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## CHAPTER NEWS

Notes from the 19 May 1988, NYCAFS EXCOM meeting:

1) AFS has approved a $\$ 3.00$ dues rebate to chapters against the wishes of NYCAFS.
2) All AFS journals will increase $\$ 3$ for next year.
3) New York will host the 1989 NB meeting in Ellenville on $7-10$ May (see Upcoming Activities)
4) Treasurer's Report: Balance as of 17 May 1988: \$17761.25

Income (28 Jan.-17 May) : 5095.00
Expenses (28 Jan.-17 May): \$ 3493.28
5) Membership stands at 301,20 less than this time last year.
6) Gary Neuderfer has resigned at chairman of Professional Initiatives.

The 1989 Annual Meeting is Scheduled for 27-28 Jan. 1989, at the Holiday Inn-Arena, Binghamton, with the Excom meeting on the 26th. The first call for papers and preregistration forms are out. If you didn't get yours, contact Tim Sinnott, NYS DEC, Room 552, 50 Wolf Rd., Albany, NY 12233-4753.

Dr. James Winter, NYCAFS President Elect, has been nominated to represent the chapter on the Return-a-Gift to Wildife Advisory Committee.

Congradulations to Dr. John H. Schacte, Jr., who was recently voted President-Elect of the Fish Health Section of AFS, and to Dr. Paul R. Bowser who was recently appointed Associate Editor of TAFS.

## NATIONAL AES ACTIVITIES

A Proposal to Operate the Fish and Wildlife Reference Service has been submitted to the USFWS by AFS together with the Wildife Society. This and several other proposals will be evaluated and the new operator should be chosen by October.

Richard Gregory was elected the new AFS 2nd Vice President, defeating Ray Hubley.

Over 380 attended the AFS/USFWS Fish Marking Symposium, representing 41 states, eight provinces and 29 countries. The proceedings will appear as a "fish tagging manual" in the near future.

Spring 1989 will find several aquaculture related courses available to practicing and potential aquaculturists in upstate New York. Dr. Paul Bowser (Dept. Avian \& Aquatic Medicine, NYS College of Veterinary Medicine, Cornell Univ.) will offer a 1-week short course between 20-24 March 1989 on diseases of fish. Diseases of Aquatic Animals (Veterinary Medicine 671) is a 2 h course targeted for veterinary students and advanced students in aquatic sciences. Prerequisites include microbiology and instructor permission. Additionally, Cornell Univ. is developing an Aquaculture course that will be offered in the near future. For more information, contact Dr. Bowser at (607)253-3365 (Fish Diseases) or Dr. Mike Timmons (607)256-2280 (Aquaculture).

The Aquatic Ecology Section at SUNY Brockport will offer two aquaculture related courses. The first, instructed by Mr. Joseph Gorsuch (Environmental Sciences Div., Eastman Kodak Co.) is entitled Toxicological Methods and Regulation (Biology 495/595). Participants will be introduced to recently developed U.S. EPA guidelines on "Good Laboratory Practices" and how they are applied in the culture and maintenance of aquatic organisms. The course will meet on Saturdays, between 0900-Noon. Aquaculture (Biology 451/551) will be offered on Thursday evenings (1815-2115) by Dr. Joe Buttner (Dept. of Biological Sciences, SUNY Brockport). Both courses are applied in nature and emphasis is on "hands-on" learning. Enrollment is limited to 20 and continueing education students are encouraged to enroll. Participants in previous Aquaculture (1985, 1987) include commuters from Lockprot, Medina, Caledonia and Syracuse (largely novice aquaculturists). For more information, you can contact Dr. Joe at (716)395-5750.

In October approximately 35,000 striped bass fingerlings reared at the Verplanck Hatchery. Westchester County. Mere released into the Hudson River. The hatchery has been operated by electric utilities since 1983 as part of a negotiated agreement to reduce mortality of Hudson River fish populations resulting from power plant operations. The 1988 stocking was the smallest since hatchery operations began (nearly 1.4 million young bass were released in the first five years of operation). An episode of unexplained mortality in early July nearly wiped out what had promised to be the most productive year yet. A team of experts, including DEC biologists, is investigating the cause of the losses. For more information, contact Mr. Arthur Woldt (518)457-5400.

New York trout producers sold a total of 216,000 pounds of trout at $\$ 882,000$ during the 12 months ending 31 Aug. 1988. This production was up 266 percent from the 59,000 pounds produced in 1981, the last year for which a survey was conducted. Value of production was six times the 1981 value.

Source: N.Y. Agriculture Statistics Service

March 17-22, 1989 - 54th North American Wildife and Natural Resources Conference. The Omni Shoreham Hotel, Washington, DC. For info: L. L. Williamson, Wildife Management Institute, Suite 725, 1101 Fourteenth St., NW, Washington, DC 20005. (202) 3711808.

April 2-7, 1989 - Second International Conference on Marine Debris. Alemoana Americana Hotel, Honolulu, Hawaii. For info: Richard S. Shomura, Southwest Fisheries Center Honolulu Laboratory, 2570 Dole St., Honolulu, HI 96822. (808) 943-1229.

April 16-18, 1989 - 14th Symposium on Aquatic Toxicology and Hazard Assessment. Atlanta Hilton, Atlanta, Georgia. For info: Wayne G. Landis, CRDEC, Aberdeen Proving Grounds, MD 21010-5423. (301) 671-2764.

April 18-21, 1989 - Second Asian Fisheries Forum. Nihon University, Tokyo, Japan. For info: The Secretariat, Second Asian Fisheries Forum, Dept. of Fisheries, Faculty of Agriculture, The University of Tokyo, Yoyoi 1-1-1, Bokyo-ke, Tokyo 113, Japan.

May 7-10, 1989 - 45th Northeast Fish and Wildlife Conference. Nevele Country Club, Ellenville, NY. For info: Gerald A. Barnhart, New York Dept. Environmental Conservation, Bureau of Fisheries, 50 Wolf Rd., Albany, NY 12233. (518) 457-5691. (First call for papers is out, contact Gerry)

May 9-12, 1989 - National Symposium on Practical Approaches to Riparian Resource Management. Holiday Inn, Billings, Montana. For info: Glenn Phillips, Montana Dept, of Fish, Wildife \& Parks, Capital Station, Helena, MT 59620, or call Marilyn Goetzinger at (406) 444-2406.

May 21-27, 1989 - AFS Early Life History Section Meeting. Merida, Mexico. For info: Andrea Frank, Mote Marine Lab, 1600 City Island Park, Sarasota, FL 34236.

July 3-7, 1989 - International Symposium on Research and Small-Scale Eisheries. Montpellier, France. For info: Dr. J.Lemoalle, Symposium Peches Artisanales, ORSTOM BP 5045,. 34032 Montpellier Cedex France.

July 11-14, 1989 - Coastal Zone 89. Omni Hotel, Charleston, South Carolina. For info: Delores Clark, NOAA Office of Constituent Affairs, 11400 Rockville Pike, Ra. B38, Rockville, MD 20852. (301) 443-8031.

Sept. 18-23, 1989 - International Symposium on Coldwater Fish Culture. Beijing, China. For info: Mr. Huang Kejia, The China Society of Fisheries, 31 Minfeng Lane, Xidan, Beijing, China.

Biodiversity, by E. O. Wilson, 1988, is based on the 1986 National Forum on Biodiversity held in Washington, DC. Available from National Academy Press, Washington, DC. $\$ 19.50$ (paperback).

Eish Physiology. Vol. XI. The Physiology of Developing Fish. Pt. B. Viviparity and Post-Hatching Juveniles, edited by W. S. Hoar \& D. J. Randall. Available from Academic Press, 1250 Sixth Ave., San Diego, California. \$76.00. (available from AFS at $5 \%$ discount)

A History of Marine Fish Culture in Europe and North America, by R. Kirk, 1987. Available from Fishing News Books Ltd., Surrey, England. L12.50 (paperback). (available fron AFS at 5\% discount)
L. I. Bean Fly Fishing for Bass Handbook, by D. Whitlock, 1987. Available from Lyon Books, New York. \$8.95 (paperback).

Proceedings of the Nov. 1987 Outdoor Ethics Conference is available for $\$ 12.50$ each from Izaak Walton League of America, 1701 N. Fort Myer Dr., Suite 1100, Arlington, VA 22209.

Ownership and Productivity of Marine Fishery Resources, by E. A. Keen, 1988, promotes full ownership of marine fishery resources in the face of the "tragedy of the commons". Available from McDonald and Woodward Publishing Co., Blacksburg, VA $\$ 10.95$.

Guide to Oxygen Management and Aeration in Commercial Fish Ponds, 1988. Available from Dixie Irwin, Louisiana Cooperative Extension Service, Publications, Room 128, Knapp Hall, LSU, Baton Rouge, LA 70803, (504) 388-6730. (Joe Buttner says this is a good one.)

How to Write and Publish a Scientific Paper, 3rd ed, by R. A. Day, 1987. Available from Oryx Press, 2214 North Central at Encanto, Phoenix, AZ 85004-1483, 1-800-457-ORYX. \$14.95 (paperback)

Lead Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Reviek, by R. Eisler, 1988. Free from Section of Information Management, U.S. Fish \& Wildife Service, Patuxent Wildife Research Center, Laurel MD 20708.

Adyances in Marine Biolofy Vol, 24, edited by J. H. S. Blaxter \& A. J. Southward, 1987. Available from Academic Press, New York. \$48.00.

Amphipod Parasites of Fishes of Canada, by E. L. Bousfield, 1987, contains keys and descriptions. Available from Canadian Government Publishing Centre, Supply and Services Canada, Ottawa, Ontario K1A OS9. Can $\$ 5.00, \$ 6.00$ (other countries).

Common Strategies of Anadromous and Catadromous Fishes, edited by M. J. Dadswell, R. J. Klauda, C. M. Moffitt, R. L. Saunders, R. A. Rulifson \& J. E. Cooper, 1987, is the proceedings of an international symposium held in Boston in 1986. Available from AFS, Bethesda, MD. $\$ 40.00$ (member), $\$ 45.00$ (non-member)

Broceedings of the Flood Bestoration Workshop held at the 12 th annual meeting of the Potomac Chapter covers restoration successes and failures following the 1985 flooding resulting from Hurricane Juan. Copies are available for $\$ 10.00$ from the AFS offices.

Selected ASTM General Use Standards for Water, 1988, is available from ASTM, 1916 Race St., Philadelphia, PA 19103.

Companion to A Sand County Almanac: Interpretive and Critical Essays, 1987, edited by J. B. Callicott, contains 12 essays that comment on the life and writings of one who is perhaps the most important conservationist in the last 100 years, Aldo Leopold. Available from Univ. of Wisconsin Press, 114 N. Murrey St., Madison, WI 53715. \$22.50 (hardback), \$12.95 (paperback). (reviewed in Fisheries, May-June 1988)

Aldo Leopold: His Life and Work, by C. Meine, 1988, is a new comprehensive bibliography honoring the centenary of Leopold's birth. Available from Univ. of Wisconsin Press, 114 N . Murrey St., Madison, WI 53715. \$29.50.

The Biology of Fish Growth, by A. H. Weatherley \& H. S. Gill, 1987, covers most aspects of individual and population growth in fishes. Available from Academic Press, New York at $\$ 65.00$ or AFS at a 5\% discount. (reviewed in Fisheries, May-June 1988)

Trout Farming Manual, 2nd ed, by J. P. Stevenson, 1987, covers most aspects of trout farming. Available from Fishing News Books, Ltd., Farnham, Surrey, England. L15.00 (paperback). (reviewed in Fisheries, May-June 1988)

Models that Predict Standing Crop of Stream Fish from Habitat Yariables: 1950-85, by K. Fausch, C. Hawks, and M. Parsons, is available free from USDA-PNW, 319 S.W. Pine St., P.O. Box 3890, Portland, OR 97208. Ask for publication PNW GTR-213.

Acquisition and Utilization of Aquatic Habitat Inventory Information, is available free for postage and handing costs courtesy of the Western Division. Copies can be obtained from the central AFS office for $\$ 2.00$ each (payable to AFS), American Fisheries Soc., 5410 Grosvenor Lane, Suite 110, Bethesda, MD 20814.

Handbook for Common Calculations in Finfish Aquaculture is available for $\$ 3.60$ from Ms. Dixie Irwin, Publications, Room 128, LSU Cooperative Extension Service, Knapp Hall, Baton Rouge, LA 70803. ("Excellent!", says J. Buttner)

Indexed Bibliography on Stream Habitat Improvement, 1888, is available for $\$ 6.50$ from Librarian, Dept. of Fisheries \& Wildlife, Utah State Univ., Logan, UT 84322-5210. (801) 750-1332.

1988 NEW YORK CHAPTER AFS OFFICERS
President . . . . . . . . . . . Frank Panek
Past President . . . . . . . . . . Robert Lange
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STANDING COMMITTEES


AD-HOC COMMITTEES
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Women \& Minorities . . . . . . . . Barbara Knuth

## YOUR COMMENTS \& SUGGESTIONS

Please send any news, comments, or suggestions you would like to share to:

Paul M. Kotila, Editor
Natural Science Div.
Franklin Pierce College
Rindge, NH 03461
603/899-5111 ext. 470
or
Joseph K. Buttner, Assoc. Editor
Aquatic Ecology Section
Dept. of Biological Sciences
SUNY Brockport
Brockport, NY 14420
716/395-5750

NOTE THE NUMBER 87 OR 88 ON YOUR MAILING LABEL. THIS DENOTES YOUR DUES STATUS. TO be a current paid up member you should have an 88 on the label. ENCLOSED IS A MEMBERSHIP BLANK FOR NEW OR RENEWAL MEMBERSHIPS.

SEND YOUR 1989 DUES TO SECRETARY/TREASURER.

## Application for Membership <br> New York Chapter of the American Fisheries Society (information provided will be used in the annual membership directory)

Applicant's name: Mailing address: $\qquad$Regular $\$ 5.00$Student \$2.00*

Employer or school: $\qquad$ - Student members must be endorsed by a faculty Specialization (s) or interest ** $\qquad$

- Check here if you wish to receive information about national AFS membership. member signing above.

| Telephone |
| ---: |
|  |
| area code and number |
| business |

* Please indicate area (s) of interest by numerical code from list on reverse side of this form.

Make check payable to NY Chapter-AFS and mail with this

## Specialization or Interest

1. Administration
2. Aquaculture
3. Aquatic biology, ecology (freshwater)
4. Biological controls
5. Benthic organisms
6. Communications (writing, publishing, publicity)
7. Exotic species
8. Fish and fishing-general
9. Fish behavior
10. Fish biology-freshwater species
11. Fish biology-marine species
12. Fish biology-estuarine species
13. Fish biology-salmonids and cold-water species
14. Fish biology-warm-water species
15. Fish larvae
16. Fisheries management (population dynamics, habitat improvement, etc.)
17. Genetics
18. Health-medicine, aquatic animals
19. Ichthyology, taxonomy
20. Illustrations
21. Impact assessment
22. International fisheries development
23. Legislation and law enforcement
24. Limnology
25. Pesticides
26. Physiology
27. Plankton
28. Pollution
29. Power plants
30. Research
31. Striped bass
32. Siurgeon
33. Toxicology-all phases
34. Water quality-analysis, improvement, etc.
35. Crustaceans
36. Education/Teaching
37. 
38. $\qquad$
39. 

## Mail Application to:

JACK HASSE
SECRETARY/TREASURER
NYAFS
c/o NYSDEC
207 Genesee St.
Utica, NY 13501


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OUR COVER

A frogfish (Antenariidae) illustrated by Samuel Fallours, an artist for the Dutch East India Commpany, who reported around 1700, "I caught it on the sand and kept it alive in my house for three days; it followed me everywhere with great familiarity, much like a little dog." This illustration first appeared in Louis Renard's Poisson. Ecrevisses et Crabes (Amsterdam, 1719), and is reproduced here from the cover of the book review issue of Science (20 May 1988).
sionals Recruiting Others ( PRO ) incentive program. Any AFS member can become a member of the PRO Club by signing up a new individual, associate, or library member. All PRO Club members (as of 15 Aug. 1988) become eligible to win an Alaska fishing trip in the drawing to be held at the Sept. 1988 annual meeting in Toronto. For further infomation, contact me (PMK) or Joe Dillard at the National Office.

AFS Journal Appeal for Manuscripts. Because of recent improvements in TAFS, NAJFM, and PFC policies, these journals now find themselves in the interesting position of actively soliciting manuscripts. Although manuscript acceptance standards have not changed, now might be a particularly good time to submit your work to the appropriate AFS journal. Manuscripts should be sent directly to the respective journal editors (Vic Kennedy, TAFS; Bob Carline, NAJFM; Bob Piper, PFC).

Mysid-Fisheries Symposium. A one-day special symposium on the Mysidaceae, their ecological role, impacts upon lake ecosystem, and implications for fishery management, will be held at the 1988 AFS meeting in Toronto. Contact: Eric Bergersen, Colorado Coop. Fish \& Wildiffe Unit, 201 Wagar Bldg., Colorado State Univ., Fort Collins, CO 80523.

A symposium on Management of Contaminated Urban Fisheries will be sponsored by the AFS Water Quality Section on 4-7 Dec. 1988, at the Midwest Fish \& Wildife Conference in Columbus, Ohio. Contact: Bob DiStefano of MO Dept. of Conservation (314/449-3761) or USFWS's Paul Baumann (614/469-5701).

The Fisheries Alliance Newsletter (FAN Mail) is available to anyone interested in current efforts by the Federal Fisheries Responsibility Committee (AFS is a member) to bring about a reorganization and coordination of federal fishery programs. Contact the national AFS office.

Managing Editor Bob Kendall and staff have moved into the new AFS editorial office. The new mailing address is 5410 Grosvenor Lane, Bethesda, MD 20814-2199; phone: 301/530-8502.

Dr. Wayne C. Starnes has joined AFS as a technical editor to assist with a number of Society publications. His ichthyology background and experience with the Smithsonian Institution should serve the Society well.

Dr. Don Hedrick, Fish Health Section president, has received well-earned recognition from California Sea Grant for his research work aimed at discovering the source of PKD (proliferative kidney disease) in Pacific salmon.

The new National Recreational Fisheries Policy, developed jointly by the nation's leading government and private fisheries groups, will be signed by AFS President Stan Moberly and distributed at the National Recreational Fisheries Conference on 68 June 1988 at Alexandria, VA.

# New York Water Stats - Pt. I. Surface Water <br> Miles of Rivers \& Streams: $\quad 70,000 \mathrm{mi}$. Miles of Coastline: $3,100 \mathrm{mi}$. Number of Lakes \& Ponds: 7,500 <br> Square Miles of Lakes \& Ponds: 5,300 <br> Square Miles of Wetlands: 1,477 

NYS DEC Water Bull., May 1988

## NATIONAL \& INTERNATIONAL NEWS

The Wallop-Breaux Reauthorization leqislation (HR 3918) has been unanimously passed by the House Merchant Marine \& Fisheries Committee.

The National Fisheries Academy, operated by the FWS in Leetown, WV, has been shifted from the Service's Research Branch to Fisheries. Gary Edwards, Assistant FWS Director-Fisheries, in now in charge.

William Evans has been confirmed as the new Under Secretary and Administrator for NOAA and officially assumed his duties on 1 April 1988. He is the former administrator of NMFS and replaces Anthony Calio.

Global temperatures in the 1980's appear to be the highest ever recorded in 130 years, according to scientists around the world. Such a rise may reflect the "Greenhouse Effect" from rising concentrations of carbon dioxide and other trace gases in the atmosphere. If this trend continues, scientists predict a rise in ocean levels due to expansion of water and melting of glaciers. Shifts in climatic patterns may also result and may already be indicated in the increased total precipitation in the Northern Hemisphere and increased winds and waves in the North Sea.

New York Times, 29 March, 19 April 1988
Despite the above, however, California, Oregon and several other western states are aqain suffering a drought. San Francisco, Los Angeles and other cities have begun to restrict water usage as a result of low snowfall and little rain. Other areas in the upper Midwest and the Southeast are also suffering from water shortages, many of them for the second or third year in a row. The Columbia River is at its lowest level since the 1930 s while Atlanta's main reservoir is six feet below normal.

New York Times, 14 May 1988
Japan has been denied a request to harvest sea snails and whiting in American waters after the Commerce Dept. accused that
regulate the importation and transportation of fish and aquatic organisms;
11) permit the DEC to require and issue permits for the operation of freshwater fish hatcheries; and
12) establish a task force to review and report on the regulation of aquaculture under the Freshwater Wetlands Act.

Hearings are planned and will be held at several locations in NYS. For a copy of the Bill and supportive documentation contact Assemblyman Bragmand or Mr. David Barnet (Senior Program Analyst) at 828 LOB, Albany, NY 12248.

Human influenza pandemics are likely to increase as inteqrated aquaculture practises become more widespread. Apparently new and devastating strains of flu virus appear every $10-$ 20 years, typically originating from the Far East. The apparent causative event is genetic reassortment of avian and human influenza viruses. Domesticated swine act as the transfer agent from bird to man. With waterfowl and pigs routinely integrated into Asian aquaculture operations (60\%); duck-fish and duck-pigfish culture in Asia), the stage is set for increased epidemics. Since such integrated culture systems have been transferred to Africa and Latin America, the potential adverse impact to human health is substantial.

Nature 331:215
World aquaculture production currently exceeds 22 billion pounds per year. This is expected to grow at $8 \%$ annually until the year 2000. The U.S. persently produces over 500 milli on pounds, and should exceed 1 billion pounds by 1990. Between 1976 and 1986, aquaculture's share of fish markets increased from 5 to 10\%. By the year 2000 aquaculture products will constitute $20 \%$ of the market. In contrast, commercial fisheries (the traditional supplier of seafood) is projected to grow at $0.3 \%$ annually and may supply up to only $50 \%$ of an estimated 3 billion pound supply shortfall in the U.S. by 2000 . The remainder can only come from aquaculture.

World Aquaculture News 1 (1)
Chitin from crab shells and exoskeletons of other crustaceans is being investiqated as an inqredient in plastic. Chitin can be converted into chitosan and used as a petroleum replacement in formulating plastics. The "new plastic" would be strong and biodegradable. Plastics made from chitosan would break down within four weeks in the water, and even more rapidly on land! Other potential products from chitosan include paper and pesticides.

Coastal Education News 3(4)

For info: Cletus Gillman, Program Chairman, Soil and Water Conservation Society, 7515 Northeast Ankeny Rd., Ankeny, IA 50021-9764.

Aug. 1-3, 1988 - Sixth Trout Stream Habitat Improvement Workshop. Saint Mary's College, Winona, Minnesota. For info: Mark Ebbers, Minnesota Dr., Box 12, 500 Lafayette Rd., St. Paul, MN 55155. (612) 297-2804.

Aug. 1-5, 1988 - International Billfish Symposium. King Kamehameha Hotel, Kailua-Kona, Hawaii. For info: Ken Hinman, National Coalition for Marine Conservation, P.O. Box 23298, Savannah, GA 31403. (912) 234-8062.

Aug. 1-5, 1988 - Second International Congress of Comparative Physiology and Biochemistry. Louisiana State University, Baton Rouge, Louisiana. For info: Dr. T. H. Dietz, Dept. of Zoology and Physiology, Louisiana State University, Bat on Rouge, LA 70803. (504) 338-1132.

Aug. 28-31, 1988 - Symposium on Water-Use Data for Water Resources Management. Sheraton El Conquistadore, Tucson, Arizona. For info: Richard A. Herbert, U.S. Geological Survey, WRD, Box 25046, Federal Center, MS 406, Denver, CO 80225. (303) 236-5928.

Sept. 5-11, 1988 - China Fishery 88. Shanghai Exhibition Centre, Shanghai, China. For info: China Fishery 88, SHK International Services Ltd., 22/F., 151 Gloucester Rd., Hong Kong.

Sept. 6-9, 1988 - Aquaculture International Congress and exposition. Vancouver Trade and Convention Centre, Vancouver, British Columbia. For info: Bruce Guerin, Marketing Manager, Aquaculture International Exposition, Vancouver Trade and Convention Centre, Box 202, 999 Canada Place, Vancouver, $B C$ V6C 3C1. (604) 681-1988.

Sept. 9-15, 1988 - The 118 th Annual Meeting of AFS. Royal York Hotel, Toronto, Ontario. For info: Carl R. Sullivan, Exec. Dir., AFS, 5410 Grosvenor Lane, Bethesda, MD 20814. (301) 897-8616.

## COMPUTERS

Linear Index of Food Selectivity, A program for IBM-PCs and compatibles that records the size (from electronic calipers or keyboard) of available prey and prey consumed by a predator and calculates size-frequency distributions and the Linear Index of Food Selectivity is available. The program requires DOS 3.0 or higher and your own electronic caliper attachments. Contact: John Confer, Biology Dept., Ithaca College, Ithaca, NY 14850; 607/274-3978.

Educational Discounts on Software. For those of you who use computers in teaching, the following manufacturers offer educational discounts on a variety of software:

Borland International Educational Dept. 4585 Scots Valley Dr. Scotts Valley, CA 95066

MicroPro International Corp. Educational Sales P.O. Box 2246 Leesburg, VA 22075 703/777-9110

MIX Software 1132 Commerce Dr. Richardson, TX 75081 214/783-6001

Chambers International Corp.
5499 N. Federal Highway,
Suite A
Boca Raton, FL 33487
305/997-9444
D. W. Inouye, Bull. Eco. Soc. Am., March 1988

## RECENT PUBLICATIONS

Froqfishes of the World. Systematics, Zoogeography, and Behavioral Ecology, by T. W. Pietsch \& D. B. Brobecker, 1987, includes descriptive accounts, taxonomy, identification keys, geographical distributions, and history of the study of this unusual group of fishes. Available from Stanford Univ. Press, Stanford, CA. (reviewed in Science, 20 May 1988)

Fishery Development, by W. F. Royce, 1987, "provides an overview of the whole process of fishery development and an appraisal of how it can be done more efficiently." Available from Acadmeic Press, 1250 Sixth Ave., San Diego, CA 92101-9665. ISBN 0-12-600955-4, \$24.95.

Current References in Fish Research (1987), covering over 4000 titles of original research published in 1987 and including a senior-author, key word, and scientific name indexes, is available from: Dr. Victor Cvancara, Rte. No. 1, 296 Hagen Rd., Chippewa Falls, WI 54729. \$12.20.

Indexed Bibliography for Largemouth Bass, covering citations listed in Vols. 1-32 (3) of the Sport Fishery Abstracts, is available from Bob Hanten, Fisheries Staff Specialist, South Dakota Game, Fish \& Parks, 455 East Capitol Ave., Pierre, SD 57501-3185.

The Biology of Fish Growth, by A. H. Weatherley \& H. S. Gill, 1987, 'presents a comprehensive, modern view of the phenomenon of growth plasticity in fish." Available from Academic Press, 1250 Sixth Ave., San Diego, CA 92101-9665. ISBN 0-12-739055-3, \$65.00.

Toxics in the St. Lawrence River System: A Bibliography, by L. J. Cochran et al., 1988, contains 162 references on toxic

Fishes of the Great Lakes Basin: A Natural History, by $W$. F. Sigler \& J. W. Sigler, 1987, is mostly a review of the life histories of the fishes of the western Great Lakes; includes a history, geography, evolution of the basin and a key to fishes. Available from Univ. of Nevada Press, Reno. \$32.50.

Pollutant Studies in Marine Animals, edited by C. S. Giam \& L. E. Ray, 1987, is a "technical description of analytical systems and their use to monitor marine fish and invertebrate populations" with an emphasis on biochemical and tissue processes. Available from CRC Press, Boca Raton, FL. $\$ 110.00$

Purse-Seining with Small Boats, by M. Ben-Yami, FAO, 1987, is a "well-illustrated, non-technical" training handbook. Available from UNIPUB, 4611-F Assembly Dr., Lanham, MD 207064391. \$12.00 (paper).

Streamside Management: Forestry and Fishery Interactions, edited by E. O. Salo \& T. W. Cundy, 1987, contains panel discussions and 15 papers on wood-water management conflicts with particular emphasis on western salmonid management. Available from Univ, of Washington Inst. of Forest Resources, Seattle. \$30.00 (paperback).

Turbine-Related Fish Mortality: Review and Evaluation of Studies, prepared by Eicher Associates for Electric Power Research Inst., 1987, is available from Research Reports Center, Box 50490 , Palo Alto, CA 94303.

Fish Physiology, Vol. 11, The Physiology of Developing Fish, Pt. A - Eqgs \& Larvae; Pt. B - Viviparity \& Posthatching Juveniles, edited by W. S. Hoar \& D. J. Randall, 1988, are available from Academic Press, 1250 Sixth Ave., San Diego, CA 92101. $\$ 89.00, \$ 95.00$, respectively.

## ETC.

Long-Term Ecoloqical Research (LTER) Newsletter. For those of $y$ ou who are interested or involved in long-term ecological research, a semiannual newsletter is available from the NSFsponsored LTER program. Contact: Judy Brenneman, Forest Science Dept., Oregon State Univ., Corvallis, OR 97331.

International Association of Astacology. This organization publishes a quarterly newsletter and periodic symposia on all aspects of crayfish studies (physiology, toxonomy, genetics, zoogeography, management). Its next international symposium is scheduled for 1990 in Louisiana. For further information, contact: Jay V. Huner, International Assoc. of Astacology, P.O. Box 10809, Southern Univ., Baton Rouge, LA 70813.

Stop Acid Rain. A colorful $2 \times 3^{\prime}$ poster of game fish entitled, "Going Fishing ...Fishing Gone?", is available from:

## DETRITUS

## Definitions

Hydromicrobiogeochemist - One who studies small underwater biota and their relationship to underlying rock strata by using chemical methods.

Microhydrobiogeochemist - One who studies biota in very small bodies of water and their relationship to underlying rock strata by using chemical methods.

Microbiohydrogeochemist - One who studies biota and their relationship to underlying rock strata by using chemical methods and SCUBA equipment.

Biohydromicrogeochemist - A very small geochemist who studies the effects of biota on hydrology.

Hydrobiomicrogeochemist - A very small geochemist who studies wet biota.

Biomicrohydrogeochemist - A very small, wet geochemist who likes lettuce.*
modified from Geotimes, July-Aug. 1962
*Editor's Note: I think this ought to be a "Macrobiomicrohydrogeochemist"

NOTE THE NUMBER 87 OR 88 ON YOUR MAILING LABEL.
THIS DENOTES YOUR DUES STATUS.
TO BE A CURRENT PAID UP MEMBER YOU SHOUUD HAVE AN 88 ON THE LABEL.
ENCLOSED IS A MEMBERSHIP BLANK FOR NEW OR RENEWAL MEMBERSHIPS.

Application for Membership
New York Chapter of the American Fisheries Society
(information provided will be used in the annual membership directory)
Applicant's name: $\qquad$Regular \$5.00

Mailing address: $\qquad$
Employer or school:

- Student members must be endorsed by a faculty member signing above.
Specialization (s) or interest **

home
Check here if you wish to receive information about national AFS membership.
Telephone
area code and number
business

[^0]
#### Abstract

Make check payable to NY Chapter-AFS and mail with this detachable application to address on reverse side of this form.


## Specialization or Interest

1. Administration
2. Aquaculture
3. Aquaitic biology, ecologỳ (freshwater)
4. Biological controls
5. Benthic organisms
6. Communications (writing, publishing. publicity)
7. Exotic species
8. Fish and fishing-general
9. Fish behavior
10. Fish biology-freshwater species
11. Fish biology-marine species
12. Fish biology-estuarine species
13. Fish biology-salmonids and cold-water species
14. Fish biology-warm-water species
15. Fish larvae
16. Fisheries management (population dynamics, habitat improvement, etc.)
17. Genetics
18. Health-medicine, aquatic animals
19. Ichthyology, taxonomy
20. Illustrations
21. Impact assessment
22. International fisheries development
23. Legislation and law enforcement
24. Limnology
25. Pesticides
26. Physiology
27. Plankion
28. Pollution
29. Power plants
30. Research
31. Striped bass
32. Siurgeon
33. Toxicology-all phases
34. Water quality-analysis, improvement, etc.
35. Crustaceans
36. Education/Teaching
37. 
38. $\qquad$

Mail Application to:
JACK HASSE
SECRETARY/TREASURER
NYAFS
c/o NYSDEC
207 Genesee St.
Utica, NY 13501


## NEW YORK CHAPTER

## AMERICAN FISHERIES SOCIETY

MARCH 1988

President<br>Frank Panek<br>NYSDEC<br>17 Fern Road<br>Rocky Point, NY 11778

Newsletter Editor
Leslie M. Kusek
Malcolm Pirnie, Inc. 2 Corporate Park Drive White Plains, NY 10602
(914) 694-2100

## EDITOR'S CORNER

The annual meeting in Binghamton was a great success. I think everyone learned some new thoughts on ecosystem management and thoroughly enjoyed themselves! Congrats to Tim Sinnott, program chairperson, and his committee!

The meeting marked the end of an era for me, however, as I announced my plans to resign as editor of the newsletter and return to Detroit, MI. I have really had fun as editor over the past two years and welcomed the opportunity the newsletter presented to meet many of New York's finest aquatic professionals.

Paul Kotila from St. Lawrence University has offered to step in as the new newsletter editor. I am personally thankful for Paul's interest, and I am sure the Chapter will benefit from his background and experience in the fisheries profession.

I would like to thank Joe Buttner and Joe Gorsuch for all of their support and advice over the past two years. It was a great pleasure working with these two gentlemen on the newsletter, and I am grateful for their effort. Best wishes, to all in the future! Go Detroit Tigers!

## PRESIDENT'S MESSAGE

The 1988 Annual Meeting of the New York Chapter was held January 28-30 at the Holiday Inn in Binghamton. Unfortunately, an untimely bout with a bad throat prevented me from attending and sharing with you what has been described to me as one of our "best meetings ever." Past-Presdient Bob Lange and members of the Executive Committee did an outstanding job seeing that things fell into place. Program Committee Chairperson Tim Sinnott deserves a "well done" from the entire Chapter membership. I hope that each of you that attended the meeting found it both informative and enjoyable.
from owners of designated properties that were not on the 1981 map. The law gives DEC the burden of establishing that such land meets state standards for a freshwater wetland.

Source: New York Times January 24, 1988.
New York State has acquired 34 -acre Crab Island on Lake Champlain through eminent domain and intends to open the property as a public park. The island is of historic importance which dates back to the Battle of Plattsburgh during the War of 1812, when 200 Americans and British were buried there. The owner of the island is currently contesting the acquisition offer of $\$ 210,000$.

Source: Times, Herald, Record, February 11, 1988.
New York City and a number of New Jersey municipalities are being pushed to find alternatives to dumping their sewage sludge in the Atlantic Ocean. The U.S. Environmental Protection Agency is saying that it will deny permits for dumping the sludge 106 miles offshore until the municipalities submit detailed studies examining other potential land-based disposal options.

The EPA is also requiring any ocean dumpers to install "black boxes" by May 31,1988 that monitor any illegal discharge of sewage waste, at a cost of $\$ 25,000$ each. The boxes record the time and location at which wastes are discharged, and are intended to prevent barges from dumping before they reach the designated site, 106 miles from shore.

At the same time, New Jersey legislators have introduced a bill to Congress that would ban dumping sewage in the Atlantic after 1991.

Source: New York Times, January 17, 1988.
Hudson River Estuary bass tournament anglers with exceptional largemouth and smallmouth bass catches have helped in New York Department of Environmental Conservation studies of bass wintering areas. Largemouth bass have been found to congregate in tidal bays at Coxsackie, Catskill and Saugerties where they have been boat electroshocked and then marked with fin clips for later recapture. During the spawning and feeding months, the bass spread out over a wider reach of Hudson River and some are later recaptured in tournaments when angling occurs throughout the middle 70 miles of river. Tournament catches monitored by DEC biologists in 1986-87 included over 2400 largemouth bass, and the ratio of marked to unmarked bass, along with concurrent boat electroshocker results, suggested over $1 / 3$ of the bass caught by tournament anglers had over-wintered in these areas.

Bass marking at two additional downriver wintering areas in 1987 set the stage for 1988 tournament monitoring and a subsequent population estimate for the entire river population. This study is being carried out by regional fishery units at Stamford and New Paltz, and is coordinated with other bass studies by the Albany warm water unit leader and the warmwater research unit at Cornell University. Dave Green from Oneida Laboratory, Cornell University, was involved in a related effort last summer.

State-owned 1,000 acres is only accessible over private land. The state is offering the landowner $\$ 900,000$ for the recreation rights that he holds on the 1,800 acres.

Source: Times, Herald, Record, February 4, 1988.

## NATIONAL NEWS

Polluters of Connecticut waters are being charged for each fish killed, under a new Department of Environmental Protection program, as well as for insects and other aquatic creatures destroyed by pollution. Money collected will go to the department's conservation and preservation fund and will be used to restock damaged streams. Under the program, DEP inspectors visit the site of each fish kill, count carcasses and then levy charges against the polluter by using a price list developed by the American Fisheries Society. Each trout can cost $\$ 1$ or more, while bait fish would result in a fine of about a nickel each. While the majority of fish kills cannot be traced, a DEP spokesman said that most of the spills that can be traced to a company are accidental and the companies involved pay promptly. For more information, contact the DEP at (203) 566-5599.

Source: Ecology USA, November 23, 1987.
A $\$ 52$ million program to prevent further pollution of Lake Champlain is nearing completion. The City of Burlington, Vermont has been meeting with state officials since this past summer to develop a plan to deal with the pollution threat to the lake resulting from the release of raw sewage into the waters. When a heavy rainfall occurs, the city's 4 million gallon per day waste treatment plant cannot accommodate the combined volume of water and sewer flows. As a result, the overflow goes directly into the lake without treatment, and raw sewage washes up along Burlington's beaches. The beaches must then be closed to avoid threatening public health. The plan being generated by the city and several other nearby towns to remedy this environmental problem includes rebuilding sewers and upgrading sewage treatment plants. As currently envisioned, more than 50,000 feet of storm drains will be constructed independent of sanitary sewers. The U.S. Attorney for the District of Vermont and the U.S. Environmental Protection Agency have also taken part in the conception of the program. Environmentalists say that Burlington is not the major factor in the growing pollution problem in Lake Champlain. They believe that the runoff of fertilizers and other nutrients from farms and the continued presence of toxics such as polychlorinated biphenyls will be of great concern even after Burlington completes its planned project.

Source: New York Times, January 17, 1988.
Foreign trawlers have been accused of fishing illegally in rich American waters off the Aleutian Islands in Alaska. Federal officials are studying a videotape taken in the latter part of January in the Bering Sea that reportedly shows seven foreign trawlers fishing 39 miles inside the 200 mile territorial limit north of the Aleutians. State department officials said that
land-based incinerators. Coastal communities and environmental groups had bitterly opposed the project, arguing that spills or accidents could destroy marine life. Many of the environmental groups also oppose land-based incineration. Two sites had been identified as potentially suitable for offshore incineration of hazardous wastes: one in the Gulf of Mexico 110 miles from Texas, and another about 140 miles off the shore of Maryland, Delaware, and New Jersey.

Source: New York Times, December 31, 1987.
Japan has lost half of its fishing quota in U.S. waters as the result of a declaration made by Commerce Secretary C. William Verity that named Japan for hurting international whaling agreements by killing Minke whales in the name of science. However, since Japan's current quota is zero, this punishment is purely symbolic. The declaration could also mean exclusion of Japanese fish and fish products from U.S. markets, which is much more significant: in 1987, Japan shipped $\$ 560 \mathrm{milli}$ ion of such products to the U.S. Although the $30-\mathrm{foot}$ Minke whale is currently plentiful (several hundred thousand are believed to exist), conservationists fear that if hunted the whale would face the same fate as the larger humpback, fin, and other species hunted in the past. These species have reached commercial extinction, where the population is so reduced that the cost of harvesting exceeds catch profits. The U.S. and Japan agreed in 1984 that Japan would end commercial whaling after the 1986-1987 catch, and Japan would keep its U.S. fishing quota.

Source: Times, Herald, Record, February 11, 1988.

## AQUACULTURE NEWS <br> (by Joe Buttner)

The NYS Aquaculture Association Board of Directors held their semi-annual meeting in conjunction with the annual meeting of the New York Chapter of the American Fisheries Society in Binghamton, NY on 29 January 1988. Thirteen members were in attendance. President David Morehouse opened the meeting and promptly requested reports from standing committees. Total membership is now 97. After some discussion, it was the censensus of the Board that future annual membership meetings would be held in conjunction with the annual meeting of the NYC AFS.

President David Morehouse and Newsletter Editor Joe Buttner represented the NYSSA at Fish Farming Expo in New Orleans (21-23 November 1987). The program was excellent, with several very informative sessions:
A. "Maximizing Earnings with Proper Feed, Nutrition and Medication" (an excellent, superbly organized and informative session).
B. "New Horizons for Aquaculture 1" (dealt with culture of tropical fish, alligators, tilapia, sturgeon, salmon, and prawns...probably of limited interest to most aquaculturists in NYS).
C. "Fish Management" (aquaculture as a tool in fish management).
sponsored by the Great Lakes Research Consortium. It was the concensus of participants that aquaculture in the Great Lakes is feasible; at least two commercial operations already exist in Canadian waters of the Great Lakes. Workshop participants believed the greatest potential for aquaculture exists as cage culture operations in protected bays, tributaries and open waters of the Great Lakes and in the form of on-shore operations that utilize water from the Great Lakes in single pass systems (e.g., discharges from power plants). Some interest was also voiced regarding land based reuse systems and salmon ranching in the Great Lakes. Technolegical problems presently associated with reuse systems and uncertainties about bioaccumulation of contaminants and potential interference with recreational fishermaen preclude development of these operations in the immediate future.

Most discussions at the workshop centered on impediments identified by workshop participants as critical restrictions to acquaculture development in the Great Lakes.

For a copy of the workshop proceedings contact Joe Buttner, Aquatic Ecology Section, Department of Biological Sciences, SUNY College at Brockport, Brockport, NY 14420.

A "Glossary of Aquaculture Terminology" has recently been compiled by the Mariculture Committee (Harold Rosenthal, James E. Stewart, J.D. Castell, and Hans Ackefors) of the International Council for the Exploration of the Sea. The NYSAA has duplicated the list (47 pages); it is available upon request from Philip Bradway, NYS Dept. of Agriculture and Markets, II Winners Circle, Albany, NY 12235.

In 1986 the New York State Urban Development Corporation funded 10 projects designed to promote aquaculture in marine waters. Funded projects were:

1. Demonstration of scallop culture on Long Island.
2. Investigations in off-bottom culture of the American Oyster.
3. The development of genetic strains of Laminaria saccharina (Kelp) for mariculture in Long Island waters.
4. Blue mussel (Mytilus edulis) Mariculture.
5. The use of oyster toadfish (Opsanus tau) as a predactor control tool in a seed clam growout project.
6. Test of hard clam seed survival as affected by subsurface planting.
7. A comparative study of the use of upweller systems for the production of clam and scallop seedlings.
8. Mooring systems for offshore aquaculture arrays.
9. Integrating hatchery production into an existing upwelling nursery system and assessing the correlation between past and future growth rates to

Obviously fish has two selling points: sensory quality (taste) and nutritional value. Sensory quality sells itself, but consumers must be informed about nutrition.

Source: The Catfish Journal (Dr. T. Love11), December 1987.
The Japanese term for "catfish" means bottom-dwelling fish that causes earthquakes. That's as bad as Chevrolet, marketing Nova's in Latin America (Nova in Spanish means No go!). Apparently a name change is in order if whiskered fish are to be marketed successfully in Japan.

Source: (in part): Water Farming Journal 2(9).

Summary of
Executive Committee Meeting Minutes
November 19, 1987
NYSDEC Offices
Albany, NY

Meeting was called to order by President Lange at 10:50 a.m. Members present were B. Lange, J. Hasse, L. Skinner, T. Sinnott, B. Knuth, G. Neuderfer, F. Panek and D. Sheppard.

President's Report - Lange
President Lange discussed the situation within the N.E. Division AFS where Steve Gloss was elected president then moved from the area, thereby creating a vacancy for the position.

A letter has been sent to the D.E.C. in support of the Return A Gift to Wildlife Program. We asked that we be allowed input in the selection process when projects are selected.

We sent a letter to the Chairman of the New York State Civil Service Commission stating our opposition to a proposal to appoint a Division Director by the governors office instead of it being a civil service position. (Note: We were informed near the end of the meeting that the Civil Service Commission had decided to change the Division Directors position to political appointee status).

President Lange closed his report by stating that Chapters seem to be gaining some influence at the National level.

## Membership Report - Panek

Frank compared the NYCAFS membership list to the AFS list and found that half the New York members do not belong to the parent society. He has contacted 167 NYCAFS members suggesting they joint the parent society. Other means of

Summary of<br>Executive Committee Meeting<br>January 28, 1988<br>Binghamton, NY

Meeting was called to order by President Lange at 5:15 p.m. Members present were B. Lange, L. Skinner, T. Sinnott, B. Knuth, G. Neuderfer, D. Sheppard, L. Kusek, P. McKeown, and M. Duttweiler.

## 1987 WORKSHOP - P. McKeown

AFS has not yet received the refund from Cornell of $\$ 2,037.95$. However, the paperwork is underway. With the receipt of this refund, total cost to the chapter for the workshop will be $\$ 64.26$.

WOMEN AND MINORITIES - B. Knuth
A joint meeting was held with the Society of American Foresters and the Wildlife Society. The meeting identified areas where more data were needed, and the committee set forth to accomplish the following tasks:

- Recommendations to professional societies and employers to diversify their membership and leadership and gain interest from minority groups, including promotional materials.
- Guidelines for educational institutions to use in the recruitment of minorities into the natural resource profession.
- Consult with chapter program committees about the potential for a joint, summer workshop to focus on "Human Value Charges Affecting Natural Resource Professionals."

The group wants to ensure that it adequately addresses the needs of minorities other than women and may seek out specialists to aid in their efforts.

ENVIRONMENTAL CONCERNS - D. Sheppard
The committee is continuing to monitor the "River Bill" developed by New York State, which is viewed as a statewide rivers management plan. The committee also provided comment on the Delaware River Water Plan. Pesticide legislation is currently being developed, and the committee is determining whether AFS should be involved.

NEW BUSINESS
The parent society has sent a letter requesting help with the raffle held during its annual meeting, specifically, the donation of some sort of trip. The committee will wait for more details.

AFS has been asked to coordinate with the NYSDEC Fisheries chief to fund development and dissemination of educational materials to elementary schools
(2) develop objectives for fiscal returns from chapter activities i.e., make money, break even, subsidize
(3) develop guidelines for budgeting chapter activities
(4) develop recommendations for productive use of chapter resources in excess of necessary reserves

## Committee Reports

## Environmental Concerns

Doug Sheppard reported that the chapter is watching rivers protection legislation being proposed by New York State as well as development of a statewide minimum flow strategy.

Membership
Current membership is 326 which is an increase of 20 during 1987.

## Program

Tim Sinnott discussed the reasons for moving the meeting site to the Holiday Inn at Binghamton and requested feedback from those in attendance. Preregistration was new this year and 92 took advantage of it. Attendance was approximately 150.

## Resolutions

Two resolutions were submitted to the executive committee. One, dealing with hiring practices of the NYSDEC, was deemed unacceptable by the executive committee and was tabled. The second urged the addition of a member iwth fish and wildife resource expertise to the Great Lakes Water Level Regulation Board so that fish and wildlife resource values are considered in settling water levels. After a lively debate, the resolution was sent back to committee with an emphasis on a need to incorporate environmental concerns to the existing operating criteria.

## Newsletter

Leslie Kusek announced she will be moving from the area and will only be able to put together one more newsletter. A search for a new newsletter editor must take place.

## Women and Minorities

Barb Knuth reported that the chapter in conjunction with the New York Chapter of the Wildlife Society and Foresters compiled data from civil service to determine the role of women and minorities in natural resources. The Wildlife Society and Foresters (NY chapters) have agreed to work jointly with NYCAFS to improve chances of career opportunities for women and minorities in New York.

## New Business

Frank Panek was installed in abstentia as the new President.
There being no other new business, a motion to adjourn was made and carried at 5:50 pm.

Note: At the conclusion of the Annual Meeting, the following authors were awarded best paper status:

Best Overall Paper - 1. Ellen Marsden and Charles Kreuger (Cornell Univertiy) "Preliminary observations on lake trout egg deposition in Lake Ontario"

Best Student Paper - Paul Kazyak (SUNY ESF) "The impact of exploitation on smallmouth bass populations in three Adirondack Lakes"

Best Poster - Richard Kirker and G. Dole "A symbiotic relationship between common white sucker and the smallmouth bass"

## AFS ACTIVITIES

The "Last Word" on the NYC AFS 1988 Annual Meeting: A number of people approached me to say that they felt the 1988 Annual Meeting was a big success. My standard answer was to say that it was a real team effort, and without the efforts of a lot of people, the meeting would not have gone well at all. I would like to take this opportunity to recognize those people that helped so much, and thank them for their support.

Chuck Kreuger provided invaluable assistance in lining up the slate of speakers. Most of the invited speakers were nominated by him. He also spent considerable time and effort suggesting how the program committee could approach the assigned topic, how to handle the panel discussion, and identifying an appropriate topic for the second invited paper session.

Paul McKeown provided many good tips about writing to the speakers to recruit them for the meeting, and he provided materials for standards. for presentations.

Chuck Kreuger, Doug Carlson, Rich Preall, and Phil Briggs volunteered to be session moderators, and performed an excellent job with few, if any, problems with projectors, lights, or time.

Anne Griggs is not a member of the NYC AFS chapter, but willingly took on the task of typing all of the programs and abstracts, designing and planning the layouts, and copying, collating, and stapling all of the handout materials.

Bob Daniels, Bob Werner, Doug Carlson, Dennis Dunning, and Jim Winter volunteered to judge papers. Judging papers, particularly student papers, and recognizing their achievements is one of the most important functions of the chapter.

Bob Daniels, Dennis Dunning, John Homa, Neil Ringler, and Dieter Busch willingly participated in the student discussion on "beginning a job in fisheries".

Jack Hasse and Carl George worked to change the registration process from a debacle into a reasonably functional operation.

A number of people performed the undistinguished, but highly important jobs of running projectors, running errands, photocopying, manning tables, moving posters, turning lights on and off, loading and unloading trucks, cleaning up, and generally just being there when they were needed. These people were Anne Griggs, Steve Orman, Dennis Wischman, Gail Dieter, Jack Campbell, Jim Davis, Mike Hughes, Wayne Wadsworth, Tom Baudanza, and Dave Winchell.

I'd like to say thanks to all of these individuals for their time and effort throughout the whole meeting. The success of any of these meetings is directly proportional to the number of folks that get involved.

Tim Sinnott
The NYC AFS Secretary/Treasurer (Jack Hasse) has begun preparing the membership directory for the printer. Any changes in address, phone number, employer, etc. should be sent to Jack Hasse c/o NYSDEC 207 Genesee Street, Utica, NY 13501.

The 1988 membership dues are payable now. The mailing label will have the number 87 or 88 in the lower corner. Those with an 87 have not paid the current year's dues.

National AFS grew by 167 members in 1987, with 975 recruits and 808 delinquents. It was a good year and the parent society commends everyone who supported the effort.

The concept of a World Fisheries Congress was recently discussed by AFS International Fisheries Section President Tap Banerjee with seven fisheries scientist members of the Food and Agriculture Organization (FAO) in Rome. The FAO delegation felt that the concept of a congress dealing with scientific rather than political issues was excellent. They also felt that an important by-product would be a better communication system between world fisheries scientists.

A fisheries action plan for the USFS Southern Region has reached the attention of national AFS. It features their "Rise to the Future" cover art and in his

Chapter officers are John E. Cooper, President; Dr. Eileen Setzler-Hamilton, President-Elect; and Chris Bouzek, Secretary-Treasurer. The Tidewater Chapter is the Society's newest Chapter (Mid-Canada is the same age).

Portland is already bidding for the 1993 annual AFS meeting. The ' 93 site will be selected at the ' 89 meeting in Anchorage so they really are working on a long lead time. The 1992 meeting location will be selected next year at the Toronto meeting so any states or Chapters in the North Central Division with a "burning" desire for sponsorship should start planning now.

## A NOTE FROM THE PRIVATE SECTOR

Arcata, California's city engineers have developed and implemented a wastewater treatment system for the 15,000 city residents that has become the home for flocks of sea birds, families of otters, and dozens of owls, osprey and falcons. A 154 acre wetland system comprised of marshes, lagoons and ponds has been designed to cleanse the city's wastewater.

Arcata is located approximately 250 miles north of San Francisco, on the coast of the Pacific Ocean. The city's treatment system is based on wetland biology and does not include a sophisticated mechanical treatment system for purification of nutrient-rich effluent. Bird watchers walk the trails that surround the wetland, searching for a glimpse of a peregrine falcon or watching sea birds dive for trout from the lagoons.

The city's engineers have created this system by viewing the effluent as a resource that can nourish plants and wildife which in turn purify the wastewater. The treatment system includes three oxidation ponds, two marshes that filter and cleanse the wastewater, three marshes and lagoons irrigated with wastewater, one brackish pond, six small ponds used to raise salmon, and a series of small marshes for research. The program also relies on a standard treatment plant that was built in the 1950's and modernized in the mid-1980's. Wastes are treated in the mechanical plant to remove and disinfect solids. The solid waste is then turned into mulch for city parks, and the nutrient-rich liquid enters the wetland ecosystem to be broken down by algae, bacteria, and plants that inhabit the marsh.

Arcata was given $\$ 100,000$ last September when it received an award from the Ford Foundation's Innovations in Government program for the treatment system. Arcata plans to use the money to build a visitors center near the restored wetlands.

Source: New York Times January 24, 1988

## RIGHT IN MY BACKYARD

For this issue of the newsletter, I decided to pull all of you fisheries scientists from the waters and give you a look at the pines...

Does anyone have any color slides or transparencies of fish cookery or fish-based meals? Joan Cone, PO Box 242, Williamsburg, VA 23187, is looking for illustrations to be used in connection with her column, "The Cookstove," appearing in Stover Publications, FISHING - THE NORTH COUNTRY. Photo credit will be given.

Canadian water quality guidelines have been published by the Canadian Council of Resource and Environmental Ministers. Copies of the 396-page report are available at no cost from the Chief Water Quality Objective Division, Water Quality Branch, Environment Canada, Ottawa, Canada K1A OH3. When ordering a copy from the U.S., enclose a $10 \times 12^{\prime \prime}$ or $11 \times 13^{\prime \prime}$ self-addressed envelope plus $\$ 2.00$ for postage. The Guidelines, which apply to inland surface waters and groundwater, contain recommendations for the chemical, physical, radiological, and biological properties of water necessary to protect and enhance designated water uses. For more information, contact Don MacDonald, (604) 666-8003.

Population Dynamics Fellowships are available from the Electric Power Research Institute for graduate level research. A total of $5-10$ fellowships per year will be awarded for the next two years. For details call SFI at (202) 898-0770.

The use of pure oxygen in hatcheries is of great interest to the AFS Bioengineering Section and the Bonneville Power Administration. If you are using pure oxygen or planning to do so, contact Jerry Bouck, Bonneville Power Administration, P.0. Box 3621, Portland, OR 97208. Ask for a copy of the questionnaire, and after you complete and return it Jerry will provide you with a copy of the final report.
Two recent reports, Comparison Between Commercial Starter and Diets for Atlantic and Coho Salmon, summarize data on growth, feed conversion, mortality, condition factors, fin condition, carcass composition and other parameters for salmon fed six different commercially available salmon starter diets. Furthermore, analyses were made of feed proximate composition, particle durability and size distribution of particle sizes. These reports were published as Bozeman Information Leaflets:

> BIL No. 37 - Atlantic Salmon
> BIL No. 39 - Coho Salmon
and are available upon request. For more information, contact Dr. H. George Ketola, Tunison Laboratory of Fish Nutrition, USFWS, 3075 Gracie Road, Cortland, NY 13045.

The Hudson River Foundation has published "Polgar Fellowships Reports on the Hudson River National Estuarine Research Reserve Program, 1986." It includes the results of eight undergraduate research projects on marshes of the Hudson River National Estuarine Research Reserve. The report is available at no cost by writing to: Dr. John Waldman, Hudson River Foundation, 122 East 42nd Street, Suite 1901, New York, NY 10168.

Six full-time temporary fish hatchery technicians are needed during May-August 1988 at EA Science and Technology striped bass fishery hatchery at Peekskill

May 27-June 1: Integrated Aquaculture Systems Course at The Wood's Hole Oceanographic Institution, Woods Hole, MA. For more information, contact: Ecologic, P.O. Box 1440, North Falmouth, MA 02556. (617) 563-5988.

May 31-June 3: Symposium on Management Schemes for Inland Fisheries in Goteborg, Sweden. For more information, contact: Dr. R. L. Welcomme, FAO, FIRD-F.229, Via delle Terme di Caracalla, 00100, Rome, Italy.

June 6-9: Rare Species and Significant Habitat at SUNY ESF, Syracuse, NY. For more information, contact Dr. Donald J. Leopold, 333 Illick Hall, SUNY ESF, Syracuse, NY 13210.

June 7-8: National Recreational Fisheries Conference at 01d Colony Inn, Alexandria, Virginia. For more information, contact: Gary Edwards, Deputy Assistant Director, Fisheries, U.S. Fish and Wildlife Service, Washington, D.C., 20240, (202)343-6394.

June 14-16: Alabama State Lake Tour will be hosted by the Alabama Game and Fish Division. For more information, contact: Stan Cook, 64 North Union Street, Montgomery, AL 36130, (205)261-3471.

June 13-17: Computational Methods in Water Resources. For more information, contact Michael A. Celia, Parsons Lab., Rm. 48-207, Department of Civil Engineering, MIT, Cambridge, MA 02139.

June 15-17: Langostino 1988. 1988 Shrimp Technology and Export Trading Show of the Americas at James L. Knight International Center, Miami, FL. For more information, contact International Shrimp Research Center, P.O. Box 53424, New Orleans, LA 70153. (504)822-0270.

July 10-13: Annual Meeting of the Western Division of AFS at the Holiday Inn, Journal Center, Albuquerque, New Mexico. For more information, contact: Nancy MacHugh, 303 Extension Hall, Oregon State University, Corvallis, OR 97331, (503)754-4431.

September 9-15: The 118th Annual Meeting of AFS at the Royal York Hotel, Toronto, Ontario. For more information, contact: Carl R. Sullivan, Executive Director AFS, 5410 Grosvenor Lane, Bethesda, MD 20814, (301)897-8616.

September 14-16: International Symposium on Fish Physiology, Fish Toxicology, and Fisheries Management at Zhongshaun University in Guangzhou (Canton), Guangdon Province, People's Republic of China. For more information, contact: Dr. David Randall, Zoology Dept., University of British Columbia, 6270 University Blvd., Vancouver, British Columbia, Canada V6T 2A9. Registration deadline is June 1.

October 2-6: 3rd International Colloquium on Pathology in Marine Aquaculture at Gloucester Point, VA. For more information, contact Dr. Frank 0. Perkins, Virginia Institute of Marine Science, Gloucester Point, VA 23062. (804)642-7102.

| Pr | k |
| :---: | :---: |
| Past Presiden | Robert Lange |
| President Elec | James Winter |
| Secretary-Trea | Jacke Hasse |

## STANDING COMMITTEES

Environmental Concerns......................Douglas Sheppard  Program.......................................... Timothy Sinnott Resolutions................................................... Tuttle  Nominating. . . . . . . . . . . . . . . . . . . . . . . . . . . . Robert Lange Newsletter...........................................Paul Kotila AD-HOC COMMITTEES

Professional Initiatives...................Gary Neuderfer
Women and Minorities.........................Barbara Knuth

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 New York Chapter of the American Fisheries Society (information provided will be used in the annual membership directory)Applicant's name:
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Make check payable to NY Chapter-AFS and mail with this detachable application to address on reverse side of this form.

## Specialization or Interest

1. Administration
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5. Benthic organisms
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7. Exotic species
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9. Fish behavior
10. Fish biology-freshwater species
11. Fish biology-marine species
12. Fish biology-estuarine species
13. Fish biology-salmonids and cold-water species
14. Fish biology-warm-water species
15. Fish larvae
16. Fisheries management (population dynamics, habitat improvement, etc.)
17. Genetics
18. Health-medicine, aquatic animals
19. Ichthyology, taxonomy
20. Illustrations
21. Impact assessment
22. International fisheries development
23. Legislation and law enforcement
24. Limnology
25. Pesticides
26. Physiology
27. Plankton
28. Pollution
29. Power plants
30. Research
31. Striped bass
32. Sturgeon
33. Toxicology-all phases
34. Water quality-analysis, improvement, etc.
35. Crustaceans
36. Education/Teaching
37. 
38. $\qquad$

Mail Application to:
JACK HASSE
SECRETARY/TREASURER
NYAFS
c/o NYSDEC
207 Genesee St.
Utica, NY 13501

## ABSTRACTS



## CONTRIBUTED PAPER SESSION I RIVERS AND STREAMS



# POPULATION DYNAMICS AND PRODUCTION OF SLIMY SCULPIN (COTTUS COGNATUS) UNDER INCREASED AND DECREASED POPULATION DENSITY IN FACTORY BROOR, NEW YORK <br> Charles Morgan and Neil H. Ringler SUNY College of Environmental Science and Forestry Syracuse, New York 13210 

As part of a study to examine the ecological relationships between the slimy sculpin (Cottus cognatus) and benthic stream insects, population dynamics of the sculpin were studied. Population growth, size distribution, and migration were studied from June 1985 to May 1987 in Factory Brook. From June to September 1987, sculpin populations were increased in three sites (additions), decreased in three sites (reductions), and sampled and replaced in four sites (controls). Four size classes were distinguishable: $0-45 \mathrm{~mm}$ in length, $0 ; 46-63 \mathrm{~mm}, \mathrm{~J} ; 64-85$ mm , II; $>85 \mathrm{~mm}$, III-IV. Most sculpin were sedentary ( $86 \%$ ), with $89 \%$ of the more mobile individuals moving less than 25 m . Over four months, mean sculpin densities ranged from 5 to $10 / \mathrm{m}^{2}$ and mean biomass density was $16 \mathrm{~g} / \mathrm{m}^{2}$. Adaition sites maintained a significantly higher mean sculpin density than both reduction or control sites. Sculpin densities for reduction sites, while declining due to removal, were not significantly different from control sites. These results will assist us in assessing the role of a predatory benthic fish on the population ecology and function of benthic stream insects.

## OCCURRENCE AND FEEDING BEHAVIOR OF THREE HERRING SPECIES IN FRESHWATER TIDAL MARSH, HUDSON RIVER, NEW YORR

Karin E. Limburg

Larval and juvenile specimens of three clupeids (blueback herring, Alosa aestivalis; alewife, A. pseudoharengus; and American shad, (A. sapidissima) were collected from the Tivoli National Estuarine Sanctuary, Hudson River, from mid-June to mid-September 1987. Morphometic characteristics were recorded and gut contents analyzed. Alewives were seen in the marsh only as larvae and once as juveniles on a strong flood tide. Shad occurred there only as juveniles, whereas bluebacks were found in both life stages. Over the season, shad shifted their diets increasingly toward larger insects away from a planktonic diet, while blue-backs maintained a planktonic feeding mode and increased the proportion of the cladoceran Bosmina longirostris in the diet. Difference in feeding strategy are discussed.

# THE ECONOMIC CONSEQUENCES OF THE NEW YORK'S 1986 STRIPED BASS MORATORIUM 

James R. Kahn, Assistant Professor, Department of Economics, SUNY Binghamton, Binghamton, New York 13901
Robert Buerger, Assistant Professor, Department of Recreation and Leisure Studies, SUNY Cortland, Cortland, New York

This paper looks at the loss to the recreational and commercial fisheries of the 1986 ban on commercial and recreational possession of striped bass in New York. Bioeconomic models of the commercial and recreational fishing sector are estimated, and the loss in net benefits (consumers' plus producers' surplus) is estimated.

The examination of the commercial fishing sector is not meant to imply that the PCB contaminated fish are safe to eat. Rather, we are simply looking at the social benefits that would result from that commercial fishery if the fish were healthy and open. The commercial fishery is examined by estimating demand and supply functions for striped bass, where an index of Chesapeake and Hudson stocks are included as explanatory variables in the supply equation.

Recreational fishing is examined by looking at 1985 data on charter boat fishing for striped bass and deriving loss estimates for the charter portion of the recreational fishery. These losses are then extended to the entire fishery by means of extropaltion coefficients based on relative catch.

## HABITAT MAPPING, SATMON RIVER, OSWEGO COUNTY, NEW YORK, FOR DEVBLOPMENT AND TESTING <br> John Homa, Jr. and Laurie J. Trolier

A 15.1 mile section of the Salmon River in Oswego County, New York, from 1.8 miles upstream of its mouth at Port Ontario to Lighthouse Hill Dam (river mile 16.9 ) was mapped for aquatic habitat. The 15.1 miles were mapped for aquatic habitat. The 15.1 miles were mapped into 157 distinct habitat segments from 100 to 2,760 feet in length. Habitat segments were classified and grouped mainly by depth (shallow, medium, deep), habitat type (run, riffle, pool), river bottom (loose material, bedrock/loose material), and finally substrate (presence of one or more of large boulder, small boulder, cobble, gravel, sand, mud). However, some habitat types (chutes, steep ledges, transition zone) were segregated and grouped separately. Mapping was conducted mainly in the field on foot at low flow. Low altitude aerial photos taken at low flow were more useful than high altitude photos taken at high flow to delineate habitat criteria. Aerial photo interpretation with ground truth was necessary to delineate habitat in detail. Base mapping (scale $l^{\prime \prime}=200 \mathrm{ft}$ ) was useful for graphic purposes and locating habitat segments in the field, however, the aerial photographs could have been used directly to develop adequate base mapping for habitat delineation purposes. Some habitat criterion (instream and overhead cover categories, such as pocket water, boulders, undercut banks), although not used to classify and segregate habitat types may be useful in other mapping scenarios.

These data will be used for input into a hydrologic and microhabitat model for use downstream of storage and release hydro projects.

## EXCESS CALCIUM DURING WATER HARDENING REDOCES HATCHABILITY OF SATMON AND TROUT EGGS

Ketola, H.G., D. Longacre, A. Gruelich, L. Phetterplace and R. LaShomb

Five experiments investigated the effect of water chemistry during water hardening on survival of eggs of Atlantic salmon (Salmo salar), rainbow trout (Salmo gairdneri) and brook trout (Salvelinus fontinalis).

Rainbow and brook trout eggs incubated in hatchery waters containing high levels ( 1,500 to $2,200 \mathrm{mg} / \mathrm{l}$ ) of gypsum, i.e., calcium sulfate, survived significantly better when they were initially water hardened (1.5 to 3 hr ) in either low-gypsum water or in high-gypsum water softened by ion-exchange to markedly reduce calcium, but not sulfate, content. Relatively small quantities of static hardening water were used to markedly improve eye-up and hatchability, without changing the post-hardening water used to incubate eggs. Eggs apparently required more than a 5:l (v:v) ratio of water to eggs to harden satisfactorily.

Atlantic salmon eggs incubated in low-gypsum water had significantly reduced survival when they were initially water hardened in water having added calcium ( $520 \mathrm{mg} / \mathrm{l}$ ) at a level comparable to that in the high-gypsum waters. Added sulfate had no appreciable effect.

$\qquad$
CONTRIBUTED PAPER SESSION II
LAKES AND OCEANS


# DISTRIBUTION OF MARKED WATLEEYE IN NEW YORK WATERS OF LAKE ERIE Donald W. Einhouse and William F. Shepherd 

From 1977 to 1980, 803 walleye were jaw tagged in New York's portion of Lake Erie to determine the distribution of walleye inhabiting New York's Lake Erie waters. Between 1977 and 1987, 143 jaw tags were returned by sport and commercial fishermen. Excluding the spring spawning period, 81\% of all recoveries were reported from New York's waters. The few tag recoveries from the Province of Ontario and Pennsylvania waters were most often from fish tagged at a New York location nearest these bordering jurisdictions. Therefore, it appears walleye occupying New York's waters are essentially local and unilateral management by New York is appropriate. In addition, over the course of this tag-recapture study, a large proportion of recaptures occurred at least three years subsequent to the tagging date. These data infer a low rate of adult mortality for walleye inhabiting Lake Erie's New York waters.

## THE EPFECTS OF HERBICIDES ON THE CHAUTAUQUA LARE ECOSYSTEM

Kevin J. Franke

Static, nonrenewal toxicity tests were conducted in the laboratory to determine $L_{50}$ values for several species of Chautauqua Lake fishes to the herbicides Diquat and Aquathol-K. Field studies were also conducted in Chautauqua Lake during 1986 and 1987 to determine the effects of the two herbicides on the survival of caged yellow perch (Perca flavescens) and sunfish (Lepomis spp.), and the on weed biomass. Significantly decreased fish survivorship occurred in approximately one of every three field experiments. Diquat was more toxic to perch than sunfish while Aquathol was equally toxic to the two test organisms. Significant mortality occurred well below laboratory determined lethal concentrations in both species for the two herbicides. Diquat and Aquathol decreased weed biomass in milfoil (Myriophyllum spicatum) dominated communities or mixed species weed communities in half of the experiments. Neither Diquat or Aquathol was able to reduce weed biomass in areas dominated by Najas flexilis (bushy pondweed) in any of the 11 experiments in which they were applied. Potential toxicity to fish and limited effectiveness in decreasing weed biomass leads to questions of economical and biological efficiency of herbicide use on Chautauqua Lake.

An experimental stocking of the wild lacustrine strain of brown trout, Salmo trutta lacustris, from Bavaria has been carried out over a four year period in several New York waters, including Thirteenth Lake and Rondout Reservoir.

Our paper will discuss survival and growth rates for this species as well as the management problems for hatcheries working with typical wild strains like lacustris. The growth of brood stock as well as the criteria for introduction and adaptation of brown trout subspecies in other waters will also be discussed.

## REVIEN OF THE 1982-83 EL NINO OF PERU AND ITS IMPACT ON THE FISHERIES

Carl J. George

The atmospheric-oceanic disturbance along the west coast of South America called El Nino (because of its incidence during the Christmas season) was especially severe during the winter of 1982-1982. At the same time, the fishing fleet was large and thus especially effective in capturing the concentrated remainder of the population of the primary target species, the anchoveta, Engraulis ringens. Social transformations in Peru, host the largest South American fishery, had simultaneously resulted in severe agricultural dislocations which also damaged the nation's economy. Recovery of the technical sector of the system has focused on diversification involving the outfitting of ships with new nets, electrical and other harvest gear and engines capable of fishing the larger, faster and deeper swimming species such as the Pacific sardine, Sardinops sagax. But, the process has been impaired because of limited financing. Concurrently, the absence of fish meal in the global trade system has resulted in a greater dependence upon soybean protein produced elsewhere. The Peruvian fishery thus stands as an example of the great need for social and political as well as biological circumspection in fisheries management.

## EXPLORING LONG ISLAND'S FISHERIES RESOURCES <br> Robert J. Kent

Many positive values are associated with recreational fishing. These include healthy use of leisure time, development of environmental concern for aquatic resources, and building self-confidence through the mastery of skills. Most people are introduced to fishing through relatives or close friends. In an effort to reach other young people lacking these relationships, an educational program entitled, "Exploring Long Island's Fisheries Resources" was jointly developed by Cornell Cooperative Extension in Suffolk County and BOCES. Objectives of the program include to enable students to: develop a sense of stewardship for aquatic resources, learn about fish anatomy and ecology, become aware of fisheries careers, and master recreational skills. The program is in its second year, and has been used successfully with both special education high school students and gifted and talented elementary school students. Some 100 students are participating in 1987-88, and it is hoped many will continue sportfishing in the years to come.


## POSTER SESSION



CULTURE OF FATHEAD MINNOWS IN THE LABORATORY<br>J.K. Buttner, S.W. Dudal and W.S. Ewell ${ }^{2}$.<br>$1_{\text {SUNY }}$ College at Brokport, New York 14420<br>${ }^{2}$ Eastman Kodak Company, Rochester, New York 14650

Fathead minnows have been maintained through two generations under controlled environmental conditions (20-25C; 16 h light : 8 h dark) in reuse systems. The 450 L systems circulate water from the fish holding unit through a biological filter and back to the fish holding unit at 11.3-30.2 L/min. Bacteria in the biological filter convert ammonia excreted by fish to nontoxic nitrates. Reuse systems required less maintenance and promoted better survival and growth than static systems; they were more economical than single-pass systems. In reuse systems consistent reproduction was obtained within 7 days after 4 miles and 8 females were introduced to a fish holding unit. Hormonal injection (l0 IU Human Chorionic Gonadotropin, intracoelomically) promoted earlier spawning and increased egg deposition.

Fathead minnow fry (<24 h old) were maintained in small, singlepass systems for 30 days using one of several diets: brine shrimp alone, three different prepared foods, combinations of brine shrimp and prepared food, and no food (controls). Best survival (>86\%) and growth were obtained with brine shrimp. Survival with prepared foods was poor (<20\%); there was no apparent benefit from combining brine shrimp and prepared foods.

## HOMING, MOVEMENTS, ACTIVITY AND TEEMPERATURES OF POTADROMOUS CENTRARCHIDS IN SOOTHCENTRAL LAKE ONTARIO AND TWO TRIBUTARIES

G.P. Gerber and J.M. Haynes Aquatic Ecology Section Department of Biological Sciences SUNY College at Brockport, New York 14420

Movements and behavior of potamodromous smallmouth and rock bass were examined in the spring and summer 1985-86. Bass were captured near spawning areas by electrofishing in tributaries. Fitted with temperaturesensing radiotransmitters, bass were released near capture sites, downstream, or in Lake Ontario $3-10 \mathrm{~km}$ from their respective tributary. Twenty six and $42 \%$ of smallmouth and rock bass, respectively, displaced to Lake Ontario from spawning or "home" tributaries returned to tributary capture sites. Fish which did not home to tributaries generally dispersed along the lake shore and frequently established home ranges, often near tributary discharges. Smallmouth bass homing to, ore released in, tributaries generally established home ranges downstream from spawning areas and often occupied tributaries all summer. Rock bass homing to home tributaries usually dispersed into the lake, or disappeared, soon after returning. Smallmouth and rock bass generally occupied temperatures 20-22 C in lake and tributary habitats when available. Smallmouth bass were most active in May, least active in July, and more active in the lake than in tributaries. Rock bass activity did not appear to vary by season or habitat. Smallmouth and rock bass activity in Lake Ontario was positively correlated with relative incident illumination. Potamodromous spawning movements by lacustrine bass stocks have genetic and management implications for centrarchid populations in large lakes.

TROPEIC ECOLOGY AND PISH COMMUNITY STRUCTURE OF FISEES IN THE LITTORAL ZONE OF THE ST. LAWRENCE RIVER, NEW YORK

Michael J. Hughes and Dr. Robert G. Werner
SUNY College of Environmental Science and Forestry, Syracuse, New York

Trophic relationships of the fish community were examined in a shallow littoral zone bay of the 1000 Islands region of the $S t$. Lawrence River. Diets of 12 fish species which occurred within the bay underwent dramatic seasonal changes in prey composition and abundance revealing a complex trophic web. Omnivory was common and occurred between nonadjacent trophic levels. Variation in diet between size classes and co-occurring species paralleled increased water temperature and relative macrophyte abundance and composition. Diet overlap between species was observed to decrease with increased habitat complexity. Pumpkinseed exhibited the least amount of overlap with the co-occurring species of the littoral zone study area. Reduced overlap was attributed to specialization in morphology and foraging tactics. Structure of the fish community also underwent seasonal variation. Both resident and transient fish species utilized the bay as a spawning and nursery area in a distinct successional pattern. Piscivores generally preceded nonpiscivores in spawning, an adpative sequence which ensured juvenile icthyophages of a food resource. The greatest abundance and diversity on larval and young-of-the-year fish occurred when macrophyte abundance was at its peak. Predation by non-piscivores on larval and young-of-the-year fish was not found to be significant. The findings of this study were not unique and characterized most littoral zone embayments in the St. Lawrence.

## DEVELOPMENT OF AN EFFICIENT TECHNIQUE TO PROMOTE THE INFLATION OF SWIMBLADDERS IN TANK REARED LARVEL STRIPED BASS

Friedmann, B.R. and J.A. Bates
Non-inflation of the swimbladder in striped bass and many other physoclistic fishes in an irreversible developmental step that results in the production of deformed fish that do not grow or survive as well as fish with inflated swimbladders. In tank culture hatchery environments, production of fish with this defect is commonly reported, often affecting the majority of fish reared. From 1984 through 1987, the Hudson River striped bass hatchery has investigated the rate of occurrence of swimbladder inflation in tank reared larvae from 67 Hudson River striped bass. No maternal factor investigated was found to be associated with variation in inflation rate. Of the endogenous factors investigated, only aeration/turbulence or maintenance of an oil-free tank water surface was associated with high rates of inflation. The removal of oils, released from decaying larvae and feed, by the application of commercially manufactured spun-polypropylene oil absorbent cloths has enabled us to provide oil-free water surfaces in multiple large tank culture units with a minimum investment of labor or materials. In 1987, greater than 7.5 million striped bass larvae were produced at the hatchery with an average swimbladder inflation of $96 \%$. The application of techniques to reliably produce normally inflated physoclistic larvae at tank culture hatcheries will remove one of the significant barriers to the development of intensive culture facilities for striped bass and its hybrids.

28 - 30 January 1988
Holiday Inn - Arena
Binghamton, New York


## Invited Paper Session II

Current Issues and Trends in Aquatic Resource Management in New York Moderator - Douglas Carlson

| $2: 00-2: 40$ P.M. | $\frac{\text { Direction of New York Fisheries Programs }}{\text { Bruce Shupp, Chief of the Bureau of Fisheries }}$ |
| :--- | :--- |
| $2: 40-3: 00$ P.M. | Afternoon Break |

Binghamton/Endicott Room

| TIME * | EVENT | LOCATION |
| :---: | :---: | :---: |
| Saturday, 30 January 1988 |  |  |
| Contributed Paper Session I |  |  |
| Richard Preall, Moderator |  |  |
| 9:00-9:20 A.M. | Population size and growth of naturally reproduced salmonids in tributaries of the Salmon River. Wisniewski, S.J. and N.H. Ringler | Binghamton Room |
| 9:20-9:40 А.M. | Patterns of habitat utilization by trout and salmon in Lake Ontario tributaries. <br> Murray, K.R. and N.H. Ringler | Binghamton Room |
| 9:40-10:00 A.M. | Size-related movements of Hudson River striped bass. Waldman, J.R., Dunning D. and Q. Ross | Binghamton Room |
| 10:00-10:20 A.M. | The economic consequences of New York's striped bass moratorium. <br> Kahn, J.R. and R. Berger | Binghamton Room |
| 10:20-10:40 A.M. | Coffee Break | Vestibule |
| 10:40-11:00 A.M. | Habitat mapping, Salmon River, Oswego County, New York, for development and testing. Homa, J. and L.J. Trolier | Binghamton Room |
| 11:00-11:20 A.M. | Stock identification through restriction analysis of mitochondrial DNA. <br> Grewe, P.M. | Binghamton Room |
| 11:20-11:40 A.M. | Early feeding of 4tlantic salmon fry, before swim up to enhance growth and survival. <br> Posten, H.A. | Binghamton Room |
| 11:40-12:00 Noon | Excess calcium during water hardening reduces hatchability of salmon and trout eggs. Ketola, H.G., D. Longacre, A. Gruelich, L. Phetterplace and R. LaShomb. | Binghamton Room |

Saturday, 30 January 1988

## Contributed Paper Session II Lakes and Oceans

| 9:00-9:20 A.M. | Distribution of marked walleye in New York waters <br> of Lake Erie. <br>  <br> Einhouse, D.W. and W.F. Shepherd |
| :--- | :--- |
| 9:20-9:40 A.M. | The effects of two herbicides on the Chatauqua Lake <br>  <br>  <br>  <br>  <br> Franke, K.J. |


| TIME $^{2}$ | EVENT | LOCATION |
| :--- | :--- | :--- |
| 10:00 A.M. - 10:00 P.M. | Development of an efficient technique to promote the <br> inflation of swimbladders in tank reared larval <br> striped bass. <br> Friedmann, B.R. and J.A. Bates | South Tier Room |

NOTES:

NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY
1988 ANNUAL MEETTING PROGRAM
28 - 30 January 1988
ADDENDUM SHEET

| TIME | EVENT | LOCATION |
| :---: | :---: | :---: |
|  | Friday, 29 January 1988 POSTER SESSION |  |
|  | DROP |  |
| 10:00 A.M. - 10:00 P.M. | Occurrence and feeding behavior of three herring species in a freshwater tidal marsh, Hudson River, New York. <br> Limburg, K.E. | Southern Tier Room |
|  | ADD |  |
| 10:00 A.M. - 10:00 P.M. | Population size and growth of naturally reproduced salmonids in tributaries of the Salmon River. Wisniewski, S.J. and N.H. Ringler | Southern Tier Room |
| 10:00 A.M. - 10:00 P.M. | Stream fish and macroinvertebrate drift patterns. Kotila, P.M. | Southern Tier Room |

Saturday, 30 January 1988

ADD
7:30 A.M. - 8:30 A.M. Breakfast Johnson City Room

## Contributed Paper Session I Rivers and Streams

## DROP



Paul M. Kotila
Environmental Studies Program
St. Lawrence University
N.Y. Am. Fish. Soc. Ann. Meeting, 29-30 Jan. 1988


#### Abstract

ABSIRACT The diel (24 hr.) drift patterns of macroinvertebrates in two streams in Pennsylvania and Colorado were examined. Downstream reaches containing natural populations of fish (Fish sites) were compared to their respective upstream reaches which lacked fish (fishless sites). The chi-square test was used to determine if nocturnal or diurnal (day-time) peaks occurred in the drift of each taxon. The numbers of taxa found in each drift category were as follows:


| Pennsylvania |  | Colorado |  |
| :---: | :---: | :---: | :---: |
| Fishless | Fish | Fishless | Fish |
|  |  |  |  |
| 0 | 0 | 3 | 0 |
| 2 | 11 | 3 | 19 |
| 4 | 3 | 4 | 6 |

Of the three taxa which occurred at both PA sites, two showed no differences in drift patterns (both nocturnal), and one acyclic drifter at the fishless site became nocturnal at the fish site. Df the eight taxa which occurred at both CO sites, twa showed mo differences in drift patterns (one nocturnal, one acyclic), two diurnal drifters at the Fishless site were mocturnal at the fish site, and four acyclic drifters at the fishless site became nocturnal at the fish site. The dominance at Eish sites of nocturnal drifters (78\% in PA, 76\% at CD) vs. the dominance of diurnal and acyclic drifters (67\% at $P A, 70 \%$ at CO) in the fishless sites, the absence of diurnal drifters at the C口 fish site, and the apparent development of nocturnal drift patterns in some taxa at the fish sites support the hypothesis that the presence of fish has influenced or does influence the drift patterns of stream macroinvertebrates.

## DEVELOPMENT OF AN EFFICIENT TECHNIQUE TO PROMOTE THE INFLATION OF SUIMBLADDERS IN TANK REARED LARVAL STRIPED BASS

The purpose of the swim bladder study was to identify techniques that can be used by fish culturists to produce striped bass fry with consistently high success rates of inflation of the swim bladder. Inflation of the hydrostatic organ, the swim bladder, in striped bass is an important developmental step that must occur vithin the first two weeks of larval life, if it is to occur at all (Bennett et al. 1987; Doroshev and Van Eenennaam 1987). Lack of inflation of the swim bladder results in fish that must swim constantly to stay off the bottom of fish ponds and tanks, and leads to deformed fish that do not survive or grow well and that are a physically unacceptable fish for either stocking or commercial sales (USFUS 1987). It was known that specific rearing techniques used by fish culturists can significantly affect the percentage of fish larvae that successfully inflate their swim bladders, but it was unknown to what extent each of these various techniques contributed to success. The results of this study will hopefully enable fry production rates at private, state, and federal hatcheries to increase by that percentage of their production that is now reported as non-surviving, uninflated larvae.

Striped bass studies on the Hudson River have been underway since 1973, but it was not until 1983 that EA observed widespread failure of our reared larvae to inflate their swim bladders.

In 1983, we had made significant physical modifications to the hatchery operations, rebuilding the facility indoors under artificial lighting, and changing from fifteen $12-\mathrm{ft}$ diameter production tanks to eighty-four 6 - ft diameter tanks. At this point in time, we recorded a drastic decline in inflation success and also a wide variation in inflation success within each roebatch, but among the many replicate tanks supplied at stockout with fry from each roebatch.

Videly varying inflation rates from 100 down to 50 percent or less have been commonly noted among hatchery-raised striped bass (Lewis and Heidinger 1981; Kraeuter and Yoods 1987; Doroshev and Van Eenennaam 1987), and maternally transmitted as well as exogenous effects have been proposed as causative agents for this wide range. Effects of temperature, salinity, photoperiod, dissolved gases, turbulence, surface access, chorionic gonadotropin use, maternal hormones, and gas gland dysfunction have all been suggested as influential.

The wide variability and overall low inflation rates within the 15 different roebatches observed by EA in 1983 and 1984 led us to concentrate in 1985 on those factors associated with the culture environment in the 84 tanks and to drastically discount those factors associated specifically with maternal effects. If maternal effects were a significant contributor to the presence/ absence of inflation success with larvae from specific male/female crosses, then observations of a wide range of variability among replicate tanks stocked with larvae from a specific cross would be uncommon. Instead, we frequently observed specific crosses where replicate tanks ranged from near 0 percent to near 100 percent during 1983 and 1984.

## ABSTRACTS

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## CONTRIBUTED PAPER SESSION I

RIVERS AND STREAMS


# POPULATION DYNAMICS AND PRODUCTION OF SLIMY SCULPIN (COTTUS COGNATUS) UNDER INCREASED AND DECREASED POPULATION DENSITY <br> IN FACTORY BROOK, NEW YORK <br> Charles Morgan and Neil H. Ringler <br> SUNY College of Environmental Science and Forestry <br> Syracuse, New York 13210 

As part of a study to examine the ecoloqical relationships between the slimy sculpin (Cottus cognatus) and benthic stream insects, population dynamics of the sculpin were studied. Population growth, size distribution, and migration were studied from June 1985 to May 1987 in Factory Brook. From June to September 1987, sculpin populations were increased in three sites (additions), decreased in three sites (reductions), and sampled and replaced in four sites (controls). Four size classes were distinguishable: $0-45 \mathrm{~mm}$ in length, $0 ; 46-63 \mathrm{~mm}$, I ; 64-85 mm , II; $>85 \mathrm{~mm}$, III-IV. Most sculpin were sedentary ( $86 \%$ ), with $89 \%$ of the more mobile individuals moving less than 25 m . Over four months, mean sculpin densities ranged from 5 to $10 / m^{2}$ and mean biomass density was $16 \mathrm{~g} / \mathrm{m}^{2}$. Adतition sites maintained a significantly higher mean sculpin density than both reduction or control sites. Sculpin densities for reduction sites, while declining due to removal, were not significantly different from control sites. These results will assist us in assessing the role of a predatory benthic fish on the population ecology and function of benthic stream insects.

## OCCURRENCE AND FEEDING BEHAVIOR OF THREE HERRING SPECIES IN FRESHWATER TIDAL MARSE, HUDSON RIVER, NEW YORK

Karin E. Limburg
Larval and juvenile specimens of three clupeids (blueback herring, Alosa aestivalis; alewife, A. pseudoharengus; and American shad, (A. sapidissima) were collected from the Tivoli National Estuarine Sanctuary, Hudson River, from mid-June to mid-September 1987. Morphometic characteristics were recorded and gut contents analyzed. Alewives were seen in the marsh only as larvae and once as juveniles on a strong flood tide. Shad occurred there only as juveniles, whereas bluebacks were found in hoth life stages. Over the season, shad shifted their diets increasingly toward larger insects away from a planktonic diet, while blue-backs maintained a planktonic feeding mode and increased the proportion of the cladoceran Bosmina longirostris in the diet. Difference in feeding strategy are discussed.

## THE ECONOMIC CONSEQUENCES OF THE NEW YORK'S 1986 STRIPED BASS MORATORIUM

James R. Kahn, Assistant Professor, Department of Economics, SUNY Binghamton, Binghamton, New York 13901

Robert Buerger, Assistant Professor, Department of Recreation and Leisure Studies, SUNY Cortland, Cortland, New York

This paper looks at the loss to the recreational and commercial fisheries of the 1986 ban on commercial and recreational possession of striped bass in New York. Bioeconomic models of the commercial and recreational fishing sector are estimated, and the loss in net benefits (consumers' plus producers' surplus) is estimated.

The examination of the commercial fishing sector is not meant to imply that the PCB contaminated fish are safe to eat. Rather, we are simply looking at the social benefits that would result from that commercial fishery if the fish were healthy and open. The commercial fishery is examined by estimating demand and supply functions for striped bass, where an index of Chesapeake and Hudson stocks are included as explanatory variables in the supply equation.

Recreational fishing is examined by looking at 1985 data on charter boat fishing for striped bass and deriving loss estimates for the charter portion of the recreational fishery. These losses are then extended to the entire fishery by means of extropaltion coefficients based on relative catch.

## HABITAT MAPPING, SALMON RIVER, OSWEGO COUNTY, NEW YORK, FOR DEVELOPNIENT AND TESTING

John Homa, Jr. and Laurie J. Trolier
A 15.1 mile section of the Salmon River in Oswego County, New York, from 1.8 miles upstream of its mouth at Port Ontario to Lighthouse Hill Dam (river mile 16.9 ) was mapped for aquatic habitat. The 15.1 miles were mapped for aquatic habitat. The 15.1 miles were mapped into 157 distinct habitat segments from 100 to 2,760 feet in length. Habitat segments were classified and grouped mainly by depth (shallow, medium, deep), habitat type (run, riffle, pool), river bottom (loose material, bedrock/loose material), and finally substrate (presence of one or more of large boulder, small boulder, cobble, gravel, sand, mud). However, some habitat types (chutes, steep ledges, transition zone) were segregated and grouped separately. Mapping was conducted mainly in the field on foot at low flow. Low altitude aerial photos taken at low flow were more useful than high altitude photos taken at high flow to delineate habitat criteria. Aerial photo interpretation with ground truth was necessary to delineate habitat in detail. Base mapping (scale l" $=200 \mathrm{ft}$ ) was useful for graphic purposes and locating habitat segments in the field, however, the aerial photographs could have been used directly to develop adequate base mapping for habitat delineation purposes. Some habitat criterion (instream and overhead cover categories, such as pocket water, boulders, undercut banks), although not used to classify and segregate habitat types may be useful in other mapping scenarios.

These data will be used for input into a hydrologic and microhabitat model for use downstream of storage and release hydro projects.

EXCESS CALCIUM DURING WATER HARDENING REDUCES HATCHABILITY OF SALMON AND TROUT EGGS
Ketola, H.G., D. Longacre, A. Gruelich, L. Phetterplace and R. LaShomb
Five experiments investigated the effect of water chemistry during water hardening on survival of eggs of Atlantic salmon (Salmo salar), rainbow trout (Salmo gairdneri) and brook trout (Salvelinus fontinalis).

Rainbow and brook trout eggs incubated in hatchery waters containing high levels (l,500 to $2,200 \mathrm{mg} / 1$ ) of gypsum, i.e., calcium sulfate, survived significantly better when they were initially water hardened (l. 5 to 3 hr ) in either low-gypsum water or in high-gypsum water softened by ion-exchange to markedly reduce calcium, but not sulfate, content. Relatively small quantities of static hardening water were used to markedly improve eye-up and hatchability, without changing the post-hardening water used to incubate eggs. Eggs apparently required more than a 5:1 (v:v) ratio of water to eggs to harden satisfactorily.

Atlantic salmon eggs incubated in low-gypsum water had significantly reduced survival when they were initially water hardened in water having added calcium ( $520 \mathrm{mg} / \mathrm{l}$ ) at a level comparable to that in the high-gypsum waters. Added sulfate had no appreciable effect.


# DISTRIBUTION OF MARKED WALLEYE IN NEW YORK WATERS OF LAKE ERIE 

 Donald W. Einhouse and William F. ShepherdFrom 1977 to 1980, 803 walleye were jaw tagged in New York's portion of Lake Erie to determine the distribution of walleye inhabiting New York's Lake Erie waters. Between 1977 and 1987, 143 jaw tags were returned by sport and commercial fishermen. Excluding the spring spawning period, $81 \%$ of all recoveries were reported from New York's waters. The few tag recoveries from the Province of Ontario and Pennsylvania waters were most often from fish tagged at a New York location nearest these bordering jurisdictions. Therefore, it appears walleye occupying New York's waters are essentially local and unilateral management by New York is appropriate. In addition, over the course of this tag-recapture study, a large proportion of recaptures occurred at least three years subsequent to the tagging date. These data infer a low rate of adult mortality for walleye inhabiting Lake Erie's New York waters.

## THE BPFECTS OF HERBICIDES ON THE CHAUTAOQUA LLAKE ECOSYSTEM

Kevin J. Franke

Static, nonrenewal toxicity tests were conducted in the laboratory to determine $L_{50}$ values for several species of Chautauqua Lake fishes to the herbicides Diquat and Aquathol-K. Field studies were also conducted in Chautauqua Lake during 1986 and 1987 to determine the effects of the two herbicides on the survival of caged yellow perch (Perca flavescens) and sunfish (Lepomis spp.), and the on weed biomass. Significantly decreased fish survivorship occurred in approximately one of every three field experiments. Diquat was more toxic to perch than sunfish while Aquathol was equally toxic to the two test organisms. Significant mortality occurred well below laboratory determined lethal concentrations in both species for the two herbicides. Diquat and Aquathol decreased weed biomass in milfoil (Myriophyllum spicatum) dominated communities or mixed species weed communities in half of the experiments. Neither Diquat or Aquathol was able to reduce weed biomass in areas dominated by Najas flexilis (bushy pondweed) in any of the 11 experiments in which they were applied. Potential toxicity to fish and limited effectiveness in decreasing weed biomass leads to questions of economical and biological efficiency of herbicide use on Chautauqua Lake.

An experimental stocking of the wild lacustrine strain of brown trout, Salmo trutta lacustris, from Bavaria has been carried out over a four year period in several New York waters, including Thirteenth Lake and Rondout Reservoir.

Our paper will discuss survival and growth rates for this species as well as the management problems for hatcheries working with typical wild strains like lacustris. The growth of brood stock as well as the criteria for introduction and adaptation of brown trout subspecies in other waters will also be discussed.

REVIEN OF THE 1982-83 EL. NIEO OF PERU

## AND ITS IMPACT ON THE FISHERIES

Carl J. George

The atmospheric-oceanic disturbance along the west coast of South America called El Nino (because of its incidence during the Christmas season) was especially severe during the winter of 1982-1982. At the same time, the fishing fleet was large and thus especially effective in capturing the concentrated remainder of the population of the primary target species, the anchoveta, Engraulis ringens. Social transformations in Peru, host the largest South American fishery, had simultaneously resulted in severe agricultural dislocations which also damaged the nation's economy. Recovery of the technical sector of the system has focused on diversification involving the outfitting of ships with new nets, electrical and other harvest gear and engines capable of fishing the larger, faster and deeper swimming species such as the Pacific sardine, Sardinops sagax. But, the process has been impaired because of limited financing. Concurrently, the absence of fish meal in the global trade system has resulted in a greater dependence upon soybean protein produced elsewhere. The Peruvian fishery thus stands as an example of the great need for social and political as well as biological circumspection in fisheries management.

## EXPLORING LONG ISLAND'S FISHERIES RBSOURCES <br> Robert J. Kent

Many positive values are associated with recreational fishing. These include healthy use of leisure time, development of environmental concern for aquatic resources, and building self-confidence through the mastery of skills. Most people are introduced to fishing through relatives or close friends. In an effort to reach other young people lacking these relationships, an educational program entitled, "Exploring Long Island's Fisheries Resources" was jointly developed by Cornell Cooperative Extension in Suffolk County and BOCES. Objectives of the program include to enable students to: develop a sense of stewardship for aquatic resources, learn about fish anatomy and ecology, become aware of fisheries careers, and master recreational skills. The program is in its second year, and has been used successfully with both special education high school students and gifted and talented elementary school students. Some 100 students are participating in 1987-88, and it is hoped many will continue sportfishing in the years to come.


## POSTER SESSION



CULTURE OF FATHEAD MINNOWS IN THE LABORATORY<br>J.K. Buttner, S.W. Dudal and W.S. Ewell ${ }^{2}$.<br>${ }^{1}$ SUNY College at Brokport, New York 14420<br>${ }^{2}$ Eastman Kodak Company, Rochester, New York 14650

Fathead minnows have been maintained through two generations under controlled environmental conditions (20-25C; 16 h light: 8 h dark) in reuse systems. The 450 L systems circulate water from the fish holding unit through a biological filter and back to the fish holding unit at 11.3-30.2 $\mathrm{L} / \mathrm{min}$. Bacteria in the biological filter convert ammonia excreted by fish to nontoxic nitrates. Reuse systems required less maintenance and promoted better survival and growth than static systems; they were more economical than single-pass systems. In reuse systems consistent reproduction was obtained within 7 days after 4 miles and 8 females were introduced to a fish holding unit. Hormonal injection (l0 IU Human Chorionic Gonadotropin, intracoelomically) promoted earlier spawning and increased egg deposition.

Fathead minnow fry ( $<24 \mathrm{~h}$ old) were maintained in small, singlepass systems for 30 days using one of several diets: brine shrimp alone, three different prepared foods, combinations of brine shrimp and prepared food, and no food (controls). Best survival ( $>86 \%$ ) and growth were obtained with brine shrimp. Survival with prepared foods was poor (<20\%); there was no apparent benefit from combining brine shrimp and prepared foods.

## HOMING, MOVEMENTS, ACTIVITY AND TEMPERATURES OF POTADROMOUS CENTRARCHIDS IE SOUTHCENTRRAL LAKE ONTARIO AND TWO TRIBUTARIES

G.P. Gerber and J.M. Haynes

Aquatic Ecology Section
Department of Biological Sciences
SUNY College at Brockport, New York 14420
Movements and behavior of potamodromous smallmouth and rock bass were examined in the spring and summer 1985-86. Bass were captured near spawning areas by electrofishing in tributaries. Fitted with temperaturesensing radiotransmitters, bass were released near capture sites, downstream, or in Lake Ontario $3-10 \mathrm{~km}$ from their respective tributary. Twenty six and $42 \%$ of smallmouth and rock bass, respectively, displaced to Lake Ontario from spawning or "home" tributaries returned to tributary capture sites. Fish which did not home to tributaries generally dispersed along the lake shore and frequently established home ranges, often near tributary discharges. Smallmouth bass homing to, ore released in, tributaries generally established home ranges downstream from spawning areas and often occupied tributaries all summer. Rock bass homing to home tributaries usually dispersed into the lake, or disappeared, soon after returning. Smallmouth and rock bass generally occupied temperatures 20-22 C in lake and tributary habitats when available. Smallmouth bass were most active in May, least active in July, and more active in the lake than in tributaries. Rock bass activity did not appear to vary by season or habitat. Smallmouth and rock bass activity in Lake Ontario was positively correlated with relative incident illumination. Potamodromous spawning movements by lacustrine bass stocks have genetic and management implications for centrarchid populations in large lakes.

## TROPHIC ECOLOGY AND FISH COMMUNITY STRUCTURE OF FISHES IN THE LITTORAL ZONE OF THE ST. LAWRENCE RIVER, NEW YORK <br> Michael J. Hughes and Dr. Robert G. Werner SUNY College of Environmental Science and Forestry, Syracuse, New York

Trophic relationships of the fish community were examined in a shallow littoral zone bay of the 1000 Islands region of the $S t$. Lawrence River. Diets of 12 fish species which occurred within the bay underwent dramatic seasonal changes in prey composition and abundance revealing a complex trophic web. Omnivory was common and occurred between nonadjacent trophic levels. Variation in diet between size classes and co-occurring species paralleled increased water temperature and relative macrophyte abundance and composition. Diet overlap between species was observed to decrease with increased habitat complexity. Pumpkinseed exhibited the least amount of overlap with the co-occurring species of the littoral zone study area. Reduced overlap was attributed to specialization in morphology and foraging tactics. Structure of the fish community also underwent seasonal variation. Both resident and transient fish species utilized the bay as a spawning and nursery area in a distinct successional pattern. Piscivores generally preceded nonpiscivores in spawning, an adpative sequence which ensured juvenile icthyophages of a food resource. The greatest abundance and diversity on larval and young-of-the-year fish occurred when macrophyte abundance was at its peak. Predation by non-piscivores on larval and young-of-the-year fish was not found to be significant. The findings of this study were not unique and characterized most littoral zone embayments in the $S t$. Lawrence.

## DEVELOPMENT OF AN EPFICIENT TECHNIQUE TO PROMOTE THE INFLATION OF SWIMBLADDERS IN TANK REARED LARVEL STRIPED BASS

Friedmann, B.R. and J.A. Bates

Non-inflation of the swimbladder in striped bass and many other physoclistic fishes in an irreversible developmental step that results in the production of deformed fish that do not grow or survive as well as fish with inflated swimbladders. In tank culture hatchery environments, production of fish with this defect is commonly reported, often affecting the majority of fish reared. From 1984 through 1987, the Hudson River striped bass hatchery has investigated the rate of occurrence of swimbladder inflation in tank reared larvae from 67 Hudson River striped bass. No maternal factor investigated was found to be associated with variation in inflation rate. Of the endogenous factors investigated, only aeration/turbulence or maintenance of an oil-free tank water surface was associated with high rates of inflation. The removal of oils, released from decaying larvae and feed, by the application of commercially manufactured spun-polypropylene oil absorbent cloths has enabled us to provide oil-free water surfaces in multiple large tank culture units with a minimum investment of labor or materials. In 1987, greater than 7.5 million striped bass larvae were produced at the hatchery with an average swimbladder inflation of 96\%. The application of techniques to reliably produce normally inflated physoclistic larvae at tank culture hatcheries will remove one of the significant barriers to the development of intensive culture facilities for striped bass and its hybrids.

Mr. John Homa Jr.
301 Forest Drive
Ithaca, N.Y. 14850

Dear Mr. Homa:
Your paper entitled "Habitat mapping, Salmon River, Oswego
County, New York, for development and testing $\square$ has been accepted for presentation at the New York Chapter AFS meeting, January 28-30, 1987 at the Holiday Inn Arena, Binghamton; New York. Presentation is scheduled for 10:40-11:00 AM on January 30, 1988. Please note that the allotted time is 20 minutes; we encourage a 17 minute presentation and a few minutes for questions.

You should meet with your session chairman, Mr. Richard Prea11, near the podium 30 minutes before starting the session. Only 2"X2" slides are permitted as visual aids; projectors and projectionists will be provided. Please bring a labelled, loaded carrousel to the meeting with you to give to Mr. Preall

Enclosed you will find a guide to visual aid preparation that may be helpful. The meeting program, reservation form and directions to Binghamton are also enclosed. Please contact me if you have any questions: (518) 457-8174 - day; (518) 583-0503 - evening.

The Program Committee thanks you for your contribution.


Enclosures
TJS/akg

# New York Chapter - American Fisheries Society <br> 1988 Annual Meeting Binghamton, New York 

AUTHOR: Johri Homa, Jr. and Laurie J. Tralier
IITLE: Habitat Mapping, Salmor, River, Dswego Courty, New York, for Development and Testirng

ABSTRACT: A 15.1 mile section of the Salmar River in Oswega Courty, New York, from 1.8 miles upstrearn of its mouth at forth Oritario to Lighthouse Hill Dam (river mile 16.7) was mapped for aquatic habitat. The 15.1 miles were mapped irta 157 distirict habitat segmerts from 100 to 2,760 feet ir lergth. Habitat segments were classified and grouped mairily by depth (shallow, medium, deep), habitat type (ruri, riffles pacil, river bottom \{loose material, bedrack/locse material), ard firially substrate (preserice of orre or more of large boulder, small boulder, cobble, gravel, sand, mud). However", some habitat types Schutes, steep ledges, trarnsitiori zome) were segregated and grouped separately. Mapping was corducted mairily ir the field ari foot at low flow. Low altitude aerial photos taker at low flow were more useful than high altitude photos taker at high flow to delineate habitat criteria. Aerial photo interpretation with grourd truth was recessary to delineate habitat ir detail. Hase mappirng (scale $1^{\prime \prime}=$ edb $f t$ ) was useful for graphic purposes and locating habitat segmerts in the field, however the aerial photographs could have beer used directly to develop adequate base mapping for habitat delimeatiom purposes. Some habitat criterion (irstrean arid overhead cover categories, such as, pocket water: boulders, undercut banks), although mot used to classify and segregate mabitat types may by useful in other mapping scerarios.

These data will be used for imput into a hydrologic ard microhabitat model for use dowrstream of storage ard release hydro projects.

Date Submitted: December 22, 1987 $\longrightarrow$ Student Professional Paper Paper

Would you like your presentation to be evaluated for award completion?


Would you prefer to make a presentation at:
$\square X$ Pechnical Session $\quad \square$ Poster Session $\quad \square \quad$ Either
Address of Senior Authowr $\quad 301$ Forest Drive, Ithaca, NY 14850

Phone Number (days): (607 ) 257-7121

## The $\frac{A}{s} F$ Diary

# 118TH AFS ANNUAL MEETING 

## EXCOM RETREAT

## An Executive Committee Retreat on

 Friday, September 9, was the first scheduled event of the 1988 AFS annual meeting. A list of the participants in the Retreat and the Excom meetings is attached.The high point of the Excom Retreat was the presentations by four prominent spokesmen from national fisheries constituent groups. Their remarks were followed by a stimulating period of questions and answers. The guest speakers participated at the special invitation of President Stan who believes AFS has not been active enough in communicating with the nonscientific fisheries community. The speakers were: Lee Wedding, executive director of the National Fisheries Institute; Gary Brewer, professor of resource policy and management, Yale University; Kip Koehler, businessman, entrepreneur, and conservationist; and Bob Hayes an attorney with Bogle and Gates in Washington, D.C.

## Implementing the Society's Long-Range <br> Plan occupied much of the attention during the

 Excom retreat. The various components were dissected, prioritized, and examined in terms of how best to achieve them. The plan will be published soon in Fisheries.The five most critically important habitat issues in fresh water as well as in the marine environment were chosen for AFS action by the participants in the Toronto Excom Retreat. The issues chosen by the AFS leadership were as follows:

Fresh Water Habitat Problems
Non point source pollution
Acid rain
Riparian habitat loss
Toxic substances
Wetland loss (tie)
Instream flows (tie)
Marine Habitat Problems


Wetland loss
Ocean dumping
OCT 111988
IWS Dept Emprrommental Comotration REGRON E- UTCCA REGONNAL LEIGINEER

Coastal development
Estuarine anoxia
Bottom alteration
NOTE: These issues were selected from a list of 20 to 30 nominated by the participants. They appear in order of the importance ascribed to them by the participants. The priority rating should not be given too much importance because differences were small. There was, however, a fairly dramatic drop-off in support for the other nominated issues.

## EXCOM MEETING

## The annual Executive Committee meet-

 ing began with stimulating end-of-the-year iremarks from President Stan Moberly. Enthusiasm for Stan's visionary, energetic, and tircless leadership was clearly shared by the entire Executive Committee. Copies of his remarks will be made available in response to requests.
## Where authorized by the Chapters, the

 Parent Society will begin collecting Chapter dues in the late summer of 1989. The new dues bill will list all participating Chapters and the amount of their annual dues. Members wishing to join one or more of these Chapters will check the one(s) of their choice and enclose the dues along with Parent Socicty and any Section memberships dues.Chapters preferring to collect their own dues or Chapters having no dues will also be listed so that it will not appear that they have been overlooked. All information will be computerized and participating Chapters will periodically receive a name and address print-out of their dues-paying members plus a check for accumulated dues payments. In addition, the Executive Committee directed that one dollar of Parent Society dues be rebated to the Chapter of each member's choice or to the Chapter of the member's zip code where no preference is indicated. There will not be an increase in Society dues to cover this Chapter support.

## NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY

December 23, 1988

MEMO TO:
FROM.
SUBJECT: NYCAFS Secty Treas Report

Sorry for the delay in getting this out but I have been out of the area for a couple weeks for schooling.

Membership stands at 306 with 1989 renewals coming in at a slow but steady rate.

The December Newsletter was mailed December 22.
The Past Presidents certificate has been ordered from AFS.

FINANCES:
$\begin{array}{ll}\text { checking } & \$ 189.72 \\ \text { c.d.(citicorp) } & \$ 6460.85 \\ \text { c.d. (Keybank) } & \$ 4243.68 \\ \text { money market } & \$ 7349.55 \\ \text { TOTAL } & \$ 18243.55 \quad(8 / 12 / 88 \text { balance } \$ 18002.21)\end{array}$

INCOME
dues
\$138
interest \$403.44
TOTAL \$541.44
EXPENSES

$$
\begin{array}{ll}
\text { AFS raffle donation } & \$ 47.00 \\
\text { postage } & \$ 136.02 \\
1989 \text { Ann. Mtg. } & \$ 135.00
\end{array}
$$

TOTAL $\$ 318.02$

November 15, 1988

Memo To: New York. Chapter Executive Committee Members
From: Frank: M. F'anek
Subject: Standing and Ad-Hoc Committee Reports

The messages from Governor Cuomo's office clearly indicate that the Stヨte of Now Vouk is hearing for smme bad fiscal timss. Restrictisns on
 implications for the chapter. I am particularly concerned about the impact of state travel restrictions on attendence at our Annual Meeting. Bob Lange and Tim Sinnott have worked out a strategy that we hope will win the commissioner's approval for DEC employees' attendence.

Travel restrictions have made it almost impossible to schedule an ExComm Meeting. As a substitute for a meeting, please provide me with a status report on your committee's functions to date and you expectations for accomplishments prior to the Annual Meeting. Once I have received all your reports I will distribute them to all ExCornim menoers. Issues that need resolution can be handled by conference calls.

I would Iike to receive your reports by November 23. 178B.
As a finel note, I regret to announce that Faul kotile has resioned as Newsietter Editor. Peui has accepted an appointmert at Frankini Fierce College in New Hampshire and his September Newsletter will be his last. Charles Guthrie has agireed to work with me to get our next newsletter out prior to the anizdel meetirg.

i

August 16, 1988

Mr. Angelo Incerpi
Vermont Fish and Game Dept.
103 S. Main Street
Waterbury, Vt. 05676
Dear Angie:
Attached is the New York Chapter's mid-year report for the upcoming Annual Meeting in Toronto. State travel restrictions have put a definite crimp on our activities. Because of this, I will be unable to attend the Annual Meeting. President-Elect Jimmy Winter lives within commuting distance of Toronto and will be representing the Chapter at the Business Meeting.

Sincerely,


FMP:rr
attachment

Mid－Year Repore to the
Northeast Division
August 15， 1988

A $\$ 900$ milion New York state budget shortfall has created an all to familiar problem for state empioyees and chapter members． Severely ：estricted in－state travel and a virtual ban on out－of－state travel has and will have effects on chapter activities and attendance by members at the AFS Annual Meeting in Toronto． President Frank Panek will be unable to attend the Toronto meeting because of these travel and budget restrictions．Fortunately， president－Elect Jimmy Winter of SUNY－Eredonia will be able to repzesent the chapter at the Excom Eusiness Meeting．A recently
 attendance and the Excom is concerned that a contimuance of these restrictiors into 1989 will limit attsndance at our Annual Meeting．

The fnnual Meeting of the New york chapter has tentatively been scheduled for January 26－28， 1939 at the sheraton Hotel at Sarbro Square in Binghamton．Einal arrangements with the hotel will be confirmed by committee alairman Tim Sinnott within the next month．The program committee has selected a theme on＂Eisheries in the 1990＇s：Technologies and Economics．＂The program will emphasize hew technologies such as hyaroacoustics，remote sensing， genetic engineering，computer applications，aquacultural technologies，etc．and their applications and practice in solving actatic／me：̈ne resource problems in liew yorli and the Northeast．
 Excom meeting that the chapter contzunes to be in good Einancial etatus cu：curuent membership stanむs at 303 which is 18 memisers less than in 1987.

Earbãa Knuth recently＝eported that the mri－scaiety commitiee on the steこus o三 womain and minここさtiEs in liatural Resources is making good progness towarais achieving its goals．Activities of the committee have focused on：i）̇̇̇ミntification cf Essues and conditions which may contzibute to woman anc minorities jeing unce： represented in the miembership and leaderchip of the professicn；2） むefiring＂issue areas＂こっ ニaニilitate setting priorities；3） iむentiミication of action items for committee and chapter attention； and 4）setting priorities for adaressing action items．The committee vill be finalizing their list of priorities and requesting review by the chapters within the next month．
 ミミ our reミロesentative to the riv．

committs will work in the department＇s management anc executive staff in むne icentificetion and recomnendation of projects for possible funding urder Jew Yovf：s hildiife Income Tå Checki－off Program．This progiam is expected to provide between si． 7 and $\$ 1.3$ million for fish and vildilife projects．The chapter was quite pleased to lãe been extended an oEfer by the state io participate on this Advisozy Committee．We hope to bring to the committee the acuatic resource perspeこtives and philosophies of our organizetion anむ its membership．
 identify envizonmenta urganュaatlons in the state ana meahamismis of preserviag their histcrical records．we certainly colild use all the help we car get on developing an archival system for our records．

Fespectfully submitted，


FMF：İ
っこ：CLapさこと Еふこっm

# fugust 13, 1989 

Kelly Hepler
Division of Sport Fish
Alaska Department of Fish and Game
333 Raspberry Road
Anchorage, Alaska 97518

Dear Kelly:
 alternatives for Chapter dues rebates. The El.....e repate issue uas certainly been controversial within the society membership and only time will be the judge of the 1988 Excom's wisdom in approving a $\$ 3.00$ rebate to Chapters.

In January 1983, the New York Chapter Excomi reviewed the rebate proposal and found no benefits to our chapter and seriously questioned the benefits to the society as a whole. We have not heard any arguments to date that would change our opinion.

The proposals as outlined fail to address the status and geagraphic make-ups of student chapters. Will the " assigned chapter" process be adequate to address this? How will the geographic boundaries for zip codes be determined and by whom? What role will the chapters have in this process? What are the estimated costs (as a percentage of the proposed dues inerease) for administration by the Internationel Office? Why will there be non-conforming peyments distributed to Divisions when zip-code designation and $2 s s i g n e d$ chapter oesignations should cover all the alternatives?

Until we can see the benefits of a rebate program, and have answers to the above questions, the NEw York Chapter will reserve its deaision on any rebate protocols.
Sincerely,
Fragk M. Pan=k
Rosidant
Racky Point, N.Y. 11778

CC: NYCAFS EXCDM
GILEERT RADONSKI :NEDAOS.

TO
FROM
SUBJECT


Attached are the minutes of the May 19 EXCOM meeting. I have sent copies to the other EXOM members.

The next issue of the newsletter should be in the mail in a day or so. I did not recieve them from the printers till the last week in July, then I was out of the office for nearly two weeks hence the delay in getting them out.

I thought I had already taken care of the Lake Erie print for the national meeting but after rechecking my records I see I was confusing it with the award we gave at the annual meeting. Any way, Now that I found my error I have ordered the print and will have it mailed directly to you.

The bank where we have our checking account (Citicorp) has started charging us all sorts of fees for our checking account. It amounts to around $\$ 100$ per year. I talked the siuation over with Larry Skinner and we agreed to find another bank for our checking account. I have closed out the checking account with Citicorp and opened a new account with Herkimer County Trust. They have no fees and we even get 200 checks for free, which at the rate we operate is 5 years worth of checks. The money market and C.D. notes were not affected by any fees so I did not move them.

Membership stands at 303 which is 18 less than last year. A few more people have renewed their memberships but we still have only about $50 \%$ of the membership current with their dues.

FINANCES


Expenses

| office supplies | $\$ 24.50$ |  |
| :--- | :--- | :--- |
| postage | $\$ 27.30$ |  |
| bank charges | $\$ 5.00$ |  |
| TOTAL |  | $\$ 56.80$ |

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Memo To: Jack Hassee
From: Frank M. Panek
Subject: Purchase of Lake Erie Print for AFs National Raffle
Date: July 27, 1988
```

At the last NYCAFS EXCOM meeting we decided to donate a framed Lake Erie Print to the National office for the raffle at the Annual Meeting.

Please order the print ASAP and hase it sent to me at my office. I will arrange to have it framed and will send the bill directly to you.

Have you completed the minutes from our May $19 t h$ meeting?
I will be on vacation for the next two weeks. I'll call your when $I$ return.


Memo To: NYC AFS EXCCM
From: FRANK M. PANEK
Subject: CANCELLATION DF EXCDM MEETING SCHEDLAED FOR JLYY 19, 1988

Due to a variety of reasons ranging from state employee travel restrictions to conflicts with vacation schedules, I am cancelling the EXCOM Meeting scheduled for July 19,1988 in Albany.

As a substitute for this get-together, please provide me with a status report on your committee's functions to date and some expectations for accomplishments prior to the Anmual Meeting. Once I have received all your reports $I$ will package and distribute them to all EXCDM members. Any questions regarding the Annual Meeting will have to be resolved by telephone.

I hope each of you have an enjoyable summer. I will contact you at a latter date to schedule a fall meeting.


Mr. Don Chase
AFS National Raffle
2403 N. Bethel Street
Olympia, WA 98506

Dear Don:

In response to President Stan Moberly's call for assistance towards the 1988 Raffle, I am pleased to inform you that the N.Y. Chapter will again participate in this important effort. The Chapter EXCOM has unanimously agreed to provide a framed NYS Lake Erie Print for the Toronto Raffle.

I will be attending the National to represent the Chapter and will plan to bring along the print. If it must be in your hands at some earlier date, please let me know so that other arrangements can be made.

Best of luck in making the raffle an overwhelming success.

Sincerely yours,

cc: Carl Sullivan
Jack Hesse
" Memo To: NYCAFS EXCOM
From: FRANK M. PANEK
Subject: Follow-up to EXCOM Meeting of May 19, 1988

Enclosed are several items for your review as a follow-up to our recent EXCOM Meeting in Albany. As a matter of practice, I will send each of you copies of the AFS Diary and FANS Newsletter as I receive them.

Please review the documents concerning the National Wildife Federation's sportfishing consumption advisory. I would like to discuss this at our July 19 th meeting.


Thomas C. Jorling Commissioner

Mr. Jay D. Hair<br>President<br>National Wildlife Federation<br>1412 Sixteenth Street, NW<br>Washington, DC 20036-2266<br>Dear Jay:

At a recent meeting of the Great Lakes Fishery Commission's Council of Lakes Committee, Dr. Jeffrey Foran presented the National Wildlife Federation initiative to develop and distribute an independent sportfish consumption advisory for Lake Michigan. I am aware of the Federation's support for advisories based upon risk assessment advocated by the U.S. EPA. l am concerned, however, that NWF has elected to work outside of the organized efforts of the eight Great Lakes states and the Province of Ontario to establish consistent, credible and effective fish consumption advisories.

Individuals who received Dr. Foran's message were not at all confident that the Federation is planning to subject the rationale for its Lake Michigan advisory to technical peer review before it is released. Such an omission would be a serious breach of research protocol. I trust you will make a special effort to assure the technical accuracy of any product that may be released for public review.

With regard to the issuance of a fish consumption advisory that may differ from the advisory that currently exists for Lake Michigan, there are a number of predictable consequences that may be expected to occur.

1. Explanation of health advisories to the using public has been difficult at best. Every effort has been made to focus these advisories as the responsibility of public health agencies. Injection of a private organization into this technical field will create confusion and erode acceprance of any advisory, no matter how valid.
2. One of the important elements of forging consistent fish consumption advisories on the Great Lakes has been the variability of interpretation of data by Health Department scientists. Through the initiative of the Council of Great Lakes Governors, a special task force has been successful at establishing common advisories on individual lakes. The appearance of a new and different advisory will certainly draw into question the credibility of any of them and damage the progress that has been made ar forging agreement to date.
3. Health agencies have been reluctant to enter the arena of consumption advisories because of the dearth of data on direct human health affects of contaminants. As science produces verifiable linkages between pollutants and human health, health officials have demonstrated a greater willingness to offer advice to consumers of fish. Health advisories have gained acceptance among consumers as the credibility of health officials has improved. Anything that would draw into public question the methods for advisory determination would set back any progress we have made toward this public acceptance. The public's view of the Federation's work would suffer the same fate as that of the Health agencies in this regard.
4. If the Federation's advisories were more acceptable to the using public than existing consumption guidelines, the public will in all liklihood, view the Federation as the "health expert" that is advising people of what is the safe level of consumption and risk. This role brings with it monumental public responsibility and liability that the Federation should carefully weigh before stepping into the health advice arena.
5. Any pronouncement made by the Federation in the human health field will be subject to meticulous and perhaps hostile scientific scrutiny. This could have a significant impact on the Federation's reputation in all aspects of its organizational involvement.

The risks to the National Wildlife Federation by unilaterally establishing fish consumption advisories are significant. I understand and appreciate the desire to advance a methodology that the Federation is convinced is better and more responsive to human health concerns than those in use today. However, I urge you to consider an alternative approach to achieving your objectives, that is by challenging currently acceptable tolerance levels and striving to alter the existing system rather than approaching the issue by independent action.


Herbert E. Doig
Assistant Commissioner
Fish, Wildlife and Marine Resources
HED/C

Hall of the States<br>444 North Capitol St. NW, Suite 534, Washington, DC 20001

(202) 624-7890

## Dear Director:

The National Wildife Federation (NWF) is developing a sport fish consumption advisory for Lake Michigan independent of state health and natural resource management agencies. NWF asserts this action is necessiry because they allege the fish consumption advisory issued by the Lake Michigan states does not adequately protect human health. The basis for this allegation is NWF's belief that advisories should be based primarily on risk assessment technology rather than on U.S. Food and Drug Aaministration action levels, which is currently the prevailing practice among health agencies.

There will be significant ramifications of the NWF Lake Michigan advisory; and, they are likely to extend far beyond Lake Michigan or the Great Lakes. The effects that will be most troublesome i.iclude: additional angler confusion about the advisability of consuming fish; diminished credibility for the advisories from health and resource management agencies; potential economic dislocations to sport and conmercial fisheries and diminished sale of fishing licenses with concomitant reauctions in agencies ability to protect and manage fishery resources.

Enclosed are copies of the fish consumption advisory issued by the Lake Michigan states, material from NWF describing their consumption advisory project and a letter I wrote to NWF President Jay D. Hair on this issue.

On May 15-17, 1988, New York will host the annual meeting of the Administrators Section of the American Fisheries Society (agenda enclosed). The theme of the meeting will be: "Managing Fisheries Contaminated with Toxic Substances". Many of the individuals involved in the Lake Michigan fish consumption issue, including health agency professionals, will be present at this meeting. This occasion can be utilized to facilitate discussion of the NWF initiative and to develop common strategies to mitigate the results of the initiative.
jack h вerayman
Presioent-HEREER E DOIG
50 Woll Road. Albany. NY 12233
Firs: Vice President-JAMES m. PATTERSON
Pirce Vincent Maser. Ortowa. Ontano KiA OE? Canso
Second Vice PresioeniwILLIAM A. MOLIN: Bor 10678 . Renc. NV $8952 \%$
Secrelary.Treasure-CHESTER F PHE:PS 126 Winchesier Dive. Savannan, GA 31410
Generi Counser-GLENNL EOWERS

I. urge you to have the Fisheries Chief of your agency attend the AFS Administrators Section meeting. If we collectively develop proactive strategies, the impact of NWF's action will be much more manageable.

Contact New York's Fishery Chief, Bruce Shupp at (518) 457-5420 for further information about the AFS Aciministrator's Section meeting.

## Sincerely,

Enclosures

|  | Oroup 1 <br> These fish pose <br> the lowest risk. | Oroup 2 <br> These fish pose an <br> intermediate risk; <br> Women and Cnildren <br> should not eat. | Oroup 3 |
| :--- | :--- | :--- | :--- |
| These fish pose |  |  |  |
| the highest tisk; |  |  |  |
| No one should eat. |  |  |  |


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| (South of Merinotta/ | Chinook Salman up to $25^{\circ}$ Brook trost up to $15^{\circ}$ |  | Chinsook Salmen over $25^{\circ}$ Brown traut over $12^{\circ}$ |
| Menormines) | Smallmorth bess |  | Brook trout over $15^{\circ}$ |
|  | Northern pike up to $28^{\circ}$ |  | Cerp" |
|  | Bulthead |  | Splate over $16^{\circ}$ |
|  | Yellow perch |  | Northern pilie over $28^{\circ}$ |
|  | Walloye ut to $20^{\circ}$ |  | Walloye over $20^{\circ \prime \prime}$ |
|  | Brown trout to to $12^{\circ}$ |  | Waite Sucters |
|  |  |  | Whito ${ }^{\text {dess }}$ |

## Keve to conectahove

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Group 2: Conteminant levals in more then 10 percent but less then 50 percent of nat lested in this Foup excueded one or more FDA health standerds. MURSDIG MOTHERS. PREGHANT WOTEN. WIEN WAD ANTTCIPATE BEARING CMIDPREN, FEMALE CHTDREN OF ANY AGE, AND MALE CHIDREN AGE 15 CR UNDER SHOLD NOT EAT EROUP 2 FISH. ALL OTHER INDIVIDUALS SHOUD LIITT THELR CONSUTPTION of ThESE FISH, and trim stin and fat bafore cooking and sating.

Group 3: Conteminent levals in 50 percent or more of fich lested in this group excmod one or more FDA hallth stenderts. NO ONE SHOLD EAT GROLP 3 FISH. Ninety perrent or more of those manked with mesterisk ( ${ }^{\circ}$ ) excoedod en FDA standerd.
U.S. Food end Drug Administration Health SLemberds for Conteminants Commanly found in Sport Fisth

| PCBs | 2 perts per million (pom) | Cmiardene | 0.3 ppm |
| :---: | :---: | :---: | :---: |
| DOT | 5 ppm | Dielarin | 0.3 ppm |
| Tnxmbann | 5 mm |  |  |



May: ir gaz
April 25, 1988
GREAT TAKE: : NA.
James M. Ridenour, Director Indiana Department of Natural Resources 608 State Office Building Indianapolis, Indiana 46204

## Dear Director Ridenour:

Thank you for your recent letter expressing your reservalions about the National Wildlife Federation's "Lake Michigan Fish Consumption Advisory Project." We share your desire that sport anglers and their families be provided accurate and consistent advice about the health threats posed by consuming sport fish caught in the Great Lakes. Our project is a concrete manifestation of our concern and of our resolve to do something about it.

For several years NWF staff from our Great Lakes Natural Resources Center have participated in the interstate negotiations on developing uniform fish consumption advisories for the Great Lakes. We are the only nongovernmental organization to be represented at these talks. Based on this involvement and on our preliminary assessment of available data, we have concluded that the current methodologies used by the Great Lakes states to develop advisories are inadequate. Moreover, we have been frustrated by the lack of significant progress in developing consistent, risk assessment-based methodologies to evaluate these health risks.
Our project is designed to produce a model approach to assessing the risks of contaminated sport fish and, as importank, to communicate those risks to anglers in a meaningful way. We have assigned qualified scientific staff to this project and we have created a scientific advisory board to advise us on technical matters. Also, because we believe that risk communication is as important as risk assessment, we have created a second advisory board comprised of anglers from the four Lake Michigan states to help us prepare the actual advisory brochure and to disseminate it in each state.
We welcome the interest of government officials such as yourself in our project. We intend to share our data and draft advisory with the Indiana Department of Natural Resources and with other agencies that express an interest. For example, at the request of the Great Lakes Fishery commission, our project staff made a presentation at the GLFC Lakes Committee meeting on April 11 and will be making a presentation to the full commission in early May.

James M. Ridenour
April 25, 1988
Page 2

As part of our public education effort, we will be holding a workshop in each of the Lake Michigan states simultaneously with the public release and distribution of our advisory brochure. We would welcome the participation of IDNR staff in the Indiana workshop to help ns inform the public about the health risks associated with eating Lake Michigan sport fish. Please feel free to have your staff contact Barbara Glenn. Project Supervisor, at 313/769-3351 to discuss our plans and IDNR involvement.
We hope that our Lake Michigan Fish Consumption Advisory Project will be viewed by government officials as a positive contribution to our shared goal of providing anglers with comprehensive and accurate information on the risks of consuming their carch. Our attitude toward this problem is not. "alarmist;" we will base our advisory on a comprehensive survey of available data and on state-of-the-art risk assessment methodologies. Nor is our attitude patronizing. We believe that anglers and their families are capable of evaluating information on these health risks in order to make sound, personal decisions about limiting their consumption of Lake Michigan sport fish. As important, this information should help mobilize residents of the Great Lake basin to demand additional controls on continuing sources of toxic substances pollution.

Again, thank you for your letter. We look forward to working with the Indiana Department of Natural Resources on this important project. If you have any further questions about this project, please contact Dave Herbst, NWF's Western Great Lakes Regional Executive, at (219)223-3251.
very truly yours,

JAY D. HAIR
President

JDH/mvp
cc: Emily Kress, IWF President Herb Krauch, IWF
David L. Herbst, NWF Regional Executive Carlos Fetterholf, GLFC


NATIONAL WILDLIFE FEDERATION
Great Lakes Natural hesururce Center
(313) 769.3351

802 Monme. Ann Arbor. : 11 th 104

Memorandum

TO: \%
Great Lakes Health Administrators
 HYOH: Mark, Van Portion, Great Takes Natural Resource canter
DATE: September 21, 1987
RE: Lake Michigan Sport Fish Consumption Advisory

Enclosed for your information is a brief description of the National Wildlife Federation's Lake Michigan Sport Fish Consumption Advisory project. We recently received funding for this project and expect to issue our fish consumption advisory for Lake Michigan within the next year.

If you have any questions or suggestions about this -project, please feel free to contact me.

MVP/mp
Enclosure

## Proponed Profect Timeline

The one-year project will proceed according to the following timetable latarting with the hiring of a post-doctoral associatel:

Pirst Monthi Post-doctoral associate begins identifying and collecting all scientific data pertinent to developing advisory:
Third Months Data collection complete, hold first meeting of ateering committee to dincuss data different approaches to developing advisory and to agree on plan for state-by-state workahops ;
Ninth Month: First draft of advisory and technical support document complate, circulate to steering committee and appropriate experts for peer review:

10th Monthi Advisory and technical support document revised in light of review, hold second mesting of steering committee toi (1) review Einal advisory, (2) agree on distribution plan for each statel (3) schedule workshops for each state: (4) participate in workshop leadership training session:
11th Month: Advisory technical support document sent to printer: publicly release advisory and technical support document, begin distribution, of advisory and publicize workshops;
12th Month: Hold one-day workshop in each state led by affiliate member of steering committee with projdet staff as technical advisor to discuse methodology of developing advisory and ite significance:

Project
Reviow phases Hoid Elnal gtoering commitere meeting in conjunction with other ragularlyomcheduled NW event (o.g. Gquat Lakem afililates meeting) to review project and develop addtional follow-up activities for citizen groups in each state.


April 20, 1988

Mr. Joseph Gorsuch
132 Wyndham Road
Rochester, New York 14612
Dear Joe:
Enclosed is the 1988-89 membership dixectory for NYCAFS, ready for the printers.
At this time, we have exactly 300 members so 350 directories will probably suffice.

If you need anything else, please let me know. As usual, thanks for helping out in this.

Sincerely,

John J. Hasse
Secretary/Treasurer
JJH: dal


1988 Annual Treasurer's Report

Balance $1 / 27 / 88$

226.72

Certificato of Deposit
$6,089.65$

| Money <br> Market | TOTALS |
| :--- | :--- |$\quad 16,393.28$

1988 Receipts
Interest
Dues After Annual Meeting
1987 Workshop
1988 Annual Meeting
Transfer from Money Market
Sub-Total
Total

| 1988 Expenses |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1989 Annual Meeting | 46.00 |  |  | 46.00 |
| 1988 Annual Meeting | 3,462.44 |  |  | 3,462.44 |
| Office Supplies | 56.68 |  |  | 56.68 |
| Postage | 426.88 |  |  | 426.88 |
| Donations | $247.00^{\circ}$ |  |  | 247.00 |
| Transfer Money Market to Checking |  |  | 3,500.00 | 3,500.00 |
| Transfer to Key Bank C.D. |  |  | 4,000.00 | 4,000.00 |
| Sub-Total | 4,239.00 | 0 | 7,500.00 | 11,739.00 |
| Balance 1/23/89 | 300.77 | 10,736.47 | 7,387.70 | 18,424.94 |

## EXCOM Meeting May 19, 1988

The meeting was called to order at 1.05 pm at the D.E.C. office in Albany by president Frank Panek with the following members present. Jack Hasse, Frank Panek, Tim Sinnott Bob Lange, Jim Winters, Doug Sheppard.

Minutes of the previous meeting were accepted as written.
Presidents Report
Frank will xerox and send to EXCOM members the AFS Diary as he gets them.
The parent society approved a dues rebate to Chapters againist our wishes.
All AFS journals will see a $\$ 3$ increase.
Poor attendance at the Northeast EXCOM meeting was noted. The president of AFS
gave a talk at the meeting stating chapters are the backbone of AFS. We were cited as a good example of an active and effecient chapter.
There is talk of a World Fisheries Congress in 1990.
There is concern over the high turnover rate of officers at all levels of AFS (nearly $40 \%$ per year).
New York will host the 1989 NE meeting May 7-10 at ellenville. Gerry Barnhart is general chairman, Frank is Fish Chairman.
FAN- formed to lobby for a single cabinet level fisheries program.
NY state division directors update- Senate passed a bill making division directors civil service instead of appointed. Assembly is sitting on the bill now. Gov.
Cuomo opposes the bill.
NE Division questionaire results- Poor response rate. The summary report is available from Frank. Results of the survey were not unexpected.

## Secretary/Treasurers Report

For the period January 28-May 17, 1988.
checking \$191.44
money market \$7287.44
C.D. (citicorp) \$6210.95
C.D. (key bank) \$4071.42

TOTAL $\quad \$ 17761.25$
(Jan. 27 balance was \$16405.07)

INCOME

| 1988 annual meeting | $\$ 2571.25$ |
| :--- | :--- |
| dues | $\$ 152.00$ |
| 1987 workshop | $\$ 2037.95$ |
| interest on accts. | $\$ 334.60$ |
| TOTAL | $\$ 5095.80$ |

EXPENSES
1988 annual meeting $\$ 3396.44$
office supplies $\$ 67.78$
postage $\$ 29.06$
TOTAL

A second C.D. was opened in the ammount of $\$ 4000$ at Key Bank in Utica for 18 months at $8.2 \%$ interest.
A new batch of membership cards were printed. We ran out of cards at ther annual meeting.
Directories are printed and will be mailed out later this week.
Membership
Membership stands at 301 which is a drop of 20 compared to last year at this time. On1y 145 current members have paid their 1988 dues.

Nominating No report.
Audit and Finance No report.
Environmental Concerns
Minimum flow inclusion in the Statewide Watershed Management Strategy Plan has not been opposed in public hearings thus far. There are a few state agencies however, that are opposing minimum flows in some form. No role is seen for the chapter at this time.

Professional Initiatives
Gary Neuderfer has resigned as chairman. Paul McKeowan will be asked to take over. The questionaire has been drafted but needs to be polished. First cut will be sent to EXCOM members for review.

Women and Minorities No report.
Newsletter No report.

Resolutions No report.
1989 Meeting
Paul McKeown and Joe Buttner will help Tim. The Sheraton and Holiday Inns in Binghamton have been asked to submit bids. The only geographical area that was not well represented at the last meeting was the northern Adirondacks. Suggested changes for the 1989 meeting include; no intermingling with ski groups (courtesy of the hotel), blocks of hotel rooms not attendees scattered all over the hotel, reserve a hospitality room for all the time during the meeting, get the student chapters to provide help running equipment, change the meal format. A formal dinner will be Friday evening, the other meals will be on your own. Judging papers is still presenting a problem. We are seeking comments and suggestions. Tentative dates for the meeting are January 26-28 or February 2-4, 1989.
The Job Program will run again as it was a very popular event.
The theme for the 1989 meeting will be "New Advances in Fisheries". There will also be a marine session and the Friday evening session will be a travelogue on fisheries work.

NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY

EXCOM meeting may 19, 1988
Unfinished Business
Absentee balloting- a by-law change allowing absentee or mail balloting has been suggested. Joe Gorsuch will be asked to chair a committee to word the suggested changes.
1988 National Raffle Initiative- It was decided not to sponsor a trip because of numerous past problems. We will be sending a Lake Erie print as a prize instead.

New Business
The EXCOM was asked by one of the members to consider forming a socioeconomic unit within the chapter. The formal subunit concept was not favored but the idea of encouraging and supporting the theme was suggested.
We were asked to support financially, publication of a book entitled"Lab on Fort Pond Bay". EXCOM decided not to support the concept because it has such local interest. A questionaire has been recieved from NY State Education Department. They are compiling an environmental archive for NY state. We will recieve a copy of the report when it is compiled.
The AIFRB/NY-NJ district will be invited to our annual meeting to explain their background.
Member, non-member distinction was again discussed. We will continue to encourage AFS membership but not require it as a prerequisitefor NYCAFS membership. Bob Lange was presented his past president certificate by Frank.

The meeting was adjourned at $3: 30 \mathrm{pm}$.
Respectfully submitted,


John Hasse, Secty/Treas.


May 10, 1988

MEMO TO: N.Y. CHAPTER AF EXECUTIVE COMMITTEE MEMBERS
FROM: FRANK M. PANE
SUBJECT: EXCOM MEETING

Our first EXCOM Meeting will be held May 19, 1988 at 1100 AM in the Bureau of Fisheries Conference Room, NYSDEC 50 Wolf Road, Albany. I expect we will adjourn no later than 3:00 PM. A meeting agenda is attached.

I hope to accomplish several items at our first meeting. Please be prepared to review your committee's organization and to briefly report on your activities. Please give special thought to possible themes for the 1989 Annual Meeting. A decision on this is needed so that we can begin planning.

Please call me ASAP at 516-751-1596 or 516-821-0357 if you will be unable to attend.


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Executive Committee Meeting
    May 1988
    Albany, New York
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1. Reading and Acceptance of Minutes of the 1988 Annual Meeting.
2. President's Report
F. Panek

- 1988 Northeast Division EXCOM Meeting (3-28-88)
- FAN
- Division Directors Update
- NE Division Questionnaire Results
- NE Fish and Wildlife Conference - 1989

3. Secretary/Treasurex's Report
J. Hasse
4. Committee Reports

| Membership | J. Winters |
| :--- | :--- |
| Nominating | R. Lange |
| Audit/Finance | L. Skinner |
| Environmental Concerns | D. Sheppard |
| Professional Initiatives | G. Neuderfer |
| Program | T. Sinnott |
| Women and Minorities | B. Knuth |
| Newsletter | P. Kotila |
| Resolutions | R. Tuttle |

5. Unfinished Business

- Absentee Balloting
- 1988 i.ational Raffle Initiative

6. New Business

- Socio economic unit proposal
- "Lab on Fort Pond Bay" Book
- Environmental Archives
- AIFRB/N.J.-N.Y. District
- Member/non-member distinctions
- 1989 Annual Meeting Theme

Meeting was called were B . Lunge, L. L. Kusek, P. McKeon

Reading of the mint accepted as printe

PRESIDENT'S REPORT

-. 15 nom. Members present
 Attached is the of the
 minutes.


No report. Discu
TREASURER'S REPOF


Money Marker

| TOTAL | $\$ \overline{16,393 . c o ~}$ |
| :--- | ---: |
| Income (dues) | 82.00 |
| (interest) | $\$ \overline{165.00}$ |
|  | $\$ 124.00$ |
| Expenses | $\$ 122.90$ |

- There is a problem balancing money market: the bank records show $\$ 0.36$ more than Jack's records.
- There is also a problem balancing the checking account: the bank's records show $\$ 12.15$ less than Jack's records.
- Jack and L. Skinner will review the records to correct the discrepancy.

MEMBERSHIP REPORT - Lange for Panek
Membership stands at 326. This is 20 more members than we had last year at this time.

1987 WORKSHOP - P. McKeown
AFS has not yet received the refund from Cornell of $\$ 2,037.95$. However, the paperwork is underway. With the receipt of this refund, total cost to the chapter for the workshop will be $\$ 64.26$.

Meeting adjourned at 7:15 p.m.
Respectfully submitted, Heslu' H. Kusek
Leslie M. Kusek for
Jack Hasse
Secretary/Treasurer


## NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY

1988 Annual Meeting Report
New York Chapter American Fisheries Society

The 1988 annual meeting of the New York Chapter American Fisheries Society held at the Holiday Inn Arena in Binghamton, NY was called to order at 4:20 pm by President Bob Lange. Sixty-eight members were present.

Minutes of the 1987 annual meeting were accepted as written.
President Lange announced that President-elect Frank Panek was absent due to illness.

## Treasurer's Report

Treasurer Jack Hasse reported a checking account difference of $\$ 12.15$ between the bank and annual treasurer's report. After a review by the audit committee, it was found the difference was caused by several transactions that took place in the old account at Alfred between the date of the 1986 annual report and closeout of the account in March. After a review of the final statement from the Alfred account, the books balanced and the annual treasurer's report was corrected. The detailed annual treasurer's report attached to this report shows a balance of $\$ 226.72$ in checking, $\$ 6,089.65$ in the certificate of deposit and $\$ 10,076.91$ in the money market account for a total of $\$ 16,393.28$. This is a drop of $\$ 795.20$ from 1986. However, Cornell owes the chapter approximately $\$ 2,000$ from the 1987 workshop so total assets have increased slightly.

Audit and Finance
Larry Skinner reported the audit of the treasurer's books showed the accounts in order except for the checking account discrepancy discussed in the treasurer's report.

This committee is looking at four areas to direct the financial workings of the chapter. They are:
(1) develop objectives for financial resources to be maintained as chapter fiscal reserve and working capital
(2) develop objectives for fiscal returns from chapter activities i.e. make money, break even, subsidize
(3) develop guidelines for budgeting chapter activities
(4) develop recommendations for productive use of chapter resources in excess of necessary reserves

## Committee Reports

Environmental Concerns
Doug Sheppard reported that the chapter is watching the rivers protection legislation being proposed by New York State as well as development of a statewide minimum flow strategy. Membership

Current membership is 326 which is an increase of 20 during 1987.


## Program

Tim Sinnott discussed the reasons for moving the meeting site to the Holiday Inn at Binghamton and requested feedback from those in attendance. Preregistration was new this year and 92 took advantage of it. Attendance was approximately 150.

## Resolutions

Two resolutions were submitted to the executive committee. One dealing with hiring practices of the D.E.C. was deemed unacceptable by the executive committee and was tabled. The second, urged the addition of a member with fish and wildlife resource expertise to the Great Lakes Water Level Regulation Board so that fish and wildlife resource values are considered in settling water levels. After a lively debate, the resolution was sent back to committee with an emphasis on a need to incorporate environmental concerns to the existing operating criteria.

## Newsletter

Leslie Kusek announced she will be moving from the area and will only be able to put together one more newsletter. A search for a new newsletter editor must take place.

Women and Minorities
Barb Knuth reported that the chapter in conjunction with the New York Chapter of the Wildlife Society and Foresters compiled data from civil service to determine the role of women and minorities in natural resources. The Wildlife Society and Foresters (NY chapters) have agreed to work jointly with NYCAFS to improve chances of career opportunities for women and minorities in New York.

## 1987 Workshop

Paul McKeown reported another successful workshop inspite of low attendance (53 people). Because of low attendance the last few years, there will be no workshop in 1988.

## Professional Initiatives

Gary Neuderfer discussed the problem of low attendance at recent workshops. A questionaire will be sent to members in the near future in an attempt to identify needs and wants of the membership in regards to the workshop. The format of the 1989 workshop will be determined by comments and ideas sent in on the questionaire.

The workshops are designed as a continuing education program.

## Presentation Standards

President Langer reported for Jim Haynes who is on sabattical. Most, if not all of the problems associated with the physical setting have been corrected by moving to the Holiday Inn. Standards for the presenters materials and skills have been developed and are being utilized at this meeting.

## Election of Officers

Mike Dutweiller introduced the presidential candidates Andy Kahnle and Jim Winters and Secty/ Treas. candidate Jack Hesse. There were no nominations from the floor. Both presidential
candidates gave short speeches followed by the balloting which showed Jim Winters to be the president-elect. By acclimation of the chapter, Jack Hasse was re-elected Secty/Treas.

Old Business
President Lange announced the following activities took place in 1987:
(1) chapter donated $\$ 500$ to the AFS raffle
(2) chapter opposed the D.E.C. reclassification of certain high level positions from civil service to political appointees. This was in vain as the civil service commission ruled in favor of the classification change
(3) chapter opposed a proposal from AFS to increase dues $\$ 3$ then rebate the money to the chapters
(4) chapter donated $\$ 100$ to Sport Fishing Institute to support continued funding of the Wa11op-Breaux program
(5) chapter donated $\$ 100$ to AFS to support efforts to establish a Federal Fisheries Initiative

New Business
Frank Panek was installed in abstentia as the new president.
There being no other new business, a motion to adjourn was made and carried at 5:50 pm. Respectfully submitted,


John J. Hesse
Secretary

Note: At the conclusion of the meeting, the following authors were awarded best paper status:
Best Overall Paper - J. Ellen Marsden and Charles Kruger "Preliminary observations on lake trout egg deposition in Lake Ontario"

Best Student Paper - Paul Kazak "The impact of exploitation on smallmouth bass populations in three Adirondack Lakes"

Best Poster - Richard Kirker and G. Dole "A symbiotic relationship between common white sucker and the smallmouth bass"

*Difference from FY.86-87 closing statement - \$500 added due to non-reported transfer to
J. Hasse from G. Rough to open accounts.


TO: Executive Staff, Division-and Regional girectors FROM: Commissioner Jorling

RE:
Federal Affairs Functions

This supplements Organization \& Delegation Memorandum \#32 which provided for transfer of all federal affairs functions to the Legislation and federal Liaison Unit.

It has come to my attention that DEC staff members frequently travel to Washington, D.C. to represent the Department at Congressional hearings or briefings, to appear before federal regulatory agencies, or to participate in meetings of national or international organizations. Many times these trips are conducted without the knowledge of senior Executive staff; seldom is the staff of New York's Washington, D.C. office informed. While I have no interest in discouraging communication with Congressional and agency contacts, I do wish to curtail unnecessary out-of-state travel and to ensure that when such travel occurs, policy positions expressed on behalf of DEC receive prior review and approval. I am also concerned that there be proper coordination between the Department, its Federal liaison and the New York State Office in Washington. Therefore, DEC staff are hereby instructed to advise Susan Weber or Bonnie Catone in advance of all travel to Washington, D.C. on matters related to Departmental interests.

Similarly, I view DEC staff membership on national and international environmental and professional organizations to be potentially valuable to the Department. These organizations serve as forums for exchanging ideas and information and can be useful to New York in forging multi-state support for our environmental programs. However, to ensure that DEC policies are not dictated by outside groups, I am directing that staff who serve on or participate with outside associations or organizations provide advance notice to Susan Weber or Bonnie Catone of policy deliberations, especially on legislation, which may impact the Department or the State of New York. No one on the staff should
represent a position of the state of New York or DEC on significant policy or legislative issues without that position having been submitted to, and approved by, the commissioner's office.

Thank you for your cooperation.

EXECUTIVE COMMITTEE MEETING
JANUAARY 26,1989
HOLIDAY INN, KIRKWOOD ROOM
BINGHAMTON, NEW YORK

1. READING AND ACCEPTANCE OF MINUTES OF MAY 19,1988 EXCOM MEETING.

2. REPORT IN THE 1788 AFS ANNUAL MEETING, TORONTO----JAMES WINTER
3. SESRETARY/TREASURER'S REPCRT———_JACK HASSE
4. COMMITTEE REPORTS

b. LNFINISED BLSINESS———————————MCM
-Absentee Balloting

-National Fishing Week Promotion
—N.E. AFS Division Meeting, 17EG

- Cedar Creek Publisher's Donation

Annual Professional Accomplisinvert Award

## EXCOM Meeting May 19, 1988

The meeting was called to order at 1.05 pm at the D.E.C. office in Albany by president Frank Panek with the following members present. Jack Hasse, Frank Panek, Tim Sinnott Bob Lange, Jim Winters, Doug Sheppard.

Minutes of the previous meeting were accepted as written.
Presidents Report
Frank will xerox and send to EXCOM members the AFS Diary as he gets them.
The parent society approved a dues rebate to Chapters againist our wishes.
All AFS journals will see a $\$ 3$ increase.
Door attendance at the Northeast EXCOM meeting was noted. The president of AES
gave a talk at the meeting stating chapters are the backbone of AFS. We were cited as a good example of an active and effecient chapter.
There is talk of a World Fisheries Congress in 1990.
There is concern over the high turnover rate of officers at all levels of AFs (nearly 40\%per year).
New York will host the 1989 NE meeting May 7-10 at ellenville. Gerry Barnhart is general chairman, Frank is Fish Chairman.
FAN- formed to lobby for a single cabinet level fisheries program.
NY state division directors update- Senate passed a bill making division directors
civil service instead of appointed. Assembly is sitting on the bill now. Gov.
Cuomo opposes the bill.
NE Division questionaire results- Poor response rate. The summary report is available from Frank. Results of the survey were not unexpected.

Secretary/Treasurers Report
For the period January 28-May 17, 1988.
checking \$191.44
money market . \$7287.44
C.D. (citicorp) \$6210.95
C.D. (key bank) \$4071.42

$$
\text { TOTAL } \quad \$ 17761.25
$$

(Jan. 27 balance was $\$ 16405.07$ )

| INCOME |  |
| :---: | :---: |
| 1988 annual meeting | \$2571.25 |
| dues | \$152.00 |
| 1987 workshop | \$2037.95 |
| interest on accts. | \$334.60 |
| TOTAT | \$5095.80 |
| EXPENSES |  |
| 1988 annual meeting | \$3396.44 |
| office supplies | \$67.78 |
| postage | \$29.06 |
| TOTAL | \$3493.28 |

A second C.D. was opened in the ammount of $\$ 4000$ at Key Bank in Utica for 18 months at $8.2 \%$ interest.
A new batch of membership cards were printed. We ran out of cards at ther: annual meeting.
Directories are printed and will be mailed out later this week.
Membership
Membership stands at 301 which is a drop of 20 compared to last year at this time. Only 145 current members have paid their 1988 dues.

Nominating No report.
Audit and Finance No report.
Environmental Concerns
Minimum flow inclusion in the Statewide Watershed Management Strategy Plan has not been opposed in public hearings thus far. There are a few state agencies however, that are opposing minimum flows in some form. No role is seen for the chapter at this time.

Professional Initiatives
Gary Neuderfer has resigned as chairman. Paul McKeowan will be asked to take over. The questionaire has been drafted but needs to be polished. First cut will be sent to EXCOM members for review.

Women and Minorities No report.
Newsletter No report.
Resolutions No report.
1989 Meeting.
Paul McKeown and Joe Buttner will help Tim. The Sheraton and Holiday Inns in Binghamton have been asked to submit bids. The only geographical area that was not well represented at the last meeting was the northern Adirondacks. Suggested changes for the 1989 meeting include; no intermingling with ski groups (courtesy of the hotel), blocks of hotel rooms not attendees scattered all over the hotel, reserve a hospitality room for all the time during the meeting, get the student chapters to provide help rumning equipment, change the meal format. A formal dinner will be Friday evening, the cther meals will be on your own. Judging papers is still presenting a problem. We are seeking comments and suggestions. Tentative dates for the meeting are January 26-28 or February 2-4, 1989. The Job Program will run again as it was a very popular eventi. The theme for the 1989 meeting will be "New Advances in Fisheries". There will also be a marine session and the Friday evening session will be a travelogue on fisheries work.

EXCOM meeting may 19, 1988
Unfinished Business
Absentee balloting- a by-law change allowing absentee or mail balloting has been suggested. Joe Gorsuch will be asked to chair a committee to word the suggested changes.
1988 National Raffle Initiative- It was decided not to sponsor a trip because of numerous past problems. We will be sending a Lake Erie print as a prize instead.

New Business
The EXCOM was asked by one of the members to consider forming a socioeconomic unit within the chapter. The formal subunit concept was not favored but the idea of encouraging and supporting the theme was suggested.
We were asked to support financially, publication of a book entitled'Lab on Fort Pond Bay". EXCOM decided not to support the concept because it has such local interest. A questionaire has been recieved from NY State Education Department. They are compiling an enviromental archive for NY state. we will recieve a copy of the report when it is compiled.
The AIFRB/NY-NJ district will be invited to our annual meeting to explain their background.
Member, non-member distinction was again discussed. We will continue to encourage AFS membership but not require it as a prerequisitefor NYCAFS membership.
Bob Lange was presented his past president certificate by Frank.
The meeting was adjourned at 3:30 pm.
Respectfully submitted,


[^1] linsitive reiations with journalists，government officials，special interest grouns，
olther professional organizations，and the gencral public．
Promole proper usc of aquatic resources by initialing and particinatinp in enecial nrojects that increase public awareness，expand marticipation，improve habiat．and
nrotect fragile resnurces． OFFICIIRS AND DUTIES
Rach Cliapter is required to have at least a President，a President－Diect，and a
Sceretay／lreasurer or a Secretary and a Treasurer．In addition to the specific dutica as－ signed by the Chapler＇s Hylaws and the gencral responsibilitics of AFS officers（Chapters 2 Presidenl：
 （ion President 10 altend the mecting（and any other general activities of the Serves as n valing member of the Division＇s Exceutive Commiltec and attend all
mectings of that Commillee
Chairs the Chapter＇s Executive Committee，holds meetings and secks advice as
I Wlly informs the President－Elect of Chapter artivities so that．if the need ariseri．
that officer can perform the duties of the President competently．
Is prepared to appoint chaitpersons and members of all standing committecs at the nonnal Chapter meeting when installed as President．
Is urepared to establish desired special commiltecs and appoint chairpersons and
members af the annual Chopter mecting．Creates other commitices as nected． Iregares mid－year and annual reports of the Chapler＇s actinitics for presentation at
lhe annual Division mecting，which should be allended if possithe．
Communicates reqularly with commitice chairpersons，ensuring that they are ac－ lively pursuing，their responsibilities．Requires a written mid－year and annula
repurt，preferably in the format designated for Socicty eommillecs（Chanter 9）．
Acts as a nonvoting member of the Socicty Exccutive Commitice and aftents both
Manual
excosp

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Chnimes renernlly poplde for interaction numeng professionala within limited areas，such
 lide evater（innperss）．Chaplern nie technically subunits of Divisions；however，Chapters



 （lin）lern wiflulu stute Cluplets）．




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## Pullionsas

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2．Iluld meethat，imbli：h worka，and perfomm other activilics on a technical and semi


1．Delemme the views or members relatlve to professionul topics arrecting their per－ fulmance，for exnuple，lyy conducling sulveys and consillering resolulions．

Pesarnt the ylews of Chanter members in the Division membershin，the AFS mem－
beenhif，natl to the general public and government atencies within the Chapter＇s boundailes．

$\because$

1. Assumes the dulles of Picsldent if the current President is unable to complete the
2. Works closely will the President so that Chapter activities will continue smoothly in Works closely
the next year.

Serves as a voting member of the Chapter's Executive Commitice.
Anticipates necessary committee appointments so that they can be made ut the time
of the almond Charr meeting.

1. Prepares and distributes to the Executive Committee members minutes of the an-

 the Division President.

Prepares corespomience us requested by officers of the Chapter.
Serves as a voting member af the Chapter's Executive Committee.
If not formally assigned in another office or person, maintains historical records of The activities, minutes, indivldunts, and other aspects of the Chapter,
warding these records to the Incoming Secielary and to AlpS headquarters, as requested.
5. Maintains Ietlerhend aud other supplies necessary For Chapter function. .

K! formation.

Develops and distributes promotional materials for the Chapter meetings;
Distributes copies of resolutions to the Executive Director, Society officers, the resolution.
9. Acts as bylaw consultant and maliamentarinn at the annual and ollie Chapter meetings. Forwards any proposed llylnw changes to the Executive Director or review by the AIS Constimitonal Consultant prior lo presentation of changes to the
Society's Executive Commilice For approval. Circulates sign-uplist for attendees and retains in Clinutel recounts.
10. Orders a l'ast-l'iesident's ceriffionte from the subunit liaison (AFS sufi) to be presented as the dist ortlet of new bustiest at the annual Chapter meeting. Prepares
programs

August 13, 1988

Kelly Hepler
Division of Sport Fish
Alaska Department of Fish and Game
333 Raspberry Road
Anchorage, Alaska 99518

Dear Kelly:
Thank you for your recent letter in which you discussed the three alternatives for Chapter dues rebates. The entire rebate issue has certainly been controversial within the society membership and only time will be the judge of the 1988 Excom's wisdom in approving a $\$ 3.00$ rebate to Chapters.

In January 1988, the New York Chapter Excom reviewed the rebate proposal and found no benefits to our chapter and seriously questioned the benefits to the society as a whole. We have not heard any arguments to date that would change our opinion.

The proposals as outlined fail to address the status and geographic makeups of student chapters. Will the " assigned chapter" process be adequate to address this? How will the geographic boundaries for zip codes be determined and by whom? What role will the chapters have in this process? What are the estimated costs (as a percentage of the proposed dues increase) for administration by the International Office? Why will there be non-conforming payments distributed to Divisions when zip-code designation and assigned chapter designations should cover all the alternatives?

Until we can see the benefits of a rebate program, and have answers to the above questions, the New York Chapter will reserve its decision on any rebate protocols.

Sincerely,

Frank M. Panek
President
17 Fern Road
Rocky Point, N.Y. 1177B

CC: NYCAFS EXCOM
GILBERT RADCNSKI, NEDAFS

TO: Addressees - AFS Excom Committee Members Dues Rebate Caucus

FROM: Kelly Hepler, Chairman Due Rebate Caucus

I have a few additional comments I would like to add to the attached letter. I sincerely apologize to the caucus members for the delay in sending out the list of proposals for your review and comment. I certainly do not want this delay to undermine or detract from the importance of the rebate issue. There is a long history of discussions behind this issue and it is essential that a climax to this issue be reached in August so that a clear and concise resolution can be presented at the annual Excom meeting in Toronto. I will contact all the caucus members the week of August 22 by phone to review your comments but I still need your comments in writing also. I should also mention that the caucus is a grassroots attempt at soliciting input from the chapters. I strongly encourage communicating with neighboring chapters about this issue because after all the Chapters are the direct beneficiary of the rebate.

Please send your written responses to the following address:
Kelly Hepler
Division of Sport Fish
Alaska Department of Fish and Game
333 Raspberry Road
Anchorage, Alaska 99518
Telephone (907) 267-2220
Thank you in advance for your support and remember time is of the essence.

At its 1988 Mid-Term Excom meeting in Seattle, the Excom approved, in concept, a $\$ 3$ dues rebate to Chapters, pending approval of an administrative process to distribute the funds. The proposal is to seek a dues increase of $\$ 3$ from the membership to be distributed to the Chapters less any administrative costs incurred by the International office. We have considered the following options if the dues increase is approved:

1) Dues Distribution Based on Zip Code: The $\$ 3$, less administrative costs, would be distributed annually to each Chapter based on the zip code of the member's address. For zip code areas not covered by a Chapter, the $\$ 3$ would be distributed to the corresponding Division.

Pros: 1) Dues distribution based on fully automated process; therefore minimal administrative costs.

Cons: 1) Dues distribution for some members would not reflect Chapter of choice.
2) Dues Distribution Based on Assigned Chapter: The $\$ 3$, less administrative costs, would be distributed annually to each Chapter based on each member's written designation of Chapter affiliation on the dues form. Any dues payment not indicating Chapter affiliation would be allocated to the appropriate Division based on $z i p$ code.

Pros: 1) Dues would be distributed accurately.
Cons: 2) Dues distribution could not be automated; therefore administrative costs would be higher.

Requirement to write Chapter affiliation would be overlooked by some members.
3) Dues Distribution Based on Zip Code or. Assigned Chapter: The \$3, less administrative costs, would be distributed annually to each Chapter based on zip code. Additionally, written designation of Chapter affiliation would be available on the dues form for those members whose AFS mailing address does not correspond to desired Chapter affiliation. Any non-conforming payments would be distributed to the appropriate Division based on zip code.

Pros: 1) Dues distribution based in significant part on automated process; therefore administrative costs would be low.
2) Chapter affiliation for dues distribution would be accurately portrayed.

Cons: None

At this stage of development, Option 3 is recommended. I would appreciate your comments on these options and our proposed recommendation by August 15, 1988. We plan to submit this implementation process to the Excom at Toronto following any necessary revisions based on your comments.

1989 NORTHEAST FISH AND WILDLIFE CONFERENCE

Nevele<br>Ellenville, New York<br>May 7-10, 1989

TECHNICAL COMMITTEE CHAIRPERSONS

General Program Chairman

| Frank Panek | NYS Dept. of Environmental Conservation Division of Fish and Wildlife <br> Bldg. 40, SUNY <br> Stony Brook, NY 11790 $516-751-1596$ |
| :---: | :---: |
| Chairperson |  |
| John Major | NYS Dept. of Environmental Conservation Division of Fish and Wildife <br> 50 Wolf Road <br> Albany, NY 12233 <br> 518-457-5411 |
| Richard Malecki | NY Coop. Fish \& Wildife Research Unit Department of Natural Resources <br> Cornell University <br> Ithaca, NY 14853 607-255-2836 |
| Frank Panek | NYS Dept. of Environmental Conservation Division of Fish and Wildlife <br> Bldg. 40, SUNY <br> Stony Brook, NY 11790 $516-751-1596$ |
| Col. Joseph Lynch | NYS Dept. of Environmental Conservation Division of Law Enforcement <br> 50 Wolf Road <br> Albany, NY 12233 <br> 518-457-5680 |
| Bert Anderson | NYS Dept. of Environmental Conservation Bureau of Engineering Services <br> 50 Wolf Road <br> Albany, NY 12233 <br> 518-457-1216 |
| Robert Budliger | NYS Dept, of Environmental Conservation Bureau of Environmental Education <br> 50 Woli Road <br> Albany, NY 12233 <br> 518-457-3720 |
| Albert Schiavone | NYS Dept. of Environmental Conservation Division of Fish and Wildlife <br> State Office Bldg. <br> Watertown, NY 13601 $315-785-2266$ |

Nevele

Ellenville, New York<br>May 7-10, 1989

## GENERAL INFORMATION

The 45 th Northeast Fish and Wildife Conference will be held May 7-10, 1989, at the Nevele Country Club, Ellenville, New York. Your host will be the New York State Department of Environmental Conservation.

Hotel accommodations are available at the Nevele at the rates listed on the enclosed hotel reservation form. Please note that this reservation form should be returned by April 1, 1989, with a $\$ 30.00$ deposit per person directly to the Nevele Country Club, Ellenville, NY 12428. Please make your reservations early.

## Hotel Rates

Empire Wing--Private Bath, Shower \& Color TV
Tower \& Colonnades--Private Bath, Shower \& Color TV

| Double <br> Occupancy | Single <br> Occupancy |
| :---: | :---: |
| $\$ 73.00$ | $\$ 108.00$ |
| 65.00 | 90.00 |
| 60.00 | 75.00 |

## College Students:

Vacationer--Private Bath, Shower \& Color TV (4-in-room occupancy) \$50.00
There is an additional charge of $\$ 10.00$ per person for a one-night-stay. (Additional $\$ 5.00$ per person for college students for one-night-stay.)

The rates listed are based on a minimum two-night stay, two-in-a-roorn occupancy, full American Plan (three meals daily), exclusive of gratuities and tax. Gratuities of $\$ 9.00$ per person per day will be added to bills to cover dining room waiters, busboys and chambermaids. Gratuities for personal services (bellmen, waiters in the Night Club, etc.) will be left to the discretion of the individual.

Meal rates for participants not registered at the hotel or additional meals taken, if any:

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Breakfast......................$ 8.00
Luncheon........................ 14.00
Dinner......................... 22.00
Dinner and Cocktail Party..... 34.00
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Gratuities are included in the above prices.

Dining Room--all meals will be served in the Globe Room at the following hours:

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Breakfast............ 7:30-9:30 a.m.
Luncheon.............12:30 p.m.
Dinner............... 7:00 p.m.
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Beginning in 1988, the Nevele has changed its food service Irom a Kosher Cuisine to a Continental Cuisine.

Meal tickets will be provided by the hotel and distribated to you at the Front Desk on arrival.

Your arrival should be planned for after lunch on Sunday, May 7. Rooms will be available after 3:00 p.m.--earlier arrivals are welcome to use the hotel's facilities. Check out time Wednesday is at 1:00 p.m.


Stanley a. Moberly
President 1987-1988

CARL R. SULLIVAN
Executive Director

PAUL BROUHA

Deputy Director

May 6, 1988
Mr. Frank Pane
17 Fern Road
Rocky Point, NY 11778

## Dear Frank:

I am writing today to enlist your help with a very important AFS membership project. This year, the Membership Committee has a goal of adding 100 new library memberships-an important project for two reasons. First, having our publications in more libraries makes fisheries literature more available to professionals like you and to the public we serve. Second, library memberships will pay the bills. Our finances are always a major concern because we have so much to do--and never enough money.

We believe that library memberships can be greatly increased. For example, over 1,000 libraries that belong to the Wildlife Society don't belong to the AFS. Add to that the thousands of libraries that belong to neither, and we have a huge pool of librarians that need to hear the AFS story. Paul Brouha and I have met with librarians, trying to figure out what makes them tick, and we have developed a strategy to grab their attention.

What makes librarians tick is personal contact. A visit from a library user counts more than a slick promotional package. What also counts is a good deal. AFS has a good deal-and we intend to make it better--so now all we need are the personal visits.

Enter you and your chapter members, always ready to help the cause (we hope)! We would like to match each library on our list with one of your chapter members familiar with the library and willing to call on the librarian. We hope you will help with identifying the right persons. Later, we will contact these "library visitors" with our request for help. We have enclosed a listing of libraries in your chapter's area. Please fill in a name and address next to each one, and return the list to Ruth Prof (Membership Secretary) at the central office by May 31.

Your help proves again what all AFS members know: Chapters are the vertebrae in the backbone of the Society. Thanks for your time. If you have any questions, please call me (703) 961-6959, or Paul Brouha or Ruth Prof at (301) 897-8616.

Sincerely,

enclosures


STATE OF NEW YORK<br>DEpARTMENT OF<br>Environmental Conservation

Albany, New York 12233-1010

## AUG 161988

Dear Dr. Winter:

You have been nominated by New York Chapter of the American Fisheries Society to represent them on the Department of Environmental Conservation's Return A Gift To Wildlife Advisory Committee. It is my pleasure to appoint you to the Committee and I appreciate your willingness to serve.

Specific responsibilities of Advisory Committee members will include:

1. Meet in conjunction with the Management Committee to review identified unmet program needs. Identify additional areas that may be worthy of consideration and, if appropriate, make recommendations on additions to the list of unmet needs.
2. Review proposals to meet the identified needs.
3. Review the Gift To Wildlife promotional plan and advise as appropriate.

The term for an Advisory Committee member will be two years.

The Advisory Committee will meet in conjunction with the Management Committee on September 7 at 10 AM in Room 604, 50 Wolf Road, Albany, to review conceptual proposals for $1989-90$ Gift To Wildlife projects. Please contact David Nelson, Gift To Wildlife Coordinator, at (518) 457-3400 if you will not be able to attend.

cc: Mr. Frank Panel, President
New York Chapter of the American Fisheries Society

Dr. James Winter
New York Chapter of the
American Fisheries Society
Biology Department
SUNY-Fredonia
Fredonia, New York 14063

## New York State

August 11, 1988


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Mr. Frank Panek
NY Chapter, AFS
17 Fern Rd.
Rocky Point, NY }1177
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Dear Frank:
The Empire State Congress for Fish and Wildlife Habitat is just beginning the task of making a preliminary evaluation of unmet habitat needs of fish and wildlife in New York, and investigating ways in which New York State may be able to promote habitat enhancement and ensure the preservation of valuable habitats. In your position as President of the State Chapter of the American Fisheries Society, we hope that you will be interested in this project and participate in our efforts.

The minutes of our two initial meetings are enclosed to provide background information. While this effort began with the State Fish and Wildlife Management Board and the State Conservation Council, our group already includes several people from other organizations, agencies and institutions. With your help, we hope to broaden the group. You are invited to attend one of our meetings in the near future. If this is not possible, can you recommena another person who might represent your interest? A meeting notice is also enclosed.

We look forward to seeing you at a meeting or hearing from you soon. If you have any questions, feel free to call me at (518) 457-0692.


WJ/cec
Encs. ..

MEMBERS: REpresentatives of County Boards of Supervisorsi'County Legisiators, Landowners and Sportsmen. Practice Soard. New York State tzaak Walton League, New York State Soil and Water Conservation Committee, New York State Coliege of Environmentai Science and Forestry at Syiacuse University. New York State College of Agriculture and Life Sciences at Cornell University.

# Empire State Congress for $\mathcal{F i s h}$ and Wildlife $\mathcal{H} a b i t a t$ 

50 Wolf Road, Room 526, Albany, NY 12233-4754 (518)457-0692

MINUTES - OCTOBER 17, 1988

Chairman Wil Kennedy called the meeting to order, with the following present:

Bob Chambers, SUNY College of Environmental Science and Forestry Jim Mullarkey, NYS Conservation Council
Charles Smith, Cornell University Laboratory of Ornithology
Bob Banister, NYS Conservation Council
Angie Berchielli, National Wildlife Federation
Dan Decker, Cornell Cooperative Extension, CALS
Bob Myers, USDA Soil Conservation Service
John Smith, NYS Conservation Council
Wil Kennedy, NYS Fish and Wildlife Management Board
A.R. Thompson, NYS Conservation Council

Henry Cossalman, Nis Conservation Council
Vern Hudson, NYS Forest Practice Board
Roger Cole, NYS Fish and Wildiife Management Board
Neil Johnson, NYS Fish and Wildlife Management Board
Wendy O'Neil, The Nature Conservancy
Wayne Jones, NYS Department of Environmental Conservation
Charles Kark, NYS Grange

Wil Kennedy reconsidered his decision to give up the chair. With assistance from Ira Reed and others, he decided, with concurrence of the group, to continue.

## Goals

There was extensive discussion of the goal or mission for this group. Although the current fiscal outlook makes General Fund appropriations unlikely, we should continue our analysis of needs and formulate proposals without regard to the immediate financial climate, since legislative action, if appropriate, may take two years or more. Further, habitat programs should probably be long range and continuing. Bob Myers encouraged the long range outlook from the federal prospective also, noting that the mechanism for help with new habitat programs is in place in SCS even though Farm Bill activities dominate staff time presently.

Public access and consumptive use were briefly discussed in their relation to habitat assistance for private lanōowners. Decisions regarding this, however, snoula be deferred until we inve iaentified the needs which must be adaressed.

Many ideas were suggested, such as the need to maintain habitat diversity as a principie objective, and the need to oktein egreement among many agencies who manage lands and warers or inEluence such management, to coordinate work toward that objective. Research on needs and practices is needed, as well as action to implement
practices. Wil Kennedy noted that there are many details we all could suggest on what to do, but another important need is organizational, deciding who is to do the work and who is to lead the effort. Dan Decker suggested that a symposium to attract all interested parties would help to set an agenda for problem solving, and to form working groups and coalitions to provide a focus. Angie Berchielli said that a grant may be available to hire someone to organize a symposium and follow up on it, etc.

## Mission Statement

Bob Chambers observed that we seem to be spinning our wheels (lots of energy, but little movement) without a basic statement of our need for existing and our specific objectives. He requested wil to appoint a subcommittee to draft the statements necessary to provide a focus for the group and explain our purpose. The following were appointed:

Bob Chambers (Chairman)
Charlie Smith
Dan Decker
Angie Berchielli
Bob Banister and Bob Myers (reviewers)

Bob Chambers asked all attendees to write down their suggestions for goais, objectives, or a mission, and give it to him before leaving the meeting.

## Group Organization

Wil Kennedy noted that Wendy O'Neil is associated with the Governor's Task Force on the forest industry, which will be dealing with many mechanisms to promote forestry, possibly including incentives to private landowners. He suggested that the concept of such a task force to address habitat concerns could be worth consideration. Wayne Jones noted that this task force arose from an economic concern resulting in the naming of the forest industry as a "target industry" which could be improved to provide economic benefits for New York State. If we were to demonstrate that fish and wildife habitat supports an economically important industry, and that the industry was in some jeopardy, a similar task force might be in order.

For the present group we have, wil asked wayne to continue hanaling correspondence. Wayne agreed, but noted that offers from others to take on this task or help with it should not be overiooked. Bob Chambers agreed, noting that it may be wise to operate more indepenäently from DEC.

I亡 was noted by several in attendance tnat their orgarizãions could not be involved in political advocacy. Bab Banister noted that tijis group began as a joint FWM Soard/Conservation Council Committee, which then sought the input of others, who could be considered advisors. At a subsequent meeting, to encourage broader
participation, it was decided that all participants would be invited to be equal partners. Since this seems to be awkward, and we do not find ourselves at odds, with voting required for action, wil Kennedy asked whether the participants outside of FWMA and NYSCC would rather be members or advisors. Bob Banister suggested the second option was most appropriate, and there were no objections.

## A Caution

Wayne Jones read a letter from Jay McAninch, of the Institute for Ecosystems Studies, who will not be able to join the group but offered advice. His main concern was that we must not ignore the possible consequences of increases in wildlife habitat, particularly in relation to agricultural damage. Careful coordination with those potentially adversely affected by wildife will be necessary. He also cautioned against making public access a prerequisite for assistance to landowners, as a measure which would severely limit cooperation.

## Future Meetings

As a start at assessing and coordinating management practices which affect habitat, we need to learn more about the actions of agencies and organizations which deal with natural resources management, both in the public and the private sector. A convenient way to start will be to ask for briefings from agencies based in Albeny, which manage state lands and waters. At future meetings, other agencies, organizations, and interest groups can be contacted.

## Next Meeting

Date: January 23, 1989
Place: 50 Wolf Road, Albany
Agenda: 9:00-10:00 AM Review goals, mission, etc. 10:00 - 12:00 PM Briefings by two agencies* 1:00-3:00 PM Briefings by two agencies* 3:00-4:00 PM Business, planning

* Briefings will be requested from: Bureau of Wildiffe, Bureau of Fisheries; Division of Lands and Forests; and Office of Parks, Recreation and Historic Preservation.

Wenay O'Neil asked attendees to bring information about their organizations to the next meeting so we can learn more about each other.

Submitted by:


WJ/cec

# Focus on Fisheries 

## Visibility of Fisheries <br> Resources and Science



An American Fisheries Society
Action Plan

# VISIBILITY OF FISHERIES RESOURCES AND FISHERIES SCIENCE 

## An American Fisheries Society <br> Action Plan

Prepared by:
David Philipp
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Jerry Conley
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Bill Gordon
Gary Matlock
Phil Janik

## Preface

Fish are recreation, food, and a source of income for millions of North Americans. More people are eating fish on a regular basis than ever before. Virtually all people find fish interesting. This interest ranges from those that view fish as an "art form," to those that depend on fish for their livelihood. If we added together all the ways fish influence us, provide food, recreation, and employment, we would have identified, perhaps, the largest single group of constituents in North America. Given a "product" this valuable and so much in demand, and a better understanding of the role of science, we should have the necessary ingredients for a "best management" system.

A central problem in fisheries resource management is the development and maintenance of effective public policies. We must play a recognizable role in policy development by influencing those decision processes that affect the health and viability of fisheries resources and that promote the protection of fish habitat.

Our challenge will be to maintain our traditional role of providing scientific information while presenting focused scientific analysis to policy makers. We must understand the science and language of the renewable resource economist and the sociologist if we are to succeed in influencing fisheries management decisions.

There is another area where great progress could be made: educating the public. If we expect to play a broader role in accimplishing responsible management of fisheries resources and proper care and consideration for fish habitat, we must educate the general public. Higher visibility will help us do this. Collectively, the members of the Society can give fisheries science the visibility necessary to achieve a greater level of stewardship from every person in North America.

It is important that we understand the needs, wants, desires, and aspirations of those that use the resource. The resource user, working together with the fisheries professional, offers the "best team" approach for achieving highest and best use of the resource.

This action plan is a start! Several areas are addressed that can help us improve our influence as individuals and collectively as members of the American Fisheries Society.

The plan will make a difference only if you get involved. Go for it!


American Fisheries Society

1. Increase the visibility and understanding of fisheries resources, including importance to the welfare of people and significance to national and local economies of North America.
2. Increase the influence of fisheries science in biological, social-cultural, political, and economic transactions related to fisheries resource management and use.
3. Further establish the American Fisheries Society as the principal professional organization influencing advancements in fisheries resource awareness, management, and use.

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Andy Kahnle Andy is a Senior Aquatic Biologist with the Hudson River Unit of the New York State Department of Environmental Conservation. His responsibilities relate to the diadromous fishes of the Hudson Estuary including life history parameters, population models, development of regulations, and interstate management. He hes been with the Department since 1980. Prior experience includes serving as technical director of hydroelectric projects for a private consultant in Pennsylvania. He has both bachelor's and master's degrees in fisheries from Cornell and Utah State respectively. He has been active in Society activities with prior roles including program committee chair and financelaudit committee member for the Chapter, serving on the nominating committee for the Northeast Division, and serving as poster session chairman for a recent annual meeting of the parent society.

Jim Winter Jim is the Associate Director of the Environmental Resources Center at the SUNY College at Fredonia, a position he has held since 1978. Currently he is also Acting Director of Sponsored Research for the college. His research interesta include the ecology of salmonids in the Great Lakes, habitat preferences of Antarctic fishes, and the effects of aquatic herbicides on rooted plants and fish. Jim received both master's and doctorate from the University of Minnesota. AFS activities include chairing the professional certification committee for the chapter, serving on the AFS membership concerns committee and the fisheries education section. He contributed a chapter to the section's "Fisheries Techniques" book and was a member of the planning committee for the AFS "Fisherieg Management" textbook.

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Jack Hasse Jack is currently completing his first term as Secretary/Treasurer of the Chapter. He is Senior Aquatic Biologist with the New York State Department of Environmental Conservation in the Utica office. He is a certified fisheries scientist through AFS. He has been a member of the Chapter since 1975 and a member of AFS since 1971. Jack has served as aite chairman for several chapter annual meetings and has chaired the publicity committee. He provided extensive logistical support for the annual national AFS meeting in Ithaca several yeara ago. In addition to his AFS affiliations, he is member of the American Ingtitute of Fishery Research Biologists and the American Society of Ichthyologists and Herpetologists.

## RESOLUTION

## Proposed for adoption by the New York Chapter of the American Fisheries Socirty

Whereas, the Great-Lakes water levels (specifically Lakes Ontario and Superior) are regulated by the international Joint Commission under authority of the 1909 Boundary Waters Treaty;

Whereas, the Boundary Waters Treaty specifically protests the fishery resources from stresses caused by human use


Whereas, the current and recent water level regulations have altered the natural levels in respond to high water level problems;

Whereas, fish and wildlife resources are impacted by changes in the water levels.

Whereas, the annual value of the fishery resource is in a similar order of magnitude as the other competing uses of the system (navigation and hydro power production) which are represented on the international Joint Commission's Boards which regulate the water levels;

Therefore, be it resolved that the New York Chapter of the American Fisheries Society support the addition of a member (s) with fish and wildlife resource expertise to the
 Great Lakes Water Level Regularion Boards so that equal :consideration of the needs of fish and wildlife resources shall be given an equal weight with other competing uses in the spirit of the Boundary Waters Treaty.

FURTHER BE IT FESOLVED that this resolution by submitted to the Northeast Division American Fisheries Society for adoption.

FURTHER BE IT RESOLVED that this resolution be submitted to the International Joint Commission for action.

## AGENDA

1. 4:10 p.m. - Call to Order
2. Minutes of the 1987 Annual Meeting
3. President's Report
4. Treasurer's Report
5. Reports of Standing Committees

Audit/Finance
Environmental Concerns
Membership
Program
Resolutions
Nominating
6. Reports of Special Committees

Newsletter
Status of Women and Minorities
1987 Workshop
Professional Initiatives
Presentation Standards
7. Election of Officers
8. Old Business
9. New Business
10. Installation of Officers
11. Announcements
12. Adjourn


[^0]:    *- Please indicate area (s) of interest by numerical code from list on reverse side of this form.

[^1]:    ＇romote the fisheries profession within the Chanter＇s boundaries through active and

[^2]:    

