

The Tributary

A Newsletter of the Western Division, American Fisheries Society

Volume 18, Nov. 1/March 1993

PRESIDENT'S CORNER

I am sure that more than one of you has grappled over the role of the Western Division of the American Fisheries Society (WDAFS) in your professional life. After all, only a small percentage of Western Division members have an opportunity to attend the annual meeting. What exactly does WDAFS contribute toward strengthening the fishery profession, advancing fishery science, and conserving fishery resources? This is a legitimate question for you to ask!

First of all the Western Division officers are your representatives on the Parent Society EXCOM and as such are your voices in influencing the business and activities of the Society as a whole. It is your responsibility to communicate to us through your Chapter officers to let us know what you think the Society should be doing or how you would like it to change. The officers are just small fish carrying the message for the WDAFS school.

Importantly, the Division is also a regional outlet for advancing the goals of the fishery profession. Last summer in Fort Collins representatives of every Chapter in WDAFS (except Hawaii) discussed our views and hopes for the Division and decided together what it is that we want to try and accomplish.

Subsequently, a group of very talented people accepted responsibility for initiating the works. People like Cay Goude and Jennifer Nielsen working on the arrangements and program for our annual meeting in the plight of pacific salmon stocks, Pete Bisson organizing a contemporary habitat inventory procedures workshop, Roger

Ovink and Pat Dwyer serving as editor of the Tributary, Dave Burns and Brad Shepard leading the WDAFS effort to review federal agency fishery programs and budgets, David Fuller working to develop a WDAFS position paper on the importance of old growth forest to fisheries, Mark Gorges using the riparian awareness program as a tool to improve grazing management on federal lands, Joe Dossantos trying to secure funding for fishery programs on tribal lands, Kelly Hepler working to reform the 1872 Mining Law, Jerry Burton concerned about reauthorization of the Endangered Species, Dennis Tol using the resolution process to inform decision makers of concerns of the Division, Ken Hashagen working to accommodate greater opportunities for women and minorities in the fisheries profession and numerous others for which there is not adequate space to mention.

I believe all of us have known a few individuals who view most of what life has to offer negatively -- people who see downside of everything. You know the type. These people seldom volunteer to do work for an organization like WDAFS. By contrast, there are people who have a positive and optimistic outlook about almost everything. They view problems as opportunities and difficulties as challenges -- people like those mentioned above.

In my view the Western Division of the American Fisheries Society is alive and well and having an important influence on our profession and, most importantly, our fishery resources. I hope you agree!

--Glenn Phillips

1992-1993 WESTERN DIVISION AMERICAN FISHERIES SOCIETY COMMITTEE CHAIRPEOPLE AND OFFICERS

Internal Affairs

Audit - John Leppink
Equal Opportunity - Ken Hashagen
Newsletter - Pat Dwyer
Membership - Carl Burger
Nominations - Don Chase
Awards - Don Chase
Time & Place - Officers

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Marine Fisheries - Mike Fraidenberg
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Threatened & Endangered Species - Jerry Burton
Resolutions - Dennis Tol
Environmental Concerns - Kelly Hepler
Native Salmon Stocks - Pat Higgins
Habitat Inventory Procedures - Pete Bisson
Old Growth - David Fuller

The Tributary is distributed to 3,300 WDAFS members and exists as a forum to present fisheries-related information.

The editor is Pat Dwyer.

If you have information you would like included in *The Tributary*, send it to:

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27 Border Lane
Bozeman, MT 59715

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27 Border Lane
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SOCIETY NEWS

NOTICE!!

The Western Division's Annual Meeting will be in Sacramento (WDAFS) which is also a joint meeting with the Western Association of Fish and Wildlife Agencies (WAFWA).

LAST CALL FOR PAPERS

The Changing Face of Conservation
New Players in the Game

1993 Western Division AFS Conference
Hosted by the California-Nevada Chapter
Red Lion Hotel, Sacramento, California
July 24-29, 1993

"Many conservation treatments are obviously superficial...Refuges and hatcheries used to maintain the supply of game and fish do not explain why the supply fails to maintain itself. In general, the trend of the evidence indicates that in land, just as in the human body, the symptoms may lie in one organ and the cause in another. The practices we now call conservation are, to a large extent, local alleviations of biotic pain. They are necessary, but must not be confused with cures. The art of land doctoring is being practiced with vigor, but the art of land health is yet to be born."

Aldo Leopold, A Sand County Almanac, 1949.

Once again Leopold's voice from "the shack" continues to haunt us. After nearly 50 years of management do we manage for healthy lands and waters? Or do we still apply doctoring techniques to the same persistent problems? It is hardly surprising that contemporary conservation efforts continue to try to reach the holistic ecological conscience envisioned by Leopold. But can we deliver? We espouse conservation objectives entitled "ecosystem management," "preservation of biodiversity" and "sustainable resources." But do we know what they really mean, much less how to implement them?

During our debate over definitions, the provoked public reaches for green revolutions, Gaia and animal rights to address their perception of our neglect. And the politicians use our empty words to cover up observations with ethics derived from Leopold's philosophy.

It is time to bring our public and private voices together to face our mutual obligations to nature. It is

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March 18-21, 1993

Eleventh Annual California Salmon, Steelhead and Trout Restoration Conference to be held at College of the Redwoods in Eureka, California, produced by the California Salmon, Steelhead and Trout Restoration Federation.

The program consists of: A Thursday workshop on erosion control with an emphasis on roads. A Friday workshop on culvert design and maintenance. A Friday symposium on organization and coordination of fish conservation education projects and programs.

The Saturday and Sunday conference topics include: managing forests to protect salmonid stocks of special concern, bioengineering techniques, low impact gravel mining techniques, water diversion treatments that save water and fish, pre- and post-project evaluation, and grant writing techniques. Jeff DeBonis, director of the Assoc. of Forest Service Employees for Environmental Ethics (AFSEEE), will be the keynote speaker.

Contact: Harry Vaughn CSSTRF, PO Box 589, Miranda, CA 95553 (707) 943-3233.

March 19-24, 1993

58th North American Wildlife and Natural Resources Conference. Omni Shoreham Hotel, Washington, D.C.

For more information, call or write to: L.L. Williamson, Wildlife Management Institute, 1101 14th Street N.W., Suite 725, Washington, D.C. 20005 - 202-371-1909.

April 13-15, 1993

International Symposium on the Biology and Management of Sablefish. Alaska Fisheries Science Center, Seattle, Washington.

For information: Mark Saunders, Department of Fisheries and Oceans, Fisheries Research Branch, Pacific Biological Station, Nanaimo, BC V9R 5J, 604-756-7154; FAX: 604-756-7053.

April 21-23, 1993

Conflicts in Natural Resources Management: Integrating Social and Ecological Concerns. Eccles Conference Center, Utah State University. A symposium sponsored by The College of Natural Resources, Utah State University, Logan, Utah.

Purpose: The purpose of this symposium is to examine the natural resources management to consider how social and ecological concerns can be integrated. The symposium will explore aspects of contemporary natural resources conflicts to help participants better understand how to develop public policies and management strategies which are scientifically sound, socially responsive, and ecologically sustainable. Participants will have the opportunity to hear prominent speakers and to engage in open-forum and informal discussions with people actively involved in finding ways to solve difficult natural resources conflicts.

Who Should Attend? Government officials, educators, students, private consultants, representatives of non-profit organizations, and members of the general public who have an interest in the management of natural resources will find the symposium worthwhile.

Agenda: An opening forum focusing on the past and future of resource conflicts will be held Wednesday night, April 21, 1993. Speakers on April 22 will provide frameworks for understanding natural resources conflicts and discuss the perspectives of various broadly defined interest groups. The final day, April 23, will focus on case studies of integrated resource management and of contemporary resource conflicts from around the United States. Speakers will include Orville Daniels, Steve Harper, Lynn Hunstinger, Robert Keiter, Edwin Marston, James Mattson, Terrence Moore, George Reiger, Marc Reischer, Jeff Romm, Jim Rouche, Charles Wilkinson, and others.

Registration: The registration fee for this conference will be \$60 if paid by April 7, 1993 and \$80 after April 7, 1993. Registration fee includes conference admission, program materials, refreshment breaks, and campus parking. Symposium attendees may order a published copy of the proceedings at a discounted price of \$15.

Utah State University course and extension credit as well as Society of American Foresters CPE credit are available to conference attendees.

For Further Information: Dr. Joanna Endler-Wada, College of Natural Resources, Utah State University, Logan, Utah 84322-5215, 801-750-2487 (office) or (801) 750-4040 (FAX) -or- Lisa Anderson, Conferences and Institutes Division, Utah State University, Logan, Utah 84322-5005, 801-750-2302 (office) or 801-750-3771 (FAX).

June 6-12, 1993

The 13th Annual World Fly Fishing Championships (WFFC) are being held June 6-12, 1993, in Kamloops, British Columbia. It is anticipated that teams from nearly 30 countries will participate.

This is the first time for the WFFC in North America.

Kamloops, with world famous "still water" trout fishing in the region, was selected by the International Federation of Sport Fly Fishing in close competition with venues in Alberta and Quebec.

As well as three days of international teams catch-and-release fly fishing sponsored by the Kamloops World Fly Fishing Championships committee, the B.C. Ministry of Environment, Lands and Parks will host a one-day international conservation symposium June 11, on the theme Clean Water-Wild Trout.

The moderator of the symposium will be Dr. David Narver, Director, Fisheries Branch, B.C. Ministry of Environment, Lands and Parks. He has done research on salmonid ecology and impacts of logging on salmonid habitat, and directs the province's freshwater fisheries management programs.

Speakers will be:

- Dr. Robert Backman, Director, Freshwater Fisheries, Maryland Department of Natural Resources, a noted authority on the impact of hatchery trout on wild trout.

- Jim McLennan, a well-known fishing guide and fly shop owner who is dedicated to preserving and enhancing the world-famous Bow River trout fishery near Calgary, Alberta.

- Tom Pero, immediate past editor of Trout, the official magazine of Trout Unlimited. He is a widely published writer on wild trout and trout management conflicts.

- Dr. Gary Berger is known across North America as a trout and trout habitat lecturer, writer and video producer.

- Morris Green, former New Brunswick Minister of the Environment and international advocate for Atlantic salmon, especially in the Miramichi River system.

- Dr. Ray White, a respected researcher, writer and lecturer on wild trout, especially in the streams of the U.S. mid-west.

- Denise Maxwell, a Skeena River steelhead guide and fly fishing instructor. She has long experience in West Coast fisheries advisory groups.

The symposium will be held at the new 5000 seat Riverside Coliseum in Kamloops and is open to the public free of charge.

For further information, contact John Cartwright or Brian Chan, symposium co-chairs, c/o BC Ministry of Environment, Lands and Parks, 1259 Dalhousie Dr, Kamloops BC V2C 5Z5 (Phone 604/374-7917, Fax 604/828-4000)

June 23-27, 1993

The Natural Areas Association is planning a major international conference to be at the University of Maine, Orono, 23-27 June 1993. A principal focus for this Conference will be "Conservation of Marine Ecosystems" but there will also be themes on endangered species and biodiversity.

The "Conservation of Marine Ecosystems" session will have presentations from leading scientists and manager concerned with national sanctuaries and parks as well as reports from scientists working in the Gulf of Mexico, Middle Atlantic Bight, and Gulf of Maine. These papers will be focused on the general issues of cumulative effects; it is now well known that it is extremely hard to delineate in the field the effects of specific trace metals or artificial organic compounds such as PCBs. Rather, marine organisms, of any type or any life history stage, and living in coastal zones, estuaries, and principal harbors, must face a multiplicity of contaminants. Thus, the Conference will attempt to elicit what the options are for the environmental manager of the 21st Century who is responsible for areas such as the New York Bight, Boston Harbor, or Casco Bay.

For those who might wish to contribute papers to the special session concerned with "Conservation of Marine Ecosystems" please write Dr. J. Pearce, NOAA/NMFS, Northeast Fisheries Science Center, 166 Water Street, Woods Hole, MA 02543 or telephone him at 508-548-5123, ext. 261/278.

July 24-29, 1993

The Changing Face of Conservation, New Players in the Game. 1993 Western Division AFS Conference hosted by the California-Nevada Chapter, Red Lion Hotel Sacramento, California.

August 28-September 3, 1993

AFS Annual Meeting in Portland, Oregon. Announcing a series of symposia sponsored by the Physiology Section at the '93 AFS Annual Meeting in Portland, Oregon.

October 5-6, 1993

Workshop on Black Bass Management in Northern Waters. The Northeast Division of the American Fisheries Society will sponsor a warmwater workshop concerning largemouth and smallmouth bass on October, 1993 at the Bonnie Castle Resort in Alexandria Bay, New York.

For further details, contact: David Green Cornell Biological Field Station 900 Shackleton Point Road, Bridgeport, New York 13030. Phone (315) 633-9243.

Water Quality Standards and Criteria Videos

The Environmental Protection Agency's (EPA) Office of Science and Technology has developed a new video production on the water quality standards and criteria programs. The title is:

■ "Development of Biological Criteria"

The video tape (along with eight productions already released to the public) are designed to provide information about the role and the importance of the water quality standards and criteria programs in the effort to clean-up our Nation's waters. The videos are available to environmental, public interest, academic (including local school systems), local governments, Federal agencies, industrial and other organizations for use in conferences, workshops, educational and other forums.

The titles of the productions previously released are:

- Introduction to Water Quality Standards
- Antidegradation Policy: A Means to Maintain and Protect Existing Uses and Water Quality
- Development of Water Quality Criteria and Its Relationship To Water Quality Standards.
- Enumeration Methods for E. Coli and Enterococci.
- Water Quality-based Approach to Pollution Control
- Water Quality Standards and 401 Certification
- Economic Considerations in Water Quality Standards
- Water Quality Standards on Indian Lands

These nine videos are available on loan from the U.S. EPA's Office of Science and Technology and Office of Groundwater and Drinking Water Resource Center (OST/OGWDW) or from EPA's 10 Regional Offices at the following addresses:

- Jim Luey, Water Quality Standards Coordinator
Environmental Protection Agency
Region 8, Water Management Division
999 18th Street
Denver, Colo. 80202-2405
303-293-1425
- Phil Woods, Water Quality Standards Coordinator
Environmental Protection Agency
Region 9, Water Management Division
75 Hawthorne Street
San Francisco, CA 94105
415-744-1997

■ Sally Marquis, Water Quality Standards Coordinator
Environmental Protection Agency
Region 10, Water Division
1200 Sixth Avenue
Seattle, Wash. 98101
206-553-2116

Additional information about the water quality standards program may be obtained from Frances A. Desselle at 202-260-1320.

Electrofishing Injury

At the Rapid City, S.D. business meeting of the Fisheries Management Section on Sept. 14, 1992, an "Electrofishing Injury Network" was formed.

The objective of the network is to provide a forum for information exchange on the subject of electrofishing-related injuries in fish. The primary vehicle for this information exchange will be the FMS newsletter. We anticipate that through the newsletter a list (network) of interested people/entities will be created, and from that list people will be able to contact others who have similar interests or needed expertise. It is also hoped that as people investigate the extent of injuries in their electrofishing operation or pursue solutions, they will contribute that information to the FMS newsletter.

Coordinators have volunteered to serve as contacts for facilitating exchange of information. Those coordinators are: Bruce Hollender (801-359-5118, Northeast), Lee Newman (705-682-6186, North Central), Curt Meyer (307-745-4046, Western), and UNNAMED (Southern). Curt Meyer has also agreed to serve as chair of the network to assist in overall communication within the network.

We hope this network will also provide some direction in pursuing answers to electrofishing injuries in fish. The types of information we see this network addressing are:

1. How wide-spread is the problem? People who feel they don't have any electrofishing injuries; how closely have they really looked?
2. Most recent information seems to be primarily on salmonids. How much variation is there among fish species in susceptibility to electrofishing injuries?
3. What types of equipment are biologists using? What types of current and characteristics of those currents have been examined? What appears to be effectively collect fish without injury or with minimal injury?
4. Can there be any agreement on what constitutes a minimal/acceptable amount of injury?
5. What components of any given electrofishing operation can be or should be modified to minimize injuries? Curt Meyer, WY Game and Fish Department
528 South Adams Street
Laramie, WY 82070

THE TRIBUTARY SOCIETY NEWS

(Continued from page one)

time to stop playing doctor and start to practice the art of healing. The society encourages contributed papers and symposia directed toward the discussion of this theme for presentation. As always, other timely and pertinent topics will also be considered for inclusion.

List of sessions to be held at the meeting includes:

1. Contemporary Lake and Reservoir Issues in the Sierras
2. Innovative Marine Fish Management - Concepts and Early Experiences.
3. Sensitive Aquatic Ecosystems of the West.
4. Scientific Credibility and Advocacy From a Consultant's Point of View.
5. Molecular Genetics and Fisheries Issues.
6. Estuarine Ecology
7. Biodiversity in Herp Fauna
8. Wild Steelhead in the West, Focus on the Stocks in Southern California.
9. Temperature Effects on Fish Physiology and Behavior.
10. Riparian Management -- A Watershed Ecosystem Issue
11. Conservation and Biodiversity
12. Aquatic Enhancement
13. Aquatic Habitat Evaluation.

Submission of contributed papers must be in the form of the abstract shown here. To be considered, abstracts must clearly state (200 words or less) your objectives, principal results, and conclusions. Abstracts must include a succinct title; full name, address, and phone number of all authors (note the individual presenter); and the text of the presentation. Please indicate audio-visual needs for the presentation. An original and six copies of the abstract **MUST BE RECEIVED BY MARCH 15, 1993**. Questions regarding the program or submissions should be directed to Jennifer L. Nielsen, Program Chair, address, or by phone 510-642-7525 (w) or 415-381-4958 (h).

FORMAT FOR ABSTRACTS FOR 1993 WESTERN MEETING

The Title of the Paper: to be presented at 1993 Western Conference.

First Author: Jennifer L. Nielsen, Department of Molecular and Cell Biology, 410 Barker Hall, University of California, Berkeley, CA 94720 (510) 642-7525 (presenter).

Co-Author: Tom Lisle, USDA US Forest Service Redwood Sciences Laboratory, 1700 Bayview Drive, Arcata, CA 95221 (707) 822-3691.

The Body of the Abstract: The purpose of submitting abstracts is to permit the Program Committee's objective evaluation and selection of papers to be presented at the 1993 conference. Succinct description of the objectives, principal results and conclusions to be presented will allow the Program Committee to collect and schedule presentations in cohesive order according to the discipline. The body of the abstract must not exceed 200 words. Remember, a well-written, informative abstract is the best measure by which the Committee can judge the quality of the proposed presentation.

Audio-Visual Needs: 2 x 2 Slides.

Presenter's Status: _____ Student
at _____ (School) _____
Non Student

Contact Person: Jennifer L. Nielsen

FAN TO SPONSOR EDUCATIONAL POSTER

A meeting was recently held in Bethesda to help plan future activities of the Fisheries Action Network. Pat Higgins and Don Chase represented the WDAFS at that meeting.

Importantly, FAN has agreed to sponsor the production of an educational poster highlighting rivers in California that presently support anadromous fish stocks that are at risk.

The poster will also depict habitat requirements and life-cycles of salmon, steelhead, and sea run cutthroat trout. For more information, contact Pacific Salmon Stocks Committee Chairman, Pat Higgins.

DRAFT OF STANDARDIZED TERMINOLOGY READY FOR PUBLICATION

You may recall that in 1983 WDAFS initiated an effort to standardize the terminology and methodology used for habitat inventory assessments. Under the leadership of Neil Armantrout, a glossary of terms was developed that included input from all Divisions in the Society. A draft of the glossary was recently completed and Neil is working on having it published. Contact Neil if you are interested in receiving a copy of the draft document.

WDAFS WORKS TO GET 1872 MINING LAW REFORM

Kelly Hepler is heading the WDAFS effort to provide input towards reforming the 1872 Mining Law. Kelly is working with the Mineral Policy Center in Washington, D.C. -- a group focusing on mining law reform.

EXCOM WORKS FOR BYPASS FLOWS

The WD EXCOM is continuing to work with WDAFS members in Colorado and Wyoming to try and help secure bypass flows for fisheries in streams located on the Apache/Roosevelt National Forests. The Bush administration had downplayed the need for instream bypass flows in favor of other water uses. We are hopeful that the new administration will be more supportive.

Best Student Paper Award

The Western Division AFS presents an award for \$100 to the best student paper given at its Annual Meeting each year.

The Chapter intends to supplement this award with \$60 second place and \$30 third place awards.

Get your abstracts into the Program Chair, Jennifer Nielsen, noting that you are a student applying for consideration of this award. The student must present the paper and should be the senior author.

Students who are AFS members are eligible, but will have 1993 Parent Society and the appropriate local chapter dues deducted from their award on their behalf.

If you wish to help in judging student papers at the Joint Annual Meeting of the WDAFS and WAFWA, contact the Awards Committee Chair.

Student Attendance Awards

The Chapter will offer support for students to attend the July 1993 Joint Annual Meeting of the WDAFS and WAFWA to be held in Sacramento.

We will be providing three free room nights (double or triple occupancy) from Saturday the 25th through Monday the 28th, for up to six students.

Preference will be given to students who are both Cal-Neva and parent society members.

Successful applicants will be selected by a three-stage random drawing, with Chapter and parent society members drawn first, parent-society-only members drawn second, and non-members drawn for any remaining slots.

Send your name, address, school affiliation, advisor's name, and membership status to the Awards Committee Chair by April 1, 1993. Winners will be notified by May 1, 1993.

Your EXCOM is Working!

Editor's Note: To give the members an idea of what the WDAFS EXCOM is doing, I've included the 1992-93 Action Agenda.

A STRATEGY FOR IMPLEMENTING THE LONG RANGE PLAN OF THE AMERICAN FISHERIES SOCIETY WITHIN THE WESTERN DIVISION

Prepared by: WDAFS EXCOM

Purpose: To provide an organized framework for activities to be conducted by WDAFS that is recognized and accepted by individual members and Chapters.

GOALS, SUBGOALS and OBJECTIVES

I. Advance the conservation, development and wise use of fishery resources for optimum use and enjoyment of all mankind.

A. Increase involvement in development of public policy.

1. Encourage Division involvement in issues having regional significance to fishery resources.

a. Provide appropriate information to congressional leaders on relevance of 1872 Mining Law Reform to western fishery resources. Draft testimony as needed for Paul Brouha. Target Date: June 1993. Responsibility: WDAFS Environmental Concerns Committee (Chairman, Kelly Hepler).

b. Provide WDAFS input in legislative process to reauthorize the Surface Mining Control and Reclamation Act. Particular emphasis on making reclamation funds available for abandoned hard rock mine sites in the western United States where acid mine drainage is degrading fishery resources. Target Date: March 1993. Responsibility: WDAFS Environmental Concerns Committee (Chairman, Kelly Hepler).

c. Develop a Western Division task force to examine the problem of integrating management of game and non-game fisheries. Issues to be dealt with include ecosystem management, biodiversity, funding for non-game programs, stocking policies, and effects of management on native fishes. Task force to contact Naomi

Edelson of IAFWA to explore opportunities for tapping federal water funds. Make recommendations to EXCOM on appropriate activities or actions. Target Date: January 1994. Responsibility: Task Force (Chairman, Tom Nester).

d. Draft a WDAFS position paper on endangered species and fishery management to be provided to congressional leaders for consideration during reauthorization of the Endangered Species Act. Items to be considered include: Ecosystem management concept, funding for studies to evaluate the needs of species before numbers are reduced to the point of requiring listing, process for determining when or if a particular stock or species should be listed, oversight of federal recovery programs and states roles in listing and recovery. Coordinate with AFS Endangered Species Committee. Target Date: January 1993. Responsibility: WDAFS Endangered Species Committee (Chairman, Jerry Burton).

e. Provide appropriate information to the AFS Marine Fisheries Section for consideration during reauthorization of the Magnusen Act. Topics may include bycatch, groundfish overharvest, role of the North Pacific Marine Fisheries Council. Target Date: March 1993. Responsibility: WDAFS Marine Fisheries Committee (Chairman, Mike Pradenberg). Coordinate with Randy Bailey and Marcelle Lynde.

f. Evaluate funding needs for tribes and mechanisms for obtaining funding. Prepare a proposal to channel funds presently distributed to the Bureau of Indian Affairs through the USFWS. Target date: July 1993. Responsibility: Native Peoples Fisheries Committee (Chairman, Joe Dossantos).

g. Evaluate the effects of present old growth forest harvest and management policies on western fishery resources and advise EXCOM of appropriate action necessary to protect fishery resources. Target date: July 1993. Responsibility: Old Growth Forests and Fisheries Committee (Chairman, David Fuller).

h. Develop a network to foster greater public understanding of the status and integrity of stocks of native Pacific salmon, steelhead, and cutthroat trout. Recommend appropriate action to EXCOM as necessary to protect these stocks. Target date: July 1993. Responsibility: Native Salmon Stocks Committee (Chairman, Pat Higgins).

i. Recommend appropriate action by EXCOM on issues or activities that affect western riparian ecosystems. Take the lead in implementing the WDAFS riparian awards program. Target date: July 1993. Responsibility: Riparian Committee (Chairman, Mark Gorges).

II. Gather and disseminate information on fisheries science and management.

A. Encourage the use of workshops and symposia as forums for collecting and disseminating information.

1. Conduct habitat inventory procedures workshop. Target Date: Winter-Spring 1993. Responsibility: Habitat Inventory Procedures Committee (Chairman, Pete Bisson)

B. Increase efforts to inform the public about topical fishery issues.

1. Assign a media relations professional to coordinate press and television coverage of the WDAFS meeting in Sacramento. Target date: March 1993. Responsibility: Local Arrangements Committee (Chairman, Cay Goude).

C. Explore new mechanisms for gathering and disseminating information.

1. Video tape the plenary sessions at the Sacramento WDAFS meetings and make the tape available to members through the Tributary. Target date: July 1993. Responsibility: Local Arrangements Committee (Chairman, Cay Goude).

III. Promote and evaluate the educational, scientific and technical aspects of the fishery science profession.

A. Develop and maintain educational standards for the fishery profession.

1. Identify continuing education opportunities.

1a. Organize one or more continuing education workshops for the Sacramento WDAFS meetings. Target date: July 1993. Responsibility: Local Arrangements Committee (Chairman, Cay Goude).

B. Expand and promote a more comprehensive certification program.

1. Promote recognition of certification as a required standard for fishery professionals through the WDAFS membership committee. Target Date: Ongoing. Responsibility: Membership Committee (Chairman, Carl Burger).

C. Develop and maintain professional standards for the fisheries profession.

1. Award outstanding organization(s) that improve the status of professionals in their employment or strive to enhance aquatic resources. Nominate worthy AFS members for prestigious professional awards. Target Date: July 1993, WDAFS - Sacramento. Responsibility: Awards Committee (Chairman, Don Chase).

D. Develop and maintain scientific and technical

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cal standards for the fisheries profession.

1. Provide continuing forums for discussion of all significant issues affecting the development, advancement and application of fishery science, technology and practice. Target Date: 1993 - Sacramento. Responsibility: Program Committee (Chairman, Randy Bailey).

IV. Provide an organizational structure that equitably represents WDAFS members, develops opportunities for effective leadership, and generates resources necessary to carry out its WDAFS programs.

A. Provide programs that develop qualified effective leadership throughout the Society.

1. Continue to provide leadership training to WDAFS EXCOM and members. Target Date: 1993 - Sacramento. Responsibility: Program Committee (Chairman, Randy Bailey).

B. Continue the ongoing formal planning process to guide Society activities.

1. Use the WDAFS retreat as the forum to develop the Division action agenda for the following year. Target Date: 1993 - Sacramento. Responsibility: President-Elect (Randy Bailey).

C. Develop a Division membership recruitment plan.

1. Clarify to the Chapters within WDAFS the Society's membership recruitment goals and objectives. Target Date: September of each year. Responsibility: Membership Committee (Chairman, Carl Burger).

D. Develop a focused and planned approach to environmental concerns programming activity.

1. Evaluate and refine the planning and prioritization process for the Division. Target Date: WDAFS, Fort Collins. Responsibility: WDAFS EXCOM (Completed).

2. Appoint committee chairpeople for each priority issue. Target Date: November 1992. Responsibility: WDAFS President (Completed).

E. Establish a student recruitment program

WDAFS AWARD NOMINATIONS DUE

An outstanding way to recognize the folks doing great work for fisheries is to nominate them for a Division award. Please consider nominating someone! We all know an agency member, researcher, hatchery operator, politician, manager or a fine biologist deserving of an award. Nominate someone of the following categories:

Award of Excellence

This is the highest award the Division honors. It is awarded to an AFS member who has shown outstanding achievement over time or in an exceptional short term activity that benefits fisheries resources and the profession. The award is for contributions that are outstanding in the effort and exceptional competence demonstrated in the application.

Award of Merit

This award is to an AFS member who has made a worthy contribution to the Division, the profession or fisheries resources. The contribution is demonstrated to be regionally significant in the application.

Robert L. Borevicha Award

This award is to an individual who has contributed to the conservation of fisheries resources within the area of the Division. The award may be to a non-member of the AFS.

Conservation Achievement Award

This award is to an entity, such as a tribe, agency, or organization, that has demonstrated a significant contribution to the conservation of fisheries resources within the area of the Division. The entity may be a non-member of AFS.

Award of Special Recognition

This award was instituted in 1991, and is given to an individual or entity that significantly contributes to the development and success of WDAFS.

Please take the time to reward fine fisheries work and nominate someone for one of these awards! Send nominations by May 1, 1993, to WDAFS Awards, Carl Burger, 4237 James Drive, Anchorage, AK 99503.

that provides incentives to retain membership.

1. Actively encourage presentations by students at Division meetings. Target Date: WDAFS meeting in Sacramento. Responsibility: Program Committee (Chairman, Randy Bailey).

2. Encourage students and young professionals to get involved in Division committees and other business. Appoint students to participate on WDAFS committees. Target Date: November 1992. Responsibility: Committee Chairmen.

F. Encourage minorities to enter the fishery profession

1. Develop a program to inform minorities of opportunities in fisheries; organize a session on equal opportunities for the WDAFS Sacramento meeting. Target Date: July 1993. Responsibility: Equal Opportunity Committee (Chairman, Ken Hashagen) Coordinate with Cay Goude and Randy Bailey.

Chapter Happenings?

As you know, this is the first issue of the Tributary since Roger Ovrink went on sabbatical. He should be commended for his many years of service to the Division. I plan to be an interim Editor for Glenn. Your input is appreciated.

Let me know what you would like to see in the newsletter and send news releases to me. I would like to have a section in future Tribs for Chapter News.

Chapters, if you're interested in letting the rest of us know what your chapter is doing, send a short summary to me by May 1.

Pat Dwyer, Editor
27 Border Lane
Bozeman, MT 59715

PUBLICATIONS

OFF THE PRESS

Predicting Ecosystem Risk: Advances in Modern Environmental Toxicology (Volume XX), edited by J. Cairns Jr., B.R. Niederlehner and David Orvos, calls attention to the urgency of our need, as a nation and part of the global community, to develop a system for estimating ecosystem risk. While the book is not intended to be encyclopedic in its coverage, diverse chapters illustrate many facets of the problem. Specific topics include the economic consequences of our poor predictive capabilities and the drastically differing problems that face developing versus developed countries. Various views of ecosystem risk analysis and the investigation of promising methods of detecting ecosystem risk are discussed. This informative and fascinating hardcover book is available for \$65.00 (plus \$3.00 shipping and handling) from Princeton Scientific Publishing Company Inc., P.O. Box 2155, Princeton, New Jersey 08543; (609) 683-4750.

Native Trout of Western North America, written by Robert Behnke and published by the American Fisheries Society, details the evolutionary diversity and complexity of the native trout of Western North America. The author has drawn not only on published literature and agency reports, but on his own vast experience with these fish as well. Behnke has integrated the biology and ecology of these fish with their taxonomy, classification, and evolutionary history to provide the most comprehensive survey of indigenous western trout available in one document. A strong subtext of this publication is preservation of the diversity still available among these remarkable animals. Few groups of fish are more venerated by the public, yet few fish have been more abused.

The natural ranges of western trout have been sharply truncated by dams, abusive land practices, and introductions of exotic species; some distinctive subspecies and populations have been lost forever. By demonstrating not only the scope of trout diversity but why this diversity is important for enhancing fishery resources, Behnke has made a major contribution to resource management in North America.

Native Trout of Western North America is available in both hardcover (\$41.00; \$33.00 AFS members only) and paperback (\$33.00, \$26.00 AFS members only) from the American Fisheries Society, 5410 Grosvenor Lane, Suite 110, Bethesda, Maryland 20814; (301) 897-8616.

Methods of Marking Fish and Shellfish is a practical synthesis of current ways to tag and mark fish, crustaceans, and mollusks for later identification.

Written by Larry A. Nielsen, Professor of Fisheries and Wildlife Sciences at Virginia Tech University and a recent (1990-1991) President of the American Fisheries Society, this book has been crafted to be equally useful as a textbook or a working manual.

It distills the wealth of field experiences documented in Fish-Marking Techniques, the proceedings of a landmark international symposium, and supplements that state-of-the-art information with other peer-reviewed material to achieve a balanced coverage of all marking methods.

Each class of techniques is treated in a well-illustrated chapter that covers advantages, disadvantages, appropriate species, materials, procedures, new developments, and key references.

Topics covered include: external, & chemical marks; and genetic identification & marking. The first book of its kind, Methods of Marking Fish and Shellfish will be an invaluable fisheries tool for many years.

Books can be ordered from the American Fisheries Society and at the following prices: \$39.00 Regular; AFS members \$31.00. (Prices include postage and handling inside the U.S. [outside the U.S. add \$3.00 per book for postage]).

Water Quality In North American River Systems

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"River managers and environmentalists will especially value Water Quality in North American River Systems for its basin-wide, ecosystem perspective. These sobering accounts of diverse yet representative systems amount to a continent-wide call for action on behalf of river integrity," said Robert L. Kendall, managing editor, American Fisheries Society.

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