The Tributary

A Newsletter of the Western Division, American Fisheries Society

Volume 19, No. 1 October 1993

PRESIDENT'S CORNER

Time sure files when you're having fun. It seems like yesterday that Glenn was outlining his plan of work for the coming year in Fort Collins. Don't expect any major shifts in emphasis with my term. The Division has established itself as a true leader within the Society. At the annual meeting in Portland it was very clear that this Division is leaps and bounds ahead of others in terms of the amount of activity to protect fishery resources in western North America. Let me cite some examples of where we're working on major issues:

The membership passed a policy statement on Protection of Old Growth Forests and Roadless Watersheds developed by David Fuller's ad hoc committee. This statement has been forwarded to the Society's Resource Policy Committee for consideration as a Society policy statement.

The executive committee by special ballot approved joining with Pacific Rivers Council to request a status review of coho salmon along the coast of the lower 48 states. This action places the Division squarely in the role of producing the best possible science to help National Marine Fisheries Service complete their review. I'm sure all affected chapters will pitch in and help. This action also raised some eyebrows at the annual meeting in Portland in light of the discussions surrounding fisheries issues and our role as advocates for the fish.

The riparian committee has been asked to review the Clinton Administration's proposal to change grazing management on public lands. We will be submitting comments by mid-October. In addition, I've asked Mark Gorges, the committee chair, to initiate a review of selected allotments with the chapters to see if existing policies are being implemented. If you want to help or have a candidate allotment, please contact Mark.

The Environment Concerns committee under Kelly Hepler's leadership continues to provide Society input to the legislative process aimed at reforming the 1872 Mining Law. The Division has the lead role in this effort for the Society.

Just a quick word about the advocacy issue. By now you have all heard that the proposed amendment to alter when and how we became involved in advocating an issue was defeated by a vote of the general membership. However, we have learned some valuable lessons that we must never, ever forget as a professional society. First, whether we want to admit it or not, we are by our very nature advocates for the protection of fish and their habitats. The entire debate centered around when and how we get involved. The Division has adopted formal guidelines to help decide which issues we will address. Some of the chapters have lead the way in this effort. I urge all chapters to do likewise. A clearly defined course of action on dealing with emerging issues will make us all a lot more comfortable in our unaccustomed role.

Finally, some administrative matters. I'd like each chapter president to send me a current list of each chapter's executive committee and other committee members with appropriate contact numbers and fax numbers as soon as possible. I receive requests for input and information on nearly a daily basis. Routing those requests to the appropriate person really helps since most requests have a short turn around time. Also, I'd like a list of chapter meeting dates so we can schedule a visit by a member of the Division executive committee if the chapter would like.

I want to thank Glenn for his very able leadership this past year and di hope that Dennis Lee, Carl Burger, Chris Moffitt and I can continue to lead the Division in a similar manner.

One final personal note, as many of you know I recently moved to California to start a new job. You may reach me at the following address and phone numbers:

Randy Bailey
3050 Meadow Creek Road
Lincoln, Calif. 95648
(916) 645-1235 work with voice mail
(916) 645-1316 fax
(916) 645-8675 home

Please feel free to contact me at any time if you have any questions or ideas on how we can serve the membership better.

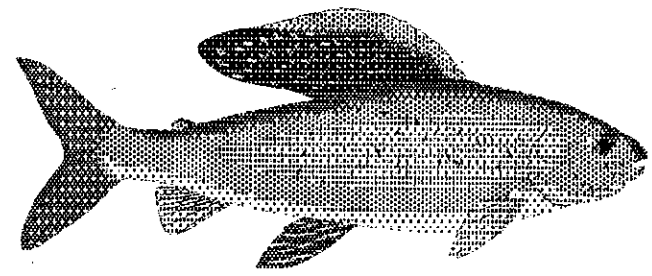
SOCIETY NEWS

Annual Meeting Of The Western Division Of American Fisheries Society

The Western Division met in a joint meeting with the Western Association of Fish and Wildlife Agencies. The Western Division held a retreat at Lake Tahoe July 23-25, to discuss The Endangered Species Act reauthorization, and identify problem areas and changes needed, and to hold a pre-business Executive Committee meeting to discuss in detail division business.

The meeting in Sacramento began with a welcome reception at the Railroad Museum in Old Town, Sacramento, Sunday evening. On Monday morning, the general plenary session was held. Opening remarks were made by Doug Wheeler, Secretary of Resources for the State of California. Boyd Gibbons and Glenn Phillips, the respective presidents of WAFWA and Western Division AFS shared thoughts on the issue, and then introduced the three featured speakers to address the "changing face of conservation": Tom Harris, author of Death of a Marsh; Marc Reisner, author of Cadillac Desert and Game Wars, and Van Gordon Sauter, President of Fox News.

The remainder of the three and one-half day meeting was full of special sessions and contributed papers on topics such a ecosystem management and biodiversity, state fish and wildlife agency management effectiveness, riparian management, the role of amphibians and reptiles in California ecosystems, fish physiology and fish health, river restoration, new tools in law enforcement, and others.



1993-1994 WESTERN DIVISION AMERICAN FISHERIES SOCIETY COMMITTEE CHAIRPEOPLE AND OFFICERS

Internal Affairs
Audit - John Leppink
Equal Opportunity - Ken Hashagen
Newsletter - Pat Dwyer
Membership - Dennis Lee
Nominations - Glenn Phillips
Awards - Glenn Phillips
Time & Place - Officers

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President - Randy Bailey
President-Elect - Carl Burger
Vice-President - Dennis Lee
Immediate Past-President - Glenn Phillips
Secretary-Treasurer - Christine Moffitt

External Affairs
Riparian - Mark Gorges
Native Peoples Fisheries - Joe DosSantos
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

(Submissions for the next Tributary are due by Dec. 15, 1993)

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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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ANNUAL MEETING REVIEW

Excerpts from End of Year Report

CHAPTER REPORTS

Alaska: Sponsored two symposia that will eventually be published including "Fish Ecology in Arctic North America" and "Exxon Valdez Oil Spill Symposia." Also sponsoring publication of a book titled "Key to the Fishes in Alaska." Received a grant to evaluate the status of anadromous salmonids in Alaska. Arranged three continuing education workshops including: (1) statistical design, (2) technical writing, (3) habitat improvements. Passed a resolution to urge the Canadian and U.S. Governments to manage the Yukon River for wild stocks without the influence of hatcheries. Developed a Chapter action plan.

Arizona-New Mexico: Recently celebrated its 25th anniversary and increased its membership to more than 90 professionals. Developed an informational brochure describing chapter organization and function; the brochure was distributed to state and federal fishery agencies and used as a recruiting tool. Hosted a hatchery workshop in conjunction with its 1993 annual meeting and is planning an Endangered Species Act workshop in 1994. Will be hosting the 1994 Western Division meeting in June 1994.

Bonneville: Commented on a highway construction project planned for the Provo River Canyon. Lobbied Congressional representatives to ease FDA restrictions on certain drugs important to fish culture. Developed an action plan to guide Chapter activities. Developed a summary of enhancement and recovery efforts for the Colorado River Cutthroat Trout that was provided to the USFWS for use during the status review process. Electrofishing and riparian workshops are planned for 1993. Will be hosting the 1995 WDAFS meeting in Park City, Utah.

Cal-Neva: Fought an initiative in California that would have given the board of professional foresters authority to license fishery biologists. Continue to offer a variety of continuing education classes for professionals. Continue to be active on a variety of aquatic resource issues including the Sacramento Chinook, delta smelt, and others. Hosted the 1993 WDAFS meeting in Sacramento.

Colorado-Wyoming: Sponsored a workshop at their annual meeting titled: "Dealing With People: How to Identify and Resolve Conflicts Among Natural Resource User Groups." Endorsed a joint position statement with five other professional societies calling for natural resource agencies to incorporate biodiversity considerations into their management plans. Will be hosting a workshop in 1994 titled: "Wild Trout - Planted Trout, Balancing The Scale." This workshop is being partly sponsored by the Western Division.

Hawaii: Worked to sponsor legislation to study the effect of inshore gill net fishing with hopes of generating regulations. Examining the problem of exotic introductions originating from ballast water from tropical regions. Working to schedule meetings on islands other than Oahu and will be inviting the public to their annual meeting.

Humboldt: Their white paper, "Factors in Northern California Threatening Stocks with Extinction," is being widely used. National forests in northern California are using this paper as a basis for designing "key watersheds" in their forest standards and guidelines. Developed a slide presentation that is being used with the new California science curriculum that features anadromous fishes as an educational brochure centering on the importance of streams in the McKinleyville area. Continue to host a social event called the "tuna mixer" that they use to encourage students to join AFS.

Idaho: The Chinook Committee hosted a successful "Chinook and Coho Workshop" that was attended by members from several Western Division chapters. The proceedings from their 1992 Smolt Passage Workshop are now available for purchase. Developed a Chapter position statement titled: "Livestock Grazing Activities in Riparian and Stream Ecosystems." Advocacy guidelines that were originally adopted by the Idaho Chapter have served as a model for similar guidelines adopted by both the Western Division and the Parent Society.

Montana: Appealed a timber sale in the headwaters of the Blackfoot River because of concerns for bull trout; discussed the Endangered Species Act at a public forum in Kalispell; and review and commented on the Milltown Dam fisheries mitigation plan. Lobbied the state legislature opposing a bill that would expand the authority of a local Chamber of Commerce to sell paddlefish roe, and supporting bills that would expand authority to lease or purchase water for instream use and provide greater review of subdivision activities. Worked with other conservation organizations to produce a beautiful and effective aquatic ecosystems education poster. A portion of the money in the Chapter account has been placed in an environmentally sensitive mutual fund called Pax World Fund.

North Pacific International: The Chapter sponsored a Sockeye-Kokanee Workshop in conjunction with their annual meeting -- proceedings will be published. Co-sponsored a coho salmon workshop last May in Nanaimo, B.C. Received a grant from the Pugh Foundation to undertake an evaluation of the status of anadromous fish stocks in British Columbia similar to previous reviews conducted in Oregon and California. The controversial oil spill video was turned over to the Canadian Aquatic Resources Committee.

Oregon: Petitioned the U.S. Fish and Wildlife Service to conduct a status review for listing Klamath Basin bull trout. At the request of Congress, they are participating in a multi-organizational effort to develop recommendations for protecting old growth watersheds in eastern Oregon and Washington. Working with a state legislative committee to develop recommended agricultural practices for protecting fishery habitat. They prepared and hosted the 1993 national meeting in Portland. Developing a video illustrating effects of grazing on riparian ecosystems. Co-hosting a workshop on rangeland management. Hosting symposia dealing with watershed restoration and coho and Chinook salmon management.

COMMITTEE AND OTHER REPORTS

Annual Meeting: The annual meeting of the Western Division was held jointly with the Western Association of Fish and Wildlife Agencies in Sacramento, Calif. the week of July 24-29, 1993. The theme of the meeting was "The Changing Face of Conservation." More than 500 registrants were in attendance. The meeting was preceded by an EXCOM retreat and pre-business meeting at Lake Tahoe. Jennifer Nielsen did an outstanding job with the program and other members of the Cal-Neva Chapter including Ken Hashagen, Chuck Knudson, Tom Taylor and Cay Goude did an excellent job with arrangements.

Audit: Christine Moffitt is doing an excellent job of accounting for expenditures. Recommendations include: (1) continue to require receipts for all expenditures, (2) purchase a ledger that can be transferred when offices change; (3) invest funds that are not being used annually to provide greater income; (4) develop a committee for budget planning.

Arrangements: The committee made several recommendations regarding future meetings with WAFWA including: (1) the contract with the hotel should be signed by both parties; (2) all money issues should be discussed and agreed upon in advance; (3) scheduling and coordination of meetings should be agreed upon in advance; (4) complimentary rooms should be split equally between WDAFS and WAFWA; (5) every attempt to be made to coordinate and cooperate. These items should be dealt with by the EXCOM well in advance of the meeting.

Awards: See Page 3.

Budget: A new committee was formed at the annual meeting that will give more attention to budget planning and investment options and will develop a process for the Division to entertain requests to fund special projects.

Bull Trout Status Review: A new committee is being formed to respond to a request from the timber industry to provide oversight and peer review of a study that they are funding and that is being conducted by Don Chapman and Associates to review the distribution and status of bull trout in the Western United States. The committee will be comprised of members from Montana, Idaho, Oregon and Washington. We are waiting to hear from the timber industry to find out if travel funds are available to committee members.

Environmental Concerns: A draft WDAFS position statement on reform of the 1872 Mining Law was tentatively accepting by the membership. The draft was distributed to the various EXCOM members and will be edited prior to being finalized. The Division intends to use this statement to lobby Congress for reform that will protect fishery resources and restore damage to fisheries caused by previous mining.

Membership: New memberships continued to surpass all other divisions but appear to be more a function of our size, than of individual recruitment efforts. Each member was challenged to recruit two new people this year. Greg Kindschi was commended for recruiting 12 new members in a single month.

Native Peoples Fisheries: The two major items being worked on by this Committee are securing a stable funding base for tribal fisheries programs and compiling information on the religious, cultural and subsistence importance of fisheries to native peoples. The Committee is planning to organize a session on native peoples fisheries for the 1994 Division meeting in Flagstaff.

Nominations: The newly elected Vice President of the Western Division is Dennis Lee from California. Terry Roelofs from California is our National Nominating Committee representative.

Old Growth Forests: This newly formed committee chaired by David Fuller, completed a draft policy statement outlining why protecting forests also protects watersheds and ultimately protects fishery habitat. The statement was approved by the membership at the annual meeting.

Pacific Salmon Stocks: Pat Higgins and his committee are focusing on educating the public concerning the status of stocks of pacific salmon, steelhead and cutthroat trout. Worked with the Fisheries Action Network to develop an educational poster describing rivers and streams that support stocks that are at risk. Requested that WDAFS join the Pacific Rivers Council in a petition to request a status review for all coho salmon stocks in the lower 48 states for possible listing under the Endangered Species Act. EXCOM members decided to poll their Chapter members before voting.

Riparian: The committee, led by Mark Gorges, drafted a riparian resolution that was approved by WDAFS EXCOM. Copies were sent to both the BLM and the USFS. The riparian challenge awards continue to be an important focus; four awards were presented at the annual meeting. Conducted a session at the annual meeting dealing with watershed and ecosystem management. Prepared comments on a Bureau of Reclamation document that dealt with wetlands and reviewed a statement prepared by BLM employees expressing concern over riparian management policies.

Stream Habitat Procedures: Pete Bisson's committee hosted a highly successful stream habitat symposium in Corvallis, Oregon that was attended by more than 400 people. Have begun revisions of a stream habitat glossary. Hosted a technical session at the Division meeting dealing with stream habitat.

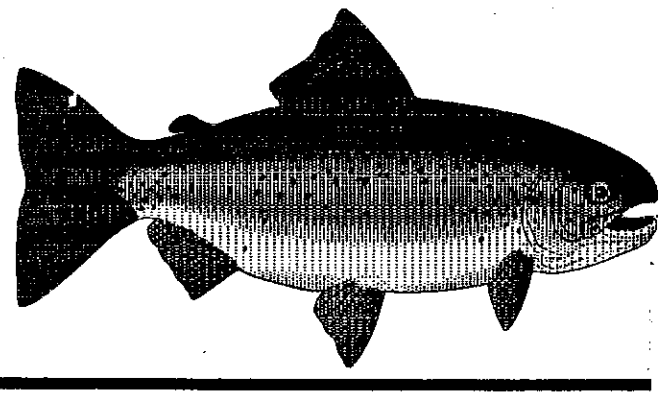
Threatened and Endangered Species: The major focus of Jerry Burton's committee is to provide fishery input during the process of reauthorizing the Endangered Species Act. Jerry has been working with the Parent Society Endangered Species Committee to provide input for the Division.

Time and Place: The 1994 Western Division meeting will be in Flagstaff, Arizona near the end of June and will be hosted by the Arizona-New Mexico Chapter. The 1995 Western Division meeting will be in Park City, Utah and will be hosted by the Bonneville Chapter.

U.S. Government Agency Budget Review: Working with Pam McClelland of the Fishery Action Network, several committees were formed to review the fishery budgets of three federal agencies. The effort was led by Dave Burns (USFWS budget), Brad Shepard (USFS budget) and Jeff Kershner (BLM budget). I am told they all did an excellent job.

WDAFS Review of AFS Position on Stock Transfer: Tony Gharret, Alex Wertheimer and Bill Smoker provided an excellent review of the draft AFS position statement: "Protecting genetic resources of aquatic organisms: elimination of stock transfers." They pragmatically argue that it is not feasible to totally eliminate stock transfers but that we need to have a process in place to evaluate and manage risk.

Action Items: None.



SOCIETY NEWS

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Report From The Financial Strategy Committee
Randy Bailey, Ginger Thomas, Christine Moffitt

So that we can provide everyone with an equal opportunity to pursue funding for special projects, we are standardizing all requests for funding from the Western Division. We have developed a standard application form and have deadlines for these applications twice yearly. In this way we can evaluate all applications together and provide a more consistent way to evaluate the merits of projects.

Applications for financial assistance must be received before Jan. 1 for consideration for Grants at mid-term business meetings, and before June 1 for grants following the Annual Business Meeting.

The grants are competitive and designed for seed money for projects, or for small, shorter term projects. Preference is given to projects of official AFS subunits, although all projects will be considered for funding.

Warning - Plan ahead for your requests for funding.

Send a letter of request for the 2-page application to either:

Christine M. Moffitt, Department of Fish and Wildlife Resource, University of Idaho, Moscow, ID 83843. 208-885-7047 (phone) or 208-885-9080 (Fax)

OR

Randy Bailey, address page one.

In addition to standardizing the requests for funding, the financial strategy committee discussed the financial management of the assets of the Division, and decided to move some of these into higher yielding, secure accounts. If anyone is interested in helping to manage these resources, please contact Christine Moffitt for details on the progress of this committee.

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* FIRST CALL FOR PAPERS *

"Ecosystem Management: New Approaches to Complex Issues"
1994 WESTERN DIVISION ANNUAL MEETING
Flagstaff, Arizona
June 18-23, 1994

The Western Division's Annual Meeting will be held next year in Flagstaff at the campus of Northern Arizona University. The meeting will be hosted by the Arizona/New Mexico Chapter. **Please note that the meeting dates (June 18-23) are earlier than usual.**

Local Arrangements Chair for the Flagstaff meeting is Tom Cain (602) 527-3422. The University will offer a package price (expected to be about $45/day) for food and lodging during the conference. Provisions will be made for family activities in the area and the conference attire will be casual. Further details will be announced in the next *Tributary*.

The theme of the conference will be "Ecosystem Management: New Approaches to Complex Issues." This theme is a timely one for the Western Division. Existing resource agencies are already implementing the ecosystem management approach. The newly created National Biological Survey (a synthesis of researchers from several federal agencies) will focus on this approach in its mission. A conference goal is to identify how we can make ecosystem management work as we approach the new century.

Secretary of the Interior Bruce Babbitt (a native of Flagstaff) has been invited to speak at the Plenary Session on Monday, June 20. Various agency heads will be asked to join in a panel discussion of their roles in ecosystem management. Also, this meeting will feature a half-day session for one of our Society's newly approved "Point-Counterpoint" debates. The debate subject at all division meetings this year will be conservation genetics and fish stocking policies.

The Program Committee is presently soliciting ideas for sessions. Those suggested to date include:

- Agency roles in ecosystem management
- Resource management in large marine ecosystems
- Estuarine ecosystems at risk
- Ecosystem management in large rivers and reservoirs
- Desert fish ecosystems
- Arctic and subarctic ecosystems
- Bioregional management of shared resources
- Ecosystem adaptations
- Genetics and aquatic ecosystem management

If you have an idea for a session or would like to submit an abstract for a paper, please contact either of the Program Co-chairs:

Dr. Terry Roelofs, Fisheries Department, Humboldt State University, Arcata, CA 95521. 707-826-3344 or 707-826-4060 (FAX)

OR

Dr. John Rinne, SW Forest Sciences Complex, 2500 South Pine Knoll Drive, Flagstaff, AZ 86001. (602) 556-2181 (602) 556-2130 FAX

Abstracts for papers concerning marine and coastal ecosystems should be sent to Dr. Roelofs while those addressing inland ecosystems should be sent to Dr. Rinne.

NOTE: ONLY 2x2 SLIDES WILL BE ALLOWED AS VISUAL AIDS AT THE CONFERENCE. An original and six copies of your abstract must be submitted by March 1, 1994, to one of the Program Co-chairs.

FORMAT FOR ABSTRACTS FOR 1994 WESTERN MEETING

The Title of the Paper: To be presented at the 1994 Western Division Meeting.

First Author: Name, address, and telephone number.

Co-Author: Name, address, and telephone number.

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 1994 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.

Presenter:

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

Format: Verbal Presentation; Poster Presentation

WESTERN DIVISION AWARDS

The 1993 Awards Committee consisted of Carl Burger (Chair), Peter Delaney (North Pacific International Chapter), Cay Goude (California/Nevada Chapter), and Tom Nesler (Colorado/Wyoming Chapter). The following awards were presented in Sacramento:

Award of Excellence

The Western Division's prestigious Award of Excellence was given to Dr. Robert Behnke of Colorado State University. The award consisted of a beautifully mounted Colorado greenback cutthroat trout, obtained through the kind assistance of Larry Visscher, USFWS, Denver. This nomination was suggested by Randy Bailey and put forth by Kurt Fausch of CSU. Dr. Behnke's monograph on western trout and his numerous, diverse publications represent an enormous achievement. He is truly a world-renowned scientist whose works are a monumental contribution in fisheries science. The Western Division is proud to have such a member in its ranks. Congratulations, Dr. Behnke!

Award of Merit

Two individuals were recognized with the WDAFS Award of Merit. Pat Higgins (Humboldt), a fishery consultant in northern California, co-authored a white paper on salmon stocks at risk and testified before the U.S. House on the decline of Pacific salmon populations. Bob Lea of California Fish and Game, Monterey, has authored or co-authored several books on marine fishery resources. The Western Division congratulates Pat Higgins and Bob Lea. Pat was nominated by David Fuller (Humboldt) and Bob was nominated by Kevin Urquhart (California/Nevada Chapter).

☺ Award of Special Recognition ☺

A tireless worker received this year's Western Division Award of Special Recognition. She constantly fights for wetlands protection, not only for WDAFS, but for her employer in Sacramento -- the U.S. Fish and Wildlife Service. Cay Goude is a most deserving recipient. Nominated by Kevin Urquhart, Cay is a Past-President of WDAFS and a co-founder of our Society's Equal Employment Opportunity Section. She received a laser-engraved, birchwood plaque. Nice going, Cay!

Conservation Achievement Awards

Three non-members were recognized for their achievements in Western Division fishery conservation. The Robert L. Borovicka Award was given to Mr. Eldon Vestal of Napa, California. His meticulous notes from the 1930's were instrumental in recent court proceedings to restore water flows in the Mono Lake drainage. Former BPA employee Mr. Fred Holm was also recognized with a Borovicka Award for his years of achievements in the restoration of kokanee, bull trout, sturgeon, and other resident fish populations in the Northwest. Mr. Vestal was nominated by Kevan Urquhart. Mr. Holm's nomination came from Allan Scholz, Joe DosSantos, and Rick Applegate.

The Western Division's Conservation Achievement Award was presented to Hal Thomas, an attorney for the California Department of Fish and Game. Nominated by Jean Baldridge of the California/Nevada Chapter, Mr. Thomas provided strong support on numerous occasions in the legal battles to restore water flows to critical fish habitat in California.

Chapter of the Year: Alaska Wins Two Awards!

Congratulations to the Alaska Chapter, winner of this year's Western Division Chapter of the Year Award. The Alaska Chapter sponsored symposia on Arctic fish ecology, the *Exxon* oil spill, and continuing education activities which led to the Western Division award. The Humboldt Chapter was a close runner-up for their work in developing seminars on Klamath salmon stocks and for their "white paper" on Pacific salmon stocks at risk.

The Alaska Chapter received further accolades at the national level. In a close race with the Minnesota Chapter, Alaska won the AFS national award for Chapter of the Year at the Portland Annual Meeting! Congratulations to President Bill Hauser and President-Elect Joe Webb and their membership for being elected not only the "Best in the West", but the best in our Society. Well done!!

Student Paper Awards

Three awards were presented for student papers at the Sacramento meeting. The first place award was given to Ms. Ramona Swenson of the University of California at Berkeley for her presentation on the ecology and reproductive activity of the Tidewater Goby. The Western Division honored Ms. Swenson with a check for $100. Second place was awarded to Mr. Jeff Burrows of the University of British Columbia for his presentation on steelhead parr seaward migrations. Third place was awarded to Ms. Paciencia Young of the University of California at Davis for her presentation on optimum exercise conditioning velocity for growth, swimming performance, and muscular development of juvenile striped bass. The California/Nevada Chapter provided checks for $65 and $35 to the second and third place papers. Congratulations to the recipients and thanks to Dr. David Vanicek (Sacramento State) for coordinating the judging.

Riparian Awards

Several persons were honored with Awards for outstanding performance in riparian manage-

(See Awards, continued on page 4)

THIS & THAT

PROPOSED

WDAFS Policy Statement On Protection of Old Growth Forests and Roadless Watersheds

WDAFS Ad Hoc Old Growth Committee
July 27, 1993
As revised by WDAFS Excom July 24, 1993

Issue Definition

Reports from the AFS Endangered Species Committee list more than 500 species, subspecies, and stocks of fishes at risk of extinction in North America (Williams et al. 1989, Nehlsen et al 1991). Habitat degradation has been a factor in the decline of these species in a majority of cases. Although much work has been done to restore or improve degraded habitat, an accelerating number of fish, and other aquatic species, continue to decline.

The effects of logging and associated road building on fish and other aquatic species have been the subject of numerous studies (reviewed in Hicks et al. 1991). Recent decades have seen extensive logging of the native forests in Western North America so that at present approximately ninety percent of the forests that existed before European settlement have been logged leaving only 10 percent of the native forests relatively undisturbed. Those watersheds that are currently relatively undisturbed (defined for purposes of this document to mean roadless or only lightly roaded with a great portion of the native vegetation intact) represent refugia for fishes and other aquatic species that are declining toward extinction. It is the policy of the Western Division of the American Fisheries Society to advocate conservation of key fish habitats in the remaining old growth forests, roadless watersheds and relatively undisturbed watersheds in Western North America.

Background

Many factors have caused declines in fish populations over the past several decades: agriculture, dams, water diversions, water pollution, commercial and sportfishing harvest, logging operations, exotic species and urbanization. Miller (1989) found that 82 percent of fish extinctions involved more than one causal factor. Currently, the American Fisheries Society has adopted environmental policy statements dealing with all of the above factors except logging, urbanization, and fish harvest (AFS 1992).

AFS has an environmental policy statement entitled "Cumulative Effects of Small Modifications to Habitat" (AFS 1992) that states the Society will emphasize the need for holistic watershed management. This approach is presented as a way of trying to reduce relatively small watershed impacts occurring over broad geographic scales and over a long time period that collectively damage the productivity and biodiversity of aquatic systems.

Many factors may work together or synergistically to cause a loss of habitat in aquatic systems. Individual logging operations are often determined to have "no significant impact" in environmental analysis, however, when the effects of many such operations and associated road construction are accumulated in a drainage basin, along with other disturbance activities, the aquatic systems may be degraded (Hicks et al. 1991). Recent court cases have halted logging projects for inadequate consideration of the cumulative effects of proposed actions in a watershed (South Fork Trinity River, California; Mapletown Ranger District, Oregon).

Widespread losses of endemic fishes and "at risk of extinction" status of many other species, subspecies and stocks of fish have been attributed to land use activities (Nehlsen et al. 1991), Moyle and Williams 1990). Simultaneous declines of fishes in basins without dams or diversions suggest that other factors play an important role in the decline of these fishes (Frissell 1993, Nehlsen et al. 1991). The "at risk" status of many species in these forested watersheds, despite recent reductions in fish harvest, suggest that extensive landscape changes in recent decades due to logging and associated road building are causing adverse cumulative effects on aquatic ecosystems (Cederholm et al 1981; Coates and Miller 1981; Hagans et al. 1986; Sedell and Everest 1990; Frissell 1991; Bisson et al. 1992).

With such widespread decline and loss of fish taxa over a large portion of Western North America, a large-scale, long-term management scheme is needed to make an effort to preserve locally adapted genetic resources. A significant component of such a plan would be to protect watersheds that have experienced little or no disturbance over the past several decades from any future disturbances. This concept has been put forth by Moyle ("Aquatic Diversity Management Areas;" Moyle and Sato 1990, Moyle and Ellison 1991) Johnson et al. ("Gang of Four" 1991); Frissell ("Storm Homes" 1991), and USFS Scientific Advisory Team ("Key Watersheds" 1993). The rationale for protecting undisturbed watersheds as a system of refugia is to allow locally adapted taxa sufficient habitat to maintain viable populations and "seed" nearby basins as they recover from disturbance. Without these protected basins, recovery of "at risk" taxa will become improbable.

At this time, very few undisturbed or relatively undisturbed basins remain in Western North America. With a perceived shortage of wood products in the future, considerable social and economic forces will encourage logging of the last portion of old-growth forests and younger forests that have not previously been logged. As part of its mission to ensure the wise use and conservation of the fish resources in Western North America, WDAFS will advocate protection of the remaining undisturbed watersheds and old growth forests.

Course of Action

WDAFS will advocate conservation of key fish habitats in remaining old growth forests, roadless areas and relatively undisturbed watersheds important to aquatic species, as refugia for aquatic species. This will be done through communications with congressional leaders, executive branch authorities, responsible state agencies, the Parent Society, and others. WDAFS will actively track key legislation and executive decisions regarding these lands to advocate for future protection using sound, science-based arguments.

WDAFS will provide information on fish taxa whose recovery is linked to watershed protection. Where information is lacking, WDAFS will advocate further investigation of the status of stocks believed to be linked to watershed protection. In addition, WDAFS will advocate research on the establishment of a watershed refugia system in Western North America to facilitate protection of fishes.

WDAFS will advocate ecologically-based restoration of watersheds where it is feasible.

WDAFS will encourage the Parent Society to adopt this or similar environmental policy calling for protection of the lands described in this document.

Literature Cited

American Fisheries Society. 1992. Environmental Policy Statements of the American Fisheries Society. Bethesda, MD.

Bisson, P.A., T.P. Quinn, S.V. Gregory, and G.H. Reeves, 1992. Best management practices, cumulative effects, and long-term trends of fish abundance in the Pacific Northwest. In: New Perspectives in Watershed Management, proceedings of a symposium held October 1990, Seattle, WA.

Cederholm, C.J., L.M. Reid, and E.O. Salo, 1981. Cumulative effects of logging road sediment on salmonid populations in the Clearwater River, Jefferson County, Washington. In: Salmon-Spawning Gravel: A Renewable Resource in the Pacific Northwest? Proceedings of a conference held Oct. 6-7, 1980, Seattle, WA. State of Washington, Water Research Center, Washington State University, Pullman.

Coats, R.N., and T.O. Miller, 1981. Cumulative silvicultural impacts on watersheds: a hydrologic and regulatory dilemma. Environmental Management 5:147-160.

Fissell, C.A. 1991. Water quality, fisheries, and aquatic biodiversity under two alternative forest management scenarios for the west-side federal lands of Washington, Oregon, and Northern California. Prepared for The Wilderness Society, 55 pp.

Frissell, C.A. 1993. Topology of extinction and endangerment of native fishes in the Pacific Northwest and California (U.S.A.) Conservation Biology 7 (2): 324-354.

Hagans, D.K., W.E. Weaver, and M.A. Madej. 1986 Long-term on-site effects of logging and erosion in the Redwood Creek Basin, northern California. PP. 38-65 in: Papers Presented at the American Geophysical Union Meeting on Cumulative Effects. Technical Bulletin 490, National Council for Air and Stream Improvement, New York, NY.

Hicks, B.J., J.D. Hall, P.A. Bisson, and J.R. Sedell. 1991. Responses of salmonid populations to habitat changes caused by timber harvest. In W.R. Meehan (ed.) The Influence of Forest and Rangeland Management on Salmonids and Their Habitat. Special Publication Number 19 of the American Fisheries Society, Bethesda, MD.

Johnson, K.N., J.F. Franklin, J.W. Thomas, and J. Gordon, 1991. Alternatives for management of late successional forests of the Pacific Northwest. A report to the Agriculture and Merchant Marine Fisheries Committees of the U.S. House Representatives, Washington, D.C.

Moyle, P.B. and G.M. Sato, 1991. On the design of reserves to protect native fishes. PP 155-169 in W.L. Minckley and J.E. Deacon (eds.) Battle Against Extinction: Native Fish Management in the American West. University of Arizona Press, Tucson, AZ.

Moyle, P.B. and J.P. Ellison 1991. A conservation-oriented classification system for inland waters of California. California Fish and Game, 77:161-180.

Nehlsen, W., J.E. Williams, and J.A. Lichatowich 1991. Pacific salmon at the crossroads: stocks at risk from California, Oregon, Idaho and Washington. Fisheries 16 (2):4-21.

Sedell, J.R. and F.H. Everest, 1990. Historic changes in habitat for Columbia River Basin salmon under study for TES listing. Draft Report, U.S. Forest Service Pacific Northwest Research Station, Corvallis, OR.

Scientific Analysis Team, 1993. Viability assessments and management considerations for species associated with late-successional and old-growth forests of the Pacific Northwest. USDA Forest Service, March 1993.

Williams, J.E. et al. 1989. Fishes of North America endangered, threatened, or of special concern. Fisheries 14 (6): 2-21.

Awards

(Continued from page 3)

ments.

The Forest Service awards were presented by Bob Nelson to:

Lowman Ranger District, Tahoe National Forest- accepted by Ann Carlson; Pacific Southwest Region - accepted by Polly Hays.

BLM awards were presented by M.W. Gorges to: Dillon Resource Area - accepted by Jim Roscoe; Barstow Resource Area - accepted by Karla Swanson and Tom Egan; Rawlins District Office and Nevada State Office.

More than 500 attended the meeting, and the mix of scientific, management and social activities was well received by all. We hope to keep up the fine attendance next year when we meet at Northern Arizona State University in Flagstaff.

PUBLICATIONS

Intermountain Fisheries Abstracts

The 1993 edition of the Intermountain Fisheries Abstracts is now available from the Idaho Chapter. This latest edition includes almost 200 abstracts from Idaho, Montana, Wyoming, Utah, Washington and Oregon. Submittals include state, federal, tribal, consultant, utility, and university folk. For your copy of IFA send $7 ($5 per copy plus $2 foir shipping and handling) to Mike Rowe, Fisheries Department, Shoshone-Bannock Tribes, P.O. Box 306, Fort Hall, Idaho 83203. IFA is also available in 5 1/4 inch floppy disk for the same price.