

## New York Chapter <br> American Fisheries Society Newsletter Winter 1997



| 1997 New York Chapter Officers: |  |
| :--- | :---: |
| President: Lars Rudstam | President-Elect: Margaret Murphy |
| Past President: Doug Stang | Secretary-Treasurer: Tim Sinnott |
| Sectretary-Treasurer-Elect: John Homa |  |


| Committees: |  |
| :--- | :--- |
| Environmental Concerns: | Howard Simonin |
| Audit/Finance | Tom Field |
| Program | Betty Lou Brett |
| Resolutions | Dave Bryson |
| Nominating | Doug Stang |
| Membership | Lars Rudstam, Margaret Murphy |
| Newsletter | Tony VanDeValk |
| Professional Incentives | Paul McKeown |
| Workshop | Dave Lemon, Dan Bishop |
| Professional Diversity | Betty Lou Brett |
| Student Affairs | Margaret Murphy, Dave Nettles |
| Youth Education | Chris Lowie, Doug Carlson |


| Publication Statement |  |
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| Newsetter: Address: | Mr. Anthony VanDeValk Comell Biological Field Station 900 Shackelton Pt. Rd. Bridgeport, NY 13030 |
| Issue Number: | Winter, 1997 |

Squadron volunteers who provided their time, personal equipment, and efforts to make this course possible. They should all be commended for their dedication to the job of making the states waters safer for boating. A donation of $\$ 250.00$ was given to the Susquenango Power Squadron by the NYCAFS.

## Student Subunit

The student subunit is currently functioning as an online communication. Approximately 30 students from several colleges and universities are currently on the email list. If you would like your name added to the list, please contact me at murphymh@obg.com:

We are planning a subunit meeting during the annual NY Chapter meeting on Jan. 29-31 in Owego, NY. Please have ideas or suggestions for the subunit and any additional needs you'd like to have addressed. Please check the schedule at the meeting for the time and place (probably following the banquet on Friday night). Hope to see everyone there!

Margaret H. Murphy

## Around New York State

The SAREP program continues to expand and one of these growth areas will be relating aquatic ecology to fisheries biology and management. Also in the works is a new urban fishing program, specialized trainings for youth organizations such as Scouts, and a staff of regional SAREP education specialists. Through all of these exciting changes, though, SAREP remains committed to its very successful traditional programs!

## Steve Brown

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## Fisheries News

New York Times Today
November 26, 1997

## Federal Agency Orders Demolition of Maine Dam to Aid Fish Migration <br> By CAREY GOLDBERG

BOSTON: Handing a landmark victory to fish defenders and river enthusiasts, a federal agency refused Tuesday for the first time to re-license a hydroelectric dam and, going even further, ordered the aging structure on Maine's Kennebec River demolished at the owner's expense.

The agency, the Federal Energy Regulatory Commission, ruled that the hindrance the Edwards Dam posed to migratory fish outweighed the benefit it provided in electric generation.

The 160 -year-old dam produces one-tenth of 1 percent of Maine's electricity, but largely blocks the passage of sturgeon, salmon and other fish that struggle upstream to spawn, the commission said.
"Today's order requiring the removal of the Edwards Dam reflects a balanced view of environmental as well as social and economic considerations," said James J. Hoecker, chairman of the commission, which oversees the nation's power industry.

Since a 1986 change in federal law, the commission has been required to balance conservation, recreation and other environmental values with energy generation in deciding whether to renew licenses. In 1994, it determined that it could deny new licenses to dams, but the Edwards Dam is the first case in which it has exercised that power.

Hoecker emphasized that the decision to remove the dam, which is in Augusta, need not be viewed with trepidation by the hydroelectric industry, which provides 14 percent of the nation's electricity supply, because the Edwards is a special case involving a tiny amount of generation and a great deal of environmental damage.

Nonetheless, the decision has been closely watched from around the country, particularly in the Western states with many mega-dams, because it is seen as something of a bellwether for an estimated 550 dams that will come up for re-licensing over the next 15 years. Many of those dams hinder the spawning routes of salmon and other fish.

Though the 3.5-megawatt Edwards Dam may be a special case, its pending demise was hailed by environmentalists Tuesday as a major triumph.
"This is the first time the commission has said 'No,"' said Pete Didisheim of the Natural Resources Council of Maine, which helped lead opposition to the dam.

The decision also brought warnings of peril from the
have on our environmental policies. Everyone is welcome to attend. Seminars will be from 3:30 to $4: 30$ on Tuesdays in Room 304, Fernow Hall at Comell. A tentative list includes (open dates will be filled soon):

| Date | Speaker | Affiliation |
| :---: | :---: | :---: |
| Feb. 3 | Ray Hilborn | U. of Washington |
| Feb. 10 | Kristen Shrader-Frechette | U. of S. Florida |
| Feb. 17 | Open |  |
| Feb. 24 | Open |  |
| Mar. 3 | Aaron Moen | Cornell Univ. |
| Mar. 10 | Steve O'Brien | Nat. Cancer Inst. |
| Mar. 24 | Kia Lee | Williams College |
| Mar. 31 | James Martin | Oregon |
| Apr. 7 | Tim Seastedt | U. of Colorado |
| Apr. 14 | Barry Noon | Colorado St. U. |
| Apr. 21 | William Reiners | U. of Wyoming |

Whirling Disease Symposium. Feb. 19-21, 1998. Colorado State University, Fort Collins. Contact Whirling Disease Foundation, P.O. Box 327, Bozeman, MT 597710327; (406)585-0860; FAX (406)585-0863; whirling@mcn.net.
$128^{\text {th }}$ AFS Annual Meeting. August 23-27, 1998.
Hartford Civic Center and Sheraton Hotel, Hartford, Connecticut. Contact Paul Brouha; AFS; 5410 Grosvenor Lane, Suite 110; Bethesda, MD 20814-2199; (301)8978616, ext. 209; FAX (301)897-8096; pbrouha@fisheries.org; http://www.esd.ornl.gov/societies/AFS/afsevent.html.
$129^{\text {th }}$ AFS Annual Meeting. August 30-September 2, 1999. Adams Mark Hotel, Charlotte, North Carolina. Contact Paul Brouha; AFS; 5410 Grosvenor Lane, Suite 110; Bethesda, MD 20814-2199; (301)897-8616, ext. 209; FAX (301)897-8096; pbrouha@fisheries.org; http://www.esd.ornl.gov/societies/AFS/afsevent.html.

5th Annual International Conference "Sharing Knowledge, Linking Sciences: The St. Lawrence River - from Research to Remedies". An International Conference on the St. Lawrence River Ecosystem Ramada Inn Hotel, Cornwall, Ontario
April 29 - May 2, 1998
FIRST CALL FOR PAPERS
Note: deadline for abstracts January 30, 1998
It gives us great pleasure to invite you to participate in our Annual Conference on the St. Lawrence River Ecosystem. The theme chosen by the St. Lawrence River Institute of Environmental Sciences for 1998 is "Sharing Knowledge, Linking Sciences: The St. Lawrence River - from Research to Remedies." We are planning a conference designed to integrate disciplines and to focus on the future health of the mighty St. Lawrence River. Building on the success of
our past conferences, we aim to attract scientists, industrialists, politicians and community members into a growing web of citizens whose health and wealth depend on a healthy St. Lawrence River. Our theme reflects the increasing demand for constructive partnerships among all sectors of society, which are needed to face the challenge of understanding, restoring, and sustaining the St.
Lawrence River Ecosystem.
For more information or for registration information, please contact:

St. Lawrence River Institute of Environmental Sciences 1111 Montreal Rd., Suite 144 Cornwall, ON K6H 1E1 phone: (613)-936-6620 fax:(613)-936-1803 or E-mail: slries@glen-net.ca

## Wanted

Volunteers Needed: I have been informed of Paul McKeown's resignation as chair for the Professional Incentives committee. Paul has served on this committee for over 5 years and has been responsible in soliciting nominations for several professional achievement awards. I am looking for a volunteer to fill this position. Please contact me at murphymh@obg.com if you are interested.

The Chapter is also in need of a Newsletter Editor. Tony VanDeValk has done an excellent job for the past couple years, but is unable to continue serving as editor. If you would like to volunteer for this position, please contact me at murphymh@obg.com.

Please consider volunteering for these positions. Thanks.
Margaret H. Murphy
Wanted: Editors. Individuals interested in forwarding the fisheries profession by volunteering to review submitted manuscripts to Fisheries. If interested, please contact: Kristin Merriman - Clarke (301) 897-8616 ext. 220 email: kclarke@fisheries.org


Figure 1. The Thousand Islands region of the St. Lawrence River from Cape Vincent to Alexandria Bay, New York, and the location of the three study bays on Grindstone Island.

The diets of wild larval muskellunge and northern pike were estimated from fish collected in 1992, 1996, and 1997. Specimens came from various bays in 1992 and from the three study bays in 1996 and 1997. 'Preference' in this study is not equivalent to electivity since the relative proportions of larval fish species were not determined.

## Results and Discussion

Northern pike exhibited the 'attachment' behavior in the aquarium for about a week at $13^{\circ} \mathrm{C}$ prior to swim-up in each year. Muskellunge exhibited this behavior for only four days (at $15^{\circ} \mathrm{C}$ ) and only in 1996. This behavior was more prevalent in pike than in muskellunge within years. Both species attached themselves to the sides and glass divider of the aquarium in various positions: by the lower jaws, side of the head, ventral and lateral surfaces of the yolk sac, and by the dorsal surface of the body. Some muskellunge adhered to the water surface using surface tension. This has also been reported in pike (Philippart and Vranken 1983; cited in Bry 1996). Future work will determine if the adhesive glands are present in muskellunge larvae.

Both species fed in the laboratory showed that they could start feeding on fish larvae and did not need zooplankton. Muskellunge and pike showed some 'preference' for certain fish larvae. Muskellunge consumed carp (Cyprinus
carpio: 7-8 mm TL) and spottail shiner (Notropis hudsonius: 6-13 mm TL) but not brook silverside (Labidesthes sicculus: 7-15 mm TL). When spottail shiner and silverside were presented together, only the shiners were eaten. Silverside would be attacked but quickly spit out when they were the only prey. Silverside have a similar shape to other fish that muskellunge consume so the factor that caused rejection may be taste or texture. Northern pike consumed yellow perch (Perca flavescens: 6 -12 mm TL ) and golden shiner (Notemigonus crysoleucas: $5-12 \mathrm{~mm} \mathrm{TL}$ ), but not smallmouth bass (Micropterus dolomieu: 6-8 mm TL). The latter species has a larger cross-sectional area relative to those species consumed and may be more difficult to swallow. Silverside were not presented to pike since they were not present when pike started to feed.

Growth of muskellunge and pike was better on fish larvae than on brine shrimp (Fig. 2). Muskellunge feeding on brine shrimp did not show any change in growth rate but the growth rate of muskellunge feeding on larval fish increased from $0.004 \mathrm{~g} /$ day to $0.03 \mathrm{~g} /$ day at 26 days after hatching. Northern pike showed a growth rate increase at 26 days after hatching on both diets: from $0.006 \mathrm{~g} /$ day to $0.017 \mathrm{~g} /$ day on brine shrimp, and from $0.005 \mathrm{~g} /$ day to $0.043 \mathrm{~g} /$ day on larval fish. These rapid changes in growth rate may represent a point at which digestive enzymes become functional enabling the fish to be more efficient at converting food energy to body tissue.

Growth of muskellunge on the larval fish diet was similar to that found by Applegate (1981) for a diet of zooplankton (Fig. 3), however, cannibalism was present, although limited, in the study by Applegate (1981) and may have influenced the recorded growth. A comparison of pike growth (Fig. 4) estimated from logarithmic regressions showed that the laboratory-raised pike that were fed fish larvae achieved growth similar to that of wild fish (Franklin and Smith 1963; Fago 1977; and LaPan 1985).


## AFS - New York Chapter Newsletter -- December, 1997

survival and year-class formation (J. Farrell, pers. comm.). Young muskellunge and pike that fed on larval fish may have an advantage if their growth is faster than those fish that relied only on zooplankton since they would be vulnerable to predation for a shorter period and could better endure periods of low food abundance The esocids that began feeding on larval fish earliest may increase their chances of reaching the critical size before winter.

## Acknowlegments

This research has been supported by grants from the New York Department of Conservation, Wildlife Forever, The Thousand Islands Land Trust, and Save the River, Inc.

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# New York Chapter <br> American Fisheries Society 

Annual Meeting - January 29-31, 1998
Treadway Inn, Owego, NY

## Meals and Conference Fees

Lunch and Dinner on Friday, January 30 are included in the conference fee.
Meeting attendees will be on their own for breakfast. Fees will be payable at the meeting.

$$
\begin{array}{ll}
\text { Conference fees,Regular Memberm............... } & \$ 65.00 \\
\text { Conference fee, Student Member... } & \$ 40.00
\end{array}
$$

## ACCOMMODATIONS

Reservations must be made by January 14, 1998 to guarantee room rates. Reservations should be made directly with the OWEGO TREADWAY INN by contacting the front desk by telephone: (607) 687-4500 or (607) 754-4000; or by mailing this form to:

$$
\text { Treadway Inn, } 1100 \text { State Road, Rte. 17C, Owego, NY } 13827
$$

Cancellations, changes or additions to any reservation may be made at the above number.
NAME:
ADDRESS:
PHONE NUMBER:
ARRIVAL DATE and TIME: $\qquad$ NO. OF NIGHTS: $\qquad$
Rates: $\$ 59.00+$ tax / room (single, double, triple or quad occupancy)
Please check type of accommodation:
Number of guests
Rooms(s) with king/queen bed $\qquad$ Room(s) with two double beds

Smoking and nonsmoking rooms available upon request. All rooms subject to availability.
Reservations will be held until 6:00 PM on the date of arrival unless a $\$ 10$ nonrefundable deposit is sent or credit card name, number and expiration date supplied.
Credit Card: $\qquad$

## AFS - New York Chaptër Neẅsletter -- December, 1997

$\left.\begin{array}{|ll|l|}\hline & \begin{array}{c}\text { New York Chapter } \\ \text { American Fisheries Society } \\ \text { Final Call For Papers }\end{array} \\ & \\ \hline \text { Annual Meeting - January 29 - 31, 1998 }\end{array}\right]$

Submit Abstracts to:
Dr. Betty Lou Brett
Biology Department
Nazareth College
4245 East Ave.
Rochester, New York 14618-3790 email blbrett@naz.edu

# New York Chapter - American Fisheries Society 

1998 Annual Meeting - January 29-31, 1998
Treadway Inn, Owego, NY Fisheries and Water Quality

Meeting Registration (and New York Chapter - AFS Membership Renewal)

SPEEDY REGISTRATION INSTRUCTIONS: New members - Complete lines I-5. Current members - Enter your name and only any information items that have changed. Check the directory if you are unsure. All - Bring the completed for and your check for the correct amount made out to NY Chapter AFS.

1. NAME
2. Employer or School
3. Address (Street, PO Box, Apt
4. Address (City, State, Zip) $\qquad$
5. Telephone number, Home: $\qquad$ Work: $\qquad$
6. E-mail:
7. New member: $\qquad$ Renewal $\qquad$
To help speed up registration, please bring completed registration form to registration desk Circle all applicable fees:
STUDENT REGULAR

Meeting Registration
$\$ 40.00$
$\$ 5.00$
NY Chapter Membership
Enter Total: \$ Please make checks payable to NY Chapter AFS

## NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY RECEIPT

January $\qquad$ 1998

Received from $\qquad$ , \$ $\qquad$
for $\quad \square$ 1998 Annual Meeting Registration $\square$ 1998 Chapter membership

[^0]NOTE THE NUMBER 96, 97, OR 98 ON YOUR MAILING LABEL. THIS DENOTES YOUR MEMBERSHIP STATUS TO BE A CURRENT PAID-UP MEMBER YOU SHOULD HAVE A 98 ON THE LABEL.

IF YOUR LABEL IS MARKED 96, YOUR NAME WILL BE DELETED FROM THE MEMBERSHIP ROLE AS OF 1 AUGUST 1998.

ATTACHED IS A MEMBERSHIP BLANK FOR NEW OR RENEWAL MEMBERSHIPS
SEND YOUR 1998 DUES TO THE SECRETARY/TREASURER

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

Name $\qquad$ Regular (\$10.00) $\qquad$ Student (\$5.00) $\qquad$

Address $\qquad$
Student applications must be endorsed by a faculty member signing above
City/State/Zip $\qquad$
Employer/Affiliation/School $\qquad$
Telephone: Work $\qquad$ Home $\qquad$
Are you a member of the American Fisheries Society (Parent Society)? Yes $\qquad$ No $\qquad$

New Membership $\qquad$ Renewal $\qquad$ What was the last year you were a paid-up member? $\qquad$
Would you be interested in serving on any of the Chapter Committees? If so, please check which committees would interest you.

| Environmental Concerns |  | Membership committee |
| :---: | :---: | :---: |
| Program Committee |  | Resolutions Committee |
| Finance Committee |  | Professional Incentives |
| Newsletter Staff |  | Professional Diversity |
| Workshop Committee |  | Student Sub-unit |

Make checks payable to NY Chapter AFS. Send This form and your check to:
John Homa
Secretary/Treasurer
c/o Ichthyological Associates
50 Ludlowville Road
Lansing, New York 14882


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| Publication Statement |  |
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|  | (Summer edition), and |
|  | November-December |
|  | (Winter edition). |
| Newsetter: | Mr. Anthony VanDeValk |
| Address: | Comell Biological Field Station |
|  | 900 Shackelton Pt. Rd. |
|  | Bridgeport, NY 13030 |
| Issue Number: | Summer, 1997 |

## Editor's Note

Once again, I am soliciting those involved in any aspect of fisheries for notes and articles that would be of interest to our readers. The recent lack of response has resulted in the absence of a feature article like those we've enjoyed in previous newsletters. I'd like to restore that tradition. If you would like to submit an article, the deadline for submissions to the winter edition is November 30, 1997. Send correspondence to Tony VanDeValk, Cornell Biological Field Station, Bridgeport, New York 13030, Phone: 315633 9243, Fax: 315633 2358, Email: ajv6@cornell.edu.

## President's Corner

Summer was a beautiful one and, hopefully, one that you all enjoyed by fishing and learning. I have been doing both, although most of my outdoor activities are done as part of our research program.

The Chapter has been busy with advocacy. We supported the Teaming With Wildlife initiative with letters to the New York congressional delegation and monetary support to the Wildlife Federation for their more extensive letter writing campaign. This initiative would allow nonconsumptive users of wildlife, fish, and nature in general to contribute in a similar way as the sportsmen and women are doing already through the tax on fishing and hunting equipment. It seems fair to me that hikers and bird watchers should take part in paying for the conservation programs of the state. It probably also means that these user groups get a little more input in the fish and wildlife program. We also supported with a memorandum to the congressional delegation the continuation of the transfer of a portion of the fuel tax that is used for boating to the Wallop-Breaux fund that supports DEC fisheries programs. Both the letter and the memorandum are in the newsletter.

This years workshop is on boating and navigation as we continue to strive for a safer profession. Accidents happen when they should not occur. A friend of mine lost a loved one on Oneida Lake this summer. The workshop complements the water safety workshop we held a few years ago. Dave Lemon is the organizer this year and is doing a superb job. More information appears in the newsletter.

The topic for the annual meeting will be Water Quality and Fisheries. Betty Lou Brett is our program chairwoman
and has already lined up several interesting speakers. The meeting will be at the Owego Treadway Inn again this year (end of January) and will be for our chapter meeting (not joint with someone). Of course everyone is invited and I hope you can come. Allan Peterson is again the local committee chairperson.

Other committees have also been busy. Student affairs with Margaret Murphy held a retreat at the Shackelton Point Field Station. Paul McKeown is making progress on the certification of fisheries professionals and also finds the time to nominate deserving members for awards. This year, we will give Professional Achievement Awards to Clif Schneider, Rip Colesante and Carl Schofield. John Forney was inducted as the tenth inductee to the Fisheries Management Section's Hall of Fame.

Unfortunately, I will not be able to offer a can of sour herring as a prize for this years raffle. The person that was bringing this Swedish delicacy to the US was stopped in customs and not allowed to bring them in. Something about customs being afraid of diseases when cans are bulging. Some Americans do not understand the true nature of sour herring and unfortunately you will not be able to get the experience at the meeting. But I tried. Have a very nice continuation of 1997. I hope to see you at the workshop and at the annual meeting.

Yours truly
Lars Rudstam

## Chapter News

Advocacy. The chapter has gone on record advocating two issues, the reauthorization of the fuel tax transfer to Wallop-Breaux funds for an additional 10 years and in support for Teaming With Wildlife. Personal letters to your senator and congresspersons would also help. You can use the letter below as a guide. The resolution approved by the EXCOMM committee on May 14, 1997 follows the letter.

The Honorable [name]
United States Senate [or United States House of
Representatives]
Washington, DC 20510
Dear Senator [or congressperson]:
The New York Chapter of the American Fisheries Society,
representing the fisheries professionals in New York State, strongly endorse the Teaming With Wildlife (TWW) proposal and we urge you to co-sponsor this legislation when it is introduced later this Spring. New York State critically needs funding for fish and wildlife conservation, outdoor recreation and conservation education programs, and we wholeheartedly agree with paying a dedicated user fee on outdoor equipment purchases to fund this initiative. Such dedicated users fees in the form of an excise tax have been paid by fishers and hunters on sport equipment for 60 years to support costs associated with improving fishing. Teaming With Wildlife will expand such users fees to a broader array of outdoor equipment so that we can meet the needs of our non-consumptive and non-game species, as well as invest in recreation and education programs that will benefit the environment and the tourism industry in New York State. We request that the New York Congressional Delegation, acting in the best interest of our state's outdoor environment and the industry depending on it, to sponsor the Teaming With Wildlife legislation.

Sincerely,

New York Chapter of the American Fisheries Society Support for transfer of motorboat fuel tax funds from the Highway Trust fund to the National Aquatic Resources Trust Fund

Whereas, New York receives over 6.8 million annually from the Sport Fish Restoration Account of the National Aquatic Resources Trust Fund; and

Whereas, this user-pay money is vitally important to fisheries programs in New York where it is used to create and improve boating and angling opportunities for our citizens; and

Whereas, this funding has helped New York become recognized as one of the nation's premier aquatic recreation states, thus adding hundreds of millions of dollars to the state economy; and

Whereas, the ten year authorization for the transfer of motorboat fuel taxes from the Highway Trust Fund to the National Aquatic Resources Trust Fund will expire on October 1, 1997; and

Whereas, New York boaters and anglers will inevitably lose many of the aquatic resource-based recreational opportunities made possible by this "user-pays, userbenefits" program if it is not re-authorized;

NOW, THEREFORE, BE IT RESOLVED, that the New

York Chapter of the American Fisheries Society endorses and strongly supports reauthorization of the transfer of motorboat fuel tax funds from the Highway Trust Fund to the National Aquatic Resources Trust Fund for an additional ten year period;
AND BE IT FURTHER RESOLVED, that the New York Chapter of the American Fisheries Society President Lars Rudstam forward copies of this resolution to New York's Congressional Delegation with a request that the Delegation, acting in the best interest of our state's anglers and boaters, jointly sponsor appropriate legislation authorizing said transfer of funds.
c:
New York Senators Daniel Patrick Moynihan and Alfonse M. D'Amato
New York Representatives Michael Forbes, Rick Lazio, Peter King, Carolyn McCarthy, Gary Ackerman, Floyd Flake, Thomas Manton, Jerrold Nadler, Charles Schumer, Edolphus Towns, Major Owens, Nydia Velazquez, Susan Molinari, Carolyn Maloney, Charles Rangel, Jose Serrano, Eliot Engel, Nita Lowey, Sue Kelly, Benjamin Gilman, Michael McNulty, Gerald Solomon, Sherwood Boehlert, John McHugh, James Walsh, Maurice Hinchey, Bill Paxon, Louise Slaughter, John LaFalce, Jack Quinn, and Amory Houghton
Secretary of the Interior Bruce Babbitt
U.S. Fish and Wildlife Service Acting Director John Rogers
Wallop-Breaux Reauthorization Committee Chairman Pat Graham
American Fisheries Society Executive Director Paul Brouha
American Fisheries Society Northeast Division
President Henry Bocke
Director, Division of Fish and Wildlife, NYSDEC Gerry Barnhart.

## Student Subunit

On May 17, 1997 the student subunit held a meeting at Shackelton Point. Seven students attended from Oneonta, Cornell, and SUNY-ESF. The meeting was held to help establish goals and objectives of the student subunit and to gather ideas to help get all interested students involved. Two main goals were identified in the meeting. One was to provide support to people entering the fisheries profession. It was suggested that this include recent graduates who may be working a year or two before continuing their education or who need a support system to help make the transition into full time employment a smoother one. The second goal is to establish a mentoring

## AFS - New York Chapter Newsletter -- August, 1997

program with more experienced professionals in the Chapter. I will be asking for volunteers from the NY Chapter to help support students and recent grads in the profession. The mentoring program will not be established for monetary support, but is more of a time commitment from the professionals to help new professionals establish a network.

In addition to identifying the goals, ideas for the fall semester were generated. We would like to hold a Fall weekend at Huntington to review and leam various sampling methods as well as presentation skills. I am still checking on availability for a date, but will E-mail students when I get more information. Ideas for fundraisers were also suggested including t-shirts, mugs, baseball caps, and cookie cutters. Any additional ideas are welcome. Finally, as an additional fundraiser, the student subunit would like to organize the raffle at the annual Chapter meeting. Since I am in charge of the raffle this year (as president-elect), I would welcome any assistance from the students. The subunit is more than welcome to help out with the raffle. The president-elect serves as the committee chair each year, but additional support is always needed. Please contact me if you would like to help out with this years raffle in any way.

I have been quite pleased with the response from students over the past 6 months, and hope the enthusiasm continues. Please feel free to contact me anytime with questions or concerns about the student subunit. My Email address is murphymh@obg.com.

Margaret H. Murphy

## Awards

Dr. John Forney, Adjunct Professor at the Cornell University Biological Field Station and NY Chapter Honorary Member, has recently been selected for induction to the Fisheries Management Section's (FMS) Hall of Excellence. He was nominated by the membership of the Section, selected by the Hall of Excellence Committee, and approved by the Section EXCOM. He will join a select group of 10 previously inducted individuals and a plaque with his likeness will be on display at the AK SAR BEN Aquarium in Gretna, Nebraska. In addition to the displays of the inductees, the Hall of Excellence includes a description of the importance of fisheries management and managers to our aquatic resources and recreational fisheries. His research on the dynamics of the walleye population of Oneida Lake has served as a model for walleye management
nationwide. His numerous presentations, publications, and professional affiliations have contributed to the scientific management of our fisheries resources. In addition, several of his students have gone on to fisheries management careers and have made significant contributions to the field. Congratulations John!

The Best Paper Award for the 1996 volume of the Journal of Aquatic Animal Health, one of the AFSsponsored journals, was, again, awarded to researchers at the Cornell School of Veterinarian Medicine. The paper was:
Stoffregen, D.A., P.R. Bowser, and J.G. Babish. 1996. Antibacterial chemotherapeutants for finfish aquaculture: a synopsis of laboratory and field efficacy and safety studies. Journal of Aquatic Animal Health 8:181-207.

This is the second consecutive year that the Best Paper Award for Journal of Aquatic Animal Health has originated from work from Cornell's Aquatic Animal Health Program. The award for the 1995 volume went to Dr. Jeffrey Fisher et al. for a paper providing some of the early descriptions of the etiology and epidemiology of "Cayuga Syndrome" (= early mortality syndrome, EMS) in Atlantic salmon.

The formal award will be announced at the Annual Meeting of the American Fisheries Society in Monterey, California later this month (August, '97). This article appeared in The News and was written by Will Elliott.

Nominations are now being accepted by the NY Chapter for Honorary Membership and the Professional Achievement Award. Honorary Membership was established to recognize members for contributions to the NY Chapter. The Professional Achievement Award was created to recognize members for contributions to the Fisheries profession. To nominate a Chapter member, simply send your nomination to:
Paul McKeown
NYS DEC
128 South St.
Olean, NY 14760
(716) 372-0645
pemckeow@gw.dec.state.ny.us.

## Upcoming events

AFS NE Division Coldwater Workshop on Lake Trout and the Annual Meeting of the Atlantic International Chapter. September 15-18, 1997. Jay Peak, Jay, Vermont. Contact John G. Trial, 650 State St., Bangor,

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ME 04401-5456; FAX (207) 941-4443;
joan.trial@state.me.us.
$127^{\text {th }}$ AFS Annual Meeting. August 24-28, 1997. Monterey Convention Center, Doubletree and Marriott Hotels, Monterey, California. Contact Paul Brouha; AFS; 5410 Grosvenor Lane, Suite 110; Bethesda, MD 208142199; (301)897-8616, ext. 209; FAX (301)897-8096; pbrouha@fisheries.org;
http://www.esd.ornl.gov/societies/AFS/afsevent.html.
$\mathbf{1 2 8}^{\text {th }}$ AFS Annual Meeting. August 23-27, 1998. Hartford Civic Center and Sheraton Hotel, Hartford, Connecticut. Contact Paul Brouha; AFS; 5410 Grosvenor Lane, Suite 110; Bethesda, MD 20814-2199; (301)8978616, ext. 209; FAX (301)897-8096; pbrouha@fisheries.org;
http://www.esd.ornl.gov/societies/AFS/afsevent.html.
$129^{\text {th }}$ AFS Annual Meeting. August 30-September 2, 1999. Adams Mark Hotel, Charlotte, North Carolina. Contact Paul Brouha; AFS; 5410 Grosvenor Lane, Suite 110; Bethesda, MD 20814-2199; (301)897-8616, ext. 209; FAX (301)897-8096; pbrouha@fisheries.org; http://www.esd.ornl.gov/societies/AFS/afsevent.html.

Fishery Stock Assessment Models for the $21{ }^{\text {st }}$ Century. Oct. 8-11, 1997. Regal Alaskan Hotel, Anchorage, Alaska. Contact Brenda Baxter, Alaska Sea Grant College Program, University of Alaska, P.O. Box 755040, Fairbanks, AK 99775-5040; (907)474-6701; FAX (907)474-6285; FNBRB@aurora.alaska.edu.

Whirling Disease Symposium. Feb. 19-21, 1998. Colorado State University, Fort Collins. Contact Whirling Disease Foundation, P.O. Box 327, Bozeman, MT 597710327; (406)585-0860; FAX (406)585-0863; whirling@men.net.

## Around New York State

Lake Erie warm-water fisheries management is in good hands, under the leadership of Don Einhouse, senior wildlife biologist at the Lake Erie Unit at Dunkirk. Gerald F. Mikol, Regional Director of the Department of Environmental Conservation confirmed Einhouse's extensive contributions Tuesday while presenting him with the Region 9 Quality Service Award for the month of May.

Einhouse, along with cold-water manager Floyd Cornelius, provide Lake Erie anglers with information about sources and resources of the lake. Both biologists were recipients
of Chautauqua County Federation of Conservation Club's Public Servant Award.

Don was cited as past president of the New York Chapter of the American Fisheries Society, chairman of the forage task group and member of the walleye and yellow perch task forces of the Great Lakes Fisheries Commission, a bioenergetics study with the Lake Erie Committee, as well as his informational presentations at sporting clubs in the six counties of DEC Region 9. Southtowns Walleye presented him with its public servant award in 1990.

The Quality Award, eligible to nearly 400 candidates, is given for work standards and involvement in fishery concerns in the region.
"Anglers who have either called the Lake Erie Unit for information or heard his presentations quickly see that Don Einhouse knows current fishing conditions and can simply explain them to all who are interested," Paul McKeown, awards committee coordinator, said.

NYS-DEC recognizes Professional Certification. According to Gerald Barnhart, Past President of the NY Chapter and Acting Director of the NYS Division of Fish, Wildlife, and Marine Resources, new Fisheries biologists that are certified will be hired at five grade levels higher than uncertified candidates, foregoing the normal traineeship. Based on the current salary structure, the difference between starting at entry level (Grade 13 Traineeship) and full performance level (Grade 18) is \$8,219.

NYS Sportfishing and Aquatic Resources Education Program (SAREP) has hired Mr. Stephen Brown as their new Director. Steve most recently worked as an extension agent in Oswego County and has worked with SAREP, schools, nature centers, and Sportsmen's Federations in that county. Prior to coming to New York, Steve worked for the Boy Scouts in San Antonio, Texas. He earned B.S. degree in Recreation and Parks Administration from Texas A \& M and M.S. degree in Environmental Science from University of Texas at San Antonio. Welcome Steve!

## Wanted

Wanted: Editors. Individuals interested in forwarding the fisheries profession by volunteering to review submitted manuscripts to Fisheries. If interested, please contact:
Kristin Merriman - Clarke
(301) 897 - 8616 ext. 220
kclarke@fisheries.org

## Recent Theses

LANTRY, BRIAN F. Bioenergetic Allometries of Percids and Gizzard Shad: Implications for Estimating Predation on the Changing Prey Assemblage in Oneida Lake, NY. Typed and bound thesis, 143 pages, 15 tables, 20 figures, 1997.

## Thesis Summary

Three separate chapters comprise this thesis and summaries for each are presented below:

Chapter 1. We evaluated a technique that makes use of the total body electrical conductivity (TOBEC) of animals to provide a rapid, non-invasive method for determination of tissue composition. The effectiveness of this procedure rests upon the differences in electrical conductivity of fat and fat-free mass. We used TOBEC values to estimate the whole-body water content of yellow perch and alewife. We used multiple linear regression (MLR) with backwards stepwise elimination to test the capability of TOBEC values, wet mass, and total length in predicting wholebody water content of yellow perch and alewife. We found that wet mass was the best predictor ( $r^{2} 0.99$ ) of whole-body water content. The inclusion of TOBEC conductivity values in MLRs did not significantly improve the predictive capability over those equations that used wet mass alone ( $r^{2}$ increased by only 0.00002 to 0.0005 ). We reanalyzed the data from three previous studies that used TOBEC to evaluate the tissue composition of fish (Brown et al. 1993; Bai et al. 1994; Jaramillo et al. 1994). Again we found that the inclusion of TOBEC values in MLRs with wet mass as the other independent variable did not improve the predictive capability of functions that used wet mass alone ( $\mathrm{r}^{2}$ increased by only 0.00003 to 0.0007 ).

Chapter 2. We evaluated the ontogeny of energy use and storage for gizzard shad, yellow perch and walleye. We combined published values with our measurements to synthesize predictive functions for routine metabolism and energy density. We then compared predicted values to our measurements of larval routine metabolism and egg and larval energy density. Our evaluations indicate that metabolism functions produced from juvenile and adult gizzard shad and walleye give reasonably accurate predictions of larval values. The metabolism function constructed from juvenile and adult yellow perch data produced 2.5 fold overestimates of mean yolk-sac larval metabolism at $15^{\circ} \mathrm{C}$. Calorimetric determinations resulted in the construction of predictive functions of the energy density ( $\mathrm{J} \cdot \mathrm{g}^{-1}$ ) from percentage dry mass ( $\{$ dry mass $\div$ wet
mass $\}$ * 100) for all three species that explained most of the variation in energy density ( $r^{2} 0.80$ ). Application of these predictive functions to fish collected from 1992 to 1995 from Oneida Lake indicated size related trends. Energy density of Oneida Lake gizzard shad, yellow perch, and walleye increased linearly with fish length for the first year of life, after which subsequent increases became more variable in response to seasonal cycles and maturation of gonads. Gizzard shad energy density increased 7-fold in the first year of life while yellow perch and walleye energy density increased almost 2-fold.

Chapter 3. We used a new metabolism function to simulate the ecological energetics for walleye from Oneida Lake, New York, for 1974, 75, 77 and 1992-94. This new model used an exponential function $(f(T)=$ $\mathrm{e}^{\left(0.0867^{*} T\right)}$ ) to simulate the temperature dependence of routine metabolism. The new function produced metabolism estimates 1.8 times greater than the Kitchell et al. (1977) function at optimum temperature $\left(27^{\circ} \mathrm{C}\right)$. Simulations with a constant proportion of maximum consumption ( P ) and the new metabolism function produced annual ration estimates that were 5 to $23 \%$ greater than simulations run with Kitchell et al. (1977) function. Simulations run with a variable $P$ design produced accurate predictions of in-situ ration estimates for 1977, the year with the greatest YOY yellow perch abundance. In-situ rations for 1975 and for August to October 1992-94 were more variable, however, simulation rations often agreed well with field estimates. Simulated ration estimates overestimated in-situ values for most of 1974 when YOY yellow perch abundance was low and also for June to August 1992-94 when growth was poor and walleye were feeding near maintenance. Both simulated consumption and in-situ ration estimates indicated prey limitation for Oneida Lake walleye in 1974 and 1992-1994. Walleye energy density, growth, and ration declined from 1992 to 1994.

## NYC-AFS WORKSHOP ‘97

Boat handling, safety, and navigation is the topic of the 1997 New York Chapter American Fisheries Society workshop. The workshop will be held at the Cortland Holiday Inn on Wednesday, September 24 and Thursday, September 25. The course will be taught by the Susquenango Power Squadron whose instructors are knowledgeable volunteer members of the United States Power Squadron. The course will include 12 hours of instruction and videos on such topics as: boat handling and elementary seamanship, national and state boating regulations, charts and aids to navigation, Great Lakes boating, inland boating, navigation rules, and others.

Course topics covered in the workshop will fulfill nearly all New York.State certification requirements for young boaters to legally operate a motor vessel alone. Individuals who participated in the 1994 NYC-AFS Aquatic Safety Workshop will be eligible to take the test for certification after completing the boating workshop. It is likely that certification will soon be required for all New York State boaters and anyone who has been previously certified by the Power Squadron will be grand fathered.

Cost of the workshop will be $\$ 55.00$ for NYC-AFS members and $\$ 60.00$ for non-members. Dinner the first night and breakfast the following morning are included in the registration fee. Lodging rates are $\$ 50.00$ for a single and $\$ 75.00$ for a double occupancy room. Pre-registration for the workshop is required by Monday, September 22 nd and a maximum of 100 participants will be accepted on a first come first serve basis. To register complete the following form and return it along with the fee to Dave Lemon. For additional information contact Dave Lemon at (607) 753-3095 ext. 208 or by e-mail at dklemon@gw.dec.state.ny.us.

# BOATING WORKSHOP REGISTRATION 

Registration Fee: $\$ 55.00$ NYC-AFS members
$\$ 60.00$ non-members
(Checks payable to: New York Chapter - AFS)
Name:
Position:
Employer:
Address: $\qquad$
$\qquad$

Phone: $\qquad$ Fax:

E-mail: $\qquad$

Return to: David Lemon NYSDEC
1285 Fisher Ave.
Cortland, NY 13045

# New York Chapter American Fisheries Society 

Annual Meeting<br>January 29-31, 1998<br>Treadway Inn, Owego, NY

Meeting Announcement and First Call for Papers Water Quality and Fisheries

On Friday January 30 at the Water Quality and Fisheries Symposium invited speakers will address Water Pollution and Water Quality topics in Fish and Fisheries including, Endocrine Disrupters, Immune function, Genetics, Biological Pollutants, Risk Assessment, Policy, Success Stories, and Continuing Concerns.

You are invited to submit abstracts for review and inclusion in the meeting program. Abstracts that are accepted for the meeting program will be presented during the contributed papers Sessions on Saturday Morning January 31, 1998

Abstracts should be submitted by e-mail to blbrett@naz.edu. or submitted in Microsoft Word format on a 3.5 " diskette, either IBM or Mac format, or may submitted typewritten on the attached form. The preferred method is by e-mail. The length of the abstract must not exceed 250 words regardless of format.

All Abstracts must be received by December 31, 1997
Please submit abstracts to annual program chair:
Dr. Betty Lou Brett Biology Department, Nazareth College 4245 East Ave Rochester NY 14618-3790

716-389-2547
e-mail- blbrett@naz.edu

# New York Chapter American Fisheries Society Meeting First Call for Papers <br> Water Quality and Fisheries <br> Annual meeting January 29-31, Treadway Inn, Owego, NY Abstract Deadline December 31, 1997 

Author(s)

Title
Abstract

Student $\square$
Professional
Poster $\square$
Presenting Author's Address,
Daytime Telephone
Please submit abstracts to annual program chair:
Dr. Betty Lou Brett
Biology Department, Nazareth College
4245 East Ave
Rochester NY 14618-3790
716-389-2547 or 716-424-4578
e-mail- blbrett@naz.edu

NOTE THE NUMBER 95, 96, OR 97 ON YOUR MAILING LABEL. THIS DENOTES YOUR MEMBERSHIP STATUS
TO BE A CURRENT PAID-UP MEMBER YOU SHOULD HAVE A 97 ON THE LABEL.
IF YOUR LABEL IS MARKED 95, YOUR NAME WILL BE DELETED FROM THE MEMBERSHIP ROLE AS OF3I AUGUST 1997.

## ATTACHED IS A MEMBERSHIP BLANK FOR NEW OR RENEWAL MEMBERSHIPS

SEND YOUR 1997 DUES TO THE SECRETARY/TREASURER
$\qquad$ -

Application for Membership
New York Chapter American Fisheries Society
(Information provided will be used in the membership directory)

Name
Regular (\$10.00) $\qquad$ Student (\$5.00) $\qquad$
Address $\qquad$
City/State/Zip $\qquad$
Student applications must be endorsed by a faculty member signing above

Employer/Affiliation/School $\qquad$
Telephone: Work $\qquad$ Home $\qquad$
Are you a member of the American Fisheries Society (Parent Society)? Yes_ No_
New Membership $\qquad$ Renewal $\qquad$ What was the last year you were a paid-up member? $\qquad$
Would you be interested in serving on any of the Chapter Committees? If so, please check which committees would interest you.

| Environmental Concerns |  | Membership committee |
| :---: | :---: | :---: |
| Program Committee |  | Resolutions Committee |
| Finance Committee |  | Professional Incentives |
| Newsletter Staff |  | Professional Diversity |
| Workshop Committee |  | Student Sub-unit |

Make checks payable to NY Chapter AFS. Send This form and your check to:
Timothy Sinnott
Secretary/Treasurer c/o NYSDEC
Room 576, 50 Wolf Road
Albany, NY 12233-4756
Interest and Specialty codes have been deleted because of the increased cost of printing and mailing the membership directory.


| 1997 New York Chapter Officers: <br> President: Lars Rudstam | President-Elect: Margaret Murphy <br> Past President: Doug Stang <br> Sectretary-Treasurer-Elect: John Homa |
| :--- | :--- |
|  |  |
| Committees:  <br> Environmental Concerns: Howard Simonin <br> Audit/Finance Tom Field <br> Program Betty Lou Brett <br> Resolutions Dave Bryson <br> Nominating Doug Stang <br> Membership Lars Rudstam, Margaret Murphy <br> Newsletter Tony VanDeValk <br> Professional Incentives Paul McKeown <br> Workshop Dave Lemon <br> Professional Diversity Betty Lou Brett <br> Student Affairs Margaret Murphy, Dave Nettles <br> Youth Education Chris Lowie, Doug Carlson |  |


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| :--- | :--- |

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## Editor's Note

Deadline for submissions to the summer edition is July 31. Send correspondence to Tony VanDeValk, Cornell Biological Field Station, Bridgeport, New York 13030, Phone: 315633 9243, Fax: 315633 2358, Email: ajv6@cornell.edu

## President's Corner

This is my first message as the president of the New York Chapter of the American Fisheries Society. I am honored to have been elected and will do my best to continue the excellent work of our past-president Doug Stang. First, several individuals need to be recognized for their efforts last year. We have much appreciated the work of Doug as our 1996 president. I have started to understand that being a president takes time and I know Doug put in a lot of time and effort into our chapter last year. Doug, Kyle Hartman (program chair) and Allan Peterson organized the annual meeting. All of you that were there know that it went very well, that we had interesting contributions, discussions and generally a good time. Tim Sinnott is our secretary/treasurer for another year. He is a major reason why the chapter works well. Tony VanDeValk edited our excellent newsletter. The increased activity from students and student involvement (over 30 students attended our annual meeting) is due to the efforts of Margaret Murphy. Chris Lowie organized the workshop on stream classification last year. It was an excellent workshop with over 70 participants. The youth education subcommittee started last year under the leadership of Doug Carlson and Chris Lowie. Paul McKeown finished our mission statement and worked with professional incentives. Don Einhouse chaired the nomination committee as our past-president and got some excellent people to agree to run for office. He also updated our officers handbook. Also thanks to Betty Lou Brett (professional diversity), Howard Simonin (environmental concerns), Dave Bryson (resolutions) and Tom Field (audit) for their efforts during the past year.

The EXCOMM now has some new people. Dave Lemon has agreed to organize this year's workshop. The topic is statistics - yes it will never go away - and will be this fall. Betty Lou Brett has taken on the task as program chairwoman for our annual meeting. The topic will be the interface between water quality issues and fisheries management - are there conflicts? Issues from contaminants to productivity will be discussed by invited speakers and contributed talks. The location for the meeting is not set at this time but the timing is as usual the
end of January (1998). John Homa was elected secretary/treasurer this year and will take over the duties in 1998. Margaret Murphy is our new president-elect.

A few words to introduce myself. I am a Senior Research Associate at the Department of Natural Resources, Cornell University, and Associate Director of the Cornell Biological Field Station on Oneida Lake. I came to New York State from Sweden (through a post-doc at the University of Wisconsin) in 1992 and am trying to fill John Forney's shoes working on Oneida Lake walleye and perch interactions. Luckily, John is around to help me along. I have a broad interest in the various interactions between fish, their habitat and other species and the humans that exploit the fish. Currently, I work with these issues on Oneida Lake, Lakes Ontario and Erie, several of the Finger Lakes, and other smaller lakes around New York State. Together with Mark Olson, I lead a research group named Cornell Warmwater Fisheries Unit that also includes Tony VanDeValk, Tom Brooking, and retired but active John Forney and David Green. My hobbies include the outdoors, two kids ( 8 and 12 year old boys) and travel. I am a resident Alien (look out for Alien I), but have spent about a third of my life in the US.

The National Fishing week in 1997 is June 2-8. This information is from the National AFS. New York has free fishing days June 28-29 this year. The theme for the national fishing week is publicity and education - a chance to get more people involved in fishing through schools and fishing clinics. Consider taking this opportunity to go to your local school and give a presentation. If you need materials contact me, SAREP at the Department of Natural Resources, Cornell University, Fernow Hall, Ithaca, NY 14853, or Doug Carlson/Chris Lowie with our youth education committee.

I am looking forward to an interesting and active year as your president. Please feel free to contact me any time with suggestions and ideas for the chapter. The members are the reason the organization exists.

Lars Rudstam
Cornell Biological Field Station
900 Shackelton Point Road
Bridgeport, NY 13030
Tel 3156339243
fax 3156333258
email LGR1@cornell.edu

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## Chapter News

## 1997 New York Chapter AFS Annual Business Meeting Minutes

January 31, 1997
The meeting was called to order at 4:55 PM. A quorum was determined to be present. The agenda was accepted. Copies of the business meeting from last year were distributed and reviewed and accepted. The annual treasurer's report was reviewed and accepted.

Bob Carline, the AFS Parent Society President-elect was introduced and invited to make a few remarks. He said that the AFS office tries to attend all chapter meetings and get feedback about what the chapters want from the Parent Society. If anyone has any comments, talk to him (Bob) during the rest of the meeting. He then talked about legislation. Congress did not do much this past year. The Magnuson Act was re-authorized. A briefing statement for the Magnuson Act went to the Marine Fisheries Network. Most of the comments included in the legislative briefing statement were included in the final legislation. Other important issues coming up are the Clean Water Act and Endangered Species Act re-authorizations, mining law reform, and the Teaming with Wildlife initiative. The Legislative Committee in the Parent Society has a steward for developing Legislative Briefing Statements. The steward will contact chapters, and ask the chapters to contact Senators, Representatives, and other legislators as needed.

Bob next discussed AFS 2000 and a variety of other topics. This initiative is coming along nicely. The membership goal is to raise $\$ 350,000$. The overall goal is $\$ 1,250,000$. The money will be used to create a trust fund to support publishing activities and to pay off AFS debt. Membership was off for 1997. Normally about 500 members don't renew, but this year, 1200 didn't renew. The parent society will work with the chapters to try to contact these delinquent members. There is also a campus network trying to draw new student members. There is a plan for Re-certification. Every five years, AFS certification will be renewed. To renew certification, one must accumulate Continuing Education Credits (CECs). The Fisheries Action Network has been renamed. It is now the Fisheries Information Network. Its purpose is to develop information about key fisheries issues.

For the past four years, the Parent Society has operated with a deficit ranging from $\$ 10,000-\$ 80,000$. The society is cutting into capital reserves to cut the deficit. This year
they are in the black, primarily due to three layoffs. The Parent Society needs to re-examine finances in order to insure a stable financial future.

The 1997 Parent Society program will be held in Monterey, California, and it looks like it will be a good program. Bob is looking for people to get involved with Parent Society committees. Bob concluded his remarks by answering a few questions.

Doug Stang inquired if there was any old business from the floor. There was none. Don Einhouse inquired if everyone present had an opportunity to vote. Everyone indicated that they had, so the polls were closed.

Paul McKeown discussed the strategic Plan. The Plan was started when the Parent society and the Northeast Division developed strategic plans. The purpose of the plan is to outline the direction for the chapter. A first draft was published in the spring newsletter, revised based upon comments received, and published again in the winter newsletter. The major intent of the plan is to provide continuity and guidance for the officers and the membership. Several components of the plan were then discussed:

1) Professional Enhancement and Recognition: Candidates would be nominated from the membership for Chapter, Northeast Division, and Chapter awards, as well as the Chapter itself competing for the Outstanding Chapter Award.
2) Professional service: This was defined as providing information and field assistance, if requested. A member asked would it be possible to put money into the budget and request that the Chapter perform some task. Paul responded that money may already be available in the Chapter to provide professional assistance, however, it would be more likely that the reverse would occur. For example, if someone had a project or proposal for the Chapter to participate in, such as the BMOC project, the Chapter could ask members to participate on their own time, or with the permission or direction of their employer.
3) Advocacy: Regarding advocacy, the plan states that if an issue came up that the membership though the Chapter should take an advocacy role in, they should develop an action plan and submit it to the EXCOM for consideration, and then to the general membership.
4) Representation: The Plan states that the Chapter will be represented by the Chapter President at the Northeast Division and Parent Society. Members are encouraged to join the Parent Society.

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5) Finance: According to the Strategic Plan, the Chapter should always operate under a balanced budget.
6) Operations Protocol: The strategic Plan is not an operations manual. It does not replace the bylaws or the Procedures Handbook.
7) Student Subunit: The New York Chapter has a student subunit that has representation on the EXCOM and is funded by the Chapter.

A motion was made that the plan be accepted. A short discussion followed. Chuck Krueger suggested that the plan be formally reviewed every five years. Dave Lemon asked whether or not a process should be included for selecting workshop topics. Tom Field responded that such a process was a good idea, but not really strategic. Doug Stang agreed that the plan should provide basic guidance and have only a general focus. A list of potential topics was available, but whoever worked on the workshop committee should have final responsibility for the topic. Chris Lowie commented that the topic of the last workshop was chosen at the Feb/Mar 1996 EXCOM meeting. Ed Mills stated that the membership's interest should be determined before selecting a topic. Doug Stang stated that the next time topics are reviewed, the EXCOM will consider ideas for a process for selecting workshop topics, and that potential topics should be reviewed with the membership at the next business meeting.

The discussion ended and a vote was held. The plan passed as amended (review plan every five years).

Following the approval of the Strategic Plan, Doug Stang asked for committee reports.

## Audit and Finance

Tom Field found a discrepancy in the books. The bank statements showed that there was $\$ 86.14$ more in the bank than the treasurer's record showed. However, he can't find where the error comes from. There was a check written for the same amount, $\$ 86.14$, but it appeared to have been properly processed by both the bank and the treasurer. The committee approved the books and the treasurer will continue to investigate the discrepancy. The Chapter has almost reached the $\$ 25,000$ goal identified by the Cash Reserves Committee in 1990. the EXCOM has decided to implement the CRC recommendations. The two-year $\$ 10,700 \mathrm{CD}$ will be broken down into two $\$ 5,000 \mathrm{CD}$ 's that mature in alternate years. A high yield investment opportunity will be made using $\$ 5,000$ from the savings account. That will leave between $\$ 5,000-\$ 7,000$ in the checking account for operating expenses, and \$2,000 $\$ 3,000$ in savings. Doug Stang and John Homa will form a
committee to seek out the aggressive high yield investment account.

## Environmental Concerns

Howard Simonin reported that the Chapter had supported re-authorization or the Magnuson Act. That act was reauthorized by Congress this past Fall. Other legislation is up for reauthorization such as the Endangered Species Act and the Clean Water Act that the committee may want to support. Howard is looking for anyone who would like to join the Environmental Concerns Committee.

## Program

Kyle Hartman thanked Doug Stang and Allen Peterson for their support and assistance in setting up the program. He highly encouraged the submission of abstracts over electronic media. Fourteen contributed papers were received as well as four posters.

## Resolutions

Dave Bryson reminded the membership that they had approved a resolution requesting that New York adopt an instream flow policy. New York is now working on adopting instream flow regulations. One possible concern for the future dealt with instream gravel mining. The National Marine Fisheries Service (NMFS) developed a nationwide policy for gravel skimming and mining. The U.S. Fish and Wildlife Service has proposed rule making to adopt the NMFS policy. One possible resolution would request that the NYSDEC develop Best Management Practices for gravel mining. He will continue to explore this idea.

## Membership

Lars Rudstam reported that current membership was 340. He continued on from Bob Carline's comments about the delinquent membership. He stated that the Chapter will do some follow-up to try to bring delinquent members back.

## Professional Incentives

Paul McKeown reported that the Professional Incentives Committee was working to obtain state recognition of AFS certification. He would also be glad to write to other employers requesting that they provide some recognition or incentives for employees with AFS Certification. Several award actions were still ongoing. Edward Mills was renominated for the Northeast Division's Dwight Webster Award. John Forney was nominated for the Parent Society's Award for Excellence.

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The EXCOM received several nominations for awards for 1997. Carl Schofield, Clif Schneider, and Richard Colesante were nominated for Professional Achievement awards. All nominations were approved. Neil Ringler would receive the Professional Achievement award from last years's nomination at the Banquet following the business meeting.

## Workshop Committee

Chris Lowie reported on the 1996 Workshop. It was a very successful workshop on Stream Habitat Assessment. There were 56 attendees. The workshop was written up in an article in "Fisheries". Now, he was looking for a topic and a volunteer for 1997. Continuing Education Credits should always be requested for future workshops. The committee should have the CEC request approved before the workshop. Submit the request to the Parent Society as early as possible. Don Einhouse conducted a survey at the business meeting two years ago, and developed a list of possible workshop topics of interest to the membership.

## Student Affairs

Margaret Murphy was trying to get students from across the state involved. She has planned a student meeting for 8:00 PM, after the banquet. She plans on visiting 2-3 schools during the coming semester.

## Youth Education Committee

Chris Lowie reported that the Youth Education Committee was formed a year ago, and had 4-5 members. The mission and objectives were to promote aquatic education among youth; work with the NYSDEC and other state programs such as SAREP. The committee has worked to get more involved with the SAREP program. They are working to contact and work with the new SAREP director, because Bruce Matthews, the former director is gone. The committee needs the active support of the Chapter membership.

Doug Stang then reviewed his budget for the past year and how the expenses for 1996 actually compared.
Membership was down a little, so income from dues was down. The Parent Society will be cutting out the Chapter rebates, so that will be another loss of future income. The Chapter was somewhat ahead, because Doug did not need to use Chapter funds to travel to the Parent Society and Northeast Division EXCOM meetings. Pending the outcome of meeting costs, he ended the year about $\$ 1,500$ ahead of the projected budget.

Election results were announced. Margaret Murphy was chosen as President-elect, and John Homa was chosen as the Secretary/Treasurer-Elect.

Doug Stang thanked the Chapter and the EXCOM for their support during his tenure, and commented on the excellent reputation of the New York Chapter. As he stepped down Lars Rudstam was escorted to the podium and was installed as the New York Chapter President for 1997.

Lars thanked Doug for his excellent job as Chapter President. He stated that he would take steps to have future workshop topics announced at the annual business meeting. He had received a letter from John Long, a representative of the Charter boat Fishing Industry that the Chapter hold the annual meeting next year at Niagara Falls. Ed Woltman asked that he keep in mind the distance some members would have to travel. Lars responded that the request would be thoroughly discussed at the next EXCOM meeting.

Everyone was encouraged to purchase raffle tickets, and the meeting was adjourned at $6: 18 \mathrm{PM}$

Respectfully submitted,
Timothy J. Sinnott
Secretary/Treasurer
NY Chapter, AFS

## Budgets

Summary of 1996 Expenditures versus the Projected from Doug Stang
NYC - AFS 1996 Annual Budget

| Revenues | Projected | $\underline{\text { Actual }}$ |
| :--- | :---: | :---: |
| 1997 Annual Meeting | $5,500.00$ | $5,270.00$ |
| 1996 Membership Dues | $2,500.00$ | $2,380.00$ |
| 1996 Rebate | 500.00 | 826.00 |
| Interest | 700.00 | 918.00 |
| Raffle | $1,200.00$ | 453.00 |
| 1996 Workshop | $4,000.00$ | $4,040.00$ |
| Total | $14,400.00$ | $13,887.00$ |

EXPENDITURES

| 1997 Annual Meeting | $5,500.00$ | $8,627.94$ |
| :--- | :---: | :---: |
| Office Supplies | 100.00 | 24.00 |
| Postage | 400.00 | 445.00 |


| Newsletter/ Directory | 700.00 | 552.00 |
| :--- | :---: | :---: |
| 1996 Workshop | $4,000.00$ | $4,272.00$ |
| Raffle | 300.00 | 23.40 |
| Donations | 300.00 | 200.00 |
| Stipends - Best Paper to | 300.00 | 100.00 |
| NEFWC |  |  |
| Stipends - Students, annual mtg | 400.00 | 315.00 |
| Travel (NED \& AFS) | $1,050.00$ | 0.00 |
| Miscellaneous | 50.00 | 0.00 |
| Total | $13,100.00$ | $14,559.34$ |
|  |  |  |
| NET END-OF-YEAR (+/-) | $1,300.00$ | 672.34 |

NYC - AFS 1997 Annual Budget
from Lars Rudstam

| Projected Revenues |  |
| :---: | :---: |
| 1998 Annual Meeting | 6,000 |
| 1997 Membership Dues | 2,500 |
| Interest | 1,000 |
| Raffle | 650 |
| 1997 Workshop | 4,500 |
| Total | 14,650 |
| Projected Expenditures |  |
| 1998 Annual Meeting | 6,000 |
| Office Supplies | 100 |
| Postage | 450 |
| Newsletter | 700 |
| Workshop | 4,500 |
| Donations | 300 |
| Stipends to best papers <br> (to go to NE Fish and Wildlife | 300 |
| Meeting) |  |
| Teaming with wildlife campaign | 500 |
| Stipends to student at Annual | 250 |
| Meeting |  |
| Raffle | 250 |
| Travel (NED-AFS meeting) | 300 |
| Travel (AFS parent society) | 1,000 |
| Total | 14,650 |

## Best paper awards.

Christine Mayer, who is a graduate student in the Dept. of Natural Resources at Cornell University, was awarded BEST STUDENT PAPER AWARD, for "Zebra mussels and the benthic-pelagic link in Oneida Lake" by C. M. Mayer, N. Idrissi, E. L. Mills, and L. G. Rudstam.

Kyle Hartman, who is an Assistant Professor in the Division of Forestry at West Virginia University, was awarded the Best Professional Paper Award for his paper, "Hydroacoustic estimates of striped bass Morone saxatilis distribution and abundance in the Hudson River" by Kyle Hartman.

## Award Nomination

The Meritorious Service Award Committee is seeking nominations for this prestigious award. It recognizes unswerving loyalty and meritorious service to the Society over a long period of time. It is awarded for an exceptional commitment to the Society's programs, ideals, objectives and long-term goals. Nick C. Parker received the award in 1996 and Christine Moffitt in 1995. If you would like to nominate someone, please contact me and I will fax you a copy of the form you should use. All nomination packages should be submitted to me by June 15, 1997

Thank you.
Carolyn A. Griswold, Research Fisherey Biologist, U.S. Department of Commerce, NOAA/NMFS, Northeast Fisheries Science Center, 28 Tarzwell Drive, Narragansett, RI 02882-1199
(401) 782-3273 (Voice) (401) 782-3201 (Fax )

Carolyn.Griswold@noaa.gov (Email)

## Upcoming events

## 1997 NYC - AFS Workshop

A statistics refresher for fisheries professionals has been tentatively selected as the topic for the 1997 NYC - AFS workshop. SUNY ESF professor Steven Stehman has agreed to prepare a two day program discussing statistics commonly used in fisheries data analysis. Professor Stehman has a knack for clearly conveying when and how to choose and use the appropriate statistical test. If all the arrangements can be made, the workshop will be held in mid to late September. In the event that this program cannot be scheduled, the planned 1998 workshop topic on boat safety, navigation, and regulations will be issued instead.


1996 Annual Treasurer's Report
Prepared 28 January 1997

|  | Checking | Savings | CD | Total |
| :---: | :---: | :---: | :---: | :---: |
| Balance 1/28/96 | \$5498.44 | \$6,248.84 | \$10,076.47 | \$21,823.75 |
| Receipts |  |  |  |  |
| Memberships | 2380.00 |  |  | 2380.00 |
| Interest | 72.37 | 190.59 | 655.16 | 918.12 |
| Parent Society rebate | 826.00 |  |  | 826.00 |
| 1996 Ecosystem Conf | 612.64 |  |  | 612.64 |
| 1996 Workshop | 4040.00 |  |  | 4040.00 |
| NE Workshop rebate | 140.00 |  |  | 140.00 |
| Receipts subtotal | 8071.01 | 190.59 | 655.16 | 8916.76 |
| Expenditures |  |  |  |  |
| 1996 annual meeting | 540.58 |  |  | 540.58 |
| Award plaques | 40.00 |  |  | 40.00 |
| Student stipends | 250.00 |  |  | 250.00 |
| Donations | 200.00 |  |  | 200.00 |
| 1996 Workshop | 4272.21 |  |  | 4272.21 |
| Duck stamps | 46.80 |  |  | 46.80 |
| NED Workshop social | 150.00 |  |  | 150.00 |
| Newsletter printing | 551.93 |  |  | 551.93 |
| Postage \& mail-related | 444.81 |  |  | 444.81 |
| Expenditures subtotal | 6496.33 |  |  | 6496.33 |
| Annual subtotals | +1574.68 | +190.59 | +655.16 | +2420.43 |
| Balance as of 1/28/97 | \$7073.12 | \$6439.43 | \$10731.63 | \$24244.18 |

Respectfully submijted,

Timothy J. Sinnott
Secretary/Treasurer
NY Chapter, AFS

NOTE THE NUMBER 95, 96, OR 97 ON YOUR MAILING LABEL.
THIS DENOTES YOUR MEMBERSHIP STATUS
to be a current paid-up member you should have a 97 ON the label.
IF YOUR LABEL IS MARKED 95, YOUR NAME WILL BE DELETED FROM THE MEMBERSHIP ROLE AS OF 1 AUGUST 1997.

ATTACHED IS A MEMBERSHIP BLANK FOR NEW OR RENEWAL MEMBERSHIPS
SEND YOUR 1997 DUES TO THE SECRETARY/TREASURER

> Applicatlon for Membership
> New York Chapter American Fisheries Society
> (Information provided will be used in the membership directory)

Name $\qquad$ Regular (\$10.00)__Student (\$5.00) $\qquad$

Address $\qquad$
Student applications must be endorsed City/State/Zip $\qquad$ by a faculty momber signing above

Employer/Affiliation/School $\qquad$
Telephone: Work $\qquad$ Home $\qquad$
Are you a member of the American Fisheries Society (Parent Society)?
Yes $\qquad$ No $\qquad$
New Membership $\qquad$ Renowal $\qquad$ What was the last year you were a paid-up member? $\qquad$
Would you be interested in serving on any of the Chapter Committees? If so, please check which committees would interest you.

| Environmental Concerns |  | Membership committee |
| :---: | :---: | :---: |
| Program Committee |  | Resolutions Committee |
| Finance Committee |  | Professional Incentives |
| Newsletter Staff |  | Professional Diversity |
| Workshop Committee |  | Student Sub-unit |

Make checks payable to NY Chapter AFS. Send This form and your check to:
Timothy Sinnott
Secretary/Treasurer
c/o NYSDEC
Room 576, 50 Wolf Road
Albany, NY 12233-4756
Interest and Specialty codes have been deleted because of the increased cost of printing and mailing the membership directory.


NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY C/O NYS DEPT. OF ENVIRONMENTAL CONSERVATION ROOM 576,50 WOLF ROAD
ALBANY, NEW YORK 12233-4756

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## New York and Pennsylvania Chapters American Fisheries Society <br> Joint Meeting

## PANFISH BIOLOGY AND MANAGEMENT



# Meeting Program and Abstracts 

# New York and Pennsylvania Chapters <br> American Fisheries Society <br> Joint Meeting 

January 30 - February 1, 1997
Treadway Inn, Owego, New York

Thursday, January 30, 1997

| 6:00-9:00 pm | Registration - Williamsburg Room |  |  |
| :--- | :--- | :--- | :--- |
| 7:00-8:00 pm | NY Chapter AFS EXCOMM Meeting - | Board Room |  |
| 8:00 pm | Welcome Social - | Williamsburg Room |  |

Friday January 31, 1997
7:30 am Registration - Starfire Lobby

## Starfire Room

8:30 am Welcome
Robert Weber, President, Pennsylvania Chapter - AFS
Douglas Stang, President, New York Chapter - AFS
Invited Paper Session: PANFISH BIOLOGY and MANAGEMENT

|  | Moderator: Douglas Stang, New York State DEC |
| :---: | :---: |
| 8:45 am | Development of Management Options for Bluegill in Wisconsin <br> T. Douglas Beard. Jr. and Nancy Nate, Wisconsin Department of Natural Resources |
| 9:15 am | Do Bluegill Reproductive Dynamics Pose a Concern for Fisheries Management? Melissa T. Drake and Donald L. Pereira, Minnesota Department of Natural Resources |
| 9:45 am | Managing Macrophytes to Improve Bluegill Growth: A Multi-lake Experiment Mark H. Olson, Cornell University |
| 10:15 am | Coffee Break - Starfire Lobby |
| 10:45 am | Effects of Exploitation on Panfish: Must We Limit Harvest? David M. Green and Thomas E. Brooking, Cornell University |
| 11:15 am | Lake Erie Yellow Perch Management and Research: An Ohio Perspective Kevin Kayle, Ohio Department of Natural Resources, Division Of Wildlife |


|  | Poster Viewing with Authors | Starfire Lobby |  |
| :--- | :--- | :--- | :--- |
| $6: 30 \mathrm{pm}$ | Dinner Buffet, NY Chapter Awards, Raffle |  |  |
|  |  |  |  |
| $8: 00 \mathrm{pm}$ | Student Breakout | - | Owego Room |

Saturday, February 1, 1997

|  | Contributed Papers - Starfire Room |
| :---: | :---: |
|  | Moderator: Lars G. Rudstam, Cornell University |
| 8:00 am | Inheritance of Microsatellite Loci in Lake Sturgeon Jonathan D. Pyatskowit and Charles C. Krueger, Cornell University; Harold L. Kincaid, U. S. National Biological Service; and Bernie May, University of California |
| 8:20 am | Diel Movement Behavior of Lake Trout Sac Fry Owen E. Baird and Charles C. Krueger, Comell University |
| 8:40 am | Behavioral Response of Emergent Lake Trout Fry to the Presence of the Alewife, a NonNative Pelagic Predator <br> Timothy R. Strakosh and Charles C. Krueger, Comell University |
| 9:00 am | The Role of Embayments and Inshore Areas of Lake Ontario as Nursery Grounds for Young-of-Year Alewife <br> F. Arrhenius, L. G. Rudstam, E. L. Mills, and K. Beelick, Comell University; C. P. Schneider, New York State Department of Environmental Conservation; and S. J. Priest, U. S. Fish and Wildlife Service |
| 9:20 am | Impediments to colonization of Lake Ontario by Blueback Herring <br> R. W. Owens and R. O'Gorman, U. S. Geological Service; E. L. Mills and L. G. Rudstam, Cornell University; J. J. Hasse, New York State Department of Environmental Conservation; B. H. Kulik, Kleinschmidt Associates; and D. B. MacNeill, New York Sea Grant |
| 9:40 am | Zebra Mussels and the Benthic-Pelagic Link in Oneida Lake, NY Christine M. Mayer, Edward L. Mills, Lars G. Rudstam, and Nasseer Idrissi, Cornell University |
| 10:00 am | Coffee Break - Starfire Lobby |

Contributed Papers (cont.) - Starfire Room

# Effects of Exploitation on Panfish: Must We Limit Harvest? 

David M. Green and Thomas E. Brooking<br>Cornell Biological Field Station<br>900 Shackleton Point Road<br>Bridgeport, NY 13030

Anglers and biologists have been concerned about a perceived decline in the size of panfish. The targeting of waters with outstanding panfish populations by anglers, tournament fishing, and the sale of panfish are considered to be factors in the decline in size. The effect of exploitation on the size and age structure, yield and catch of crappie, bluegill and yellow perch is examined utilizing constant and variable recruitment models by R. Beamesderfer (MOCPOP 2.0, A flexible system for simulation of age-structured populations and stock-related functions). Only populations experiencing fast growth rates are likely to provide any significant numbers of large panfish. When anglers become aware of the existence of a water with large panfish and target these populations, the constant recruitment models predict only moderate levels of exploitation will substantially reduce the size structure in one to two years. The more realistic variable recruitment models indicate that yield and catch would be only $34-86 \%$ of the catch and yield predicted by the constant recruitment models. Regulations for limiting exploitation are discussed.

Invited paper - professional

# Crappie Management in Missouri's Large Reservoirs 

Michael Colvin<br>Missouri Department of Conservation<br>1110 South College Avenue<br>Columbia, MO 65201

White crappies (Pomoxis annularis) are popular sport fish in Missouri's large reservoirs and over half of the total fishing pressure may be expanded for them in some years. Crappie populations exhibited symptoms of high angler exploitation through the 1970s when the only restriction on harvest was a daily limit of 30 . Trap-netting and creel surveys indicated that the populations consisted mainly of young fish; few age-4 and older fish were captured in nets, and more than $90 \%$ of the harvest were ages 1-3. Total annual mortality averaged about $50 \%$ for age- 2 white crappies and $80 \%$ for ages 3 and older. Exploitation rates were estimated to be about $60 \%$ for fish 9 in and longer (age 3 and older). In addition, annual harvests of crappies were variable because of fluctuations in year-class strength. During the 1980s, restrictive regulations designed to reduce the harvest of age-1 and age-2 crappies were implemented to provide larger fish in the creel and reduce the effect of fluctuations in yearclass strength by producing populations which contain a higher percentage of older fish. However, evaluation of these regulations was difficult because age-1 and age-2 white crappies were not fully vulnerable to trap nets making changes in survival rates difficult to determine. Lower daily creel limits (15/day) did not reduce the harvest of age-1 and age-2 white crappies on most reservoirs, but 9 - or 10 -inch minimum size limits did. After minimum size limits were imposed, a significantly greater proportion of the harvest shifted to age-3 and older white crappies. Survival rates of age-3 doubled on some reservoirs; probably indicating a similar increase for younger fish. After minimum size limits were implemented, the mean length of harvested white crappies generally increased from $<9$ in to $>10 \mathrm{in}$, but in one reservoir it increased from about 7 in to $>11$ in. Currently, crappie populations in Missouri's large reservoirs that had few age-4 and older fish and satisfactory growth rates are managed with minimum size limits. Populations that do not consistently meet these criteria are managed with either 15 -daily creel limits or with the older 30-daily limit.

Invited paper - professional

# Indirect Effects of Vegetation Removal on Fish Community Structure and Predator-Prey Interactions 

Steven A. Pothoven<br>Great Lakes Center<br>Buffalo State College 1300 Elmwood Avenue<br>Buffalo, NY 14222<br>Bruce Vondracek<br>Minnesota Fish and Wildlife Cooperative Unit<br>University of Minnesota<br>Fisheries and Wildlife Dept.<br>St. Paul, MN 55108<br>Donald. L. Pereira<br>Minnesota Dept. of Natural Resources<br>Section of Fisheries<br>1200 Warner Rd<br>St. Paul, MN 55112

We evaluated fish community structure and predator prey interactions in two lakes, in suburban Minneapolis, Minnesota, one year prior and two years following whole lake herbicide (Sonar) applications in May 1994. In one treatment lake, bluegill (Lepomis macrochirus) relative abundance decreased significantly in 1995 and mean bluegill length increased compared to 1993. The presence of a large year-class of yellow perch may have buffered predation on small bluegill in the other treatment lake. Bluegill growth increased in both treatment lakes in 1994 compared to the previous 5 years; but remained constant in three reference lakes. Changes in distribution were noted for large ( $>100 \mathrm{~mm}$ ) bluegill and for black crappie. Largemouth bass (Micropterus salmoides) feeding efficiency (fish per stomach and empty stomachs) increased during the initial treatment year and growth rates were higher than the previous 3 years in treatment lakes. Northern pike (Esox lucius) feeding efficiency was similar across years, but diet composition changed related to altered prey distribution and vulnerability following vegetation removal.

Contributed paper - student

# Inheritance of Microsatellite Loci in Lake Sturgeon 

Jonathan D. Pyatskowit<br>Department of Natural Resources - Cornell University<br>lthaca, NY 14853<br>Charles C. Krueger<br>Department of Natural Resources - Cornell University<br>Harold L. Kincaid<br>U.S. National Biological Service<br>National Fishery Research and Development Laboratory<br>R.R.D. Box 63<br>Wellsboro, PA 16901<br>Bernie May<br>Department of Animal Science - University of California<br>Davis, CA 95616

Microsatellite loci are chromosomal regions of DNA containing short sequences of tandem repeats of the base pairs ACTG. These regions have potential for population genetics studies because microsatellite loci often have alternate forms (alleles) which exhibit greater genetic variability than mitochondrial DNA or loci that encode allozymes. The greater variability is especially helpful in studies of small populations and populations with low levels of gene flow. Microsatellites are readily amplified using PCR. Alleles can be resolved using high resolution agarose. Twelve potential tri- and tetra-meric repeat motif microsatellite loci were developed and tested for amplification in lake sturgeon. Five of the twelve amplified well and were further tested for inheritance by examining genotypes of progeny from single pair matings. Locus LS-62 was monomorphic in all the families tested. The four polymorphic loci (LS-19, 34,39 , and 68) were tested for disomic or tetrasomic mode of inheritance using a Chi Square test. Two loci exhibited disomic inheritance and two loci exhibited tetrasomic inheritance. These loci are being used to structure natural populations and to estimate their effective population sizes. Information that microsatellites provide are also be used to formulate recommendations for fishery managers involved in restoration projects.

Contributed paper - student

# Behavioral Response of Emergent Lake Trout Fry to the Presence of the Alewife, a Non-Native Pelagic Predator 

Timothy R. Strakosh and Charles C. Krueger<br>Cornell University<br>Department of Natural Resources<br>206D Fernow Hall Ithaca New York, 14853

The lack of success in restoration of lake trout (Salvelinus namoycush) to some areas of the Great Lakes has been linked to fry predation by the non-native alewife (Alosa pseudoharengus). The purpose of this study was to determine whether emergent, free-swimming lake trout fry innately recognize alewives as predators or must learn that they are predators through encounters. Laboratory tanks were used to compare the vertical distribution of free-swimming lake trout fry with and without the alewife. Lake trout fry in the presence of alewives were concentrated near the top (surface) and bottom zones in the tanks, unlike the control tanks where the fry were distributed in the middle and bottom zones. Surface orientation of fry in the presence of a predator may occur because native predators of lake trout fry are benthic. Fry could increase their predation risk from non-native, pelagic alewives as they flee to the surface. Alewives were also introduced into tanks with naive lake trout fry to observe whether or not the avoidance response was immediate (innate)or required an encounter (learned). Lake trout fry distributions in four tanks were compared before and after alewife introduction. Many fry moved immediately into the substrate within the first 1-2 minutes after alewives were introduced while others remained distributed near the surface. Immediate recognition by fry supports the hypothesis that fry innately recognize alewives as predators.

Contributed paper - student.

# Impediments to colonization of Lake Ontario by Blueback Herring 

R. W. OWENS and R. O' GORMAN<br>USGS Biological Resources Division<br>Great Lakes Science Center<br>Lake Ontario Biological Station<br>17 Lake Street<br>Oswego, New York 13126<br>E. L. MILLS and L. G. RUDSTAM<br>Department of Natural Resources<br>Cornell University Biological Field Station<br>900 Shackelton Point Road<br>Bridgeport, New York 13030

J. J. HASSE<br>New York Department of Environmental Conservation<br>207 Genesee Street<br>Utica, New York 13503

B. H. KULIK

Kleinschmidt Associates
75 Main Street, P.O. Box 576
Pittsfield, Maine 04967
D. B. MACNEILL

New York Sea Grant, Morgan III
SUNY Brockport
Brockport, New York 14420
Two immature blueback herring (Alosa aestivalis) captured in Lake Ontario in October 1995 mark the first record of this anadromous marine clupeid in the Great Lakes. Blueback herring most likely invaded the Great Lakes via the Erie Canal, a navigation canal that links the Mohawk-Hudson watershed, which drains to the Atlantic Ocean, to Oneida Lake, which drains to Lake Ontario through the Oneida-Oswego Rivers. In spring, blueback herring run up the Hudson River to spawn but obstacles denied them access to the upper Mohawk River until canals were built in the early 1800s. Blueback herring currently spawn in several tributaries to the Mohawk River, including one near Rome, N.Y. (about 420 km from the ocean and 27 km from Oneida Lake).They were first noted in Oneida Lake in 1982 and, in fall 1994, large numbers of young blueback herring were observed in the Oswego Rivers. Blueback herring have colonized reservoirs in the southem United States and thus have the potential to colonize Lake Ontario. There are, however, several major impediments to colonization -- cold winter water temperatures, limited number of tributaries suitable for spawning, competition from alewives (Alosa pseudoharengus), and piscivorous salmonines.

Contributed paper - professional

# Temporal and Spatial Variation of the Littoral Zone Fish Community of Oneida Lake, NY 

Spencer R. Hall and Dr. Mark H. Olson<br>Cornell Biological Field Station<br>900 Shackleton Point Road<br>Bridgeport, NY 13030

Much of our understanding of complex interactions of community structure in lakes has come from research of planktonic communities. Yet limnologists can maximize their contributions to community ecology by studying and understanding variation of the littoral zone. We examined temporal and spatial variation of the littoral zone fish community of Oneida Lake, NY, during early June through mid-August 1996. Using a seine we sampled littoral fish on within-day and weekly temporal scales at three diverse sites. To quantify extant littoral zone dynamics, we considered fluctuations of four community level indices (diversity, evenness, richness, and abundance) and two species-level indices (abundance and mean size). Using repeated-measures ANOVA and regression analysis, we found decreasing and highly significant trends of diversity and evenness accompanied by an increasing trend of abundance on a weekly scale. In some cases, variation of these indices between sites and interactions of temporal and spatial variation were important. Richness did not vary between sites and weeks, and variation on a daily time scale was insignificant. Yellow perch, the most dominant of the 8 species studied, increased in abundance dramatically throughout the summer as age-0 individuals used the littoral zone. Changes in yellow perch determined, in large part, fluctuations of community evenness, diversity, and abundance. Several other species (white sucker, logperch, largemouth bass, perhaps pumpkinseed) exhibited variations of similar patterns, while others differed (Notropis spp., banded killifish, bluntnose minnow). The degree of temporal and spatial variation varied between species. Consequently, the shallow littoral zone fish community of Oneida Lake is dynamic on a temporal, and to a lesser degree, a spatial scale at both the community and the species level.

Contributed paper - student

# The Pelagic Fish and Zooplankton Communities of Otsego Lake: Alewife (Alosa Pseudoharengus) Abundance, Zooplankton Size, and Limnological Trends. 

DAVID WARNER and WILLARD HARMAN<br>S.U.N.Y. Oneonta Biological Field Station<br>R.D. 2 Box 1066<br>Cooperstown, N. Y. 13326<br>LARS RUDSTAM<br>Cornell University Biological Field Station<br>900 Shackelton Point Road<br>Bridgeport, N.Y. 13030

Alewife were introduced to Otsego Lake (Otsego county, New York) in 1986. Changes since alewife introduction include reduction or elimination of several native planktivorous fish, a drastic decline in the crustacean zooplankton community and a decline in the mean length of zooplanktonic organisms. The algal community has shifted toward dominance by cyanophytes. Secchi transparency has declined, while chlorophyll a and areal hypolimnetic oxygen deficit (AHOD) has increased. Alewife abundance, size, biomass, and distribution data were collected acoustically and by netting with a trawl, trapnet, and seine. Zooplankton abundance and size data were provided from archived samples collected in 1992 and from biweekly collections starting 5/28/96 and ending October 1996. The pelagic fish community is dominated by alewife ( $97.6 \%$ of trawl and gillnet catch). Smelt are also present. Five years of trapnet data indicate a significant number of alewife migrate to embayments in May/June and can be found there until August/September. Mean size of mid-lake crustacean zooplankton decreased following the movement of these alewife offshore. Alewife density was estimated to be between 2000 and 7000 fish per hectare. Trap net CPUE was higher in 1996 than in five previous years.

Contributed paper - student

# White Perch Trophic Dynamics: Diet, Growth, and Bioenergetics 

WEIMER, M.T., and BRANDT, S.B.
Buffalo State College
1300 Elmwood Ave.
Buffalo, N.Y. 14222

The white perch (Morone americana) is an abundant benthivore in the freshwater, oligohaline, and mesohaline portions of the Chesapeake Bay estuary, and may have significant effects upon the macrobenthic community of the Bay. White perch are fished commercially and recreationally in many coastal waters, and provide a prey resource to larger piscivores such as striped bass and bluefish. As part of our overall goal to define the role of the white perch in the Bay's food web, we examined the diet, growth, and bioenergetics of this species. White perch were sampled during different seasons (April, June, October, and December) of 1995 and 1996 over a 24 hour period with bottom trawls. Fish lengths, wet weights, and ages were assessed. White perch showed seasonal differences in diet composition, consuming mainly amphipods, polychaetes, neomysids, and isopods during spring and summer, with a shift toward decapod, bivalve, and fish consumption later in the year. Consumption estimates derived from the bioenergetics model and used to estimate the daily ration were compared to direct measures of diel and seasonal predation rates on various prey types. Overall, white perch appear to play a dominant role in the benthic food-web interactions in many regions of the Chesapeake Bay.

Contributed paper - student

The Effects of Long-term Copper Sulfate Use on the Toxicity of Lake Sediments

H. A. Simonin and E. A. Paul<br>New York State Department of Environmental Conservation (NYSDEC)<br>Rome, NY<br>G. Neuderfer, R. Bauer<br>NYSDEC<br>Avon, NY<br>and<br>T. Gudlewski<br>NYSDEC<br>Hale Creek, NY

Copper sulfate has been widely used for algae control for over 50 years. Due to concerns regarding potential impacts of long-term copper sulfate use, we conducted a study of lake sediments from 15 New York lakes, 9 of which had received many years of copper sulfate treatments. Using a triad approach we collected sediment samples from each lake for copper analysis, conducted laboratory toxicity tests of the sediment using Chironomus tentans and Hyallela azteca, and collected and identified benthic invertebrate samples. The lakes which had received copper sulfate treatments had significantly higher levels of copper (up to 894 ppm on a dry weight basis) in the sediment than did the untreated lakes. Despite high copper concentrations, we observed relatively little impact on the survival and growth of C. tentans or H. azteca in the toxicity tests. Limited Ceriodaphnia toxicity testing of the pore water did show significant mortality in the sample with the highest pore water copper concentration. The benthic macroinvertebrates collected from the lakes treated with copper sulfate appear to be similar to those collected from untreated lakes. The burrowing mayfly Hexagenia was found in $60 \%$ of the untreated lakes but in none of the treated lakes. An evaluation of the overall impacts of copper on the lake sediments and possible implications will be presented.

Poster presentation - professional

# Ecological Risk Assessment Process for Pesticide Registration in New York State 

Timothy J. Sinnott, Tracey M. Tomajer, and Jack G. Cooper<br>New York State Department of Environmental Conservation<br>Division of Fish, Wildlife and Marine Resources<br>Bureau of Environmental Protection<br>50 Wolf Road<br>Albany, NY 12233

New York requires that all pesticides be registered by the state as well as the EPA. The Bureau of Environmental Protection of the Division of Fish, Wildlife \& Marine Resources is responsible for conducting ecological risk assessments of pesticide products that are submitted for state registration review. The result of an ecological risk assessment, along with human health and groundwater risk assessments, is used in the decision whether or not to register a new product for use in New York. In order to assess the potential risk of new pesticides consistently and in a timely manner, the Bureau of Environmental Protection developed the Pesticide Screening System (PSS). The PSS is a system of computer models that evaluate the potential for adverse impacts from new pesticides. For mammalian and avian species, the PSS models various residue levels on treated vegetation and compares the results to dietary toxicity thresholds. The aquatic component of the PSS compares the concentration of a pesticide in different-sized ponds that could result from various concentrations of pesticide runoff with fish and aquatic invertebrate $\mathrm{LC}_{50}$ and No Observered Effects concentrations. The results of the models are conservative, and are used as a screening tool. Pesticides with aquatic and terrestrial residue levels that do not exceed toxicity thresholds are considered to be of little risk, and are recommended for registration. If a product does not pass the screening, additional data is sought from the product manufacturer that addresses the specific concern identified by the PSS.

Poster presentation - professional

NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY c/o NYSDEC, Room 530, 50 Wolf Road, Albany, New York 12233-4756

March 4, 1997
Owego Treadway Inn and Conference Center 1100 State Route 17C
Owego, New York 13827

## ATTN: Debra Lewis

Dear Ms. Lewis:
I am writing to remit payment for the 1997 Annual Meeting of the New York Chapter of the American Fisheries society, which was held at the Owego Treadway Inn January 30 - February 1, 1997. The accommodations and service provided by the Owego Treadway Inn were excellent and contributed to the overall success of the meeting.

Allan Peterson, of our program committee, forwarded the bill to me for payment. However, in reviewing the bill, we became aware of two discrepancies:

1) The charges for the morning coffee breaks and for the afternoon breaks was incorrect: The charge on the bill was $\$ 3.25$ each for the morning breaks, and $\$ 4.00$ each for the afternoon breaks. However, the prices on the contract for the meeting arrangements were $\$ 2.85$ each for the morning breaks and $\$ 3.75$ for the afternoon breaks (See pages 7 and 8 of the attached copy of the bill). This results in a $\$ 131.50$ correction of the original bill from $\$ 7040.78$ to $\$ 6909.28$.
2) Our chapter held a workshop at the Owego Treadway Inn during October 1996. The workshop committee was surprised that a service charge that they had not anticipated was added to their overall bill. When that occurred Allen Peterson contacted the Treadway Inn regarding the plans for our meeting, and was informed that we would not be billed for a service charge. We therefore priced our registration accordingly and per your information, did not collect monies to cover any service charge. The bill, however, does include service charges as follows: $\$ 75.70$ for the Thursday evening social on 30 Jan, $\$ 838.81$ for the luncheon buffet, breaks, and banquet on Friday, 31 Jan, and $\$ 94.05$ for the Saturday morning coffee break on 1 Feb (see pages 6, 7, and 8 of the attached copy of the bill). This results in a $\$ 1,008.56$ adjustment of the bill from \$5,900.72.

Allen Peterson contacted you on February 11 to discuss these discrepancies, and has not yet heard back. We have held our annual meetings at the Owego

Treadway every year since 1990 except for 1996，when we met jointly with another group．This past year，like all other years，we have been very pleased with the exceptional service and arrangements provided．For that reason，I thought it best to pay the bill immediately．Please find enclosed a check for $\$ 5,900.72$ to cover the payment for most of they items on the bill．I hope we will come to a quick resolution on the other items，as discussed above．

Thank you again for helping to make our meeting a success．

## Sincerely，



Timothy J．Sinnott Secretary／Treasurer NY Chapter，AFS
attachment




March 3, 1997
Owego Treadway Inn and Conference Center 1100 State Route 17C
Owego, New York 13827

## ATTN: Debra Lewis

Dear Ms. Lewis:
I am writing to remit payment for the 1997 Annual Meeting of the New York Chapter of the American Fisheries society, which was held at the Owego Treadway Inn January 30 - February 1, 1997. The accommodations and service provided by the Owego Treadway Inn were excellent and contributed to the overall success of the meeting.

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1) The charges for the morning coffee breaks and for the afternoon breaks was incorrect. The charge on the bill was $\$ 3.25$ each for the morning breaks, and $\$ 4.00$ each for the afternoon breaks. However, the prices on the contract for the meeting arrangements were $\$ 2.85$ each for the morning breaks and $\$ 3.75$ for the afternoon breaks (See pages 7 and 8 of the attached copy of the bill). This results in a $\$ 131.50$ correction of the original bill from $\$ 7040.78$ to $\$ 6909.28$.
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Allen Peterson contacted you on February 11 to discuss these discrepancies, and has not yet heard back. We have held our annual meetings at the Owego Treadway every year since 1990 except for 1996, when we met jointly with another group. This past year, like all other years, we have been very pleased with the

## DRAFT

exceptional service and arrangements provided. For that reason, I thought it best to pay the majority of the bill immediately. Please find enclosed a check for $\$ 5,900.72$ to cover the payment for most of they items on the bill. I hope we will come to a quick resolution on the other items, as discussed above.

Thank you again for the helping out meeting to be a success.
Sincerely,

Timothy J. Sinnott
Secretary/Treasurer NY Chapter, AFS

Jo: $\operatorname{dim}$ Senate
Som: Alter Peterson

New York State Department of Environmental Conservation Room 576, 50 Wolf Road, Albany, Now York 12233-4756

Division of Fish, Wildlife and Marine Resources


John P. Cathill Acting Commissioner Bureau of Environmental Protection Standards and Criteria Unit FACSIMLE TRANSMISSION COVER SHEET

Voice phone (518) 457-0758
FAX phone (518) 485-8424

TO: len Peterson
subject: Af BLL for meeting
$\qquad$
W, TH yon, OS WG DUSCASSGD LAST
FROM: Timothy J. Sinnott, Biologist 2 (Ecology)



## DRAFT

NEW YORK Chapter - a mineilcan fisheries society coo NYSDEC. Roam 530, 50 Wolf Rad, Albany, New York 12233-4756


Owego Treachway Inn and Conference Center

I am writing to remit payment for the 1997 Annual Meeting of the New York Chapter of the American Fisheries society, which was held at the Owego Treactway Inn January 30 - February 1. 1997. The accommodations and service provided by the Owego Treadway Inn were excellent and contributed to the overall success of the meeting.

Allan Peterson, of our program committee, forwarded the bill to me for payment. However, in reviewing the bill, we became aware of two discrepancies:

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hel ping to make our
Thank you again for the helpiagent meeting to be a success.
Sincerely,

Timothy J. Sinnott
Secretary/Treasurer
NY Chapter, AFS

## DRAFT



OWEGO TREADWAY INN AND CONFERENCE CENTER

1100 STATE ROUTE 17 C OWEGO, NEW YORK 13827

607-687-4500 OR 607-754-4000
FAX: 60T-687-2456
FAX COVER SHEET To $\quad$ 尘
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AMERICAN FISHERY SOCIETYALLEN PETERSON PQ BOX 3607 EINGHAMTON

NEW YORK 13902



OWEGO TREADWAY INN
1100 ST゙AT゙E ROUTE 17 C
OWEGO, NY
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NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY coo NYSDEC, Room 575, 50 Wolf Road, Albany, New York 12233-4756

February 11, 1997

Owego Treadway Inn and Conference Center
1100 State Route 17 C
Owego, New York 13827
Dear sir/ma'am:
Please find enclosed a check for $\$ 6,909.28$ to cover the costs of our annual meeting held at the Owego Treadway Inn January 30-Feb 1, 1997. This sum results from a $\$ 131.50$ correction of the original bill, which was for $\$ 7,040.28$. The billing error occurs on pages seven and eight, where morning breaks were mistakenly billed at $\$ 3.25$ each instead of the contract price of $\$ 2.85$ each, and the afternoon breaks were billed at $\$ 4.00$ each instead of the contract price of $\$ 3.75$ each.

Again, as in the past, I thank you for the excellent service and hospitality that the Owego Treadway Inn provided.

Sincerely,


Timothy J. Sinnott
Secretary/Treasurer
NY Chapter, AFS


NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY coo NYSDEC, Room 576, 50 Wolf Road, Albany, New York 12233-4756

March 10, 1997
Owego Treadway Inn and Conference Center 1100 State Route 17C
Owego, New York 13827
ATTN: Debra Lewis

## Dear Ms. Lewis:

I received your letter of March 6, 1997 and conferred with Allen Peterson. He is on the program committee and is responsible for making decisions regarding the arrangements. His recommendation was that the chapter pay the difference in the price for the morning and afternoon breaks, and the service charges. Based on Allen's recommendations, I have enclosed a check for $\$ 1140.06$. Combining this payment with the $\$ 5,900.72$ that we have already submitted shows a final total payment of $\$ 7040.78$.

Sincerely,


Timothy J. Sinnott
Secretary/Treasurer
NY Chapter, AFS


March 6, 1997
Mr. Timothy J. Sinnott
New York Chapter, AFS
c/o NYSDEC
Room 576, 50 Wolf Road
Albany, New York 12233-4756

Dear Mr. Sinnott:


Thank you for your recent letter and payment. I appreciate all the concerns you outlined and had discussed some of them with Mr. Peterson in February. I agree that it was a outstanding conference and were looking forward to working with the group again.

After Allen's call, I reviewed the billing for the conference and it left me with quite a deliemma. Allen was correct in that the breaks were quoted at a lower price to him, however the final contracts generated in January had the correct higher prices as ALL our break menus were increased on January 1, 1997. I know that our management's position will be that the back page of the contract clearly states that we have the right to change our pricing any time within six months of the function and they have not been flexible about this in other cases. The menus that Allen received also state the service charge must be added to all prices. The item that gives me the most cause for concern however, is that they also state "guaranteed count required 5 business days prior to function" and that the billing will reflect the guaranteed number of guests or the actual number, depending upon which number is higher. When I spoke with Allen on the Monday prior to the conference, the number of guests that he guaranteed was 150 guests. As you can see, that was the number that was used for billing until after Friday lunch. After lunch, Allen stopped down to the office and told me that registration was "off" and that count was really more like a 110 guests, not 150 . I altered the billing for the Friday night banquet and Saturday's breaks to reflect this fact.

This is where the problem lies. If I bring this bill to my manager's attention, he will want to know why the guarantee was not charged and will charge it. What I did was highly irregular, but I did it for the group. The difference in the billing will be considerable: $(40 \times \$ 3.25,40 \times \$ 1.50$, and $40 \times 13.95$ plus
service charge $=\$ 882.00)$.

I guess I am at a loss on how to proceed. The partial payment helps, but they will expect full payment and all is according to the contract stipulations. Please let me know how you would like me to proceed.

cc: Mr. Allen Peterson

1100 State Route 17C

## MR. ALLEN PETERSON

Thank you for selecting our services. Please review, make any corrections or deletions, sign, and return along with your deposit, if required, within 10 days to make this agreement effective. Please remember to keep one copy for your records.

We are looking foward, with pleasure to being of service to you.
In order to assist you in making your function a success, may we remind you that the following requirements are necessary. The final guest count is due five (5) working days prior to the scheduled event. "


I have read and agree to the above information.


All agreements unless in writing and contained herein are invalid and not binding upon the Owego Treadway Inn and Conference Center.

A deposit may be required to hold a function date. The balance due to be paid by the engagor (customer) at the conclusion of the function. The Owego Treadway Inn and Conference Center will not accept post dated checks. In the event of cancellation by the engagor (customer) the deposit shall be retained by the hotel and not refunded to engagor (customer). Prices extended over a six (6) month period subject to change.

Within 48 hours of your event, should the client request a change of meeting room(s) and or set-up, the Owego Treadway Inn and Conference Center reserves the right to charge the client for such changes.

The hotel is not liable for failure to complete contract due to causes beyond its control.
This function is scheduled for the time designated on the reverse side. Any deviation from that must be arranged with management an may result in additional charges.

The hotel reserves the right to cancel arrangements at any time when the functions are of a nature not acceptable to the Owego Treadway Inn and Conference Center.

The hotel reserves the right to change function rooms when an increase or decrease in attendance warrants a change.

All food and beverage must be purchased from the hotel and patrons of this function will not permitted to bring in their own.

It is the responsibility of the engagor (customer) to see no one under the age of twenty-one (21) years of age consumes alcoholic beverages.

Final guarantee number of covers is required 72 hours prior to the function unless specified differently. Otherwise "Number of Covers Expected", on reverse side, will be considered the guaranteed count and will be billed as such.

Nothing is to be tacked, nailed or otherwise fastened to the walls or fumiture of the hotel which would damage, mar or soil such property. Any damage to walls, rugs, or hotel furnishings will be chargeable to the engagor (customer). We will not be responsible for the equipment left in meeting rooms. Engagor (customer) must notify Banquet office when meeting is over.

The engagor (customer) assumes the responsibility for any and all damages to hotel property or for any injury to any of the employees or guests of the hotel caused by the acts of conduct of the engagor (customer) or any of the guests at this function.

The Owego Treadway Inn and Conference Center are smoke free facilities. Smoking is allowed only in designated areas outside our building.
(I), (We) hereby agree and contract for the foregoing. (I), (We) guarantee payment of monies due thereunder as set forth in this agreement. (I), (We) further represent that (I), (We) are authorized to sign this agreement.

Signed: $\qquad$ Date: $\qquad$

# New York and Pennsylvania Chapters American Fisheries Society 

Joint Meeting - January 30 - February 1, 1997
Treadway Inn, Owego, NY

## Meals and Conference Fees

Lunch and Dinner on Friday, January 31 are included in the conference fee.
Meeting attendees will be on their own for breakfast. Fees will be payable at the meeting.
Conference fee, Chapter ${ }^{1}$ Member.
Conference fee, Student Member
Conference fee, Non-Member. .$\$ 65.00$

## ${ }^{1}$ New York or Pennsylvania Chapter - AFS

ACCOMMODATIONS
Reservations must be made by January 14, 1997 to guarantee room rates. Reservations should be made directly with the OWEGO TREADWAY INN by contacting the front desk by telephone: (607) 687-4500 or (607) 754-4000; or by mailing this form to:

Treadway Inn, 1100 State Road, Rte. 17C, Owego, NY 13827
Cancellations, changes or additions to any reservation may be made at the above number.

NAME:
ADDRESS:

## PHONE NUMBER:

$\square$
ARRIVAL DATE and TIME: NO. OF NIGHTS: $\qquad$

Rates: $\$ 49.00+$ tax / room (single, double, triple or quad occupancy)
Please check type of accommodation:
Rooms(s) with king/queen bed
$\qquad$
Number of guests $\qquad$ Room(s) with two double beds

Smoking and nonsmoking rooms available upon request. All rooms subject to availability. Reservations will be held until 6:00 PM on the date of arrival unless a $\$ 10$ nonrefundable deposit is sent or credit card name, number and expiration date supplied.
Credit Card: $\qquad$



# MEMBERSHIP DIRECTORY 

1997-1998

Past Presidents

1966
1967
1968
1969
1970
1971
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John Gould
Robert Zilliox
Udell Stone
William Flick
Paul Neth
Robert Griffith
Howard Loeb
Martin Pfeiffer
William Pierce
William Pierce
Robert Werner
C. Lavett Smith

Bruce Shupp
Philip Briggs
John Grim
Joseph Gorsuch
Steven Gloss
James Haynes
Lawrence Skinner
Gerald Barnhart
Michael Dutweiler
Robert Lange
Frank Panek
James Winter
Barbara Knuth
Tom Field
Neil Ringler
Edward Mills
Paul McKeown
Don Einhouse
Douglas Stang
Lars Rudstam

Honorary Members
John Forney
Steven Gloss
Joseph Gorsuch
William Pierce
Gaylord Rough
Bruce Shupp

## Professional Achievement Award

Robert Engstom-Heg
David Green
Edward Mills
Neil Ringler
C. Lavett Smith

Robert Werner

## CHAPTER AWARDS

NED Best Chapter Award - 1994
NED Best Chapter Award - 1995
(This list may be incomplete - if you are aware of other award recipients, please contact John Homa)

| NAME and | ADDRESS |  | TELEPHONE |
| :--- | :--- | :--- | :--- |
| AFFILIATION | 425 JORDON RD | (H) | $518-732-4335$ |$]$ YEAR PAID


| 1997 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| CAMPBELL, JACK | 6373 TUCKAHOE RD | (H) | (315) 483-2331 | 98 |
| SODUS CENTRAL | WILLIAMSON, N.Y. 14589 | (W) | (315) 589-8058 |  |
| CARLSON, DOUG | NYS DEC | (H) | (315) 688-2805 | 97 |
| NYSDEC | 317 WASHINGTON ST WATERTOWN, NY 13601 | (W) | 315-785-2262 |  |
| CASTRO, LEONARDO CHILE |  | (H) |  | 96 S |
|  |  | (W) |  |  |
| CHEUNG, PAUL J. NY AQUARIUM | NEW YORK AQUARIUM W 8TH ST. CONEY ISLAND BROOKLYN, NY 11224 | (H) |  | 97 |
|  |  | (W) |  |  |
| CHIOTTI, TOM NYSDEC | 83 MORRIS ROAD FREEVILLE, NY 13068 | (H) | 607-838-3733 | 97 |
|  |  | (W) | 607-753-3095 |  |
| CHIPMAN, BRIAN VERMONT F\&W | 111 WEST ST ESSEX JUNCTION, VT 05452 | (H) | (802) 899-4276 | 97 |
|  |  | (W) | (802) 878-1564 |  |
| CHISHOLM, DAVE <br> LEMOYNE COLLEGE | 5100 HIGHBRIDGE \#26E FAYETTEVILLE, NY 13066 | (H) <br> (W) | (315) 637-5465 (315) 445-4724 | 97 |
|  |  |  |  |  |
| CHYTALO, KAREN NYSDEC | 14 BUCKINGHAM MEADOW E. SETAUKET, NY 11733 | (H) <br> (W) | (516) 751-3723 <br> (516) 444-0468 | 97 |
|  |  |  |  |  |
| CLOCK, JEFFREY A. CENT, HUDSON,G,E,C. | 284 SOUTH AVE <br> POUGHKEEPSIE, NY 12601 | (H) <br> (W) | 914-486-5534 | 96 |
|  |  |  |  |  |
| COLESANTE, RICHARDNYS DEC | 66 CORT 23 | (H) | 315-623-9475 | 97 |
|  | CONSTANTIA, NY 13044 | (W) | 315-623-7311 |  |
| COLQUHOUN, JAMES | 56 PAXWOOD ROAD | (H) | 518-439-1231 | 97 |
| NYS DEC | DELMAR, NY 12054 | (W) | 518-457-6178 |  |
| CONOVER, DAVID O. | MAR SCI RES CTR STONY BROOK, NY 11794 | (H) |  | 97 |
|  |  | (W) |  |  |
| COOPER, JOHN E. | 1444 Co Rt 23 CONSTANTIA, NY 13044 | (H) |  | 97 |
|  |  | (W) |  |  |


| 1997 |  |  |  |  |
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| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| DEY, WILLIAM P. | EA ENG SCI TECH | (H) |  | 97 |
| EA ENG SCI TECH | 3 WASHINGTON CTR NEWBURGH, NY 12550 | (W) |  |  |
| DILAURO, MARTIN | USGS/BRD-R\&D LAB | (H) |  | 97 |
| USGS/BRD-R\&D LAB | RD \#4 BOX 63 WELLSBORO, PA 16901 | (W) |  |  |
| DILERNIA, ANTHONY | 58-23 196 Pl | (H) |  | 97 |
|  | FRESH MEADOWS, NY 11365 | (W) |  |  |
| DUNNING, DENNIS J. NYPA | CIO NY POWER AUTHORITY | (H) |  | 97 |
|  | 123 MAIN STREET <br> WHITE PLAINS, NY 10601 | (W) |  |  |
| DURFEY, LANCE | 16 LINCOLN DRIVE | (H) |  | 97 |
|  | TUPPER LAKE, NY 12986 | (W) |  |  |
| EARNEST-KOONS, CORNELL UNIVERSITY | DEPT OF MICROBIOL \& | (H) | (607) 272-8784 | 965 |
|  | CORNELL UNIVERSITY ITHACA, NY 14853 | (W) | (607) 253-3365 |  |
| EATON, SHERI M. | 22 1/2 HELEN AVE | (H) |  | 97 |
|  | CORTLAND, NY 13045 | (W) |  |  |
| ECKERT, THOMAS H | BOX 43 | (H) |  | 97 |
|  | CAPE VINCENT, NY 13618 | (W) |  |  |
| EDELSTEIN, KARENCORNELL UNIVERSITY | 109 FERNOW HALL | (H) | 607-533-7778 | 97 |
|  | CORNELL UNIVERSITY ITHACA, NY 14853 | (W) | 607-255-2834 |  |
| EDISON, KATHLEEN S. | PO BOX 922 | (H) |  | 97 |
|  | ITHACA, NY 14851 | (W) |  |  |
| EINHOUSE, DONALD NYSDEC | 11344 DENNISON RD | (H) | (716) 9659799 | 97 |
|  | SILVER CREEK, NY 14136 | (W) | (716) 3660228 |  |
| ELLER, JEFFREY <br> NYSDEC | 109 BERGDORF RD | (H) | (315) 625-7835 | 97 |
|  | PARISH, NY 13131 | (W) | (315) 298-5051 |  |
| ELROD, JOSEPH | USFWS | (H) | 315-342-2227 | 97 |
| USFWS | 17 LAKE STREET OSWEGO, NY 13126 | (W) | 315-343-3951 |  |

NAME and
AFFILIATION
GALATI, JOSEPH
NYS DEC

GANDINO,
SUNY ESF

GARIBALDI, LOUIS NY AQUARIUM

GIBBONS, NICK
GL SPORT FISHING
GLOSS, STEVEN USFWS-U. OF

GOEHLE, MICHAEL

GORSUCH, JOSEPH EASTMAN KODAK

GREEN EDWARD G
GREEN, DAVID

GREULICH, ANDY NYSDEC

GRIM, JOHN
NE BIOLOGISTS INC

1997
ADDRESS
2527 PALM ROAD
JAMESTOWN, NY 14701

7417 MUENCH ROAD LIVERPOOL, NEW YORK

NEW YORK AQUARIUM
BOARDWALK AT W 8TH BROOKLYN, NY 11224

5 PEBBLE LANE
HUNTINGTON STA. NY 11746
P.O. BOX 297

ELMHURST, ILL 60126
U. OF WYOMING BOX 3067 UNIVERSITY STATION LARAMIE, WYOMING 82071

## 376 ROAT DRIVE ANGOLA, NY 14006

> 79 GURN SPRING RD GANSEVOORT, NY 12831

34 ALDEN GLEN DRIVE WEBSTER, NY 14580

RR1 BOX 637 LARAWAY RD CAYUGA, NY 13034

## PO BOX 1865

RICHFIELD SPRGS, NY 13439
8 RESIDENCE ROAD
ALTMAR, NY 13302

ONE KERR ROAD
RHINEBECK, NY 12572

|  | TELEPHONE | YEAR PAID |
| :--- | :--- | :---: |
| (H) | (716) 483-1368 | 97 |
| (W) | (716) 372-0645 |  |

(H) 315-457-3079 96 (W)
(H)
(W)
(H) (716) 271-9048 (W)
(H)
(W) (630) 941-1351
(H)
(W) 307-766-2143
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(H) 716-872-0483
D.HO
(W) 716-588-2140
(H)
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(H) (315) 855-0301

97
(W)
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(W) 315-298-5051
(H) 914-876-4786

97

|  | 1997 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| HOFFMAN, THOMAS | 8737 LAKE RD | (H) |  | 97 |
|  | BARKER, NY 14012 | (W) | (716) 542-5544 |  |
| HOHREITER, DAVID | BLASLAND \& BOUCK ENG. | (H) |  | 97 |
| BLASLAND\&BOUCK | 6723 TOWPATH RD BOX 66 SYRACUSE, NY 13214 | (W) |  |  |
| HOLLEY, KEITH A. | 17 WOODWARD PKWY | (H) | (516) 735-5622 | 97 |
| NYSDEC | FARMINGDALE, NY 11735 | (W) | (516) 440-0280 |  |
| HOLMES, EDWARD D. | 7000 CLEARY RD. | (H) |  | 97 |
|  | HEMLOCK, NY 14466 | (W) |  |  |
| HOMA, JOHN ICHTHYLOGICAL | ICHTHYLOGICAL ASSOC. | (H) | (607) 272-3778 | 97 |
|  | 50 LUDLOWVILLE RD | (W) | (607) 533-8801 |  |
|  | LANSING, NY 14882 |  |  |  |
| HONDORP, DARRYL | 22 WOODWARD AVE \#3 | (H) |  | 97 |
|  | BUFFALO, NY 14202 | (W) |  |  |
| HOUSTON, LEONARD | 238 79TH ST. | (H) |  | 97 |
|  | BROOKLYN, NY 11209 | (W) |  |  |
| HUGHES, THOMAS CORNELLU | PO BOX 475 | (H) | (315) 369-2697 | 97 |
|  | OLD FORGE, NY 13420 | (W) | (315) 369-6781 |  |
| HULBERT, PHILIP NYSDEC | R.D. 1, BOX 622 | (H) | 607-278-5490 | 96 |
|  | E MEREDITH, NY 13757 | (W) | 518-457-6937 |  |
| HURST, STEPHEN S. | 3276 WALDEN OAKS BLVD | (H) | (607) 758-3143 | 96 |
|  | CORTLAND, NY 13045 | (W) | (607)753-3095 |  |
| HURST, THOMAS P. | MAR SCI RES CTR | (H) |  | 975 |
|  | SUNY AT STONY BROOK | (W) |  |  |
| HYATT, WILLIAM A | 42 KENNETH DR | (H) |  | 96 |
|  | GLASTONBURY, CT 06033 | (W) |  |  |
| ISLAM, AKM NAZRUL | DEPT OF ENV MEDICINE | (H) |  | 96 S |
|  | NYC MED LONG MEADOW TUXEDO, NY 10987 | (W) |  |  |


| 1997 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| KING, LAURENCE R. | 18 SHARON STREET | (H) |  | 97 |
|  | SIDNEY, NY 13838 | (W) |  |  |
| KIRK, WILLIAM L. | RM 306-5 4 IRVING PL. NEW YORK, NY 10003 | (H) |  | 97 |
|  |  | (W) |  |  |
| KNUTH, BARBARA | 122A FERNOW HALL | (H) | 607-539-6635 | 97 |
| CORNELL UNIVERSITY | CORNELL UNIVERSITY ITHACA, NY 14853 | (W) | 607-255-2822 |  |
| KOCIK, JOHN F. NATL MARINE FISH | NOAANMFS/NEFSC | (H) | (508) 477-5617 | 97 |
|  | 166 WATER ST. <br> WOODS HOLE, MA 02543 | (W) | (508) 548-5123 |  |
| KOSCHNICK, TAYLER | 11550 N MERIDIAN ST | (H) |  | 97 |
|  | STE 180 | (W) |  |  |
|  | CARMEL, IN 46032 |  |  |  |
| KOTILA, PAUL M | NATURAL SCIENCE DIVISION | (H) | 603-585-6508 | 97 |
| FRANKLIN PIERCE | FRANKLIN PIERCE COLLEGE RINDGE N. HAMPSHIRE 03461 | (W) | 603-899-4255 |  |
| KOZLOWSKI, GREG | 24 GAYMOR LANE | (H) | (516) 543-2587 | 96 |
| NYDEC | COMMACK, NY 11725 | (W) | (516) 444-0283 |  |
| KRUEGER. CHARLES C. CORNELL | 206 D. FERNOW HALL CORNELL UNIVERSITY ITHACA, NY 14853 | (H) |  | 97 |
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| KURTENBACH, JIM | 2890 WOODBRIDGE AVE | (H) | (908) 453-4866 | 97 |
| US EPA REGION II | EDISON, NJ 08837 | (W) | (908) 321-6695 |  |
| KURTZ, ROBERT J | 27 SMITH STREET | (H) | 516-561-6429 | 97 |
| US ARMY CORP OF | VALLEY STREAM, NY 11580 | (W) | 201-656-4749 |  |
| LA PAN, STEVEN | NYSDEC | (H) |  | 96 |
| NYSDEC | DULLES ST OFF 317 WASH | (W) | 315-785-2262 |  |
| LAKE, TOM R. | 3 STEINHAUS LANE WAPPINGERS FALLS NY | (H) | 914-296-5875 | 97 |
|  |  | (W) |  |  |
| LANDEAU, LAURIE | 367 ASHAROKEN AVE | (H) |  | 97 |
|  | NORTHPORT, NY 11768 | (W) |  |  |


|  | 1997 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| MALCHOFF, MARK | NY SEA GRANT - CORNELL | (H) | 516-369-1935 | 97 |
|  | 39 SOUND AVENUE RIVERHEAD NY 11901 | (W) | 516-727-3910 |  |
| MANOR, PHILIP | JOHN WILEY \& SONS | (H) |  | 97 |
| JOHN WILEY \& SONS | 605 THIRD AVE <br> NEW YORK, NY 10158-0012 | (W) |  |  |
| MARSDEN, J. ELLEN | SCH OF NAT RES | (H) |  | 97 |
| UNIV OF VERMONT | UNIVERSITY OF VERMONT BURLINGTON, VT 05405 | (W) |  |  |
| MARTIN, MICHAEL | ADIRONDACK AQUATIC INST | (H) |  | 97 |
|  | $\text { PO BOX } 244$ | (W) |  |  |
|  | PAUL SMITHS, NY 12970 |  |  |  |
| MATTHEWS, BRUCE | 121 FERNOW HALL, DNR | (H) | (607) 589-7887 | 97 |
| CORNELL UNIVERSITY | CORNELL UNIVERSITY ITHACA, NY 14853 | (W) | (607) 255-8370 |  |
| MAYACK, DAVID | 58 WINEBERRY LANE | (H) | (518) 899-6410 | 97 |
| NYSDEC | BALLSTON SPA, NY 12020 | (W) | (518) 773-7318 |  |
| MAYER, CHRISTINE | CORNELL BIO FIELD | (H) |  | 975 |
| CORNELL UNIVERSITY | 900 SHACKLETON PT RD BRIDGEPORT, NY 13030 | (W) | (315) 633-9243 |  |
| MC BRIDE, NORMAN | HC 1 ROUTE BOX 16 | (H) |  | 97 |
| NYSDEC | STAMFORD, NY 12167 | (W) |  |  |
| MC CARTHY, CHARLES | SUFFOLK CO COMM | (H) | (516) 298-5859 | 97 |
| SUFFOLK CO COMM | 2 SPEONK-RIVERHEAD RD RIVERHEAD, NY 11901 | (W) | (516) 548-2625 |  |
| MC COSH, MORGAN | 405 N FRENCH RD STE 120A | (H) |  | 97 |
| USFWS | AMHERST, NY 14228 | (W) | (716) 691-5456 |  |
| MC DONALD, RICHARD | 886 CALDWELL HILL RD | (H) |  | 975 |
|  | LISLE, NY 13797 | (W) |  |  |
| MC KEOWN, PAUL E | NYS DEC | (H) | 716-372-0312 | 97 |
| NYSDEC | 128 SOUTH STREET OLEAN, NY 14760 | (W) | 716-372-8676 |  |
| MC KOWN, KIM ANN | 16 BIRCHWOOD AVE | (H) |  | 97 |
|  | E. SETAUKET, NY 11733 | (W) |  |  |


|  | 1997 |  |  |  |
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| NAME and |  |  |  |  |
| MURPHY, MARGARET | 5000 BRITTONFIELD PKWY | (H) | (315) 474-3944 | 97 |
| OBRIEN \& GERE ENG | SYRACUSE, NY 13221 | (W) | (315) 437-6100 |  |
| NASHETT, LARRY | HCR \#2 BOX 532 | (H) |  | 97 |
| NYSDEC | TUPPER LAKE, NY 12986 | (W) |  |  |
| NETTLES, DAVID C. | 21 VIEW ST | (H) |  | 97 |
|  | SARANAC LAKE, NY 12983 | (W) |  |  |
| NEUDERFER, GARY N | 45 NORMAN RD | (H) |  | 97 |
|  | ROCHESTER, NY 14623 | (W) |  |  |
| O'CONNER, JOEL S. | USEPA REGION 2 WATER | (H) |  | 97 |
| EPA | 290 BROADWAY \# 1539 NEW YORK, NY 10007-1823 | (W) | 212-264-5356 |  |
| O'CONNOR, JOHN R. | 312 PEARSON HALL | (H) | (518) 234-6597 | 97 |
| SUNY COBLESKILL | SUNY COBLESKILL COBLESKILL, NY 12043 | (W) |  |  |
| O'GORMAN, ROBERT | USGS BIOL RESOURCES DIV | (H) | (315) 343-2351 | 97 |
| USFWS | 17 LAKE STREET OSWEGO, NY 13126 | (W) | (315) 343-3951 |  |
| OLSEN, MARK H. | CORNELL BIO FLD ST | (H) |  | 97 |
| CORNELL UNIV | 900 SHACKLETON PT RD BRIDGEPORT, NY 13030 | (W) |  |  |
| ORVIS, CURTIS J | 45 CHAPEL ROAD | (H) |  | 96 |
|  | AMHERST, MA 01002 | (W) |  |  |
| OSTERBERG, DONALD | 458-3 OLD PARISHVILLE RD | (H) | 315-265-8971 | 97 |
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| USFWS | 17 LAKE ST OSWEGO, NY 13126 | (W) | 315-343-3951 |  |
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$97 S$
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(W) 717-724-3322
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(W)
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B.A.S.S.

SICKLES, DYLAN T

SICLUNA, JOSEPH D. NYS DoS

SILVESTRI, EDWARD
SIMONIN, HOWARD
NYSDEC
SINNOTT, TIMOTHY
NYSDEC

SKINNER, KATHLEEN RUSSELL SAGE

SKINNER, LAWRENCE NYSDEC

SMITH, C LAVETT AMER MUSEUM NAT

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AM MUSEUM NATURAL
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(H) 201-768-2173
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| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| YANKAUER, KENNETH | 1 PHILBRICK LN APT 2 | (H) |  | 96S |
|  | KITTERY, ME 03904 | (W) |  |  |
| YOSHIURA, LUZ | 14-24 RT 9 APT F | (H) |  | 97S |
|  | TIVOLI, NY 12583 | (W) | (914) 756-2023 |  |
| YOUNG, BYRON H. | 53 HIGHVIEW LANE | (H) |  | 97 |
|  | RIDGE, NY 11961 | (W) |  |  |
| ZAWACRI, CHESTER S. | 494 TERRYVILLE RD. | (H) |  | 96 |
|  | PT JEFFERSON STA NY 11776 | (W) |  |  |
| ZELIE, WALTER F. | CARPENTER'S BROOK | (H) |  | 97 |
|  | FISH HATCH RT 321 | (W) |  |  |
|  | ELBRIDGE, NY 13060 | (W) |  |  |
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## CHAPTER AWARDS

NED Best Chapter Award - 1994
NED Best Chapter Award - 1995

| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| :---: | :---: | :---: | :---: | :---: |
| BALDIGO, BARRY | 425 JORDON RD | (H) | 518-732-4335 | 97 |
| US GEOLOGICAL | TROY, NY 12180 | (W) | 518-472-3107 |  |
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| NYDEC | CAMILLUS, NY 13031 | (W) | (315) 653-7727 |  |
| BANASZEWSKI, | FINGER LAKES COMM | (H) |  | 97 |
|  | 4355 LAKE SHORE DR | (W) |  |  |
|  |  |  |  |  |
| BARNHART, GERALD A. | NYSDEC | (H) |  | 97 |
| NYSDEC | 50 WOLF RD | (W) |  |  |
|  | ALBANY, NY 12233-4750 |  |  |  |
| BATH, DALE W. | P.O. BOX 104 | (H) |  | 96 |
|  | LAKE PLACID, NY 12946 | (W) |  |  |
| BAUM, THOMAS R. | EMPIRE FIBERGLASS | (H) |  | 97 |
|  | PO BOX 1006 <br> LITTLE FALLS, NY 13365 | (W) |  |  |
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CHISHOLM, DAVE LEMOYNE COLLEGE

CHYTALO, KAREN NYSDEC

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(H)
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FREEVILLE, NY 13068

111 WEST ST ESSEX JUNCTION, VT 05452

5100 HIGHBRIDGE \#26E FAYETTEVILLE, NY 13066

14 BUCKINGHAM MEADOW
E. SETAUKET, NY 11733

284 SOUTH AVE POUGHKEEPSIE, NY 12601

66 CORT 23 CONSTANTIA, NY 13044

## 56 PAXWOOD ROAD

DELMAR, NY 12054

MAR SCI RES CTR STONY BROOK, NY 11794

1444 Co Rt 23
(H)

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| :---: | :---: | :---: | :---: | :---: |
| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| DEY, WILLIAM P. | EA ENG SCI TECH | (H) |  | 97 |
| EA ENG SCI TECH | 3 WASHINGTON CTR NEWBURGH, NY 12550 | (W) |  |  |
| DILAURO, MARTIN | USGS/BRD-R\&D LAB | (H) |  | 97 |
| USGS/BRD-R\&D LAB | RD \#4 BOX 63 WELLSBORO, PA 16901 | (W) |  |  |
| DILERNIA, ANTHONY | 58-23 196 Pl | (H) |  | 97 |
|  | FRESH MEADOWS, NY 11365 | (W) |  |  |
| DUNNING, DENNIS J. NYPA | C/O NY POWER AUTHORITY | (H) |  | 97 |
|  | 123 MAIN STREET <br> WHITE PLAINS, NY 10601 | (W) |  |  |
| DURFEY, LANCE | 16 LINCOLN DRIVE | (H) |  | 97 |
|  | TUPPER LAKE, NY 12986 | (W) |  |  |
| EARNEST-KOONS, CORNELL UNIVERSITY | DEPT OF MICROBIOL \& | (H) | (607) 272-8784 | $96 S$ |
|  | CORNELL UNIVERSITY ITHACA, NY 14853 | (W) | (607) 253-3365 |  |
| EATON, SHERI M. | 22 1/2 HELEN AVE | (H) |  | 97 |
|  | CORTLAND, NY 13045 | (W) |  |  |
| ECKERT, THOMAS H | BOX 43 | (H) |  | 97 |
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| EDELSTEIN, KAREN | 109 FERNOW HALL | (H) | 607-533-7778 | 97 |
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| EDISON, KATHLEEN S. | PO BOX 922 | (H) |  | 97 |
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| NYSDEC | SILVER CREEK, NY 14136 | (W) | (716) 3660228 |  |
| ELLER, JEFFREY | 109 BERGDORF RD | (H) | (315) 625-7835 | 97 |
| NYSDEC | PARISH, NY 13131 | (W) | (315) 298-5051 |  |
| ELROD, JOSEPH | USFWS | (H) | 315-342-2227 | 97 |
| USFWS | 17 LAKE STREET OSWEGO NY 13126 | (W) | 315-343-3951 |  |


| 1997 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NAME and YEAR PAID |  |  |  |  |
| GALATI, JOSEPH | 2527 PALM ROAD | (H) | (716) 483-1368 | 97 |
| NYS DEC | JAMESTOWN, NY 14701 | (W) | (716) 372-0645 |  |
| GANDINO, SUNY ESF | 7417 MUENCH ROAD LIVERPOOL, NEW YORK | (H) | 315-457-3079 | 96 |
|  |  | (W) |  |  |
| GARIBALDI, LOUIS | NEW YORK AQUARIUM | (H) | (716) 271-9048 | 97 |
| NY AQUARIUM | BOARDWALK AT W 8TH | (W) |  |  |
| GIBBONS, NICK | 5 PEBBLE LANE HUNTINGTON STA. NY 11746 | (H) |  | 96 |
|  |  |  |  |  |
| GL SPORT FISHING | $\begin{aligned} & \text { P.O. BOX } 297 \\ & \text { ELMHURST, ILL } 60126 \end{aligned}$ | (H) | (630) 941-1351 | 97 |
|  |  | (W) |  |  |
| GLOSS, STEVEN | U. OF WYOMING BOX 3067 | (H) | 307-766-2143 | D.HO |
| USFWS-U. OF | UNIVERSITY STATION LARAMIE, WYOMING 82071 | (W) |  |  |
| GOEHLE, MICHAEL | 376 ROAT DRIVE ANGOLA, NY 14006 | (H) |  | 97S |
|  |  | (W) |  |  |
| GOODSELL, MARTHA | 79 GURN SPRING RD GANSEVOORT, NY 12831 | (H) |  | 97S |
|  |  | (W) |  |  |
| GORSUCH, JOSEPH | 34 ALDEN GLEN DRIVE | (H) | 716-872-0483 | D.HO |
| EASTMAN KODAK | WEBSTER, NY 14580 | (W) | 716-588-2140 |  |
| GREEN EDWARD G | RR1 BOX 637 LARAWAY RD CAYUGA, NY 13034 | (H) |  | 96S |
|  |  | (W) |  |  |
| GREEN, DAVID | PO BOX 1865 <br> RICHFIELD SPRGS, NY 13439 | (H) | (315) 855-0301 | 97 |
|  |  | (W) |  |  |
|  |  |  |  |  |
| GREULICH, ANDY NYSDEC | 8 RESIDENCE ROAD ALTMAR, NY 13302 | (H) | 315-298-4046 | 96 |
|  |  | (W) | 315-298-5051 |  |
| GRIM, JOHN NE BIOLOGISTS INC | ONE KERR ROAD RHINEBECK, NY 12572 | (H) <br> (W) | 914-876-4786 <br> 914-876-3983 | 97 |
|  |  |  |  |  |


|  | 1997 |  |  |
| :--- | :--- | :--- | :--- |
| NAME and | ADDRESS | TELEPHONE | YEAR PAID |
| AFFILIATION | 8737 LAKE RD | (H) | 97 |
| HOFFMAN, THOMAS | BARKER, NY 14012 | (W) | $(716) 542-5544$ |



|  | 1997 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| MALCHOFF, MARK | NY SEA GRANT - CORNELL | (H) | 516-369-1935 | 97 |
|  | 39 SOUND AVENUE RIVERHEAD NY 11901 | (W) | 516-727-3910 |  |
| MANOR, PHILIP | JOHN WILEY \& SONS | (H) |  | 97 |
| JOHN WILEY \& SONS | 605 THIRD AVE NEW YORK, NY 10158-0012 | (W) |  |  |
| MARSDEN, J. ELLEN | SCH OF NAT RES | (H) |  | 97 |
| UNIV OF VERMONT | UNIVERSITY OF VERMONT BURLINGTON, VT 05405 | (W) |  |  |
| MARTIN, MICHAEL. | ADIRONDACK AQUATIC INST. | (H) |  | 97 |
|  | PO BOX 244 | (W) |  |  |
|  | PAUL SMITHS, NY 12970 |  |  |  |
| MATTHEWS, BRUCE | 121 FERNOW HALL, DNR | (H) | (607) 589-7887 | 97 |
| CORNELL UNIVERSITY | CORNELL UNIVERSITY ITHACA, NY 14853 | (W) | (607) 255-8370 |  |
| MAYACK, DAVID | 58 WINEBERRY LANE | (H) | (518) 899-6410 | 97 |
| NYSDEC | BALLSTON SPA, NY 12020 | (W) | (518) 773-7318 |  |
| MAYER, CHRISTINE | CORNELL BIO FIELD | (H) |  | 97S |
| CORNELL UNIVERSITY | 900 SHACKLETON PT RD BRIDGEPORT, NY 13030 | (W) | (315) 633-9243 |  |
| MC BRIDE, NORMAN | HC 1 ROUTE BOX 16 | (H) |  | 97 |
| NYSDEC | STAMFORD, NY 12167 | (W) |  |  |
| MC CARTHY, CHARLES | SUFFOLK CO COMM | (H) | (516) 298-5859 | 97 |
| SUFFOLK CO COMM | 2 SPEONK-RIVERHEAD RD RIVERHEAD, NY 11901 | (W) | (516) 548-2625 |  |
| MC COSH, MORGAN | 405 N FRENCH RD STE 120A | (H) |  | 97 |
| USFWS | AMHERST, NY 14228 | (W) | (716) 691-5456 |  |
| MC DONALD, RICHARD | 886 CALDWELL HILL RD | (H) |  | 97S |
|  | LISLE, NY 13797 | (W) |  |  |
| MC KEOWN, PAUL E | NYS DEC | (H) | 716-372-0312 | 97 |
| NYSDEC | 128 SOUTH STREET OLEAN, NY 14760 | (W) | 716-372-8676 |  |
| MC KOWN, KIM ANN | 16 BIRCHWOOD AVE | (H) |  | 97 |
|  | E. SETAUKET, NY 11733 | (W) |  |  |

NAME and
AFFILIATION
MURPHY, MARGARET
OBRIEN \& GERE ENG

NASHETT, LARRY NYSDEC

NETTLES, DAVID C.

NEUDERFER, GARY N

O'CONNER, JOEL S. EPA

O'CONNOR, JOHN R. SUNY COBLESKILL

O'GORMAN, ROBERT USFWS

OLSEN, MARK H. CORNELL UNIV

ORVIS, CURTIS J

OSTERBERG, DONALD SUNY POTSDAM

OWENS, RANDELL USFWS

PADILLA, MIGUEL US COAST GUARD

PANE, JOSEPH

1997
ADDRESS
5000 BRITTONFIELD PKWY
SYRACUSE, NY 13221

HCR \#2 BOX 532 (H)
TUPPER LAKE, NY 12986

21 VIEW ST
SARANAC LAKE, NY 12983

45 NORMAN RD.
ROCHESTER, NY 14623

USEPA REGION 2 WATER
290 BROADWAY \# 1539
NEW YORK, NY 10007-1823
312 PEARSON HALL
SUNY COBLESKILL
COBLESKILL, NY 12043
USGS BIOL RESOURCES DIV
17 LAKE STREET
OSWEGO, NY 13126
CORNELL BIO FLD ST
900 SHACKLETON PT RD
BRIDGEPORT, NY 13030
45 CHAPEL ROAD AMHERST, MA 01002

458-3 OLD PARISHVILLE RD POTSDAM, NY 13676

USFWS OSWEGO BIO
17 LAKE ST
OSWEGO, NY 13126
15 MARBLE HILL AVE BRONX, NY 10463

2265 WESTCHESTER AVE NEW YORK, NY 10462
(W)

TELEPHONE
(H) (315) 474-3944
(W) (315) 437-6100
(W)
(H)
(W)
(H)
(W)
(H)
(W) 212-264-5356
(H) (518) 234-6597
(H) (315) 343-2351
(W) (315) 343-3951
(H)
(W)
(H)
(W)
(H) 315-265-8971
(W) 315-267-2261
(H) 315-343-1401
(W) 315-343-3951
(H) (718) 562-5394
(W) (804) 6284192
(H)

97

| 1997 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| QUILTY, TIMOTHY | 342 HURLEY AVE | (H) |  | 96 |
|  | \#15-94 | (W) |  |  |
|  | KINGSTON, NY 12401 |  |  |  |
| RACHLIN, JOSEPH | DEPT BIO SCI, LEHMAN COLL | (H) | 201-791-5165 | 97 |
| LEHMAN COLLEGE | 250 BEDFORD PARK BLVD W BRONX, NY 10468 | (W) | 212-960-8239 |  |
| RADLE, EDWARD | 721 PLANK ROAD | (H) | (518) 371-7519 | 98 |
| NYSDEC | CLIFTON PARK, NY 12065 | (W) | (518) 457-0757 |  |
| RADZYMINSKI, STEVE NYSDOT REG 1 | 29 GARDEN AVE. <br> ALBANY, NY 12203 | (H) | (518) 459-0910 | 98 |
|  |  | (W) | (518) 486-4292 |  |
| RATHJE, CARL NYSDEC ONEIDA | 223 RAINBOW SHORES RD PULASKI, NY 13142 | (H) <br> (W) | (315) 298-458 | 97 |
|  |  |  | (315) 623-7311 |  |
| RICHARDSON ALICE NYSDEC | 2133 CO RT 22 <br> ALTMAR, NY 13302 | (H) | (315) 298-5051 | 97 |
|  |  | (W) |  |  |
| RICHTER, ROBERT | JOURNEY'S END CROTON, NY 10520 | (H) |  | 96 |
|  |  | (W) |  |  |
| RINGLER, NEIL SUNY CESF | SUNY COLLEGE OF ESF 1 FORESTRY DRIVE SYRACUSE, NY 13210 | (H) | (315) 638-8128 | 97 |
|  |  | (W) | (315) 470-6770 |  |
| ROBINS, JEFFREY | 31 POMEROY STREETCORTLAND, NY 13045 | (H) | (607) 756-8137 | 97 |
| NYSDEC |  | (W) | (607) 753-3095 |  |
| ROSEMAN, EDWARD F. | 13 NATURAL RESOURCES | (H) | (517) 355-6037 | 97 S |
| MICHIGAN STATE UNIV | MICHIGAN STATE <br> E. LANSING, MI 48824 | (W) | (517) 353-6697 |  |
| ROSS, ROBERT M. | RD 4, BOX 63 | (H) | 717-376-5394 | 96 |
| NAT. BIO. SURVEY | WELLBORO, PA 16901 | (W) | 717-724-3322 |  |
| ROTH, ROBERT N. | 118 GARFIELD ST HOLLAND, NY 14080 | (H) |  | 975 |
|  |  | (W) |  |  |
| ROUGH, GAYLORD | 88 S MAIN STREET | (H) | 607-587-9161 | D.HO |
| ALFRED U RETIRED | ALFRED, NY 14802 | (W) | 607-871-2205 |  |


| 1997 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NAME and AFFILIATION | ADDRESS |  | TELEPHONE | YEAR PAID |
| SCHULTZ, ERIC T. | UNIVERSITY OF CT | (H) |  | 96 |
|  | 75 N EAGLEVILLE RD STORRS, CT 06269-3042 | (W) |  |  |
| SEELEY, GEORGE R. | RR 3 BOX 262 | (H) |  | 96 |
|  | DELANSON, NY 12053 | (W) |  |  |
| SHEPPARD, DOUGLAS NYSDEC | 3 BIRCHWOOD DR. CLIFTON PARK, NY 12065 | (H) |  | 97 |
|  |  | (W) |  |  |
| SHORT, RUSSEL | ECOLOGY \& ENVIRONMENT | (H) |  | 97 |
|  | 368 PLEASANT VIEW DR LANCASTER, NY 14086 | (W) | (716) 684-8060 |  |
| SHUPP, BRUCE B.A.S.S. | 562 ROARK TRACE MONTGOMERY, ALA 36116 | (H) |  | D.HO |
|  |  | (W) |  |  |
| SICKLES, DYLAN T | 308 DEEFIELD ST GREENFIELD, MA 01301 | (H) |  | 96S |
|  |  | (W) |  |  |
| SICLUNA, JOSEPH D. NYS DoS | NYS Dos DIV of COASTAL RESOURCES ALBANY, NY 12231-0001 | (H) |  | 97 |
|  |  | (W) | (518) 473-2476 |  |
| SILVESTRI, EDWARD | 222 MCNAUGHTON AVE CHEEKTOWAGA, NY 14225 | (H) |  | 96 |
|  |  | (W) |  |  |
| SIMONIN, HOWARD NYSDEC | NYS DEC <br> 8314 FISH HATCHERY ROAD ROME, NY 13440 | (H) | (315) 336-3702 | 97 |
|  |  | (W) | (315) 337-0910 |  |
| SINNOTT, TIMOTHY NYSDEC | 62 VICHY DRIVE <br> SARATOGA SPRINGS NY | (H) | 518-583-0503 | 97 |
|  |  | (W) | 518-457-1769 |  |
| SKINNER, KATHLEEN RUSSELL SAGE | BIOLOGY DEPT. <br> russell sage college <br> TROY, NY 12180 | (H)(W) | (518) 283-7661 | 96 |
|  |  |  | (518) 270-2280 |  |
| SKINNER, LAWRENCE NYSDEC | 40 EDWARDS RD. <br> WYNANTSKILL, NY. 12198 | (H) | 518-283-7661 | 97 |
|  |  | (W) | 518-457-1769 |  |
| SMITH, C LAVETT <br> AMER MUSEUM NAT | AM MUSEUM NATURAL CENTRAL PARK W at 79TH NEW YORK, NY 10024 | (H) | 201-768-2173 | 97 |
|  |  |  | 212-769-5768 |  |

1997
NAME and
AFFILIATION
TAORMINA, ANTHONY

| TERRA, MARIA E. | GR LAKES CTR, BUFFALO | (H) |  | 97 |
| :---: | :---: | :---: | :---: | :---: |
|  | 1300 ELMWOOD AV BLDG BUFFALO, NY 14222 | (W) | (716) 878-4329 |  |
| THIESLING, MARY | RR 3 BOX 822A | (H) | (914) 783-1797 | 97 |
| USEPA | MONROE, NY 10950 | (W) | (212) 264-8793 |  |
| TONER, JASONCORNELL U | 136 SEVEN MILE DR, LOT 15 . | (H) | (607) 272-8255 | 975 |
|  | ITHACA, NY 14850 | (W) |  |  |
| TORT, MARIA J. | 440 E. BUFFALO ST APT 7 | (H) |  | 97S |
|  | ITHACA, NY 14850 | (W) | (207) 581-4389 |  |
| TROTTA, LAURIE | HC 1 BOX 143A | (H) |  | 975 |
|  | CENTRAL BRIDGE, NY 12035 | (W) |  |  |
| TUTTLE, L RAYMOND | STERRY DRIVE, R.D. 1 | (H) | 607-656-8702 | 97 |
| NYS ELECTRIC \& GAS | $\text { BOX } 281$ <br> GREENE, NY 13778 | (W) | 607-729-2551 |  |
| TYLER JACK | 11550 N MERIDAIN ST | (H) |  | 97 |
|  | STE 180 | (W) |  |  |
|  | CARMEL, IN 46032 |  |  |  |
| VAAS, C RANDY | 22806 FRALICK RD | (H) | 315-788-7225 | 97 |
| NYS DEC | WATERTOWN, NY 13601 | (W) | 315-785-2246 |  |
| VAN DUSEN, PETER J | 5542 US RTE 11 | (H) |  | 975 |
|  | HOMER, NY 13077 | (W) |  |  |
| VANDEVALK, ANTHONY | 104 ELAINE AVE | (H) | 315-458-4592 | 97 |
| CORNELL | N. SYRACUSE NY 13212 | (W) | 315-633-9243 |  |
| VARADARAJ, K. | DEPT OF PHYSICS \& | (H) |  | 97 |
| SUNY STONEYBROOK | SUNY AT STONEYBROOK STONEYBROOK, NY 11794 | (W) |  |  |
| WALDMAN, JOHN | THE HUDSON RIVER FOUND. | (H) |  | 97 |
| HUDSON RIVER FOUND | 40 W 20TH ST 9TH FLOOR NEW YORK, NY 10011 | (W) |  |  |

96
(W)
(H)
(W) (716) 878-4329
(H) (914) 783-1797
$97 S$
$97 S$
(W) (212) 264-8793
(H)
W) (207) 581-4389
(H) 315-788-7225
(W) 315-785-2246
(H)
(W)
(H) 315-458-4592
(W) 315-633-9243

YEAR PAID
7090 SE LILLIAN CT STUART, FL 34997-2223
(W)

|  | Membership Directory $1997 .$ |  | TELEPHONE | YEAR PAID |
| :---: | :---: | :---: | :---: | :---: |
| NAME and AFFILIATION | ADDRESS |  |  |  |
| YANKAUER, KENNETH | 1 PHILBRICK LN APT 2 | (H) |  | 96 S |
|  | KITTERY, ME 03904 | (W) |  |  |
| YOSHIURA, LUZ | 14-24 RT 9 APT F | (H) |  | 97S |
|  | TIVOLI, NY 12583 | (W) | (914) 756-2023 |  |
| YOUNG, BYRON H. | 53 HIGHVIEW LANE | (H) |  | 97 |
|  | RIDGE, NY 11961 | (W) |  |  |
| ZAWACRI, CHESTER S. | 494 TERRYVILLE RD. | (H) |  | 96 |
|  | PT JEFFERSON STA NY 11776 | (W) |  |  |
| ZELIE, WALTER F. | CARPENTER'S BROOK | (H) |  | 97 |
|  | FISH HATCH RT 321 | (W) |  |  |
|  | ELBRIDGE, NY 13060 |  |  |  |
| ZERRENNERE, ADAM | PO BOX 383 | (H) |  | 96 S |
|  | WILLSBORO, NY 12996 | (W) |  |  |

## Finst Anmoummementu!!

## AQUATIC SAFETY FOR FISHERIES PROFESSIONALS

"A must for both field biologists and supervisors!"
B. Shupp, NYS Bureau of Fisheries Chief

## Instructor:

Dave Smith,PhD, US Coast Guard (ret)

## Cost:

\$75 (\$80 after July 31) per person

## Description:

Instructor Dave Smith PhD, USCG (ret) will take participants through a 1 1/2 day training session involving classroom discussions, in-pool training and implementation of safety techniques under "real life" in-stream conditions. You will get wet!!

Requirements: PFD required, raingear and boots recommended.
Location and Lodging: Date:
Ithaca College, Ithaca, New York August 17-18, 1994
Dormitory Style (2 per room)
Meals: barbeque ( $8 / 17$ ) and breakfast ( $8 / 18$ ) included-other meals available on campus

Attendance: Limited to first 100 applicants.

## Schedule

August 17 (Wed)

August 18 (Thurs)
To register, complete and mail to:
Jack Hasse
NYS-DEC
207 Genesee Street
Utica, NY 13501
(315)793-2554

12-1 PM registration
1-4 PM lecture
4:30-6:30 PM pool
7 PM barbeque \& beverage
7-8 AM breakfast
8-9 AM travel to stream
9-noon stream session
STUDENT REGISTRATION
NAME $\qquad$ FEE $\qquad$
ADDRESS
PHONE


June 30,1994

Dear NYS student sub-unit member:
On August 17-18 the New York State Chapter of the American Fisheries Society will hold a water safety workshop at Ithaca College. Registration fees for this event have been set at $\$ 75$. In order to make this very important workshop more available to student members, the Executive Committee has agreed to pay for $\$ 20$ of the registration fee through the student sub-unit account. Since you are a member of the NYS Chapter student sub-unit you are eligible for this $\$ 20$ discount. All you need to do is write "student" on your registration form and mail it with a check for $\$ 55$ to the address located on the form. This workshop could save your life someday so I urge you to take advantage of this discount and please attend.

Mark Arrigo
Past President
SUNY CESF Chapter, American Fisheries Society

## 1994 Annual Meeting Registration, and Membership Renewal

SPEEDY REGISTRATION INSTRUCTIONS: Complete all of the items marked *. Bring the completed form to the registration table with your check for the correct exact amount. The receipt will be checked, signed and given to you. Complete items 2-6. only if you are a new member, or you wish to change any of the information. Check the directory if you are unsure.

1.     * NAME $\qquad$
2.     * Employer or School $\qquad$
3.     * Address (Street, PO Box, Apt \#) $\qquad$
4.     * Address (City, State, Zip)
5.     * Telephone number, Home: $\qquad$ Work: $\qquad$
6.     * Interest or Specialization (see codes on back) $\qquad$
7.     * ALL: Membership New $\qquad$ Renewal $\qquad$

* Circle all applicable fees:

STUDENT MEMBER REGULAR MEMBER

Meeting Registration
$\$ 22.00$
$\$ 29.00$

Chapter Membership
$\$ 5.00$
$\$ 10.00$

* Enter Total: $\qquad$

Make checks payable to NY Chapter, AFS

## NEW YORK CHAPTER, AMERICAN FISHERIES SOCIETY <br> RECEIPT

* January $\qquad$ 1994

Received from * $\qquad$ \$ $\qquad$
for 1994 Annual Meeting Registration $\qquad$ 1994 NY Chapter Membership $\qquad$
Student Rate $\qquad$ Regular Rate $\qquad$

[^1]

Balance 1/26/1993
1


NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY
c/o NYDEC, 50 Wolf Road, Albany, NY 12233-4756
1993 Annual Treasurer's Report

Balance $1 / 26 / 1993$


## 1993 Expenditures

| 1993 Annual Meeting | 4,140.74 |  |  |  | 4,140.74 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 Meeting Raffle |  | 149.84 |  |  | 149.84 |
| 1993 Meeting student stipends |  | 300.00 |  |  | 300.00 |
| Postage | 14.50 |  |  |  | 14.50 |
| Bulk mailing permit | 75.00 |  |  |  | 75.00 |
| Travel to NE EXCOM mtg | 691.43 |  |  |  | 691.43 |
| Newsletter printing | 503.50 |  |  |  | 503.50 |
| Newsletter mailing | 119.32 |  |  |  | 119.32 |
| T-shirt loan | 1,250.00 |  |  |  | 1,250.00 |
| Bass workshop raffle | 16.75 |  |  |  | 16.75 |
| 1994 meeting raffle | 212.63 | 150.00 |  |  | 362.63 |
| Windsor fish prints | 129.58 |  |  |  | 129.58 |
| NE student stipend donation | 120.00 |  |  |  | - 120.00 |
| Sub-total for expenditures | \$7,273.45 | 599.84 |  |  | \$ 7,873.29 |
| 1993 Totals | \$1,774.54 | \$-247.84 | \$ 420.34 | \$ 186.28 | \$ 2,133.32 |
| Balances as of 19 Jan 94 | \$1,892.49 | \$ 577.78 | \$9,212.02 | \$5,885.40 | \$17,567.69 |

Consolidated checkbook total:

$$
\begin{array}{r}
\$ 1,892.49 \\
+\quad \$ \quad 577.78 \\
\hline \$ 2,470.27
\end{array}
$$

Note: Student sub-unit and chapter checking accounts are consolidated in one checkbook.


Timothy J. Sinnott
Secretary/Treasurer


## NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY

c/O NYDEC, 50 Wolf Road, Albany, NY 12233-4756

## 1993 Annual Treasurer's Report

| Balance 1/26/1993 | Checking | Student |  | Certificate | Savings | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ 117.95 | \$ | 825.62 | \$8,791.68 | \$5,699.12 | \$15,434.37 |
|  | 1993 Receipts |  |  |  |  |  |
| Interest | 45.99 |  |  | 420.34 | 186.28 | 652.61 |
| 1993 Annual Meeting | 4,033.00 |  |  |  |  | 4,033.00 |
| 1993 Meeting Raffle |  |  | 352.00 |  |  | 352.00 |
| Dues (After meeting) | 2,526.00 |  |  |  |  | 2,526.00 |
| Larval Workshop (1992) | 1,045.00 |  |  |  |  | 1,045.00 |
| Bass Workshop Raffle | 456.00 |  |  |  |  | 456.00 |
| Loan repayment | 942.00 |  |  |  |  | 942.00 |
| Sub-total for receipts | \$9,047.99 | \$ | 352.00 | \$ 420.34 | \$ 186.28 | \$10,006.61 |

## 1993 Expenditures

| 1993 Annual Meeting | 4,140.74 |  |  |  | 4,140.74 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 Meeting Raffle |  | 149.84 |  |  | 149.84 |
| 1993-Meeting student stipends |  | 300.00 |  |  | 300.00 |
| Postage | 14.50 |  |  |  | 14.50 |
| Bulk mailing permit | 75.00 |  |  |  | 75.00 |
| Travel to NE EXCOM mtg | 691.43 |  |  |  | 691.43 |
| Newsletter printing | 503.50 |  |  |  | 503.50 |
| Newsletter mailing | 119.32 |  |  |  | 119.32 |
| T-shirt loan | 1,250.00 |  |  |  | 1,250.00 |
| Bass workshop raffle | 16.75 |  |  |  | 16.75 |
| 1994 meeting raffle | 212.63 | 150.00 |  |  | 362.63 |
| Windsor fish prints | 129.58 |  |  |  | 129.58 |
| NE student stipend donation | 120.00 |  |  |  | - 120.00 |
| Sub-total for expenditures | \$7,273.45 | 599.84 |  |  | \$ 7,873.29 |
| 1993 Totals | \$1,774.54 | \$-247.84 | \$ 420.34 | \$ 186.28 | 2,133. 32 |
| Balances as of 19 Jan 94 | \$1,892.49 | \$ 577.78 | \$9,212.02 | \$5,885.40 | \$17,567.69 |

Consolidated checkbook total:

$$
\begin{array}{r}
\$ 1,892.49 \\
+\quad \$ \quad 577.78 \\
\hline \$ 2,470.27
\end{array}
$$

Note: Student sub-unit and chapter checking accounts are consolidated in one checkbook.


Timothy J. Sinnott
Secretary/Treasurer


Note: Student sub-unit and chapter checking accounts are consolidated in one checkbook.


Timothy J. Sinnott Secretary/Treasurer

# c/o NYDEC, 50 Wolf Road, Albany, NY 12233-4756 

EXCOM Meeting Minutes, 8 November 1993
The secretaries' notes for this meeting were misplaced, so the minutes are being typed from memory.

The meeting was called to order by President Ed Mills at approximately 11:00. Members present were Ed Mills, Tim Sinnott, Lars Rudstam, Dave Green, Myriam Ibarra(?), Betty Lou Brett, Paul McKown(?), Steve LaPan, Mark Arrigo, Don Stewart(?).

The first issue was the 1994 annual program. All was in order. Some minor problems remained, but none serious. The keynote speaker was unable to attend, but several alternates were being contacted. The idea of holding a cultural diversity session at the meeting was discussed, but it was decided to wait until next year when the topic could be addressed more fully.

Ed Mills reported back regarding the Windsor Fish prints. At the last meeting, discussion as to whether or not the chapter should sell the fish prints was tabled until Ed found out if unsold prints could be returned. Unsold.prints can be returned. The EXCOM voted to purchase 25 posters, 5 each of five styles, for the chapter to sell at the meeting as fundraisers. Tim Sinnott was directed to place the order.

The next agenda item was the "Aquatic Ecologist" video. After conducting further research into what AFS was doing, Neil Ringler determined that the video being produced by AFS parent society would overlap considerably with what was proposed by the New York Chapter. The video committee recommended that planning for the video be halted until the AFS work was done. At that time, the need for a video along the lines of the "Aquatic Ecologist" film could be reassessed.

The raffle was discussed next. Ed Mills was able to procure a fishing trip as a prize for the raffle. The student chapter brought the Sage fly rod to show the ExCOM. Paul McKeown had received several letters from tackle manufacturers that described low-cost tackle packages available to non-profit organizations for prizes, raffles, etc. The EXCOM voted to purchase the large "Tournament" pack from Mann's Bait Co. in Alabama, for $\$ 35.00$. Tim Sinnott was directed to make the purchase. Rallfe tickets would be printed up and mailed out in the December Newsletter.

Paul McKeown lead a discussion on chapter awards, and if anyone would be nominated for an award at the upcoming business meeting. Also discussed was whether or not the Chapter should present an award to non-members, recognizing achievement in the areas of fisheries or aquatic resources. It was decided that the topic should be raised at the annual business meeting.


NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY c/o NYDEC, 50 Wolf Road, Albany, NY 12233-4756

1993 Annual Treasurer's Report

Balance $1 / 26 / 1993$

| Interest | 45.99 |  |  |  | 420.34 |  | 186.28 | 652.61 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 Annual Meeting | 4,033.00 |  |  |  |  |  |  | 4,033.00 |
| 1993 Meeting Raffle |  |  | 352.00 |  |  |  |  | 352.00 |
| Dues (After meeting) | 2,526.00 |  |  |  |  |  |  | 2,526.00 |
| Larval Workshop (1992) | 1,045.00 |  |  |  |  |  |  | 1,045.00 |
| Bass Workshop Raffle | 456.00 |  |  |  |  |  |  | 456.00 |
| Loan repayment | -942.00 |  |  |  |  |  | 186.28 | \$10,006.61 |
| Sub-total for receipts | \$9,047.99 | \$ | 352.00 | \$ | 420.34 | \$ | 186.28 | \$10,006.61 |

## 1993 Expenditures

| 1993 Annual Meeting | 4,140.74 |  |  |  | 4,140.74 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 Meeting Raffle |  | 149.84 |  |  | 149.84 |
| 1993 Meeting student stipends |  | 300.00 |  |  | 300.00 |
| Postage | 14.50 |  |  |  | 14.50 |
| Bulk mailing permit | 75.00 |  |  |  | 75.00 |
| Travel to NE EXCOM mtg | 691.43 |  |  |  | 691.43 |
| Newsletter printing | 503.50 |  |  |  | 503. 50 |
| Newsletter mailing | 119.32 |  |  |  | 1, 119.32 |
| T-shirt loan | 1,250.00 |  |  |  | 1,250.00 |
| Bass workshop raffle | 16.75 |  |  |  | 16.75 |
| 1994 meeting raffle | 212.63 | 150.00 |  |  | 362.63 |
| Windsor fish prints | 129.58 |  |  |  | 129.58 120.00 |
| NE student stipend donation | - 120.00 |  |  |  |  |
| Sub-total for expenditures | \$7,273.45 | 599.84 |  |  | \$ 7,873.29 |
| 1993 Totals | \$1,774.54 | \$-247.84 | \$ 420.34 | \$ 186.28 | \$ 2,133.32 |
| Balances as of 19 Jan 94 | \$1,892.49 | \$ 577.78 | \$9,212.02 | \$5,885.40 | \$17,567.69 |

Consolidated checkbook total:

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\begin{array}{r}
\$ 1,892.49 \\
+\quad \$ 77.78 \\
\hline \$ 2,470.27
\end{array}
$$

Note: Student sub-unit and chapter checking accounts are consolidated in one checkbook.


Timothy J. Sinnott
Secretary/Treasurer

NEW YORK CHAPTER - AMERICAN FISHERIES SOCIETY
c/O NYDEC, 50 wolf Road, Albany, NY 12233-4756
1993 Annual Treasurer's Report

| Checking | Student | Certificate Savings |  | Total |
| :--- | :--- | :--- | :--- | :--- |
| $\$ 117.95$ | $\$ 825.62$ | $\$ 8,791.68$ | $\$ 5,699.12$ | $\$ 15,434.37$ |

1993 Receipts


| 1993 Annual Meeting | 4,140.74 |  |  |  | 4,140.74 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 Meeting Raffle |  | 149.84 |  |  | 149.84 |
| 1993 Meeting student stipends |  | 300.00 |  |  | 300.00 |
| Postage | 14.50 |  |  |  | 14.50 |
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| T-shirt loan | 1,250.00 |  |  |  | 1,250.00 |
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| 1994 meeting raffle | 212.63 | 150.00 |  |  | 129.58 |
| Windsor fish prints | 129.58 |  |  |  | 120.00 |
| NE student stipend donation | $\frac{120.00}{\$ 7,273.45}$ | 599.84 |  |  | \$7,873.29 |
| 1993 Totals | \$1,774.54 | \$-247.84 | \$ 420.34 | \$ 186.28 | \$ 2,133.32 |
| Balances as of 19 Jan 94 | \$1,892.49 | \$ 577.78 | \$9,212.02 | \$5,885.40 | \$17,567.69 |

Consolidated checkbook

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$$

Note: Student sub-unit and chapter checking accounts are consolidated in one checkbook.


Timothy J. Sinnott
Secretary/Treasurer

NOTE THE NUMBER 91, 92, OR 93 ON YOUR MAILING LABEL. THIS DENOTES YOUR DUES STATUS. TO BE A CURRENT PAID UP MEMBER YOU SHOULD HAVE A 93 ON THE LABEL.

IF YOUR LABEL IS MARKED 91, YOUR NAME WILL BE DELETED FROM THE MEMBERSHIP ROLE AS OF 1 AUGUST 1993.

ENCLOSED IS A MEMBERSHIP BLANK FOR NEW OR RENEWAL MEMBERSHIPS.
SEND YOUR 1993 DUES TO SECRETARY/TREASURER.

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


| Specialization or Interest | 17. Genetics <br> 18. Health-medicine, aquatic animals | 35. Crustaceans <br> 36. Education/Teaching |
| :---: | :---: | :---: |
| 1. Administration | 19. Ichthyology, taxonomy | 37. |
| 2. Aquaculture | 20. Illustrations | 38. |
| 3. Aquatic biology,ecology(freshwater) | 21. Impact assessment |  |
| 4. Biological controls | 22. International fisheries |  |
| 5. Benthic organisms | development |  |
| 6. Communications (writing, publishing, publicity | 23. Legislation and law enforcement <br> 24. Limnology | MAIL APPLICATION TO: |
| 7. Exotic species | 25. Pesticides | Timothy Sinnott |
| 8. Fish and Fishing, general | 26. Physiology | SECRETARY/TREASURER |
| 9. Fish behavior | 27. Plankton | NYC-AFS |
| 10. Fish biology-freshwater species | 28. Pollution | c/o NYSDEC |
| 11. Fish biology-marine species | 29. Power plants | Room 530, 50 Wolf Road |
| 12. Fish biology-estuarine species | 30. Research | Albany, NY 12233-4756 |
| 13. Fish biology-salmonids \& cold water species | 31. Striped bass <br> 32. Sturgeon |  |
| 14. Fish biology-warm water species | 33. Toxicology-all phases |  |
| 15. Fisheries management (population dynamics, habitat improvement, etc.) | 34. Water quality-analysis, improvement, etc. |  |



Note: Student sub-unit and chapter checking accounts are consolidated in one checkbook.


Timothy J. Sinnott
Secretary/Treasurer


## New York Chapter - American Fisheries Society Newsletter November 1994



1994 New York Chapter Officers:

President: Paul McKeown
Past President: Edward Mills
Committees:
Environmental Concerns: Howard Simonin
Audit/Finance
Program
Resolutions
Nominating
Membership
Newsletter
Professional Incentives
Workshop
Professional Diversity
Student Subunit
ESF Student Chapter

President-Elect: Don Einhouse Secretary-Treasurer: Tim Sinnott

Jack Hasse/Tom Field
Ed Woltmann
Bob Werner, Dave Bryson, Don Stewart
Edward Mills
Don Einhouse
Lars Rudstam/Myriam Ibarra
Doug Stang
Jack Hasse/Dave Lemon
Betty Lou Brett
Brian Wood
Pete Tango
aquatic education and urban fishing programs at the state and national level.

Our program committee is in the midst of developing an annual meeting for January 26-28, 1995 in Owego, New York (see related information in this newsletter). The title of the meeting will be "Recreational Fisheries Management; Past, Present and Future", and will focus on changes occurring within the fisheries management profession and the roles of extension and aquatic education in this process. An array of invited speakers, representing government agencies, universities and private organizations will present their perspectives on the ways in which managers can recognize and meet these challenges. I sincerely hope that every chapter member will attend and benefit from these presentations.

Since this is my final newsletter before my tenure ends, I would like to thank all of you for your assistance and support. I would particularly like to recognize the 1994-1995 Executive Committee which included Mark Arrigo, Betty Lou Brett, Dave Bryson, Donald Einhouse, Tom Field, Jack Hasse, Myriam Ibarra, David Lemon, Ed Mills, Allen Peterson, Lars Rudstam, Howard Simonin, Tim Sinnott, Doug Stang, Don Stewart, Pete Tango, Ed Woltmann and Brian Wood. See you all in Owego!

Paul McKeown, President, 128 South Street, Olean, NY 14760, (716) 372-0645, Fax:(716)372-2113

## Chapter News

## Aquatic Safety Workshop a Success!

The 1994 Aquatic Safety Workshop, sponsored by the New York Chapter of the American Fisheries Society, was held at Ithaca College on August 17 \& 18 and proved to be a resounding success. The course, taught by Dave Smith, Ph.D. (US Coast Guard, ret.), included classroom instruction as well as training sessions in both a pool and a local stream.

In total, 108 people participated in the safety workshop. The vast majority of workshop attendees were employees of the New York State Department of Environmental Conservation, however, three representatives from the State of Maine also attended as did several employees from three private consulting firms.

Topics discussed in the classroom included hypothermia, boating safety, the importance of proper floatation equipment, the role alcohol plays in many accidents in and around water, and recognizing the signs of a person who is drowning.

During the pool session instruction was given on adjusting personal floatation devices to ensure a proper fit. Attendees were then asked to don their personal floatation gear and jump into the water. Once everyone entered the water the difference between a properly and improperly adjusted jacket or vest was very apparent. The stability of an inflatable boat compared to a traditional small fisheries work boat amazed participants. Three people easily flipped a jon boat whereas eight people had a hard time flipping a raft. Basic emergency survival skills such as forming a tight huddle when in a group and maintaining the proper compact position when alone in cold water were practiced. Proper techniques for rescuing a drowning person and lifting victims out of the water and into a boat were also practiced. Finally, class members were asked to enter the pool with chest waders on to demonstrate how much floatation they provide, contrary to popular belief. Getting out of the water with chest waders full of water was the final drill.

Thursday morning the group arrived at Fall Creek by bus to find four feet of muddy, raging water. where 12 hours earlier the water was clear and safe to enter. After a quick consult with the local fisheries staff and conservation officers the drill site was moved to Buttermilk Falls State Park. Against the backdrop of the falls flowing at bank full the participants began the instream drills. Initial apprehension of entering the fast flowing muddy water was soon replaced by whoops, hollers, and laughter as the "yictims" in PFD's and floating feet forward swept downstream while other participants tried various techniques to "rescue" them. All those involved came away with a new or heightened respect for the power of a raging stream and how careful one has to be to keep from going from rescuer to victim. Many people went home and made a bleach bottle/ $50^{\prime}$ polyproplene rope rescue throw bag to carry in their boats and trucks.

The food, lodging, and other facilities at Ithaca College proved to be very agreeable. Nearly all those attending the workshop rated the facilities and course very high.. Ideas for the 1995 workshop are being solicited. Suggestions can be addressed to Paul McKeown.

## Award Committee from Doug Stang

The New York Chapter AFS is accepting nominations for the Professional Achievement Award and Honorary Membership Award. The Professional Achievement Award is conferred to active professionals in recognition of outstanding achievements and contributions to the field of fisheries science/management. The Honorary Membership Award is bestowed to individuals who have provided exemplary service to the NYC AFS. Please notify Doug Stang (518-457-9435) of suggested nominees for either award.

## From the Student Subunit

The student subunit will once again be giving awards for students presenting papers or posters at the Chapter's annual meeting in January. Like last year, student presenters will be given free registration and up to $\$ 25$ towards lodging at the meeting. Students should indicate on their abstract form that they are interested in the awards when submitting their abstract. To qualify for this award, students must be presenting results from research they have done while in school.

Students are needed for help running the slide projectors at the annual meeting. Compensation for their work may include free registration and room at the meeting. If interested, contact Brian Wood (see address below).

A student meeting will be held at the annual meeting this year. It is hoped that students from several Universities will be present at the meeting so that a general framework can be created to organize and set goals for the subunit. All students are encouraged to attend the annual meeting and this important gathering.

Finally, all students are reminded to return the questionnaires sent out recently. If you have not received a questionnaire, please contact Brian Wood, Department of Natural Resources, Fernow Hall, Cornell University, Ithaca, NY 14853; (607) 255-5469; bmwl @cornell.edu.

## NYC AFS RAFFLE

In recent years, our Chapter has put together a raffle for our annual meeting as a fund raiser to defray meeting costs for student participation, to support our overall budget and provide entertainment during our annual banquet.

Each year, this raffle has expanded in both the quality and quantity of prizes offered. This year's event also promises to have a large array of prizes, including some significant grand prizes of fishing traps and wildlife art.

You can support our raffle by donating items for this event, as well as selling tickets. If you can make a donation, please contact Don Einhouse at the NYS DEC Lake Erie Unit, 178 Point Drive North, Dunkirk, New York 14048 (phone 716-366-0228).

A separate mailing of 10 raffle tickets per NYC AFS member will also be made with the upcoming announcement for our Annual Meeting. Additional tickets will be available upon request. Your support of this fund raiser is greatly appreciated.

## Upcoming events

## The Annual Meeting of our Chapter

Our annual meeting will be from Thursday to Saturday, January 26 to 28 , at Owego Threadway. Ed Woltmann is chairing the program committee and promises us an excellent program under the theme fisheries management, past, present and future. A separate mailing will present the program. Call for papers are at the end of the newsletter. We are looking forward to seeing you in Owego next year. For more information contact Ed at NYS DEC, Building 40, SUNY Stony Brook, New York 11790, Phone: 516 444-0280.

## Great Lakes Research Consortium

The Great Lakes Research Consortium is holding their annual Student-Faculty Conference at the SUNY Environmental Science and Forestry in Syracuse, January 13-14, 1995. Over hundred student and faculty members attended each of the last four annual conferences. The conference will highlight student research and provide opportunities for students to meet others interested in Great Lakes science and scholarship. Deadline for submission of abstracts is December 1 , 1994. Send abstracts and get more information from the Great Lakes Research Consortium, 24 Bray Hall, SUNY-ESF, Syracuse, NY 13210, FAX 315 479-6970, Email jmanno@suvm.syr.edu.

## 51th Annual Northeast Fish and Wildlife

Conference, will be held April 9-12 1995, Sheraton Fontainebleau, Ocean City, Maryland. Hosted by Maryland Department of Natural Resources 580 Taylor Avenue, Annapolis, MD 21401. Conference Theme: Managing fish and wildlife diversity. Contact the Maryland DNR for more information. Deadline for abstracts December 1 1994. Inquiries on the technical sessions for freshwater and marine fisheries can be made to Carol Richardson 4109283643.

## East Coast Trout Management and Cul-

 ture Workshop II Penn State University, May 31 - June 2, 1995, Sponsored by the Northeast and Southern Divisions. Authors interested in submitting abstracts need to contact Steve Moore (management related, 615436 1250) or Dennis Ricker (culture related 814359 5143). Deadline for submission is February 28, 1995.
## AFS - New York Chapter Newsletter -- November, 1994

sity in farms and forests represents one modern approach to disseminating research by Department fishery faculty such as Mark Bain, Dave Green, Chuck Krueger, Bernie May, Ed Mills, Lars Rudstam and others.

This is a unique time for AFS chapter members can influence our evolving 4-year plan. If you would like to see scanning documents already prepared as part of that process, or participate as our planning moves forward to a spring completion, let me know immediately (BTW1@cornell.edu or Fernow Hall, Ithaca, NY 14853).

Our extension program seeks to advance management of natural resources by educating key individuals in knowledge new to them. Our programs are developed with cooperators at county, state, regional and national levels and we seek to be innovators in use of electronic technology. Our priorities are set with input from individuals like yourself, so we're particularly interested in hearing what AFS members might value most, from the Cornell Cooperative Extension program in the Department of Natural Resources.

## Bruce Wilkins, Department Extension Leader

## SAREP program

The New York Sportfishing and Aquatic Resources Education Program is a cooperative federal, state and local initiative designed to involve youth and adults with fishing. Through fishing SAREP promotes an understanding of aquatic ecology and the development of a stewardship ethic. SAREP emphasizes the use of community clubs and apprentice/mentor relationships. SAREP trains and certifies volunteer adult Instructors. Training focuses on teaching and working with youth, teaching angling ethics and using aquatic sampling techniques to learn more about the biology and ecology of aquatic systems. Instructors also learn to use the SAREP Manual, which includes activity chapters on angling skills, ecology and biology, aquatic sampling, angling ethics, safety, community service and fisheries management.

Through the use of the Cornell Cooperative Extension system SAREP is supported locally through 4H. Statewide direction is based in the Cornell Department of Natural Resources Extension program. Funding is provided through New York's share of the federal Sport Fish Restoration Act, administered by the DEC.

Since its inception in 1989, SAREP has trained almost 600 Instructors. These Instructors annually involve over 20,000 youth in SAREP activities, with over 5000 involved in on-going community clubs. SAREP programs are operating in virtually every county in New York, and a pilot urban program in Syracuse is
offering great promise for other urban areas in the future.

SAREP is attempting to build a new generation of anglers and conservation leaders who not only know how to fish, but how to fish responsibly and care for the aquatic resource that supports the tishing. For more information contact Bruce Matthews, Director, 121 Fernow Hall, Cornell University, Ithaca, NY 14853;607-255-9370, FAX 607-255-2815, e-mail bem3@cornell.edu.

## HUMAN DIMENSIONS RESEARCH UNIT

The Human Dimensions Research Unit (HDRU) is concerned with the "people" side of fisheries management. Obtaining angler preferences so that they can be incorporated into management policy, understanding how proposed and actual fisheries policies and regulations affect anglers, and understanding the economic impacts of fisheries on local communities are some of the components of HDRU's fisheries research program. HDRU leaders Tommy Brown, Barbara Knuth, and Dan Decker have communities are some of the components of HDRU's fisheries research program. HDRU leaders Tommy Brown, Barbara Knuth, and Dan Decker have all contributed to the Unit's fisheries research program.

Tom Brown's research has included statewide angler studies of freshwater fishing in New York and studies of fishing effort, economic impacts, and impacts of banning snagging in the Salmon River. He also is interested in angler survey methods: He recently completed a study on comparing the use of mail questionnaires and diaries to obtain data on Great Lakes fishing. In addition, he recently co-authored the AFS book Angler Survey Methods with Ken Pollock of North Carolina State University and Cynthia Jones of Old Dominion University.

Barbara Knuth's work in the HDRU has focused on people's awareness of and response to fish consumption health advisories, through a series of studies in the Great Lakes region and the Ohio River Valley. During the past year, she has had the opportunity to tie together the last 7 years of HDRU work on this topic. She spent a year on sabbatical leave from Cornell writing the fourth in a series of USEPA guidance documents on fish consumption advisories. The volume she is authoring focuses on risk communication, and will be available in final form by the end of the year. Barbara is also serving as an invited scientist for the Michigan Environmental Science Board. The Board has been charged by the Great Lakes Governors to review the Great Lakes Fish Consumption Advisory Protocol and develop a set of related recommendations.

Dan Decker works in the areas of communication and program evaluation as well as conceptualizing

Peter Rand (advisor Don Stewart) received a Ph.D. from SUNY-ESF in the Summer of 1994 for the thesis Modeling Pelagic Predator-Prey Interactions in the Upper Food Web of Lakes Michigan and Ontario.

I investigated pelagic predator-prey dynamics in the upper food web of Lakes Michigan and Ontario. I focused on trophic processes occurring between invertebrates (zooplankton, Mysis and Diporeia), planktivores and salmonines in both lakes. The thesis consists of five separate chapters that address different issues pertaining to this general topic. In Chapter 1, I compared predatory demand by pelagic prey fish with invertebrate production in Lake Michigan during 1987 and in Lake Ontario during 1990. In Chapter 2, I compared bioenergetic model estimates of consumption with estimates of in situ rates of prey consumption by alewife Alosa pseudoharengus in Lake Michigan. In Chapter 3, I described the dynamics of energy density and size of Lake Ontario alewife and rainbow smelt Osmerus mordax, and used a bioenergetic model of a common pelagic piscivore, chinook salmon Oncorhynchus tshawytscha, to demonstrate the effect of these factors on piscivore daily ration during 1978-90. In Chapter 4, I developed a bioenergetics model for steelhead trout Oncorhynchus mykiss that simulates growth and consumption by the population. In Chapter 5, I integrated material covered in the previous four chapters and developed a stochastic predator-prey model of the pelagic fish community in Lake Ontario to evaluate the risks of trophic imbalance. The model is based on an age-structured population matrix model of the alewife with separate accounting for density-, predator- and climate-dependent mortality. I calculated the probabilities of observing conditions of food limitation for the predatory salmonines. I found risk of trophic imbalance to be greatest for the simulations with 1990 predator populations and a high relative feeding rate. The alewife population appeared to be highly resistant to collapse based on strong inverse density dependence. Important mechanisms not included in the present model include effects of further changes in lower food web production and the effect of a pelagic competitor that could suppress alewife and prevent a full recovery

## Feature Article

> Onondaga Lake (Part 1): From Atlantic salmon to Zebra mussels - History of the Onondaga Lake Fish Community and Associated Water Quality.

by<br>Peter Tango and Mark Arrigo. State University of New York, College of Environmental Science and Forestry, 1 Forestry Drive, Syracuse, NY, 13210.

## State of the Lake

Onondaga Lake, located at the northern edge of Syracuse, NY, has the dubious label as one of the most polluted lakes in our nation. Yet, historical records suggest the lake once supported coldwater fish populations for several species that met a rapid extinction in the late 1800's. Today, Onondaga Lake is classified as a hypereutrophic waterbody (Effler 1987) with a warmwater fish community dominated by r-selected species; smaller species that are often robust to a wide variety of conditions in their environment (Odum 1985).

Onondaga Lake is 7.2 km long by 1.6 km wide, has a surface area of 1170 ha , an average depth of 12 m , and a maximum depth of 20.5 m (Meyer and Effler 1980). The lake is generally dimictic although spring turnover is incomplete in some years due to conductivity gradients resisting mixing of the lower water column. Much of the perturbed condition of the lake is a function of the sewage treatment history and contamination from a variety of industrial wastes.

Sewage from much of the watershed flows into the METRO Sewage Treatment Plant before being released into the lake. The sewage is treated to the tertiary level in an effort to lower lake phosphorus levels. But during storm events raw sewage floods the capacity of the treatment facility and untreated wastes flow directly to the lake. The influx of sewage supports high fecal coliform counts and the nutrient loading results in repeated nuisance algal blooms throughout the summer. High productivity and sedimentation rates result in high oxygen demand for decomposition. The hypolimnion becomes anoxic throughout the summer season and may progress into the epilimnion during July and August fluctuating to within 6-8 meters of the surface (Effler 1987). Due to summer hypolimnetic conditions the period of fall turnover can produce dissolved oxygen levels less than $5 \mathrm{mg} /$ lakewide with localized

## AFS - New York Chapter Newsletter .- November, 1994

system since the 1950's, the first records for gizzard shad in Onondaga Lake did not occur until the 1980 NYSDEC survey by Chiotti (1981).

## Recent Monitoring of Onondaga Lake

An expanding monitoring program of the lake and tributaries has developed at SUNY-College of Environmental Science and Forestry under Dr. Neil H. Ringler since 1989. Monitoring thus far includes adult fish population studies and assessing reproduction. Additional habitat work, population studies, and experimental stockings of Atlantic salmon are also underway in the major tributaries of Nine Mile Creek and Onondaga Creek. Within the lake, between 1989 and 1994, the program has revealed a diverse but dominantly warmwater fishery; fifty species have been captured during this six year period (Table 1).

Data from 1989 to 1993 indicates four species have dominated abundances in the lake; white perch, gizzard shad, bluegill (Lepomis macrochirus), and pumpkinseed sunfish (Lepomis gibbosus). Among the adult age classes, white perch consistently ranked first in catch per unit effort (CPUE) and have exhibited the lowest year to year variance among these species. Gizzard shad have challenged as a co-dominant species but the population crashed after 1992 and is presently found in low numbers in the net catches. Bluegill and pumpkinseed sunfish have varied widely in abundances but are increasing based on CPUE (Ringler et al., unpubl. data).

Dominant predators of the lake are smallmouth bass, walleye, northern pike (Esox lucius), and bowfin (Amia calva). Catch rates among these species have all remained relatively low with little annual variation. Bass tournaments conducted by the SUNY-College of Environmental Science and Forestry Student Chapter of the American Fisheries Society each summer from 1991 to 1994 indicate high catch rates of smallmouth bass on hook and line are common. Pelagic gill netting in 1991 and 1993 indicated smallmouth bass were the most common limnetic predator in the lake followed closely by walleye.

We believe species diversity is largely augmented by immigration of fish from the Seneca River, tributaries to the lake, and from adjoining wetlands. There has been little or no evidence of young of the year and early life stages for some of the common major predators (walleye, northern pike and bowfin) and limited reproduction from smallmouth bass. Several rudd (Scardinius erythropthalmus) have been captured since 1991 and may be the product of immigration or accidental releases due to the baitfish trade. Non-native coldwater species are captured seasonally within the lake. Brown trout (Salmo trutta) between 3 and 7 lb . and $1-3 \mathrm{lb}$. rainbow trout (Oncorhyncus mykiss) have
been collected in the spring and fall since 1991. Two rainbow trout caught in 1994 were adipose fin-clipped fish and are suspected of immigrating from the Finger Lakes (L. Wedge, pers. comm.). Brook stickleback (Gasterosteus aculeatus) and central mud minnow (Umbra limi) are common species in the adjoining wetlands but are extremely rare catches each year in the lake. Less than half of the species recorded in the past six years have significant reproduction within the lake. Future projects for habitat remediation in the littoral zone are expected to have a positive impact on reproduction and survivorship of nearshore species and improve the diversity derived from within the lake.

## Recovering Onondaga Lake: Limnology, Physical Habitat, and the Fish Community

1950-1994. Conditions in the lake plummeted to an all-time low during the 1950's; the lake had been reduced to a cesspool of industrial waste and raw sewage. Fishing and swimming were banned. The lake was odorous as hydrogen sulfide bubbled up and sludge rafts floated on the surface (Hennigan 1989/90). Since the 1960's a political and economic (not to mention biological) debate has ensued as to the clean up of Onondaga Lake. Some remediation actions have already taken place: a phosphorus ban on detergents in 1972, and upgrading of the METRO sewage treatment plant to secondary (1979) and tertiary treatment (early 1980's). In addition, there was a reduction in mercury loading and other ionic wastes from a chlor-alkali facility. Eventually the facility was closed in the mid1980's (Effler 1989/90). Calcium levels were at supersaturation into the 1980's as a result of wastes from the chlor-alkali plant. This caused a coating to form on zooplankton and phytoplankton (Garafalo and Effler 1987). The calcium coating was hypothesized to have limited zooplankton abundance and hence grazing pressure on the high phytoplankton densities (Effler 1987). Over the last two decades, the low abundances of fish in the south basin of the lake (Noble and Forney 1971) and sporadic reproduction of many fish species (Chiotti 1981) may also have been influenced by the precipitation of calcite onto larval fishes to limit reproduction in this environment. In addition, the inundated calcium carbonate waste beds continue to limit suitable substrate for nest building species, particularly in the south basin.

Due to the extreme hypereutrophy at which the lake existed until the 1980's, reductions in phosphorus loading have not resulted in prodigious improvements of the lake condition. However, the evidence of lake response under the remediation efforts to date is 1) decrease in the presence of bluegreen algae (Sze 1980), 2) declining total phosphorus concentrations (Canale and Effler 1989), 3) increased average transparency in the

## AFS - New York Chapter Newsletter -- November, 1994

as a result of improved transparency (Arrigo et al., unpubl. data). Additional positive responses in fish reproduction and survival are anticipated as littoral zone improvement structures are completed and remediation work is conducted on the tributaries to the lake.

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## First Call For Papers

Contributed papers and posters are now being solicited for presentation at the Annual Meeting. Abstracts are required of all persons seeking to present a paper or poster. Abstracts may be typewritten on the form on the following page or submitted in WordPerfect or ASCII format on an IBM formatted 3.5" diskette. Abstracts must not exceet 200 words in length and those typed on the form must be double spaced.

The deadline for submission of abstracts is January 6, 1995.
All abstracts accepted for presentation will be printed and distributed at the meeting. Presenters will receive instructions and presentation guidelines when their abstract is accepted. All presentations will be evaluated by a panel of judges and considered for recognition. Presentations will be judged in three categories: Best Professional Paper, Best Student Paper and Best Poster Presentation.

## Attention Student Presenters

The Student Subunit of the New York Chapter is offering a Student Stipend which will cover the cost of Registration and up to $\$ 25$ of expenses*. This offer is only available to the student actually presenting the paper, not co-authors. The Meeting Registration Form must be filled in and submitted with the Abstract in order to be eligible for the student stipend.
*Total reimbursement is based upon the number of students requesting the stipend.


Thursday, January 26, 1995
7:00-9:00 PM Early Registration
7:00 PM Executive Committee Meeting
8:00 PM Mixed Social
Friday, January 27, 1995

| 8:00-9:00 AM | Registration |
| :--- | :--- |
| 9:00 AM | Opening and Welcome |
|  | Paul McKeown - President, NY Chapter, AFS |

9:15 AM - 12:00 PM Invited Paper Session 1

| 9:15 AM | Keynote Address - Fisheries Management in the U.S - <br> Past, Present and Future |
| :--- | :--- |
| 9:45 AM | Hal Schraam - USF\&WS |
| 10:00 AM | Federal Perspective <br> Dr. James G. Geiger - USF\&WS |
| 10:15 AM | State Perspective <br> Gerald Barnhart - New York State DEC |
| 10:30 AM | Coffee Break |
| 10:45 AM | Academic Perspective <br> Neil Ringler - SUNY ESF |
| 11:00 AM | Marine Perspective <br> Gordon Colvin - New York State DEC |
| 11:15 AM | Angler/Industry Perspective <br> Norville Prosser - American Sportfishing Association |
| $\mathbf{1 2 : 0 0 ~ P M ~}$ | Panel Discussion |

New York Chapter - American Fisheries Society - 1995 Annual Meeting Program

| Friday, January 27 (cont'd) |  |
| :---: | :---: |
| 1:30 PM-4:15 PM | Invited Paper Session II |
| 1:30 PM | Maintaining Relevancy in the Face of a Changing Public - <br> The Role of Youth Fishing and Aquatic Education Programs Sharon Rushton - Future Fisherman Foundation |
| 2:00 PM | The Mississippi Experience Hal Schraam - USF\&WS |
| 2:15 PM | The Illinois Experience <br> Greg Tichacek - Illinois Dept. of Conservation |
| 2:30 PM | The Pennsylvania Experience <br> Carl Richardson - Penn. Fish Commission |
| 2:45 PM | Coffee Break |
| 3:00 PM | The Connecticut Experience George Babey - Connecticut DEP |
| 3:15 PM | The New York Experience <br> Bruce Matthews - Cornell Cooperative Extension |
| 3:30 PM | Panel Discussion |
| 4:15 PM | Break |
| 4:30 PM | Business Meeting |
| 5:00 PM | Poster Presentations - Authors Present |
| 5:30 PM | Cocktail Hour |
| 6:30 PM | Banquet |
| Saturday, January 28, 1995 |  |
| 8:30-11:30 AM | Contributed Papers |
| 11:30 AM | Closing Ceremonies, Incoming President's Remarks Best Paper Awards |
| 12:00 PM | Conference Ends |

NOTE THE NUMBER 93, 94, OR 95 ON YOUR MAILING LABEL.
THIS DENOTES YOUR MEMBERSHIP STATUS
TO BE A CURRENT PAID-UP MEMBER YOU SHOULD HAVE A 95 ON THE LABEL.
IF YOUR LABEL IS MARKED 93, YOUR NAME WILL BE DELETED FROM THE MEMBERSHIP ROLE AS OF 1 AUGUST 1995.

ATTACHED IS A MEMBERSHIP BLANK FOR NEW OR RENEWAL MEMBERSHIPS
SEND YOUR 1994 DUES TO THE SECRETARY/TREASURER

Application for Membership
New York Chapter American Fisheries Society
(Information provided will be used in the membership directory)

Name
Regular (\$10.00) $\qquad$ Student (\$5.00) $\qquad$

Address $\qquad$
City/State/Zip $\qquad$
Student applications must be endorsed by a faculty member signing above

Employer/Affiliation/School $\qquad$
Telephone: Work $\qquad$ Home $\qquad$
Are you a member of the American Fisheries Society (Parent Society)? Yes__ $\qquad$ No $\qquad$

New Membership $\qquad$ Renewal $\qquad$ What was the last year you were a paid-up member? $\qquad$
Would you be interested in serving on any of the Chapter Committees? If so, please check which committees would interest you.

| Environmental Concerns |  | Membership committee |
| :---: | :---: | :---: |
| Program Committee |  | Resolutions Committee |
| Finance Committee |  | Professional Incentives |
| Newsletter Staff |  | Professional Diversity |
| Workshop Committee |  | Student Sub-unit |

Make checks payable to NY Chapter AFS. Send This form and your check to:
Timothy Sinnott
Secretary/Treasurer
c/o NYSDEC
Room 530, 50 Wolf Road
Albany, NY 12233-4756
Interest and Specialty codes have been deleted because of the increased cost of printing and mailing the membership directory.

NOTE THE NUMBER 91, 92, OR 93 ON YOUR MAILING LABEL.
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IF YOUR LABEL IS MARKED 91, YOUR NAME WILL BE DELETED FROM THE MEMBERSHIP ROLE AS OF 1 AUGUST 1993.

ENCLOSED IS A MEMBERSHIP BLANK FOR NEW OR RENEWAL MEMBERSHIPS.
SEND YOUR 1993 DUES TO SECRETARY/TREASURER.
If you have joined the chapter when you paid your Parent Society dues, please fill out a membership form and send it in, so we will have your complete information in the directory - Thanks

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

Applicant's name: $\qquad$ Regular (\$10.00)__ Student (\$5.00) $\qquad$
Mailing address:
Employer or School:
Specialization(s) or interest
Student members must be endorsed by a- faculty member signing above.
Telephone $\qquad$ Home
wrea coda and number
Business
Check here if you wish to receive information about national AFS membership.
-Please indicate area(s) of interest by numerical code from list below.

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

| Specialization or Interest | 17. Genetics <br> 18. Health-medicine, aquatic animals | 35. Crustaceans <br> 36. Education/Teaching |
| :---: | :---: | :---: |
| 1. Administration | 19. Ichthyology, taxonomy |  |
| 2. Aquaculture | 20. Illustrations | 38. |
| 3. Aquatic biology, ecology(freshwater) | 21. Impact assessment |  |
| 4. Biological controls | 22. International fisheries |  |
| 5. Benthic organisms | development |  |
| 6. Communications (writing, publishing, publicity | 23. Legislation and law enforcement <br> 24. Limnology | MAIL APPLICATION TO: |
| 7. Exotic species | 25. Pesticides | Timothy Sinnott |
| 8. Fish and Fishing, general | 26. Physiology | SECRETARY/TREASURER |
| 9. Fish behavior | 27. Plankton | NYC-AFS |
| 10. Fish biology-freshwater species | 28. Pollution | c/o NYSDEC |
| 11. Fish biology-marine species | 29. Power plants | Room 530, 50 Wolf Road |
| 12. Fish biology-estuarine species | 30. Research | Albany, NY 12233-4756 |
| 13. Fish biology-salmonids \& cold water species | 31. Striped bass <br> 32. Sturgeon |  |
| 14. Fish biology-warm water species | 33. Toxicology-all phases | . |
| 15. Fisheries management (population dynamics, habitat improvement, etc.) | 34. Water quality-analysis, improvement, etc. |  |



## New York Chapter - American Fisheries Society Newsletter July 1994



1994 New York Chapter Officers:<br>President: Paul McKeown<br>Past President: Edward Mills<br>Committees:<br>Environmental Concerns:<br>Audit/Finance<br>Program<br>Resolutions<br>Nominating<br>Membership<br>Newsletter<br>Professional Incentives<br>Workshop<br>Professional Diversity<br>Student Subunit<br>ESF Student Chapter<br>President-Elect: Don Einhouse<br>Secretary-Treasurer: Tim Sinnott<br>Howard Simonin<br>Jack Hasse/Tom Field<br>Ed Woltmann<br>Bob Werner, Dave Bryson, Don Stewart<br>Edward Mills<br>Don Einhouse<br>Lars Rudstam/Myriam Ibarra<br>Doug Stang<br>Jack Hasse/Dave Lemon<br>Betty Lou Brett<br>Brian Wood<br>Pete Tango

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Stang, is taking over the Professional Incentives Committee. Doug is the Warmwater Unit Leader for NYSDEC ( 50 Wolf Road, Albany, NY 12233-4753, Tel:
518-457-9435). Pete Tango is the new chairperson for the AFS Student Chapter. Pete is a graduate student at SUNY-ESF working with Neil Ringler. Tom Field (Fernwood Limne, Inc.) and Bruce Wilkins (Cornell University) will work on Financial Investment for the chapter. The Chapter is very grateful to these folks for their willingness to help us out.

## The New York Chapter voted best in the North East Division !

We just learned that we are the BEST - in the Northeast anyway. The chapter is continuing into the next round at the national level. Of course, we all know that whatever the national competition results are, we should really have won also in the national competition.

## The Annual Meeting

Our annual meeting in January 1995 will be from Thursday to Saturday, January 26 to 28, at Owego Threadway. More information in the next newsletter. Ed Woltmann is chairing the program committee and promises us an excellent program. The not yet finalized theme is fisheries management, past, present and future. We are looking forward to presentations by many of you and encourage anyone with suggestions to contact Ed at NYS DEC, Building 40, SUNY Stony Brook, New York 11790, Phone: 516 444-0280.

## Resolutions

The resolution printed in the last newsletter on instream flow policy in New York was past by the EXCOM meeting (June 28, 1994) with slight modifications. A letter will be send to the Governor shortly.

## FAN - Fisheries Action Network

FAN is an information arm of the parent society charged with identifying issues for which our parent society should take action. The group is in the process of developing and defining themselves. The chapter is looking for a liaison with FAN. This is our chance to get the parent society to act on issues we find important. If you are interested in being the liaison, or simply interested in more information, call Paul McKeown. Paul recently attended an information
meeting with the FAN group (at the Northeast Division meeting in Burlington.

## Membership

Our membership is increasing. We have as of June 28, 1994, 330 regular members (increase with 7\%), 65 student members (increase with $76 \%$ !! - due to recruiting effort by the student subunit - congratulations Brian Wood) for a total of 395 members (a $15 \%$ increase over same time last year).

## Upcoming events

## International Fish Physiology Symposium

Theme: Practical applications of fish biology.
These symposium from July 16 to July 20 at the University of British Columbia, Vancouver, Canada, gives 3 days of practical and scientific presentations, 3 days of trade show exhibits, 2 days of continuing education courses and a 1 day tour of local labs and hatcheries. Contact High performance fish, UBS Conference Centre, 5961 Student Union Blvd., Vancouver BC, Canada V6T 2C9, or phone 6048221050 (FAX 604822 1069).

## International Conference on Sturgeon Biodiversity and Conservation.

The Hudson River Foundation for Science and Environmental Research, The American Museum of Natural History, and the Aquarium for Wildlife Conservation invite you to a conference on sturgeon biology, July 28 30, 1994 at the American Museum of Natural History, New York City. More then 30 experts from Russia, China, eastern and western Europe, Canada and the United States will make presentations collectively detailing the status of sturgeons worldwide, their biology and phylogeny, and proposed measures to save sturgeon and paddlefish species from extinction. Contact The Hudson River Foundation, International Sturgeon Conference, 331 West 57th Street, Box 159, New York NY 10019 or call 2122453907 if interested in attending. Conference chairpersons are Vladimir Birstein, Robert Boyle and John Waldman.

Aquatic Safety Workshop !
organized by our Chapter (Jack Hasse and Dave Lemon) August 17-18 at Ithaca College. (see last page)

## Great Lakes Center for Environmental Research and Education at SUNY Buffalo

The Center for Environmental Research and Education CERE has added Great Lakes to its name to emphasize the focus of its work. The Great Lakes Center was established to increase the role of Buffalo State College in environmental research and education in the Great Lakes Basin. The Center brings together faculty from various departments to work in a complex of modern laboratories including an Environmental Toxicology and Chemistry laboratory, and a new Aquatic Research laboratory. The Center is also well equipped for field research with a 42 -foot research vessel, an electroshocking boat and a fleet of smaller craft for nearshore sampling.

Since the center came under the direction of Dr. Steve Brandt, there has been reorganization in the center and some personnel changes. Dr. Kim Irvine is the new Associate Director for Research and Dr. Randal Snider is the new Associated Director for Education. The Great Lakes Center has also some additions to the scientific staff. Dr. Kyle Hartman has joined as the Manager of the Field Station, Dr. Michael Jech is an Assistant Research Scientist with expertise in hydroacoustics, Dr. Shadid Khan is a Research Scientist working with the environmental Toxicology and Chemistry group.

The Center had a very busy Spring. It sponsored a series of seminars, workshops, forums, conferences for professionals, students and the public. The Summer schedule is equally busy. For information on meetings, research and educational opportunities contact Carol Darstein at 716878 4329. Administrative offices are located at Classroom Building C215, 1300 Elmwood Avenue, Buffalo State College; Buffalo, NY 14222.

## Freshwater management on Long Island

## By Ed Woltmann

## Region 1 Freshwater Fisheries Staff

| Edward Woltmann | Regional Fisheries Manager |
| :--- | :--- |
| Charles Guthrie | Senior Aquatic Biologist |
| Greg Kozlowski | Senior Aquatic Biologist |
| Bruce Cronemeyer | Sr. Fish-Wildlife Technician |
| Scott Davis | Fish-Wildlife Technician |
| Keith Holley | Fish-Wildlife Technician |

Well known for its abundant marine resources and associated saltwater fishing opportunities, Long Island also has a significant freshwater resource consisting of over 526 lakes and ponds ranging up to 250 acres in size and over 30 miles of streams. Although many of the waters in heavily populated Nassau and western Suffolk County have been altered significantly over the years, a larger number of the ponds and lakes on the eastern and of the Island remain essentially unchanged from the days when Long Island was first populated.

Historically, this region was renowned for its freshwater fishing opportunities, particularly for trout. Anglers once came from throughout the northeast to fish the numerous cold, spring-fed stream for brook trout. One of the more famous Long Island anglers was Daniel Webster who in 1827 landed a 14 lb .8 oz . sea run brook trout from the Carmans River.

Although many of the region's historic trout waters have since disappeared or are no longer capable of holding trout, we are fortunate that our three major coldwater streams, the Connetquot, Nissequogue and Carmans Rivers, remain essentially unchanged and continue to provide outstanding trout fishing opportunities for brook, brown and rainbow trout. All three waters are now protected under the State's Wild, Scenic and Recreational Rivers Act. Additional protection is afforded by their location within either State of County parks. the Nissequogue and Connetquot are intensively managed by the Long Island State Parks and Recreation Commission as fly fishing preserves and are stocked with trout grown in a hatchery within Connetquot State Park (one of the oldest hatcheries in the state). The Carmans River is stocked and managed by the Department of Environmental Conservation, in cooperation with Suffolk County Department of Parks and Recreation. In addition to these three major rivers, a number of small spring creeks, mill ponds and kettlehole ponds can be found in Suffolk County that continue to provide good trout fishing opportunities. Sorme of these springcreeks still maintain native brook trout populations.

Current coldwater fisheries management emphasis on Long Island involves identification and protection of native brook trout populations and, where possible, re-establishment of brook trout in suitable habitats. Improving the quality of current trout populations both through habitat management and protective regulations is also emphasized. Although sea-run brook trout fisheries have all but disappeared, tidal sections of many Long Island's coldwater streams currently produce trophy-sizes brown tryout. We have collected fish in excess of 8 lb . during our electrofishing surveys of these waters. A current research project underway on the tidal section of the Nissequogue river will assess the input of our fall fingerling an yearling domestic brown trout stocking programs to the brown

## AFS - New York Chapter Newsletter -- July, 1994

evacuation time and fish size was described using a peicewise linear regression joined-at a fish total length of 34 mm . In Oneida Lake, young shad exhibited a diel feeding cycle with gut fullness gradually increasing to a maximum during mid-day ( $1100-1900 \mathrm{~h}$ ) and declining during the night. YOY gizzard shad shifted from a diet of exclusively zooplankton in July to a combination of zooplankton, algae. and detritus in August. The proportion of Daphnia in stomachs was greatest on $1 / 2$ July 1991 ( $78 \%$ of total biomass) and 6/7 august 1992 ( $78 \%$ ) when mean age-0 gizzard shad TL was 29.6 and 34.0 mm . Estimates of total daily ration with fish size and mean gut fullness and consumption of Daphnia matched changes in lake Daphnia biomass. On 1/.2 July, 1991 and 6/7 August 1992 (age-0 gizzard shad mean weights 0.178 and 0.312 g ), when Daphnia production in Oneida Lake was 294.6 and 153.2 mg dry wt $\mathrm{m}^{-2}$ day-1 respectively, an estimated 30.6 and 9.5 YOY gizzard shad $\mathrm{m}^{-2}$ would have consumed $100 \%$ of the Daphnia production.

David Perkins (advisor Chuck Krueger), received a Ph.D. from the Department of Natural Resources, Cornell University in the Spring 1994 for a thesis on

## Dynamics of Reproduction by HatcheryOrigin Lake Trout (Salvelinus namaycush) in Lake Ontario

Natural recruitment of lake trout in the Great Lakes has been minimal, except in Lake Superior where remnant stocks exist. Quantitative studies of survival between egg deposition and fry emergence were conducted on a spawning reef in Lake Ontario to determine variables associated with poor production of hatchery-origin lake trout. Thirty to 90 mesh bags were buried in the substrate of Stony Island reef in 1990, 1991 and 1992 to collect eggs and fry. Bags were retrieved on three dates over the six month period between the end of spawning and fry emergence. Egg abundance in the substrate increased significantly ( $\mathrm{P}<0.01$ ) from $700 \mathrm{~m}^{-2}$ in 1990 to $3572 \mathrm{~m}^{-2}$ in 1991 and $3355 \mathrm{~m}^{-2}$ in 1992. Change in egg abundance probably resulted from an increase in the proportion of Seneca strain spawners, rather than an increase in the total number of adults in the eastern basin. Mean embryo survival for the entire reef was $45 \%$ (range, $27-57 \%$ ) shortly after spawning, $7.5 \%$ (range, 7.4-7.5\%) in mid-April, and 3\% (range, 1.8-3.9\%) near the time of emergence in mid-May. Much of the early mortality was likely due to physical shock caused by water currents during storms, Mortality later in development was caused by predation and possibly poor incubation quality of substrate along the base reef. A life history model for lake trout in Lake Ontario was developed and parameterized with the levels of fertilization and egg-to-fry survival rate esti-
mated in this study, Other parameters were estimated from stocking rates and previous studies. Model output indicated that the current lake trout population has the potential to produce over 1.26 million age- 1 fish annually. No evidence exists for this level of recruitment in Lake Ontario. Natural recruitment may be limited by a low proportion of eggs incubating in suitable substrate and/or low survival of fry to age-1. These problems could be due to a combination of 1) limited spawning habitat, 2) ineptitude of some strains to locate spawning habitat, 3) disease-related mortality during the swim-up life stage, and 4) fry mortality from alewife predation. Managers need to reconsider current strategies and time requirements necessary to achieve restoration goals and objectives for lake trout in Lake Ontario:

## Feature Article

## Relative Survival Rates of Differentially Reared Muskellunge in Chautauqua Lake, New York

February 15, 1994
Paul E. McKeown, Stephen R. Mooradian
New York State Department of Environmental Conservation
128 South Street
Olean, New York 14760

John L. Forney<br>Cornell University<br>Department of Natural Resources<br>Ithaca, New York 14853


#### Abstract

The propagation and stocking of muskellunge in Chautauqua Lake has supported an economically valuable sport fishery for over a century. Changes in the physical and biological components of Chautauqua Lake, as well as changes in management strategies and rearing techniques, have influenced the abundance of adult muskellunge. Early propagation programs focused on the production and stocking of fry. With advances in technology in the late 1930's came an increased emphasis on the production of fingerlings reared in ponds. Subsequent increases in the adult catch of muskellunge in the pound nets inferred the superior survival of these fingerlings. Pond rearing of fingerlings continued to the mid 1970's when the increased survival to stocking of trough reared fingerlings (hereafter referred to as intensive fingerlings) resulted in a change in production to intensive rearing. Pro-




Figure 3. Extensive fingerling muskellunge rearing schedule.
ber. Lengths of fingerlings stocked in September from 1981 to 1990 were compared to electrofishing catch rates in fall (weighted to number stocked) to determine if length at stocking influenced short term survival.

To evaluate relative survival rates of differentially reared muskellunge following stocking, two methods of sampling were utilized. Approximately one month after stocking, predetermined sections of shoreline were sampled with an electrofishing boat. The catch per of hour of fingerlings recovered by electrofishing relative to the number stocked provided an index of short term survival (Mooradian 1986). Long term contributions of differentially reared stocks were computed by comparing the adult catch in the poundnets and trapnets to the number stocked as fingerlings (McKeown and Forney 1993).

Relative survival to maturity for intensive and extensive lots was indicated in the poundnet and trapnet catch (Table 1). The proportion of intensive to extensive muskellunge recovered from 1987 to 1993 was 1:3.86 (chi-square analysis, $\mathrm{p}<0.05$ ), substantially higher than differences in survival first determined from the recovery of fingerlings one month after stocking.

In 1987 and 1988, lots of extensive fingerlings were stocked in August and September. Evaluation of these stockings indicated that September stocked fingerlings were recruited to the nets on the order of 1.9:1 compared to August stockings (Table 1).


Figure 4. Regression analysis of relative survival to length at stocking for fingerling muskellunge in Chautauqua Lake, New York.

## Results

Evaluation of relative survival rates of intensive and extensive fingerlings one month after stocking indicated that a disproportionate number of marked fingerlings recovered were extensively reared. Chi-square tests for homogeneity of ratios confirmed that differences in the proportion of intensive to extensive fingerlings recovered were highly significant ( $\mathrm{p}<0.01$ ) in each of the three years (19841986). Proportion of intensive to extensive fingerlings recaptured relative to numbers stocked were in a ratio of 1:2.49 (1984), 1:1.85 (1985) and 1:2.41 (1986) for a pooled ratio of 1:2.38 (1984-1986). Extensive fingerlings grew more rapidly between release and recovery than intensive fingerlings (0.04 in $\{1.0$ mm \}/day vs. 0.03 in $(0.7 \mathrm{~mm}) /$ day, $1984-$ 1986) (Forney 1987).

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## FInmal Announcement!!!

# AQUATIC SAFETY FOR FISHERIES PROFESSIONALS <br> "A must for both field biologists and supervisors!" <br> B. Shupp, NYS Bureau of Fisheries Chief 

Instructor:
Dave Smith, PhD, US Coast Guard (ret)

## Cost:

\$75 (\$80 after July 31)
per person

## Description:

Instructor Dave Smith PhD, USCG (ret) will take participants through a 1 1/2 day training session involving classroom discussions, in-pool training and implementation of safety techniques under "real life" in-stream conditions. You will get wet!!

Requirements: PFD required, raingear and boots recommended.
Location and Lodging:
Ithaca College, Ithaca, New York
Dormitory Style (2 per room)
Meals: barbecue (8/17) and breakfast ( $8 / 18$ ) included-other meals available on campus
Attendance: Limited to first 100 applicants.

## Schedule

August 17 (Wed)

August 18 (Thurs)
To register, complete and mail to:
Jack Hasse
NYS-DEC
207 Genesee Street
Utica, NY 13501
(315)793-2554

Date:
August 17-18, 1994

Schedule
12-1 PM registration
1-4 PM lecture
4:30-6:30 PM pool
7 PM barbecue \& beverage
7-8 AM breakfast
8-9 AM travel to stream
9-noon stream session
Name: _ _ _ _ _ _ _ _. Fee: _ _ _ _ . Address:

Phone:
Roommatē C̄hoicē:

NOTE THE NUMBER 92, 93, OR 94 ON YOUR MAILING LABEL. THIS DENOTES YOUR MEMBERSHIP STATUS TO BE A CURRENT PAID-UP MEMBER YOU SHOULD HAVE A 94 ON THE LABEL. IF YOUR LABEL IS MARKED 92, YOUR NAME WILL BE DELETED FROM THE MEMBERSHIP ROLE AS OF 1 AUGUST 1994.

ATTACHED IS A MEMBERSHIP BLANK FOR NEW OR RENEWAL MEMBERSHIPS
SEND YOUR 1994 DUES TO THE SECRETARY/TREASURER

Application for Membership
New York Chapter American Fisheries Society
(Information provided will be used in the membership directory)

Name $\qquad$

Address $\qquad$

City/State/Zip $\qquad$
Employer/Affiliation/School $\qquad$
Telephone: Work $\qquad$ Home $\qquad$
Are you a member of the American Fisheries Society (Parent Society)? Yes_ $\qquad$ No $\qquad$

New Membership $\qquad$ Renewal $\qquad$ What was the last year you were a paid-up member? $\qquad$ Would you be interested in serving on any of the Chapter Committees? If so, please check which committees would interest you.

| Environmental Concerns |  | Membership committee |
| :---: | :---: | :---: |
| Program Committee |  | Resolutions Committee |
| Finance Committee |  | Professional Incentives |
| Newsletter Staff |  | Professional Diversity |
| Workshop Committee |  | Student Sub-unit |

Make checks payable to NY Chapter AFS. Send This form and your check to:
Timothy Sinnott
Secretary/Treasurer
c/o NYSDEC
Room 530, 50 Wolf Road
Albany, NY 12233-4756
Interest and Specialty codes have been deleted because of the increased cost of printing and mailing the membership directory.


## New York Chapter - American Fisheries Society Newsletter April 1994



| 1994 New York Chapter | Officers: |
| :--- | :--- |
| President: Paul McKeown |  |
| Past President: Edward Mills | $\quad$ Secretary-Treasurer: Tim Sinnott |
| Committees: |  |
| Environmental Concerns: | Vacant |
| Audit/Finance | Jack Hasse/Tom Fields |
| Program | Ed Woltmannn |
| Resolutions | Bob Werner, Dave Bryson, Don Stewart |
| Nominating | Edward Mills |
| Membership | Don Einhouse |
| Newsletter | Lars Rudstam/Myriam Ibarra |
| Professional Incentives | Vacant |
| Workshop | Jack Hasse/Dave Lemon |
| Professional Diversity | Betty Lou Brett |
| Student Subunit | Brian Wood |
| ESF Student Chapter | Mark Arrigo |

1980's. To stay ahead of inflation I suggest that we take a more aggressive role with at least a portion of our investments. To achieve this I will be forming an ad hoc committee to advise the chapter on investments. Anyone with any expertise or interest in financial investments please contact me at your earliest convenience.

In closing, I would like to challenge all of you to assist me in improving your professional seciety. How can this be best accomplished? Three simple yet succinct words best describe the comerstone of an effective professional organization; involvement, enthusiasm and support!

## Paul McKeown, President

128 South Street, Olean, NY 14760
(716) 372-0645

Fax:(716)372-2113

## Chapter News

## Minutes, AFS Annual Business Meeting, 27 January 1994

The meeting was called to order at 2:10 PM
President Ed Mills began by reviewing highlights of the past year. These included:
A. The decision was made to put off work on the "Aquatic Ecologist" video, because there was too much overlap with a project being accomplished by the AFS Parent Society on the fisheries profession.
B. The NE workshop on Black Bass Management was a total success. Participants attended from all over the country. Congratulations to Dave Green, Doug Stang, and Al Schiavone for a job well done.
C. The financial standing of the chapter is in excellent shape. The chapter has a balance about $\$ 2,000$ higher than last year at this same time.
D. Advocacy. The chapter has not taken a position on this topic, despite the parent society and NE Division being strongly in favor. Paul should consider this during the coming year.
E. Raffle. Already a success. The chapter needs to look at innovative ways of raising funds. Proceeds
of the raffle will be shared between the chapter and the student subunit.

The minutes of the last business meeting as published in the March 1993 newsletter were accepted. The treasurer's report was read and accepted. A copy is attached.

Awards
Bruce Shupp was nominated by the executive committee for Honorary Membership Award, and Dave Green and Bob Werner were nominated for Professional Achievement Awards. All three nominations were approved by voice vote.

## Election

The new procedure for voting was explained to the members present. Ballots would be provided at registration, and all members had until the beginning of the business meeting to vote. Anyone who did not have a chance to vote was given an opportunity to cast a ballot at that time. Candidates for 1994 President- elect are Don Stewart and Don Einhouse

Newsletter
The new editors of the newsletter for 1993 were Myriam Ibarra and Lars Rudstam. Myriam thanked all of those who contributed to the newsletter, and requested future contributions from all present.

## Program

Thanks to Steve La Pan, Al Schiavone, and Al Petersen for doing an excellent job in arranging the meeting. Al Petersen requested comments and suggestions on the F\&W Olympics held Wednesday night. He also volunteered to continue to do arrangements as long as the meetings were held in Owego.

## Student Sub-unit

Brian Wood indicated that he was trying to make contact with students at schools other than ESF and Cornell. Most of them aren't aware of the student sub-unit. The Student sub-unit is a component of the New York Chapter, and all student chapter members automatically belong to the student sub-unit as well. The ESF Chapter is an independently chartered chapter of the parent society with its own by-laws. The ESF chapter is conducting a field trip to the Alleghany National Park in April, and invites any interested students from other schools to contact them if they would like to participate.

## NE Division

Carolyn Griswold reported on events at the Northeast Division. The NE Division went well. Bill Hyatt is in charge of the next workshop, and is holding a planning

Steve M. commented that he thought the new balloting procedure was good, and that it should be continued.

The meeting was adjourned at 5:32 PM.
Respectively Submitted
Timothy J. Sinnott Secretary/Treasurer

## Committees

## Realignment of RAGTW

The NYC-AFS was recently notified that the Return A Gift To Wildlife (RAGTW) program has revised it's operational framework and will no longer require input from an advisory committee. For several years chapter members Barb Knuth and Norm Soule held seats on the RAGTW advisory committee. According to Herb Doig, Assistant Commissioner of the Office of Natural Resources (DEC), The input provided by the advisory committee played a primary role in shaping the RAGTW program. Central to the restructuring will be a process to obtain input on overall program goals and priorities from a broad array of wildlife interest groups, rather then focusing on allocating funds to specific projects. Program emphasis will be on conserving the State's fish and wildlife diversity and creating wildlife observation and appreciation opportunities. Special thanks to Barb and Norm for their efforts!

## Committee Openings

The Executive Committee is seeking enthusiastic volunteers to fill positions in the Environmental Concerns and Professional Incentives Committees. For additional information, interested parties should contact Paul McKeown at (716)372-0645.

## Proposed Resolution

After consulting with a number of fisheries professionals, it became clear that New York State is experiencing difficulties with instream flow issues. Disputes over the allocation of water has been the focus of many high profile projects such as the New York City water supply and the withdrawal needs for snow making at Hunter's Mountain. Difficulties are also experienced when determining instream flow and water quality certifications and instream flow allocations are being challenged by hydroelectric development. Bearing all these and other
demands on the state's waterways, I drafted the following resolution:

## NEW YORK STATE INSTREAM FLOW POLICY

WHEREAS, the State of New York has many waterways and many diverse and competing uses for its waters; and
WHEREAS; the State's waterways are administered as a common property, public trust resource; and WHEREAS, the State of New York is responsible for the administration of state and Federal laws and regulations relating to the uses of the nation's waterways; and
WHEREAS, the New York Chapter of the American Fisheries Society is greatly concerned with the multiple use management of our state's waterways;

NOW THEREFORE BE IT RESOLVED, the New York Chapter of the American Fisheries Society, assembled at its 1994 Annual Meeting, 24 January 1994, recommends that Governor Mario A. Cuomo appoint and the New York State Legislature form and appropriate funds to support a New York State Task Force' comprised of technical professionals and concerned citizens, to develop an instream policy for New York.

Before proceeding further with this proposal, the resolutions committee solicits input and comments. These comments should be sent to :David Bryson, US. Fish \& Wildlife Service, 3817 Luker Road, Cortland, NY 13045.

## American Fisheries Society is ONLINE on COMPUSERVE.

The American Fisheries Society is online with its new section of the Earth Forum on CompuServe. Join us by taking advantage of a free sign-up package which includes $\$ 15.00$ worth of free connect time. To join call 1-800/848-8199, select voice mail option to speak with an operator, ask for representative 190 to request the free CIS subscription, courtesy of Earth Forum.

Take advantage of the ability to talk to AFS members anywhere at low cost. In your sign-up package you will get information on a local phone number for access and instructions for signing up. Once you get online type GO EARTH at any prompt. Joe Reynolds, the System Administrator will be happy to answer any question you may have.
$\$ 10$ million in the fall of 1989. A well developed business and facilities infrastructure followed the development of the fishery. Continued dealing with business interests along the river occurs, currently focused on flows proposed in the FERC license application by Niagara Mohawk Power Corporation. The utility operates two hydropower facilities on the river. Historically the utility operated these in a peaking mode. The license application proposed base flows as the result of negotiations with DEC, U. S. Fish and Wildlife Service, and others.

A recent acquisition of $1,700+$ acres of land plus public fishing rights and conservation easements on Niagara Mohawk properties along the Salmon River Corridor was achieved through a third party purchase. Fishing rights along the river downstream of the lower reservoir had been previously dedicated to DEC but could have been withdrawn with a ten day notice. Included in the acquisition was the area around the Salmon River Falls, a picturesque 100 foot high falls at the top of a steep narrow 1.5 mile gorge.

The DEC Salmon River Fish Hatchery, which is the source of all chinook, coho, and winter-run steelhead in New York, is located on the river. Region 7 fisheries staff annually monitor spawning runs of these species and collect biological data. Returning chinook jacks collected there are a good indicator of chinook recruitment in Lake Ontario.

The region contains some 1,600 miles of trout streams, primarily small waters managed for wild brook trout. Most of the larger trout streams receive stockings of brown trout. A high priority for the past three years has been to resurvey the stocked sections to apply Catch Rate Oriented Trout Stocking (CROTS) formulae. Notable high quality streams include Ninemile and Skaneateles Creeks in Onondaga County, Geneganslet Creek in Chenango County, Old Chenango Canal and Oriskany Creek in Madison County, and Factory Brook in Corland County.

Major warm water lakes in the region in addition to Otisco Lake are Oneida Lake and Whitney Point Reservoir. Oneida Lake walleye and perch monitoring and walleye/perch/gizzard shad interactions are among the studies done by Cornell University staff (Lars Rudstam, et. al.) at the Shackelton Point Biological Field Station under contract from DEC. Information they develop allows us to closely manage walleye as the primary predator through minimum length regulations. Their work is leading to a better understanding of complex predator prey interactions with these species. The region also provides assistance to the newly renovated Oneida Fish Hatchery as needed during walleye spawning activities.

Whitney Point Reservoir is a 1,200 acre flood control impoundment on the Otselic River. The reservoir
was noted only for white crappie fishing but walleye have had recruitment successes recently which have produced an extremely popular fishery. Future work will look at walleye recruitment, exploitation, and restricting harvest.

Fishery management efforts on warm water rivers are currently limited to the Susquehanna River where a general survey has been ongoing for three years. To date, 40 miles have been sampled with 30 miles remaining. Walleye, smallmouth bass, and tiger and true muskies (the latter stocked by Pennsylvania Fish Commission) comprise the major gamefish species. An ongoing tagging project directed at determining fish movement and exploitation rates of walleye and musky has to date revealed tremendous movement upriver (5070 miles) and down river ( $100+$ miles $)$ by walleye.

In addition to the previously mentioned acquisition of public access along the Salmon River, efforts to develop access sites to facilitate float trips along our medium-sized rivers have been successful. Cartop launch sites at strategic locations to compliment municipal access sites now make twenty miles of the Chenango and Tioughnioga Rivers walleye and smallmouth bass fisheries accessible.

Regional efforts directed toward environmental protection primarily deal with Article 15 (Protection of Waters) permit review, hydropower licensing (Salmon River, Oswego River, Owasco Lake Outlet), fish collections for contaminant analysis, fish kill investigations, and coordination with the Division of Water to assist in enforcement of water quality standards and the ongoing cleanup of Onondaga Lake.

## Region 7 Fisheries Unit Staff

| Les Wedge | Regional Fisheries Manager |
| :--- | :--- |
| Larry Gumaer | Biologist 1 (Ecology) |
| Tom Chiotti | Biologist 1 (Aquatic) |
| Dave Lemon | Biologist 1 (Aquatic) |
| Jeff Robins | Biologist 1 (Aquatic) |
| Russ Davall | Fish and Wildlife Technician 3 |
| Paul Moore | Fish and Wildlife Technician 2 |
| Dan Bishop | Fish and Wildlife Technician 2 |
| Wayne Masters | Fish and Wildife Technician 2 |
| Steve Hurst | Fish and Wildlife Technician 1 |

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is needed to improve the protection and enhancement of the natural resources.

Specifically, anticipated activities include:
-Evaluate and assist in updating information used in interagency plans as related to the management and restoration of the biological resources.
-Provide a description of the basins and an analysis of how its characteristics, and current or planned land and water use practices affect the fishery resources and habitats of the basin.
-Continue to develop methods and action items to facilitate restoration of depleted, nationally significant fishery stocks such as lake trout, lake sturgeon, and Atlantic salmon.
-Address specific interstate resource concerns such as restoration of walleye and yellow perch fisheries by providing planning, information and technical expertise.
-Identify fishery habitat areas which could be modified for the benefit of the aquatic resources, and provide detailed action plans for those habitats.
-Will increase inter- and intra-agency coordination efforts with Department of Defense military reservations and USFWS National Wildlife Refuge systems to develop comprehensive ecosystem watershed management plans for aquatic natural resources.
-The use of historic information of the aquatic resources and the intensive efforts to restore water quality provide a great opportunity to mesh the various efforts with fish and wildlife restoration and enhancement. This office is focusing on the use of Geographic Information System technology to model the state of the lake and to identify most effective restoration opportunities. Various databases are available from agencies and universities which include fish stock assessments, primary and secondary production evaluations, nutrient loading determinations, shoreline and other physical modifications and other impacts on the system. There is a need to pull all this information together into a Geographic Information System to be used in conjunction with ecosystem modeling. This is an essential tool in assessing management decisions and analyzing status and trends.
-Watershed approach efforts are necessary to determine linkages between physical, chemical and biological parameters that affect ecosystem health. These efforts are not being properly funded at present.

## Public Benefits

- Restoration and rehabilitation of these resources is a public trust requirement and is also required by the
specific mandates for an overall better quality of life for us and future generations.
- According to the intend of the Act, at 50 percent ( $\$ 1$ million) or higher funding for this Office, an increasing proportion of the funds (up to $50 \%$ at full funding [ $\$ 2$ million]) will be made available to "partners" and "cooperators." This important funding tool has not yet been available since funding has been at $1 / 10$ the authorized amount.

Specific benefits include:

- A healthy aquatic community and associated habitats that emphasize self-sustaining native fish populations.
- A healthy terrestrial community and associated habitats in the watershed.
- Populations of native biota above critical levels.
- A net gain in wetland habitat area and optimization of wetland functions.
- A society that is knowledgeable of the values, functions, and dynamics of ecosystems - where individuals understand the role(s) of society and themselves in the ecosystem, and can make informed decisions.

For more information contact:
W.-Dieter N. Busch

## Feature Article

This article is extracted from:

Bishop, Dan L. 1992. Interaction between adult lake trout abundance and recruitment of stocked salmonines in Cayuga and Seneca Lakes. M.S. Thesis. SUNY College of Environmental Science and Forestry, Syracuse, New York.

## Introduction

The effects of increasing predator levels in aquatic ecosystems by means of artificial stocking programs raises many concerns for fishery managers. Increased predator levels and stability of the predator-prey systems with increased pressure on forage populations are among the most urgent of these concerns and has been the thrust of much of the work done in the Great Lakes (Stewart et al. 1981; Stewart et al. 1983; Eck and Brown 1985; Jude and Tesar 1985; Eck and Wells 1987; Stewart and Ibarra 1991). Another major area of investigation has centered on the effects of sea lampreys on salmonines (Lett et al. 1975; Pycha 1980; Farmer 1980; Kitchell and Breck 1980; Swink and Hanson 1986; Bergstedt and Schneider 1988; Coble et al. 1990).

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Stocked fish, identified by the presence of a fin-clip, accounted for $30-40 \%$ of the rainbows taken in the Cayuga Lake fishery during the 1980 s based on angler diary reports of marked and unmarked fish.

Seneca lake was stocked with rainbow trout until 1988 when landlocked Atlantic salmon were introduced. Brown trout yearlings and fall-fingerlings were stocked throughout the 1980's in Seneca Lake.

Recruitment of Stocked Salmonines Lake Trout:

Numbers of age 3 lake trout captured in standard summer gillnets ( 32 nets/year on each lake) were used to index recruitment. Age 3 fish were used because they were the youngest fish fully recruited to the nets. In addition, other sources of mortality were minimized because these fish were just starting to recruit to the sport fishery and small enough to avoid sea lamprey induced mortality.

Time periods chosen for the analysis (1983-1988 for Seneca and 1986-1991 for Cayuga) were periods of marked increases in adult lake trout populations and declining lamprey populations. This led to an increase in the adult lake trout-to-lamprey ratio. Lampreys selectively feed on the largest available hosts. Wounding data from Seneca Lake (Engstrom-Heg and Kosowski 1991) and Cayuga Lake suggest that lamprey induced mortality on age 3 lake trout was probably negligible during the study period. In addition, angling regulations, survey efforts, and stocking rates were stable for both lakes.

Estimates of mid-year adult populations of lake trout were used to index predators and these were taken from Engstrom-Heg's (1990), and Engstrom-Heg and Kosowski's (1991) sea lamprey control evaluations. The population estimates were based on tag returns from angler diary cooperators and the general public, and an expansion of catch per unit of effort from angler diary data.

The 1982 Seneca and 1988 Cayuga year-classes (Two of 12 observations) were not used in the analysis because they were outliers believed to be caused by factors other than adult lake trout population levels. The Seneca Lake 1982 year-class performed very poorly, likely due to a documented outbreak of coldwater disease in the hatchery (Data provided by Dr. J.H. Schachte, NYSDEC).

The 1988 year-class in Cayuga Lake was not used in the analysis because it was an obvious outlier caused by exceptional performance of the fall-fingerlings which were adipose fin-clipped only. This was the only cohort from Cayuga Lake where fall-fingerlings returned in greater numbers than yearlings. Landlocked salmon in Cayuga Lake (discussed later) provide
additional evidence that fish marked with adipose finclips may have a survival advantage over those with pectoral or pelvic clips.

Information in the literature on the effects of finclipping of fish released into the wild is rare. Chadwick (1966) provides a literature review and discussion on the effects of fin-clips on mortality. Many of the cases reviewed involved species of Pacific salmon. Various fin-clip combinations were shown to have different effects on survival of stocked salmonines. Generally, unmarked fish showed the best survival. Among fin-clipped fish, adipose fin-clips were the least detrimental followed by pelvics and then pectorals. He also suggested that it was probable that mortality from fin clipping was likely to increase as the environment became more rigorous (e.g., Increased predator levels).

A regression of the numbers of age 3 lake trout caught in survey nets on the estimated number of adult (ages 6-15) lake trout present when each cohort was stocked ( $r^{2}=0.67, p<0.01$, Figure 1) suggests that predator levels at the time of stocking are a major factor in resulting year-class strength. For example, age 3 fish caught in 1988 from the Cayuga Lake 1985 yearclass, stocked as fall-fingerlings in 1985 and as yearlings in the spring of 1986, were paired with the adult lake trout population in Cayuga Lake during the summer of 1986. Data from the two lakes were pooled because a regression model with separate slopes and intercepts for the two lakes did not significantly increase the variability in catches of age 3 fish accounted for by the pooled model.

Survival ratios of lake trout stocked as yearlings and fall fingerlings were examined to evaluate their relative performance. Calculations of survival ratios were done for each year-class as follows: the number of fish recovered was divided into the number of fish stocked for yearlings and fall-fingerlings. The quotient for yearlings was then divided by the quotient for fallfingerlings.

Overall survival ratios Y:FF were 1.96:1 for Seneca Lake and 2.36:1 for Cayuga Lake. These findings are similar to the findings of Elrod et al. (1988) for Lake Ontario. Excluding the 1987 year-class from the Cayuga Lake estimate resulted in a ratio of 1.90:1. The 1987 year-class fall-fingerlings in Cayuga Lake had coldwater disease and the resulting survival ratio was 50:1. Unusual survival ratios of yearlings to fall fingerlings for individual cohorts, such as the 1987 year class in Cayuga Lake, suggest that there may be compensatory survival of one component (yearling or fall fingerling) when the other component performs below expectations. The excellent performance of the 1987 year class yearlings in Cayuga Lake brought the overall strength of the year class reasonably close to the
ment decisions that may not be made solely on the basis of biology.

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clo NYSDEC
Room 530, 50 Wolf Road
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Interest and Specialty codes have been deleted because of the increased cost of printing and mailing the membership directory.
:

# 1994 Joint Annual Meeting <br> New York Chapters of: <br> THE WILDLIFE SOCIETY <br> AMERICAN FISHERIES SOCIETY 

Natural Resource Management in New York: Cross-Disciplinary

Owego Treadway Inn, Owego, New York
January 26-28, 1994

ABSTRACTS

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Reducing impingement of alewives with high-frequency sound at a power plant intake on Lake Ontario

Dennis J. Dunning and Quentin E. Ross New York Power Authority, 123 Main Street White Plains, NY 10601

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Significance of Tributary Spawning to the Hudson River
Smallmouth Bass Population
Robert E. Schmidt and Theresa Stillman
Simon's Rock College; Alford Rd. Great Barrington, MA 01230

Drift net sampling in Stockport Creek, a large Hudson River tributary, demonstrated a 2 week period of downstream drift of smallmouth bass fry ( 3 cm TL or less) in June 1993. Estimates of the drift varied depending on the model of the daily timing and duration of the drift phenomenon. Magnitude of the drift was between $10,000-60,000$ bass fry for the 2 week period.

Best guesses of the population size of catchable smallmouth bass in the Hudson range between $10,000-20,000$. The drift from this one tributary appears to be a significant recruitment mechanism for the Hudson bass population.

## PROFESSIONAL CONTINUED

Pathology associated with soybean protein fed to Rainbow Trout (Oncorhynchus mykiss)

Paul R. Bowser and Kathy Earnest-Koons Department of Avian and Aquatic Animal Medicine, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853 Gary L. Rumsey
Tunison Laboratory of Fish Nutrition
U.S. Fish and Wildlife Service, Cortland, NY 13045

Attempts to partially or completely replace fish meal protein in salmonid feeds with soybean protein have met with only limited success at high (>40\%) dietary inclusion level. For several years work has focused on problematic effects of protease inhibitors and lectins. More recently, work in small mammals has suggested that some globular protein constituents of soybean can act as antigens or allergens and cause poor growth. The activities of these latter compounds can be altered by heat and chemical treatment.. In this study, we investigated the use of defined soybean preparations as constituents of trout feed.

Fish were fed diets containing high or low antigen soya protein and growth of the fish and histological changes that occurred in the gastrointestinal tract were documented. Fish fed a diet formulated with fish meal as the only protein source (control diet) had the best growth. Tissues examined from control fish contained few lesions. Growth was slightly less in fish fed a diet containing a soya protein source grew very little during the study period. Histological lesions observed included a blunting of the intestinal epithelial folds, increased cellularity and pycnotic nuclei within the intestinal epithelial tissue. These lesions were most severe in fish fed the high antigen soya protein diet, followed by the low antigen soya protein diet.

Instream Flow Analysis on the Salmon River, NY: Tools for Evaluating Hydropower Peaking Operations
M. E. Conners and J. Homa, Jr. Ichthyological Associates, Inc. 50 Ludlowville Road, Lansing, NY 14882

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Seasonal and spatial patterns of diet and condition in Lake Erie Rainbow Smelt

Scott Prindle
301 Illick Hall, SUNY-ESF
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Seasonal changes in diet of young-of-year and older rainbow smelt (Osmerus mordax) were analyzed to determine their utilization of various prey resources. I examined the length-weight relationships and energetic patterns of rainbow smelt to determine if there are any differences among the three basins of Lake Erie. Analysis of monthly diet composition of young-of-year smelt in 1992 revealed a heavy dependance on copepods from June through August, a shift to predominance of Bosmina in September, and to larger cladocerans in October (i.e., Bythotrephes and Daphnia). Larger smelt preyed on midge larvae, Bythotrephes, and copepods in June, Bythotrephes, Daphnia, and copepods in July, and predominantly Bythotrephes in October. Analysis of covariance of length vs. wet weight for YOY smelt revealed a gradient in L-W regression slopes with eastern basin fishes having the highest slope and western basin fishes the lowest slope. This suggests that the more eastern fish were in slightly better condition, but analysis of length vs. dry weight did not reveal significant differences between basins. Adult smelt in the eastern basin were in significantly better condition than central basin smelt both in terms of wet and dry weight. YOY and adult smelt showed pronounced seasonal cycles of energy density (cal/g) with a strong peak in late summer, a pattern noticeably different from that observed for Lake Ontario smelt.

Age, growth \& distribution of Cunner (Tautogolabrus adspersus) and Tautog (Tautoga onitis) larvae in the New York Bight: A single season analysis

Mark H. Malchoff and Robert K. Cowen New York Sea Grant, 39 Sound Avenue Riverhead, New York 11901

This study of the cunner (Tautogolabrus adspersus), and tautog (Tautog onitis), was undertaken to describe larval age and growth characteristics, ontogenetic changes in spatial and/or temporal distribution, and interactions with the physical environment which could influence recruitment. Ichthyoplankton and physical oceanographic information, were obtained from four 1988 cruises within the New York Bight. Larval growth rates were estimated at 0.34 mm (day), and 0.30

## Miller and Haynes - STUDENT CONTINUED

Braddock Bay on the canal water through a set of three sluice gates, where a dense bed of zebra mussels has formed and is known to have existed since 1990. Within 75 meters downstream from this point mussel density is less than one per meter. In the summer of 1993 veliger counts in the canal were on average 52 times greater than they were in Salmon Creek. pH ranged from 7.5 to 8.2 in Salmon Creek and 7.3 to 8.3 in the canal. Temperature did not exceed $30^{\circ} \mathrm{C}$ and calcium concentration did not fall below the minimum of 40 ppm . Particulate organic carbon in Salmon Creek average only slightly less than the Canal and was not significantly different ( $t=0.25, \mathrm{p}, 0.05$ ). Given these appropriate water quality conditions and a source of veligers, my talk will discuss reasons why zebra mussel are not colonizing streams fed by the New York State Barge Canal.

Maniputation of littoral habitat to enhance spawning and recruitment of largemouth bass and pumpkinseed sunfish

Mark A. Arrigo and Neil H. Ringler
242 Illick Hall, SUNY ESF 1 Forestry Drive, Syracuse, New York 13210

Onondaga Lake, New York, received inputs of calcium waste as a by product of soda ash manufacturing from 1886 to 1986. Most of the littoral area has been covered with semisolid calcium carbonate or calcium carbonate nodules (oncolites) that resemble gravel but are lighter and more easily disturbed. The lack of nutrient holding capability and physical nature of the substrate limits aquatic plant growth. Recruitment of largemouth bass and sunfish has been and nearly non-existent during some years. Three $400 \mathrm{~m}^{\wedge} 2$ areas of Onondaga Lake were manipulated in 1993 to determine whether spawning by largemouth bass (Micropterus salmoides) and pumpkinseed sunfish (Lepomis gibbosus) could be enhanced with artificial spawning beds and half-log structures. A 625 $m^{\wedge} 2$ area, adjacent to two of the spawning areas was planted with aquatic macrophytes in an attempt to increase juvenile survivorship and growth.

A total of 983 active nests was identified; nests built in manipulated areas were 17 X as abundant as in reference sites. Pumpkinseed nests comprised $51 \%$ of the total, largemouth bass $2 \%$, and bluegill $2 \%$ (Lepomis macrochirus). Identification of the remaining nests was not confirmed. Most pumpkinseeds (95\%) built nests near the spawning beds and accompanying half-logs, whereas most largemouth bass (91\%) built nests on artificial spawning beds. Significantly more ( $5 x-9 x$ ) yearling bass and sunfish were captured in macrophyte enclosures than in reference sites. Growth rates of largemouth bass and pumpkinseeds within macrophyte enclosures were almost identical to those in reference sites

## MADSEN ET AL. - PROFESSIONAL POSTERS CONTINUED

habitat during the summer of 1993. These manipulations should increase fish recruitment by increasing spawning success and survival of young-of-the year fishes. We will detail the construction and experimental designs of the littoral manipulation and present some preliminary results from monitoring of the plant, fish, macroinvertebrate and zooplankton communities.

## Comparative age estimation of Atlantic Sturgeon and Lake Sturgeon using fin ray sections

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Bill Andrews
Division of New Jersey Fish, Game and Wildlife Nacote Research Station, Port Republic, NJ 08241

Steve LaPan
New York State Department of Environmental Conservation 317 Washington Street, Watertown, NY 13601

Age in sturgeon species (Acipenser spp.) is usually determined by counting annuli on cross sections of fin rays. Identification of sturgeon annuli is often difficult because of their unique life history characteristics which include late maturity, intermittent spawning, longevity, and adaptation to a wide range of environmental conditions. We examined pectoral fin ray sections of Atlantic sturgeon (A. oxyrhynchus) from coastal waters and those of lake sturgeon (A. fulvesens) from the St. Lawrence River. Fin ray sections were cut near the base of the pectoral fin with a low-speed diamond saw. Preparing readable fin sections required more precision (e.g. thickness) in lake sturgeon than Atlantic sturgeon, however ages of lake sturgeon were generally easier to estimate than those for Atlantic sturgeon. Lake sturgeon had distinctive annuli once the first annulus was established. In contrast, annuli of Atlantic sturgeon were often difficult to identify, making age determinations subject to more interpretation. Differences between species may result from the use of freshwater, estuarine, and marine environments by Atlantic sturgeon. For both species age estimation was generally more difficult for older fish. Secondary ray readings facilitated aging of lake sturgeon but were less useful for Atlantic sturgeon. Fin ray sections can be used to age live sturgeon and the technique is practical in terms of collection, processing, legibility, and precision.

Title: $\quad$ GIS Analysis of Spruce Grouse Habitat in the Northern Adirondacks
Author: Howard Weinberg and Robert E. Chambers
Address: SUNY College of Environmental Science \& Forestry
Syracuse, N.Y. 13210

## Phone: (315)470-6695

Spruce grouse (Dendragapus canadensis) viability in New York is threatened due to habitat loss and fragmentation. Previous studies identified existing occupied habitats and provided analysis at the local level. The purpose of this project was to extrapolate this local data to a more regional level encompassing the spruce grouse's existing and potential range in the northern Adirondacks. A geographical information system (GIS) was used to analyze vegetative and physiographic features common to known spruce grouse display sites and to identify potential habitat for future management or restoration. ARC/INFO, ERDAS, and IDRISI software were used for processing of satellite imagery, digitization, and analysis of data. Data layers used for analysis included cover types, soils, elevation, display site locations, vegetation data for habitat areas, and fire and logging history from 1900 through 1915. Display sites were found generally in stands of at least two conifer species (one being black spruce, Pica mariana), having a DBH predominately between 10 and 23 centimeters. They were located within 300 meters of open bogs and at elevations between 457 and 487 meters. Display sites were found to occur on one of three soil associations: Borosaprists-Fluvaquents, Greenwood-Cathro, and Naumberg-Searsport. There was no association between display sites and presence of Polytrichum mosses.

## Title: $\quad$ Physical Indicators of Rabies in Raccoons

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[^0]:    SecretaryITreasurer

[^1]:    Timothy J. Sinnott
    Secretary/Treasurer

