

The Tributary

A Newsletter of the Western Division, American Fisheries Society

Volume 19, No. 3 May 1994

PRESIDENT'S CORNER

Division provided valuable service

This is my final President's column. The year has flown by with so much going on, particularly at the chapter level, where we're closest to the issues at hand.

I'm happy to report that Kelly Hepler's Environmental Concerns Committee has completed a draft of a Society position paper on reform of the 1872 Mining Law that is moving in Congress this year. I believe that the Division has provided a valuable service to the country by developing the technical background material necessary to help the Congress stop the abuses under this archaic law. Thanks to Kelly and all of you who contributed to this fine effort.

Carl Burger and I attended the mid-year parent society executive committee meeting in Albuquerque. Two major issues evolved that require the membership's input. First, the Fisheries Administrators Section has developed a draft implementation plan for the North American Fisheries Action Agenda. This is the implementation plan for the Snowbird Workshop held in 1991. This implementation plan will provide guidance for multiple fisheries interests to help improve the fate of our fishery resources for the next thirty years. The Section is asking for member input to improve the document prior to final release. I have sent a copy to all chapter presidents, committee chairs, and Division excom in order to expedite review. If you have an interest, please contact one of these folks for a copy. The Division must submit all comments to the Section by May 15, 1994!

The second issue involves the review of a Draft Strategic Plan for the Society executive committee. This plan was developed by the Society's Strategic Planning Committee to provide guidance to the executive committee on work programs and areas of emphasis for the next 5-7

years. The review became contentious when some members of the executive committee felt that the review process was on a fast track. Much discussion occurred and a compromise review process was adopted. All chapter presidents, committee chairs and Division excom have also received copies of this document for review. The review deadline is also May 15, 1994. I have asked that all comments be sent to me by May 13, 1994 in order to meet the deadline. Please feel free to contact any of the folks listed above for a copy if you wish to review it. Remember, this document's purpose is to provide guidance to the parent Society executive committee and not to individual divisions and chapters.

And now to the fun stuff. There are three major symposia being held within the Division between now and September. The first addresses wild trout and planted trout: balancing the scale, and will be held in Wyoming. The second is a conference on Ecologically Significant Units, addressing the issues surrounding what constitutes a population under the auspices of the Endangered Species Act and will be held in Monterey, Calif. The third is Wild Trout V which will be held in Yellowstone in September. Don't miss the opportunity to participate in one of these great events. Just over the line is the 1994 International Trout Stream Habitat Improvement Workshop in Calgary in September.

Last, but not least, is the Division annual meeting at Northern Arizona University, Flagstaff, Arizona in June. Carl Burger, Tom Cain, John Rinne and Terry Roelofs have developed a great program and arrangements package. Details are in the Tributary elsewhere. I hope to see you all in Flagstaff.

Randy Bailey

SOCIETY NEWS

ALERT!

Registration material for Flagstaff meeting (June 19-23) is being mailed to you by Northern Arizona University. For more information on the annual meeting, see page 3.

American Fisheries Society Is Online on CompuServe Are You?

The American Fisheries Society is online with its own section on the Earth Forum of CompuServe. Join us by taking advantage of a free signup package which includes \$15 worth of free connect time. To join call 1-800-848-8199, select voice mail option to speak with an operator, ask for representative 190 to request the free CIS subscription, courtesy of Earth Forum.

Take advantage of the ability to talk to AFS members anywhere at low cost. In your signup package you will get information on a local phone number for access and instructions for signing up. Once you get online type GO EARTH at any prompt. Joe Reynolds, the System Administrator, will be happy to answer any questions you may have.

(Continued to page 4)

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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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 Aug. 30, 1994)

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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:

Pat Dwyer, Tributary Editor
27 Border Lane
Bozeman, MT 59715

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27 Border Lane
Bozeman, Montana 59715

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MEETINGS, SYMPOSIUMS & SEMINARS

Wild Trout & Planted Trout: Balancing the Scale May 19-20 Denver, Colo.

Goal

To define the current concerns about use of cultured trout and stocks of wild trout in the management of sport fisheries, and to identify management alternatives that will address such concerns.

The workshop will focus on issues regarding the management of inland or resident salmonids in the Rocky Mountains of the United States and Canada.

The workshop will be held in Denver, CO May 19, & 20, 1994. The participants are fish culturists, fisheries managers, and representatives of sport fishing organizations from the Rocky Mountain region of the United States and Canada.

The first day of the workshop is composed of invited papers by recognized experts, anglers, and special interests. Speakers will focus on the factual basis for the current issues, the responsibilities of fisheries management agencies regarding trout, and the current role of trout culture in the management of trout fisheries.

The second day will begin with a panel presentation investigating the importance of wild trout. The panel will be composed of anglers, managers and ecologists.

A facilitated workshop will be conducted for the majority of the second day to address the question, "Wild Trout and Planted Trout, how do we balance the scale?" The goal is to identify common concerns, issues and alternatives regarding wild trout and planted trout in the management of trout fisheries in the Rocky Mountains.

Registration is \$50. This includes a ticket to the evening barbecue on May 19 and a copy of the proceedings.

For more information, contact:

Steve Wolff

**Wyoming Game and Fish Department
5400 Bishop Boulevard
Cheyenne, WY 82006**

Phone: (307) 777-4559

Program

May 19, morning session will include:

- Plenary Session -- The Factual Basis for the Current Situation;
- Historical account of the development of trout fisheries in the Rocky Mountain region
- Use of cultured trout for the continued maintenance of sport fisheries for trout
- Statement by an advocate for native trout
- Statement for "wild" trout fishing
- Statements from anglers on harvesting fish and the catch and release program

May 19 Afternoon session

- Defining the current responsibilities of agencies regarding trout management in the Rocky Mountain region
- Dinner speaker - Thad Anderson, Colorado State University

May 20 morning session

- Investigation into the Importance of Wild Trout - Panel discussion
- Views from anglers, fisheries manager, fish biologist, fish health specialist, special interest fishing group, ecologist/environmentalist.
- Workshop - Wild Trout and Planted Trout - How Do We Balance the Scale?

May 20 afternoon session

- Continuation of the morning workshop
- Closure at 5 p.m.

Evolution and the Aquatic Ecosystem May 23-25, 1994 Doubletree Inn, Monterey, Calif.

The American Fisheries Society, a non-profit, scientific organization devoted to fisheries conservation, is sponsoring an important three-day conference that will influence the future decisions of population conservation and biological diversity issues.

Evolution and the Aquatic Ecosystem: Defining Unique Units in Population Conservation will be the focus of the AFS-cosponsored conference scheduled May 23-25 1994 at the Doubletree Inn in Monterey, Calif. This conference will be as relevant for the conservation of plant and terrestrial animal species as it will be for the protection of fish and other aquatic populations.

Research biologists, managers, decision mak-

ers and politicians are frequently faced with the question of what populations of fish to save. Increasingly, there is a new set of questions generated from these queries: what is a unique population, what is a founding population, and what is the relationship between populations? These questions have been pursued by a number of disciplines, but so far definitive answers are hard to come by.

There is a need for experts from these disciplines to combine their information, to learn new answers, and to identify new research.

AFS members take pride in providing fisheries information that is on the cutting edge of science, and this conference will be no exception. Speakers including Robin Waples, with the National Marine Fisheries Service, who brought the term of evolutionarily significant units into the regulatory arena; Robert J. Behnke, professor in the Department of Fishery and Wildlife Biology, Colorado State University; J. Baird Callicott, professor of Philosophy and Natural Resources, University of Wisconsin-Stevens Point; and Peter A. Bisson, aquatic biologist at Weyerhaeuser Company, will all be discussing ways in which the scientific and management communities can understand **sub-units of fish species for conservation purposes.**

Current sponsors include the Cal-Nevada and Humboldt Chapters of AFS; AFS Fisheries Action Network; the Genetics, Early Life History, Fish Culture, and Fish Administrators Sections of AFS; the Bureau of Land Management; the Columbia River Inter-Tribal Fish Commission; the U.S. Forest Service; the National Biological Survey; the National Marine Fisheries Service, and the National Park Service.

For more information on the conference and registration, contact Christine Gan or Cindy Carpanzano, Department of Molecular and Cell Biology, 401 Barker Hall, AC Wilson Laboratory, University of California, Berkeley, Calif. 94702-3202, 510-642-7525, FAX 510-643-5035.

Symposium Announcement

Sustaining Rangeland Ecosystems.

August 29-31, 1994; La Grande, Ore.

Sponsored by: Pacific Northwest Section of the Society for Range Management, Oregon Chapter of the American Fisheries Society, Oregon Chapter of the Wildlife Society, Blue Mountains Natural Resources Institute.

Sustaining Rangeland Ecosystems. August 29-31, 1994; La Grande, Ore.

The symposium goals are to:

- Update resource professionals and interest groups on technical and sociopolitical issues affecting management of intermountain rangelands.
 - Identify common ground and new ways of managing rangeland ecosystems for resoration of biodiversity and native flora and fauna, and for sustained production of traditional commodities and amenities.
- Plenary and concurrent session speakers will discuss:
- What is a healthy rangeland?
 - Blending new knowledge with old paradigms
 - Managing exotic versus native flora and fauna
 - Rangeland relationships of grazing, fire, wildlife and fish.
 - Ungulate relationships of rangelands.
 - Changing social and economic values
 - Legal issues
 - Partnerships for rangeland management.

There will be two submitted poster sessions and a limited number of selected contributed papers (15 minutes with five minutes for questions) accepted.

Questions on the conference should be directed to:

John Tanaka, Blue Mountains Natural Resources Institute, 1401 Gekeler Lane, LaGrande, Ore. 97850. Tel: (503) 963-7122 (W) or (503) 963-8232 (H); FAX: (503) 962-6504.

SECOND NOTICE

**TROUT UNLIMITED CANADA
would like to announce the
1994 International Trout Stream
Habitat Improvement Workshop
To Be Held at the Marlborough Inn
In Calgary, Alberta, Canada
September 6, 7, 8 and 9 of 1994**

The workshop is being organized by Trout Unlimited Canada in association with Alberta Fish and Wildlife Services. An exciting program is

being offered for your interest and attention. The agenda will include presentation of scientific papers, field tours, panel discussions and poster sessions.

Planned are two days of bus tours to southern and central Alberta featuring a wide range of in-stream and riparian projects on small to large fluvial systems. Also featured will be fisheries mitigation strategies associated with the construction of a large irrigation reservoir and techniques applied to linear disturbances such as pipelines.

The workshop will conclude with a panel discussion to provide a forum for participants to communicate individual concerns and ideas. The information exchange amongst the collective expertise assembled at the workshop will benefit everyone assigned with the task of protecting our fisheries resources in the face of ever increasing developmental pressures.

The conference has been scheduled at a time that will allow participants to extend their visit and enjoy Alberta's many tourist amenities. For anglers, the world class Bow River trout fishery will be at your doorstep. Make your plans to attend now!

If you are interested in receiving more information, please contact:

Garry Szabo

Trout Unlimited Canada
Co-Chairman
Ph. (403) 221-8365
FAX (403) 221-8368

Lorne Fitch

Albert Fish & Wildlife Service
Co-Chairman
Ph. (403) 381-5281
FAX (403) 381-5723

FIRST NOTICE AND CALL FOR PAPERS

1994 Northeast Pacific Chinook and Coho Salmon Workshop

"Salmon Ecosystem Restoration: Myth and Reality"

**Hilton Hotel, Eugene, Oregon
November 7-10, 1994**

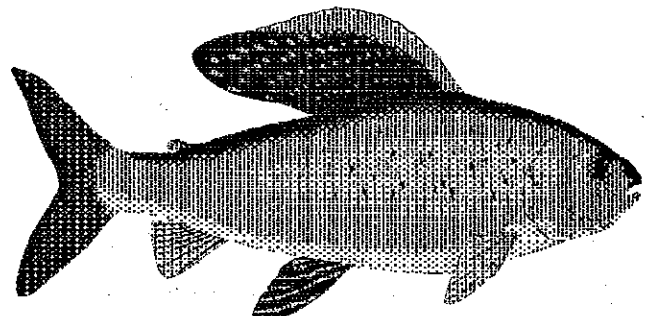
The Oregon Chapter AFS, in conjunction with the Western Division AFS, would like to announce the fourth biennial Northeast Pacific Chinook and Coho Salmon Workshop at the Hilton Hotel in Eugene, Oregon, November 7-10, 1994.

"Salmon Ecosystem Restoration: Myth and Reality" is the theme for the 1994 chinook and coho salmon workshop. The purpose of the workshop is to facilitate the exchange of information critical to the restoration and management of Northeastern Pacific chinook and coho salmon.

The format of the 1994 workshop will be four sessions with invited speakers providing engaging commentary as well as ample discussion on salmonid ecosystem management. In addition, we are requesting abstracts for a complimentary poster session. There will be a hosted evening social concomitant with the presentation of the contributed posters. A proceedings of the workshop will be published.

Abstracts for poster presentation must be limited to 200 words or less (follow AFS format as in Fisheries 17(6):27 and must be submitted by July 1, 1994 to: MaryLouise Keefe, Oregon Department of Fish and Wildlife, Inlow Hall, Eastern Oregon State College, 1410 "L" Avenue, LaGrange, OR 97859 (503) 962-3777; Fax (503) 962-3849.

Questions about workshop arrangements should be directed to: Jeff Dose, USDA Forest Service, Umpqua National Forest, P.O. Box 1008, Roseburg, OR 97470 (503) 672-6601; FAX (503) 673-4017.



ANNUAL MEETING

Welcome to Flagstaff

The Arizona-New Mexico Chapter is excited to be hosting the Western Division Annual meeting June 19-23 in Flagstaff, Ariz. Located at 7,000 feet elevation and surrounded by the Coconino National Forest, we feel Flagstaff provides an ideal setting for combining business with pleasure. With so many things to see and do around Flagstaff, we encourage division members to bring their spouse, family and/or friend along to the meeting.

Flagstaff's proximity to a number of historic sites and points of interest is why it's nicknamed the "City of Seven Wonders." Just a short drive away are the Grand Canyon (80 miles), Oak Creek and the Red Rocks of Sedona (30 miles), ancient cliff dwellings at Walnut Canyon National Monument (10 miles), and the Indian ruins and volcanic features of Wupatki Ruins and Sunset Crater National Monument (15 miles). Don't want to leave town? Then try shopping Flagstaff's historic downtown area along Route 66, visit Lowell Observatory where the planet Pluto was discovered, tour the Museum of Northern Arizona, or visit "The Arboretum at Flagstaff" to see their native plant (and native fish) exhibits.

For those who like hands on experiences, we are arranging for one to two small groups to assist local archeologists in the excavation of a 700-year-old site called Elden Pueblo. The program is approximately 4 hours long, during which time participants are given a tour of the site, taught excavation techniques and site ethics, and help out in the excavation of the pueblo. The program is tentatively scheduled for Monday, June 20th from 1 to 5 p.m. Please contact Tom Cain (602-527-3422) by June 1 if you are interested in signing up.

Driving to Flagstaff? Plan on taking a couple of extra days to enjoy the sites on the way here or going home, because no matter which direction you're coming from there is something to see. Via the west you'll cross over Hoover Dam as you leave the lights and games of Las Vegas behind; from the north you can visit Bryce or Zion National Parks in Utah, or Mesa Verde National Monument in Colorado, and from the east, re-trace Route 66 on your way through Albuquerque, NM or take a detour up to the Four Corners area and Monument Valley.

Flying to Flagstaff? All flights to and from Flagstaff go through Phoenix, and this final leg can be a speedy one. An alternative is to fly to Phoenix, rent a car and make the 150 mile drive to Flagstaff. On the way you can visit the ancient cliff dwellings at Montezuma's Castle or go through Sedona and drive up Oak Creek Canyon. Your car will come in handy for seeing sites around town.

Given the popularity of the area, you should make your travel and lodging accommodations early. Rooms have been blocked at three hotels and please remember to identify yourself as a member of the American Fisheries Society when making reservations. Rooms will remain blocked until June 1.

■ Fairfield Inn (602-773-1300) - Single and Double rooms \$70 plus tax.

■ Econo Lodge (602-774-2225) - Double \$52 plus tax; Double Suite \$62 plus tax

■ Quality Inn (602-774-8771) - Single \$70 plus tax, double \$76-80 plus tax.

For those on a tighter travel budget, a dorm has been reserved on the campus of Northern Arizona University for \$44 a day, including room and board and based on double occupancy. The rooms are suite-style with four people sharing two private bedrooms and a common bathroom. It's a short walk from the dorm to the meeting facilities. We recommend that those bringing their families stay in a motel which offers more amenities for kids than the dorm.

The Chapter has been busy with meeting arrangements and we feel we have an exciting program lined up. But, the ultimate success of the annual meeting will largely depend on the participation of the division members. We hope you can join us in Flagstaff this summer and help us make the 1994 annual meeting a memorable one. If you would like additional information, please feel free to give me, Tom Cain, a call at 602-527-3422.

WESTERN DIVISION AFS MEETING, FLAGSTAFF DRAFT PROGRAM

SUNDAY, June 19

3:00-9:00 p.m. - Registration

MONDAY, June 20

8:30 a.m. - Keynote Address: Secretary of Interior Bruce Babbitt invited.

9:00-9:15 a.m. - Pros of Ecosystem Management

9:15-9:30 a.m. - Cons of Ecosystem Management

9:30-10:00 a.m. - BREAK

10:00-Noon - Agency panel discussion of Ecosystem Management

(Federal agencies -- US, Canada, Mexico, and WAFWA officers)

Noon-1:30 p.m. - LUNCH BREAK

1:30-5:30 p.m. - Point-Counterpoint Debate: Conservation genetics and fish stocking policies. Moderator: Jim Martin, ODFW.

6:00-10:00 p.m. - Mexican BBQ

TUESDAY, June 21

8:00 a.m. to Noon - CONCURRENT SESSION 1
Southwestern Aquatic ecosystems and native fishes

1. Inter-And Intraspecific Relationships of the Flannelmouth Sucker (*Catostomus latipinnis*) based on mtDNA, A. M. Hutchison,

2. Mitochondrial DNA Variation in Rhinichthys oseeulus, D.D. Oakey and M.E. Douglas.

3. Quantification of Sexual Dimorphism in Razorback Sucker (*Xyrauchen texanus*), C. Reimus

4. Effects of Perturbation of the Virgin River, Az-Nv-Ut, on Genetics of Native Fishes, R. Timmons.

5. Variance in Fish Populations of Aravaipa Creek, Arizona, and Its Implications in Management Decisions, A. L. Velasco

6. Patterns of Genetic Variation in Three Cypripid Fishes Native to the Southwestern United States, C.A. Tibbets and T.E. Dowling.

7. Genetic Variation Within and Among Populations of The Little Colorado Spinedace, C.A. Tibbets, A.C. Weibel and T.E. Dowling.

8. Movements and Habitat Selection of Reintroduced Razorback suckers (*Xyrauchen texanus*) and Colorado squawfish (*Ptychocheilus lucius*) in the Verde River, Arizona, R. W. Clarkson.

9. Biotic and Abiotic Factors Influencing the Use of Backwater Areas and Associated Mainchannel Beachfaces by Juvenile Native Fishes in the Colorado River, Grand Canyon, T. L. Hoffnagle, W. R. Persons, G. C. Doster and M. A. Huegel,

10. Effects of Inorganics from Irrigation Drainwater on the Endangered Razorback Sucker and Bonytail in the Middle Green River, S.J. Hamilton.

11. Effects of Green Sunfish on the Distribution and Abundance of Gila Chub in Sabino Creek, Arizona, R. Dudley and W. J. Matter.

8:00 to 10:00 a.m. - CONCURRENT SESSION 2

Ecosystem management on regulated rivers

1. Opening Comments: Ecological Health of Rivers Below Dams. Moderator: William Trush

2. Preserving Biological Habitat Below Dams: A Geomorphic Imperative, F. Ligon

3. Cottonwoods and Dams: Can They Coexist? M. Merigliano

4. The Illusion of Geomorphic Stability: Implications for Research and Monitoring of Riparian Habitat, B. Cluer

5. Flows Required to Maintain Cottonwood Communities on the Upper Missouri River. G. Auble and M. Scott

6. Maintaining Dynamics of Steep Bedrock Rivers: Implications for Channel Morphology and Biological Communities. S. McBane and W. Smith.

10:00-10:20 a.m. - BREAK

10:20-Noon - CONCURRENT SESSION 1

(Continued)

CONCURRENT SESSION 2

(Panel and Continued)

2:00-5:00 p.m. - CONCURRENT SESSION 3

Urban stream ecosystems

1. Urbanization effects on stream habitat and options for restoration and protection in King County, Wash., G. Lucchetti and R. Fuerstenberg

2. Back From Oblivion: The Case of Jolly Giant Creek, G. B. Allen, Ph.D

3. Biological Assessment and Preliminary Design for Restoration of a Reach of Fanno Creek, Tualatin Basin, Ore., M. B. Bonoff, P. D. Tappel,

K. M. Malone

4. Urban Creek Restoration Projects in the East San Francisco Bay and CRUW, D. O'Connor, A.L. Riley, R. Archie

5. Urban land use effects on salmonid habitat - a basin-wide perspective, E. A. Ablow, J. A. Knutzen, B.A. Stoker, C. J. Antieau.

Noon-2:00 p.m. - WDAFS Awards Luncheon and Business Meeting

2:00 - 4:00 p.m. - WORKSHOP: Socioeconomic approaches to fishery investigations

6:00-10:00 p.m. - Trade Show Social and Raffle

WEDNESDAY, June 22

8:00-10:00 a.m. - CONCURRENT SESSION 4

Large river ecosystems: The Rio Grande

1. Historic overview of the native fish fauna of the Rio Grande and the natural setting.

2. Native fish fauna of the Rio Grande in Colorado: Changes and causes, Nesler/Langlois.

3. Native fish fauna of the Rio Grande from the Taos Box to Big Bend, Platania.

4. Native fish fauna of the Pecos River: Changes and Causes, Brooks.

5. Native Fishes of the Devil's River, Garrett.

6. Endangered Mexican Ichthyo Fauna of the Rio Grande, Contreras-Balderas.

7. Native fishes of the lower Rio Grande, Edwards.

8. Fishes of stenothermal habitats of the Rio Grande basin, Hubbs.

9. Establishment of non-native fishes and impacts on native fishes; the Pecos River as a case study, Propst.

10. The Rio Grande silvery minnow; a model for the decline of the native fish fauna, Bestgen.

11. Rio Grande cutthroat trout: decline and recovery of a native salmonid, Hatch.

8:00-10:00 a.m. - CONCURRENT SESSION 5

Surveys and Techniques in Fisheries

1. The Arizona Angler: A Review of Trends from the 1986, 1989 and 1992 Statewide Angler Surveys. T. Pringle.

2. A system for estimating entrainment of organisms into water diversions. R. T. Grost of Harza, Inc.

3. Heavy-metal Contamination of Aquatic Food-chain Organisms in the Upper Sacramento River. M. K. Saiki and D. T. Castleberry.

4. Electrofishing: The Use of Induced Epilepsies to Capture Fish. N. G. Sharber.

5. Evaluation of Field Electrofishing-Induced Spinal Injuries in Largemouth Bass (*Micropterus salmoides*) in Mittry Lake. C. J. Schleusner, O. E. Maughan, and J.P. Sharber.

10:00-10:20 a.m. - BREAK

10:20-Noon - CONCURRENT SESSION 4

(Continued)

CONCURRENT SESSION 5

(Continued)

Noon-1:00 p.m. - LUNCH BREAK - Special luncheon on Cultural Diversity

1:00-3:00 p.m. - CONCURRENT SESSION 6

Large River Ecosystems:

Glen Canyon Environmental Studies

1:00-3:00 p.m. - CONCURRENT SESSION 7

Western Riverine and Reservoir Ecosystems

1. Role of basin-wide fish movement in population response to habitat enhancement. C. Gowan, K. D. Pausch.

2. Fish communities and aquatic habitat of the Purgatoire River and its tributaries in southeastern Colorado: analysis of changes over a decade. S. C. Lohr and K.D. Lausch.

3. Fishery Responses to Sediment Sluicing in the Wind River on the Wind River Indian Reservation, Wyoming, L. C. Bergstedt and E.D. Bergersen.

4. The reoperation of Navajo Dam, an "Ecosystem Approach" to fisheries and water management in the San Juan River, L. Ahlm.

5. Relationships among piscivorous sportfish, prey and angler effort at two southwestern warm-water reservoirs. D. J. Salmala and R. Cole.

6. Natural organic loading and abundance of herbivorous fish at two southwestern reservoirs. M. P. Herzog and R. A. Cole.

7. Lower Colorado River Basin native fish management plan with emphasis on Big River Fisheries: A Service Perspective. C. Minckley.

3:00-3:20 p.m. - BREAK

3:20-5:00 p.m. - CONCURRENT SESSION 6

(Continued)

CONCURRENT SESSION 7

(Continued)

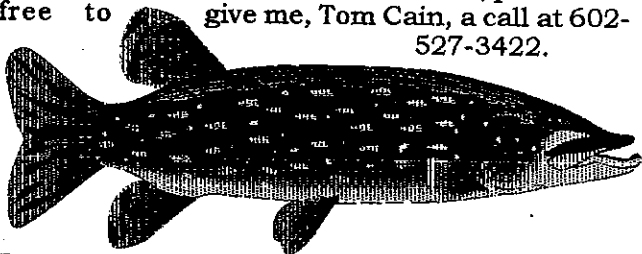
THURSDAY, June 23

8:00-10:00 a.m. - CONCURRENT SESSION 8

Biology and management of western trout

1. The effects of livestock grazing on golden trout (*Oncorhynchus mykiss aquabonita*) and their na-

(See Annual, page 4)



SOCIETY NEWS

(Continued from page one)

Western Division Election

The election of officers for the Western Division is coming up. This issue of the *Tributary* contains the biographical sketches of the candidates and ballots. Read the resumes and return your mail ballot as soon as possible by June 5.

For the office of Vice-President:

Jerry Burton is a senior staff biologist for the New Mexico Ecological Services Field Office, U.S. Fish and Wildlife Service in Albuquerque, New Mexico. For the past 17 years, he has been working primarily with listing and recovery of threatened and endangered southwestern fish species. Jerry received a B.S. in biology from the University of Wisconsin, Oshkosh, in 1967 and started working for the Service in 1968. During the 26 years he has worked for the Service, he has been a Fishery Biologist for the Division of River Basin Studies in Tulsa, Oklahoma; a Fisheries Project Leader, Fisheries Assistance Office, Vancouver, Washington; Assistant Area Manager for Fisheries and Endangered Species, Phoenix, Ariz.; Staff Fisheries Biologist, USFWS, Regional Office, Albuquerque; and his present position is senior staff biologist in the Albuquerque Field Office.

Jerry has been a member of the AFS since 1971 and has served as Secretary/Treasurer, Vice-President and President of the Arizona/New Mexico Chapter. He is currently Chairman of the WDAFS Endangered Species Committee, and is a member of the Parent Society's Endangered Species Committee. He has presented papers at numerous WDAFS annual and Chapter meetings. He is also a member of the Desert Fishes Council and most recently represented the Council in a Fisheries Action Network meeting with the U.S. Forest Service. He believes fisheries professionals should, through active participation in AFS, give of their time and talents.

Thomas P. Nesler is the Program Administrator for Nongame and Endangered Aquatic Wildlife for the Colorado Division of Wildlife. He administers all recovery programs for federal and state listed fish, amphibians, mollusks, and crustaceans, as well as statewide management programs for species of special concern and native species, status and trends in Colorado. Tom earned his Bachelor of Science in Fishery Biology at Colorado State University in 1973 and his Master of Science in Limnology/Fishery Biology at Iowa State University in 1977. He has been employed by the Colorado Division of Wildlife since 1977.

Tom has been active in AFS since being an undergraduate at CSU. He was a member of the student chapter at CSU and served as Secretary-Treasurer. He joined the AFS and Colorado-Wyoming Chapter in 1977. Tom has served multiple terms on the Colorado-Wyoming Program Issues and Resolutions, Newsletter, Best Paper, and Award of Excellence Committees. Tom was elected to the Chapter Executive Committee in 1989 and served as Secretary-Treasurer, Vice-President, President, and Past-President from 1989 through 1992. He has served as co-leader in the development of two Mysid-Fisheries symposia, one of which was held at the AFS meeting in Toronto in 1988, and initiated the practice of joint meetings between the Colorado-Wyoming Chapter and neighboring AFS Chapters or other professional societies. Tom is or has been a member of the Early Life History Section, Introduced Fishes Section, Endangered Species Committee, and Fisheries Management Section of AFS. Tom also served on the arrangements committee for the Western Division annual meeting in Fort Collins and chaired a special session on management conflict issues concerning endangered fishes conservation and sportfishery management.

Tom believes involvement in AFS at multiple levels is both necessary and advantageous to fishery professionals for their career development, the exchange of scientific information, ideas, and personal experience, and the networking and cooperation necessary in dealing with aquatic resource problems that transcend governmental boundaries. AFS is both learning and teaching, giving and taking. Tom feels fishery professionals in the Western Division are faced with critical challenges in balancing the conservation of native fishes and development of sport or commercial fisheries, and maintaining habitat and qual-

ity in aquatic systems for both.

For the office of Secretary-Treasurer

Christine Moffitt who has served in this position for the past two years is running unopposed.

For National Nominating Committee

Charlie E. Smith is the pathologist and aquaculture specialist for Rangen Inc. in Hagerman, Idaho. He recently retired from the U.S. Fish and Wildlife Service where he was employed for 32 years. He worked at the Fish Technology Center in Bozeman, Montana from 1968-93 and served as Director of the Center for his last eight years with the Service. He worked for seven years at the Western Fish Nutrition Laboratory in Cook, Washington, prior to moving to Montana. He received a bachelor's degree in biology from Walla Walla College and has completed graduate work in microbiology and pathology at Montana State University. Charlie was president of the AFS Fish Health Section in 1990-91 and has served on the nominating committee for the Fish Health Section.

Wayne A. Hubert has been an active member of AFS since 1972. He has served as secretary-treasurer, vice-president, and president of both the Iowa and Colorado/Wyoming chapters and has worked on numerous committees at the Chapter, Section, Western Division, and Parent Society Levels. Recently, he completed serving as co-editor for the new fisheries management text, *Inland Fisheries Management in North America* and as an associate editor for the *Transactions of the American Fisheries Society*. Currently, he is president-elect of the Education Section. Wayne is assistant leader of the Wyoming Cooperative Fish and Wildlife Research Unit and a professor in the Department of Zoology and Physiology at the University of Wyoming. His research focuses are applied management problems dealing with interactions of fish and their environment. Prior to moving to Wyoming in 1982, he was with the Iowa Cooperative Fishery Research Unit and the Tennessee Valley Authority.

AFS Socioeconomics Section To Sponsor Workshop At Annual Meeting

The Socioeconomics Section of the American Fisheries Society will sponsor and conduct a 3-hour technology transfer workshop at the Western Division AFS Meeting in Flagstaff. The workshop is free to all participants and is tentatively scheduled for Tuesday afternoon, June 21.

The purpose of the workshop is to explore the many ways in which the social sciences can be used to compliment the biological sciences in the study and management of fisheries. Some of the topics to be discussed at the workshop include: why economics, sociology, and anthropology are meaningful to fisheries management; methods for valuing fish lost in fish kills; and anything you want to discuss relative to the issue of fisheries social science. The last hour and a half will be devoted to the relevant concerns, questions, gripes, complaints and/or good experiences of the workshop participants.

Our speakers are two noted social scientists, Dr. Peter Fricke, Sociologist and current President of the Socioeconomics Section and Dr. Leroy Hushak, Economist and Past-President of the Socioeconomics Section. We encourage anyone who is interested in fisheries social science to attend this workshop.

Fish Passage Policy and Technology Symposium Proceedings Are Now Available

The published proceedings of the **Fish Passage Policy and Technology Symposium** sponsored by the Bioengineering Section are now available. The 2-day symposium was part of the 1993 annual AFS meeting in Portland, Ore.

Thirty papers presented policy, planning and current technologies of upstream and downstream fish passage. The **policy, planning and management** section includes discussions of special passage considerations for endangered species, history and success of fish passage mitigation, inventory of fish passage needs, the development of fish passage policy and ecological affects of fish passage over natural barriers.

The **upstream fish passage technologies** section reviews current technologies in many regions of the world, upstream juvenile fish passage and

the evaluation of fishways.

The **downstream fish passage technologies** section discusses understanding and designing for fish behavior, the impact of facility design to the control of predation and recent developments in new fish screening concepts including The Eicher and MIS screens.

The proceedings of the symposium are available from the Bioengineering Section for \$20 per copy including postage and handling. To order, send your request with a check, money order or purchase order (we are not able to handle charges) to: Greg Kindschi, AFS Bioengineering Section, 4050 Bridger Canyon Road, Bozeman, MT 59715.

Cultural Diversity Committee Meetings At Fairbanks

The Cultural Diversity Committee of the Alaska Chapter held a working luncheon during the Annual Chapter Meeting, Nov. 15 to 18, 1993, in Fairbanks, Alaska. Judy Gordon, Committee Chair, presented results of the cultural diversity survey "A report on the status of women and minorities in fisheries related positions in Alaska state and federal agencies and at the University of Alaska," which was prepared by Cynthia Pring-Ham, Committee Vice-Chair. This study was initiated during the 1992 annual chapter meeting. The luncheon attendees also had the opportunity to comment on the Committee's procedures as described in the draft of the AFS Alaska Chapter's Procedures Manual.

A list of annual committee projects, developed from the Committee's procedures, were discussed. Volunteers to assist with these projects were identified. The projects selected were: 1) surveying the membership for women and minorities willing to serve on Chapter committees, run for Chapter office and/or serve as session chairs at annual chapter meetings; 2) organization and development of scholarships to send an entry-level woman and an entry-level minority to annual chapter meetings; 3) development of and assisting in existing mentoring programs at the high school level; 4) organization of a cultural diversity luncheon at the Western Division Annual Meeting; and 5) solicitation of a cultural diversity speaker for next year's Annual Chapter Meeting. Judy Gordon will host a cultural diversity luncheon at the Western Division Meeting, Wednesday, June 22, 1994 in Flagstaff, Ariz. All chapters are invited to contribute to this session. For further information, please contact Judy Gordon at 907-456-0511.

Annual Meeting

(Continued from page 3)

tive habitat on the Golden Trout Wilderness, California. R. Knapp and K. R. Matthews.

2. Diel and seasonal movement and habitat use by Colorado River cutthroat trout. M. K. Young.

3. A genetic examination of hybridization between Colorado River cutthroat trout and rainbow trout in three high altitude streams in the Uinta Mountains. C. Bischoff.

4. The Influence of Hatchery Photoperiod and Water Chemistry on Smoltification in Chinook Salmon (*Oncorhynchus tshawytscha*). T.L. Hoffnagle and A.J. Fivizzani.

5. Role of salmon carcasses in maintaining stream productivity: Results of a test for direct consumption of carcasses by juvenile coho salmon, steelhead and cutthroat trout. P. A. Bisson.

6. Apache trout as a sport fish on the Fort Apache Indian Reservation, Arizona. K. J. Meyer and D. Parker.

7. Catch rates and returns of Apache trout in streams of the Fort Apache Indian Reservation, Arizona. D.C. DeClay and K. J. Meyer.

8. Apache Trout Management: New Approaches Using Genetics, Habitat Improvement, Regulations, and Fish Culture. G.J. Carmichael, J. N. Hanson and J.R. Novy.

8:00-10:00 a.m. - **CONCURRENT SESSION 9**
Marine Ecosystems

No papers by the *Tributary's* printing deadline.
10:00-10:30 a.m. - **BREAK**

10:30-Noon - **CONCURRENT SESSION 8**
(Continued)

CONCURRENT SESSION 9
(Continued)

Noon-1:00 p.m. - Luncheon, Local Arrangements and Budget Personnel

Details: Call John Rinne (602) 556-2181 ext. 2001