

The Tributary

A Newsletter of the Western Division, American Fisheries Society

Volume 19, No. 2 January 1994

PRESIDENT'S CORNER

Work together to accomplish more

I don't usually do "philosophy" pieces, but I'm going to make an exception this edition since several events have transpired in the last few months that I believe helped me focus on what being a professional fishery biologist really means to the world outside of fishland.

A couple of months ago, I was attending a meeting in the Salmon Trollers Hall in Fort Bragg, California, to listen to the local people (translation -- out of work commercial salmon fisherpersons) provide input to federal and state agency personnel about the implementation of the Central Valley Project Improvement Act's Anadromous Fish Restoration Program.

There was the usual litany of problems and complaints (only reasonable since these folks have been all out of business for the last several years) but there was hope that this particular planning effort would be different since the Bureau of Reclamation and U.S. Fish and Wildlife Service control a restoration fund with real money behind the projects.

However, one skeptical fisherman very clearly pointed out that he had in his possession over 20 years of annual reports on how to restore the salmon and steelhead resources of California. According to fishermen, these reports contained specific projects and had received all of the various bureaucratic blessings that these things need in order to be implemented. His frustration was that, according to him, none of the projects had ever been implemented on the ground. This brings me to the philosophy of this piece. I call it sitting on your hands!

This fisherman was frustrated not by the fact that he was unable to conduct his livelihood in

the traditional way, I believe he was frustrated by our failure as fishery professionals to do a complete job. Sure we all have more than we can do but we often use the dodge of "its not my job to do that" as a way to avoid tackling the really tough problems or we sit on our hands and let some other professional not to do their job and as a result the fishery resource and ultimately society suffers.

I challenge you to step up to the plate and do a complete job of being a professional fishery biologist. Why do millions of dollars of fish restoration projects go unfunded after spending nearly as many millions figuring out what needs to be done? In my mind there is a huge opportunity to help improve the nation's fishery resources laying at our door step.

It's called implement what we already know needs to be done! How do we do that you say? I say get off your hands and figure out a way. I never met a politician who didn't like to put a project in his or her district, particularly when that project increased economic return and jobs for the local economy. There are lots of willing partners to implement these projects, we just need to do a complete job of finding them and acting as a technical catalyst to start the ball rolling. The next time you pick up a planning document ask yourself if it has or will be implemented. If the answer is no, then you may want to go look in the mirror and ask yourself why! The ship is slowly sinking on our watch, can we afford to sit on our hands?

Randy Bailey, president

SOCIETY NEWS

Division president attends meeting; fisheries supporter dies of cancer

Division President Randy Bailey attended an organizing committee meeting of the National Irrigated Land Initiative in Reno in early December on behalf of the Society.

This group, composed primarily of irrigated agricultural interests, is determining the feasibility of pursuing a national initiative to develop and implement techniques that improve irrigated lands productivity, reduce water needs, increase water use efficiency, improve water quality of agricultural return flows, and improve fish and wildlife habitats in the process.

The information has been forwarded to Society President Hubley and Executive Director Brouha for their consideration. Fishery resources could be big winners if this initiative is successful.

Both the Bureau of Reclamation and Soil Conservation Service strongly supported such an initiative. There will be lots of opportunity for individual chapters to get actively involved in local projects and provide technical support. Thanks to the National Association of Conservation Districts for organizing the effort. By the way, although Randy was the only fishery biologist in the room, his input was enthusiastically received by the participants.

The Division lost a true fisheries stalwart on Thanksgiving Day when Rebecca Jane Everett lost a year-long battle with cancer. Becky worked in Montana, Alaska, and most recently at the University of California, Davis. Becky's interest in fish genetics and their application to management was the focus of her life. She strongly believed that genetics held the key to better management of fish stocks in general. Her enthusiasm, cheerful spirit, good humor and professional dedication will be sorely missed.

(Continued to page 3)

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

Officers

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Vice-President - Dennis Lee
Immediate Past-President - Glenn Phillips
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External Affairs

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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 April 1, 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:

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27 Border Lane
Bozeman, MT 59715

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MEETINGS, SYMPOSIUMS & SEMINARS

North Pacific International Chapter Annual General Meeting February 9-11, 1994, Wenatchee, Washington

The theme of this year's Annual General Meeting is "Ecosystem Management: Creating Partnerships for Effective Stewardship." Sessions already planned will address the changing responsibilities of fisheries managers on the Columbia River system, the biology and management of endangered salmon stocks, and the application of GIS technology to fisheries management.

A pre-meeting workshop on smolt release strategies will be held on Tues., Feb. 8. A field trip to view fish passage facilities on one of the mainstem Columbia River dams also will be offered on Feb. 8.

In addition, the Wenatchee area offers some excellent winter recreation opportunities, including downhill and cross country skiing. Please consider attending and participating in the meeting this year. For additional information contact: Bob Bilby, 206-924-6557; FAX 206-924-6970.

Using Hydroacoustics for Fisheries Assessment. Two-day short course conducted by Hydroacoustic Technology, Inc., Seattle, Wash.

Offered Feb. 17-18, 1994 in Seattle and Feb. 24-25 in Boston.

Covers basic hydroacoustic theory, deployment logistic data collection and processing techniques, and typical results. Included are detailed discussion of single-beam, dual-beam, and split-beam data collection and processing techniques, as well as target tracking and echo integration techniques. Highlights examples from current and past hydroacoustic projects.

Contact Bruce Ransom, HTI, 715 NE Northlake Way, Seattle, WA 98105, 206-633-3383 for an outline and further info.

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.

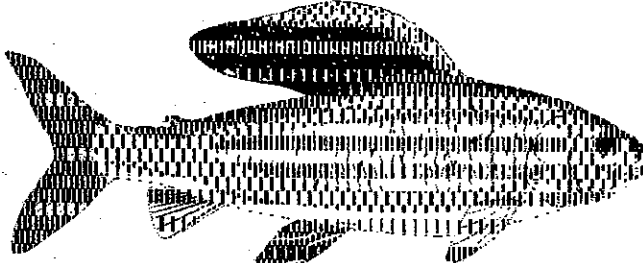
There will be two submitted poster sessions and a limited number of selected contributed papers (15 minutes with five minutes for questions) accepted.

If you wish to submit a paper or poster, by April 1, 1994, please send title, author(s), and a short (300 word) abstract to:

David A. Pyke, USDI - Bureau of Land Management, 3200 S.W. Jefferson Way, Corvallis, Ore. 97331. Tel: (503) 750-7307; FAX: (503) 750-7329.

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.



FIRST NOTICE

1994 International Trout Stream Habitat Improvement Workshop Calgary, Alberta, Canada, Sept. 6, 7, 8 and 9 of 1994.

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, Sept. 6, 7, 8 and 9 of 1994.

Featuring two days of field tours highlighting stream and riparian habitat projects on a variety of Alberta's streams and rivers.

For further information, please contact:
Garry Szabo, Trout Unlimited Canada, Co-Chairman, Ph. 403-221-8365; FAX 403-221-8368.

or

Lorne Fitch, Alberta Fish and Wildlife Service, Co-Chairman, Ph. 403-381-5281; FAX (403) 381-5723.

A Special Symposium of the American Fisheries Society

Uses & Effects of Cultured Fishes in Aquatic Ecosystems

Doubletree Hotel and Convention Center Albuquerque, New Mexico March 12-17, 1994

Program

Saturday PM March 12: Registration

Sunday AM March 13: Plenary Session
Delano Graff, Carlos Fetterolf, Gil Radonski, Section Presidents.

Sunday PM March 13: Technical Session 1
Fisheries Management Needs:

Sports Fish Resoration & Enhancement
Sunday EVE March 13: Poster Session 1
Soapbox Forum concurrent with beverage & posters

- A. Fish Stocking Successes
- B. Fish Stocking Failures
- C. Aquaculture

Monday AM March 14: Technical Session 2
Fisheries Management Needs:

Threatened & Endangered Species
Moderator: Fish Culture Section
Monday PM March 14: Technical Session 3
Fisheries Resotation & Enhancement

Stocking Criteria & Goals
Moderator: Physiology Section
Monday EVE March 14: Poster Session II
Soapbox forum concurrent with beverage & posters

- D. Physical & Biological Considerations in Stocking
- E. Urban Fishing Needs
- F. Put & Take Fishing Needs

Tuesday AM March 15: Technical Session 4
Fisheries Resotation & Enhancement:
Genetic Criteria & Goals
Moderator: Genetics Section

Tuesday PM March 15: Technical Session 5
Fish Production to Meet Needs:
Capabilities & Limitatons
Moderator: Bioengineering Section

Tuesday EVE March 15: Poster Session III
Soapbox forum concurrent with beverage & posters

- G. Integrated Fisheries Management
- H. Society Life Style Changes Affecting Perceptions of Angling
- I. Genetic Gizmos: Marking, Ploidy Doubling, Gene Banking, and more

Wednesday AM March 16: Technical Session 6
Evaluation of Stocked Fishes:
In Hatcheries & In the Wild
Moderator: Fish Culture Section

Wednesday PM March 16: Technical Session 7
Role of Exotic Species (Zebra Mussel)
Past & Future Uses In Fisheries Management
Moderator: Introduced Fish Section

Wednesday EVE March 16: Poster Session IV
Soapbox forum concurrent with beverage & posters

Thursday AM March 17: Technical Session 8

Hatcheries, Habitat, & Regulations:
Past & Future Uses in Management
Moderator: Fisheries Management Section
Thursday PM March 17: Section Perspectives
Close of Technical Symposium
Paul Brouha Delano Graff
Thursday EVE March 17:
Symposium Social & Conversations

Wild Trout & Planted Trout: Balancing the Scale

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 form 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.

Chapter Happenings?

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

Chapters, if you're interested in letting the rest of us know what your chapter is doing, send a short summary to me by January 15 to: Pat Dwyer, Editor, 27 Border Lane, Bozeman, MT 59715.

SOCIETY NEWS

SECOND 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 considered 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
- Ecosystem management in Urban Streams
- Ocean Ecosystems

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.

Submission of contributed papers must be in the form of the abstract shown here. To be considered, abstracts must clearly state (200 words or less) your objectives, principal results, and conclusions. Abstracts must include a succinct title; full name, address, and phone number of all authors (note the individual presenter); and the text of the abstract. **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

WDAFS AWARDS NOMINATIONS

It's time to start thinking about recognizing those from both within and outside our ranks who have made outstanding contributions to fishery resources or the fishery professions.

Five awards offered by the Western Division include:

1) **Excellence** - AFS member who's shown outstanding achievement/exceptional competence in fishery resource applications through a monumental work, new methodology, or multiple successful efforts.

2) **Merit** - AFS member who's made a regionally significant contribution to the Division, profession, or fishery resources.

3) **Special Recognition** - Individual or entity making significant contribution to development and success of WDAFS.

4) **Robert Borovich** - Individual who has significantly contributed to fishery conservation within the Division, may be non-member.

5) **Conservation Achievement** - An entity or an organization that has made a significant contribution to the conservation of fishery resources in the Division. **Entity may be a non-member.**

Please take the time to nominate worthy individuals or entities from your Chapter area. Those of you who have attended previous WDAFS awards ceremonies know how much they mean to the recipients. Please send nominations by March 15, 1994 to: Glenn Phillips, 64 Cloverview Drive, Helena, MT 59601.

NOMINATIONS

There are three elected offices in the Western Division of AFS including: Vice-President, Secretary-Treasurer, and National Nominating Committee Representative. The person elected to be Vice-President normally serves in consecutive years as President-elect, President, and Immediate-Past-President. The Secretary-Treasurer serves for two years and may be elected for two consecutive terms. A brief description of responsibilities associated with each office is listed below:

Vice-President

- Chairman of the Membership Committee
- Member of the Program Committee
- Assumes the duties of the President-elect if the President-elect is absent or unable to carry out his or her responsibilities
- Other duties as assigned by the President

President-elect

- Chairman of the Program Committee
- Chairman of the Arrangements Committee
- Prepares budget for next fiscal year to be acted upon by the EXCOM and membership
- Assumes duties of President if President is absent or unable to carry out his or her responsibilities

bilities

- Member of Society EXCOM; attends two EXCOM meetings annually

President

- Presides at all WDAFS meetings
- Chairman WDAFS EXCOM
- Member Society EXCOM; attends two EXCOM meetings annually
- Appoints WDAFS committee chairs
- Develops and carries out WDAFS plan
- Communicates regularly with WDAFS chapters and committees
- Assigns WDAFS officers to attend chapter meetings

Immediate Past-President

- Chairman WDAFS Nominating Committee
- Chairman WDAFS Awards Committee

Secretary-Treasurer

- Keeps minutes of annual EXCOM and business meetings
- Allocates and receives funds, keeps financial records, fulfills IRS requirements, and presents financial report to the Division.
- Keeps the official records of the Division

Division Representative - Society Nominating Committee

- Searches the Division for and nominates qualified candidates for Society officership

Surely there are individuals in each chapter with the leadership skills and ability to serve as a Division Officer.

Please send nominations or letters of interest in running for office to: Glenn Phillips, 64 Cloverview Drive, Helena, MT 59601 or call (406) 444-2449.

Excellence in Fisheries Education Award Announcement

The American Fisheries Society (AFS) Excellence in Fisheries Education Award was established in 1988. The award is administered by AFS' Education Section and is presented annually to an individual to recognize excellence in organized teaching and advising in some aspect of fisheries education. Nominees may be involved in extension or continuing education, as well as traditional college and university instruction.

Nomination deadline is June 1, 1994. Additional information may be obtained from:

Matt Sabo, Chairman, Excellence in Fisheries Award Committee, Louisiana State University, Baton Rouge, LA 70803 (504) 388-4560.

CAN YOU HELP?

Scientists comprising the groundfish task at the NMFS Alaska Fisheries Science Center engage in research related to the distribution, abundance and life histories of commercially-important species in the Bering Sea and Gulf of Alaska as well as contiguous waters of the Aleutian Islands and U.S. West Coast.

In support of these activities, we are assembling a computerized database consisting of citations (and abstracts) from peer-reviewed and "grey" literature. Hoping to accomplish this project as efficiently as possible, we are soliciting input from fisheries biologists and other individuals who have already entered relevant citations into bibliographic databases for their personal libraries.

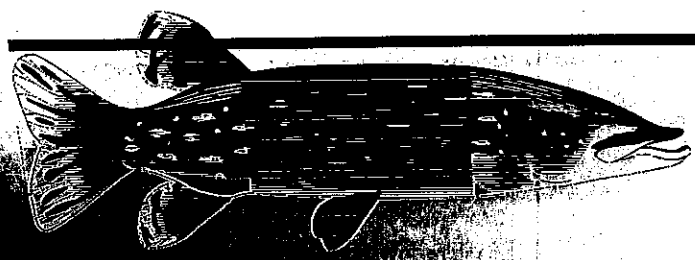
We are presently compiling citations in PAPYRUS, which has a built-in utility for converting a number of bibliographic database file formats to the PAPYRUS format.

We also have the support of the software developer to assist with the inevitable format conversions from other products. Ultimately, we envision a bibliographic database of commercially and ecologically important fish and invertebrate species that is electronically accessible to the larger scientific community. (This assuming insurmountable copyright issues are not encountered).

(Continued to page 4)

THIS & THAT

Our roots are in fish!



Editor's Note: The following is Glenn Phillip's President's address given during the annual meeting last summer.

In case you were unable to attend, here is his speech in its entirety.

I would like to take some time this morning to reflect a bit on what it was that led many of us to become fishery professionals. If you think about it, we are a pretty diverse bunch. Just take a look at the program for this meeting or the variety of articles in the journals we publish. Our ranks include hatchery workers, fish disease specialists, fish nutritionists, population dynamists, geneticists, ecologists, ichthyologists, limnologists, water chemists, toxicologists, aquatic entomologists, marine biologists, biometricians, physiologists, algologists, fishery managers, fishery administrators, and even an occasional planner. Nevertheless, I believe that the common thread that draws us together is that for some reason we all believe that fish, and the waters that sustain them are important.

I suspect each of you has a story to tell about what led you to conclude that fish and water are something worth worrying about. I would like to share with you part of mine. I grew up in St. Paul, Minnesota, on the east side near the 3M complex if you are familiar with the town. Like many Minnesota families, mine had a cabin on a lake about 150 miles north of the twin cities -- round lake near Brainerd. Our cabin had been only the third on the lake, built by my grandfather in the late 1920s. My mother spent her childhood summers, as I had, with weekends and vacations spent at the lake. Of course the lake underwent changes between my mother's childhood and mine. Cabin sites increased from three to more than a hundred, the dirt trail that led around the lake was paved with asphalt, and packs of wolves howling on moon-lit night became stories from the past. Still, the setting was quiet, peaceful and relaxing in every aspect. As you drove in the sandy driveway to the cabin, the tall pine trees smelled as good as they ever had and the light dancing through the trees was as inviting as ever. No matter how many dozens of times we arrived, there was always excitement that we were there.

The cabin and cabin life were simple. There was one bedroom, a living room, a kitchen and a large screen-in porch that was L-shaped and faced the lake. The porch had large wooden shutters that we pulled down whenever a storm approached. There was no television, or VCR, or stereo -- although we sometimes went to the Gull Drive-In at night to take in a movie. There was no running water, not even hot water, but the well water, which was drawn from a large red handled pump in the kitchen was the best I have ever tasted.

The sanitary facility was an outhouse located between the cabin and the lake road. Heat was provided by an oil stove that was lit only to take the chill off unusually cool summer mornings. There was also a wood burning cooking stove in the kitchen, I can remember pulling my head down under the covers in the morning until I could feel the heat drifting my way and could smell the pancakes cooking.

Fishing was also simple then. At first we had only a wooden row boat that required annual painting and had to be soaked in the lake early in the summer to allow the wood to swell. The boat never sealed completely and our feet were always wet when we used it. I can remember rowing out about a quarter of a mile with my parents and sisters to the drop off near the edge of the first bull rushes where we anchored. The water there was 15-20 feet deep and you couldn't see the bottom, but the tops of wide leafed plants, my parents called them sunfish weeds, could be seen penetrating upward from the depths. This, we were told, was a good fishin' hole.

Our bait was night crawlers, kept in a tin can and dug at "the worm place" that was located along

the lake road about one mile back toward the highway. For my parents the gear was cane pole and bobber, but for us kids, it was a drop line held by hand over the side of the boat and twitched to attract fat bluegills, rock bass, and pumpkinseed. The latter were particularly beautiful and I thought at the time could not have been more appropriately named. If you've ever caught a pumpkinseed, you know what I am talking about.

I am not sure what the limits were then, but we used a bucket. When the bucket was full of fish, we headed back for shore. Frequently by the time we got there, several of our catch had managed to flip out of the bucket and were splashing around on the floor of the boat. The challenge then became to retrieve them without having a spine penetrate your fingers; I think you get the picture.

If by chance a large fish had been taken, such as a northern pike or walleye, it was customary to take a photograph for the collection. These photos still grace our family photo albums. I am convinced that people take pictures of fish not so much to show the fish off, although that is part of it, but to remind them of the beautiful places they go to catch fish and the wonderful times they had on these outings with family and friends.

Back then I am not sure that anyone practiced catch and release. But then, the fishing pressure was not nearly as "great" nor was the gear as efficient nor sophisticated as today. We cleaned our fish on a large flat board that was nailed between two tall white pines. There was a light mounted on one of the trees to accommodate evening trips. Early on the fish were scaled, gutted, and the fins and head were removed. In more recent years they were filleted boneless. I can still smell the fish frying in a large cast iron skillet and see them being served around the large yellow table on the porch, usually accompanied by corn on the cob or fresh new potatoes. There is nothing quite like a meal of fresh fish at the lake.

Life at the cabin revolved around the lake -- it was the centerpiece and the reason we were there. The lake seemed to bring out the best in everyone. We swam in it, fishing in it, walked along its shoreline, watched the sunset over it, and spent the evenings discussing the many pleasures that it provided and the life that it sustained. The fish that had been caught and gotten away, the muskrat family that swam under the dock, the loons and blue herons, frogs and turtles, mayflies and dragonflies that were all part of the picture and most importantly, their inter-relationships with each other. Like a never ending theater play unfolding before our eyes.

As children growing up, most of us had not heard of limnology, or ecology, or biodiversity nor did we know the term ecosystem. But I would submit that although we did not know the word ecosystem we all had experience that gave us a fundamental appreciation for them and that later in life caused us to view with disdain the full range of activities that threaten them. Sadly enough, many children grow up without childhood experiences that give them an appreciation and understanding of natural things. Of course the problem is that if natural things are not understood and appreciated, they tend not to be

taken care of.

In my view the greatest and most challenging problem we face is to help others view natural processes and natural beauty more as biologists do. Aldo Leopold fully understood this when he wrote, "to promote appreciation of nature is a job not of building roads in lovely country, but of building receptivity into the unloving human mind." The depth of Leopold's thinking on the harmony of nature and his acknowledgment that few understand it was beautifully expressed when he wrote: "the song of a river ordinarily means the tune that waters play on rock, root and rapid... This song of the waters is audible to every ear, but there is other music in these hills, by no means audible to all. To hear even a few notes of it you must first live here a long time, and you must know the speech of hills and rivers. Then on a still night when the campfire is low, sit quietly and listen for a wolf to howl, and think hard of everything you have seen and tried to understand. Then you may hear it -- a vast pulsing harmony -- its score inscribed on a thousand hills, its notes the lives and deaths of plants and animals, its rhythms spanning the seconds and the centuries." He understood that living things do not exist in isolation when he said: "they are interlocked in one humming community of cooperation and competition, one biota."

AFS members Willa Nehlsen, Jim Lichatowich and Jack Williams knew about the harmony of nature as it applies to pacific salmon when they wrote: "an intimate connection exists between salmon life histories and habitats. The life history can be viewed as a series of geographically and seasonally connected places where salmon live out the important events of their lives, such as spawning, migrating, feeding and escaping predators. Each salmon species has a characteristic life history pattern, with distinctive features such as the age structure of the spawning population, the length of juvenile residence in freshwater, and the distribution of spawning within the basin. These species' life histories indicate a rich pool of diversity: they are central themes around which each population within a species has developed profuse variation." If more people understood and appreciated the requirements and diversity and beauty of Pacific Salmon, I doubt they would be at risk today.

I recognize that natural resource work is at times frustrating but what better way to make a living. The many special lakes and rivers and oceans and estuaries located throughout the United States and Canada are largely what you have devoted your professional lives to. As we initiate this conference that has as its theme "the changing face of conservation," I hope that we are reminded that these waters, these places, these fisheries have helped shape our most basic values and beliefs.

Whether your career has led you to Alaska's Kenei, Oregon's Rogue, Montana's Yellowstone, or California's Sacramento, the water and the life it sustains are important as are those of you who seek to understand it and to protect water's gifts. These places are plain and simply worth worrying about; you do important work -- don't let anyone convince you otherwise!

PUBLICATIONS

STATUS AND DISTRIBUTION OF THE FRESHWATER FISHES OF SOUTHERN CALIFORNIA

Camm C. Swift, Thomas R. Haglund, Robert Fisher and Mario Ruiz
1993. Bull. S. Calif. Acad. 92(3):1-67

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Society

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If you have such a database and are willing to share it with us, or can refer us to someone (or an institution) that does, please contact us. Also, we welcome any comments or suggestions related to our effort that you may have. Thank you for your assistance.

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