

President's Corner:

Committees Accomplishing Assignments

The Western Division (WDAFS) continues to maintain active programs and enthusiasm for involvement in fisheries issues by its members and chapters. During the past 9 months, the officers, committees, and chapters have been active in many fisheries issues. All 17 of the WDAFS committees have contributed to getting the job done during the 1982-83 session. Most will remain intact for the 1983-84 session to accomplish their assignments.

A brief overview of some important aspects of committee work will be helpful for members. The Water Development and Streamflow Committee is preparing a WDAFS position statement on low-head hydroelectric development. A draft statement should be ready for circulation and comment at the annual meeting in July. The committee assisted the Colorado/Wyoming Chapter in preparation of the chapter's Instream Flow Paper for the 1983 Wyoming Legislature. The WDAFS contributed financial aid to the chapter for the publication. Co-chairmen Tom Wesche and Dudley Reiser have done a good job of organizing the committee's workload. Riparian Habitat Committee Chairman Don Martin and committee members have been active in riparian legislative affairs, as well as assisting AFS in national riparian issues involving the BLM and Forest Service. Guidance has been sent to the Arizona/New Mexico, Oregon, Idaho, and North Pacific International Chapters concerning the upcoming national U.S. Forest Service Riparian Review. The Committee and chapters will assure WDAFS representation on the Forest Service review team as they evaluate riparian habitat condition and policy directives on western National Forest lands. The review on Arizona/New Mexico National Forests is scheduled for April 18-22 and a report on the outcome will be presented to the membership at the annual meeting. Since the Oregon Chapter's initiative on riparian tax incentive legislation, several other chapters have become involved in this issue too. Because several chapters have begun development of 35mm slide-tape modules for state-public informational sessions, the WDAFS will coordinate a mini-riparian overview discussion at the annual meeting through the Riparian Habitat Committee. A meeting session is being planned for July 11, the day before the technical sessions begin, so involved chapters and interested members can view and discuss riparian objectives in a coordinated approach.

Jack Griffith's Awards Committee will have a fine awards program planned, so please fill out any nominations and return the form in this newsletter to him. It only works with your help!

The Audio-Visual Committee, under Mike Johnson, is hard at work developing guidelines for preparation of slide-tape modules. This is one topic we will all benefit from when it is complete in 1984. Nominating Committee work under Past President Bob White has developed a fine slate of officers for 1983-84, so vote as soon as you get this newsletter. Let's show a good voter turnout, an indication of your pride in the AFS, the Division, and chapters! Students and members continue to get consideration in WDAFS in-

ternal and external affairs through the work of the Student Concerns, Membership Concerns, and Membership Committees under Chairman Jim Reynolds, Dave Bennett, and Tony Novotny, respectively. Dave Cross is the new Chairman of our Public Lands Committee and is gearing up for involvement in public lands management issues. This committee is one that will take a lot of work, so any volunteers should contact Dave.

John Rinne's Endangered Species Committee is continually active in updating fish species status throughout the WDAFS states. Time and Place Committee Chairman Ross Peterson (1984) and John Peters (1985) have begun coordinating with the Western Association for the joint annual meetings in 1984 and 1985. If you have any suggestions for sessions, topics, etc., let me know.

Program Chairman and President-Elect Stan Moberly and Program Liaison Bob Wiley have done an outstanding job in developing the 1982 Annual Meeting Program for Jackson. Give them your support and participate in July!

I would like to commend all WDAFS officers, committees, members, and chapters for their strong support in WDAFS affairs this year. Though the job of President is time consuming and demanding, I have enjoyed working with all of you. Your support and dedication to AFS objectives has made my job easier and more worthwhile. Because of you (members and chapters) the Western Division continues to give strength to the AFS in leadership, accomplishment of program goals, and national involvement in fisheries issues. All of you, keep up the good work and I hope to see you continue to be active in some phase of AFS involvement in the WDAFS. We will continue to make the members, especially the student and the chapters, a focal point of the WDAFS affairs. Incoming President Stan Moberly plans to maintain these initiatives and he will further the WDAFS leadership in AFS. Pledge your support to him now and sign your name to the Committee's interest list in the newsletter, so you can help. Thanks for a good year, and we will see you in Jackson Hole. Good fishing to you!—*Don Duff, President*

MicroHydro Projects Threaten Small Streams

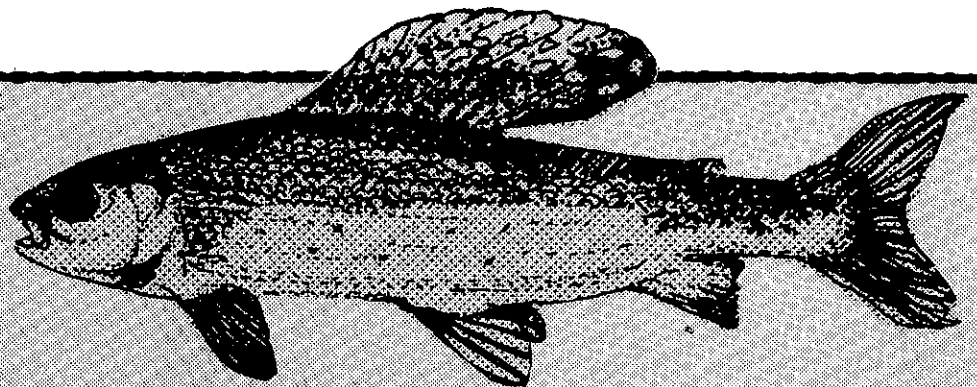
Mom and pop hydropower - the next gold rush? Not since the gold fever of the 1800s have small-scale speculators posed such a threat to the mountain streams of the west. But this time the gold dust is the water, itself, diverted into pipes and using the natural fall of the stream as head to power small generators. Diversions from a few hundred feet to over 5 miles are proposed in headwater streams across the west. How did it happen and is it really any big deal?

Federal legislation in the form of PURPA and various tax credits were developed to encourage development of renewable energy resources. So zealous are these incentives that PURPA requires a

THE TRIBUTARY

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WESTERN DIVISION,
AMERICAN FISHERIES SOCIETY

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Western Division of the American Fisheries Society

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Committee Chairpersons

Awards	Jack Griffith Idaho
Audit	Mary McAfee Colorado
Program	Stan Moberly Alaska
Riparian Habitat	Don Martin Idaho
Time and Place (1984)	Ross Peterson British Columbia
Time and Place (1985)	John Peters Colorado
Water Development and Streamflow	Tom Wesche Wyoming Dudley Reeser Colorado
Nominating	Bob White Montana
Student Concerns	Jim Reynolds Alaska
Membership Concerns	David Bennett Idaho
Public Lands	Vacant To be announced
Newsletter	Glenn Phillips Montana
Resolutions	John Peters Colorado
Audio-Visual	Mike Johnson California
Marine Fisheries	Gary Sakagawa California
Endangered Species	John Rinne Arizona
Self-Evaluation	Bob White Montana
Membership	Tony Novotny Washington

utility to buy the energy whether it is needed or compatible with its system. Further, the utility must pay the full avoided cost (the cost it would have to pay if it developed a new resource such as coal or nuclear). In the Northwest this is particularly discomfoting because microhydro projects product most of their power in the spring and least in the winter, just the reverse of the region's seasonal energy needs. These incentives can undermine the intent of the Northwest Power Planning Act to provide a balanced guide to energy development. This is further complicated by FERC, the licensing agency, which is expediting and streamlining licensing procedures for small projects to accommodate the avalanche of newly proposed projects.

But do not these small projects have a significant impact on Fisheries? Certainly measures can be taken to mitigate sediment input, insure adequate flows for passage and reaving at any one project. A larger threat exists, however, in the potential cumulative impacts of many of these projects in a drainage, particularly on migratory stocks of fish.

Many questions remain unanswered because few of these projects have yet been built. As a result, Montana Department of Fish, Wildlife and Parks was funded by the Bonneville Power Administration in 1982 to evaluate the potential cumulative impacts of microhydro development on the migratory cutthroat and bull trout in the Swan River drainage, where 30 microhydro projects are proposed. The study will assess the effectiveness of various methods that can be used to evaluate the fishery and habitat in high gradient streams, criteria to be used in evaluating microhydro projects, methods to predict cumulative impacts, and the bioeconomic values that could be lost due to potential cumulative impacts on a migratory resident fishery.

These issues are also important to the Montana Chapter AFS which is preparing resolutions and letters regarding PURPA and other related legislation. We will also be requesting the FERC meet with us in the near future to discuss our concerns.—*Pat Graham, Montana*

Idaho Chapter Opposes USFS Logging Practices

Idaho AFS has been involved in what has become a very complicated water quality issue. The state of Idaho's rule-making process allows anyone to petition for a rule change. The petition is then considered in public hearings and the information gathered is used by the State Board of Health and Welfare as a basis for decision.

In March 1982 Region 1 of the U.S. Forest Service (USFS) initiated a change in the state Water Quality Standards dealing with nonpoint source pollution. USFS was particularly interested in how the standard would affect their timber sale planning process, since it limited the amount of damage (pollution) that could occur in water as a result of nonpoint source activities such as logging. Submitting petitions with views opposing the USFS stand were the Idaho Conservation League (ICL) and Idaho AFS. A petition with a position similar to USFS was submitted by a timber interest group, the North Idaho Forestry Association (NIFA).

Hearings were held in September 1982 on all four petitions jointly. The Board of Health and Welfare ruled in January 1983 to accept some compromise language for the standards developed by staff of USFS, NIFA and the state Department of Health and Welfare - Division of Environment. They further directed that a Task Force of technical individuals be formed to supply them additional objective information on nonpoint source pollution in Idaho. The compromise language is viewed as an interim standard, with hopes that material generated by the Task Force may clarify the issue further. The matter is still far from resolution at this point, however.

Idaho AFS plans to hold a small workshop to develop a standard which will quantify the amount of damage occurring in a stream from nonpoint source activities. Efforts at this point are concentrated on silviculture, but other nonpoint source activies are also potentially involved (agriculture, mining). The information from the workshop will be submitted to the Department of Health and Welfare for use in developing their nonpoint source standard.

If you are interested in more detailed information on the non-point source issue in Idaho, or if you have information or experience which may help Idaho AFS in developing a possible standard, please let us know by contacting Jack Griffith, Box 8007, Pocatello, ID 83201.

Utah—Instream Flow

On March 18, 1983, the Utah State Engineer accomplished a historic first for Utah—signing a water rights decision allowing instream flows for fisheries as a first priority water use. In December 1980, the City of Logan, Utah, requested an appropriation for the entire streamflow within a 2 mile section of the Logan River for hydroelectric generation. The Utah Division of Wildlife Resources (UDWR) protested the appropriation application, and conducted fish population and habitat surveys in 1981-1982 to determine instream flows necessary to maintain a high value, wild brown trout fishery within the proposed impact reach.

The UDWR based their protest on Section 73-3-8 (enacted in 1971) of Utah water law, which stipulates that new appropriations cannot "unreasonably affect public recreation or the natural stream environment." Studies conducted by UDWR biologist William H. Geer defined the "natural stream environment" and flows necessary for its preservation. The Utah State Engineer consequently reduced the appropriation requested by Logan City to the monthly amounts recommended by UDWR. This is the first time that Section 73-3-8 has been used to protect instream flows in Utah; prior appropriations doctrine required out-of-stream diversion as a condition for beneficial use of water.

Riparian Education High WDAFS Priority

The true value of riparian areas has long been little recognized in the West, as most fisheries workers are aware. WDAFS is currently involved in an effort to inform and educate about the riparian issue in the West.

In 1981 the Oregon Chapter-AFS effectively lobbied the passage of a bill for the protection and enhancement of riparian areas. This precedent setting effort is and should be replicated by all AFS Chapters in the Western Division. Currently, riparian legislation efforts are taking place in Colorado, Montana, Utah and Idaho. These efforts are taking different formats, eg., slide-tape modules, coalitions and active lobbying efforts. Therefore, every Chapter in the Western Division should pursue some aspect of promoting riparian protection and enhancement in the coming year.

Don Duff, Western Division President, has asked that the Chapters get together the day preceding the Western Division Annual Meeting on July 11 in Jackson to discuss their individual efforts dealing with riparian protection and enhancement. Please designate someone who will be attending the Western Division meeting and could discuss and/or present material your Chapter has put together or would like to put together on this issue. Please have that person(s) contact Don Martin by June 1 so that he may develop an agenda. This will essentially be a show and tell session and a good chance to strategize.

As most of you are aware, AFS, with the cooperation of the U.S. Forest Service (USFS) has been reviewing the management of riparian areas on National Forest lands in the West. Idaho sites in USFS Region 4 were selected as being representative of riparian management on National Forest lands. Tours were made of the sites in 1980 and 1982 by representatives of AFS, Forest Service and other agencies. Progress has been made toward the recognition and management of riparian areas within National Forest systems in Idaho, but alot is yet to be done.

The USFS-Washington, D.C. is sponsoring a National Review of riparian areas in 1983. This review was originally planned for USFS Regions 3, 4 and 6 but is now being limited to Regions 3 and 6. Carl Sullivan, AFS Executive Director, has been asked by the Chief USFS to participate in the National Riparian Review. In order to best inform Carl as to local "real world" conditions, each Chapter has assigned someone familiar with local riparian conditions to ac-

company him, along with Forest Service personnel, on the riparian site tour in their state. The Arizona-New Mexico riparian tours took place the week of April 18, 1983. The USFS gave very short notice to AFS about the scheduling of these tours, yet local AFS involvement was planned. All Chapters, even those where tours are not currently planned, need to maintain a high level of involvement with the USFS during this National Riparian Review. If you have any questions or comments on this subject, please do not hesitate to contact Don Martin, Western Division-Riparian Committee Chairman, Route 1 Box 84, Star, ID 83669. You can phone Don at (208) 286-7503 (home) or (208) 334-4255 (office).

The Unit, a New Organizational Concept for AFS

A subdivision of the Idaho Chapter has recently surfaced as a functional entity of the American Fisheries Society. The Palouse Unit was formed as a result of increased student interest in fishery resources at the University of Idaho. The needs of the University fishery community were rather different from those of other professionals in the state. The members preferred that the Unit have more of a social function and hold regular meetings with guest speakers, while the Idaho Chapter met annually for a 2-3 day professional meeting. A club was the original thought but students favored association with the American Fisheries Society. The obvious move was to establish a "Student Chapter." Concern was expressed, however, that organizing another AFS Chapter in Idaho could act to divide fishery biologists in the north from those in the south. With that concern in mind, we developed the concept of the "Unit" as a subset of the Chapter.

The Palouse Unit operates almost completely independent of the Idaho Chapter. An executive committee guides the Unit, and monthly meetings are scheduled during the academic year. The By-laws of the Unit and Chapter require that the Unit president be a member of the Executive Committee of the Idaho Chapter and that policy matters, such as resolutions and position statements, must receive prior approval by the Executive Committee of the Idaho Chapter before being aired.

The benefits of this organizational structure certainly out-weigh the disadvantages. First, rather than dividing the professionals within Idaho, we have actually increased the interaction between Unit and Chapter members. The Palouse Unit has been so successful that biologists in the state are discussing the possibility of organizing other Units in southern and eastern Idaho. The Palouse Unit, as a University organization, has also benefited directly by having the clout and prestige of a professional society. The only disadvantage is the increased time required to process resolutions and policy matters. We believe, however, the advantages have been significant. Other states contemplating establishing new chapters or increasing interaction with the University organizations might be interested in applying the AFS Unit concept to their area.—David Bennett, Idaho

D-J Bill Introduced in House

Congressmen John Breaux, Walter Jones, Edwin Forsythe, and others introduced H.R. 1724 on March 1, 1983. First hearings are scheduled for March 8. Several members of the D-J Steering Committee including this office will be testifying. It is our best estimate that if passed as introduced, the Bill will generate \$30 million annually for boating facilities and \$60 to \$65 million new dollars annually for traditional D-J fisheries enhancement projects. Last year's total D-J apportionments (based on the present 10% tax on rods, reels, and lures) amounted to about \$31 million. This figure is expected to increase so that if our new Bill is successful total sport fishing enhancement funding should jump to roughly \$100 million per year. This will go a long way toward meeting the identified need. The additional \$30 million available for boating facilities projects should also help by relieving some existing pressures on limited D-J funds.

At the moment, the key legislative group is the House Ways and

Means Committee. Below is a list of its members from Western Division states indicating which sit on the particularly important Select Revenues Subcommittee. For the present, we need to direct most of our attention to these individuals.—*Carl Sullivan, Executive Director AFS*

House Ways and Means Committee
U.S. House of Representatives
Washington, D.C. 20515
(202) 224-3121

California

Fortney Stark (D)*
Robert Matsui (D)
William Thomas (R)

Hawaii

Cecil Heftel (D)*

* Members of Select Revenue Subcommittee
from Western states

Conferences and Workshops

Coastal Zone 83—The third in a series of interdisciplinary conferences providing opportunities for the exchange of information and views regarding coastal and ocean affairs, will be held June 1-4, 1983, at the Town and Country Hotel in San Diego, California. Major issues to be addressed at the conference include: environmental concerns; development management; access to the shore; governmental considerations; role of states and other institutions; impact of energy development; and new direction in marine policy and coastal management. Further information is available from Orville T. Magoon, General Chairman, Coastal Zone 83, P.O. Box 26062, San Francisco, CA 94126. Telex: San Francisco 470093, (415) 566-5352.

The theme of the 1983 Northeast Division American Fisheries Society Workshop will be "*Fisheries and Computers, Practical Applications*." Objectives of the workshop are to: (1) Introduce participants to the capabilities and use of micro computers in fisheries work, (2) Expose participants to examples of existing computer applications, (3) Provide opportunities for individual "hands-on" micro computer experience. Sponsors include the New York AFS Chapter and the New York Department of Environmental Conservation. The meeting is scheduled for June 21-23 at the Cornell University Conference Center.

The "*Symposium on the Role of Fish Culture in Fisheries Management*" is scheduled for Missouri in the spring of 1985. The Symposium will be sponsored jointly by the AFS Fish Culture and Fisheries Management Sections, which incidentally, are our 2 largest sections. Chairman of the Steering Committee is Delano Graff of the Pennsylvania Fish Commission.

Gas Supersaturation in Hatcheries—Causes, Effects, and Solutions is the topic of a workshop sponsored by the Bio-Engineering Section of the American Fisheries Society. The workshop will be presented during the annual meeting of the American Fisheries Society on August 14-20, 1983 in Milwaukee. The purpose of the workshop is to provide practicing fish culturists and engineers with current information on the causes, effects, and solutions to gas supersaturation problems in aquatic culture systems. The workshop will be conducted as a training course and a workshop syllabus will be prepared. Emphasis will be placed on the effects of low level gas supersaturation and development of criteria for hatcheries. Dissolved gas criteria designed to protect migrating salmonids are totally inadequate to protect hatchery fish. Many health problems in hatcheries may be caused by chronic exposure to low levels of gas supersaturation.

Workshop topics will include: Physics of gas supersaturation; measurement of gas supersaturation; source of gas supersaturation; effects of gas supersaturation; removal of gas supersaturation; current research and experience; and research needs. Manufacturers of gas supersaturation instrumentation will be invited to demonstrate their equipment. People interested in presenting papers or serving

on the steering committee should contact John Colt, 1303 Lake Blvd., Davis, California 95616, (916) 756-3558.

Reservoir Fisheries Management—Strategies for the 80s is the title of a national symposium focusing on managing reservoir fishery resources. High angling demand and a decline in the rate at which new impoundments are being constructed will require a shift in emphasis toward management of aging reservoirs. A reassessment of sampling methods, effects of chemical and physical factors, predator-prey interactions, and influences of harvest on fish populations is needed to maintain effective and predictable management programs. The conference, scheduled for June 13-15, will be held in Lexington, Kentucky. For details contact Benjy Kinman, Kentucky Department of Fish and Wildlife Resources, No. 1 Game Farm Road, Frankfort, Kentucky 40601.

Publications

The Western Division of AFS has published the proceedings of the 1981 Symposium on *Fishes of the Upper Colorado River System: Present and Future*. This symposium focused on the endangered and threatened fishes of the Colorado system and presented various views from conservation agencies, developing agencies, and private individuals concerning prospects for recovery. One paper covers the distribution, abundance and status of all the fishes in the upper basin including maps of fish distribution. This 131-page document is available for \$10 from the American Fisheries Society, 5410 Grosvenor Lane, Bethesda, Maryland 20814.

The Proceedings of the Rehabilitation of Salmonid Populations and Habitat Symposium may be obtained from the California Cooperative Fishery Research Unit, Humboldt State University, Arcata, CA 95521 for \$7.00 per copy. The symposium was divided into three sections: (1) Artificial Propagation/Salmon Ranching, (2) Livestock-Fishery Interactions, and (3) Stream Rehabilitation and Enhancement. The symposium was introduced by keynote speaker K. H. Loftus who addressed the Great Lakes rehabilitation program and A. Netboy who spoke on the problems associated with Columbia River rehabilitation.

Fish Kill Evaluation Guidelines—Copies of *Guidelines for Evaluating Freshwater Resource Damages and Computing Resource Damage Claims in Washington State*, by Harry B. Tracy and Lewey J. Kittle, Jr., may be obtained for \$5.00 per copy from the Washington State Department of Ecology, Olympia, WA 98504. This helpful contribution describes the methodology for documenting the extent of damages and instructions for computing resource damage claims in the State of Washington that should be of general interest to fishery managers.

Salmon and Trout Migratory Behavior Symposium Proceedings—This publication, edited by E. L. Brannon and E. O. Salo, contains 33 papers prepared by fisheries scientists from throughout the world dealing with migration and distribution of salmonids. Copies of this 309-page contribution can be obtained from Dr. E. L. Brannon, School of Fisheries, University of Washington, Seattle, WA 98195 for \$19.50 plus \$1.50 postage and handling.

The Best Management Practices for the Management and Protection of Western Riparian Stream Ecosystems is now available for \$5.00. It is the goal of the Western Division to provide these guidelines to public agencies and the private sector to provide better understanding and management of western state riparian habitats. Copies can be obtained from Gordon Haugen, 21543 S. W. 98th, Tualatin, Or 97062. Please make checks payable to the Western Division AFS.

Proceedings of the Symposium on *Acquisition and Utilization of Aquatic Habitat Inventory Information* can be obtained for \$20.00 per copy from the American Fishery Society, 5410 Grosvenor Lane, Bethesda, MD 20814. Published by the Western Division, the proceedings were edited by Neil Armantrout.

The long-delayed proceedings of the June 1981 *Cornell Acid Rain Symposium*, has finally been completed and is available at AFS. The 357-page proceedings is hardbound and was edited by AFS Past President, Dr. Ray Johnson. Easily the most comprehensive scientific acid rain document produced anywhere to date, the

1983 Annual Meeting: Jackson Hole in July

The State of Wyoming cordially invites you to attend and participate in the 1983 Joint Annual Conference of the Western Association of Fish and Wildlife Agencies and the Western Division of the American Fisheries Society, July 10-14, 1983, at Teton Village, Wyoming.

On the back is an advance registration form for the conference and a room reservation for conference headquarters hotels. Additional facilities, such as a hostel, condominiums, and hotels are available. Information may be obtained from the Teton Village Resort Association, Inc., Box 220, Teton Village, Wyoming 83025, (800) 443-6931. People should make their reservations early since the meetings coincide with the peak of the tourist season.

A full-service KOA facility is available. For information write Teton Village KOA, Box 38, Teton Village, Wyoming 83025. Phone (307) 733-5334.

Medical care, babysitting services, etc., are available through conference hotels. Jackson Hole is served by Frontier Airlines Jet Service and transportation will be provided to and from the airport and convention center.

Vendors who would like exhibit space are advised to contact the Inn at Jackson Hole, Box 325, Teton Village, Wyoming 83025, phone (800) 842-7666.

Numerous activities for those so inclined are available in Jackson Hole and include white-water raft trips, sightseeing tours,

horseback tours, tram rides, rodeos, fishing, etc. Registration and sign-up opportunity for these activities will be provided by Teton Village personnel at convention center hotels.

Also enclosed is a manuscript instruction sheet for use by those who would like to submit papers for the 1983 conference. Please mail papers to WAFWA/WDAFS, ATTENTION: (Appropriate chairperson), Joint Conference, c/o Wyoming Game and Fish Department, Cheyenne, Wyoming 82002. Technical Session chairpersons are:

Fisheries: Bob Wiley and Stan Moberly

Wildlife: Dale Strickland

Law Enforcement: Pete Petera

Conservation Education: Joe Vogler

Response to Environmental Impacts: Mike Stone and Harry Harju

Please indicate with papers submitted what kinds of audio-visual or other specialized equipment you will need to effectively make your presentation. People participating in the poster session who wish to have an abstract included in the "Abstracts" available at the meetings should send abstracts to Stan Moberly by June 1.

If you have specific needs or questions that have not been addressed, please advise.—*Bill Morris, Joint Conference General Chairman*

Program

Tuesday, July 12, 1983

1:00-3:00 PM Session 1

User Perception of the Sport Fishery Resources in the Rocky Mountain West
Chairman: R.P. VanGytenbeek, Federation of Fly Fishers, Denver, CO

3:15-5:00 PM Session 2

Fishing Regulations: Strategies and Philosophies
Chairman: A.N. Whitney, Montana Dept. of Fish, Wildlife and Parks, Helena, MT

Wednesday, July 13, 1983

1:00-3:30 PM Session 3

Fish Stock Assessment in Large Rivers: Application to Management
Chairman: S.P. Yundt, Wyoming Game and Fish Department, Laramie, WY

1:00-3:00 PM Session 4

Marine Fishery Resource Issues
Chairman: G. Sakagawa, National Marine Fisheries Service, La Jolla, CA

3:30-5:00 PM

WDAFS Business Meeting.

Thursday, July 14, 1983

8:00-10:00 AM Session 5A

Standardizing Habitat Evaluation Systems: Is it Possible or Desirable?
Chairman: W.T. Helm, Utah State University, Logan, UT

10:15-12:00 noon Session 5B

Standardizing Habitat Evaluation Systems: How to Accomplish it/Redirection
Chairman: W.T. Helm, Utah State University, Logan, UT

10:15-12:00 noon Session 6

Fish Culture-Fish Management: A Relationship.
Chairman: R. Burkett, Alaska Department of Fish and Game, Juneau, AK

1:15-3:15 PM Session 7

Management of Forage Fishes in Western Impoundments
Chairman: R.V. Bulkely, Utah Cooperative Fishery Research Unit, Logan, UT

3:30-5:00 PM Session 8

Progress of Fishery Management in Mexico
Chairman: N. Armantrout, Bureau of Land Management, Portland, OR

CONFERENCE ADVANCE REGISTRATION FORM

Name (please print or type) _____
Street _____ City _____ State or Province _____
Zip _____ Telephone No. (include area code) _____
Position _____
Organization _____
I will be accompanied by (spouse) _____

WAFWA Registration Fee: \$20.00 (after July 1, \$25.00) Spouses and children free \$ _____
WDAFS Registration Fee: \$5.00 (WDAFS delegates must pay WAFWA registration fee to be eligible to register for WDAFS) \$ _____
Western Banquet: \$12.00 (each) \$ _____
TOTAL CHECK \$ _____

Make checks payable to "Western Association 1983 Conference Fund" and mail with completed form to: Wyoming Game and Fish Department, Cheyenne, Wyoming, 82002 before July 1, 1983. This is *not* your hotel reservation. Please complete separate Teton Village form and mail to Teton Village by June 10, 1983 (a deposit for two nights is required). After this date, reservations will be accepted on a space availability basis.



Western Association of Game & Fish Agencies July 10-July 14, 1983

Name _____ Telephone _____
Address _____ City _____ State _____ Zip _____
Arrival Date _____ Number of Adults _____
Departure Date _____ Children under _____
Approximate Arrival Time _____

Room Type and Rates (Check One)

Standard \$53.00 (Soujourner) _____ \$60.00 (Jackson Hole) _____
Deluxe \$63.00 (Soujourner) _____ \$63.00 (Jackson Hole) _____
Superior \$80.00 (Soujourner) _____ \$80.00 (Jackson Hole) _____

If we cannot accommodate your first request, you will be upgraded to next room type available.

Deposit Requirements: To confirm your reservations, please enclose a check for 2 nights lodging. A written confirmation will be sent upon receipt of your check.

Cancellation Policy: \$10.00 per person cancellation fee on all cancellations. Full deposit is forfeited on cancellations made less than two days prior to arrival.

Check-in time: 4:00 pm

Check-out time: 11:00 am

FOR OFFICE USE:

Room Number _____ Deposit Received \$ _____
Room Rate _____ Date _____

Post Office Box 325 • Teton Village, Wyoming 83025
307/733-2311

book covers the total proceedings of the AFS Northeastern Division sponsored symposium. Interested persons may acquire them from AFS at \$25.00 per copy.

Intervention in the Federal Energy Regulatory Commission's Review of Hydropower is the title of a handbook just produced by the Federation of Fly Fishers. A copy sent to us by the Montana-based national conservation organization shows that this critically important handbook gives full coverage to the legal aspects of small hydropower plants. It presents the legal basis for intervention in projects, forms and procedures, tells how to gain standing before the Federal Energy Regulatory Commission, and how to obtain information on specific projects that are under consideration. Copies are available at \$2.95 each from the Federation Fly Fishers, P.O. Box 1088, West Yellowstone, Montana 59758.

Fish and Wildlife Relationships To Mining Committee Formed

Lynn Starnes, chairman of this newly formed committee within the Water Quality Section the American Fisheries Society writes "I am attempting to contact all fish and wildlife biologists who have an interest in or work with mining/reclamation. Mining, which occurs in every state and province, through land disturbance can influence fish and wildlife. Our goal is the development of enhanced fish and wildlife resources on mine sites through enlightened management efforts.

"If anyone would like additional information, or to volunteer, or just to be kept informed of future activities, please have them contact me.

"How we proceed with this committee will depend on the energy and interests of the professionals who volunteer to work with us. We already have planned annual symposia which are being initiated with a one-day session at the 1983 AFS annual meeting in Milwaukee. We envision establishment of a state (province) network to report, for example, local (state, province) and national regulatory changes, keep track of abandoned mine reclamation programs, and hopefully, promote consultation and participation the part of AFS members in drafting regulations.

"I look forward to hearing from AFS members from your area."

For more information contact: Lynn B. Starnes, Biologist, Fisheries and Aquatic Ecology Branch, Division of Air and Water Resources, Tennessee Valley Authority, Knoxville, Tennessee, 37902.

Western Division Awards

Nominations for several Western Division AFS awards are being solicited. A brief description of the awards and criteria for nomination are listed below.

The Award of Excellence—an engraved plaque in recognition of a living member of the Western Division for sustained professional excellence. Nominees should have excelled in accomplishing one or more of the following: (1) a monumental work; (2) original techniques or research methodology; (3) new, fresh ideas, viewpoints, or data that contribute remarkably to conservation management or basic understanding of aquatic resources; (4) a new, successfully-executed fishery research or management program of regional, national or international importance; (5) imaginative and successful program in education at any level of teaching or graduate student guidance; (6) important faunal or ecological discoveries or new taxonomic criteria; (7) research especially beneficial to mankind; (8) interdisciplinary activities involving leadership in team efforts in laboratory and/or field; (9) multiple successful efforts in a variety of fields, such as biology, public understanding, technical and popular writing, laboratory and field research, inspirational leadership, and enunciation of professional principles; (10) sustained, effective and inspirational leadership in Western Division activities.

The Outstanding Chapter Award—a traveling plaque to be given to the chapter in the Division which, during the preceding year, best exemplified the goals and policy of the Society. Such activities may include, but may not be limited to: sponsorship of workshops, effective communication with the general public, and active involvement in issues relating to aquatic ecology.

Student of the Year Award—an award of \$100 to be given in an effort to encourage the attendance and active participation of students in the Division annual meeting. Nominees should be prepared to present a paper on their research at the year's annual meeting. They must be AFS members. Both graduate and undergraduate students are eligible. Criteria include evidence of strong potential for a career as an involved fisheries professional, as indicated by a strong academic record, an ability to communicate effectively (both orally and in writing), and the completion of a meaningful special project or research study.

Robert L. Borovicka Conservation Achievement Award—a certificate to be awarded to a nonmember individual, a nongovernmental group, or a local, state or federal agency that has contributed substantially to some aspect of the conservation of the aquatic resources within the Western Division, through either research, management, communication, education or cooperation.

AWARD NOMINATION FORM

AWARD: Excellence _____ Outstanding Chapter _____ Conservation Achievement _____ Student of the Year _____

Nominee: _____

Full name of nominee (or group): _____

Nominee's Address: _____

Present Position: _____

Academic Career: _____

Professional Career: _____

NOMINATION STATEMENT: Attach a typed statement explaining why this individual or agency is deserving of an award. Please explain fully the accomplishments or series of career accomplishments that distinguishes this nominee. Include information on other awards and honors received, AFS offices held, etc. Attach any pertinent news clippings, letters, or documents.

Submitted by: _____ Date: _____

Address: _____ Phone: _____

Return nomination material to: Jack Griffith, Chairman, Awards Committee, Department of Biology, Idaho State University, Pocatello, Idaho, 83209.

Election Candidates

NEIL ARMANTROUT

President Elect

Neil is presently District fisheries biologist with the Bureau of Land Management in Eugene, Oregon. Prior to assuming this position he was State Fisheries Biologist in Portland and had worked for BLM in the Moab District, Utah and the Ukiah District, California. He has also worked for the Washington State Department of Fisheries, the Willamette National Forest in Oregon, and has taught at Pahlevi University, Shiraz, Iran as a Peace Corp Volunteer. While in Iran, Neil worked on fishery resources in the Caspian Sea and the Persian Gulf and assisted the Game and Fish Council of Iran in developing a freshwater management program and management plan for Caspian salmon. Neil received his college training at Oregon State University, being awarded a BS in zoology, an MS in General Science, and a Ph.D. in Fisheries.

Neil has been a member of AFS since 1971. He has served AFS as endangered species committee, basin coordinator, Bonneville Chapter; information and education committee chairman, Oregon Chapter; endangered species committee, Western Division; and the endangered species committee and international affairs committee of the Parent Society. Neil is currently secretary/treasurer of the Western Division. Neil also helped organize and chaired the recent Symposium on Acquisition and Utilization of Aquatic Habitat Inventory Information held in Portland, Oregon.

JACK GRIFFITH

President Elect

Jack has been on the faculty of the Department of Biology at Idaho State University since 1981. At ISU he teaches classes in fisheries and natural resource ecology and supervises graduate research in fisheries. His research interests are in the general areas of salmonid ecology and management. Jack's training includes a BS in Conservation (1966) and an MS in Fisheries (1967) from Cornell University and a Ph.D. in Fisheries from the University of Idaho (1971). Before coming to ISU, Jack spent 3 years as a Research Associate at the Oak Ridge National Laboratory where he did research on fish behavior and mortality related to turbine intakes of electrical generating facilities. He also spent 3 years as a fisheries research officer for the government of the Republic of Zambia (Africa) where he established a research station on Lake Bangweulu, the nations largest fishery, to assess status of its fish populations to enable maximization of yield.

Jack has been a member of AFS since 1967. He is a certified Fisheries Scientist and has been active in AFS at State, Division and Parent Society levels. He was a founding member and Secretary/Treasurer, East Tennessee Chapter. He has served as Secretary/Treasurer (1979) and President (1980-82) of the Idaho Chapter. Jack was on the Program Committee of the Southern Division (1976) and has chaired the Awards Committee of the Western Division for the past 2 years. He served as Associate Editor, salmonids and freshwater ecology, *Transactions*, 1975-77. In 1980, Jack received the Outstanding Conservationist Award from the Southeast Idaho Rod and Gun Club.

JAMES FESSLER

Secretary - Treasurer

Jim is presently Assistant Regional Supervisor for the Northwest Region of Oregon Department of Fish, and Wildlife. He has responsibility for all fish, wildlife and nongame activities in the region. He was previously project leader for the Research Section of ODFW (1969-79) and conducted management related studies on the ecology of summer steelhead and resident rainbow trout in the Deschutes River. From 1962 until 1969, he worked as a fisheries biologist for the ODFW Research Section doing physiology studies. Jim's training includes a BS in Wildlife Management (1962) and an MS in Fisheries and Statistics (1969) from Oregon State University.

Jim became a life member of AFS in 1962. He has served as president-elect, program chairman and president of the Oregon Chapter as well as on other chapter committees. Jim is a member of

Pacific Fisheries Biologists and the Wildlife Society. He has authored numerous technical and journal publications.

MICHAEL STONE

Secretary - Treasurer

Mike is presently the Ecological Services Manager for the Fish Division, Wyoming Game and Fish Department, in Cheyenne. He is responsible for supervision and coordination of activities to carry out the Division's environmental protection, inventories and planning efforts. Before assuming his present position, he served as Staff Fisheries Biologist (1975-79) and Fish Culturist (1974-75) for the Wyoming Game and Fish Department. Mike received his BS degree in Fisheries Biology from Colorado State University in 1971, and an MS in Aquatic Ecology from the University of Illinois in 1974.

Mike has been a member of the American Fisheries Society since 1972. Recent AFS involvement includes review of manuscripts for the *North American Journal of Fisheries Management* at the request of the Editorial Board and serving on the Western Division Endangered Species Committee in 1982 and 1983. He is active in the Colorado-Wyoming AFS Chapter serving on the Program Committee for 3 years, and as Program Chairman in 1983. He also chaired the Aquatic Issues Committee for 2 years and served on the Proceedings Committee in 1982. He has authored numerous technical and semi-technical publications.

JOHN RINNE

National Nominating Committee

John is a Research Fishery Biologist for the Forest Service at the Rocky Mountain Forest and Range Experiment Station, Tempe, Arizona. He received his BS from a Nebraska State College and both his MS (1969) and Ph.D. (1973) in Zoology from Arizona State University. From 1973 to 1975 he was employed as a fishery biologist for the East African Freshwater Fisheries Research Organization in Kenya, conducting research on tilapia and silurid catfishes. In his current position he conducts research on the habitats, biology, and distribution of native southwestern fishes with emphasis on threatened and endangered species.

John has been a member of the American Fisheries Society since 1968 and has served as Secretary-Treasurer, Vice President, and President of the Arizona-New Mexico Chapter. He has been active in the Western Division, serving on its Riparian Habitat Committee (1978-81), Water Development and Streamflow Committee (1980-83), and has been chairman of the Endangered Species Committee since 1981. He is a certified fisheries scientist, has active membership in regional and national professional societies and publishes in their respective journals. He has been a member of the Desert Fishes Council since 1975 and is Area Coordinator for the Sonoran Desert, Mexico.

BRUCE SMITH

National Nominating Committee

Bruce has been District Fisheries and Aquatic Habitat Biologist for the Bureau of Land Management in Rock Springs, Wyoming since 1974. He served in the Peace Corps in India from 1971 to 1973 in the Fisheries Development Program where he worked on warm-water fish farm management and commercial reservoir management. Bruce received his BS in Wildlife Management in 1971 from the University of Wyoming. He then studied warmwater fish culture at the University of Oklahoma.

Bruce has been a member of AFS since 1976. He has served on the Outdoor Youth Committee of the Parent Society and has been a member of the Fisheries Administrators and Fisheries Educators Sections. He has served as Secretary-Treasurer, Vice President and President of the Colorado-Wyoming Chapter as well as committee member of the Aquatic Issues Committee and Chairman of the Rollefson Aquatic Habitat Scholarship Award Committee. Bruce has also been active in the Izaak Walton League, Wyoming Wildlife Federation and has been a scout master for 7 years.

Parent Society News

AFS will be substantially involved in *Section 404 Litigation* on an amicus curiae (friend of the court) basis. We will soon join the IAFWA in filing a brief in support of the position of the National Wildlife Federation and 15 national conservation/environmental groups who seek to set aside as unlawful the interim final Corps of Engineers regulations relating to dredge-and-fill permits.

Testimony on the reauthorization of the *Boating Safety Act* was presented by AFS on April 5. The hearing was conducted by Congressman Gerry Studds of MA who is Chairman of the Subcommittee on Coast Guard and Navigation. AFS testified that the proposed use of marine fuel tax money for boating access would be more wisely spent if channelled to the state through the existing D-J mechanism rather than through a new program in the Department of Transportation.

Thanks to its volunteer advisory staff of Gordon Fredine, Yates Barber, Bob Schueler, Willis King, Ray Johnson, Lynn Hutchens and John Gottschalk, AFS was able to develop very substantive comments on the *budget requests of the National Marine Fisheries Service and the Fish and Wildlife Service*. The budget review documents, some containing up to 12 typewritten pages, reinforced with graphs, etc., were sent with personal letters to many legislative leaders and staff in both the House and Senate. Copies have also been made available to agency leaders and AFS Executive Committee members. The AFS statements are particularly critical of the disproportionately heavy budget cuts sustained by fisheries.

EXCOM members rejected in a somewhat narrow vote, proposals to (1) add \$5.00 subscription cost each to *Transactions and the North American Journal of Fish Management (NAJFM)* and (2) add a \$5.00 subscription cost to *Transactions* alone. Members of the EXCOM voted unanimously to defer the proposed 1984 eliminations of *Transactions* and NAJFM page charges for at least one year with the understanding that such deferral does not necessarily alter the EXCOM's plan for ultimately phasing out all page charges. Thus both *Transactions* and the NAJFM will again impose \$20.00 per page publication charges in 1984.

The revised 1983 *AFS Budget*, in the amount of \$752,000 received unanimous Executive Committee approval. Revenues are estimated to be equal to expenditures.

Written AFS comment on the *National Aquaculture Act* has been formally requested by Congressmen John Breaux and Edwin Forsythe. Breaux is Chairman of the House Subcommittee on Fisheries and Wildlife Conservation, while Forsythe is the Senior Minority Member. The AFS Fish Culture Section is coordinating the response preparation.

Chapter Meetings

Alaska

The Alaska Chapter held its Ninth Annual Meeting in the Sitka Centennial Building November 15-18, 1982. One hundred twenty-five registered participants plus 20 or so others in attendance helped make the event an outstanding success.

Attendance and participation by AFS President Bill Lewis and Western Division President Don Duff was a special treat for the Alaska Chapter. President Lewis gave the keynote address stressing continued growth and development of fisheries science in the affairs of man and fish. Don Duff reported on Western Division activities requesting closer ties of mutual involvement and cooperation between the Division and its Chapters.

Six technical sessions were held where 46 papers were given on a wide variety of Alaska fishery issues. A special panel on 'Salmonid Resources of the Kenai River' was followed by papers on freshwater and marine fisheries, enhancement, environmental issues, and international fisheries. Bob Armstrong of the Alaska Cooperative Fishery Research Unit won the Best Paper Award for "A Synopsis of Our Knowledge and Ignorance About Arctic Grayling in Alaska."

Feature banquet speaker was Dr. Jay Barton, President of the University of Alaska. An emotional high point of the meeting was presentation of the Chapter's first "Wally Noerenberg Award for Fishery Excellence." Given posthumously to its namesake and

presented to Wally's wife Betty and daughter Gretchen for the Chapter by Bob Roys, the award involved congratulatory telegrams from many dignitaries, including Alaska Governors, congressmen, plus a special plaque and a \$1,000.00 check.

Another meeting highlight involved focus on the role of education and academic training in the science and professionalism of fisheries at a luncheon with AFS officials and the statewide University of Alaska fisheries faculty. Long time educator and AFS President Bill Lewis spoke at the luncheon.

Alaska Chapter officials for the 1982-83 term included Bill Heard, who as president elect became the new president. Heard presented Jim Reynolds the outgoing president's certificate with a hearty thanks for a job well done. Newly elected officers were Curt Kern, president-elect and Bill Smoker, secretary-treasurer. Lou Carufel continues to serve as editor of the Alaska Chapter Newsletter *Oncorhynchus*.

Montana

The Annual Meeting of the Montana Chapter was held in late February. Hydropower and its impacts on fisheries was the theme. The first day of the four day session was a workshop conducted by FERC on the licensing of small-scale hydro. The second day highlighted the Northwest Power Planning Act, including energy planning, economic imbalance created by managing for maximum power at the expense of fish, and the conflicts between sustaining the fishery by artificial or natural production. The third day centered on hydro development in Montana and its future. The final day, student papers were presented. Membership continues to increase, reaching nearly 175 members. The Chapter's number one priority in the coming years is to lay the ground work for a state riparian protection bill similar to Oregon's for the 1985 Legislature which has included development of a slide show and draft legislation. The summer meeting is tentatively scheduled for August 11 and 12 in southwest Montana and will be highlighted by field examination of stream hydraulics and the impacts of channel alterations. Also, a half day will be spent assessing various field sampling techniques.

Best Paper Award Contribution

For the 1983 annual meeting, July 10-14, 1983, in Jackson, Wyoming, the Atlantic Richfield Company will contribute \$100. The contribution will go toward the best paper award for the best applied research paper given at the fisheries technical sessions. The contribution is aimed at stimulating interest in applied research, particularly by students, according to Mr. Eugene R. Mancini, Atlantic Richfield Company, who contacted WDAFS President Don Duff about the contribution in March. Mr. Mancini said that Atlantic Richfield Company was making the contribution not only to the WDAFS but also to nine other leading ecological societies. He said that data provided through "applied research" efforts more often provides the information required by industry ecologists in their day-to-day activities. It is hoped this contribution may spark the interests of undergraduate and graduate level student ecologists toward applied research issues. The WDAFS thanks the Atlantic Richfield Company for their contribution for the best paper award. Jack Griffith, Chairman, WDAFS Awards Committee, will coordinate this award at the annual meeting with the Atlantic Richfield Company.

Western Division is Society's Largest

Membership numbers:

	1981	1982	% Change
Northeastern	1,033	1,045	+1.2%
North Central	1,526	1,498	-1.8%
Southern	1,782	1,771	-.5%
Western	2,335	2,343	+.3%
Total	6,676	6,657	

Gerking, Moberly Nominated For National Post

At the Kansas City AFS EXCOM meeting, the AFS Nominations Committee placed in nomination two Western Division members for the position of AFS Second Vice President. These two men are Stan Moberly, of Alaska, and Shelby Gerking, of Arizona, both well-respected members of the Division and the AFS.

Although the Western Division has the largest membership, please do not take this election for granted. Show some pride in your Division and lets have a **BIG** voter turnout. Mark your ballot and send it in right away after you receive it. *Vote for the candidate of your choice*, Stan Moberly or Shelby Gerking, but don't procrastinate, **PLEASE VOTE!!!**

Remember, your vote will decide which Western Division member begins the ascent to AFS President in 1987!!! *Don Duff, President WDAFS*

Americans See More Wildlife on TV Than in the Wild

Most Americans don't know very much about animals or wildlife conservation issues, according to a study conducted for the U.S. Fish and Wildlife Service. Dr. Stephen Kellert of Yale University interviewed 3,107 adult Americans. He reported initially in 1979 what has come to be known as the "Kellert Report," and has recently published two new reports on his data.

The results demonstrate the critical need for better communication between wildlife managers and the public. There are large segments of our society that are ignorant of things important to the future of wildlife conservation and management. "The public is not generally prepared to make informed decisions about the complex wildlife problems and controversies that face us in the remainder of this century," says Assistant Secretary of the FWS, Ray Arnett.

Most Americans know relatively little about animals. Although coyotes are often killed in western states to protect livestock, 75% of the people surveyed thought the coyote was an endangered species. Half of the public did not know that the statement "spiders have 10 legs" is false. Only half knew that insects did not have backbones. Only half knew what animal veal comes from. About 58% stated that they care more about suffering of individual animals than about species population levels. Watching animal TV shows,

owning pets and visiting zoos are Americans most frequent animal-related activities. Of the people questioned, 25% hunted, 45% fished, 11% belonged to a conservation-related organization, and 25% were birdwatchers.

Unrelated to the Kellert reports but related to the Bonneville Chapter's information and education efforts are some figures about the reading ability of Americans. About 54% of American adults read at or below an 11th grade level. In response, car manufacturers are presently writing car recall notices at the 5th grade level. The IRS Form 1040 is written at the 10th grade level; Ladies Home Journal at the grade 7 level.

WDAFS Resolutions Needed

Time has come to submit resolutions for action at the Western Division meeting in Jackson, Wyoming in July 1983. All chapters and individual members are reminded to send their resolutions by June 1, 1983 to John C. Peters, Chairman Resolutions Committee, D-150, P.O. Box 25007, Denver, Colorado 80225. He can be reached by phone for assistance at 303-234-2050 or FTS 234-2050. It is especially important to submit those resolutions that should be sent to the Parent Society, by the Western Division, by May 1, 1983. Guidance for submitting resolutions and a format example were provided in the February, 1981 Western Division Newsletter.

The executive committee recently approved a resolution supporting funding and staffing for the Cooperative Unit Program. This action was taken to show Western Division support again to the Congress for the unit program during the federal budget process.—*John C. Peters, Chairman Resolutions Committee.*

Editors Note

As some of you probably already know, I have decided to resign as Western Division editor following this issue. During the past two years I have very much enjoyed editing the Newsletter and attending to the business of getting it out to the membership. However, I think it is time for the Newsletter to benefit from some fresh ideas and for me to move on to some other Division service. I am sure that President-elect Stan Moberly would appreciate hearing from anyone interested in taking over Newsletter editorial responsibilities.

Let me add a quick reminder to Committee Chairmen that Committee reports to the EXCOM are due prior to the annual meeting. I think that the Division has made some significant contributions to resource management over the last several years and I look forward to bigger and better things under the new leadership.

—*Glenn Phillips, Editor*

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