

# The Tributary

A Newsletter of the Western Division, American Fisheries Society

Volume 23, No. 2, May 1998

## PRESIDENT'S CORNER Pete Bisson

### Time to Split??

The question surfaces now and again: Should the Western Division be divided into two or more smaller divisions? There are some good arguments on both sides of this question and the purpose of this editorial is to review some of them and ask for your feedback.

As you know, the Western Division counts about 3,000 members the largest division within a society whose membership over the last few years has ranged from 9,700-10,000. Our boundaries extend from Alaska to Mexico and from the eastern Rocky Mountains to the western Pacific islands and trust territories. You probably couldn't find a more diverse collection of fisheries interests if you tried. Basically, the argument over remaining intact as a division or splitting onto two or more smaller divisions revolves around what to do about this diversity and how it should be represented within AFS as a whole. Have we gotten too big, or is this diversity healthy? Are we under-represented in AFS governance, or does our considerable involvement in Section activities and our ample presence within the Society's governing board (e.g., 1st and 2nd AFS vice-president and 8 of the 21 section presidents are currently WDAFS members) constitute adequate representation for most issues? Do our annual meetings contain enough of something for everyone, or do topics at WDAFS meetings reflect items of local or regional interest to the extent that they are uninteresting to those from far away? Would chapters benefit more from belonging to a single large division or a smaller, more locally-focused one?

### The Case for Splitting Up

Every division gets two votes on the AFS Governing Board and each section of more than 200 members gets one vote. Due to the size of our division, each WDAFS vote represents far more AFS members than a vote by any other sub unit. Thus, WDAFS is proportionately underrepresented on the AFS Governing Board. Splitting into two or more divisions

will make western member's positions more equitably represented in AFS business and policies.

Annual meeting programs are often dominated by issues or topics of local importance but which may not be of interest to many division members. For example, meetings on the Pacific coast usually feature technical sessions involving salmon. These issues may be of limited interest to biologists and fisheries managers from the interior West. Splitting the division into smaller units will allow annual meetings to be focused on regional issues that have more relevance to the majority of members. Additionally, the cost of attending a regional meeting will likely go down as most members will not have to travel as far, and it may be easier to get travel authorization if the meetings are closer and feature items of local importance.

Now that division rebates have been re-instituted, having two or more smaller divisions might facilitate a more equitable distribution of rebate dollars among projects across the entire West. Smaller divisions might be more in touch with local chapter matters and committee activities might be geared toward less general, more specific projects.

### The Case for Staying Together

Many of the arguments for splitting up can also be used for staying together. The fact that technical sessions at WDAFS annual meetings are often slanted toward local fisheries topics gives members from outside the local chapter a chance to broaden their knowledge of issues throughout the west. This can be refreshing if you're weary of hearing about the same old thing, and it gives members an opportunity to make new friends. Personally, I welcome the chance to hear about what's being done to save the razorback sucker or an endangered pupfish species. The cost of attending the meeting may be higher, but many members bring their families and parlay the meeting into a vacation.

While it is true that splitting the WDAFS into two or more smaller divisions would increase the number of votes western members have on the AFS Governing Board, our members tend to be very active in sections and through them they can further influence Governing Board actions. Additionally, Western Division's members have done very well in AFS elections and we now have two members (Chris Moffitt and Carl Burger) in the AFS president's cycle, further ensuring that our views will not be ignored.

Keeping the division together means that the 10% active membership dues rebate will add up to a substantial amount of new revenue which will be available for special projects and other activities. This will give us new operating flexibility and may help facilitate more expensive projects than if the same dollars were divided among two or more smaller divisions.

Keeping the division together means that committees have a larger pool of potential members from which to draw, and a wider range of expertise as well.

### What Can You Do?

Whether you're a lump or a splitter, we'd like to hear your views. If you have a strong opinion one way or another, please let a member of the Executive Committee know or write an op-ed piece for the Tributary explaining why you feel the way you do. We may also include a straw poll in this summer's ballot for WDAFS officers, giving you a chance to express your opinion.

If there is widespread support for splitting the division, or if views are sharply divided, we have several options. We can bring a motion to the AFS Governing Board at this summer's meeting in Hartford asking for recognition of two or more new divisions. But assuming that we will not be ready to take this step yet, we can take an opportunity to discuss our division's future at the WDAFS meeting in Anchorage in late September. In any case, this is an important matter worthy of your consideration and I'll hope you let us know how you feel.

## WESTERN DIVISION AMERICAN FISHERIES SOCIETY ANNUAL MEETING

**Anchorage, Alaska, USA**  
**September 30 - October 3, 1998**  
**Contact: Brenda Baxter, FNBRB@uaf.edu**

### COMBINED AFS AND WAKEFIELD MEETINGS

The Alaska Chapter, North Pacific International Chapter, and Western Division of the American Fisheries Society will hold their 1998 annual meetings jointly with this Wakefield symposium.

The University of Alaska Sea Grant College Program has been sponsoring and coordinating the Lowell Wakefield Fisheries Symposium series since 1982. These meetings are a forum for information exchange in biology, management, economics, and processing of various fish species and complexes as well as an opportunity for scientists from high latitude countries to meet informally and discuss their work.

### SYMPOSIUM BACKGROUND

The goal of this symposium is to gather worldwide expertise and discuss how to incorporate ecosystem considerations into practical fishery management advice, and to recommend a process for advancing fishery management beyond the single species model. In the last 10 years, there has been a growing perception that it is not effective to base fisheries management policies solely on single-species considerations. Large decadal shifts in species composition, abundance, and productivity are common, and are not predictable from single-species models. Climate regime shifts and human activities (e.g., overfishing, pollution, habitat degradation) are implicated in these changes. North American examples include (1) Georges Bank, where the bottomfish community, once dominated by commercially valuable species such as cod and haddock, shifted to lower-valued species such as skates and dogfish; and (2) Gulf of Alaska and Bering Sea, where declines of crabs and shrimps have given rise to increasing pollock and flatfish. Severe economic

hardships are associated with such declines in commercial fisheries. Beyond consumer preferences, society places high values on marine ecosystem components, such as marine mammals, seabirds, and turtles. Threatened or endangered species warrant special consideration. Population declines often lead to after-the-fact adjustments to fishing regula-

*Continued on page 3*

### INSIDE HIGHLIGHTS!

*Division News*

*AFS Society News*

*Annual Chapter Meetings - Best Paper Awards*

*Meeting Announcements*

The Tributary is distributed to 3,671 WDAFS members and exists as a forum to present fisheries-related information. The editor is Paul Evans. If you have information you would like to have included in The Tributary, please contact us at:

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Submissions for the next issue of The Tributary are due by August 3, 1998.

## Comments by the American Fisheries Society Regarding the Proposal to List 13 Pacific Salmon Populations Under the Endangered Species Act

The American Fisheries Society (AFS), founded in 1870, is the oldest and largest professional society representing fisheries scientists. The AFS promotes scientific research and enlightened management of aquatic resources for optimum use and enjoyment by the public. An important goal of the AFS is to bring the best scientific information to bear on issues concerning the conservation and management of valuable fishes.

As a regional icon of environmental quality, Pacific salmon have enjoyed unprecedented management attention for well over a century. They are an important commercial species and have been so since the mid-1800s. Salmon are much sought after by recreational fishers in salt and fresh water and form the basis of a regionally important sport fishing industry. To indigenous peoples of western North America, salmon were an important seasonal food source and often the center of culturally rich religious traditions. Pacific salmon are the focus of environmental awareness and educational activities along the West coast; many school children participate in a salmon project at one time or another during their primary education. Finally, salmon are "keystone species" that link marine, freshwater, and terrestrial ecosystems by returning marine nutrients to streams and lakes, plants, and wildlife. For all these reasons, salmon conservation has become a high priority among the region's policy makers.

The proposal by the National Marine Fisheries Service to add to the current list of threatened or endangered salmon species an additional 13 populations (Ozette Lake sockeye, Hood Canal summer chum, Puget Sound chinook, upper Columbia River spring chinook, middle Columbia steelhead, lower Columbia chum, lower Columbia chinook, Snake River fall chinook, upper Willamette River chinook, upper Willamette River steelhead, southern Oregon & California coast chinook, Central Valley (Calif.) spring chinook, and Central Valley fall chinook) further reinforces the precarious status of salmon in many parts of western North America. At present there are relatively few watersheds in Washington, Oregon, Idaho, and California in which one or more salmon populations are not listed under ESA or being proposed for listing. While the causes of salmon declines are complex, recent listing proposals should serve to reinforce the need for changes in the policies that govern Pacific salmon and their ecosystems. It should be clear that existing policies and institutions, however well intentioned, have not worked.

The AFS believes that the time for arguing

whether salmon are or are not at risk of extinction has passed. Their plight is now apparent, and touches virtually the entire Pacific Northwest. Real, substantive changes will be needed, not only to save salmon from extinction but to recover them to levels where traditional human uses of salmon can be restored. These changes will require a thorough examination of all policies and management actions affecting the salmon life cycle during both freshwater and marine phases. And there is no way to hide the conclusion that change will require sacrifice. But these changes will only work if they are based on the best available information, and to that end the AFS is prepared to provide the assistance of its Western Division and local chapters to the development of scientifically sound recovery plans.

Editors Note: The Western Division EXCOM offered assistance in suggesting professionals to participate on an independent scientific review panel that can provide technical assistance to emerging recovery plans for the Salmon Recovery Office.

### Draft Position Statement - Responsible Use of Fish and Other Aquatic Organisms

The Governing Board has approved advancing a draft position statement for a vote by the membership. The draft position statement is titled "Responsible Use of Fish and Other Aquatic Organisms." Policy that would be adopted, if approved, states (in part):

1. Diverse forms of utilization of fish and other aquatic organisms are prominent around the world and will continue to be important for sustaining human societies. Thus, the AFS supports and promotes fisheries management policies and practices which provide opportunities to consume fish and other aquatic organisms in a manner that ensures long-term ecological sustainability.

2. The consumptive and non-consumptive uses of fish and other aquatic organisms by humans contribute to the social, cultural, economic and spiritual well-being of many societies. Through traditional uses, fish and other aquatic organisms are culturally significant to those societies. For these reasons, fish and other aquatic organisms will continue to be important in sustaining human societies.

3. It is appropriate and often necessary for humans to manage fish and other aquatic organisms to sustain and protect their populations, communities, and habitats, and to maintain the integrity of evolutionary and ecological processes that create and support the diversity of aquatic organisms. As the species with the greatest capacity to affect aquatic environments due to the pervasive effects of human population growth, technology, and consumption, humans have an obligation to maintain and restore aquatic ecosystems and their biotic components.

4. It is appropriate for humans to use fish

and other aquatic organisms in a responsible manner for scientific, commercial, educational, cultural, and recreational purposes in order to promote the quality of human life, promote the quality of aquatic ecosystems, and enhance the capacity of human societies to value and conserve these ecosystems.

5. Managers of recreational and commercial fisheries should use practices that do not threaten the viability of populations of native species of aquatic and terrestrial organisms, their habitats, and their ecosystems. Management decisions should be evaluated and justified a priori in a manner that ensures long-term ecological sustainability.

6. Human interaction with aquatic organisms is governed largely by cultural mores and different human cultures place different values on fish and other aquatic organisms. It is each individual's right to choose (within the bounds imposed by his or her society) whether or not to engage in consumptive or non-consumptive use of aquatic organisms. It is the role and responsibility of fisheries professionals to inform societies about the implications and consequences of use of, or actions affecting, fish and other aquatic organisms.

7. All fisheries-related activities involving the use of fish and other aquatic organisms, including resource management, research, administration, education and law enforcement, should be developed within and justified by conservation principles and philosophies. Any use should be conducted in accordance with the best scientific and professional information available and consistent with humane practices, including those outlined in The Guideline of Use of Fishes in Field Research (Nickum 1988) and The Guide for the Care and Use of Laboratory Animals (National Academy of Sciences 1985).

8. Fishery professionals should support and promote conflict management methods to address disagreements over fishing and other human interactions with aquatic organisms. These methods should include facilitation, mediation, arbitration, negotiation, or collaborative decision making. The success of the various approaches should be evaluated to make recommendations for future conflict resolution and to determine how approaches could be altered to increase their effectiveness.

The entire language of the draft position statement can be found at <http://www.esd.ornl.gov/societies/AFS/draft.html>. You should have received a ballot in the mail. If you have any questions, contact Marilyn Brown at (301) 897-8616 x201 or [mbrown@fisheries.org](mailto:mbrown@fisheries.org).

### VOTE

Robert F. Carline will assume the office of president of the American Fisheries Society at the 128th Annual Meeting of the Society in Hartford,

*Continued on page 8*

## DIVISION NEWS

### 2001 Congratulations to the Arizona/New Mexico Chapter

The Governing Board of the American Fisheries Society has selected Phoenix, AZ as the location for the 131st Annual Meeting in 2001. Through the hard work of Tom McMahon (Past President of the AZ/NM Chapter 1996-97), the AZ/NM Chapter was selected to host the annual meeting. The site of the meeting will be the Crowne Plaza in conjunction with the Civic Center. Room rates are a deal at \$80/night for single and double occupancy. The plenary session will be held at Symphony Hall. Tom McMahon and Joe Janisch (AZ Game and Fish) are serving as co-chairs of the Local Arrangements Committee and Colleen Caldwell (New Mexico State University) will serve as co-chair of the Program Committee. The Chapter is already planning the raffle. And yes, it is known that Phoenix is HOT in August. Water bottles and sunscreen are

planned as supplements for every registration packet.

### Proceedings of the Sea-Run Cutthroat Trout Symposium now available.

The proceedings of this coastwide conference, sponsored jointly by the Lower Umpqua Flycasters and the Oregon Chapter of the American Fisheries Society, and held in Reedsport, Oregon in October 1995 are now available. Included are 27 papers on topics of biology; status by state and province, from California to Alaska; a case study of the Umpqua River, where the species has been listed as endangered; and section on restoration and recovery. Among the authors are Bob Behnke, Tom Northcote, Willa Nehlsen, Bill Percy, Pat Trotter, and Jack Williams. Also included are abstracts of several contributed papers and posters that were presented at the meeting. The publication is \$20 postpaid

and can be ordered from:

Oregon Chapter, American Fisheries Society P.O. Box 722 Corvallis, OR 97339

Citation: Hall, J.D., P.A. Bisson, and R.E. Gresswell, editors. 1997. Sea-run cutthroat trout: biology, management, and future conservation. Oregon Chapter, American Fisheries Society, Corvallis. 183 pages.

### Fishing Guides Needed

Donna Turgeon, 1998 Raffle Committee chair, has asked the Western Division to sponsor a guided fishing or hunting trip to be raffled at the annual AFS meeting in Hartford. We are seeking volunteer guides to spend a day or two escorting lucky raffle winners to your best and most secret spots. If

*Continued on page 8*

# WESTERN DIVISION AMERICAN FISHERIES SOCIETY ANNUAL MEETING

Continued from pg. 1

tions without a good understanding of cause and effect.

Is it therefore desirable to incorporate ecosystem considerations into fishery management advice? It may be argued that objectives for optimal yields are best met by applying harvest rate specifications, while no useful objectives exist for incorporating ecosystem considerations in fishery management. It may also be argued that objectives for simultaneous optimal yields from all fisheries are simply impossible, and that fishery management objectives need to be restated with a more holistic view of ecosystem processes. Although well-established methods exist to apply stock assessments and biological reference points, further progress must be made if ecosystem considerations are to result in tangible fishery management advice.

Ecosystem processes also include the effects of nutrient additions from fish carcasses which have been identified in estuaries and in anadromous lakes and streams. Consideration of these effects on long-term ecosystem productivity may affect the harvest management of these species.

## Schedule and Registration

16th Lowell Wakefield Fisheries Symposium and 1998 joint meeting of the American Fisheries

Society Western Division, Alaska Chapter, and North Pacific International Chapter

### SCHEDULE

#### Tuesday, September 29

9:00 - 12:00 p.m.

Continuing Ed.—Applications for Fish and Wildlife Management

1:30 - 5:00 p.m.

Continuing Ed.—Fish and Wildlife Software and Data Availability

9:00 - 5:00 p.m.

Continuing Ed.—GIS Applications in Fish and Wildlife Management

4:00 - 7:00 p.m.

Registration/Social

#### Wednesday, September 30

7:30 a.m.

Registration/continental breakfast

9:00 - 12:00 p.m.

Opening Plenary Session

12:00 - 1:30 p.m.

Lunch on your own

1:30 - 5:00 p.m.

Wakefield Symposium

1:30 - 5:00 p.m.

AFS concurrent sessions

6:00 - 9:00 p.m.

Opening Reception

#### Thursday, October 1

7:30 a.m.

Registration/continental breakfast

8:00 - 12:00 p.m.

Wakefield Symposium

8:00 - 12:00 p.m.

AFS concurrent sessions

12:00 - 1:30 p.m.

Lunch on your own

1:30 - 5:00 p.m.

Wakefield Symposium

1:30 - 5:00 p.m.

AFS concurrent sessions

6:00 - 9:00 p.m.

Trade Show/Poster Session/Social

#### Friday, October 2

7:30 a.m.

Registration/continental breakfast

8:00 - 12:00 p.m.

Wakefield Symposium

8:00 - 12:00 p.m.

AFS concurrent sessions

12:00 - 1:30 p.m.

Lunch on your own

1:30 - 3:00 p.m.

Wakefield Symposium

1:30 - 3:00 p.m.

AFS concurrent sessions

6:00 - 7:00 p.m.

Social Hour

7:00 - 10:00 p.m.

Banquet

#### Saturday, October 3

7:30 a.m.

Registration/continental breakfast

8:00 - 12:00 p.m.

Wakefield Symposium

8:00 - 12:00 p.m.

AFS concurrent sessions

12:00 - 1:30 p.m.

Lunch on your own

1:30 - 5:00 p.m.

Wakefield Symposium

1:30 - 5:00 p.m.

AFS concurrent sessions

### PROGRAM

The registration desk will be open Tuesday, September 29 from 4:00 to 7:00 PM and beginning Wednesday, September 30 at 7:30 AM. The program will begin Wednesday, September 30 at 9:00 AM and conclude on the afternoon of Saturday, October 3.

The official language of the symposium is English. Participants who need interpretation or translation services should provide their own.

### WAKEFIELD SESSIONS

Oral and poster presentations scheduled in the Wakefield sessions are by researchers from Australia, Canada, Denmark, France, Philippines, Russia, South Africa, Sweden, Ukraine, United Kingdom, and United States. The program is organized into the following sessions:

Physical and Environmental Effects

Species Interactions

Concepts and Tools for Management

Anthropogenic Influences

Habitat and Spatial Considerations

Whole Ecosystem Approaches

For titles and authors of papers in these sessions, see the agenda.

### AFS SESSIONS

Oral and poster presentations for the AFS program will be organized into the following sessions:

Lake Fertilization

Influence of Spawning Anadromous Fishes on Freshwater and Terrestrial Ecosystems

Sockeye Salmon Ecology and Management  
Recent Developments in Modeling Salmon Populations

Riparian Ecology and Management

Rainbow Trout in Alaska

Ecosystem Management on Commercial Forest Land

Current Topics in Marine Fisheries

Assessment and Management in the North Pacific

Pink Salmon and Oil

Adaptive Management for Fish Recovery and Enhancement

Applications of Mass Marking in Fisheries Management Research

Effects of Urban Development on Fish and Their Habitat

For AFS session program information and updates including titles and authors of oral and poster presentations, visit the Alaska Chapter AFS web site at: <http://www.alaska.net/~fishak/98meet.html>

### OPTIONAL EVENTS

Continuing Education Opportunities

Internet Applications for Fish and Wildlife Management (morning Tuesday, September 29)

Disseminating information to the public  
Data acquisition over the World Wide Web  
Browser applications  
Development of web pages  
Structure and function of the Internet

Fish and Wildlife Software and Data Availability (afternoon Tuesday, September 29)

AFS Computer User Section Software Library  
Web sources  
Electronic data availability

GIS Applications in Fish and Wildlife Management (full day Tuesday, September 29)

Remote sensing  
Desktop applications  
Data sources  
Gap analysis  
Aerial videography  
Habitat evaluation

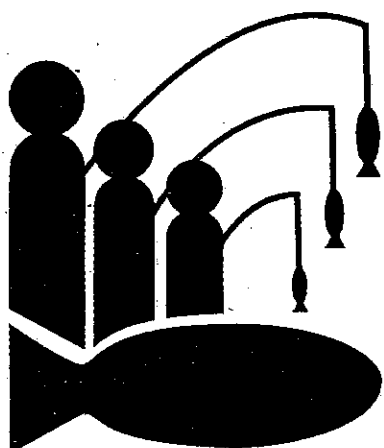
### Banquet - Friday, October 2

The evening, in celebration of the 25th anniversary of the Alaska Chapter AFS, will begin with a social hour followed by dinner and entertainment.

Guest speaker: Clem Tillion, fisherman, ferryboat operator, entrepreneur, fisheries visionary, former Alaska State Senator, and past member and chairman of the North Pacific Fishery Management Council.

The dinner will feature salad, dessert, and a choice of fish-beef mixed grill or vegetarian entree.

The program includes entertainment by a lively band and by the Alaskan Native Kikaput Yupik Singers and Dancers who have recently performed at the Seattle Art Museum for the opening of the Yupik Mask Exhibit, and at the Milwaukee Indian Summer Festival. Their repertoire of unique songs includes one about coho salmon, in keeping with the meet-



# NATIONAL FISHING WEEK

## MAY 30 - JUNE 7, 1998

Catch a smile.

Continued on page 4

# WESTERN DIVISION AMERICAN FISHERIES SOCIETY ANNUAL MEETING

## Continued from pg. 3

ing's theme. Special achievements or contributions of AFS members will be recognized, and drawings for a wide variety of door prizes and the annual Alaska Chapter Raffle will be held.

Join us for some good fellowship and help the Alaska Chapter celebrate this silver event.

## LOCATION AND FACILITIES

The symposium will be held in Anchorage, Alaska's largest city and home to half the state's population. In early October the average temperature is 48 deg F with approximately 13 hours of daylight. At the time of the symposium snow is unlikely, but the weather could turn chilly so come prepared. For information on Anchorage, visit:

<http://www.alaska.net/~acvb>

### Facilities

All symposium sessions will be held at the Anchorage Hilton Hotel in downtown Anchorage. Several cab companies provide transportation between the airport and downtown for \$13.00 to \$15.00 one way; the Alaska Cab Company provides Hilton Hotel guests with a flat one-way rate of \$10.00. The hotel has a health spa with a pool, sauna, and Jacuzzi for guests.

Guest room accommodations are being held for symposium participants at a special rate of \$85.00 per night for a single or double room (plus 8% tax). Be sure to make your reservations by August 28, 1998, and mention you will be attending the American Fisheries Society or Wakefield Symposium meetings to obtain this special rate. Make reservations directly with the hotel:

Anchorage Hilton Hotel  
500 West Third Avenue  
Anchorage, AK 99501 USA  
phone: 907/272-7411

Toll free reservation lines from anywhere in the U.S.:  
800/HILTONS - national Hilton reservations line  
800/245-2527 - Anchorage Hilton reservations line  
(available Mon-Fri 8 AM - 5 PM Alaska time only)  
hotel phone: 907/265-7152, hotel fax: 907/265-7140

### AREA SIGHTSEEING

Alaska is known as the Great Land and the opportunities for wildlife viewing, sightseeing, hiking, camping, museums, and a host of other outdoor and indoor activities are unparalleled. In and around Anchorage, visit the following web sites for ideas:

Municipality of Anchorage:  
<http://www.ci.anchorage.ak.us>

Anchorage Convention and Visitors Bureau:  
<http://www.alaska.net/~acvb>

Alaska Visitors Association:  
<http://www.alaskanet.com/visitalaska>

### HUNTING AND FISHING

Alaska is an outdoor sporting paradise. To combine your Wakefield/AFS trip with a hunting or fishing adventure, check out the following web sites:

<http://www.state.ak.us/tourism/>  
[http://www.state.ak.us/local/akpages/FISH.GAME/sport/sf\\_home.htm](http://www.state.ak.us/local/akpages/FISH.GAME/sport/sf_home.htm)  
<http://www.state.ak.us/local/akpages/FISH.GAME/wildlife/wildmain.htm>  
<http://www.alaskafishing.com/>  
<http://www.outdoorsdirectory.com/>

Three key components to making your adventure happen are planning, timing, and financial resources. Most hunting seasons occur in early September. Fishing opportunities decline as fall-winter approaches. Opportunities are available to fit any budget. Take advantage of your trip to Alaska and have the time of your life!

### SPECIAL TOURS

Alaska SeaLife Center and Kenai Fjords National Park tours Sunday, October 4, 1998. We have arranged tours of two of Alaska's premiere attractions: Alaska SeaLife Center and Kenai Fjords National Park including transportation by motor coach to and from Seward, Alaska, through Kenai Fjords Tours. (You may provide your own transportation and still take advantage of the tour.)

### Alaska SeaLife Center

(<http://www.alaskasealife.org> or 800/224-2525) is the only major subarctic, cold water marine research facility in the world and is unique in that it allows visitors to watch and learn about the various marine wildlife and at the same time interact with the scientists as they do research. This tour is customized for meeting participants and provides a behind-the-scenes guided tour of the laboratories, research activities, life support systems, and aquaria.

Kenai Fjords National Park Tour

(<http://www.alaskaone.com/kft/kenfj.htm> or 800/468-8068) is a fabulous wildlife and glacier cruise taking passengers through Resurrection Bay, around Aialik Cape, to the face of an active tidewater glacier, and through the Chiswell Islands National Wildlife Refuge.

For details, visit the conference web page at <http://www.uaf.edu/seagrant/Conferences/Ecosysframe.html>

### PROCEEDINGS

A symposium proceedings including all papers and posters presented at the Wakefield sessions will be published. Approximate due date: late 1999.

### REGISTRATION INFORMATION

To register, complete the registration form and return it with fees to the coordinator at the mailing address below. The registration fee covers a light continental breakfast and break refreshments daily; the opening reception on Wednesday, September 30; socials on September 29 and October 1; and symposium materials.

Continuing education courses, banquet tickets, and proceedings of the Wakefield sessions are available at extra charge as indicated on the registration form.

### Registration fee in U.S. dollars:

Participant: \$150.00 until 8/28, \$225.00 from 8/29 and on site

Spouse/Companion fee\*: \$35.00 until 8/28, \$50.00 from 8/29 and on site.

\*to attend receptions, trade show, and poster session.

Students: for possible discounted fee, contact the symposium coordinator.

You are urged to register in advance so that adequate materials are available. Make checks payable to University of Alaska Sea Grant. Payment can also be made by VISA or Mastercard. If it becomes necessary to cancel your registration; fees will be refunded at 75% if notice is received by September 11, 1998. Purchase orders will not be accepted for registration.

For further information contact:

*Continued on page 5*

# 1997-98 WESTERN DIVISION AMERICAN FISHERIES SOCIETY COMMITTEE CHAIRS & OFFICERS

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Awards/Nominations	Dennis Lee	(916) 654-1369
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# WESTERN DIVISION AMERICAN FISHERIES SOCIETY ANNUAL MEETING

Continued from pg. 4

Brenda Baxter, Symposium Coordinator  
Alaska Sea Grant College Program  
PO Box 755040  
Fairbanks, AK 99775-5040 USA  
e-mail: FNBRB@uaf.edu; phone:  
907/474-6701; fax: 907/474-6285

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# Ecosystem Considerations in Fisheries Management

## Registration Form

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### REGISTRATION FEE (check appropriate amount):

Participant:  \$150.00 until 8/28  \$225.00 from 8/29 and on site  
Spouse/companion:  \$ 35.00 until 8/28  \$ 50.00 from 8/29 and on site

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Number \_\_\_\_\_  
Banquet ticket(s) at \$35.00, total \$ \_\_\_\_\_  
Please choose entree:  fish-beef mixed grill  vegetarian  
Wakefield proceedings at \$30.00, total \$ \_\_\_\_\_

### CONTINUING EDUCATION COURSES, Tues., 9/29 (check courses desired)

Internet Applications for Fish and Wildlife Management  
(morning) @ \$60.00  
 Fish and Wildlife Software and Data Availability  
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# Help them catch a fish and you'll catch a smile.

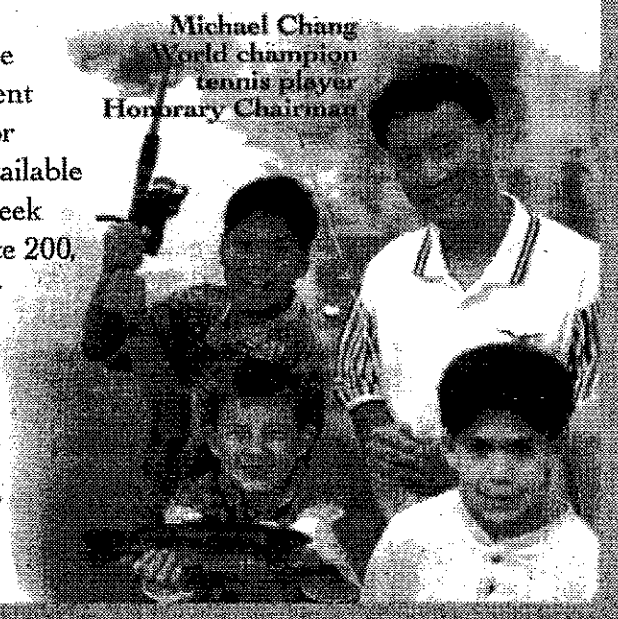
National Fishing Week is coming up and we need you to help us coordinate a fishing event in your area. It's easy, fun and a great time for kids. Free kits on how to run an event are available now. To get yours write: National Fishing Week Steering Committee, 1033N. Fairfax St., Suite 200, Alexandria, VA 22314. Call (703)684-3201 or visit our website at [www.gofishing.org](http://www.gofishing.org).



**NATIONAL FISHING WEEK**  
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*Catch a smile.*

Michael Chang  
World champion  
tennis player  
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# ANNUAL CHAPTER MEETINGS - BEST PAPER AWARDS AND ABSTRACTS

## Bonneville Chapter / Colorado-Wyoming Chapter Joint Annual Meeting, March 2-5, 1998

BONNEVILLE/COLORADO/WYOMING CHAPTERS,  
BEST PROFESSIONAL PAPER - Daniel Duffield

### Fine Sediment Effects on Brook Trout (*Salvelinus fontinalis*) in Selected Streams of the Monongahela National Forest Daniel J. Duffield, U.S. Forest Service, Ogden, UT

During 1994, 25 native trout streams on the Monongahela National Forest in West Virginia were selected to assess stream habitat condition and brook trout populations. Streams with adequate to excellent water quality were selected in an effort to avoid the potential limiting effects of acid precipitation. Fish populations, aquatic macroinvertebrate populations, fine sediment levels in trout spawning gravels, and stream habitat were measured in a 91 meter study reach on each stream. A double pass electrofishing technique was used to estimate fish populations (Platts et al. 1983). Sediment sampling consisted of 6 shovel samples of potential trout spawning gravels within each study reach. Potential trout spawning substrate was identified by locating suitable sized (12 mm to 25 mm) gravels in pool tails. Shovel sampling followed the procedure described by Grost et al. (1991). Habitat classification and inventory were conducted in each study reach. Data were stratified by Rosgen channel types (Rosgen 1994) since Reeves (1991) stated that effects of sedimentation can vary with reach type. Correlation analyses were performed on all variables in relation to sediment measures. Linear regression was used to correlate fish populations with fine sediment percentages and other habitat variables.

Of the 25 stream sampled in 1994, nineteen had mean fine sediment (< 4 mm) levels greater than 20 % in trout spawning gravels. Fine sediment means in high gradient Rosgen A channels ranged from 6% to 31%. For Rosgen B channels, fine sediment means ranged from 11 % to 35 %. When the data were analyzed with SAS, moderate to highly significant correlations were found between trout populations and fine sediment levels. Moderate gradient Rosgen B channels exhibited the strongest correlations between trout and fine sediment levels in trout spawning gravels. Total trout (lbs/ac) and the number of trout per acre of all age classes were inversely correlated with fine sediment for B channel types. Age 1+ trout displayed the most significant inverse correlation ( $r^2 = 0.91$ ,  $p = 0.0001$ ) with fine sediment in B channels. Overall, I concluded that fine sediment levels have detrimentally altered trout populations in most of the native trout streams within the Monongahela National Forest. I also hypothesize that land management activities could add to already high sediment levels and decrease native trout populations further.

BONNEVILLE/COLORADO/WYOMING CHAPTERS,  
BEST STUDENT PAPER (TIE) - Nathan P. Nibbelink

### Use of a Geographic Information System (GIS) and large-scale habitat gradients to assess salmonid habitat potential in Rocky Mountain streams.

Nathan P. Nibbelink and Frank J. Rahel (Department of Zoology and Physiology, University of Wyoming, Laramie, WY 82071-3166, 307/766-2426, nathan@uwyo.edu).

Management agencies have a need for habitat capability models allowing rapid, cost-effective assessments of fish habitat potential over large areas based on few easily-measured variables. We show how a Geographic Information System (GIS) used in conjunction with a few general habitat gradients and existing fisheries databases can identify stream areas with potential to support high standing stocks of brook and brown trout in the Laramie River drainage (Wyoming, USA). Trout were absent or in low abundance (0-700 fish/km) in stream reaches with warm summer water temperatures (> 21 C), and were found in low to moderate abundance (100-1,100 fish/km) in streams with high gra-

dient (> 6% slope). In reaches with moderate gradient (< 6% slope) and temperatures < 21 C, trout had the greatest range of abundance (0-2,200 fish/km). Thus, moderate gradient and suitable summer temperatures are important conditions for producing high standing stocks of trout, but do not, by themselves, guarantee high standing stocks. We believe riparian condition may play an important role in limiting standing stocks in many areas predicted to be suitable based on temperature and gradient. Incorporation of these simple habitat features into a GIS is useful for identifying stream reaches with potential to support high stocks of trout and for directing management efforts to sites where this potential is not realized.

BONNEVILLE/COLORADO/WYOMING CHAPTERS,  
BEST STUDENT PAPER (TIE) - Douglas C. Novinger

### Physiological and Behavioral Basis for Competition Between Cutthroat Trout and Brook Trout.

Douglas C. Novinger, and Frank J. Rahel (Department of Zoology and Physiology, University of Wyoming, Laramie, WY 82071).

Introduced brook trout have replaced native cutthroat trout throughout much of their historic range. Brook trout dominate lower elevation stream reaches where temperatures are warmer while cutthroat trout persist at high elevations where temperatures are cool. We explored the influence of temperature on physiological and behavioral determinants of competitive superiority to explain this distribution. In one experiment, we measured swimming performance and active metabolism of age 2+ fish at constant temperatures ranging from 3-24C. We did not find significant differences between species in maximum metabolic rates or critical swimming speeds at any temperature. However, brook trout had higher estimated standard metabolic rates at temperatures >10C. In a second laboratory experiment, we quantified prey capture success and aggressive behaviors of age 0 fish at four temperatures in a diel 1-8C cycle. We matched two brook trout with two cutthroat trout; brook trout were consistently larger to simulate a natural size difference between the species. There was no difference in prey capture success between species at any temperature. Brook trout were more aggressive than cutthroat trout at all temperatures and initiated 87-92% of the aggressive acts. Most aggression (60-73%) was directed at cutthroat trout. Interactions were reduced 62-78% at 1-2C, though brook trout remained aggressively dominant.

### California/Nevada Chapter Annual Meeting, April 23-25, 1998

CALIFORNIA/NEVADA CHAPTER, BEST STUDENT PAPER - Michael P. Marchetti

### An Experimental Study of Competition Between the Native Sacramento Perch (*Archoplites interruptus*) and Introduced Bluegill (*Lepomis macrochirus*)

Michael P. Marchetti, University of California Davis, Department of Wildlife, Fish and Conservation Biology, Davis, CA 95616 (530-753-8713)

The Sacramento perch (*Archoplites interruptus*), a centrarchid native only to the Central Valley of California, has been eliminated from most of its native range. To examine the role of interspecific competition in this decline, a series of experiments were conducted to assess the fitness, habitat use and aggressive behavior of the Sacramento perch in the presence of an introduced confamilial species, bluegill (*Lepomis macrochirus*). The experiments indicate that 1) Sacramento perch gain less weight and show a reduced growth rate when placed with bluegill, but that this interaction only occurs with food limitation and is not affected by overall fish density. 2) Sacramento perch do not shift their habitat use (cover use of water depth) when in the presence of bluegill. 3) Sacramento perch demonstrate less aggressive behavior than bluegill, but increase their aggressiveness when they are conspicuously larger than bluegill. Overall, the results imply that

Sacramento perch and bluegill will compete for food resources, and the mechanism of interaction is aggressive dominance by bluegill. It is suggested that long term persistence of Sacramento perch will require habitat that is free of introduced centrarchid fishes.

### Idaho Chapter Annual Meeting, February 26-28, 1998

IDAHO CHAPTER, BEST PROFESSIONAL PAPER (TIE) - Jim Fredericks

### Evaluation of Lake Trout and Bull Trout Population Status in Upper Priest Lake. Jim Fredericks (Regional Fisheries Biologist, Idaho Department of Fish and Game).

Lake trout were introduced to Priest Lake in 1925. They were first reported in Upper Priest Lake in 1985. Catch records of some Upper Priest Lake anglers indicated that the lake trout population was expanding in the upper lake, but no quantitative surveys of Upper Priest Lake had been conducted in recent years. We used gillnets, hoopnets, and conventional angling to assess the abundance and size structure of lake trout *Salvelinus namaycush* and bull trout *Salvelinus confluentus* populations in Upper Priest Lake. We marked all lake trout and bull trout > 320 mm with spaghetti tags to develop population estimates, and surgically fitted nine lake trout with sonic tags to monitor movements. In four sampling periods from June 2 to October 15, we collected 150 lake trout, including 5 recaptures, ranging in size from 193 to 980 mm. We tagged 112 of the lake trout and estimated a total population of around 646 fish greater than 320 mm. We caught 20 bull trout, including 1 recapture, ranging in size from 190 to 738 mm. The lack of recaptures precluded a reliable estimate of the bull trout population. However, the ratio of marked to unmarked fish in the catch, the ratio of bull trout to lake trout in the gillnets, and redd surveys in Upper Priest Lake tributaries, suggest the adult bull trout population is between 50 and 100 fish. The lake trout size structure indicates a rapidly expanding population. Sonic telemetry and tag return information suggests that movement between the upper and lower lakes is not uncommon. We concluded that suppression of the lake trout population will be a long-term, ongoing project.

IDAHO CHAPTER, BEST PROFESSIONAL PAPER (TIE) - Ned Horner

### The Use of Angling as a Management Tool for Controlling Lake Trout.

Ned Horner (Regional Fisheries Manager, Idaho Department of Fish and Game).

Lake trout *Salvelinus namaycush* have recently become established in Upper Priest Lake, Idaho, threatening a depressed population of adfluvial bull trout *Salvelinus confluentus*. Upper Priest Lake is currently managed as a catch-and-release fishery, precluding the use of angling as a method to remove lake trout. Anglers commonly ask why they can't harvest lake trout if the intent is to remove them from the lake. An effort was made to determine if sport angling could be used as an effective management tool to remove lake trout, without unacceptable risk to bull trout from unintended by-catch. A group of expert lake trout sport fishing anglers were recruited to fish Upper Priest Lake on August 15-17, 1997 using multiple gear and bait to maximize catch rates. Twenty-five lake trout and six bull trout were caught in 100 hours of angling effort, for a catch rate of 3.2 h/fish. The catch ratio of lake trout to bull trout by anglers during the "Fish-a-Thon" was 4.2:1. The catch ratio of two anglers who frequently fish Upper Priest Lake was 4.9:1 lake trout to bull trout in 1997. In comparison, the catch ratio of gill net caught lake trout to bull trout was 10:1 in 289 h of gill netting effort. Bull trout appear to be more vulnerable to anglers than lake trout. There also appears to be complete habitat overlap of the two char species in this 30 m

Continued on page 7

# ANNUAL CHAPTER MEETINGS - BEST PAPER AWARDS AND ABSTRACTS

Continued from pg. 6

deep lake. Lake trout and bull trout were caught at all depths by sport anglers and in gill nets. One lake trout died as a result of the angling effort (3% angling mortality) despite the relatively high level of angler knowledge and handling care. We would expect higher angling mortality on bull trout from the general angling public. It does not appear that sport angling can be used as an effective management tool to selectively remove lake trout from Upper Priest Lake.

IDAHO CHAPTER, BEST STUDENT PAPER - George P. Naughton

## Predator Abundance and Salmonid Prey Consumption in Lower Granite Reservoir and Tailrace.

George P. Naughton (Department of Fish and Wildlife, University of Idaho, Moscow, ID 83844-1136)

We estimated the relative abundance and diet composition of smallmouth bass *Micropterus dolomieu* and northern squawfish *Ptychocheilus oregonensis* in the tailrace and forebay of Lower Granite Dam associated with the surface bypass collector and made comparisons with the Snake and Clearwater River arms of upper Lower Granite Reservoir. We found that the relative abundance of smallmouth bass < 175 mm in length was significantly higher in the Snake River and Clearwater River arms than in the tailrace and forebay in 1996 and 1997. Smallmouth bass > 175 mm in length were generally more abundant in the Snake River arm than at the other sampling locations in 1996 and 1997. Northern squawfish > 349 mm were most abundant in the tailrace boat-restricted zone while squawfish < 200 mm were most abundant in the tailrace in 1996 and 1997. We found no significant differences in the relative abundance of northern squawfish 200-349 mm in length among reservoir locations in both years. Crustaceans and non-salmonids were the most abundant food items by weight of both smallmouth bass and northern squawfish from April through August 1996 and 1997. Juvenile salmonids were not a major component of smallmouth bass and northern squawfish diets at any location in Lower Granite Reservoir and tailrace. High flows and resulting lower water temperatures and higher turbidity may have contributed to the low levels of predation on juvenile salmonids.

## Montana Chapter, February 4-6, 1998

MONTANA CHAPTER, BEST STUDENT PAPER - Laura M. Katzman

## Predation on Juvenile Arctic Grayling in Upper Red Rock Lake, Montana

Laura M. Katzman and Alexander V. Zale, Montana Cooperative Fishery Research Unit, Montana State University, Bozeman, MT 59717

The only indigenous, lacustrine population of Arctic grayling *Thymallus arcticus* south of Canada and Alaska inhabits Red Rock Lakes National Wildlife Refuge. This genetically and behaviorally unique population of Arctic grayling has undergone a recent decline in abundance; predation by other fish species has been identified as a potential cause of it. We investigated predation on juvenile Arctic grayling at the mouth of Red Rock Creek in 1995 and 1996. All juvenile Arctic grayling pass through this area during their downstream migration to Upper Red Rock Lake. The objectives of the study were to: 1) determine the timing of the age-0 Arctic grayling migration, 2) identify predators of age-0 Arctic grayling at the mouth of Red Rock Creek in Upper Red Rock Lake during the migration, and 3) quantify the predation of age-0 Arctic grayling at this site during the migration. Age-0 Arctic grayling migrated into the lake from early July through late August. Potential predators captured were brook trout *Salvelinus fontinalis*, burbot *Lota lota*, and Yellowstone cutthroat trout *Oncorhynchus clarki bouvieri* x rainbow trout *O. mykiss* hybrids. No Arctic grayling were found in the stomach contents of these predators. No fish were found in the stomach contents of brook trout, and only 0.1% and 4.0% fish by weight were eaten by burbot and cutthroat hybrids, respectively. Predation by fish at the mouth of Red Rock Creek during the age-0 Arctic grayling migration is probably not causing the low abundance of Arctic grayling at Red Rock Lakes National Wildlife Refuge.

## Oregon Chapter, February 11-13, 1998

OREGON CHAPTER, BEST STUDENT PAPER - Kristopher Wright

## Responses of Stream Biota to Variations in Longitudinal Temperature Patterns in High Desert Streams of The Blue Mountains.

Kristopher Wright\* and Christian Torgersen, Oregon Cooperative Fishery Research Unit, Fisheries and Wildlife, Oregon State University, Corvallis, OR 97331, 541/737-1963; Bruce A. McIntosh, Forest Sciences, FSL, Oregon State University; Hiram W. Li, and Judith L. Li, Oregon Cooperative Fishery Research Unit, Fisheries and Wildlife, Oregon State University; Robert L. Beschta and Rick Hopson, Forest Engineering, Oregon State University; Colden Baxter, Oregon Cooperative Fishery Research Unit, Fisheries and Wildlife, Oregon State University, Patricia McDowell and Steven Jett, Department of Geography, University of Oregon, Eugene; J. Boone Kauffman, Kate Dwire, and Jack Brookshire, Oregon Cooperative Fishery Research Unit, Fisheries and Wildlife, Oregon State University

Images captured using Forward Looking

Infrared (FLIR) videography revealed that the temperature profile in a watershed disturbed by intensive livestock grazing; the Middle Fork John Day (MFJD), rose and fell as peaks and troughs with 50 C differences. In contrast, the stream draining the wilderness basin, exhibited gradual temperature change. Extensive and intensive fish surveys in the two watersheds revealed longitudinal fish community patterns strongly reflecting temperature profiles. There was a gradual shift from coldwater to warmwater communities in the wilderness stream system; whereas, the relative composition of community types in the disturbed stream (MFJD) followed the distribution of temperature patches. Interannual, longitudinal stream temperatures though similar in pattern, were different in temperature ranges. We hypothesize that this changes fish community patterns from year to year and patterns may appear to be stochastic when in fact they are driven by deterministic processes. Subsurface flow within reaches was very slow and poorly oxygenated, suggesting that high stream temperatures may force organisms to choose cool microhabitats of low dissolved oxygen or mainstream habitats that are warmer and higher in dissolved oxygen. Water chemistry, primary production, macrophytic and algal biomasses, macroinvertebrate abundances and fish diets at 12 sites along the MFJD were examined for effects of water temperature and possible hyporheic up-welling/down-welling on the trophic network. We ruled out any influence of the hyporheic corridor through field measurements, but are less certain with temperature.

OREGON CHAPTER, BEST STUDENT POSTER - Kimberly Cleveland

## Temporal Changes in the Community of Ephemeroptera, Plecoptera and Trichoptera in Oak Creek (Benton County, Oregon) Following a Flood Disturbance.

K.K. Cleveland\*, J.L. Li and W.J. Gerth, Department of Fisheries and Wildlife, Oregon State University, Corvallis, OR 97330, 541/37-2792

Taxa diversity and life histories were analyzed for the Ephemeroptera, Plecoptera and Trichoptera (EPT) community in an agricultural reach of Oak Creek (Mary's River watershed) prior to and following flooding in February of 1996. Samples collected in June of 1993 were compared to samples taken in June, 1996 and showed dominance of the genus *Labiobaetis*. Post-flood changes within the site included increased community evenness in association with lower abundance of *Labiobaetis* and dramatic changes in EPT community composition as detected using Jacard similarity coefficients. Temporal succession was examined by including samples taken in March and October of 1996 and considered in relation to EPT life histories.

## MEETING ANNOUNCEMENTS

Symposia on "The Intersection of Molecular and Behavioral Science in Marine and Freshwater Fishes" to be held at the Ecological and Evolutionary Ethology of Fishes (EEEF) meeting at the University of Washington, Seattle WA, June 24-27, 1998.

This symposia will survey the use of molecular techniques to address behavioral questions, and visa versa. Although these two disciplines are traditionally thought of as non-overlapping, in fact each is an integral part of the evolutionary history of an organism and represents the ultimate in genotype and phenotype expression at the individual level.

Abstracts should not exceed 200 words and must include the following: Title; Author(s); Author(s) affiliation and contact numbers; Text of abstract; AV needs.

Contact Sponsor:

Dr. Jennifer L. Nielsen

Hopkins Marine Station  
Stanford University  
Pacific Grove, CA 93950-3094  
(408) 655-6233  
e-mail jnielsen@leland.stanford.edu

### 1998

Jun 25 North American Benthological Society 46th Annual Meeting. University of Prince Edward Island, Charlottetown, Prince Edward Island. Contact Jill Lancaster, Institute of Ecology and Resource Management, University of Edinburgh, Darwin Building, Mayfield Road, Edinburgh EH9 3JU, Scotland, United Kingdom; 011/44-0131-662-0478; j.lancaster@ed.ac.uk.

Jul 9 13 American Fisheries Society Larval Fish Conference. The University of Michigan, Ann Arbor, Michigan. For more information about this

exciting event, contact Ed Rutherford, Michigan Institute for Fisheries Research, 1109 N. University Ave., 212 Museums Annex Bldg. 1084, Ann Arbor, MI, 48109-1084, 734/663-3554, Fax 734/663-9399.

Jul 26 30, 1998 International Congress on the Biology of Fish. Towson University of Maryland, Baltimore, Maryland. Organized by the AFS Physiology Section. Contact, Don MacKinlay, Department of Fisheries and Oceans, 555 West Hastings Street, Vancouver, BC V6B 5G3; 604/666-3520; FAX 604/666-6894; mackinlayd@dfompo.gc.ca.

Aug 23 27, 1998 The 128th Annual Meeting of the AFS - "Challenges for the New Millennium: Shaping the Future of Fisheries Science and the Fisheries Profession." Hartford Civic Center and Sheraton Hotel, Hartford, Connecticut. Contact Betsy

Continued on page 8

*Continued from pg. 2*

Connecticut. At that time, Christine M. Moffitt will be installed as president-elect, and Carl V. Burger will advance to first vice-president.

Ballots to members were mailed in April for election of the 2nd Vice President. The candidates are Kenneth L. Beal and Donna D. Turgeon. For more information about the candidates, visit <http://www.esd.ornl.gov/societies/AFS/2vpcan98.htm>. Exercise your opportunity to make a difference in the future of the Society VOTE!!

### Guidelines for Subunits on Advocacy Positions

Subunits should adopt internal procedures to manage the development of their advocacy positions. Because involvement in advocacy is important to the Society, each subunit is strongly urged to amend its bylaws to adopt, by reference, the Society's procedures or alternative procedures consistent with these. The internal procedures should address the criteria used to select issues and provide sufficient guidelines for quality control, such as peer review, of written products that advocate a position or action. Subunits should consult Society headquarters to develop a mechanism for relaying and promoting their policies and positions to all concerned parties.

The following steps provide a good procedure for developing subunit advocacy positions:

(1) A member or committee raises a formal concern or issue.

(2) The subunit's executive or other committee reviews the issue based on the following questions:

- (a) Is the issue pertinent to the subunit's goals?
- (b) Will the subunit's involvement make a difference?
- (c) Do (or will) subunit members support the position?
- (d) Does the subunit have adequate expertise and technical information to develop a position?
- (e) Have alternative views been considered?
- (f) Is the urgency of the issue so great that the officers or executive committee would have to act without full membership approval?
- (g) Would the subunit be willing, and does it have the resources, to follow through?
- (h) Do geographic boundaries and other aspects of the issue make subunit involvement appropriate? Should other subunits or entities be involved?
- (i) Do risks outweigh the potential benefits of taking action?

(3) When the subunit determines that the issue is appropriate for action, it

(a) subjects the issue to further development if necessary,

(b) solicits an independent review (necessary for all but the most minor issues; the greater the sensitivity and importance of the issue, the more intensive the review should be), and

(c) takes the recommended action and so notifies AFS headquarters.

(4) The actions taken by the subunit may include (but are not necessarily limited to)

(a) sending a letter with a request for action or for comments;

(b) drafting and sending a resolution;

(c) preparing a position paper, legislative briefing paper, or policy paper (copied to Society headquarters)

(d) referring the issue to a Division or the Society with recommendations;

(e) recommending an educational forum;

(f) taking no action but providing supporting rationale to proponents; and

(g) undertaking litigation - but only as a last resort after it is determined that failure to litigate will have serious consequences, after the approval and financial support of the membership have been obtained, and after the assistance of experienced natural resource litigators has been secured.

### Travel Grants for Students

The Equal Opportunity Section is implementing annual meeting travel grants for students from underrepresented groups. The Parent Society has committed to contributing \$2,000 towards these grants for 1998. We are requesting additional contributions from all divisions and sections. Additional contributions will allow us to reach a greater number of students. As part of this effort we are planning a Mentoring/Recruitment Luncheon. We will be matching the students with AFS mentors to help them get the most out of the annual meeting and potential future AFS experiences. We are seeking mentors that would be interested in assisting during the meeting with the understanding that a longer term mentoring relationship may evolve. If you or anyone you know would be interested in being a mentor have them contact me by email, or by telephone (541) 962-3777. Thanks for your help!

MaryLouise Keefe  
Pres. E. O. Section

## MEETING ANNOUNCEMENTS

*Continued from pg. 7*

Fritz; AFS; 5410 Grosvenor Lane, Suite 110; Bethesda, MD 20814-2199; 301/897-8616, ext. 212; FAX 301/897-8096; [bfritz@fisheries.org](mailto:bfritz@fisheries.org).

Aug 30 Sep 3, 1998 AFS Fish Health Section Annual Meeting and Third International Symposium on Aquatic Animal Health: Building Partnerships for the 21st Century. Renaissance Harborplace Hotel, Baltimore, Maryland. Contact Sarah Poynton; Division of Comparative Medicine; Johns Hopkins University School of Medicine; 459 Ross, 720 Rutland Avenue; Baltimore, MD 21205; 410/955-3273; [wellfish@welchlink.welch.jhu.edu](mailto:wellfish@welchlink.welch.jhu.edu).

Sep 28 30 International Conference of the Society for Ecological Restoration (SER). Thompson Conference Center, University of Texas, Austin, Texas. Contact David Mahler, 4602 Placid Place, Austin, TX 78731; 512/458-8531; or SER, [ser@vms2.macc.wisc.edu](mailto:ser@vms2.macc.wisc.edu).

Sep 30 Oct 3, 1998 AFS Western Division Annual Meeting. 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; <http://www.uaf.edu/seagrant/Conferences/symposia.html>.

Nov 10 13 18th International Symposium of the North American Lake Management Society. Banff Springs Hotel, Banff, Alberta, Canada. Contact Alberta Lake Management Society, Department of Biological Sciences, University of Alberta, Edmonton, AB T6G 2E9; [rzurawel@gpu.srv.ualberta.ca](mailto:rzurawel@gpu.srv.ualberta.ca).

### 1999

Aug 30 September 2, 1999. The 129th Annual Meeting of the AFS. Adams Mark Hotel, Charlotte, North Carolina. Contact Betsy Fritz; AFS; 5410 Grosvenor Lane, Suite 110; Bethesda, MD 20814-2199; 301/897-8616, ext. 212; FAX 301/897-8096; [bfritz@fisheries.org](mailto:bfritz@fisheries.org).

*Continued from pg. 1*

you would like to help the Society in this way, and maybe gain a little extra publicity for yourself, please contact any member of the Western Division Executive Committee. We will help provide transportation for two to your location.

### Outstanding Chapter Candidates Submissions are needed soon

If your chapter has been especially active and is deserving of the Western Division's Outstanding Chapter Award, now is the time to get your materials to Past-President Tom Nesler. Remember, to be considered for the AFS Chapter of the Year Award, you must be nominated by the Division, which means we must have selected a 1998 winner by early summer. Please contact Tom Nesler at (970) 472-4834 or e-mail him at [tom.nesler@state.co.us](mailto:tom.nesler@state.co.us)

### National Nominating Representative Needed

Currently, the Western Division does not have a representative to the National Nominating Committee. Because this is an elected office, we are seeking good candidates who would be willing to run for this office. If you're interested, please contact Tom Nesler at (970) 472-4834 or e-mail him at [tom.nesler@state.co.us](mailto:tom.nesler@state.co.us)

### Websites

Those of you concerned with border issues in the Salton Sea - Colorado River delta region may find a new website on this region of interest. It is located at <http://www.sci.sdsu.edu/salton/SaltonBasinHomePage.html>

Through the NBII Clearinghouse [www.nbi.gov/clearinghouse.html](http://www.nbi.gov/clearinghouse.html), Internet users can search through an assortment of standardized descriptions of different biological databases or information products. This site is a cooperative effort led by USGS to increase access to biological data and information maintained by a variety of Federal and State government agencies, universities, museums, libraries, and private organizations.

