southern time/area closure affecting the tuna fishery would be removed.

NMFS is reviewing the new plan, and if it is approved, regulations to implement this new management regime are expected to go into effect on April 1, 2004. "The combination of conservation and technological measures makes this plan very innovative," said Kitty Simonds, the Council's Executive Director. "It is our expectation that international fleets will note its practicality and effectiveness and adopt similar measures. When this happens, we will have in place a comprehensive global plan, which will be a major boost to sea turtle recovery."

Hawaii's longliners make up 3 percent of the entire longline fleet in the Pacific Ocean. Throughout the three year swordfish fishery ban, many Hawaii longliners expressed concern that the closure did nothing to address interactions between turtles and foreign vessels, whose swordfish catch is often exported to consumers throughout the United States.

"Hawaii's longliners have a long record of working with the Council to develop mitigation measures that are effective in reducing harm to marine life," said Council member and Hawaii Longline Association (HLA) president Sean Martin, who noted that in the 1980's Hawaii's longliners were in the forefront of the effort to have Pacific tuna stocks protected under the Magnuson-Stevens Act. "In regards to turtles, we are now in a very good position to model practices that will quickly be exported to other nations where more needs to be done to protect endangered species," said Martin.

The Council's efforts to craft a plan that would become the foundation of a new model swordfish fishery began late last year after a federal judge's ruling invalidated NMFS' biological opinion concerning the status and management of sea turtles. The ruling also eliminated fishery regulations based on the opinion, including the ban on swordfishing. It also invalidated the biological opinion's "incidental take statement," which exempts vessel operators who accidentally hook or entangle sea turtles from legal prosecution. NMFS, the HLA and Earthjustice promptly requested a temporary reinstatement of these regulations out of concern that liability for a single incidental turtle catch could lead to the shutdown of the entire longline industry.

The court granted these requests in October, 2003, and also suggested that the Council develop new long-term fishery rules to be implemented by April 1, 2004, when existing regulations will be vacated.

In response, the Council convened a committee of scientists, fishery managers and representatives of industry and environmental organizations to review available information on how to best prevent injury to sea turtles. The Council reviewed the various proposals received from the committee and chose for its final plan one that would require swordfish longliners to use

circle hooks, mackerel-type bait and de-hookers. These new gear requirements have worked in the Atlantic swordfish fishery, where NMFS research has shown they substantially reduce turtle interactions.

"The research clearly indicates that the use of certain gear minimizes the impact on turtles," noted Paul Dalzell, Council Senior Scientist. Citing NMFS research, Dalzell affirmed that gear restrictions in the Atlantic reduced the hooking of loggerhead sea turtles by 92 percent and hooking of leatherback sea turtles by 67 percent.

Dalzell said the new gear rules will give Hawaii longliners the opportunity to repeat the success they had with gear modifications that notably minimized their bycatch of seabirds. Seabird mortality was greatly reduced and the potential for a fishery closure averted, when the longline fishery voluntarily collaborated with the Council to test seabird-safe methods of fishing, including the use of towed deterrents and blue-dyed bait, Dalzell said. This resulted in conservation benefits to the birds and operational benefits to the fishermen, added Dalzell. "We have the science and technology that enables us to strike a balance between the health of ocean resources and the viability of an important industry," he said.

As part of its plan, the Council undertook five conservation measures, which focus on protection of turtle nesting beaches and foraging habitats in the Pacific region. The Council and NMFS have now developed partnerships with local non-governmental organizations to halt the harvesting of turtle eggs and end or reduce threats from natural and man-made causes. "Maintaining these types of measures is a key component of the new plan," Kitty Simonds observed. "If we don't protect turtles in all life cycles, no amount of protection in the pelagic or coastal phase is going to make a difference."

Vessel operators in the re-established swordfish fishery will face several other new restrictions, including a "hard limit" for loggerhead and leatherback sea turtles. This means the swordfish fishery will shut down for the remainder of the calendar year if vessel interactions with these species exceed the limit set in the new "incidental take statement" due to be issued by NMFS. Vessel operators will also be required to provide added protection for seabirds by using night-setting when targeting swordfish in waters above 23°N.

Hawaii's swordfish fishery was once a highly lucrative enterprise. The shutdown of the industry prompted many vessels to become licensed in other regions which have fewer restrictions or to shift their focus to tuna. It is estimated the closure also led to the loss of 500 Hawaii jobs.

Supporters of the Council's new plan say it marks the end of a three year period which has brought hardship to fishery participants, and prevented fishermen from adopting practices that might educate other nations in effective fishery management. "Now we can go forward and show the world a solution that is practical for fishermen and safe for turtles," said Council Chair Roy Morioka.

For more information, contact Paul Dalzell at 808-522-6042.

From: Pacific Island Fishery News, Winter 2004

Folks: I try very much to pursue geographic equity material in Briefs, but, lacking material, I do not cover New England well. Remember I will furnish self addressed posted envelopes (or reimburse postage) to those who will tear out appropriate news articles from newspapers, alumni newsletters, magazines etc. and send them to me. Is there a New Englander that will help? Editor.

Science Under Fire?

By Jennifer Hattam

Government scientists, beware: If you can't tell the Bush administration what it wants to hear, you'd better keep quiet . In October 2003, a team of Fish and Wildlife Service biologists learned this lesson the hard way. After a decade of study, they had devised a rescue plan for the Missouri River's endangered pallid sturgeons and least terns and threatened piping plover. But just when the biologists were about to publish a final report calling for changes in the amount of water released from the river's dams, they found themselves yanked from the project. Under pressure from the Army Corps of Engineers and congressional supporters of the barge industry, Interior Department Assistant Secretary Craig Manson replaced the original scientists with an out-of-state "SWAT team." Their second opinion, released after just 45 days of study, called for smaller changes in water flow than the original team had recommended for recovery of spawning fish and nesting birds.

According to Jeff Ruch, Executive Director of Public Employees for Environmental Responsibility, many professionals with "inconvenient" messages have been reassigned in Fish and Wildlife Service offices throughout the country. And the problem isn't limited to one agency. The Bureau of Land Management recently announced plans to transfer 20 Boise, Idaho, staffers to a remote office. Ruch characterized the move as a "targeted political payback" to local ranchers who oppose BLM interference in their affairs.

As Reported in Sierra, March-April 2004

Some local fish dealers upset about new federal reporting requirements

By Patricia Smith
Freedom ENC

New Bern – Some local fish dealers are upset about a new federal rule that will require them to use a computer to file their records daily. The regulation mandates daily electronic filing beginning May 1 from those from Maine to North Carolina who hold a federal permit to deal in seafood such as summer flounder, sea scallops, scup, black sea bass, squid, monkfish, butterfish and spiny dogfish. Currently these dealers, 42 in North Carolina, are required to report landings once a week, and can do so by paper or phone. "It's just a tremendous burden," said Jerry Schill, president of the North Carolina Fisheries Association, a New Bern-based commercial fishing trade group. "It's not just a matter of electronic reporting, it's a matter of doing it every day," Schill said. On some days, when packing is slow, that will not be a big problem, Schill said. "Other times it's just wall-to-wall," he said.

Those dealers that reported less than $300,000 in annual fish purchases between 2000 and 2002 will have at least a year to comply. But fisheries officials said this would cover only a small percentage of dealers who hold federal permits, such as roadside vendors or those who fish, then sell their own catch. Those dealers who do fall under the new rules must report all seafood purchases daily, not just the federal species.

The rule was published in the Federal Register March 23. The Fisheries Association has retained the Norfolk, VA, law firm of Vanderventer Black and plans to file a lawsuit against NMFS by Friday to meet a 30-day deadline to do so, Schill said. The purpose of the new regulations, according to the Federal Register, is to improve monitoring of commercial landings by collecting more timely and accurate data, enhance enforceability of and promote compliance with existing regulations and ensure consistence in reporting requirements among fisheries.

From: New Bern (NC) Sun Journal, April 21, 2004

NOAA Helps Coho Salmon Return to California Streams

By Jim Milbury

On January 12, state fisheries biologists, working with NOAA Fisheries, slogged through mud and rain with an ice chest full of mature coho salmon from Lagunitas Creek, a central California stream which has a self-sustaining salmon population, and released the fish into nearby Walker Creek, where the fish once thrived but are now absent.

The release of the fish, the first of three planned annual plantings, is just the latest example of federal and state efforts to use everything from elbow grease to DNA analysis to restore healthy populations of Pacific coast salmon.

Federal, state and local salmon recovery programs have helped produce recent record salmon returns of the fish from offshore waters to coastal streams of the Pacific Northwest where they spawn. But coho salmon on California's central coast have not fared as well.

One of five salmon species found in California, coho were once prevalent, drawing significant commercial and recreational fishing. Since the 1940s, the number of coho salmon decreased significantly, with only six to 15 percent remaining. By 1993, commercial and recreational fishing was closed in California to protect the species.

Their populations have been listed as threatened under the Endangered Species Act since 1996 when coho were no longer "running," or returning, to their native creeks and streams to spawn. Since then, NOAA Fisheries scientists believe the situation may have become even worse in some locations.

The life cycle of coho salmon in California lasts three years. The fish hatch in freshwater streams from egg nests called "redds" from March through May. They grow to maturity in their native stream for more than a year before beginning their migration to the ocean, where they remain for another year and a half. In November through February, these salmon return to the streams where they were born to establish redds of their own and then die.

The planting of coho salmon in Walter Creek resulted from a surprising discovery and a problem turned into an opportunity. "A little over three years ago we realized that coho salmon were declining, particularly in the Russian River Basin," said Patrick Rutten, central California supervisor for the Protected Resources Division of NOAA Fisheries' Southwest Region. "From what we knew, there was only one stream (in the Russian River Basin) that had a marginal self-sustaining run of coho salmon." That stream, Green Valley Creek, is a relatively small waterway with less than two miles of suitable salmon habitat. The creek struggles to maintain a run of less than a 100 salmon returning from the ocean to spawn each year.

Coho salmon are identified by the year they are born, or "year class." Since they have a three-year life cycle, a year class of 2004 would be expected to return as a run in the stream it was born in 2007. A population is considered self-sustaining if it has a run for each year of the three-year cycle.

"Historically, coho salmon were present in several tributaries to the Russian River. Currently, however, Green Valley Creek is the only tributary in the Russian River that has three year classes of coho salmon," said Dan Logan, a scientist in NOAA Fisheries' Santa Rosa office.

In 2000, a salmon recovery team composed of representatives from NOAA Fisheries, the National Park Service, the California Department of Fish and Game, water agencies, commercial fishermen, universities and local organizations designed a plan to save existing runs of salmon in the Russian River Basin and reestablish coho salmon in streams and rivers where they were once prevalent.

In 2001, the group began an annual program of capturing juvenile coho salmon in Green Valley Creek to raise in a hatchery as brood stock. The fish would be raised to adulthood and used to propagate their offspring for introduction back into the streams within the Russian River Basin.

Coho salmon from Green Valley Creek would also be bred with salmon caught in Lagunitas Creek, a nearby waterway with a relatively strong run of coho salmon, but in a watershed that empties into Tomales Bay instead of the Russian River Basin. It was thought that such a cross-breeding program would expand the gene pool of the salmon and increase their potential for surviving in the wild, an idea soon found to be potentially harmful to the project.

Every year since 2001, scientists from the California Department of Fish and Game and the National Park Service donned nets and buckets to catch juvenile coho salmon in Green Valley Creek and Lagunitas Creek in pools that were at high risk of drying up in the summer heat. The fish were then transported to the don Clausen Fish Hatchery at Warm Springs Dam in northern California. Here they were isolated and placed in separate pens by stream and year class waiting until they reached sexual maturity for breeding purposes.

As a precaution, Carlos Garza, a geneticist at the NOAA Fisheries Laboratory in Santa Cruz, decided to take tissue samples from every fish captured for genetic analysis before allowing the breeding to take place. The outcome of that analysis was nothing that scientists had expected. The fish from the two creeks were very dissimilar, even though they were from the same species and from streams flowing relatively close to each other.

"We really had to do the (genetics) work to know," Garza said. "If we had assumed that because they (salmon from Green Valley Creek and Lagunitas Creek) were geographically proximate they would have been similar, we would have been wrong."

What Garza found was that the coho salmon from Green Valley Creek were very different genetically from those captured in Lagunitas Creek. At least some of these differences are believed to be related to specific traits necessary for their survival in that particular watershed. Had coho in the Russian River Basin been bred with salmon from Lagunitas Creek, a different watershed, many of these survival traits that had evolved over many years could have been lost and their ability to repopulate the Russian River Basin reduced or even nullified.

Garza also determined that the salmon from Green Valley Creek were from only a few distinct families and that many were as genetically related as brothers and sisters. In response, he developed a method to ensure genetically similar individuals were not bred with one another by using a plan of mating a salmon from one family with a salmon from another family.

"We used the genetic data to construct a breeding matrix," Garza said. "The matrix ensures individuals that are close kin are not mated together because that leads to inbreeding with a loss of genetic variation and deleterious traits. It is also designed to ensure that all of the families are represented in future generations."

With the genetics and breeding patterns understood for the Green Valley Creek coho salmon, the question then became what to do with the coho salmon from Lagunitas Creek. They could not be bred with the other coho salmon and they could not be returned to their stream because of concerns over spreading disease from the hatchery back to the native population.

"To a certain extent we ended up in this situation where we had this problem," Garza said. "And we turned this problem into just a great opportunity."

The team looked closely at historical records for streams in the same watershed as Lagunitas Creek. What they found was Walker Creek, a small tributary to Tomales Bay. Salmon runs were now extinct there, but some salmon habitat had been restored over the last twenty years. The team saw this as the best prospect to revive a coho salmon population in a stream devoid to these fish for decades. The January 12 planting followed.

The restoration team will continue to plant fish in Walker Creek in 2005 and 2006. If salmon runs return there in 2007, 2008, and 2009, plantings may continue. Streams and creeks in the Russian River Basin will be stocked with fish from Green Valley Creek. The stream location and method of planting are still being determined.

But with a brood stock safe in the hatchery, scientists now have the option of releasing mature salmon to spawn, planting juveniles that will travel to the ocean and return, or planting artificially fertilized egg nests in the streams.

From: NOAA Report, February 2004

District Directors

Alaska, Northern
Joseph F. Margraf, Jr.
University of Alaska
P.O. Box 757020
Fairbanks, AK 99775-7020
ffjfml@uaf.edu

Alaska, Southeast
Bruce Wing
P.O. Box 210265
Auke Bay, AK 99821-0265
bruce.wing@noaa.gov

Arizona - New Mexico
G. Morris Southward
Statistics and Res. Inst.
New Mexico State University
Box 30003 Dept. 3130
Las Cruces, New Mexico 88003-8003
southward@nmsu.edu

California, Northern
Diana Watters
California Dept. of Fish and Game
350 Harbor Blvd.
Belmont, CA 94002-4018

California, Southern
Raymond R. Wilson
CSULB Biol Sci
1250 N. Bellflower Blvd.
Long Beach, CA 90840
rwilson1@csulb.edu

Capital
Frank M. Panek
National Fish Health Research Laboratory
1705 Leetown Rd.
Kearneysville, WV 25430

Carolinas
Robert L. Dixon
NOAA, 101 Pivers Island Road
Beaufort, NC 28516
robert.dixon@noaa.gov

Florida
Thomas W. Schmidt
USDI Nat'l. Park Service
Everglades Nat'l. Pk., S. Fla. Res. Ctr.
P.O. Box 279
40001 State Rd. 9336
Homestead, FL 33014
tom_schmidt@nps.gov

Great Lakes, South Central
Dora R. Passino-Reader
National Fish. Center
1451 Green Road
Ann Arbor, MI 48105-2897
dora_reader@usgs.gov

Gulf of Mexico, Northeast
Vacant

Keystone
Joseph W. Rachlin
Dean of Nat. & Soc. Sci.
Lehman College of CUNY
250 Bedford Pk. Blvd. W.
Bronx, NY 10468-5189
rachlin@alpha.lehman.cuny.edu

New England
Kevin D. Friedland
Director, UMass/NOAA CMER Program
Blaisdell House
University of Massachusetts
Amherst, MA 01003-0040
friedlandk@forwild.umass.edu

Oregon-SW Washington
Vacant

Texas
Lance Robinson
Texas Parks and Wildlife Dept.
Seabrook Marine Lab
Seabrook, TX 77856

Washington, NW
Bruce S. Miller
School of Aqu. & Fishery Sci.
University of Washington
Box 355020
Seattle, WA 98195
bsm@u.washington.edu

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, feeshdr@starfishnet.com Subscription $30 a year to Institutions and Non-Members. Officers-Richard Schaefer, 6211 Madawaska Rd., Bethesda, MD 20816,dickschaef@aol.com - President; Barbara Warkentine, SUNY-Maritime College, Science Dept., 6 Pennyfield Ave., Fort Schuyler, Bronx, NY 10465-4198, synodus@aol.com - Secretary; Allen Shimada, NMFS, Office of Science and Technology, 1315 East West Highway, Silver Spring, MD 20910, allen.shimada@noaa.gov -Treasurer. ISSN-8755-0075

American Institute of Fishery Research Biologists
c/o Allen Shimada
NMFS, Office of Science and Technology
1315 East West Highway
Silver Spring, MD 20910

Return Service Requested

3 3 ****AUTO**MIXED AADC 270
Dr. William H. Bayliff
Inter-American Tropical Tuna Commission
8604 LA JOLLA SHORES DR
LA JOLLA, CA 92037-1508

American Institute of Fishery Research Biologists

Promoting excellence in fishery science

. . . BRIEFS . . .

Website: www.iattc.org/aifrb/

VOL. 33, NO. 3 MAY, JUNE 2004

The President Speaks!

AIFRB Update News and Call for Volunteers

Greetings to all Associates, Members, Fellows and Emeriti! Thought I'd take this opportunity to bring you up to date on some important events and activities currently being pursued by your officers and the BOC.

First, the BOC recently completed its mid-year teleconference to review progress toward goals with respect to various assignments made to its committee chairs and officers, and to begin planning for the next BOC meeting to be held in late August in Madison, WI. With regard to the latter, if you have any items you wish to have included on the agenda for discussion/resolution, please let me know and they will be considered for addition. We will begin assembling a draft agenda in the very near future.

Secondly, we have recently purchased an AIFRB "table drape" inscribed with the name of the Institute, our logo, motto and website, to assist us as an advertising tool in our recruiting/marketing efforts. It will be used for the first time in Madison where we plan to have a "Recruiting/Marketing Table" located near the AFS registration counter. I would like to have this table "staffed" from Monday morning, August 23, through Thursday morning, August 26. I am seeking volunteers to serve approximate 4-hour shifts each. If you plan to attend the AFS meeting and are willing to volunteer some of your free time, please let me know. I could really use your help.

Thirdly, a few months ago Michael Hinton requested of me that he be replaced as our webmaster. In that regard, I am pleased to announce that Neal Foster, at the University of Michigan, has agreed to serve in Michaels's place as our new webmaster. Thank you, Michael, for your years of dedicated service to the Institute and to you, Neal, for volunteering to take on this task. It is greatly appreciated.

Lastly, I am also pleased to announce that Doug Vaughan has agreed to chair a special "ad hoc" committee to examine the issue of what constitutes or defines "fishery research biologist". This issue has caused considerable confusion and concern among the general membership and the BOC in recent years. It emanates from an ever increasing infusion of new disciplines into the field of fishery science that raises questions about eligibility for membership in AIFRB. Some members argue that AIFRB should retain a liberal inclusionary policy, while others argue for a more conservative exclusionary policy. Since the outcome of this debate will significantly impact our current recruitment and marketing efforts, the analysis and recommendations of Doug's committee are very important to the future of AIFRB. At the present time, Doug is seeking volunteers to serve with him on this committee. If you are interested, please let me know and I will appoint you to serve with Doug and others. Thanks.

As a reminder, I can be reached at dickschaef@aol.com or telephone (301) 320-5202 or (410) 873-2926.

Dick Schaefer
President, AIFRB

Board of Control

Annual Meeting – August 21-22, 2004

The officers, regional directors, and committee chairs will conduct the business of the Institute in Madison, Wisconsin August 21-22, 2004. Members are welcome to attend. Issues of concern to any member should be conveyed to an officer, director, or the editor of *Briefs* for resolution at the meeting to be held in advance of and in coordination with the annual meeting of the American Fisheries Society.

The AIFRB is a 501(c)(3) tax-exempt nonprofit organization (EIN 61-6050711).

Golden State District eschews Soy Sauce! For Once!

The Northern California District held a dinner meeting on Thursday, May 20, 2004 at Spenger's Fresh Fish Grotto in Berkeley, CA. Following a social hour and dinner the guest speaker Robert R. Abbott, Ph.D., President of Strategic Environmental Consulting, Inc., spoke on "The use of caged fish to monitor the hydroacoustic effects of pile driving".

Submitted by: Michelle Barlow

Our Founding Members: Two Biographies

Henry A. Dunlop

Henry A. Dunlop, also know as Harry, was born in Dunrea, Manitoba, Canada, on July 8, 1898. He earned a Bachelor of Arts in Zoology at the University of British Columbia in 1919 and a Master of Arts in Zoology in 1922 at the same university. He continued his graduate studies at the University of Toronto in 1924-1925 and at the University of Washington School of Fisheries between 1931 and 1936. He joined the International Fisheries Commission, predecessor of the International Pacific Halibut Commission, in July 1925 as Assistant Director. He held this position until May 1939. Harry Dunlop was appointed Acting Director of the Halibut Commission for the period June 1939 to September 1940, at which time he was appointed Director of Investigations, a position he held until his retirement.

Under his direction, the halibut resource was rehabilitated. Before his retirement in 1963, the fishery attained the maximum sustainable yield through conservation, a condition not attained by any other marine fishery in the world. A close relationship between the halibut industry, the fishery, and the Commission prevailed. As a consequence, fishing records that demonstrated the decline and rebuilding of the resource were readily available to the Commission's staff and early regulatory models of commercial fishing were developed.

Harry Dunlop was a member of the American Fisheries Society, the American Society of Ichthyologists and Herpetologists, and the American Association for the Advancement of Science. He was a charter member of the Pacific Fishery Biologists. In 1953, he received the Elizabeth II Coronation Medal for meritorious public service to Canada. He was also a founding member of the American Institute of Fishery Research Biologists. Early ideas and discussions that led to the formation of AIFRB took place in the Halibut Commission's offices. The role of cooperation between the members of the fishery and the regulating agency were crucial to the recovery of the halibut resource and in any ways influenced the discussions that led to the formation of AIFRB.

F. Heward Bell

Heward Bell was born July 4, 1902, in Swansea, Wales. He came to Canada as a child and was raised there. As a young man he attended the University of British Columbia in Vancouver and graduated as an honor student in biology. He had a lifetime interest in biology, particularly in fishery biology. He was a gentleman, a scholar, and an author. As a child he contracted and survived polio. As a consequence, he saw beauty in all things and developed an inquiring mind.

Upon graduation from the University of British Columbia in 1924, Heward was appointed instructor in biology for that University. In 1925, he served as a research assistant for the Fisheries Research Board of Canada, tagging salmon off the west coast of Vancouver Island. Also in 1925, he was appointed Associate Scientific Assistant for the International Fisheries Commission, later known as the International Pacific Halibut Commission. On a leave of absence from the Halibut Commission in 1940-1941 he served as assistant director of the International Pacific (Sockeye) Salmon Fisheries Commission of Canada and the United States. During the period 1930 to 1970 he was a Special Lecturer in Fisheries at the University of Washington. He became Assistant Director of the Halibut Commission in 1943 and remained in that position until he was appointed Director in 1963. He served in that capacity until his retirement in 1970.

During his early years as a field biologist, Heward knew and worked with many individuals who were early pioneers in the commercial fisheries for halibut and salmon off the coasts of Alaska, British Columbia, and the contiguous United States. These relationships, as well as his early training in biology, were influential in forming his concepts of managing a fishery. He collected voluminous data records of fishing effort and catch. These records became the backbone of the management procedures of the Halibut Commission.

Heward's early experience as a fishery biologist was obtained on halibut vessels chartered for tagging studies. He survived a winter shipwreck off Kodiak Island. The early tagging studies showed the migration patterns of halibut and Heward's experience with the fishing operation led to the use of catch-per-unit values as measures of population size.

Heward was honored for his work as a fishery biologist and administrator in 1953 when he received the Coronation Medal of Elizabeth Regina II for services rendered to Canada with respect to the Pacific halibut fishery. He was the first person to receive the Golden Halibut Award, an award presented annually by the Halibut Fishermen's Wives Association of North America for services rendered to the industry of Canada and the United States. In 1962 he received a dedicated service award from the Maritime Press Association. In retirement he wrote and published *The Pacific Halibut – The Resource and the Fishery*, a book detailing the development of the halibut fishery and its management.

Heward was a founding fellow of the American Institute of Fishery Research Biologists. His views of professionalism in fishery biology were contributed to that organization during its founding period.

Biographies submitted by: Morris Southward

Tillman Retires

Dr. Michael F. Tillman retired in January 2004, after 11 years as Director of the Southwest Fishery Science Center, NMFS, NOAA and more than three decades of federal service with the NMFS. His retirement was celebrated with a reception at Scripps Institution of Oceanography.

Dr. Michael F. Tillman

Tillman, an Alaskan Native and member of the Tlingit Indian Tribe, was born in Seattle, Washington, and received his primary and secondary education there. He received his B.S., M.S., and Ph.D. degrees from the University of Washington and first joined the NMFS in 1972 to supervise a modeling study of the Bering Sea marine ecosystem, based out of Seattle. In 1974, he was assigned to the assessment of whale stocks to help support U.S. policies at the International Whaling Commission, serving on its Scientific Committee and then chairing the Committee from 1982 to 1985.

In 1979, he was appointed as the first director of the National Marine Mammal Laboratory in Seattle, which was established as a principal source of scientific expertise on marine mammals within the NMFS. From 1983 to 1986, he served as the first professional director of the Conservation Monitoring Center of the International Union for Conservation of Nature (IUCN) in Cambridge England. In 1987, he returned to NMFS headquarters in Washington, D.C., as chief of the Conservation Science Division within the Office of Protected Resources. Tillman was appointed NMFS' Senior Scientist for Fisheries in 1988, and for two years he oversaw the NMFS' field-based research and science programs.

In 1990, he was appointed Deputy Assistant Administrator for Fisheries, responsible for the day-to-day operation of the NMFS, overseeing the activities of 2,000 employees and a budget of more than $200 million annually. In 1993, he was appointed Science Director of the NMFS Southwest Region, overseeing the research programs on Pacific fisheries, marine mammals, and endangered species undertaken by the SWFSC in California and Hawaii, as well as the NMFS Antarctic research program.

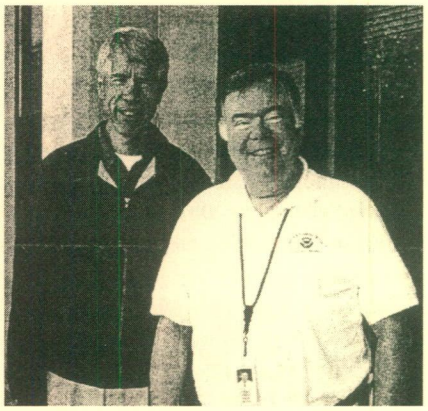
Among his many international activities, Mike Tillman served as chairman of the IUCN Species Survival Commission's Cetacean Specialist Group and as a member of the Commission's Steering Committee. He was a U.S. delegate to the International Council for the Exploration of the Sea and to the Interim Scientific Committee for North Pacific Tunas and Tuna-like Species. Tillman is Deputy U.S. Commissioner to the International Whaling Commission and served as U.S. Commissioner to the Inter-American Tropical Tuna Commission.

Tillman is a research associate of the Scripps Institution of Oceanography at the University of California in San Diego and serves on the External Advisory Board of the California State University, Los Angeles' Center for Excellence in Science and Technology, supporting its efforts to train minority graduate students. He has authored or co-authored more than 40 publications, focusing mainly on whale stock assessment methods and results. Dr. Tillman is a recipient of the Presidential Rank Award of Meritorious Executive, the Albert Schweitzer Medal of the Animal Welfare Institute, Presidential Appointments as U.S. Commissioner to the Inter-American Tropical Tuna Commission and as Deputy U.S. Commissioner to the International Whaling Commission, and three Department of Commerce Bronze Medals.

From: Director's Report to the 55th Tuna Conference Southwest Fisheries Science Center Administrative Report/LJ-04-04

Submitted by and thanks to: Bill Bayliff

Fellow Fox New SWFSC Director



Mike Tillman (left) and Bill Fox (right).

Fellow William W. Fox is the new Director of the Southwest Fisheries Science Center succeeding Mike Tillman. Fox's previous positions with the National Marine Fisheries Service (NMFS) included Director of the Office of Science and Technology from 1996 to 2004, Director of the Office of Protected Resources from February 1993 until October 1996, and Director of NMFS from January 1990 until January 1993. Other public service has included the State of Florida Marine Fisheries Commission (1983-1990) and the U.S. Marine Mammal Commission (1983-1990), with terms as chairman of both commissions. Before returning to public service in 1990, Fox was a Professor of Marine Biology and Fisheries and Director of the Cooperative Institute for Marine and Atmospheric Studies at the University of Miami's Rosenstiel School of Marine and Atmospheric Science (1982-1990). Before that Bill spent 12 years with NMFS and its predecessor agency, the Bureau of Commercial Fisheries. Fox has authored or co-authored more than 60 scientific publications and is a Member of the American Fisheries Society, a Fellow of the American Institute of Fishery Research Biologists, and a Member of Sigma Xi, the Scientific Research Society. Fox has a B.S. in zoology and an M.S. in marine science from the University of Miami, and a Ph.D. in fishery science from the University of Washington.

Modified from: Director's Report to the 55th Tuna Conference, Southwest Fisheries Science Center Administrative Report/ LJ-04-04

Thanks to: Bill Bayliff

Research Assistance Awards — Apply Now!

American Institute of Fishery Research Biologists

2004 Research Assistance Award Program

The Research Assistance (RA) Award established in 1986 is offered annually to AIFRB graduate students and other Associate members to support travel expenses associated with professional development. The RA provides a maximum award of $350 towards the opportunity to present results of an original paper or research project of merit at scientific meetings, or to conduct research at distant study sites. All AIFRB Associate Members in good standing are eligible. An individual may receive one award in a lifetime. Application packages must contain a research abstract, letter of support from the student's sponsor, and a 2-page curriculum vitae. Send AIFRB RA applications to: Dr. Jerald S. Ault, University of Miami RSMAS, 4600 Rickenbacker Causeway, Miami, FL 33149, (305)361-4884 ph; (305)361-4791 (fax); ault@shark.rsmas.miami.edu. Deadline is 1700 EDT on August 16, 2004.

Important New or Recent Works by Members

Shrimp Stocks, Shrimp Fisheries and Sea Turtle Populations Could Benefit from Improved Shrimp Stock Assessments and Management

A recent paper by AIFRB Fellow Emeritus Dr. Charles Caillouet suggests that improved assessments and management of shrimp stocks in state and Federal waters of the Gulf of Mexico could enhance shrimp stocks, shrimp fisheries, and sea turtle populations. Despite use of turtle excluder devices (TEDs) by shrimp trawlers, sea turtle strandings show positive correlations with shrimp fishing effort. Indications of growth overfishing in shrimp stocks are strong, and have been developing for decades, so it would be prudent for federal and state marine fisheries management agencies to reduce fishing pressure on the shrimp stocks, thereby alleviating growth overfishing, avoiding recruitment overfishing, and protecting sea turtles.

Prior shrimp stock assessments have been flawed and have encouraged overfishing. Exposure to shrimp fishing effort levels higher than are necessary to maximize or optimize shrimp yield per recruit is not a good thing for shrimp stocks, shrimp fisheries or sea turtle populations.

The full paper can be viewed and downloaded from the Marine Turtle Newsletter Web Site: http://www.seaturtle.org/mtn/archives/mtn100/mtn100p22.shtml.

Coming Soon!

Stock Identification Methods

Applications in Fishery Science

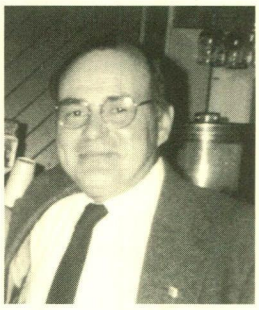
Edited by Steven X. Cadrin, Kevin D. Friedland and John R. Waldman

Stock Identification Methods provides a comprehensive review of the various disciplines used to study the population structure of fishery resources, explaining the merits and sensitivities of each approach. It represents international expertise on each method, assembled through a working group of the International Council for the Exploration of the Sea (ICES).

Key Features: Describes eighteen distinct approaches to stock identification grouped into sections on life history traits, environmental signals, genetic analyses, and applied marks; Features experts' reviews of benchmark case studies, general protocols, and the strengths and weaknesses of each identification method; Reviews statistical techniques for exploring stock patterns, testing for differences among putative stocks, stock discrimination, and stock composition analysis; and Focuses on the challenges of interpreting data and managing mixed-stock fisheries.

September 2004, Hardback, c. 550 pp., Elsevier
$64.95/£39.99 (tentative)
ISBN: 012154351X

The early life history of swordfish (*Xiphias gladius*) in the western North Atlantic



John Jeffrey Govoni

John Jeffrey Govoni, Elisabeth H. Laban, Jonathan A. Hare

Abstract – Lengths and ages of swordfish (*Xiphias gladius*) estimated from increments on otoliths of larvae collected in the Caribbean Sea, Florida Straits, and off the southeastern United States, indicated two growth phases. Larvae complete yolk and oil globule absorption 5 to 6 days after hatching (DAH). Larvae, 13 mm preserved standard length (PSL) grow slowly (~0.3 mm/d); larvae from 13 to 115 mm PSL grow rapidly (~6 mm/d). The acceleration in growth rate at 13 days follows an abrupt (within 3 days) change in diet, and in jaw and alimentary canal structure. The diet of swordfish larvae is limited. Larvae, 8 mm PSL from the Caribbean, Gulf of Mexico, and off the southeastern United States eat exclusively copepods, primarily of one genus, *Corycaeus*. Larvae 9 to 11 mm eat copepods and chaetognaths; larvae 11 mm eat exclusively neustonic fish larvae. This diet indicates that young larvae <11 mm occupy the near-surface pelagia, whereas, older and longer larvae are neustonic. Spawning dates for larvae collected in various regions of the western North Atlantic, along with the abundance and spatial distribution of the youngest larvae, indicate that spawning peaks in three seasons and in five regions. Swordfish spawn in the Caribbean Sea, or possibly to the east, in winter, and in the western Gulf of Mexico in spring. Elsewhere swordfish spawn year-round, but spawning peaks in the spring in the north-central Gulf of Mexico, in the summer off southern Florida, and in the spring and early summer off the southeastern United States. The western Gulf Stream frontal zone is the focus of spawning off the southeastern coast of the United States, whereas spawning in the Gulf of Mexico seems to be focused in the vicinity of the Gulf Loop Current. Larvae may use the Gulf of Mexico and the outer continental shelf off the east coast of the United States as nursery areas. Some larvae may be transported northward, but trans-Atlantic transport of larvae is unlikely.

Fish. Bull. 101:778-789 (2003).

New!

Large Marine Ecosystems of the World

Trends in Exploitation, Protection and Research

Volume 12 in Large Marine Ecosystem

Edited by G. Hempel and K. Sherman

Globally, 95 percent of the world's annual marine fish catch comes from 64 large marine ecosystems (LME). Effects of overfishing, pollution, habitat destruction and climate change are described in this volume for several LMEs in polar and boreal seas, and tropical and upwelling regions. Together with other volumes in the series, this volume provides a post "World Summit" perspective on the efforts supported by the Global Environment Facility to lessen the North-South economic divide and promote sustainable recovery of depleted fish stocks and degraded habitats. Case studies describe how competing interests of different agents can be united across political boundaries to achieve the sustainable development of shared resources.

2003, Hardback, 440 pp., $105.00/£105.00 Elsevier
ISBN: 0444510273

Still Available!

Large Marine Ecosystems of the North Atlantic

Changing States and Sustainability

Edited by K. Sherman and H.R. Skjoldal

2002, Hardback, 464 pp., $99.00/£99.00
ISBN: 0444510117

A Fish Biologist's Impact on National Security

Howard A. Schuck

This is a story of the threat assessment indicating United States vulnerability to surprise atomic attack-that was believed and acted upon. (As contrasted to assessments which were ignored with serious consequences, like the Rudman Commission and Gilmore Panel in late 1990's, and in the Pacific just prior to Dec. 7, 1941).

This story is the "inside" perspective of the unlikely chain of events which led to the inquiry being authorized, and then conducted. It postulates why its unsettling findings were accepted as credible and valid. It describes how the findings were utilized as the basis for the massive efforts to eliminate this vulnerability, i.e. that the United States' system for deterring Nuclear World War III – (SAC) – could be attacked by complete surprise, and destroyed on the ground by the Soviet long-range bomber force.

Finally the book speculates as to how the inquiry helped end the cold war without nuclear detonations by either side.

About the Author

Classed as "Least Likely to Succeed", the author at age 12 studied and practiced fly-fishing for 4 years in local waters devoid of trout. At age 16 he was decreed a trout fisherman, at 17 an expert and at 18 a trout conservationist.

At Cornell his thesis developed the method which was used at N.Y. State's experimental trout stream to produce the first ever count of the number of trout in a stream. As a result he was asked by USFWS to try to count the haddock at Georges Bank in the North Atlantic. This effort was also successful. Howard's ability to count elusive items influenced Dept. of Defense to suggest that he might be able to count other items which are also hard to see, are moving, and do not wish to be counted, i.e. the number of Soviet bombers which might be destroyed by U.S. Air Defenses under various conditions of altitude, speed, night or day, degree of alert, and timing and size of attack.

Howard was dubious that he was capable of handling this problem, but decided to try it. Parts II and III document what happened to him when he left his beloved fish and entered into an unfamiliar and challenging profession.

From Author House
Electronic Book: ISBN 141847424X $4.95
Paperback: ISBN 1418430463 $13.50

Freshwater Fishes of the Northeastern United States

A Field Guide

By Robert G. Werner

A unique reference to the freshwater fishes of the Northeast for anglers, students, naturalists, and environmentalists.

Informative, accurate and readily comprehended by both the layperson and scientist, this book will aid anyone interested in identifying fishes of the northeastern United States while learning more about their life history and distribution. The book focuses on characteristics of fishes in the field using beautiful illustrations for most species that accurately depict their morphology and color. The book is a source of detailed information with state-by-state species lists and an extensive bibliography.

Robert G. Werner has published two books, Fishery Science: The Unique Contribution of Early Life Stages and Freshwater Fishes of New York State: A Field Guide, the latter published by Syracuse University Press. He is professor emeritus of SUNY Environmental Science and Forestry College and the former director of the St. Lawrence River Biological Station. He is also former co director of the Great Lakes Research Consortium.

Syracuse University Press
1-800-365-8929
6 x 9, 280 pages, 112 black-and-white and 134 color illustrations, bibliography, glossary, index
$38.00

Ed. Note: I am certain that there are many more works of members that deserve listing in Briefs, with your help I could be more complete in my coverage.

Two More Documents of Interest

Canadian Subsidies

The Canadian Subsidy Directory 2004 edition is available. This publication contains more than 2600 listings of grants and loans offered by government departments, foundations and associations.

To obtain a copy please visit: www.canadabooks.biz
ISBN: 2-922870-05-7

Undaunted Tales

Non-scientific adventures of seagoing scientists

By Merton C. Ingham
A Review by Albert C. Jones

Seagoing experiences of fishery biologists, oceanographers and vessel crew aboard the fishery oceanography research vessel *Undaunted* in the late 1960s are chronicled in this book by Dr. Merton C. Ingham. Mert Ingham served as chief scientist and physical oceanographer aboard the *R/V Undaunted* while the vessel was assigned to the Tropical Atlantic Biological Laboratory (U.S. Bureau of Commercial Fisheries – now NOAA Fisheries), Miami, Florida. The *R/V Undaunted*, a U.S. Navy surplus auxiliary tugboat converted to a civilian oceanographic research vessel, lacked many amenities and comforts of today's modern oceanographic research vessels. However, the scientists and crew were dedicated to their tasks. They also had unique personalities that led to unpredictable events at sea and ashore during cruises in the tropical Atlantic off Africa and South America. These events are described by the author in an entertaining way. Today's young marine scientists will wonder if such situations and outcomes, sometimes ludicrous and sometimes reflective, could be true, as the author claims. Older scientists will recall with amusement and nostalgia similar experiences from their own seagoing days. And the scientists who joined Ingham on the Undaunted cruises will recognize specific events and attest to the veracity of Undaunted Tales. I recommend the book for casual, enjoyable reading. Available from the author (Merton C. Ingham, 11 Hawthorne St., South Dennis, MA 02660-3217, barmer@gis.net) for $8.00 per copy plus $3.00 shipping for 1-3 copies.

The old Unwanted carried me on my first extended cruise in 1967. I have almost recovered. Ed.

A Pertinent Meeting Held

"Bycatch in Northeast Fisheries: Moving Forward"

June 29-July 1, 2004

The workshop provided an opportunity for northeast constituents with an interest in issues related to bycatch of fish and other marine life to examine specific aspects of bycatch and express their views on issues. Participants discussed and recommended priorities and solutions regarding science/research, data/monitoring, management, and gear engineering that will be identified and incorporated in an updated version of the Northeast Region Bycatch Implementation Plan to be released later in 2004.

The Northeast Regional Office (NERO) has organized a workshop, "Bycatch in Northeast Fisheries: Moving Forward." The Workshop is co-sponsored by NMFS and Northeast and Mid-Atlantic Sea Grant, in cooperation with the Northeast Fisheries Science center, New England Fishery Management Council, Mid-Atlantic Fishery Management Council, and Atlantic States Marine Fisheries Commission. Additional support was provided by the Northeast Consortium.

This workshop was an opportunity for constituents with an interest in fishing issues to share ideas about developing improved measures to reduce or eliminate bycatch of both fishes and protected species. The information collected will be used by NERO to update the Regional Bycatch Implementation Plan later this year.

Salmon 2100 Project Initiated

Two dozen of the top salmon scientists and policy experts have joined forces in an innovative research project to answer the question of what it would take to restore wild salmon runs in the Pacific Northwest. The Salmon 2100 Project has been organized in collaboration with Oregon State University's Center for Water and Environmental Sustainability.

The purpose of the project is to synthesize and apply the best available scientific and social information and understanding to the challenge of protecting and restoring wild salmon runs in California, Oregon, Washington, Idaho, and southern British Columbia. A key objective of the project is to identify those policy options that, if adopted, would successfully sustain wild salmon through this century.

To identify those policy options, the project has enlisted 24 leading Pacific Northwest scientists and policy experts, each of whom possesses stellar scientific and analytical credentials, a track record for innovative thinking about salmon and ecosystem recovery, and a demonstrated ability to think beyond the status quo. The project participants are writing chapters in a book to be published by the American Fisheries Society.

Restoring wild salmon to the Pacific Northwest is a daunting challenge. Since discovery of gold in California in 1848, salmon runs have dramatically declined across the region due to water pollution, loss of spawning, rearing, and riparian habitat, a history of over-fishing, dam construction and operation, water withdrawal for irrigation and industrial cooling, competition with hatchery-produced salmon, competition with various non-indigenous fish species, predation by marine mammals and birds, and climatic and oceanic shifts.

Many experts conclude that current salmon recovery efforts, as earnest, expensive, and socially disruptive as they currently are, do not appear likely to sustain significant wild salmon runs through 2100. It appears that other recovery strategies must be adopted if wild salmon are to survive in significant numbers through the century. Key project results also will be disseminated to policy makers and others through a regional symposium (Corvallis, February, 2005) and an international symposium (Anchorage, September, 2005).

Contacts: Robert T. Lackey, lackey.robert@epa.gov or (541) 754-4607; Denise H. Lach, Dlach@oce.orst.edu or (541) 737-5471

Submitted by: Robert T. Lackey

America's Most Endangered Rivers of 2004

1. Colorado River: While conflict over Colorado River water allocations has grabbed headlines for years, water pollution problems from human waste, toxic chemicals, and radioactive material have been largely overlooked and threaten to get worse. Unless the federal government bolsters cleanup efforts, drinking water for 25 million Americans will remain at risk.
2. Big Sunflower River: Two flood control boondoggles promoted by the U.S. Army Corps of Engineers threaten Mississippi's Big Sunflower River. Unless the EPA vetoes the Yazoo Pumps, the project will damage seven times more wetlands than all the nation's private developers harm in one year. Without opposition from EPA and the U.S. Fish and Wildlife Service, the Corps will also dredge more than 100 miles of the riverbed.
3. Snake River: Dams on the Columbia and Snake rivers have caused dramatic declines in the Snake's once abundant wild salmon population, with all the river's runs either extinct or sliding toward extinction. Unless the administration delivers a credible plan to rebuild wild salmon populations, our generation could be the last to enjoy these legendary species.
4. Tennessee River: All along the Tennessee, overloaded wastewater systems discharge inadequately treated sewage into the river with distressing regularity. Unless the administration holds these sewer systems accountable – and Congress provides financial assistance – the Tennessee River will continue to be deluged with sewage.
5. Allegheny and Monongahela rivers: Abandoned mines leak acid and other toxic substances into streams throughout Pennsylvania and West Virginia. Unless Congress takes action, efforts to treat this problem will cease and the amount of pollution reaching the rivers will increase, threatening drinking water, fish and wildlife.
6. Spokane River: More pollution concentrated in less water will be the future of the Spokane unless new groundwater withdrawal applications are rejected, sewage plants meet stringent water quality standards, and mine waste is cleaned up.
7. Housatonic River: Irresponsible industrial activity has left the Housatonic with some of the highest levels of PCBs in the nation. Unless the EPA orders a cleanup of the remaining PCBs, the toxic legacy in the Housatonic will remain a health hazard for generations to come.
8. Peace River: Mining in the Peace River watershed has caused serious problems for many years, and large new mines are planned. Two Florida agencies must safeguard the watershed from mining impacts, including protecting drinking water, as

well as tourism and commercial fishing industries.

9. Big Darby Creek: Big Darby Creek in Ohio has managed to escape many impacts of urban sprawl. Unless state and local governments adopt and enforce river-conscious land use planning in the Big Darby watershed, one of the highest quality streams left in the Midwest may become just another polluted, urban ditch.
10. Mississippi River: After decades of manipulation by the Corps of Engineers, the Mississippi is beset with problems. Unless Congress gives the agency marching orders that reflect the needs, desires and opportunities of today's communities, the river faces ecological collapse with vast economic impacts to tourism and recreation industries.

From: American Rivers, Spring 2004

See related article next. Ed

House Considers Upper Mississippi Project

The Water Resources and Environment Subcommittee of the House Transportation and Infrastructure Committee held a hearing Thursday, June 24, 2004 on the Army Corps of Engineers Upper Mississippi River navigation improvement and environmental restoration plan. The proposed project would construct seven new 1200-foot locks on the Upper Mississippi and Illinois Rivers, and double the size of five existing locks on the Upper Mississippi, from 600 feet to 1200 feet. Navigation advocates claim the river transport system is outdated, causing long delays and ultimately affecting the cost of grain transported on the river. However, environmentalists are concerned that further construction on the river would further hurt a damaged ecosystem. The Corps has included a proposal for $5.3 billion to be spent over 15 years on environmental restoration. Environmental organizations support a substantially larger investment in river restoration, and note that the National Academy of Sciences has found that no lock expansion project can be evaluated until the Corps takes more limited steps to improve operations of the existing navigation system.

The House hearing follows a Senate draft bill from Sen. Kit Bond (R-MO) to construct seven new 1200-foot locks at nearly $3 billion over 10 years. Bond will be seeking to authorize these funds through the Water Resources Development Act restoration bill. The House does not yet have a companion bill, though sources indicate Representatives are waiting to see what comes out of the Senate first.

Witnesses at the hearing will include officials from the Corps, EPA, Agriculture Department, and the Fish and Wildlife Service. Representatives of the National Academy of Sciences, the Upper Mississippi River Basin Association, National Corn Growers Association and Environmental Defense are also expected to testify.

From: American Rivers RPU

Freedom to Fish Act Building Momentum Among Congressmen

With the Recreational Fishing Alliance (RFA) stepping up its lobbying efforts in Washington, seven members of Congress have recently signed onto the Freedom to Fish Act introduced by Congressman Jim Saxton (NJ).

The Freedom to Fish Act (H.R. 2890) would establish reasonable, scientifically based standards that must be met before any more no fishing marine protected areas (MPAs), i.e. marine reserves, are established off our coasts. Such closures would have a devastating impact on coastal economies and quality of life for millions of recreational fishermen with little conservation benefit. Consistent with sound marine conservation, the Freedom to Fish Act recognizes the social and economic importance of recreational fishing and establishes standards that must be met before no fishing MPAs are implemented in federal waters.

In a demonstration of strong, bipartisan support, Representatives Rob Andrews (NJ), Allen Boyd (FL), Barbara Cubin (WY), Jim Marshal (GA), George Nethercutt (WA), Mike Simpson (ID), and Dave Vitter (LA) have each signed on as co-sponsors for the Freedom to Fish Act.

"History has shown us that marine fisheries problems need to be addressed on a gear by gear basis-not by creating blanket no fishing MPAs as some radical environmental groups would like to do," said Jim Donofrio, RFA Executive Director. "The Freedom to Fish Act recognizes this and would allow fishery managers to get to the real sources of overfishing."

From: International Angler 66(3), May-June 2004

California Budget Crisis Postpones No-Fishing Marine Reserves

Citing a severe lack of funds and technical expertise, California has indefinitely postponed plans to create a string of no-fishing marine reserves along the state's coast. This isn't the first time the state's ambitious reserve process has stalled. The Marine Life Protection Act of 1999 originally directed wildlife biologists to complete a master plan for establishing a network of marine reserves by April 2003. Fishermen successfully fought to extend the deadline two years.

The California department of Fish and Game estimates it would cost $1.5 million over the next 18 months to two years to continue drafting a reserve plan. Environmental groups have offered to help keep the "working group" process moving forward. But even with private funds, the department says, its own budget woes and staff reductions render it unable to support that effort.

From: International Anger 66(3), May-June 2004

Pacific Salmon Recovery Fund Given $10 Million Raise in 2005 Budget

Administration officials announced a $10 million increase for the Pacific Coastal Salmon Recovery Fund for a $100 million total in 2005. Established in 2000, the fund has provided over $118 million to the Washington Recovery Funding Board and $59 million to the Oregon Watershed Enhancement Board.

From: International Anger 66(3), May-June 2004

Council Begins Work on Amendment 1 for Spiny Dogfish

The Mid Atlantic Fishery Management Council at its March meeting voted to begin work on Amendment 1 to the joint Spiny Dogfish Fishery Management Plan (FMP). The Council will address the biomass rebuilding target and the establishment of a stock rebuilding schedule that is consistent with the National Standard one guidelines. The Amendment will also include the subtraction of overages from the next fishing year's annual quota, and the ability to develop multi-year quota specifications.

The Joint Middle Atlantic/Northeast Spiny Dogfish Committee in February decided there was no reason to address limited access because as the resource rebuilds there is not likely to be a directed fishery for several decades. The Joint Committee also rejected the idea of prohibiting spiny dogfish possession in the EEZ.

A spiny dogfish stock assessment was conducted by Stock Assessment Review Committee (SARC) in June 2003. According to that assessment the "spiny dogfish stock is overfished and overfishing is not occurring." The estimated fishing mortality in 2002 exceeded the rebuilding target (F= 0.03) by a factor of 3. "The female spawning portion of the biomass has declined by about 75% since 1988 and is at 29% of the biomass target." The "recruitment estimates from 1997 to 2003 represent the seven lowest values in the entire series."

The management advice that the SARC provided is: "given low current spawning biomass, poor recruitment and reduced pup survivorship, the SARC recommends total removals (landings, discards, Canadian catch) below those derived from the estimated rebuilding F (0.03). Targeting females should be avoided."

The future forecast from the SARC is that: "rebuilding of spiny dogfish populations will take at least 15 years under the most optimistic scenario. The low biomass of spawning females, high abundance of males, and the near absence of dogfish less than 50 cm will induce large oscillations in the stock regardless of management strategies. Forecasts of rebuilding which take into account the apparent lower survival of pups from smaller females indicate that rebuilding will not occur."

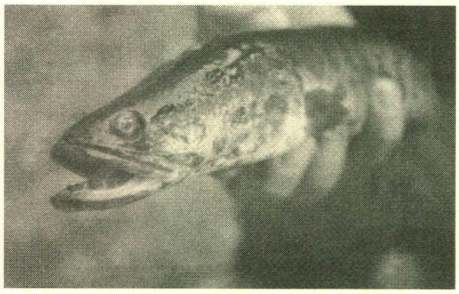
Many fishermen have difficulty with the stock assessment because the scientific findings do not support what they see when they retrieve their nets. Unquestionably, the total stock of dogfish is large and was estimated to have been in excess of 800 million pounds in 2002. However, the near complete lack of large adult females (which had been targeted by the fishery since the U.S. began seriously harvesting the resource in the late 1980s), the life history characteristics (long-lived, few pups, long gestation), and the record low recruitment since 1997, all lead to serious concern for the sustainability of this resource.

From: Mid-Atlantic Perspectives 8(5), Spring 2004

Hard to Keep a Good Fish Down!

4 snakeheads caught near Potomac; MD, VA issue alerts

When Virginia biologists identified a fearsome-looking fish snagged in a tributary of the Potomac River as a snakehead, they wrote it off as a castoff from someone's aquarium. But when the fish kept turning up, on both the Maryland and Virginia side of the river, they began to fear the worse: The so-called "Frankenfish" – a voracious predator which biologists fear could alter local ecosystems – has found a new home.



This snakehead was caught along Little Hunting Creek near Mount Vernon, VA. AP Photo

Four fish were caught in or near the Potomac from late April to mid-May – two in Virginia and two in Maryland. All four fish were the same species – northern snakehead – which raised concerns among biologists as some were mature enough to procreate. The first fish was a mature female, while the most recent one caught was a developing male.

After the fourth fish was caught on May 15, Virginia fisheries officials created a snakehead fish panel to assess the possibility that the snakeheads are spawning, said Julia Dixon, spokeswoman for the Virginia Department of Game and Inland Fisheries. Gary Martel has contacted both Maryland and District of Columbia Fisheries agencies requesting a meeting to coordinate efforts, Dixon said. "The incident team is working to see what resources are needed to even assess what is needed," she said. We're going to be working closely with Maryland to see if we're dealing with a population." State officials will work with the Smithsonian Institution to see if genetic testing can tell if the Virginia fish is related to one recently found in Maryland.

The snakehead is considered dangerous to the ecosystem because it devours other fish and frogs and has no known predators. Native to Asia and Africa, it's an anomaly because it can move short distances on land using it fins and live out of water for up to three days. "We learn more and more from these exotics," Dixon said. "The results are not the desired results." While fisheries officials expressed concerns that the snakeheads are spawning, efforts to get rid of them may be futile. "If they're in there, there's nothing anyone's going to be able to do about it," Virginia fisheries biologist John Odenkirk said last week. He said people may have to accept that the alien fish may likely join a long list of exotic animals that have adapted to the ecosystem. "Maybe 100 years from now it'll become part of the ecosystem as common as the largemouth bass," he said.

Officials have gone to great lengths to keep the fish out. In 2000, snakeheads infested a pond in Crofton, MD, spawning hundreds of juveniles. State biologists poisoned and drained the lake. Largely as a result of the Crofton discovery, at least 20 other states have imposed a ban on the sale, ownership or release of snakeheads.

This first snakehead this year turned up in a pond in Wheaton, MD. That lake was also drained, and biologists were relieved to find no other snakeheads. But the relief was short-lived: Only days later, a snakehead turned up in the Potomac.

From: Bay Journal, June 2004

South Atlantic Reef Fish Status

Stock status for the non-deepwater species units in the South Atlantic snapper/grouper complex as specified by the preferred biological reference points and status determination criteria and the percent reduction in harvest needed to reach the MSY control rule. *The species has undergone a Southeastern Data, Assessment, and Review (SEDAR) stock assessment.

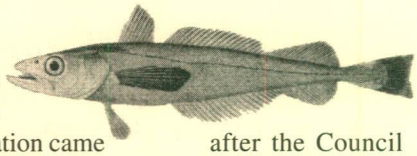
Management Unit		Indicator Species	Overfishing?	Overfished?	Percent Reduction
Unit 1	Shallow-water Grouper	gag grouper*	No	No	0%
Unit 1A	Goliath Grouper*		No	Yes**	0%
Unit 1B	Nassau Grouper		No	Yes**	0%
Unit 2	Shallow-water Snapper	yellowtail snapper*	No	No	0%
Unit 3	Triggerfish/Spadefish	gray triggerfish	Yes	No	7%
Unit 4	Mid-Shelf Snapper	vermillion snapper*	Yes	No	31%
Unit 5	Jacks	greater amberjack	No	No	0%
Unit 6	Sea Bass	black sea bass*	Yes	Yes	30%
Unit 8	Grunt/Porgy*	white grunt	Yes	No	6%
Unit 8A	Red Porgy		No	Yes	(increase allowed)

**Total closure for Goliath grouper in place since 1990 and Nassau grouper since 1992.

Unit 7, The Deepwater Grouper/Tilefish Unit will be addressed separately in Amendment 14 to the Snapper Grouper Fishery Management Plan. Snowy grouper is the indicator species.

From: The South Atlantic Update, Spring 2004

Council Recommends Removal of Whiting from "Overfished" List



Based on a new stock assessment, the Pacific Fishery Management Council is recommending that National Marine Fisheries Service (NMFS) remove whiting from the "overfished" list. Whiting was originally declared overfished in 2002. The recommendation came after the Council adopted a new Pacific whiting assessment at its March meeting in Tacoma. The new assessment was recommended by a Stock Assessment Review Panel and the Scientific and Statistical Committee as the best available science for managing Pacific whiting in U.S. and Canadian waters. It is likely NMFS will comply with this request in the near future.

The Council also set 2004 Pacific whiting harvest specifications using the new assessment. The acceptable biological catch (ABC) was determined to be 514,441 mt for the entire stock. Under the terms of the recently negotiated pacific whiting treaty with Canada, which is still pending Senate ratification and federal rulemaking, the U.S. share of the ABC would be 73.88%, or 380,068 mt. However, the Council recommends U.S. fisheries be managed to an optimum yield (OY) of 250,000 mt. The Council did not want to consider higher Pacific whiting harvests that might risk exceeding the 2004 OY for widow rockfish (an overfished species), and was concerned about the effect of higher catches in 2004 on abundance in future years. The Council also considered complications of adopting a level higher than 250,000 mt, which was the upper bound of the range analyzed in the final environmental impact statement of proposed ABCs and OY specifications for the 2004 Pacific Coast groundfish fishery. Adopting a higher Pacific whiting harvest in 2004 would have likely delayed the normal April 1 start of the Pacific whiting fishery while further analysis was done under the terms of the National Environmental Policy Act.

Choosing between two models

Both the Stock Assessment Review Panel and the Scientific and Statistical Committee recommended two models from the assessment as equally probable. The distinction between the two models is the value of the catch ability coefficient (q) from the National Marine Fisheries Service 2003 hydroacoustic survey for Pacific whiting. The two assessment models (q=0.6 and q=1.0) indicate the presence of a strong 1999 year class and an estimated spawning stock biomass in 2003 of either 47% or 49% of the stock's initial, unfished biomass (termed $B_{47\%}$ and $B_{49\%}$, respectively), depending on whether the true value of q is 1.0 or 0.6. Both of these estimates of spawning stock biomass are above the threshold associated with the level necessary for maximum sustainable yield ($B_{40\%}$).

In setting the ABC, the Council considered the scientific advice of equally probable abundance estimates and made the policy decision to select the q=1.0 assessment model as the basis for determining the ABC level of 514,441 mt for the entire stock. The basis of this choice included the historical use of the q=1.0 assumption in prior years' management of this fishery, the negative implication to future year stock abundance if harvest quotas were set using the q=0.6 model in 2004, and the lack of compelling information to choose the less conservative option.

From: Pacific Council News 28(1), Spring 2004

Senate Panel to Review Grazing Practices

The Senate Public Lands Subcommittee of the Energy and Natural Resources Committee in late June reviewed a proposal from the Bush Administration on federal grazing regulations. The hearing will examine the Bureau of Land Management and Forest Service's grazing programs, including the deep backlog of permits that the Forest Service has to review. Environmental groups have filed suite over a number of grazing permits asserting that the permits put threatened and endangered species at risk, cause stream bank erosion, soil compaction, and lower plant diversity. The Bureau of Land Management revealed a proposal last December that would extend the amount of time required to take action on grazing practices that harm rangeland health from one year to two. It would also limit public participation in major planning decisions, remove the time limit for ranchers to hold a permit without using it, and would allow ranchers the rights to permanent rangeland improvements such as fences, wells or pipelines. Many Democrats and environmentalists have criticized the plan, asserting that it would only exacerbate the environmental problems already stemming from grazing.

Fate of Northwest Salmon Back in Biologists' Hands

Court determines that it doesn't have jurisdiction

The Ninth Circuit Court of Appeals declined to rule on a case to determine how hatchery and wild Oregon coast coho salmon should be handled under the Endangered Species Act. Government scientists decided years ago that only wild coho should be counted when determining whether the species qualifies for federal protection, not only because hatchery numbers are a poor indicator that the species is recovering in its natural habitat, but also because hatchery fish can actually harm wild populations. In September 2001, responding to a suit by developers, a district court found the government's method illegal and stripped wild coho of their Endangered Species Act protections.

The Bush Administration refused to appeal the ruling, so conservation and commercial fishing groups, represented by Earthjustice, stepped into the gap to defend the coho. This quick action put the protections back in place for the coho pending an appellate court decision. In February, the Ninth Circuit decided it didn't have jurisdiction to decide the case. Now all eyes are on the continuing agency process that will determine the interactions of and protections for hatchery and wild fish. At the end of March, six leading independent scientists publicly urged the government to treat wild and hatchery fish differently and to protect the wild.

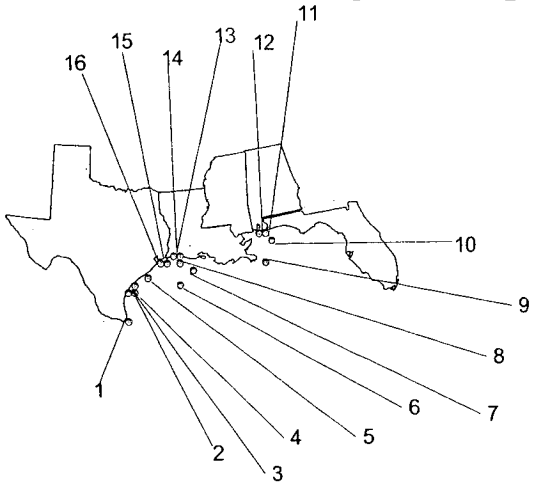
In the meantime, Earthjustice's attorneys are seeking reconsideration of the Ninth Circuit's ruling – a petition process that keeps the ESA protections for Oregon coast coho in place until final action by the appellate court.

From: In Brief, Summer 2004

Gulf Council Opposes the Use of Open Loop LNG Systems in the Gulf of Mexico

The Gulf of Mexico Council, at its May meeting, received a presentation on proposed liquefied natural gas (LNG) facilities in the Gulf of Mexico. To meet an increasing demand, 15 new LNG terminals are proposed for the Gulf of Mexico. One LNG currently exists in Lake Charles, Louisiana. Nine of the proposed facilities are closed loop systems that will not impact fishery resources, but six proposed facilities would each circulate approximately 100-200 million gallons of water per day to heat the liquefied natural gas back to its gaseous phase. Each facility would impact billions of fish eggs, larvae, and plankton each year. All fish eggs and larvae are assumed to be killed after passing through these systems. NOAA Fisheries is concerned about the potential impact of these facilities on fish populations in the Gulf of Mexico. One facility at Sabine Pass, Texas would filter 30% of the water in Sabine Lake each year. EPA has required the power generating industry to use closed loop systems to mitigate impacts on aquatic biota. As a result of the information presented to the Council, the Council adopted a position that it believes LNG open loop systems will adversely affect the biota of the Gulf of Mexico and the recreational and commercial fishing industries that depend on this biota. Therefore, the Council opposes the use of open loop LNG systems in the Gulf of Mexico, and recommends the use of closed loop systems in inshore, near shore, and offshore locations.

Existing and Proposed LNG Facilities



1. Cheniere Brownsville
2. Cheniere Corpus Christi
3. Vista del Sol
4. Oxy-Chem
5. Freeport
6. El Paso (approved)
7. Port Pelican (approved)
8. Gulf Landing
9. Main Pass
10. Compass Port
11. Cheniere Mobile
12. ExxonMobile Mobile
13. Lake Charles (existing)
14. Hackberry (approved)
15. Cheniere Sabine Pass
16. Golden Pass

Sea Otters Get a Hand

Threatened southern sea otters off the coast of California would benefit from a new bill introduced in Congress by Representative Sam Farr (D-CA). The legislation would organize and authorize funding for sea otter research and recovery programs for a five-year period, as well as set up a team of experts (including fishermen, scientists and conservationists) to advise the recovery process. "We have been fighting to bring the southern sea otter back from near-extinction for [more than] sixty years. Yet today scientists estimate that there are still only 2,400 sea otters," says Farr. "This legislation will provide the platform for full recovery of sea otters in California and for scientific study that will help improve our understanding of the health of California's costal ecosystems."

From: Defenders, Spring 2004

Hudson sturgeon release may glean information for Bay effort

New York officials in May plan to release several dozen large Atlantic sturgeon into the Hudson River, a move that some biologists hope is a prelude to an eventual release in the Bay within the next few years. The release was proposed by New York and U.S. Fish and Wildlife Service who hope the tagged, hatchery-reared sturgeon will provide new information about the halibut use, movement and post-release behavior of the fish. The release was approved in March by Atlantic States Marine Fisheries Commission, a panel of fishery officials from East Coast states and federal agencies that is responsible for managing migratory fish stocks.

The Hudson release is the first along the Atlantic Coast since 1996, when the Maryland Department of Natural Resources turned more than 3,200 fish loose into the Nanticoke River. "Not a heck of a lot has gone on in the interim," said Steve Minkkinen, who was with the DNR and helped to plan the 1996 release and now heads the U.S. Fish and Wildlife Service's Maryland Fisheries Resource Office.

The stocked fish are descendants of Hudson River fish that were captured and taken to the USF&WS's Northeast Fishery Center in Lamar, PA, during the 1990s. Biologists at the center used the fish to perfect hatchery spawning techniques for sturgeon, and eventually produced thousands of young fish. Some of those were released in the Hudson in 1994, and in the Nanticoke two years later. But the hatchery was left with about 600 fish, some of which are now 4-feet long, putting the hatchery in the unique position of being overpopulated with some of the rarest fish along the East Coast.

The Hudson plan, which will relieve space pressure at the hatchery, calls for releasing 25 radio-tagged fish in May, and another 325 tagged fish later in the year. The hatchery will keep about 135 fish for further spawning studies. Because the fish are so large, predation is not expected to be a problem as is often the case with other hatchery-reared fish.

One thing that remains unclear is whether hatchery sturgeon – especially large ones – will return to their native river to spawn, as do wild sturgeon. Because some of the Lamar fish are 10 years old and will mature within the next few years, the release could shed light on that issue. "We don't know when these fish imprint to their home water," said Andy Kahnle, a biologist with the New York Department of Environmental Conservation. "Salmon imprint at the larval stage. We have no clue when it occurs in sturgeon. "These fish were spawned from Hudson parents and were hatched in a hatchery in the Susquehanna drainage. I don't have any idea where they will return to spawn. That question is on the table."

The Hudson is home to the largest remaining Atlantic sturgeon stock on the U.S. East Coast. Kahnle said it's estimated that the Hudson stock includes 200-300 females and 500-600 males in it spawning population, and they produce between 5,000-8,000 fish a year. About 17,000-20,000 immature Hudson fish are estimated to be living along the Atlantic Coast. "We may be seeing a rebounding of the Hudson stock, but it will take awhile," Kahnle said.

Kahnle said the rebound appears to stem from Atlantic States Marine Fisheries Commission action in 1998 which mandated an unprecedented almost 40-year moratorium on catching sturgeon to give the population a chance to recover. But that did not address all of the problems. Between 1988 and 2000, an average of 1,400 sturgeon a year were killed in bycatch off the Atlantic Coast. "That's a lot of bodies given the low coastwide abundance of this species," Kahnle said. Bycatch losses have declined in recent years as restrictions were placed on some of the most harmful fisheries.

From: Bay Journal, May 2004

DuPont Faces Suit Over Mercury Pollution

The Natural Resources Defense Council (NRDC) and the Virginia Chapter of the Sierra Club are preparing to take DuPont to federal court to force a cleanup of mercury from Virginia's South River and the South Fork of the Shenandoah. The mercury poses a serious health threat to people who eat fish from those waters. "There are well-known ways to remedy mercury pollution in rivers, but DuPont is avoiding those," says Nancy Marks, senior attorney with NRDC. Dupont's Waynesboro textile operations discharged tens of thousands of pounds of mercury into the South River from 1929 to 1950. When the contamination was disclosed in 1977, the state was forced to declare a fish consumption health advisory for over 100 miles down river of the plant. That advisory continues today. Mercury pollution is known to cause severe physiological, behavioral and reproductive disorders and is particularly harmful to developing fetuses. The main route of human exposure is through eating contaminated fish.

Over 20 years ago, DuPont and its consultant convinced government regulators that the mercury contamination would disappear on its own. That has not occurred, according to the most recent data collected by the state. Today, some fish in the two rivers have mercury levels more than eight times the level at which the state issues health advisories. But rather than make DuPont clean up the mercury pollution, state and federal regulators have joined DuPont in a collaborative effort to study the mercury contamination. The team has no cleanup plans. "The time for study is over," says Marks. "Local residents have waited long enough for the cleanup to being."

From: Nature's Voice, Jan-Feb. 2004

Commerce Department delays decision on shrimp case

By Brad Rich

U.S. Commerce Department officials announced Wednesday they had delayed until July a decision on whether to impose tariffs on imported shrimp in order to help the beleaguered domestic shrimp industry. A statement from the office indicated the delay was necessary because of the "complexity" of the case. The U.S. International Trade Commission (ITC) had ruled earlier this year that there is a "reasonable indication: that as many as six foreign countries have "materially injured" the U.S. shrimp industry with unfair trade practices. The unanimous finding by the ITC — an independent, nonpartisan, quasi-judicial federal agency that provides trade expertise to both the legislative and executive branches of the federal government — set the stage for a final decision on the issue by the U.S. Department of Commerce on or near June 8. If the commerce department investigation and ruling eventually echoes the findings of the ITC, the U.S. could impose tariffs on some shrimp products exported to the U.S. by Brazil, China, Ecuador, India, Thailand and Vietnam. The ITC action was in response to petitions filed on Dec. 31, 2003, by the Southern Shrimp Alliance (SSA), a compact of shrimpers and shrimp industry participants from North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana and Texas. The products covered in the SSA trade action are certain warm-water shrimp and prawns, whether frozen or canned, wild-caught (ocean harvested) or farm-raised (produced by aquaculture), head-on or head-off, de-veined or not de-veined, cooked or raw, or otherwise processed in frozen or canned form. According to statistics from the National Marine Fisheries Service, the value of the U.S. shrimp harvest dropped by more that 50 percent ($690 million) betweeen 2000 and 2002. While the whoesale value of shrimp had dropped to the lowest levels in 40 years due to unfair trade, shrimp industry spokesmen point to a recent Wall Street Journal report that states the average price for a shrimp entrée at major restaurant chains actually increased during the same period. In other words, according to the national publication, consumers have not benefited from the low prices that have injured shrimpers and processors. Financially strapped shrimpers in Carteret County are involved in the case through the N.C. Fisheries Association, a New Bern-based commercial fishermen's trade and lobbying group that has been a member of and participant in the SSA effort since the very beginning. In North Carolina, shrimpers landed 5.2 million pounds worth $11.9 million in 2001 and 9.9 million pounds worth $18.2 million in 2002, the last year for which complete statistics are available from the N.C. Division of Marine Fisheries. That might sound like a healthy industry, but in 2000, the figures were 10.3 million pounds and $25.4 million. That total put the year in the top five since 1972, but the average price per pound worked out to only $1.84. That price looks even worse if you factor in inflation: It's lower, in 1972 dollars, than the 64 cents per pound fishermen averaged for their shrimp that year. By contrast, shrimpers received an average of $2.46 per pound in 2000 and $2.16 per pound in 2001. Shrimpers and their representatives have said that after 2001, the European Union and Japan clamped down on shrimp imports because of health concerns about antibiotics in farm-raised shrimp. That, they contend, forced many exporters into the American market, and contributed to the downward slide of prices. Success in the SSA effort could have resulted in tariffs being imposed on the exporting countries by late 2004, but settlements are possible with one or more of the targeted nations.

From: The Carteret County (NC) News-Times; Friday, May 21, 2004

Ed: Latest reports are that the USDOC will impose tariffs on shrimp from China and Vietman, at the least.

District Directors

Alaska, Northern
Joseph F. Margraf, Jr.
University of Alaska
P.O. Box 757020
Fairbanks, AK 99775-7020
ffjfml@uaf.edu

Alaska, Southeast
Bruce Wing
P.O. Box 210265
Auke Bay, AK 99821-0265
bruce.wing@noaa.gov

Arizona - New Mexico
G. Morris Southward
Statistics and Res. Inst.
New Mexico State University
Box 30003 Dept. 3130
Las Cruces, New Mexico 88003-8003
southward@nmsu.edu

California, Northern
Diana Watters
California Dept. of Fish and Game
350 Harbor Blvd.
Belmont, CA 94002-4018

California, Southern
Raymond R. Wilson
CSULB Biol Sci
1250 N. Bellflower Blvd.
Long Beach, CA 90840
rwilson1@csulb.edu

Capital
Frank M. Panek
National Fish Health Research Laboratory
1705 Leetown Rd.
Kearneysville, WV 25430

Carolinas
Robert L. Dixon
NOAA, 101 Pivers Island Road
Beaufort, NC 28516
robert.dixon@noaa.gov

Florida
Thomas W. Schmidt
USDI Nat'l. Park Service
Everglades Nat'l. Pk., S. Fla. Res. Ctr.
P.O. Box 279
40001 State Rd. 9336
Homestead, FL 33014
tom_schmidt@nps.gov

Great Lakes, South Central
Dora R. Passino-Reader
National Fish. Center
1451 Green Road
Ann Arbor, MI 48105-2897
dora_reader@usgs.gov

Gulf of Mexico, Northeast
Vacant

Keystone
Joseph W. Rachlin
Dean of Nat. & Soc. Sci.
Lehman College of CUNY
250 Bedford Pk. Blvd. W.
Bronx, NY 10468-5189
rachlin@alpha.lehman.cuny.edu

New England
Kevin D. Friedland
Director, UMass/NOAA-CMER-Program
Blaisdell House
University of Massachusetts
Amherst, MA 01003-0040
friedlandk@forwild.umass.edu

Oregon-SW Washington
Vacant

Texas
Lance Robinson
Texas Parks and Wildlife Dept.
Seabrook Marine Lab
Seabrook, TX 77856

Washington, NW
Bruce S. Miller
School of Aqu. & Fishery Sci.
University of Washington
Box 355020
Seattle, WA 98195
bsm@u.washington.edu

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, feeshdr@starfishnet.com Subscription $30 a year to Institutions and Non-Members. Officers-Richard Schaefer, 6211 Madawaska Rd., Bethesda, MD 20816,dickschaef@aol.com - President; Barbara Warkentine, SUNY-Maritime College, Science Dept., 6 Pennyfield Ave., Fort Schuyler, Bronx, NY 10465-4198, synodus@aol.com - Secretary; Allen Shimada, NMFS, Office of Science and Technology, 1315 East West Highway, Silver Spring, MD 20910, allen.shimada@noaa.gov -Treasurer. ISSN-8755-0075

American Institute of Fishery Research Biologists
c/o Allen Shimada
NMFS, Office of Science and Technology
1315 East West Highway
Silver Spring, MD 20910

Return Service Requested

American Institute of Fishery Research Biologists

Promoting excellence in fishery science

. . . BRIEFS . . .

Website: www.iattc.org/aifrb/

VOL. 33, NO. 4 JULY, AUGUST 2004

Board of Control Assembles

August 20-21, 2004 Madison, WI

Residents flee in panic, beer supplies dwindle.

The annual head-on assault on Institute business by officers and District Directors occurred in Wisconsin's capitol, Madison on August 20-21, 2004. The focus of this issue of *Briefs* will be devoted to annual reports by officers and committees to the Institute.

Board of Control Members Assembled in Front of Wisconsin State Capitol, Madison. August 21, 2004. L-R pictured: Gary Sakagawa, Bruce Wing, Ray Wilson, Tom Keegan, Allen Shimada, Frank Panek, Jerry Ault, Linda Jones, Tom Schmidt, Joe Rachlin, Kevin Friedland, Dora Passino-Reader, Marty Golden, Barbara Warkentine, Tom Lambert

President's Annual Report 2003-2004

It has been a very busy, but not totally fulfilling, year for your President. Membership recruitment remains paramount among my top priorities.

First, to ceremonial responsibilities: In November, I traveled to Seattle, WA, to present the 2004 Outstanding Achievement Award (Group) to the Ecotoxicology Research unit at the NOAA/NMFS Northwest Fisheries Science Center and in December, to Dartmouth, MA, to present the 2004 Outstanding Achievement Award (Individual) to Dr. Brian J. Rothschild, Director of the Department of Marine Sciences at the University of Massachusetts. Both events were well attended and I hope will result in some additional recruitment to the Institute. Regarding recruitment efforts, I had a "table drape" made and inscribed with the name of the Institute, our logo, and our motto (Advancing Excellence in Fishery Science) for future use on recruitment/marketing tables. I intend to use it for the first time on a recruitment table that will be erected in conjunction with the AFS annual meeting in Madison, WI, in August.

With respect to committee appointments and actions, shortly after last year's annual BOC meeting in Quebec City, PQ, I sent letters of thanks and appreciation to all members of the special committee on Recruitment and Retention, co-chaired by Gil Radonski and Marty Golden who did an outstanding job. I also appointed Morris Southward to chair a special committee to examine the current criteria that permit Emeritus status in the Institute (employment/retirement status, dues vs non-payment of dues, etc.). Morris and his committee have completed their assignment, and a report. I recently appointed Dough Vaughan to chair a special committee to examine the issues surrounding membership inclusion as provided by the bylaws, and to clarify what defines a "fishery research biologist". Doug will be seeking further guidance and recommendations on his committee's membership at the BOC meeting in Madison. Last, I recently reconstituted the Capital Management Committee and appointed Vidar Wespestad as its chair.

Work in progress: I have yet to prepare draft duties for an AIFRB-AFS Liaison person; I intend to discuss this matter further at the next BOC meeting. I intend to appoint a special committee to draft guidelines for employing agencies to follow regarding professional development during the 2004-2005 operating year. Lastly, I attempted on several occasions by both phone and mail to reach John Glude in order to obtain from him information for use in one of several biographies being prepared about Institute Founders, but to no avail. I will continue to try to reach him.

At Mike Hinton's request, I have replaced him as our Webmaster with Dr. Neal Foster at the U. of Michigan. Thanks to both of them.

Richard H. Schaefer, President

The AIFRB is a 501(c)(3) tax-exempt nonprofit organization (EIN 61-6050711).

Treasurer's Report: 2003-2004

By Allen Shimada

Statement of Cash Receipts and Cash Disbursements

9/1/03 through 8/16/04

9/1/03 - 8/16/04

Interim Report - Madison WI

	9/1/02 to 8/31/03	9/1/03 to 8/16/04	Amount Difference	
Cash Receipts				
AIFRB Service Contract	2,920.00	0.00	-2,920.00	
Founders/Capital/Unrestricted Funds	13,374.00	2,592.00	-10,782.00	
Member Dues	12,410.00	12,920.00	510.00	
Capital Gains (Reinvested '03-'04)	0.00	236.71	236.71	
Investment Income (Reinvested '03-'04)	1,650.45	2,246.75	596.30	
Supplemental Funds (Contract-'03, Return Dues-'04)	4,080.00	430.00	-3,650.00	
United Bank Interest (Chk)	22.27	1.71	-20.56	
Total Cash Receipts	34,456.72	18,427.17	-16,029.55	
Cash Disbursements				
AIFRB Meeting Service	150.00	0.00	-150.00	
AIFRB Reception	500.00	0.00	-500.00	
AIFRB Awards				
Achievement Award Expense	248.52	149.90	-98.62	
Research Assistance Award	1,050.00	1,050.00	0.00	
W. F. Thompson Award/Expense	500.00	500.00	0.00	
Service Charges (Sequoia Bank/Schwab)	194.00	305.00	111.00	
Board of Control	3,749.04	2,750.00	-999.04	Est. 4 BOC @ $550
Bridge Loan	0.00	0.00	0.00	
BRIEFS Newsletter	7,014.41	8,115.54	1,101.13	
Collection	0.00	0.00	0.00	
District Donation	0.00	0.00	0.00	
District Recruitment	0.00	150.00	150.00	
Foreign Check Collection	0.00	0.00	0.00	
Honorarium	0.00	0.00	0.00	
License Fees	0.00	0.00	0.00	
Membership Expense	163.16	0.00	-163.16	
Other (Table Drape)	0.00	786.10	786.10	
President's Expense	587.93	731.30	143.37	
Production Editor	0.00	0.00	0.00	
Reinvestments (CapGains/Div/Int)	1,650.45	2,483.46	833.01	
Reimbursement	117.15	0.00	-117.15	
Service Contract Advance	4,080.00	0.00	-4,080.00	
Secretary's Expense	0.00	0.00	0.00	
Transfer Funds (SQB/FF/SSB)	12,260.00	2,445.00	-9,815.00	
Travel Display	0.00	0.00	0.00	
Treasurer's Expense	379.41	270.73	-108.68	
Total Cash Disbursements	32,644.07	19,737.03	-12,907.04	
Net Change	1,812.65	-1,309.86	-3,122.51	
Beginning Cash Balance	1,302.89	3,115.54	1,812.65	
Estimated Cash at End of Year	3,115.54	1,805.68	-1,309.86	

Statement of Investment Accounts

August 18, 2004

Interim Report - Madison WI

SMITH BARNEY - Capital Account

Symbol	Company	QTY	Price ($)	Market Value ($)	Total Cost ($)	Gain/Loss ($)	Gain/Loss (%)	Yield	Income ($)
C	Citigroup Inc	250	45.64	11,410.00	9,009.16	2,400.84	26.65%	3.51%	400.00
STA	St Paul Travelers Cos Inc	13	34.02	442.26	522.14	-79.88	-15.30%	2.59%	11.44
FRT	Federated Realty Investment Trust	500	43.90	21,950.00	10,279.24	11,670.76	113.54%	4.46%	980.00
FBR	Friedman Billings Ramsey Group	300	17.31	5,193.00	3,845.00	1,348.00	35.06%	7.86%	408.00
AFR	American Financial Realty	153	13.81	2,112.93	2,504.78	-391.85	-15.64%	7.24%	153.00
AES	The AES Corp	900	9.96	8,964.00	12,068.06	-3,104.06	-25.72%		
MRK	Merck & Co Inc	100	45.81	4,581.00	6,317.21	-1,736.21	-27.48%	3.32%	152.00
MHS	Medco Health Solutions	12	30.67	368.04	357.40	10.64	2.98%		
WEINX	AIM Weingarten Fund Class A (12/6/96)	447.17	11.48	5,133.51	9,703.04	-4,569.53	-47.09%	0.12%	6.26
MSRCX	Van Campen Emerging Markets Class C (3/4/96)	135.984	10.71	1,456.39	2,652.69	-1,196.30	-45.10%		
	CASH			12.35				0.73%	0.09
	Unrealized Gain/Loss Total			61,623.48	57,258.72	4,364.76	7.62%	3.43%	2,110.79

SMITH BARNEY - Closed Transactions

			Proceeds ($)	Gain/Loss (L.T.)	Gain/Loss (S.T.)
St Paul Travelers Cos Inc - Merger cash in lieu	4/7/04		8.91	-2.80	0.00
St Paul Travelers Cos Inc - Merger cash in lieu	4/7/04		13.37	3.05	0.00
Realized Gain/Loss Total			22.28	0.25	0.00

FBR.COM - Founders Fund

Symbol	Company	QTY	Price ($)	Market Value ($)	Total Cost ($)	Gain/Loss ($)	Gain/Loss (%)	Yield	Income ($)
TWX	Time Warner	200	16.44	3,288.00	8,351.70	-5,063.70	-60.63%		
ORCL	Oracle Corp	350	10.51	3,678.50	6,333.65	-2,655.15	-41.92%		
MSFT	Microsoft Corp	280	27.46	7,688.80	7,130.30	558.50	7.83%	1.17%	89.60
VEIPX	Vanguard Equity Income Fund	517.534	22.45	11,618.64	9,050.40	2,568.24	28.38%	1.24%	143.50
	CASH			97.44				0.72%	0.70
	Unrealized Gain/Loss Total			26,371.38	30,866.05	-4,494.67	-14.56%	0.89%	233.80

FBR.COM - Closed Transactions

			Proceeds ($)	Gain/Loss (L.T.)	Gain/Loss (S.T.)
Vanguard Equity Income Fund	12/12/03		236.71	210.41	26.30
Realized Gain/Loss Total			236.71	210.41	26.30

Combined Accounts

	Market Value ($)	Total Cost ($)	Gain/Loss ($)	Gain/Loss	Yield	Income ($)
Unrealized Gain/Loss Total	87,994.86	88,124.77	-129.91	-0.15%	2.66%	2,344.59
Realized Gain/Loss Total			258.99			

		Special Dividends
FBR	7/30/04	$36.00
MSFT	12/2/04	$840.00
		$876.00

Lagniappe!

Stalwart Supporters – Contributors 2003-2004

William Aron, Randy Bailey, Ronald Baird, Izadore Barrett, Carl Bond, William Brungs, Clifford Burner, Walter Courtenay Jr., Dominic DeGiusti, Joseph Elrod, Bernard Fink, John Fryer, Paul Hamer, Richard Heimann, John Helle, Robert Hillman, Joseph Hunn, John Jolley Jr., Joseph Kutkuhn, Thomas Lambert, W. Martin, Ole Mathisen, Raymond Morgan II, Katherine Myers, Philip Nelson, Paul Olson, Craig Orange, Dora Passino-Reader, Gary Powell, Joseph Rachlin, Sammy Ray, William Ripley, Gary Sakagawa, Clyde Sayce, Robert Schoning, Allen Shimada, Susan Smith, Stanford Smith, G. Morris Southward, Frieda Taub, Harold Tyus, Douglas Vaughan, Gary Wedemeyer, Sigurd Westrheim, Irene Yerger. Total Contributions: $2,592.

Much gratitude to these supporters who provided voluntary contributions during the last year.

Membership Report

Tom Keegan, Membership Chairman. Members: Dr. Cecil A. Jennings, Dr. Joe Margraf, Dr. Douglas S. Vaughan, and Dr. Barbara Warkentine.

New Members:

Associates (Student) – (5): Nicholas Farmer – Florida , Michael Kaller – Louisiana at large, Bradley Harris – New England, Sandra Morrison – Great Lakes, South Central and Julie Zimmerman – Great Lakes, South Central. **Associates** (Professional) – (5): Larry Lacunza – Northern California, Stacy Stocker – Northern California, Laura Oremland – Capital, Eric Eisenhardt – Northwestern Washington and Jennifer Stone – Northwestern Washington. **Members** – (7): Jonathan Baskin – Southern California, Michael Clark – At large (San Luis Obispo), Dale Roberts – Northern California, Gary Nelson – New England, Debra

Palka – New England, Kevin Stokesbury – New England and Erik Williams – Carolinas. **Fellows** – (4): Jennifer Nielsen – Northern Alaska, Howard Bern – Northern California, Karen Martin – Southern California and P. Sukamaran – International at large. The 21 new members came from the following areas of employment: federal government (4), state (1), private (3), university employed (7), graduate students (5) and municipality (1). The distribution of new members by regions and districts is: **Alaska and Western Canada Region**: Northern Alaska (1) and Southeast Alaska (0); **Northwestern States Region**: Northwest Washington (2) and Oregon – Southwest Washington (0); **Southwestern States and Western Mexico Region**: Northern California (4), Southern California (2) and At large (1); **Central States and Middle Canada Region:** Great Lakes – South Central (2); **Northeastern States and Eastern Canada Region:** Capital (1), Keystone (0), New England (4) and Canada (0); **Southeastern States and Eastern Mexico Region**: Carolina (1), Florida (1), Texas (0) and Louisiana at large (1); **International:** India at large (1).

Promotions

To Member – (1): Carl Ruetz – Great Lakes, South Central District. **To Fellow** – (4): Collen Caldwell – SW States and Western Mexico Region, Michael Meador – Capital District, Duane Neitzel – Northwest Washington District and Alex Wertheimer – Northern Alaska District. **To Emeritus** – (9): Walter Momot – Great Lakes, South Central District, Gary Chapman – Oregon, Southwest Washington District, George Harry – Northwest Washington District, Donald Wickham – Capital District, George Allen – Northern California District, Frieda Taub – Northwest Washington District, Donald Rogers – Northwest Washington District, Bradford Brown – Florida District and Robert Werner – Keystone District.

Submitted by Membership Committee

The W.F. Thompson Award

Best Student Paper for 2004

The winning paper this year was by Richard McBride, Michael Fahay and Kenneth Able and was nominated by Dr. Ken Able, Marine Field Station, Rutgers Univ., Tuckerton, NJ 08087. Its title is "Larval and settlement periods of the northern searobin (*Prionotus carolinus*) and the striped searobin (*P. evolans*)". The winning paper was published in Fishery Bulletin, 100:63-73.

The senior author, Richard McBride, did his work at Rutgers and is now at Florida Marine Research Institute, 100 – 8th Ave. SE St., Petersburg, FL 33701-5095.

Submitted by Jack Pearce
Thompson Award Committee Chair

Abstract of winning paper

Larval and settlement periods of the northern searobin (*Prionotus carolinus*) and the striped searobin (*P. evolans*)

Richard S. McBride, Marine Field Station Institute of Marine and Coastal Sciences, Rutgers University; Michael P. Fahay, Sandy Hook Laboratory Northeast Fisheries Science Center, National Marine Fisheries Service, NOAA; Kenneth W. Able, Marine Field Station Institute of Marine and Coastal Sciences, Rutgers University

This study reports new information about searobin (*Prionotus spp.*) early life history from samples collected with a Tucker trawl (for planktonic stages) and a beam trawl (for newly settled fish) from the coastal waters of New Jersey. Northern searobin, *Prionotus carolinus*, were much more numerous than striped searobin, *P. evolans*, often by an order of magnitude. Larval *Prionotus* were collected during the period July-October and their densities peaked during September. For both species, notochord flexion was complete at 6-7 mm standard length (SL) and individuals settled at 8-9 mm SL. Flexion occurred as early as 13 days after hatching and settlement occurred as late as 25 days after hatching, according to ages estimated from sagittal microincrements. Both species settled directly in continental shelf habitats without evidence of delayed metamorphosis. Spawning, larval dispersal, or settlement may have occurred within certain estuaries, particularly for *P. evolans*; thus collections from shelf areas alone do not permit estimates of total larval production or settlement rates. Reproductive seasonality of *P. carolinus* and *P. evolans* may vary with respect to latitude and coastal depth. In this study, hatching dates and sizes of age-0 *P. carolinus* varied with respect to depth or distance from the New Jersey shore. Older and larger age-0 individuals were found in deeper waters. These variations in searobin age and size appear to be the combined result of intraspecific variations in searobin reproductive personality and the limited capability of searobin eggs and larvae to disperse.

A History: Membership Activity 1979 – 2004 (August)

MEMBERSHIP SUMMARY 1979 TO AUGUST 13, 2004

(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**	-	-	-	**-**
1998	16	10	5	**31**	3	4	10	**17**
1999	6	10	2	**18**	-	6	5	**11**
2000	14	4	1	**19**	5	13	6	**24**
2001	17	5	4	**26**	3	7	5	**15**
2002	3	5	3	**11**	1	8	9	**18**
2003	9	2	2	**13**	4	7	11	**22**
2004	10	7	4	**21**	1	4	9	**14**

Recent loss of a fisheries hero: John Fryer

On September 1, 2004 the fishery science and fish health community lost one of its founding members, Dr. John Fryer. John passed away peacefully with his family present. To the many of us who knew him as a colleague, mentor and a friend, he will be greatly missed. He was recently nominated for the AIFRB Outstanding Achievement Award.

From what we have learned John had been receiving dialysis treatment and on the way to one of his appointments, he had a minor accident in which he broke a rib, this wasn't detected for nearly a week. The accident may have occurred because of a minor stroke, and over the next week his ability to function declined rapidly, possibly a sign of other strokes. He went into the hospital Sunday and by Monday it was pretty clear he wasn't going to survive. He had developed pneumonia and it became septicemic. It was all over very quickly.

There will be no memorial service at this time, but a memorial lecture and reception is planned for sometime in the future, at Oregon State University.

Submitted by Frank Panek

More Friends Lost

Joseph H. Rose
908 Meadowview Drive
Nampa, ID 83651

Dr. Dominic L. De Giusti on June 5, 2004
50295 Brockton Court
Macomb, MI 48044-6108

Deaths prior to May 7, 2004

Also Robert French, Seattle, WA; Don Johnson, Seattle, WA; Allyn Seymour, Seattle, WA; Jim Wood, Kenmore, WA; and A.J. Ross, Seattle, WA

Editor: The last five names were from a recent accounting of the Washington NW District. My apologies if the list duplicates earlier announcements in Briefs.

Former President Hubbs: Two New Honors

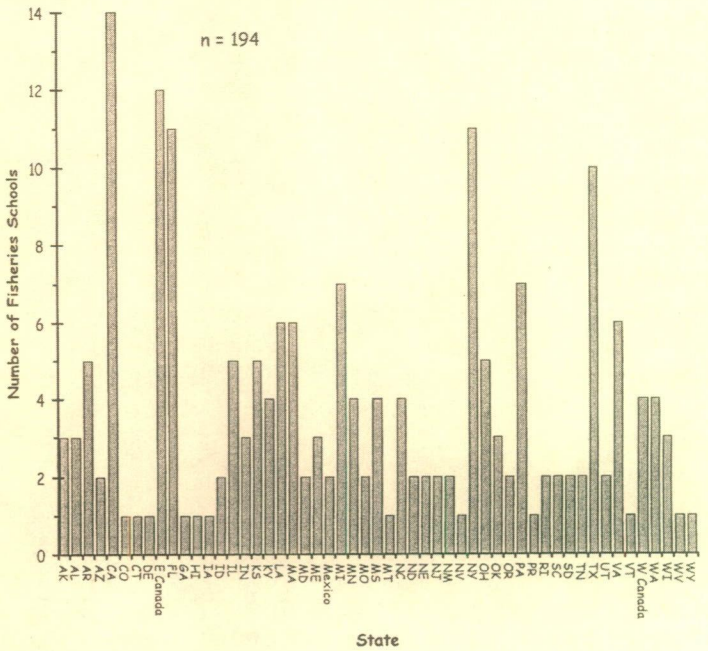
Clark Hubbs, Regents Professor Emeritus at the University of Texas, at Austin, recently was honored by the initial awarding of the newly instituted Robert Johnson Award for services to the American Society of Ichthyologists and Herpetologists (ASIH). Additionally a new mosquito fish *Gambusia clarkhummsi* was named for our former president (check Copeia, 2003, No. 4 for details)

Ed: If the newly recognized species is as energetic as its namesake mosquitoes may be soon placed on the endangered species list.

Fisheries Training: A geographic perspective

Prepared by Jerald Ault as a portion of a document entitled Fisheries Schools for AIFRB Recruitment (2004).

Distribution by state of colleges and universities offering training in fishery biology.



Regional and District Director and Committee Chair Appointments 2004-2005

At the end of the 2004 BOC meeting in Madison, President Schaefer made the following Regional Director Appointments. These appointments are set according to our established rotational cycle.

Bruce Miller – NW States, Joseph Margraf – Alaska and W. Canada, Dora Passino-Reader – Central States & Mid Canada, Diana Watter – Southwest States & W. Mexico, Joseph Rachlin – NE States & E. Canada and Robert Dixon – SE States & E. Mexico.

Schaefer has also reappointed all current committee chairs. Also reappointed were John Merriner (Productions), Gene Huntsman (*Briefs* editor), Allen Shimada (Treasurer), Barbara Warkentine (Secretary) and Kate Myers (Archives).

Exploring the last frontier

A groundbreaking project sheds light on ocean life in the unexplored Dry Tortugas (Florida).

By Jennifer Babson

Dry Tortugas – When Jerome Fiechter goes down for a dive, he's toting a few things along for the ride. Like a water temperature sensor, a laser device, waterproof paper, a wrist computer and a GPS affixed to his flag. Sometimes, he even takes a camera along with his dive tank. Fiechter is one of a team of 22 researchers/divers who are participating in a groundbreaking project that aims to map and quantify fish, coral and lobster populations in the vast Dry Tortugas. "Our divers are essentially small paratroopers operating with a lot of equipment," says Jerald Ault, a professor of marine biology at the University of Miami (UM) and the project's leader.

Underway since June 10, the 22-day effort is part of an ongoing attempt by scientists to get their arms around an expanse of water and island that have been dubbed "the last frontier" for their remote location – 70 miles off Key West – and the nature and scope of their elusive inhabitants. The Tortugas include a national park, and parts of it are within the boundaries of the federally protected Florida Keys National Marine Sanctuary. "Essentially, it's been out of sight and out of mind," Ault says. "People call the last place they can find something 'land's end' – and that's what this is." The expedition is the fourth of its kind for Ault and his team. His divers are on the lookout for anything that moves – and some things that don't. Some 250 species of fish are believed to inhabit the Tortugas. Fish species from throughout the Keys voyage to spawn in coral and nutrient-rich seagrass here, making it a critical part of a marine ecosystem that stretches all the way to the Everglades. There are 18 species of grouper – considered a bellwether fish from the standpoint of habitat health. Other fish include snappers, butterfly fish, parrotfish, surgeon fish, grunt and permit. Rare black coral can be found here, as well as star coral and many other varieties.

Fish Psychologist

But Ault says his endeavor boils down in some ways to fish psychology. "I have to put myself in a position to kind of think like a fish – what are the conditions that are there that make me want to be there?" he says. Some fish – like red grouper – like to swim up close and check out the surveys in progress. Others – black grouper, for example – keep their distance and don't like human company.

Ault's team includes fish scientists, physical oceanographers, ecologists and statisticians. The cost of their latest collaboration: about $500,000, funded mostly by the National Marine Fisheries Service Coral Reef Program, the National Park Service and the sanctuary. Even the captain of the M/V Spree, a 100-foot crew boat the team is using on their current expedition, thinks the research project is pretty cool. He's used to toting tourists. "It's fun to come down here to do this because you learn about a lot of things," captain Frank Wasson said. "But you have to be able to navigate the shallows." That's because the dive team may hop from 15 feet to 106 feet in the course of an hour.

The safety of divers – whose tanks include a high level of oxygen, 36 percent – is monitored by two researchers from the National Oceanic and Atmospheric Administration's National Undersea Research Center, based at the University of North Carolina in Wilmington. Divers use what has been dubbed the "stationary cylinder" technique to make their fish measurements: Two pairs of two divers are dropped into a 200-by-200 meter area. Over a 20 to 30 minute period, they rotate in a 360-degree arc, scanning for signs of life and noting the habitat. The approach is pioneering in its specificity and is being adopted by other researchers in places like Australia and Hawaii.

Tough Job

The dives – and pairs of researchers may do up to a five day – are not for the faint of heart. Barracudas may swim up to say hello, and sharks may do a once-over. "It's very meticulous and pretty physically intense," says UM marine biology student Joe Tomoleoni. "We are going all day long, nonstop pretty much till dinnertime."

Using an APT – an all purpose tool, which looks like a white squeegee – divers measure the size and characteristics of fish they encounter, and use a graphite pencil and plastic clipboard to record the details on a piece of waterproof paper. The data is

(sic: tsk, tsk, Miami Herald) then entered into one of about 10 laptop computers aboard the vessel. From there, it's plugged into sophisticated databases that measure such things as fish and coral density, the depths and terrain of the ocean bottom, and habitat composition.

One diver, marine scientist Jiangang Luo, even devised a laser contraption that's sometimes used to size up fish that are harder to measure. "The hardest part is getting a good switch that works under water," he says. The battery-powered device is encased in acrylic and sealed by O-rings similar to those used in space shuttle design. It projects four parallel lines onto the body of a fish that can be used to calculate the creature's size.

In past missions, the team has also used remote-controlled vehicles to enter depths that a human could not and has employed a two-man, 20-foot delta submarine.

But the researchers like to dive. "Most of the year you're at your desk, so when you get a chance to be out in the field, it's great," said Mike Feeley, a marine biology and fisheries Ph.D. student at UM.

A Better Picture

The idea, says Ault, is to give scientists and policy makers "a better picture of change" that has occurred at the Tortugas since parts of the region have been made off-limits to fishing. For many of the researchers, it's a chance to explore a universe that for some biologists is like landing on the marine moon. "Down there, it's so tranquil," said Luo, whose periodic seasickness has not deterred him. "When you go to a deep site, 90-some feet, the water is so clear and it's so beautiful, you can't describe it." Ault contends that South Florida's coral reefs generated 71,000 jobs and $6 billion in economic activity in 2001. And that, he says, is one reason economic policy makers should care about protecting this threatened natural resource. "You have to tie the resource to the economic sustainability of the system," Ault says. "South Florida is all about tourism – beaches and reefs and sea life." "The question is: Can we repair it or keep it at the level it is today 30 years from now?"

From: Miami Herald and Herald.com, June 27, 2004

A Member's Responsibility: Pursue Advanced Rank

Unquestionably many of our members are eligible for advancement in rank. Advancement is to the benefit of both the Institute and the member, but the member must seek promotion. Any member in good standing (dues are paid up-to-date) may apply or be nominated for advancement in rank. There is no cost for advancement. AIFRB guidelines for the process state that "Applications for advancement in rank must include an updated curriculum vitae that includes information on additional course work, degrees, descriptions of professional experience, titles of positions, numbers of employees or students supervised, and a description of responsibilities for courses taught. It should also include an updated list of publications and other information on professional achievements in science and public affairs. In considering applications for advancement in rank, competence and achievement of members will be judged not only by publications, but as well by evidence of growth in responsibility; professional development; contributions to resource conservation (teaching, editing, promotion of relevant legislation, and program planning in fishery organizations). Also, strong support of the profession and professional integrity are requisites."

Membership categories include:

Associate – Graduate student in a fishery sciences related field (Associate Student) or recent college graduate employed in a fishery related science (Associate Professional). **Member** – Competence and achievement with experience beyond college of 12 years (Doctorate), 14 years (Masters) and 15 years (Bachelors). **Fellow** – Distinguished achievement with experience beyond college of 12 years (Doctorate), 14 years (Masters) and 15 years (Bachelors).

Completed applications for promotion should be sent to: Thomas Keegan, Membership Committee Chair, AIFRB, ECORP Consulting, Inc., 2260 Douglas Blvd., Suite 160, Roseville, CA, 95661.

Additional information on membership, rank, and the process involved can be found on the AIFRB website at http://www.iattc.org/aifrb/default.htm.

Also, why not consider introducing a colleague, co-worker, or student to AIFRB. The website also contains a downloadable membership application and information about AIFRB. Additional members are always welcomed!

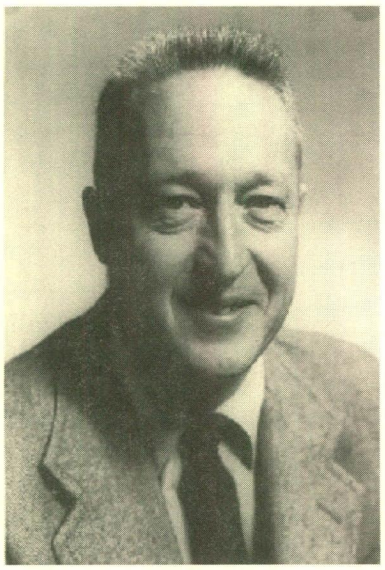
Prepared by Frank Panek and submitted by Allen Shimada

A Founding Member: Milner B. Schaefer

The year 1970 saw an irremediable loss in the international status of United States fisheries science because of the death of Milner B. Schaefer.

Dr. Schaefer was born in Cheyenne, Wyoming, in December, 1912. He received his Bachelor of Science degree in 1935, from the University of Washington, School of fisheries, which also awarded him the degree of Doctor of Philosophy in 1950.

From 1936 to 1950, Dr. Schaefer served as scientist for the Department of the Interior's Bureau of Commercial Fisheries in Hawaii and in California, and as a scientist for the International Pacific Salmon Fisheries Commission. From1942 to 1946, he also served as an officer in the United States Navy. During this period, he suffered recurrence of a heart-valve inflammation and



Milner Schaefer

damage, which he bore unperturbedly throughout his career, until it culminated in his untimely death.

From 1951 to 1962, Dr. Schaefer was Director of Investigations for the Inter-American Tropical Tuna Commission (IATTC). He joined the University of California's Scripps institution of Oceanography in 1951 as a research associate and was appointed Professor of Oceanography and Director of the University-wide Institute of Marine Resources in 1962, the appointments that he filled until his death.

Dr. Schaefer was a member of the coordinating board of the University of California's Water Resources Center beginning in 1963. From July, 1967, to February, 1969, he served as science adviser to the Secretary of the Interior, Mr. Stewart Udall. He was active on several committees of the National Academy of Sciences/National Research Council concerned with resources; with the application of science and technology to economic development; and with the freedom of scientific exploration on the high seas. These included the Committee on Oceanography's Panel on Radioactivity in Marine Environment, the Panel on International Marine Scientific Affairs, and the Steering Committee for Study of the International Decade of Ocean Exploration. He was also a member of NAS/NRC Nutrition Board's Scientific Advisory Committee on Marine Protein Resource Development. He was a member of the Food and Agriculture Organization of the United Nations' Panel of Fisheries Experts, and Expert Panel for Facilitation of Tuna Research (Chairman, 1964-66), and the Indicative World Plan Working Group on Marine Resources Appraisal. He was a member of the State of California's Advisory Committee of the Department of Fish and Game. Other memberships included the Department of State's Advisory Committee on Fisheries Oceanography; Consultant, National Council of Marine Resources and Engineering Development; and Board of Directors, Aqua International.

Professional and scholastic memberships included Phi Beta Kappa, Sigma Xi, the American Society of Ichthyologists and Herpetologists, the Pacific Fishery Biologists (President, 1939-40), American Fisheries Society, American Geophysical Union, American Statistical Association, Biometrics Society, American Society of Limnology and Oceanography (President, Western Division 1956-57), American Institute of Fishery Research Biologists (Founding Fellow), Marine Technology Society, California Academy of Sciences (Fellow).

Dr. Schaefer's principal research was involved with marine ecology and population dynamics – emphasizing fisheries' development and conservation – but it also included studies on marine pollution, disposal of atomic wastes, and economic and social aspects of multiple uses of marine resources. He is author of more than one hundred scientific publications in these fields.

In the three decades that Milner B. Schaefer served fisheries science, the field could boast a scant half dozen United States scientists who shared his broad views of marine fisheries as involving much more than domestic sport and seafood. The prescience in his recognition of the ultimate international impact of marine fisheries and of the worldwide environmental and pollution aspects of the field is now verified by daily developments.

It was this unique continuing penetration and insight into an obscure but powerful gathering of events, their ultimate vital global importance, and the underlying essentiality of a much neglected and somewhat unpopular field, that most sharply mark the stature of Dr. Milner B. Schaefer and most starkly delineate the magnitude of his loss to the University and to the broad multidisciplinary field of fisheries science.

John D. Isaacs
William A. Nierenberg

Submitted by Allen Shimada

An Interesting Meeting:

Empty Seas: Our Overfished Oceans

Friday, October 1, 2004, Golden Gate University School of Law

Panels: 1996 Magnuson Act Considered: Paul Sandifer, U.S. Commission on Ocean Policy; Drew Capputo, Natural Resources Defense Council; Jannis Searles, Oceana; Margaret Spring, U.S. Senate Fisheries Subcommittee; Zeke Grader, Pacific Coast Federation of Fisherman's Associations. **Fisheries Trade Considered:** Sonja Fordham, The Ocean Conservancy; Marcos Orrellana, Center for International Environmental Law; Lalaina Rakotoson, Development and Environmental Law Centre-Madagascar; Mark Linscott, U.S. Trade Representative's Office. **Global Fisheries Governance Considered:** Deirdre Warner-Kramer, U.S. State Department; Tim Eichenberg, Attorney/Consultant; Montserrat Gorina-Ysern, Conservation International. **Co-sponsored by:** Environmental Law Section - California State Bar, International Law Section - California State Law, Environmental Law Section - Bar Association of San Francisco, Center for International Environmental Law, The Ocean Conservancy, Oceana,

Natural Resources Defense Council, Conservation International, Pacific Coast Federation of Fishermen's Associations

For program information, contact one of the symposium co-directors: Paul Kibel, (510) 419-2235, pkibel@fablaw.com or Tim Eichenberg, (415) 386-8127, timeichenberg@yahoo.com. Website: www.ggu.edu/law.

The Empty Seas symposium is supported by a grant from the As You Sow Foundation.

Ed. Note: Notification of this meeting arrived too late for timely publication in Briefs.

Nation's Federal Marine Fisheries Managers to Host Fisheries Conference in March

Mark your calendar to save **March 24-26, 2005**, for the second national fisheries management conference, co-sponsored by the eight Regional Fishery Management Councils, the three Interstate Marine fisheries Commissions, and the National Marine Fisheries Service (NOAA Fisheries). The conference will be held in Washington, D.C. and will be open to the public.

Managing Our Nation's Fisheries II – Focus on the Future, promises pertinent and informative discussions that will interest members of the public, fishery participants, environmental advocates, policymakers, and reporters on the fisheries beat. The conference will focus on key issues raised by the U.S. Commission on Ocean Policy, and issues surrounding re-authorization of the Magnuson-Stevens Fishery Conservation and Management Act, which governs management of our nation's marine fisheries.

The conference will provide a forum for information exchange and for participants to examine a wide range of perspectives on potential legislation that would impact future fisheries management.

Primary focus will be on implementing an ecosystem-based approach for fisheries, strengthening scientific advice for fishery management decisions, addressing the various statutes governing our nation's fishery management process, and design of IFQ programs for fisheries.

The conference will provide an opportunity to meet with the nation's fisheries managers and others involved in living marine resource management.

Conference Logistics: March 24-26, 2005 at Omni Shoreham Hotel and Conference Center, 2500 Calvert Street, Washington, D.C. Advanced registration will be required.

Don't miss this opportunity! More information will be available soon on the conference web site: www.managingfisheries.org.

Contact: David Witherell, (907) 271-2809 or Sheela McLean (907) 586-7221.

A Member's New Work!

A compete, illustrated compendium

Reproductive Biology and Early Life History of Fishes in the Ohio River Drainage

Ictaluridae – Catfish and Madtoms, Volume III

Thomas P. Simon, Indiana Biological Survey, Aquatic Research Center, Bloomington, Indiana, USA

Robert Wallus, Aquatic Biology Consultant, Murphy, North Carolina, USA

Features: Presents the most comprehensive coverage on the early life histories, ecology, and early growth of catfish and madtoms of North America; Contains distinguishing characteristics and a pictorial guide to *Ameiurus, Ictalurus*, *Pylodicitis*, and *Noturus* species in the Ohio River Drainage; Provides critical information on how to identify larval fishes collected in sampling programs; Includes numerous original illustrations of larval fish with morphological descriptions.

Catalog no. 1919, January 2004, 232 pp., ISBN: 0-8493-1919-6, $119.95/£72.99, CRC Press

---

Another Famous Founder: Oscar Elton Sette

Dr. Oscar Elton Sette was a pioneer in the development of fisheries oceanography and according to many fisheries scientists, is the father of modern fisheries oceanography in the U.S.. He is recognized both nationally and internationally for many significant contributions to marine fisheries research. He formulated the concept that the "changing ocean" rather than "average ocean conditions" plays key roles in the natural fluctuations of fish stocks and their vulnerability to harvesting. He originated the importance of multidisciplinary and interdisciplinary approaches, including the interrelationships between fisheries, oceanography, and meteorology, to understanding and solving marine connections of trophodynamics (including nutrients, phytoplankton, zooplankton, tuna forage organisms, and tunas), ocean currents, and tradewind meteorology to explain the distribution and relative abundance of tuna stocks in the equatorial Pacific.

Dr. Sette spent his entire professional career of about four decades in Federal service with fisheries agencies that eventually became NOAA Fisheries. He served in many capacities both at headquarters and in the field and did research in both the Pacific

and Atlantic Oceans. He was the founding director of what is now the NMFS Honolulu Laboratory. As director of the Honolulu Laboratory he assembled an outstanding staff of scientists to carry out his scientific vision that led to the development of U.S. tropical tuna and related pelagic fisheries in the central and western Pacific. Late in his career he also founded a specialized Federal fisheries research laboratory at Stanford University, where he put together a multidisciplinary group of marine scientists including experts in fisheries, physical oceanography, and meteorology to investigate the roles of climate change and El Nino in fisheries.

In addition to conducting and directing fisheries research, Elton, who preferred to be called by his middle name, was also instrumental and influential in formulating national policies for fisheries research and management followed by in the U.S. in the days before the formation of NOAA National Marine Fisheries Service. He also played major roles in planning and establishing, as well as providing notable scientific leadership and guidance for, the Pacific Ocean Fisheries Investigations (POFI) which investigated tuna and other pelagic resources in the central and western Pacific, the California Cooperative Fisheries Investigation (CalCOFI) which initially emphasized the California sardine and later other coastal pelagic fishes in the California Current, the international EASTROPAC program concerning tuna resources in the Eastern Tropical Pacific Ocean, and the international NORPAC program pertaining to salmon resources in the North Pacific. Elton, along with Don McKernon, Wib Chapman, and other marine policy and tuna industry leaders, also played an important part in the formation of the Inter American Tropical Tuna Commission. Among his other accomplishments and contributions to marine science, Elton was one of the founders of the Eastern Pacific Oceanic Conference (EPOC), an organization that continues today, more than 50 years later, where all disciplines of marine scientists are welcome to come together informally to present new research findings, new ideas for marine research, and forge relationships for cooperative research projects and programs.

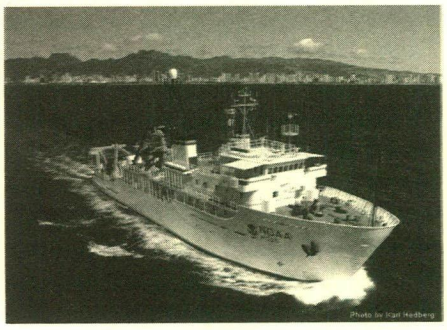
Dr. Sette was a gifted oral and written communicator. He possessed the wonderful ability to explain complex ideas, concepts, and scientific findings in a pragmatic, concise, straightforward, understandable, and clear manner.

Although he was a man with big ideas and many strengths and capabilities to implement them, Elton was a relatively small-built man who spoke softly. He was also a gentle man and a gentleman. He had incredibly high standards and was a patient listener. Whatever Elton sought out to do, he did so with vigor, dedication and determination. Yet, he was notably inclusive, rather than exclusive, and was a firm believer of the power of teamwork to accomplish goals. In memory of Dr. Sette, who passed away in the mid-19802, the American Fisheries Society makes an annual award for outstanding contributions to marine fisheries science.

Submitted by Allen Shimada

Sette's Namesake

The NOAA Ship *R/V Oscar Elton Sette* is named for Dr. Oscar Elton Sette, a pioneer in the development of fisheries oceanography and, according to many, fisheries scientists, the father of modern fisheries oceanography in the U.S.. He is recognized both nationally and internationally for many significant contributions to marine fisheries research. *Oscar Elton Sette* replaces *Townsend Cromwell*. *R/V Oscar Elton Sette* supports the scientific missions of NOAA's National Marine Fisheries Service Pacific Islands Science Center in Honolulu, Hawaii. The ship normally operates throughout the central and western Pacific, and conducts fisheries assessment surveys, physical and chemical oceanography, marine mammal projects and coral reef research. It collects fish and crustacean specimens using bottom trawls, longlines, and fish traps. Plankton, fish larvae and eggs are also collected with plankton nets and surface and mid-water larval nets. The ship routinely conducts scuba diving missions for the Honolulu Laboratory. Ample deck space enables *Oscar Elton Sette* to carry a recompression chamber as an added safety margin for dive-intensive missions in remote regions. The ship is actively involved in NMFS Honolulu Coral Reef Restoration cruises, which concentrate scientific efforts on the removal, classification and density of marine debris and discarded commercial fishing gear from fragile coral reefs. Using the Internet and satellite communications, *Oscar Elton Sette* maintains a Web site titled Student Connection (http://atsea.nmfs.hawaii.edu), which provides semi-weekly communication between students and the ship. Students can follow the vessel's daily operations through regularly posted pictures and write-ups through this site.



Sette also responsible for our Treasurer

Personal Note from Allen Shimada

I'll be sailing on the *Oscar Elton Sette* in late September and in my preparations have come across a good biography for the newsletter.

I'm looking forward to my first cruise in warm water after too many off Alaska. O.E. Sette and Milner "Benny" Schaefer recruited my mom and dad (both single and unknown to each other at the time) to help start up the Honolulu Lab, so it will be a homecoming of sorts, as both the lab and I turn 50!

District Directors

Alaska, Northern
Joseph F. Margraf, Jr.
University of Alaska
P.O. Box 757020
Fairbanks, AK 99775-7020
ffjfml@uaf.edu

Alaska, Southeast
Bruce Wing
P.O. Box 210265
Auke Bay, AK 99821-0265
bruce.wing@noaa.gov

Arizona - New Mexico
G. Morris Southward
Statistics and Res. Inst.
New Mexico State University
Box 30003 Dept. 3130
Las Cruces, New Mexico 88003-8003
southward@nmsu.edu

California, Northern
Diana Watters
California Dept. of Fish and Game
350 Harbor Blvd.
Belmont, CA 94002-4018

California, Southern
Raymond R. Wilson
CSULB Biol Sci
1250 N. Bellflower Blvd.
Long Beach, CA 90840
rwilson1@csulb.edu

Capital
Frank M. Panek
National Fish Health Research Laboratory
1705 Leetown Rd.
Kearneysville, WV 25430

Carolinas
Robert L. Dixon
NOAA, 101 Pivers Island Road
Beaufort, NC 28516
robert.dixon@noaa.gov

Florida
Thomas W. Schmidt
USDI Nat'l. Park Service
Everglades Nat'l. Pk., S. Fla. Res. Ctr.
P.O. Box 279
40001 State Rd. 9336
Homestead, FL 33014
tom_schmidt@nps.gov

Great Lakes, South Central
Dora R. Passino-Reader
National Fish. Center
1451 Green Road
Ann Arbor, MI 48105-2897
dora_reader@usgs.gov

Gulf of Mexico, Northeast
Vacant

Keystone
Joseph W. Rachlin
Dean of Nat. & Soc. Sci.
Lehman College of CUNY
250 Bedford Pk. Blvd. W.
Bronx, NY 10468-5189
rachlin@alpha.lehman.cuny.edu

New England
Kevin D. Friedland
Director, UMass/NOAA CMER Program
Blaisdell House
University of Massachusetts
Amherst, MA 01003-0040
friedlandk@forwild.umass.edu

Oregon-SW Washington
Vacant

Texas
Lance Robinson
Texas Parks and Wildlife Dept.
Seabrook Marine Lab
Seabrook, TX 77856

Washington, NW
Bruce S. Miller
School of Aqu. & Fishery Sci.
University of Washington
Box 355020
Seattle, WA 98195
bsm@u.washington.edu

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, feeshdr@starfishnet.com Subscription $30 a year to Institutions and Non-Members. Officers-Richard Schaefer, 6211 Madawaska Rd., Bethesda, MD 20816, dickschaef@aol.com - President; Barbara Warkentine, SUNY-Maritime College, Science Dept., 6 Pennyfield Ave., Fort Schuyler, Bronx, NY 10465-4198, synodus@aol.com - Secretary; Allen Shimada, NMFS, Office of Science and Technology, 1315 East West Highway, Silver Spring, MD 20910, allen.shimada@noaa.gov -Treasurer. ISSN-8755-0075

Dr. William H. Bayliff
Inter-American Tropical Tuna Commission
8604 LA JOLLA SHORES DR
LA JOLLA CA, 92037-1508

3 3 ****AUTO**MIXED AADC 270

American Institute of Fishery Research Biologists
c/o Allen Shimada
NMFS, Office of Science and Technology
1315 East West Highway
Silver Spring, MD 20910

Return Service Requested

NON-PRFT
U.S. Postage
PAID
Permit No. 125
Morehead City, NC 28557

American Institute of Fishery Research Biologists
Promoting excellence in fishery science

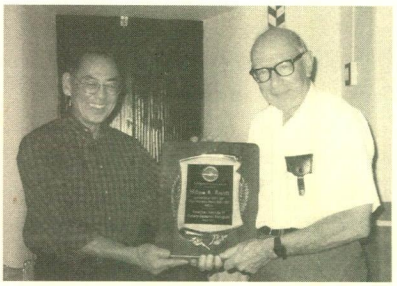
. . . BRIEFS . . .

Website: www.iattc.org/aifrb/

VOL. 33, NO. 5 SEPTEMBER, OCTOBER 2004

Bayliff Receives Distinguished Service Award

At its Quebec City meeting in 2003, the Board of Control (BOC) selected William H. Bayliff to receive the Distinguished Service Award for 2003. The Institute established the Distinguished Service Award in 1994 to recognize members who have performed outstanding and sustained service to the Institute. In selecting Bill Bayliff the BOC noted Bill's long and outstanding dedication to advancing the objectives of the Institute and service to the Institute. He is particularly recognized for his contribution in developing selection procedures for the W. F. Thompson Award and for his sustained dedication in annually identifying nominees for that award. Bill obtained his B.A. degree from Western Maryland College and his M.S. and Ph.D degrees from the University of Washington, Seattle. He is a fishery biologist on the staff of the Inter-American Tropical Tuna Commission in La Jolla, California, which he joined in 1958. He has published more than 50 papers in peer-reviewed journals. Bill became a member of AIFRB in 1959 and was promoted to Fellow in 1971. He served at the District level as Secretary-Treasurer in 1965, 1966, and as Acting Director in 1966-1967 of the Southern California District. In 1989, he was appointed Chairman of the W.F. Thompson Award Committee of the Institute. He served as Chairman until 1992, but continued his involvement thereafter with Committee affairs. Of particular significance is his initiative in 1993 of preparing guidelines for the evaluation and selection process for the Thompson Award. The guidelines are currently used by the Committee. He also researched and prepared the first complete record of recipients of the Thompson award. As a continued service to the Committee, Bill regularly scans publications for eligible candidates for the Thompson Award and solicits their application. For his outstanding and sustained service the Institute is proud to honor Bill with the Distinguished Service Award for 2003.



Submitted by Gary Sakagawa

Richard McBride accepts from President Schaefer a plaque symbolizing the Thompson award for the best student-authored paper of 2004. The work entitled Larval and settlement periods of the Northern searobin (Prionotus carolinus) and striped searobin (P. Evolans) co-authored with Michael P. Fahay and Kenneth W. Able was published in Fishery Bulletin 100:63-73

Photo by Dora Passino-Reader

President Schaefer's charge to Website Committee

An item of major discussion at the Board of Control (BOC) meeting was the pressing need to "upgrade" the professional "image" of our website, and the further need for increasing the frequency of its "updating". The reasons are several: 1) The BOC wishes to use the website as an active component of AIFRB's suite of recruitment and marketing tools to increase its membership base; therefore, we customarily, and ever more frequently, refer potential new members to our website where, we tell them, they can find "everything" and "anything" they need to know about AIFRB. To enhance our image, and to make a good "first impression" on such persons, the website needs to be as

The AIFRB is a 501(c)(3) tax-exempt nonprofit organization (EIN 61-6050711).

"professional looking" and informative as we can afford and conceive. 2) It is the intent of the BOC to gradually, but unwaveringly, move toward making substitute use of website for purposes of receiving and conveying membership information and, similarly, reduce the use of BRIEFS as our primary source of such activity. Indeed, it is our intent to regularly put BRIEFS "online" as soon as possible so that those who can and wish to access BRIEFS on the internet, rather than receive "hard copy", may do so. The BOC wants to pursue this as a part of its efforts to accelerate communication and disseminate information while reducing costs.

With respect to accomplishing these objectives, I am designating Neal Foster as Webmaster who along with Joe Rachlin and Katherine Myers constitute our Website Oversite Committee charged to explore and implement what actions need to be taken. The help of an "outside" consultant may be necessary; that should be explored with respect to requirements and costs associated with upgrading. It may be necessary for a formal proposal to be requested from a consultant, and a formal contract be entered into for services once we know what the associated costs might be. Our treasurer, Allen Shimada, has requested that the website be so designed as to allow members directly to make address changes, check on dues status and to pay dues and make contributions by credit card payment online.

Important Works by Members

In a Perfect Ocean

The State of Fisheries and Ecosystems in the North Atlantic Ocean

Daniel Pauly and Jay Maclean

The first empirical assessment of the status of ecosystems in the North Atlantic, this important work analyzes fourteen large marine ecosystems, to provide an indisputable picture of an ocean whose food webs have been dramatically altered, resulting in a phenomenon described by the authors as "fishing down the food web."

The book compares the past and present health status of the North Atlantic and presents a rigorous scientific assessment of fisheries catches, biomass and trophic level. It considers the factors that have led to the current situation, describes the policy options available for halting the decline and offers recommendations for restoring the North Atlantic. Includes maps and charts illustrating the effects of overfishing and interactions contributing to North Atlantic ecosystem decline.

Island Press

160 pages. Tables, figures, maps, index. 2003

Paperback: $25.00/1-55963-324-7

Hardcover: $50.00/1-55963-323-9

Boreal Shield Watersheds

Lake Trout Ecosystems in a Changing Environment

Edited by J.M. Gunn, R.J. Steedman, R.A. Ryder

Boreal Shield Watersheds: Lake Trout Ecosystems in a Changing Environment brings together the work of a renowned international group of scientists who specialize in aquatic science and environmental management. They explore the functioning of Boreal Shield ecosystems, focusing on the lake trout, the classic coldwater species of northern glaciated lakes, using it as an indicator of environmental change and as a model to measure the effectiveness of management actions.

This book demonstrates how boreal waters have served as a crucible for decades of environmental research into the impacts of nutrient additions, trace contaminants, acid rain, climate change, sport fishing, invasive species, and watershed disturbances.

The text builds on this substantial research legacy and explores our ability to manage human interactions with ecosystems across the vast Boreal Shield ecozone of North America, and with other important ecosystems worldwide. It also provides models and new methods of assessing the risk to and the durability of ecosystems in relation to local, regional, and global human activities. Maps and descriptions of several important long-term monitoring sites and an atlas describing more than 3,000 lake trout lakes in the region are special components of the book.

Features

*Explores the effects of forestry roads and timber harvest on the reproductive habitat of lake trout

*Examines the impacts of invasive species on the area's food web dynamics

*Analyzes acid deposition in the northeast U.S.; its sources, inputs, effects, and management and recovery strategies

*Discusses the potential change of lake trout populations resulting from climate change, as estimated from regional life history models

*Reviews current knowledge of the impact of reservoir construction, nutrient and trace metal (Hg) dynamics and the role of dissolved organic carbon in Shield waters

*Presents management options for small and large lakes including the Great Lakes.

*Describes new sampling methodologies for conducting regional assessments

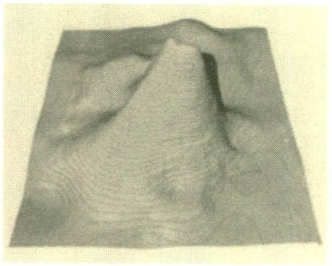
CRC Press

Catalog no. L1646, January 2004, 528 pp.

ISBN: 1-56670-646-7, $139.95

Shimada Seamount Commemorative Presentation

As many of you know, Skip Theberge of the NOAA Library in Silver Spring, MD, is a member of the Advisory Committee for Undersea Features (ACUF) of the U.S. Board on Geographic Names. He noted some time ago that there is a Shimada Seamount off the coast of Mexico and inquired of Allen Shimada if he knew the origin of the name. To his surprise, Allen informed him that it was named for Allen's father, Bell Shimada, who was a fisheries scientist. Bell Shimada was killed in the same plane crash that killed Townsend Cromwell in 1958 ~~1954~~ while enroute to fisheries research vessel *R/V Spencer F. Baird*. Upon this revelation, the ACUF thought it would be appropriate to have a small ceremony at which to make a formal presentation of a framed 3-D image of Shimada Seamount to Allen. This was done in the NOAA Central Library on October 5. The ceremony represented an opportunity to reflect upon our heritage and honor one of our past scientists.



Schematic depth profile of Shimada Seamount

Some additional background on this topic- in his 1968 publication, "Seafloor Topography of the Central Eastern Pacific," Bureau of Commercial Fisheries Circular 291, Tom Chase writes, "In 1957, Hurricane Bank, later named Shimada Bank, was discovered by the tunaboat Hurricane at lat.16°52' N.,long. 117° 32'W...Through 1964, a total of 16,398 tons of tuna had been caught at this bank." What Chase didn't write was that it was he who proposed the name change to the Board of Geographic Names in the mid 1960's after renaming Hurricane Bank to Shimada Bank, in honor of Inter-American Tropical Tuna Commission (IATTC) Fisheries scientist, Bell Shimada, who was killed in a 3 June 1958 airplane crash at Guadalajara, Mexico, while en route to Acapulco, to meet the *R/V Spencer F. Baird* for the final leg of Expedition Scott. The feature is now listed in the GEBCO gazetteer as Shimada Seamount, located at 16°52'N, 117°31'W, and has been investigated in detail by Jim Gardner (Gardner, JV., et al., GSA Bull. 95(1984)855-862.)

Northern California Considers Crabs

Northern California District Members assembled at a dinner meeting in Benicia on November 10 to hear Chris DeWees, Sea Grant Marine Fisheries Specialist, UC-D, report on his research "Racing for crabs: costs and management options evaluated in the Dungeness crab fishery".

Submitted by Michele Barlowe

Nominations Requested

CALL FOR NOMINATIONS FOR THE 2005 ROBERT H.GIBBS, JR. MEMORIAL AWARD FOR EXCELLENCE IN SYSTEMATIC ICHTHYOLOGY. The American Society of Ichthyologists and Herpetologists (ASIH) seeks nominations for the 2005 Robert H. Gibbs, Jr. Memorial Award for Excellence in Systematic Ichthyology. The award is made annually for "an outstanding body of published work in systematic ichthyology" to a citizen of a Western Hemisphere nation who has not been a past recipient of the award. The award consists of a plaque and a cash prize of $5,000. The award is presented during the ASIH banquet held in conjunction with the annual meeting. Nominations may be made by any ichthyologist, including self-nominations, and should include the nominee's curriculum vitae, details of the nominee's specific contributions and their impacts on systematic ichthyology. Nominations should be submitted by March 1, 2005. Nominations will be effective for three years. Four copies of each nomination should be sent to Dr. Larry M. Page (Chair of the 2005 Gibbs Award Committee), Florida Museum of Natural History, 2500 NW 19th Way, Gainesville, FL 32605, e-mail: lpage1@ufl.edu or to the ASIH Secretary, Dr. Maureen A. Donnelly, Department of Biological Sciences, Florida International University, 11200 SW 8th St., Miami, FL, 33199, e-mail: asih@fiu.edu. Please do not send nominations via email or Fax. For a list of previous Gibbs Award winners, please visit the ASIH website (http://www.asih.org/awrds/gibbs.html).

A Stalwart of the AIFRB:
Founding Member F. Heward Bell

Heward Bell was born July 4, 1902, in Swansea, Wales. He came to Canada as a child and was raised there. As a young man he attended the University of British Columbia in Vancouver and graduated as an honor student in biology. He had a lifetime interest in biology, particularly in fishery biology. He was a gentlemen, a scholar, and an author. As a child he contracted and survived polio. As a consequence, he saw beauty in all things and developed an inquiring mind.

Upon graduation from the University of British Columbia in 1924, Heward was appointed instructor in biology for that University. In 1925, he served as a research assistant for the Fisheries Research Board of Canada, tagging salmon off the west coast of Vancouver Island. Also in 1925, he was appointed Associate Scientific Assistant for the International Fisheries Commission, later known as the International Pacific Halibut Commission. On a leave of absence from the Halibut Commission in 1940-1941 he served as assistant director of the International Pacific (Sockeye) Salmon Fisheries Commission of Canada and the United States. During the period 1930 to 1970 he was a Special Lecturer in Fisheries at the University of Washington. He became Assistant Director of the Halibut Commission in 1943 and remained in that position until he was appointed Director in 1963. He served in that capacity until his retirement in 1970.

During his early years as a field biologist, Heward knew and worked with many individuals who were early pioneers in the commercial fisheries for halibut and salmon off the coasts of Alaska, British Columbia, and the contiguous United States. These relationships, as well as his early training in biology, were influential in forming his concepts of managing a fishery. He collected voluminous data records of fishing effort and catch. These records became the backbone of the management procedures of the Halibut Commission.

Heward's early experience as a fishery biologist was obtained on halibut vessels chartered for tagging studies. He survived a winter shipwreck off Kodiak Island. The early tagging studies showed the migration patterns of halibut and Heward's experience with the fishing operation led to the use of catch-per-unit values as measures of population size.

Heward was honored for his work as a fishery biologist and administrator in 1953 when he received the Coronation Medal of Elizabeth Regina II for services rendered to Canada with respect to the Pacific halibut fishery. He was the first person to receive the Golden Halibut Award, an award presented annually by the Halibut Fisherman's Wives Association of North America for services rendered to the industry of Canada and the United States. In 1962 he received a dedicated service award from the Maritime Press Association. In retirement he wrote and published *The Pacific Halibut – The Resource and the Fishery*, a book detailing the development of the halibut fishery and its management.

Heward was a founding fellow of the American Institute of Fishery Research Biologists. His views on professionalism in fishery biology were contributed to that organization to that organization during its founding period.

Submitted by Morris Southward

A significant meeting

Coastal Zone 05

July 17-21,2005 New Orleans LA

For more information: www.csc.noaa.gov/cz/

Route to a Solution?
National Competition to Design Fishing Gear Aimed at Reducing Bycatch

NOAA, along with a group of aquariums, universities and conservation organizations, is sponsoring The Smart Gear Competition, a contest to develop designs for practical, cost-effective solutions to reduce the incidental catch of sea turtles, cetaceans, fish bycatch and other non-target species in either fixed gear or nets. One winner will be selected for the grand prize of $25,000 and to take their design from the drawing board through prototype development, testing, and initial manufacture. The two runners-up will receive $5,000 each. For more detailed information, see the Smart Gear Competition's Web site at: http://www.smartgear.org/.

Submitted by Charles Wax Caillouet who noted that the SE Regional office of NMFS passed up the same idea in 1986.

A Crucial Fisheries Issue: An Alternative View

LETTER TO THE EDITOR

(Marine Turtle Newsletter):

TEDs

C.R. Shoop & C. Ruckdeschel

P.O. Box 796, St. Mary's GA 31558, USA (E-mail: mailto:cimuseum@yahoo.com

It has been 12 years since the turtle excluder device (TED) regulations were implemented in the USA, but the stranding rate for dead sea turtles has continued to rise. The 17 mile beach of Cumberland Island, Georgia, has gone from an annual average stranding rate of 50 turtles during 1981 to 1985, to 84 dead turtles a year for the last five years. In each of the last two years, the toll has been more than 100. The increase in number of strandings has been irregular; nevertheless, the data alone give no indication when TED use was required. Some people dismiss the increased mortality, saying there are just more turtles, but that ignores the problem. That thousands of sea turtles continue to be killed by shallow water trawling is proof that the TED experiment is a failure, despite models and claims to the contrary, few of which incorporate stranding data. Each year or so, TED regulations are modified which allows another year of trawling (another experiment), yet the death toll continues to rise. The latest modification (2003) enlarged the TED opening to allow turtles to escape, but most turtles that are killed are small. Less than 10% of the stranded turtles we have recorded were adults, and we have necropsied almost 2000 on Cumberland Island. Shallow water trawling is akin to bull-dozing woodlands for blueberries. The destruction is enormous, the result long lasting, and the ultimate fate of the fishery is obvious. Areas off-limits to trawling are needed to protect habitats utilized by sea turtles and the ecosystem in general. Research on additional methods to keep turtles out of nets and deal with bycatch in a different way should be a priority. Our continued commercial exploitation as hunter-gathers must eventually end as it did with bison and passenger pigeon. We are "clearcutting" and ravaging the nearshore ecosystems, with sea turtles one of most obvious victims. At present, the only local (GA) shrimp fishery nonlethal to sea turtles and essentially free of bycatch is the cast net fishery. However, the trawl fishery is politically strong enough to indirectly prohibit cast netters from modifying their nets to increase efficiency and to restrict their take to 48 quarts of shrimp per day in Georgia, USA. People using their own muscle are restricted in the amount of shrimp they are allowed, while powerful, destructive trawlers pulling up to four giant nets have no limits. There is something wrong with this picture. Sea turtles are protected by the Endangered Species Act, so some pretense of governmental protection must be offered for trawling to continue. TED regulations provide that pretense and thereby enable shallow water trawling; the carnage of sea turtles continues. T-E-D really stands for "Trawling Enabling Device." We have entrusted the protection of all sea turtles in the waters of USA to the National Marine Fisheries Service (NOAA, Department of Commerce), but we must remember that such obligation comes secondarily to their primary charge, promoting commercial fisheries, and thus presents a serious conflict of interest. The present government-sanctioned killing of our sea turtles is preventable, but the government is unwilling to make the politically charged decisions necessary. To do so would impinge upon or hinder the economically powerful shrimp trawling industry. Government agencies continue to tout the value and great success of TED regulations and that pacifies the public. Perhaps if the public knew the truth, their outrage might outweigh the economic pressure now governing the situation. Are many thousands of dead sea turtles each year a measure of success? The public has an excuse, but why does the community of sea turtles biologists continue to support TEDs and accept the magnitude of mortality? The stranding results over the 12 year "experiment" should be obvious enough to convince anyone that the solution for adequately protecting sea turtles from trawl nets is not the current TED regulations.

Submitted by Charles Caillouet

Any Rebuttal?? Ed.

Go Tell It on a Mountain

The U.S. Army Corps of Engineers can no longer allow coal companies in West Virginia to bury free-flowing mountain streams under mining waste using a rubberstamp permit, thanks to a court victory by NRDC and other environmental groups. The ruling ends a controversial practice by which companies used the nationwide permit issued under the Clean Water Act to destroy more than 1,200 miles of Appalachian streams. The stream burial is a product of mountaintop removal — a cheap form of coal mining by which companies blow up mountaintops to access seams of coal, and then dump much of the debris into nearby valleys and waterways, killing all aquatic life.

From: Nature's Voice, Sept/Oct 2004

Halibut investigation fosters another founding member: Henry A. Dunlop

A Brief Biography

Henry A. Dunlop, also known as Harry, was born in Dunrea, Manitoba, Canada, on July 8, 1898. He earned a Bachelor of Arts in Zoology at the University of British Columbia in 1919 and a Master of Arts in Zoology in 1922 at the same university. He continued his graduate studies at the University of Toronto in 1924-1925 and at the University of Washington School of Fisheries between 1931 and 1936. He joined the International Fisheries Commission, predecessor of the International Pacific Halibut Commission, in July 1925 as Assistant Director. He held this position until May 1939. Harry Dunlop was appointed Acting Director of the Halibut Commission for the period June 1939 to September 1940, at which time he was appointed Director of Investigations, a position he held until his retirement.

Under his direction, the halibut resource was rehabilitated. Before his retirement in 1963, the fishery attained the maximum sustainable yield through conservation, a condition not attained by any other marine fishery in the world. A close relationship between the halibut industry, the fishery, and the Commission prevailed. As a consequence, fishing records that demonstrated the decline and rebuilding of the resource were readily available to the Commission's staff and early regulatory models of commercial fishing were developed.

Harry Dunlop was a member of the American Fisheries Society, the American Society of Ichthyologists and Herpetologists, and the American Association for the Advancement of Science. He was a charter member of the Pacific Fishery Biologists. In 1953, he received the Elizabeth II Coronation Medal for meritorious public service to Canada. He was also a founding member of the American Institute of Fishery Research Biologists. Early ideas and discussions that led to the formation of AIFRB took place in the Halibut Commission's offices. The role of cooperation between the members of the fishery and the regulating agency were crucial to the recovery of the halibut resource and in many ways influenced the discussions that led to the formation of AIFRB.

Submitted by Morris Southward

Polluted fish warnings cover one-third of country's lakes, one-fourth of rivers

By John Hellprin, The Associated Press

Washington — One of every three lakes in the United States, and nearly one-quarter of the nation's rivers contain enough pollution that people should limit or avoid eating fish caught there.

Every state but Alaska and Wyoming issued fish advisories covering some and occasionally all of their lakes or rivers in 2003, according to a national database maintained by the Environmental Protection Agency and updated every year.

Though the number of advisories rose to 3,094, up from 2,814 in 2002, according to figures released Tuesday, EPA Administrator Mike Leavitt said the increase was due to more monitoring, not more pollution.

Nearly all the advisories involve contaminants such as mercury, dioxins, PCBs, pesticides and heavy metals, including arsenic, copper and lead. Currently they cover 35 percent of the nation's lake acreage and 24 percent of river miles.

Leavitt said mercury pollution from industry is decreasing, through he cited figures only as recent as five years ago. Primary sources of mercury pollution include coalburning power plants, the burning of hazardous and medical waste and the production of chlorine. It also occurs naturally in the environment. The advisories cover fish caught during recreational and sport fishing, not deep-sea commercial fishing or fish farming operation. "It's about trout, not tuna. It's about what you catch on the shore, not what you buy on the shelf," Leavitt said. This is about the health of pregnant mothers and small children, that's the primary focus of our concern."

But he also acknowledged that virtually every acre of lakes and mile of rivers could eventually be covered by advisories. Since pollution is found in fish nearly every time a state looks for it, the EPA assumes that whenever a state does that kind of monitoring it will wind up issuing a fish advisory, he said.

"I want to make clear that this agency views mercury as a toxin. Manmade emissions need to be reduced and regulated. There has been an appropriate, heightened public concern," Leavitt said.

This year, 44 states had a fish advisory for mercury, a persistent substance that affects the nervous system. Two more states, Montana and Washington, added statewide advisories to warn of the potential for widespread contamination of fish.

Servings of fish caught by family or friends and not covered by an advisory should be limited to one six-ounce portion a week, according to the Food and Drug Administration.

From: Sun Journal, New Bern, NC — Wednesday, August 25, 2004

Menhaden I:

Menhaden stock perplexes fish managers

Too few of the forage fish or too many large rockfish?

By Karl Blankenship

After four decades of fishing the Bay. Jim Price says he is ready to hang up his rod and reel, at least when it comes to striped bass. The fish - a species he has prized and studied for years - are now too sick, and too skinny, to be worth catching. Almost a decade ago, Price began raising concern that the Bay's most popular recreational fish was running out of menhaden, a small, oily fish, to eat. Many say the species has been overharvested in the Bay by a commercial fishing industry that has consolidated largely in Virginia while most other states have closed their waters to commercial menhaden fishing.

Menhaden are an important forage fish for striped bass, as well as other predators such as weakfish and bluefish. But everyone agrees the numbers of young menhaden in the Bay have been at low levels for years, even as striped bass populations have mushroomed. The lack of menhaden is blamed for "skinny" rockfish in the Bay. Studies show that striped bass of the same age are smaller today than they were just 15 years ago. Some claim the Bay's most prized fish is so stressed and underfed that they have become susceptible to mycobacteriosis - a potentially lethal disease that can cause ugly lesions on fish - which infects half or more of the Bay's rockfish population.

As the situation worsened, recreational anglers have increasingly pressed for efforts to curtail the menhaden fishery, with efforts ranging from a "save the stripers" petition drive to unsuccessful legislation in Virginia this year to clamp down on the fishery. But, some scientists say, there is a problem with the overfishing scenario. It may not be true. In fact, assessments of the menhaden spawning stock show it is healthy - and has been for years. The numbers of young "peanut" menhaden are clearly near record lows in the Bay, but scientists say there are potential causes other than the menhaden fishery - including the possibility that the Bay's huge striped bass population may be taking too big of a bite out of the menhaden population.

After years of prodding, the Atlantic States Marine Fisheries Commission - a multistate organization responsible for managing migratory species - plans to hold a workshop this fall to deal with the question of whether the Bay is running out of menhaden, and if restrictions are warranted for the commercial fishery. To some, the ASMFC's willingness to take a broad look at the issue signals that it is ready to act. "I think it has the potential to lead to some significant changes in the way the fishery is managed and to give at least some interim protections to the menhaden stock and the fish that prey on them," said Ken Hinman, president of the National Coalition for Marine Conservation.

Others doubt such a workshop can do much more than highlight how much scientists don't know about the issue. But their ecological role is every bit as important as their economic role. Scientists have estimated that a healthy, algae-grazing menhaden population might remove 10 percent or more of the Bay's nitrogen, although such estimates remain controversial. Because of that potential, even wastewater treatment plant operators in the past have urged the ASFMC to consider reduced catches.

But menhaden are also a major biological engine that propels the Bay ecosystem. They rapidly turn algae into food-small menhaden can grow by 1 millimeter a day-for many of the Bay's predatory fish. Because they are rich in oils, menhaden are considered to be especially nutritious for other fish, and are credited with helping striped bass build fat reserves before winter.

Studies in Maryland show that the menhaden content in striped bass diets has dropped sharply in recent decades. In the late 1950's-when menhaden stocks were at their highest in recent history-they accounted for nearly 80 percent of the diet for striped bass more than 3 years old. That fell to about 20 percent now. Today, 3- to 6-year-old Bay-dwelling striped bass on average weigh 10- 15 percent less than they did in the late 1980s. Other studies show that body fat reserves in striped bass have also dwindled.

Also dwindling is the supply of menhaden, especially those younger than 2 years old. These are the ones preferred by most of the striped bass living in the Chesapeake, where rockfish spend the first several years of their lives. The number of small fish entering the menhaden population, known as "recruits" has been at near record low levels for more than a decade.

Because menhaden spawn as a single, coastal stock with their eggs randomly dispersed, any problem with recruitment should be reflected coastwide, many scientists insist - not just in the Bay. Yet some surveys suggest that the numbers of young have increased elsewhere. In lower New England, said AIFRB Fellow, Doug Vaughan, a fisheries scientist with the National Marine Fisheries Service who assesses the health of the menhaden stock, "the indices have been at historic highs over the last five to eight years." But he added, because the bulk of the menhaden population is in the mid-Atlantic, good recruitment in New England has less of an impact on the overall population. Vaughan and others suspect the reason for the Chesapeake's poor menhaden recruitment in recent years rests not with the spawning stock, but with factors more restricted to the Bay. That could include things like poor water quality in the Chesapeake. Some suggest that the focal point for menhaden recruitment - which historically has been centered in the Bay and North Carolina estuaries - might be shifting farther north for some reason. Or others issues may be important.

For instance, an analysis of decades of spawning and weather data by Bob Wood, a climatologist with the National Oceanographic and Atmosphere Administration's Chesapeake Bay Office, suggests that menhaden recruitment in the Chesapeake - as well as

striped bass recruitment - is heavily influenced by regional weather patterns.

When a high pressure system, known as the Azores-Bermuda high, dominates the region's weather patterns in March - usually signaling an early spring - it's good news for menhaden as well as other ocean spawners. But when a competing system, dominated by a high pressure system known as the Ohio Valley High, dominates, it's good for striped bass and other anadromous fish. In general, that pattern has been more favorable for striped bass in recent years than for menhaden, Wood said. That could explain why, although the ASMFC's assessment continues to find healthy spawning stocks, actual recruitment has been low. "In terms of spawning stock, the numbers are incredibly good," Vaughan said. "But it is the survival through to recruitment which seems to be the bottleneck."

Another possibility is that past emphasis in managing for a large striped bass stock after the population crashed - forcing a closure of the fishery in the late 1980s - has produced a population so large it is putting other species at risk. And not just menhaden, but other fish that also rely on menhaden for food.

"This isn't just about menhaden and striped bass," Matt Cieri said. "It is also about the effects of striped bass on the availability of prey for weakfish and bluefish, as well as some of the marine mammal populations. Do you want more striped bass, or do you want more bluefish?"

For all the concern about menhaden, they remain one of the most numerous fish in the Bay. The question for those who worry about the size of the fishery is whether menhaden are being managed in a way that allows them to perform all of the economic and ecological jobs that people expect of the small fish.

Critics say the stock assessment is aimed primarily at measuring whether the menhaden spawning stock is large enough to support the fishery, and that it does not adequately account for the needs of predatory fish. Although the ASMFC's most recent menhaden management plan - completed more than three years ago - calls for taking the ecological role of menhaden into account, the plan specifies no actions to make that happen.

The ASMFC is supporting the development of a complex multispecies computer model focused on menhaden, but it is not expected to be completed for a year.

Fishery critics also contend the population baselines used to measure healthy menhaden populations are based on estimates since the 1950s. Before that time, evidence suggests the menhaden population may have been much greater. "We may have actually been overfishing this stock for 40 to 50 years and not realized it," said Bill Goldsborough, senior scientist with the Chesapeake Bay Foundation.

There is also concern from some scientists, environmental groups and recreational anglers that the stock assessment focuses on the entire East Coast, and therefore does not address population health in local areas, such as the Bay. The intense fishing pressure in the Chesapeake, they say, could lead to localized depletion of menhaden stocks, and too few fish for other species to eat.

Once, the catch of menhaden was distributed all along the coast. As recently as 1981, menhaden was processed at 11 East Coast plants. Today, only two processing plants are left, one in Reedville, VA, and one in North Carolina. About 60 percent of the entire menhaden East Coast catch comes out of the Bay - but the total catch is declining.

Two independent peer reviews of the ASMFC's stock assessment in recent years have raised the question of whether localized depletion could be an issue.

Alexi Sharov, a fisheries biologist with the Maryland Department of Natural Resources and a member of ASMFC's Menhaden Technical Committee, said it is hard to know whether that's the case because no one has ever adequately monitored the rate at which menhaden migrate in and out of the Bay.

"The perception is that there is a constant exchange," he said. "The schools are moving in and out and there is a constant replenishment." In fact, Sharov said, no one really knows whether most of the menhaden move into the Bay in the spring and stay there, or whether large numbers are constantly moving in and out during the summer, replacing those caught in the fishery. "That is one of the black holes that really preclude us from making any conclusions," Sharov said.

In the face of such uncertainties, the groups pushing for ASMFC action say that management should take a "precautionary approach." They call for reducing the overall menhaden catch and incorporating numeric catch limits in the menhaden fishery management plan - right now the plan does not set a specific maximum harvest. They also advocate spreading the menhaden catch over a broader geographic area.

In addition, they would like to limit the harvest of menhaden that have not lived long enough to reproduce - those 2 years old or younger. Right now, most of the fish caught in the Bay are 2 years old.

That would have two benefits, some argue. Allowing more 2-year-old fish to reproduce would increase the size of the spawning stock. While other factors, such as climate, may heavily influence recruitment, Goldsborough and others say a larger spawning stock would produce more eggs and larvae that might help offset other variables.

Besides, Goldsborough said, people can't do much to control things like the weather, but they can manage the catch. "You control what you can control," Goldsborough said. "And the more adults you build into the population, the greater buffer you have against poor recruitment."

A second benefit of protecting 2-year-old menhaden, he said, would be increasing the food supply for older striped bass. Most of the immature striped bass that live in the Bay eat smaller menhaden-which are not targeted by the fishery. But Goldsborough said the age 2 menhaden are important for larger striped bass migrating in and out of the Chesapeake.

Besides reducing the menhaden catch, some are also open to increasing the striped bass catch to reduce their menhaden demand, perhaps by reducing the minimum catch size for striped bass below the current 18 inches. In the late 1970s and early 1980s - before the fishery was closed because of a stock collapse - it was

legal to catch striped bass that were 12 inches long. When the fishery was reopened, the minimum size was raised to 18 inches to protect the stock.

But an 18-inch fish demands dramatically more food than a 12-inch long. Even if the striped bass population had not increased , raising the minimum size limit would have increased their food demand threefold, according to estimates by Jim Uphoff, a fisheries biologist with the Maryland Department of Natural Resources. Price, the former charter boat captain, said that protecting striped bass may have worked too well. Two decades ago, he pushed to protect the striped bass as a threatened species. Now, he not only blames too few menhaden for striped bass woes, but also striped bass abundance. "If you look at the data, striped bass abundance has had an influence on menhaden abundance ever since we kept records," Price said. "I think you have to manage both."

Not everyone who wants to protect menhaden agrees with that view. Ken Hinman, of the National Coalition for Marine Conservation, opposes the idea of "fishing down" one species to benefit another. The goal, he said, should be to manage for more of both species. "We could have too many striped bass in the Bay for the number of menhaden that are there, but that doesn't mean we shouldn't have that many striped bass in the Bay. It could be that we should not be fishing for menhaden primarily in the Bay."

To many, the upcoming workshops are welcomed because they may hasten the arrival of a new era of multispecies fisheries management.

Traditionally, fish species are managed individually, as though what happens to one species will not impact another. The poor status of many fish stocks has helped to promote the concept that interrelationships between species need to be accounted for in fisheries management. In fact, the Bay Program's Chesapeake 2000 agreement called for Bay fishery management to address multispecies issues - starting with the menhaden plan. But some say the debate about menhaden and striped bass illustrates that multispecies management is no panacea. Fishery managers already face tough questions in determining how much of the catch should be allocated among recreational and commercial fisherman, as well as among states. Multispecies management makes that even more difficult because it pits species against species - along with their stakeholders.

"You have a stakeholder in one fishery having a say in another fishery," said Tom Miller, a fisheries biologist with the University of Maryland's Center for Environmental Science. "Those are going to be very challenging questions."

Managers, with uncertain data, are forced to pick winners and losers. The new watchword for fisheries management is, when faced with uncertainty, to be "precautionary." But in this case, Miller asked, does precautionary mean protecting menhaden from commercial fishermen - or from striped bass? The questions go on. Whose stake is more important - that of recreational anglers who fish for striped bass or that of a small town that depends on menhaden for its living? How many menhaden should be preserved to help filter the Bay?

Miller, who served on the peer review panel that examined the ASMFC's recent menhaden stock assessment, said so many questions remain about menhaden that it may be hard to reach definite answers. The ASMFC's Menhaden Technical Committee recently outlined a $1-million-a-year research program aimed at clarifying what it considers to be key issues to improve menhaden management.

"I don't think there is a golden treasure trove of data out there waiting be correctly analyzed and brought to the table that is going to answer all of the questions," he said. It's unclear whether recommendations from a workshop could lead to acceptable management action. For example, the ASMFC may not be able to force the menhaden catch to be spread out. Most other coastal states have closed their waters to menhaden fishery: Only Virginia and North Carolina waters - as well as federal water more than 3 miles offshore - remain open. The ASMFC has no authority to order states to allow the menhaden boats to fish.

Many consider it unlikely that ASMFC would allow a greater striped bass harvest in the Bay. Anglers in many coastal states believe their supply of large fish hinges on large stocks in the Chesapeake.

Some worry that the stakes of any decision could be huge. Instead of moving toward addressing multispecies concerns, they worry that a premature action by the ASMFC could actually hinder multispecies management.

"There is always a fear that some people, in a desperate attempt to do something to rectify the problem in the Chesapeake Bay, may impose management measures that may or may not be effective," Cieri said. "If those management efforts end up being challenged, as I'm sure they will be, one wouldn't want to see a setback in ecosystem management because someone jumped the gun."

Others, such as Price, who has pushed for action for a decade, worry about what will happen to the Bay's fish if nothing is done. He worries that if striped bass are not controlled, and menhaden fishing reduced, hungry striped bass may begin threatening other species through increased predation. "If these workshops can't come up with some recommendations, I'm going to be ready to throw in the towel," he said.

The dates for the ASMFC workshops were Oct. 12-14.

From: Bay Journal , October 2004

Menhaden II
Environmental hysteria? Useful New Players?

Menhaden Brings Environmentalists and Recreational Fishers Together

Next to a sport fisherman rowing out to hook a striped bass, the huge industrial fishing boats prowling the Chesapeake Bay look like something out of Star Wars. Aided by spotting planes circling overhead, these 170-foot long "mother ships" deploy smaller boats to encircle schools of fish with an immense "purse seine" net, dragging them into the ship's refrigerated hold. Delivered to a Virginia processing plant, the fish are ground for animal feed or squeezed like a load of olives for their most valuable component, oil. A single Houston-based company, Omega Protein, harvests two-thirds of the entire East Coast catch of this small oily fish, called menhaden, or sometimes bunker or pogies. Juvenile menhaden make up 80% of the diet of a mature striped bass, and Chesapeake Bay is the spawning ground for 90% of all striped bass. If menhaden are being depleted in the bay, that could be one cause for the loss of body mass among the Chesapeake's striped bass. The average Bay bass now has 25% of the fat found in a healthy fish. This loss of fat may contribute to the growing incidence of mycobacteriosis and pfiesteria.

Shared concern for the role of menhaden as a key forage species has now spawned an unprecedented alliance between Environmental Defense (ED) and the Coastal Conservation Association (CCA), which represents 95,000 recreational fishermen from Texas to Maine. The two organizations have not always agreed: While Environmental Defense worked to defeat "Freedom to Fish" bills in 11 states, CCA helped pass Maryland's bill, which makes it nearly impossible to protect critical habitat from recreational fishing. But as CCA's Dick Brame says, "That's what I like about Environmental Defense. Even when we disagree, it's not a parting of ways. We move on to the next thing."

In this case CCA and ED joined forces to reform menhaden management in Virginia's half of the Chesapeake Bay. Most other Atlantic States have banned industrial menhaden fishing, but Virginia is home to Omega's biggest processing plant. While it delegates every other fish to its marine resource commission, the Virginia state legislature manages menhaden itself.

Thanks to ED efforts with CCA, however, the Atlantic States Marine Fisheries Commission will meet this fall to frame a better management plan. "We need to develop new scientific tools to detect localized depletion of forage species." Says our marine biologist Dr. Michelle Duval. "And we need to complete multi-species models to address the cascading impacts of the harvest on other fisheries and species." As filter feeders, feasting on algae, the menhaden have yet another ecological role, helping clean the water of excess nutrients. Such filtering is key to the health of major estuaries like the Chesapeake and Pamlico Sound, which have serious water quality problems.

Only by addressing these ecosystems as a whole can the menhaden, and the striped bass, thrive.

From: Solutions 35(4), Sept.-Oct. 2004

Founding Member Glude Passes

John B. Glude, 86, of Annapolis, Maryland, a former lab director of the Maine Sea and Shores Fisheries office in Boothbay Harbor, died October 19 at Ginger Cove Health Center in Annapolis. He also lived in Seattle, Washington for 30 years. He was born August 2, 1918 in Silverdale, Washington. He graduated from Silverdale High School as class salutatorian in 1935 at age 16. He earned a bachelor's degree in fisheries, with a minor in engineering, from the University of Washington in 1939. He received a master's in business administration from the University of Washington.

Mr. Glude's first job was with the Washington Department of Fisheries (WDF) but he left briefly during World War II to serve as a naval architect draftsman at Tacoma Naval Shipyard. After the war, he returned to his position as a fishery biologist at WDF. He was involved with research to determine the effects of polluted waters from pulp mills on oysters. This work formed the basis for regulatory actions and the preservation of the valuable oyster resources in the state of Washington. Mr. Glude was a pioneer in fisheries research, including the seed import oversight from Japan; a director of the National Marine Fisheries Lab in Annapolis; and he implemented the first National Aquaculture Plan. He had published over 100 scientific papers.

In 1948, he was offered a position at the Woods Hole Oceanographic Institute in Woods Hole, Mass. The main emphasis at that time was research on the abundance and survival of soft shell clams throughout the entire U.S. east coast. The research project was moved the following year to a former fish hatchery in Boothbay Harbor. During this time, he became lab director of the Boothbay Harbor facility and instituted further research on artificial propagation of clams and other species. The research during those years on the soft shell clam was ground-breaking and is still referred to extensively. He served as vice president and president of the World Aquaculture Society (also a life member) and was president and life member of the National Shellfisheries Association.

Mr. Glude was an avid sportsman, enjoying fly fishing and duck and game hunting. He also enjoyed kayaking and began wind surfing at the age of 65. His wife of 50 years, Jean Harrison Glude, died in 1991. He is survived by two sons, Terry Glude of Atlanta, Georgia and Bill Glude of Juneau, Alaska; a daughter, Nancy Kelly of Annapolis; six grandchildren; and two great-grandchildren. Funeral services were held October 23 at the Taylor Funeral Home in Annapolis. Interment was private. In lieu of flowers, donations may be made in Mr. Glude's name to Hospice of the Chesapeake, 445 Defense Highway, Annapolis, MD 21401.

From Boothbay (ME) Register Oct 28, 2004
Submitted by Bernard Skud

Congress strikes!!
Aquatic Resource Bills of Interest

As is the typical fashion before leaving town, the Senate passed a number of natural resource and river related bills prior to adjourning for the election. The following is a brief description of the bills past by the Senate related to watersheds:

The Upper White Salmon Wild and Scenic Rivers Act (S.1614), sponsored by Sen. Cantwell (D-WA), was passed by the Senate. It designates a portion of White Salmon River as a part of the National Wild and Scenic Rivers System. The bill would designate a total of 20 miles of the river, adding to the eight-mile stretch already listed as wild and scenic. H.R.2397 is the companion bill in the House sponsored by Rep. Brian Baird (D-WA).

S.2691, the Long Island Sound Stewardship Act of 2004 sponsored by Sen. Lieberman (D-CT), establishes the Long Island Sound Stewardship Advisory Committee, which will work to protect the sound through conservation easements, management plans, 'stewardship sites', heightened public awareness of the issues, and federal funding. The bill authorizes $40 (SIC) per year through 2013 for these activities.

S.2847, sponsored by Sen. Crapo (R-ID), Inhofe (R-OK) and Jeffords (I-VT), reauthorizes the Water Resources Research Act of 1984.

Sen. Leahy's (D-VT) bill, the Upper Connecticut River Partnership Act (S.1433), establishes a grants and technical assistance program through out the Connecticut River watershed to assist local and state governments, nonprofit organizations and private interests carrying out conservation and restoration projects in New Hampshire and Vermont. To this end the bill authorizes $1 million per year.

S.1466, the Alaska Land Transfer Acceleration Act of 2003 sponsored by Sen. Lisa Murkowski (R-AK), will expedite the survey and transfer of 89 million acres of federal land to Alaska and its native tribes.

S. 437, by Sen. Kyl (R-AZ), the Arizona Water Settlement Act, paves the way for a major water development on the Gila River with potentially severe impacts to the river's unique ecological values. It adjusts the Central Arizona Project and amends the Southern Arizona Water Rights Settlement Act of 1982.

All of the bills above require further action by the House. The following bills have passed both the House and Senate and are ready for the President's signature to become law:

H.R.4593, sponsored by Rep. Gibbons (R-NV) and Senator Ensign (R-NV), adds 768,294 acres of wilderness designations within Lincoln County, NV (north of Las Vegas). It has drawn critism from enviromentalists mainly because two areas were not included in the wilderness designation, the Pahranagat Range and the East Mormon Mountains area. The bill also would allow utility corridors for water transfers from eastern Nevada rural areas to Las Vegas to ensure continuing water flows to Las Vegas given the ongoing Colorado River drought and decreasing water levels in Lake Mead.

H.R.4731, sponsored by Rep. Jim Gerlach (R-PA), reauthorizes appropriations for the National Estuary Program through FY 2010.

From: American Rivers River Policy Update

Hells Canyon Lawsuit Victory

New Poll Shows that Ratepayers Favor Idaho Power Acting Responsibly

A recent poll released in June reports that an overwhelming majority of Idaho Power ratepayers support salmon restoration in the Snake River above Idaho Power's three Hells Canyon dams. According to the poll, 71 percent of ratepayers believe Idaho Power is responsible for repairing the damage it has caused to the river and fish populations as it seeks a 30-50 year operating license. In addition, 62 percent of ratepayers say they are willing to pay an additional $1.50 in their utility bills to help cover the costs.

Also, on June 22nd, a federal court ordered FERC to respond to 1997 petition filed by HRC members American Rivers and Idaho Rivers United requesting that the agency consult with NOAA Fisheries on the adverse impacts the Hells Canyon Complex has on endangered salmon and steelhead. Calling the seven-year delay "nothing less than egregious," the court concluded that "petitioners are entitled to an end to FERC's marathon round of administrative keep-away and soon," and ordered FERC to take action on the petition within 45 days. While the groups were pleased with the outcome of the case, they expect FERC to deny the petition and that by the time any lawsuit would reach the courts, the substance of the original petition will be moot.

The massive 3-dam Hells Canyon Complex, owned and operated by Idaho Power Company, has severe impacts on salmon and steelhead. Located on the Snake River on the Idaho/Oregon border, the Complex is the Ultimate barrier for migrating salmon and steelhead in the upper Snake River basin. The Complex blocks fish from hundreds of miles of their historic habitat, including over 80 percent of the habitat for Snake River fall Chinook salmon. Although Idaho Power is currently in the process of relicensing this facility, the earliest a new license would be issued is 2006. It is more likely the process could take much longer – up to a decade or more. Some scientists have forecast that certain stocks of Snake River salmon could go extinct as soon as 2016. For the poll results and other Hells Canyon news, visit http://amriversaction.ctsg.com/ctt.asp?u=35437&1=47187.

District Directors

Alaska, Northern
Joseph F. Margraf, Jr.
University of Alaska
P.O. Box 757020
Fairbanks, AK 99775-7020
ffjfml@uaf.edu

Alaska, Southeast
Bruce Wing
P.O. Box 210265
Auke Bay, AK 99821-0265
bruce.wing@noaa.gov

Arizona - New Mexico
G. Morris Southward
Statistics and Res. Inst.
New Mexico State University
Box 30003 Dept. 3130
Las Cruces, New Mexico 88003-8003
southward@nmsu.edu

California, Northern
Diana Watters
California Dept. of Fish and Game
350 Harbor Blvd.
Belmont, CA 94002-4018

California, Southern
Raymond R. Wilson
CSULB Biol Sci
1250 N. Bellflower Blvd.
Long Beach, CA 90840
rwilson1@csulb.edu

Capital
Frank M. Panek
National Fish Health Research Laboratory
1705 Leetown Rd.
Kearneysville, WV 25430

Carolinas
Robert L. Dixon
NOAA, 101 Pivers Island Road
Beaufort, NC 28516
robert.dixon@noaa.gov

Florida
Thomas W. Schmidt
USDI Nat'l. Park Service
Everglades Nat'l. Pk., S. Fla. Res. Ctr.
P.O. Box 279
40001 State Rd. 9336
Homestead, FL 33014
tom_schmidt@nps.gov

Great Lakes, South Central
Dora R. Passino-Reader
National Fish. Center
1451 Green Road
Ann Arbor, MI 48105-2897
dora_reader@usgs.gov

Gulf of Mexico, Northeast
Vacant

Keystone
Joseph W. Rachlin
Dean of Nat. & Soc. Sci.
Lehman College of CUNY
250 Bedford Pk. Blvd. W.
Bronx, NY 10468-5189
rachlin@alpha.lehman.cuny.edu

New England
Kevin D. Friedland
Director, UMass/NOAA CMER Program
Blaisdell House
University of Massachusetts
Amherst, MA 01003-0040
friedlandk@forwild.umass.edu

Oregon-SW Washington
Vacant

Texas
Lance Robinson
Texas Parks and Wildlife Dept.
Seabrook Marine Lab
Seabrook, TX 77856

Washington, NW
Bruce S. Miller
School of Aqu. & Fishery Sci.
University of Washington
Box 355020
Seattle, WA 98195
bsm@u.washington.edu

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, feeshdr@starfishnet.com Subscription $30 a year to Institutions and Non-Members. Officers-Richard Schaefer, 6211 Madawaska Rd., Bethesda, MD 20816,dickschaef@aol.com - President; Barbara Warkentine, SUNY-Maritime College, Science Dept., 6 Pennyfield Ave., Fort Schuyler, Bronx, NY 10465-4198, synodus@aol.com - Secretary; Allen Shimada, NMFS, Office of Science and Technology, 1315 East West Highway, Silver Spring, MD 20910, allen.shimada@noaa.gov - Treasurer. ISSN-8755-0075

American Institute of Fishery Research Biologists
Promoting excellence in fishery science

. . . BRIEFS . . .

Website: www.iattc.org/aifrb/

VOL. 33, NO. 6 NOVEMBER, DECEMBER 2004

Significant Actions
Board of Control - August 2004

A Summary

1. Member Delinquency: A shortfall to the treasury, amounting to $8,220, was attributed to delinquent members. Dues from active members generated revenue of $11,130. If all members were in good standing we would be in excellent shape. The BOC explored ways to address the issue of delinquent membership. Regional/District Directors will contact delinquent members to let them know what they can do to avoid being dropped from membership. Those individuals that choose not to remit past dues will be stricken from the rolls.

A ***motion***, by Director Rachlin, to drop those members that are two years in arrears and, upon the request from Regional/District Directors, have the President send a letter to them informing them of the BOC's action to drop them was **seconded** and unanimously **approved** by the BOC.

Jerald Ault will draft a letter highlighting the benefits of AIFRB membership to be included in the dues mailings to encourage continuing membership.

Article II section 7 of the bylaws states "Members who have been dropped may be reinstated upon payment of the admission fee and of dues for two years, which shall include the year in which reinstatement is granted."

2. Capital Management Committee: The new Chair for this committee is Vidar Wespestad. Members of the committee are John Jolley, Financial Advisor for Smith Barney, and Joseph Rachlin. John Jolley will be looking over our accounts and will provide advice to the committee and the treasurer.

Treasurer Shimada reported good progress with our investments over the last two years. Financial goals include generating sufficient dividend growth income. This money will fund our award programs and protect our operating budget. Another goal is to accrue $100,000 in the Founders Fund. Plans are to use 5% of these funds to support the Members/Fellow Professional Awards Program.

3. Research Assistance Award Committee: One application received and met the award guidelines, and was funded at $350. Chair Ault also informed the BOC that he solicited applications by sending e-mail announcements and by having the award published in *Briefs* and on the web-site. The BOC suggested targeting students' major professors and interacting with colleges and universities that have fishery related programs. To this latter point, Chair Ault distributed and presented a detailed report on his research on "Fisheries Schools for AIFRB Recruitment. He identified 194 schools and presented a breakout of these by AIFRB designated regions (See *Briefs* Sept-Oct 2004). To help Regional/District Directors communicate with institutions, Chair Ault provided the schools' names, addresses, and major contact persons. Chair Ault has also drafted a letter for Regional/District Directors and the President to use in contacting these schools.

4. *Briefs*: The BOC discussed the cost associated with *Briefs* production and how these costs could be decreased. Some recommendations were to limit the number of issues, the number of pages, and/or the number of copies produced per issue. After some discussion the BOC felt that the Editor is in the best position to make the appropriate adjustments to reduce cost and to operate within the established budget. To this end the following motion was made.

A ***motion***, by Director Rachlin, that the budget for the production of this year's issues of *Briefs* shall not exceed $7,500 was **seconded** and unanimously **approved** by the BOC.

5. Productions: Doug Vaughan and Editor John Merriner produced a poster display to replace our old bulky one. It was printed by Duke Marine Labs. The poster was displayed, along with our banner, at our recruiting table. (See poster, p.4)

6. Recruitment & Marketing Committee: Co-Chair Marty Golden reviewed the recommendations set forth by the committee last year, reported that many of these have been accomplished. The AIFRB website address and slogan are now displayed on every issue of *Briefs*. The AIFRB banner was made. A recruiting table was set-up for the Madison meeting. A new display poster has been produced. AIFRB is visible through its sponsorship of international conferences (*i.e.* World Fisheries Congress) and by organizing symposia at key fishery meetings (*i.e.* Annual AFS Meeting).

The AIFRB is a 501(c)(3) tax-exempt nonprofit organization (EIN 61-6050711).

Co-Chair Golden acknowledged that the Institute still needs to increase its efforts towards recruiting new members. Board of Control members offered many suggestions, which are as follows: Have President Schaefer contact John Jolley asking him to speak to his sports fisherman's group about AIFRB. This represents an untapped resource. The Institute should outreach to students' major Professors. Treasurer Shimada suggested that the President send out letters of invitation to join AIFRB. President Schaefer stated that currently it is the members that nominate individuals for membership. Director Wing discussed the history associated with how membership in AIFRB was once conducted. At one time you needed three letters of recommendation for membership. Past President Sakagawa stated that, while nominations can be had, they are not necessary. Secretary Warkentine suggested that the membership brochures be produced in Spanish and sent to universities in Puerto Rico, and Mexico. These areas have many fishery related programs. Past President Sakagawa suggested that we explore the possibility of conducting one day workshops of hot topics. Through this venue both advanced scientists and students can learn about the Institute. These can be run often and moved around the country. Associated with these workshops would be a key lecturer.

7. AIFRB symposium at Madison AFS meeting: Doug Vaughan was the senior organizer for this year's symposium and was its moderator. The symposium ran all day on Wednesday 25 August 2004. The title was "Recent Advances in Abundance Estimation and Stock Assessment."

8. Celebration 2006: Bruce Miller reported that he has been working with local AIFRB members and with the committee. Based on their discussions the best time to host the Golden Anniversary celebration would be in March and proposed that there be two days for symposia and two days for the BOC meetings. After some discussion the BOC agreed that the 23rd – 24th (Thursday and Friday) of March be dedicated to the symposia and the 25th – 26th (Saturday and Sunday) of March be reserved for the BOC meeting.

The committee estimated attendance at 130 people. The new University of Washington fishery building has a large auditorium, which would be ideal for a keynote address. Member Beamish indicated interest in organizing a symposium and proposed that it be on "The Theory of Over-fishing." President Schaefer will contact Beamish regarding his offer and proposed topic. Additional suggestions as to how the two day program might be organized were presented. Director Kevin Friedland suggested that the program mix cutting edge research papers with historical work. Marty Golden suggested that we consider a workshop format whereby small breakout groups are formed to discuss critical concepts and formulate conclusions.

Director Miller proposed that there be catered box lunches for Thursday afternoon with a dinner that night. We would host a reception and guided tours of the facilities. Past President Sakagawa suggested that two hours of the business meeting be dedicated to a general meeting for discussions and input from all members present.

The BOC agreed that a registration fee will be required to cover expenses, which would include the publication of a symposium volume. It was suggested that we look for sponsors/co-sponsors (*e.g.* Sea Grant) for the symposium. For the program booklet it was suggested that we might wish to sell ads to vendors and/or have people buy space to acknowledge founders.

The BOC discussed a number of items that should be included in the program brochure or as posters. These included the history of AIFRB, what AIFRB is, who the Founders were, how people became involved in the Institute, highlighting people who received various AIFRB awards, and a comparison of fisheries philosophy when AIFRB was founded with that of today.

9. Founders Fund (Sakagawa and Shimada): Treasurer Shimada informed the BOC that the Founders Fund currently has a market value of $26,371.38. He continues to receive donations for this fund from the membership. For the fund to grow rapidly we must look towards endowments. An annual report, which recognizes donors, will be published in *Briefs*. Still in the works is the production of a brochure for the Founders Fund. The design needs to be worked out. President Sakagawa would like to see the Founders Fund highlighted at the 2006 celebration. AIFRB needs to recognize Dr. and Mrs. Kasahara for their contributions to this fund.

10. Authority for outside contracts: Past President Sakagawa distributed a draft policy statement on how to handle contracts. According to the policy statement if the BOC is not in session the President must go to the Executive Committee for unanimous approval. The Executive Board consists of the President, President-Elect, Past President, Treasurer, and Secretary.

A ***motion***, by Past President Sakagawa, to have the BOC approve the policy as modified was **seconded** and unanimously **approved** by the BOC.

Secretary Warkentine will make the changes to the policy statement and have it included in the Procedures Manual.

11. Discussion of attendance/reimbursement at annual BOC meetings (Schaefer): President Schaefer stated that there is a need to have as many BOC members as possible in attendance at the meeting to be productive. However, given the state of the treasury he did raise the question as to who should receive compensation and at what amount. Past President Sakagawa informed the Board that only voting members of the BOC can be considered for compensation. Committee Chairs are not compensated. Compensation only covers travel and lodging for the time of the BOC meetings. The current cap is $550. The BOC agreed that the funding cap of $550 remain in effect for this BOC meeting. The compensation level for the 2005 meeting was discussed. Director Rachlin proposed that we set a budget amount that would cover all eligible members at some fixed amount.

A ***motion***, by President-Elect Jones, to budget $8,000 for travel reimbursement for the BOC to attend the 2005 meeting and to have the reimbursement cap set at $400 was **seconded** and **passed** by the BOC.

12. Committee Assignments: President Schaefer reviewed committee assignments. Marty Golden and Gilbert Radonski will remain as Co-Chairs for the Recruitment and Management Committee. Vidar Wespestad will Chair the Capital Management Committee. Douglas Vaughan will Chair the committee to evaluate "What is a fishery biologist?" Neal Foster will Chair the Web-page committee.

13. Regional/Director rotation: Secretary Warkentine reviewed the Regional Director rotation. For the 2004-2005 year the following Directors are to advance to the position of Regional Director: Bruce Miller for Northwestern States, Joseph Margraf for Alaska & Western Canada, Dora Passino-Reader for Central States & Middle Canada, Diana Watter for Southwest States & Western Mexico, Joseph Rachlin for Northeast States and Eastern Canada, and Robert Dixon for Southeast States & Eastern Canada. Secretary Warkentine presented these candidates to President Schaefer for his consideration. President Schaefer, acting in accordance with the 2001 AIFRB bylaws (Article III, Sec. 6, Pg. 12, Regional Directors and Article III, Sec. 4, Pg. 11, Secretary, Treasurer, Chairperson of the Membership Committee, Editor and Production Editor of the Newsletter) appointed the aforementioned District Directors to the position of Regional Directors. Secretary Warkentine will forward the list of Regional Directors to all District Directors. Secretary Warkentine will also remind Directors that they are to conduct elections every two years to be in compliance with the AIFRB bylaws.

President Schaefer also made the following appointments: Secretary – Barbara Warkentine, Treasurer – Allen Shimada, Membership Chair – Thomas Keegan, *Briefs* Editor – Gene Huntsman, and Production Editor – John Merriner. He asked all other current committee chairs to continue to serve for the 2004-2005 year.

14. 2005 BOC Meeting: The next BOC meeting will be held in conjunction with the Annual AFS meeting in Anchorage, Alaska. The BOC meeting will be held on Saturday and Sunday the 10th-11th September 2005. A number of items regarding the set-up for this meeting were discussed. These are highlighted below:

1.) Symposium – The symposium will have as its focus "Cooperative Research" and will be co-chaired by Allen Shimada and Vidar Wespestad. There should be no cost to AIFRB in running this symposium. Past President Sakagawa suggested that a committee be formed to focus on getting sponsors for the symposium. This could be done in the venue of a contract. V. Wespestad, A. Shimada, and J. Ault have agreed to form this committee. Anyone else interested in helping were asked to contact a committee member. 2.) The AIFRB table should be manned on Sunday when the majority of people are arriving to register for the AFS meetings. BOC members should be the primary individuals at the table not the President. 3.) AIFRB Reception: President Schaefer suggested that the BOC consider having the President stay in a suite, which could then be used as the hospitality room for the reception. The BOC was open to this suggestion. Director Margraf will look into hotels, suite availability and cost. BOC members suggested that we look for sponsors to underwrite some of the cost for the reception. 4.) Contact people: Bill Wilson is the General Chair for the AFS meeting. Bill Houser is the housing chair for the meeting. Phil Mundy will be asked to assist with AIFRB meeting arrangements. 5.) Looking to 2007: The AFS meeting will be held in San Francisco, CA. Membership Chair Keegan has agreed to work on arrangements for this meeting.

15. Emeritus status: President Schaefer reviewed Director Southward's report. After assessing the status of Emeritus in AIFRB it was determined that 1/3 of our membership are at the rank of Emeritus. The potential for increase in numbers in this category is significant. The Committee recommended that Emeritus members pay into the Institute a fee sufficient to cover the cost of receiving *Briefs*. Treasurer Shimada stated that donations that come from Emeritus members do not currently cover the cost for all Emeritus. The BOC discussed a fee policy at length. Some suggestions were to charge them a one time fee, give them an option as to receiving *Briefs* or not, or charge them an annual, but reduced fee.

A ***motion***, by Chair Tom Keegan, to change bylaws Article II, Sec. 4, Paragraph 2 from "Those members granted Emeritus Status shall retain all rights and privileges accorded regular members of the same rank except members granted the status of Emeritus shall not be required to pay fees or dues related to maintaining a regular membership" to "Those members granted Emeritus Status shall retain all rights and privileges accorded regular members of the same rank." was **seconded** and unanimously **approved** by the BOC.

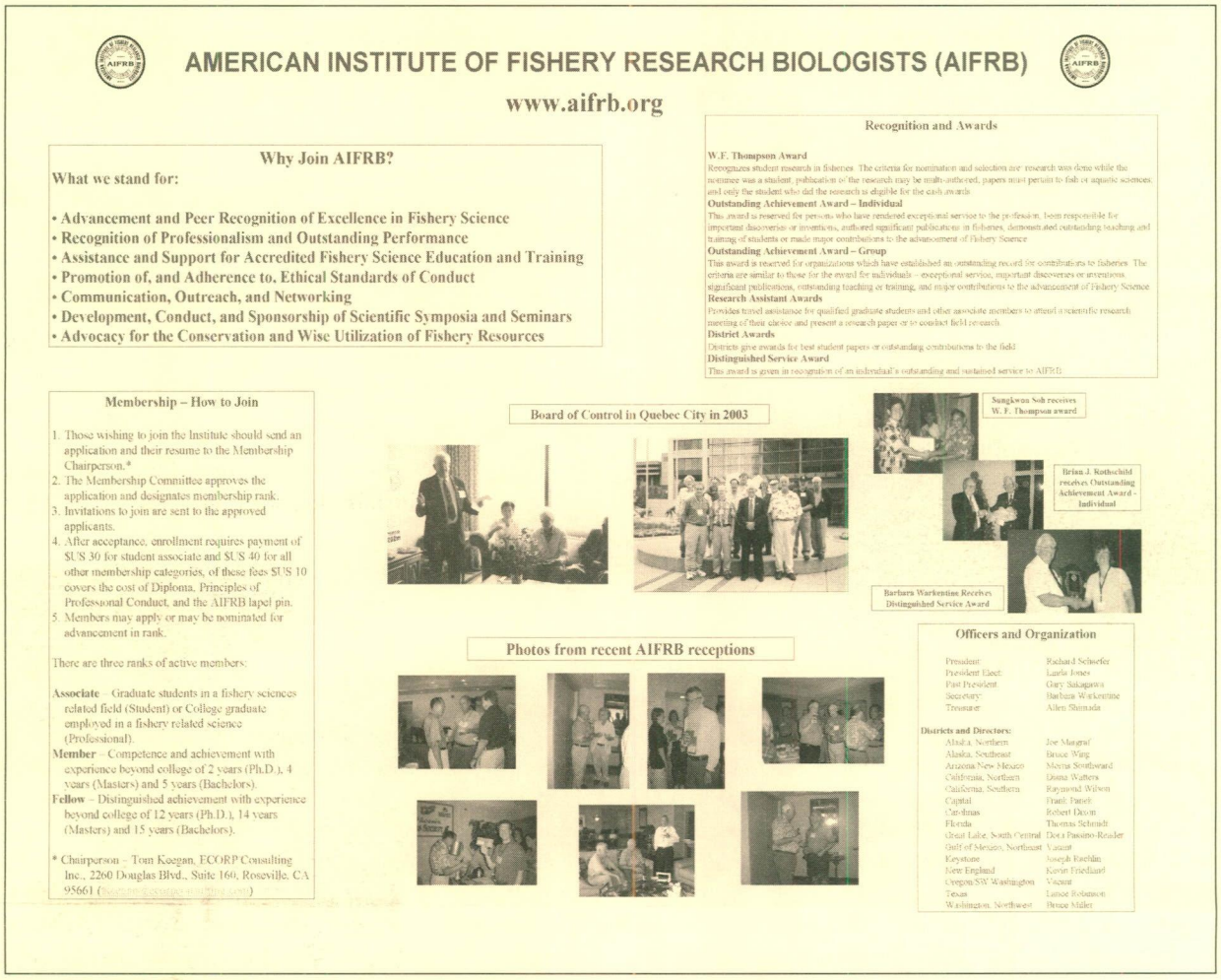
Director Keegan ***moved*** that all members holding the rank of Emeritus status pay dues at a rate that is ½ the regular membership dues was **seconded** and **approved** by the BOC.

A ***motion***, by Director Rachlin, that the new dues structure be implemented with this year's dues cycle, that a letter notifying the membership of the new dues structure be sent out by 30th September and that the dues notices reflecting the new rates be sent out by the 30th of October was **seconded** and unanimously **approved** by the BOC.

A ***motion***, by Director Wilson, to increase the membership dues to $40 for implementation in the 2005-2006 dues cycle was **seconded** and **approved** by the BOC.

A ***motion***, by Chair Ault, that dues structure voted by the BOC shall go into effect with the 2006 billing cycle except that the Emeritus members shall be assessed a $20 fee effective with the 2005 billing cycle was **seconded** and unanimously **approved** by the BOC.

16. Membership Qualifications (Vaughan & Schaefer): President Schaefer appointed D. Vaughan to chair an *ad hoc* committee to look into the questions: "What meets the definition of Fisheries Biologist?" The AIFRB bylaws will be examined in addressing this question.



17. *Briefs* editorial policy: The BOC discussed establishing an editorial board to assist Editor Huntsman. After some discussion it was felt that this would slow down the production process and agreed to keep the current structure in place. President-Elect Jones suggested that we should develop an editorial policy so that it could be included into the procedures manual. The BOC agreed to this suggestion since the procedures manual provides a very important guide to newly elected officers. President Schaefer will form an *ad hoc* committee entitled "The Editorial and Production Committee" to develop editorial guidelines. The BOC discussed committee membership. It was agreed that both Editors Huntsman and Merriner serve on this committee. Directors Friedland and Passino-Reader volunteered to serve. President Schaefer will contact committee members and will charge the committee.

18. Budget for Awards: A ***motion***, by Past President Sakagawa, to budget $500 for the Thompson Award, $900 for the Associate Research Awards, and $200 for the Outstanding Service Award Plaque for fiscal 2004-2005 was **seconded** and unanimously **approved** by the BOC.

Apply Now! Encourage Students!

2005 Research Assistance Award Program

The Research Assistance (RA) Award established in 1986 is offered annually to AIFRB graduate students and other Associate members to support travel expenses associated with professional development. The RA provides a maximum award of $300 towards the opportunity to present results of an original paper or research project of merit at scientific meetings, or to conduct research at distant study sites. All AIFRB Associate Members in good standing are eligible. An individual may receive one award in a lifetime. Application packages must contain a research abstract, letter of support from the student's sponsor, and a 2-page curriculum vitae. Send AIFRB RA applications to: Dr. Jerald S. Ault, University of Miami RSMAS, 4600 Rickenbacker Causeway, Miami, FL 33149, (305) 421-4884 ph; (305) 421-4791 fax; jault@rsmas.miami.edu. Deadline is 1700 EST on June 17, 2005.

Two Historical Photos

Courtesy of Howard Schuck

Harvard Biological Laboratory

Original Headquarters of North Atlantic Fishery Investigations – of U.S. Bureau of Fisheries – about 1930.
Staff, about 1936 – Photo credit Erna Milch-Gormley

Front row (left to right): Wm. C. Neville, Fishery Biologist; Mildred S. Moses, Biologist Assistant; Oscar E. Sette, In charge, NAFI; Erna L. Milch, Secretary; Wm. C. Herrington, Fishery Biologist. Back row (left to right): Robt. A. Nesbit, Fishery Biologist; Elmer Higgins, Chief Division of Scientific Inquiry, Washington, D.C.; John R. Webster, Fishery Biologist

Photo from Howard Schuck's book:
"A Fish Biologist's Impact on National Security"

Scientific Crew on an Albatross III Cruise – Georges Bank

1951 (left to right): Ray Buller, Wm. Royce, Milner B. Schaefer (observer from Washington, D.C.), Al Pluff, Biological Aide, Louis Stringger, Howard Schuck, (above) Jack Webster

---

Northern California Sets Standards

A Model for other Districts

The energetic Northern California District under the guidance of Diana Watters and Michele Barlow maintains a level of activity that should inspire other districts. While the district leaders may occasionally employ the stick, far more obvious is their use of the carrot and other comestibles including: pizza, beer, etc. (10/20/04); seafood (Captain Blyther's, Benicia (11/10/04) and bean curd (Ping's Mandarin Restaurant, San Rafael (12/16/04). A gastronomic apogee occurs at their annual banquet, January 15, 2005, Chef Hung's (Ed., I'm biting my tongue), San Francisco, where the menu included: Hot and Sour Soup, Crispy Chicken, Walnut Prawns, Steamed Bass, Peking Duck, Braised Tofu with Black Mushrooms, Mustard Greens and Yang Chow Fried Rice. Tom Jow and Ed Ueber planned the Banquet. Recent intellectual stimulation included two talks: "Racing for crabs: costs and management options evaluated in the Dungeness crab fishery" by Chris DeWees, Sea Grant Marine Fisheries Specialist, UC-D and "Restoring the San Joaquin River: Recent Developments and Historic Opportunities" by Jared Huffman. Huffman will be reported on the recent federal court decision ordering the U.S. Bureau of Reclamation to restore flows to the desiccated San Joaquin River below the Bureau's Friant Dam. The goal is to restore fish life below the dam (which has not had this quantity of water for 50 years) pursuant to the requirements of both state and federal law. Huffman is the Senior Attorney working with the Natural Resources Defense Council.

Issues at the annual business meeting included: 1. Identifying and scheduling upcoming presentations to monthly AIFRB meetings; 2. Food and restaurant selection for meetings; 3. Inclusion of Monterey area members; 4. Judging student papers at Cal/Neva AFS meeting; 5. Symposium Planning – Salmon Restoration for CY 2006.

Geibel found, Miller lost (temporarily)!

Mike Laurs wrote:

There was a note in the March-April issue of the AIFRB *Briefs* inquiring about the whereabouts of John Geibel. I ran into John at a wine tasting event this past weekend in San Marin, California. His email address is geibel@sbcglobal.net.

As did Bruce Miller:

In the last *Briefs* (Sept-Oct 2004), in the picture on the front page, the character on the right end (looking at pic) is not Tom Lambert, but me, Bruce Miller.

Apologies to Bruce from an ad hoc committee of Carolina AIFRB members who failed to recognize him. Ed.

Salmon 2100 Project

Twenty eight salmon scientists and policy experts have joined forces in an innovative project to identify ways that, if adopted, likely would restore and sustain wild salmon runs in California, Oregon, Washington, Idaho, and southern British Columbia through 2100. The Salmon 2100 Project was organized jointly by Oregon State University's Center for Water and Environmental Sustainability and EPS's research laboratory in Corvallis, Oregon.

The Project will synthesize and apply the best available scientific information to the challenge of protecting and restoring salmon runs. Specific, practical policy options will identified and described that, if adopted, would successfully sustain wild salmon. To identify those policy options, the Project has enlisted 28 leading Pacific Northwest scientist and policy experts, each of whom possesses recognized scientific and analytical credentials, a track record for innovative thinking about salmon and ecosystem recovery, and a demonstrated ability to think beyond the status quo. Project participants are writing chapters for a book to be published by the American Fisheries Society.

Restoring wild salmon to the Pacific Northwest is a daunting challenge. Since discovery of gold in California in 1848, salmon runs have dramatically declined across the region due to water pollution; loss of spawning, rearing, and riparian habitat; a history of over-fishing; dam construction and operation; water withdrawal for irrigation and industrial cooling; competition with hatchery-produced salmon; competition with various non-indigenous fish species; predation by marine mammals and birds; and climatic and oceanic shifts. Many experts conclude that current salmon recovery efforts, as earnest, expensive, and socially disruptive as they currently are, do not appear likely to sustain significant wild salmon runs through 2100. Sustainability remains elusive, and it appears that other recovery strategies must be adopted if wild salmon are to survive in significant numbers through the century.

Key Project results also will be disseminated to scientists, managers, policy makers, and others as part of a regional conference (Corvallis, Oregon, February, 2005, Oregon Chapter Meeting, American Fisheries Society) and an international conference (Anchorage, Alaska, September, 2005, Annual Meeting, American Fisheries Society).

Project leaders: Robert T. Lackey, lackey.robert@epa.gov, (541) 754-4607; Denise H. Lach, denise.lach@oregonstate.edu, (541) 737-5471. ***Project participants***: Kenneth I. Ashley, University of British Columbia, Vancouver, BC, Larry L. Bailey, Rural Resource Associates, Tonasket, WA, David A. Bella, Oregon State University (retired), Corvallis, OR, Gustavo A. Bisbal, U.S. Fish and Wildlife Service, Portland, OR, Michelle Boshard, Rural Resource Associate, Tonasket, WA, Ernest L. Brannon, University of Idaho, Moscow, ID, James L. Buchal, Attorney, Portland, OR, Carl J. Cederholm, Washington Department of Natural Resource, Olympia, WA, Jeff Curtis, Trout Unlimited, Portland, OR, Jeffrey J. Dose, U.S. Forest Service, Roseburg, OR, Terry Glavin, Sierra Club, Victoria, BC, Gordon F. Hartman, Department of Fisheries and Oceans (retired), Nanaimo, BC, David T. Hoopes, San Juan County, Friday Harbor, WA, E. Eric Knudsen, U.S. Geologic Survey (retired), Sedro Wooley, WA, John Lombard, Steward and Associates, Snohomish, WA, Kaitlin L. Lovell, Trout Unlimited, Portland, OR, Donald D. MacDonald, Sustainable Fisheries Foundation, Nanaimo, BC, James T. Martin, Oregon Department of Fish and Wildlife (retired), Molino, OR, John H. Michael, Jr., Washington Department of Fisheries and Wildlife, Olympia, WA, Jay W. Nicholas, Oregon Watershed Enhancement Board, Salem, OR, Thomas G. Northcote, University of British Columbia (retired), Vancouver, BC, Edwin P. Pister, California Department of Fish and Game (retired), Bishop, CA, Guido R. Rahr, Wild Salmon Center, Portland, OR, William E. Rees, University of British Columbia, Vancouver, BC, Brent S. Steel, Oregon State University, Corvallis, OR, Benjamin B. Stout, Rutgers University/University of Montana/NCASI (retired), Albany, OR, Jack E. Williams, U.S. Forest Service/Southern Oregon University/Trout Unlimited, Ashland, OR, Andre J. Talbot, Columbia Inter-Tribal Fisheries Commission/Environment Canada, Montreal, QC.

Submitted by: Bob Lackey

(Ed. A little surprising that there are but two, by my count, AIFRB members on this list! Recruiting Needed?)

An Interesting Meeting

Simposio Sobre Ciencias Pesqueras En México
La Paz, Baja California Sur, México 24 de May 2005
Second Call for Papers

Los temas a discutir son: *(Ed. Offered untranslated in the knowledge that those that care will translate better than I)*

1. **Dinámica y Evaluación de Recursos Pesqueros**: Dinámica y estado de pesquerías y recursos pesqueros; métodos de cuantificación y evaluación; nuevos avances en métodos y modelos de dinámica de poblaciones.
2. **Eficiencia de Sistemas de Pesca**: Eficiencia ecológica y económica de los sistemas de captura y de proceso; interacción entre pesquerías.
3. **Recursos Potenciales**: Existencias; disponibilidad; tecnologías; mercados; fomento.
4. **Cambios en la abundancia asociados a factores oceanográficos y climáticos**: Forzamiento ambiental y disponibilidad de recursos: clima, oceanografía, contaminación, erosión, azolvamiento.
5. **Las pesquerías en el contexto de los ecosistemas**: Impacto de la pesca en el ecosistema; manejo de recursos en el contexto de sus ecosistemas; compatibilidad entre explotación y conservación de la biodiversidad; métodos de estudio y modelos de simulación.
6. **Administración pesquera**: Bases científicas para la pesca sostenible; legislación pesquera y ambiental para el manejo y conservación de recursos acuáticos; componentes económicos y sociales en el manejo y conservación de recursos pesqueros; instrumentos de manejo integral: comanejo, participación activa, comités, derechos históricos, ordenamiento costero; alternativas para el desarrollo de programas de manejo pesquero: el Golfo de California, el Golfo de Tehuantepec, el Golfo de México, otras zonas.
7. **Educacíon pública**: importancia de la conservación de pesquerías.
8. **Organización de los científicos pesqueros en México**

For more information visit www.cicimar.ipn.mx or www.wdafs.org, email sympesq@ipn.mx or telephone Dr. Mauricio Ramírez Rodríguez al +52-612-1234658 or 1225344, fax 612-1225322.

Submitted by: Michelle Barlow

Pacific Sardine Stock Assessment and Harvest Guideline for 2005

At its November meeting, the Council adopted a harvest guideline of 136,179 metric tons (mt) for the 2005 Pacific sardine fishery. This guideline is based on the current biomass estimate of approximately 1.2 million mt and the harvest guideline formula in the coastal pelagic species (CPS) fishery management plan (FMP). The recommendation applies to the fishing season beginning January 1, 2005 and ending December 31, 2005. National Marine Fisheries Service (NMFS) will review the Council recommendation and other fishery information, and will consider whether to approve and implement the harvest guideline. A decision was expected by January 1, 2005.

The revised sardine allocation formula (see Pacific Council News, Spring 2003) specifies that the sardine harvest guideline is initially allocated 33% (45,393 mt) to the northern subarea (Subarea A) and 66% (90,786 mt) to the southern subarea (Subarea B). On September 1, the remaining harvest guideline will be reallocated, with 20% to Subarea A and 80% to Subarea B. The amount of sardine harvest guideline that remains unharvested on December 1 is pooled and made available coast wide. The dividing line between the two subareas is Point Arena, California (39 degree N latitude).

If a subarea attains its portion of the harvest guideline before the September 1 reallocation, the Council asked NMFS to implement a subarea-specific incidental allowance for Pacific sardine of up to 45% by weight of other CPS FMP managed species. The current Pacific sardine stock assessment is available at swfsc.nmfs.noaa.gov/frd/Coastal%20Pelagics/Sardine/sardine1.htm.

From: Pacific Council News, Winter 2004

Science Under Siege I

Administration Leans on Scientists to Allow Increased Water Export from the Sacramento River

Reports in *The Los Angeles Times* and *The Sacramento Bee* may have headed off, at least temporarily, apparent administration efforts to force federal scientist to alter their reports and recommendations to justify increasing the amount of water pumped from the Sacramento/San Joaquin Delta. The water would be delivered to agribusiness interests in the Central Valley and to municipalities in the Los Angeles Basin.

The Times story, based on documents obtained by Earthjustice in the course of litigation over the delta smelt, reported that an official in the Interior Department in Washington, DC, had had highly irregular contact with an attorney for the California Farm Bureau concerning a so-called "status review" of the smelt. The review was prompted by a lawsuit filed by the Farm Bureau. Biologists from the Fish and Wildlife Service reviewed the available science and determined that not enough was known to consider lifting protection for the smelt. When this finding was lodged with the court, Julie McDonald, an aide to Under Secretary of Interior Craig Manson, sent an email to the biologists, saying, among other things, this:

"I have copies of the letter and the press release...Each of these documents makes the statement that delta smelt populations have not recovered and are significantly below historic levels. We have spent the last two days agreeing that we cannot estimate delta smelt populations as we do not have the proper data to do so, and yet your letter and the press release categorically state we have this information."

She then telephoned a Farm Bureau attorney and read him the email. Reading between the lines, it appears as if there were two dramatically different approaches at work here. The scientists appear to have taken the position that, in the face of incomplete data, there was no justification for removing the smelt from the protective umbrella of the Endangered Species Act. MacDonald, on the other hand, seems to be suggesting that, given meager data, there's no justification for keeping the species on the protected list. "I believe," she concludes, " that the facts represented by the Service provide an oversimplified and misleading characterization of what is happening and are certainly inconsistent with our discussions. I have asked that the press release be stopped until we have an opportunity to more accurately characterize the finding and its basis." The Farm Bureau promptly asked the court to reopen proceedings, still hoping to brush the pesky smelt out of the way. The case is pending.

But even if the smelt is eventually delisted, there are at least three other species standing in the way of increased water extraction from the delta: the winter and spring runs of king salmon and the Central Valley steelhead. All three are currently undergoing reviews that will culminate in a "biological opinion" which will recommend what's to be done about them. This time it was *The Sacramento Bee* that blew the whistle. On October 2, it reported that "Officials at a federal fisheries agency ordered their biologists to revise a report on salmon and other endangered fish so that more water can be shipped to Southern California from the Delta, according to interviews and internal agency documents obtained by *The Bee*." Federal biologists, the paper went on, had determined that a plan to increase pumping from the Delta "could jeopardize endangered salmon and other fish."

Administrators in Long Beach, the story continues, "overruled the biologists and supervised a rewriting of their analysis. That, in turn, removed the last major obstacle to a plan that could send more water south, affecting how much is reserved in Northern California." The resulting brouhaha caused the agency to delay final release of the BiOp for several weeks. It remains to be seen what will happen, but it seems altogether clear that skids are being greased on behalf of agribusiness and imperiled species pushed aside to accomplish that goal. – Tom Turnex

From: In Brief, Winter 2004

Science Under Siege II

Ehrlich asks Leavitt to help speed up *ariakensis* study

Maryland Gov. Robert Ehrlich has sought to bypass concerns of scientists and federal officials about his plan to introduce foreign oysters into the Chesapeake by asking the head of the EPA "to help move forward on this matter." In an Oct. 14 letter to EPA Administrator Michael Leavitt, the governor said that Maryland's drive to make a decision on the issue by March "is meeting some resistance" from the EPA's Chesapeake Bay Program Office, as well as the state-federal Bay Program's Scientific and Technical Advisory Committee.

Maryland officials have been pushing hard to complete work by March on an environmental impact study which could lead to an introduction of the nonnative oyster, *Crassostrea ariakensis*, into the Bay. The EIS was initiated in response to a proposal

by Maryland and Virginia to introduce breeding populations of the oysters. But STAC, in a report issued earlier this year, outlined five years of "critical" research which it said should be completed before a credible decision about introducing the foreign oyster could be made. Last year, the National Academy of Sciences issued a report that suggested six to seven years of research might be required.

This fall, officials from the Bay offices of the EPA, U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration outlined – at the request of congressional staff – an accelerated research program that would extend through the end of 2007. "I do not believe that such delays are necessary and seek your assistance in seeing that the process moves forward in a timely manner," Ehrlich wrote in a letter to Leavitt dated Oct. 14, the day before NOAA announced $2 million for more research on *C. ariakensis*. The EPA administrator had yet to respond to the letter, which was first reported by the *Baltimore Sun*, by late November.

Scientists say it will take several years to do experiments to answer pressing disease and ecological questions. Further, they say, more studies are needed to determine whether an introduction would likely succeed. A failed effort, they say, would be costly and potentially divert resources from native oyster restoration efforts. Citing scientific uncertainty, Virginia Secretary of Natural Resources Secretary Tayloe Murphy has said several times in recent months that he does not believe the information needed to support the introduction of a breeding *C. ariakensis* population will be available next year, and has instead urged continued aquaculture experiments with sterile oysters. Nonetheless, Ehrlich expressed confidence that a "science-based" decision could be reached by March based on more that $1 million in research being funded by the state.

Abridged from: Bay Journal, December 2004

Science Under Siege III

"Managers who want fast-track promotions quickly learn to use a technique that frees them from complex and difficult resource decisions. They do data-free analysis and analysis-free decision making."

Richard Fairbanks, Forest Magazine: Winter 2005

(The original reasons for establishment of the AIFRB persist. Ed.)

Maine Atlantic Salmon

On June 18, 2004, NOAA Fisheries published a draft recovery plan for the Gulf of Maine distinct population segment of Atlantic salmon. The draft recovery plan, developed in cooperation with the U.S. Fish and Wildlife Service and the Maine Atlantic Salmon Commission, complements current conservation efforts, particularly those described in Maine's Atlantic Salmon Conservation Plan.

In December 2000, the Atlantic salmon population was listed as endangered. At the time of the listing, eight rivers were known to still support wild salmon populations (*i.e.*, Sheepscot, Dennys, Machias, East Machias, Narraguagus, Ducktrap and Pleasant rivers, and Cove Brook). However, since that time the population has continued to decline, with fewer than 100 adult fish returning to the eight rivers to spawn in 2003.

NOAA Fisheries, under the Endangered Species Act, is required to develop a recovery plan to identify specific management actions necessary for the conservation and survival of the species, measurable criteria for determining when recovery is achieved, and time and cost estimates for recovery plan is to halt the decline of endangered Atlantic salmon. Initial recovery efforts focus on continued survival of the population by reducing the most severe threats such as acidified water, mixing of wild and farmed fish, take of adult and juvenile fish by anglers, predation and competition, and excessive or unregulated water withdrawals.

The recovery plan also identifies numerous actions needed for full recovery, which includes protecting and restoring freshwater and estuarine habitat, supplementing the naturally spawning fish with hatchery-reared salmon from the same rivers, conserving of the population's genetic integrity, assessing the fish during key stages in their lives, promoting salmon recovery through outreach and education, and assessing and revising the recovery program over time.

For further information regarding the recovery plan, contact Mark Minton, NOAA Fisheries, at (978) 281-9328. The recovery plan is available online at: http://www.nero.noaa.gov/atsalmon/.

From: Changing Tides, Fall-Winter 2004-2005

Science Symposium Presents Northwestern Hawaiian Islands Research

For the first time in over 20 years, the scientific community was brought together for a symposium on recent research conducted in the Northwestern Hawaiian Islands (NWHI). Held November 2-4, 200 at the Hawaii Convention Center, the Third Northwestern Hawaiian Islands Scientific Symposium provided a forum for scientists to showcase the latest scientific findings about the NWHI. About 150 attendees participated in the 3 day symposium where the results of over 50 papers were presented on topics including sea turtles, coral reefs, Hawaiian monk seals, seabirds and fisheries. On the second day of the symposium, organizers held a special public and outreach exhibition where scientists shared rare underwater video images taken from deep sea submersibles and "critter cameras" mounted on the backs of Hawaiian monk seals. Nearly 400 people attended the exhibition and there were many opportunities for both adults and children to talk to the researchers and to test the equipment and gadgets used to gather scientific information.

Research studies to assess NWHI resources were initiated in the late 1970s as part of a Tripartite Cooperative Agreement between the Hawaii Division of Aquatic Resources, NOAA Fisheries (then known as National Marine Fisheries Service), and the U.S. Fish and Wildlife Service. The University of Hawaii Sea Grant Program joined shortly after. Following the conclusion of this agreement, two symposia were convened in the early 1980s to exchange results and ideas. Key management products of the first two symposia were fishery management plans for bottomfish, crustaceans and precious corals.

Presentations given at the symposium summarized the history of exploitation of NWHI resources, from the unregulated, industrial scale foreign and domestic fisheries of the early 1900s, to the highly regulated limited-entry fisheries of today. Recent and current research confirms that the marine resources of the NWHI are as healthy today as they were during the time of the Tripartite research studies. The generally pristine state of the NWHIs coral reefs is not mirrored by the condition of the terrestrial ecosystem. Invasive species (*Verbisina* spp on Pearl and Hermes, Kure and Midway; ants on Kure and grasshoppers on Necker) have created numerous problems for indigenous populations of plants and ground nesting birds.

Dr. Richard Grigg, coordinator of the Tripartite research studies, notes that the NWHI are now at a jurisdictional and administrative crossroad. Since the last two symposia, significant changes in the management of the NWHI have led to the development and implementation of discrete research initiatives. Dr. Gerard DiNardo, co-chair of the symposium organizing committee said the variety of agencies with different management missions and mandates has resulted in fragmented research during the past 10 years. Consequently, a clear and coordinated research plan for ecosystem-based management is lacking. Symposium organizers assembled an expert panel to address this issue. The panel recommended the reformation of a Tripartite-like agreement among key resource management agencies to develop a five to ten year research plan that would identify ecosystem-based management needs.

The event was organized by the Hawaii Department of Land and Natural Resources, NOAA Fisheries, NOAA Ocean Service, the University of Hawaii, the U.S. Fish and Wildlife Service and the Western Pacific Fishery Management Council. Proceedings of the Symposium, including 50 scientific peer reviewed papers, will be published in a special edition of the Smithsonian Institution's Atoll Research Bulletin in early 2006.

From: Pacific Island Fishery News, Winter 2004

First Smoking, Now Trawling; The Terminator Terminates

California Governor Schwarzenegger Signs Coral Protection Bill Into Law

Three years ago few people had ever heard of "destructive bottom trawling," though bottom trawling does more damage to ocean floor habitat than any other human activity. Things have changed. 2004 has been a whirlwind year for the Stop Destructive Trawling campaign; as Splash newsletter goes to press, government bodies from the Atlantic to the Pacific coast are taking action to halt or limit destructive trawling.

In September the New England Fishery Management Council voted unanimously to ban or restrict destructive bottom trawl fishing (for monkfish) in 12 underwater canyons off the coast of New England and Mid-Atlantic States. Deep-sea corals had recently been discovered in these canyons, and Oceana supporters had been urging the government to protect the fragile habitat, as it is required to do by law. The Council listened. Its action will ban trawling entirely in two canyons (Oceanographer and Lydonia) and limit trawling in ten others until more information about corals in those areas is available. The decision is the

first such action in New England or the Mid-Atlantic.

A key Stop Destructive Trawling effort on the Pacific coast culminated when, in mid-October, California's Governor Schwarzenegger signed into law SB 1459, a bill that will significantly limit bottom trawling in California's state waters. The new law will remove bottom trawl gear from the ocean over time while allowing current fishermen to maintain their livelihoods. Authority over bottom trawls will also be transferred from the State Legislature to California's Fish and Game Commission, which will make management of the fishery considerably more accessible to the public. The passage of the law marks a major shift in Pacific ocean management and a tremendous victory for Oceana's supporters and allies.

From: Splash 3(2) Fall 2004

California Recreational Fishery Sampling Program Replaced

The Marine Recreational Fisheries Statistics Survey (MRFSS) has been an integral part of recreational fishery monitoring, but it was designed to provide a broad perspective on national fisheries, not to estimate catch and effort at the level of precision needed by management. Until 2004, California recreational groundfish fishery monitoring has relied solely on MRFSS. However, because these data may be imprecise and are highly variable, particularly for rare or non-retained species, management of California recreational groundfish fisheries has been difficult. In response, staff from the California Department of Fish and Game (CDFG) and the Pacific States Marine Fisheries Commission (PSMFC) designed a new program for estimating the catch of groundfish in California's marine recreational fisheries, incorporating some modified elements of the previous MRFSS program and the high quality sampling of California's Ocean Salmon Project. This new program, the California Recreational Fisheries Survey (CRFS), was implemented in January 2004.

Mr. Russell Porter, Field Programs Administrator for PSMFC, and Mr. Steve Crooke, CRFS Mandate Coordinator for CDFG, updated the Council on CRFS program methodology and implementation. The CRFS program surveys all modes of marine recreational fisheries in California in seven geographic areas in California. Catch and effort estimates will be generated monthly and will rely heavily on dockside sampling by CDFS and PSMFC employees. This increased presence at angler access sites has resulted in a 231% increase in the number of anglers interviewed and a 166% increase in the number of fish sampled in the first six months of 2004 relative to the same time period in 2003. The accuracy of catch and effort estimates is expected to improve, especially for overfished species and species rarely taken. Preliminary results from the new survey are being reviewed by CDFG.

From: Pacific Council News, Fall 2004

Lawsuit Challenges Amendment Imperiling Reef Fish

The Ocean Conservancy recently filed suit in federal court challenging Amendment 21 to the Gulf of Mexico Reef Fish Resources Fishery management Plan, citing the dangers the amendment poses to gag grouper. Amendment 21 threatens populations of gag grouper and other reef fish by opening two marine reserves in the eastern Gulf of Mexico to surface trolling for six months a year. Surface trolling for species such as wahoo and cobia also catches vulnerable reef fish like gag grouper – which the reserves were created to protect – and makes reserve enforcement nearly impossible.

Gag grouper, which change from female to male as they grow, are especially vulnerable to fishing pressure; fishermen target the larger fish, which results in removing a disproportionate number of males and undermining the health and reproduction of the entire population.

Surface trolling in reserves poses several problems: the practice still catches gag grouper, and makes marine reserve enforcement virtually impossible because enforcement officials cannot differentiate between legal and illegal fishing. "Allowing fishing in these marine reserves prevents Amendment 21 from doing what it's supposed to do: protect gag grouper" said Coby Dolan, Program Counsel for The Ocean Conservancy.

From: Blue Planet 4(2) Fall 2004

District Directors

Alaska, Northern
Joseph F. Margraf, Jr.
University of Alaska
P.O. Box 757020
Fairbanks, AK 99775-7020
ffjfml@uaf.edu

Alaska, Southeast
Bruce Wing
P.O. Box 210265
Auke Bay, AK 99821-0265
bruce.wing@noaa.gov

Arizona - New Mexico
G. Morris Southward
Statistics and Res. Inst.
New Mexico State University
Box 30003 Dept. 3130
Las Cruces, New Mexico 88003-8003
southward@nmsu.edu

California, Northern
Diana Watters
California Dept. of Fish and Game
350 Harbor Blvd.
Belmont, CA 94002-4018

California, Southern
Raymond R. Wilson
CSULB Biol Sci
1250 N. Bellflower Blvd.
Long Beach, CA 90840
rwilson1@csulb.edu

Capital
Frank M. Panek
National Fish Health Research Laboratory
1705 Leetown Rd.
Kearneysville, WV 25430

Carolinas
Robert L. Dixon
NOAA, 101 Pivers Island Road
Beaufort, NC 28516
robert.dixon@noaa.gov

Florida
Thomas W. Schmidt
USDI Nat'l. Park Service
Everglades Nat'l. Pk., S. Fla. Res. Ctr.
P.O. Box 279
40001 State Rd. 9336
Homestead, FL 33014
tom_schmidt@nps.gov

Great Lakes, South Central
Dora R. Passino-Reader
National Fish. Center
1451 Green Road
Ann Arbor, MI 48105-2897
dora_reader@usgs.gov

Gulf of Mexico, Northeast
Vacant

Keystone
Joseph W. Rachlin
Dean of Nat. & Soc. Sci.
Lehman College of CUNY
250 Bedford Pk. Blvd. W.
Bronx, NY 10468-5189
rachlin@alpha.lehman.cuny.edu

New England
Kevin D. Friedland
Director, UMass/NOAA CMER Program
Blaisdell House
University of Massachusetts
Amherst, MA 01003-0040
friedlandk@forwild.umass.edu

Oregon-SW Washington
Vacant

Texas
Lance Robinson
Texas Parks and Wildlife Dept.
Seabrook Marine Lab
Seabrook, TX 77856

Washington, NW
Bruce S. Miller
School of Aqu. & Fishery Sci.
University of Washington
Box 355020
Seattle, WA 98195
bsm@u.washington.edu

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, feeshdr@starfishnet.com Subscription $30 a year to Institutions and Non-Members. Officers-Richard Schaefer, 6211 Madawaska Rd., Bethesda, MD 20816,dickschaef@aol.com - President; Linda L. Jones, 14931 73rd Ave., Kenmore, WA 98028, linda.jones@noaa.gov -President-elect; Barbara Warkentine, SUNY-Maritime College, Science Dept., 6 Pennyfield Ave., Fort Schuyler, Bronx, NY 10465-4198, synodus@aol.com - Secretary; Allen Shimada, NMFS, Office of Science and Technology, 1315 East West Highway, Silver Spring, MD 20910, allen.shimada@noaa.gov -Treasurer. ISSN-8755-0075

Dr. William H. Bayliff
Inter-American Tropical Tuna Commission
8604 LA JOLLA SHORES DR
LA JOLLA, CA 92037-1508

3 3 ****AUTO**MIXED AADC 270

American Institute of Fishery Research Biologists
c/o Allen Shimada
NMFS, Office of Science and Technology
1315 East West Highway
Silver Spring, MD 20910

Return Service Requested

NON-PRFT
U.S. Postage
PAID
Permit No. 125
Morehead City, NC 28557