



PISCES

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Certification Challenge — Encouraging Professional Development

Mike Meinz, President

One goal of the American Fisheries Society as well as many other professional societies is to encourage the ongoing professional development of its members. One method for encouraging ongoing professional development is through a certification program. Certification is a means of setting standards and guidelines for professional recognition. It serves to upgrade the professional image and is a mark of accomplishment. Certification also is a mechanism to demonstrate responsible peer evaluation. The specific objectives of AFS certification are (1) to provide governmental and nongovernmental organizations, private firms, courts, and the general public with a definitive minimum standard of experience and education for fisheries professionals and (2) to foster broader recognition of fisheries professionals as well-educated and experienced individuals.

In the past, the requirement for AFS certification was minimal but that has changed. Originally, anyone with minimal education requirements and experience could become a certified fisheries professional. Certification was for a lifetime. However, on July 1, 1998, the AFS Governing Board implemented a revised program for professional certification. The main differences between the former and revised plan are (1) a change in the certification titles, from associate fisheries scientist and certified fisheries scientist to associate fisheries professional and certified fisheries professional; (2) a change in education requirements; and (3) *a requirement for certification renewal every five years.*

To encourage ongoing professional development, the AFS Western Division of the American Fisheries Society is offering a prize to those Society members who apply for certification or recertification by the end of July 2000. The Western Division, in association with the Cal-Neva Chapter and several other Division chapters, will pay the certification fee and all expenses to the Western Division meeting in Telluride (to a limit of \$1,500) for one of the newly certified members drawn at random from those certifying during the contest.

The Rules:

- Contest starts with the publication of the October *Tributary*.
- Contest ends in July, just prior to the Western Division's annual meeting in Telluride.
- Candidates being certified must be members of both the Chapter and the Society.
- Members must have completed certification at the time the contest closes—having submitted the paperwork doesn't count!

For more complete information about professional certification, check the American Fisheries Society's web page at www.fisheries.org.

Symposium and 34th Annual Meeting

Update: March 30 – April 1, 2000

Mike Meinz, President

In this issue of *Pisces* you will find the draft conference agenda, technical session titles, registration materials, and hotel and transportation information. The process of putting this event together is no small task. I want to thank Elise Holland, Program Chairperson, and all those who responded to my call for help in the last issue of *Pisces*. More than eighty individuals (committee chairpersons, session coordinators and speakers) stepped forward to help put this program together. This proves that we can accomplish a lot when we work together.

As you review the agenda, you will note many highlights. The Symposium and Annual Meeting will feature experts from throughout the Northwestern United States. Sessions will cover both marine and freshwater topics. Robert C. Hight, the new Director of the California Department of Fish and Game, will be a keynote speaker on Friday. Our banquet speaker will be announced shortly. In addition, there will be a Poster Session, a Fish Fashion Social, a Student Job Fair, and nightly social hours featuring local micro brews.

As mentioned above, the agenda is still in draft form, so additional information is still forthcoming. Be sure to check the Cal-Neva website for updates at www.afs-calneva.org.

Welcome to Four New Executive Committee Members

Mike Meinz, President

The Cal-Neva Chapter would like to announce and welcome **four** new committee members! Robert Blizard, (510) 286-6238 or Robert_Blizard@dot.ca.gov, will take over for Ramona Swenson as Manager of the Fisheries Information Network (FIN); Joe Miyamoto, (510) 287-2021 or miyamoto@ebmud.com, is our able Bylaws and Nomination Committee chairperson; Fred Feyrer, (916) 227-2552 or ffeyrer@water.ca.gov has bravely stepped forward to become Membership chairperson; and David Manning, (707) 547-1988 or scwafish@eudoramail.com, will become the first chairperson of the Time and Place Committee. Thank you all for volunteering your time and efforts. I would also like to express a special thanks to Ramona Swenson. Ramona has been FIN Manager since 1996 but she is moving on to an even bigger challenge. She and her husband are expecting their first child sometime next fall. The Excom will miss Ramona's thoughtful participation at our meetings. Thank you Ramona and may the very best be in your future.

Chapter Officer Nominations

Joe Miyamoto, Bylaws and Nominations Committee Chairperson

The California Nevada Chapter is seeking nominations for President-elect and Secretary for the March 2000 election. This is your opportunity to apply your leadership and planning skills while helping to shape the future of AFS. The vision of the American Fisheries Society states "By 2004, the American Fisheries Society will be recognized widely as a leader in promoting the development of fisheries professionals, advancing fisheries and aquatic science, and promoting conservation and sustainable development of fishery resources and aquatic ecosystems." You can help the society achieve this goal by serving as a Chapter officer. Any members interested in running for office should contact Joe Miyamoto at (510) 287-2021 or by e-mail at miyamoto@ebmud.com no later than February 18, 2000.

Chapter Award Nominations

Pat Coulston, Awards Chairperson and Past President

Good food, informative great presentations, camaraderie, networking opportunities... a lot great things happen at our Chapter's annual meeting. One of the most important aspects of the meeting is using the gathering to bestow awards on members and nonmembers to "promote and recognize" excellence in our discipline and in conservation. The purpose of this brief article is to seek the membership's help in identifying potential award nominees. The chapter has two award categories:

The Award of Excellence

This award recognizes Chapter members for professional excellence in research, management, education, publication, or outstanding contribution to the profession, the Society, or fisheries conservation.

The Conservation Achievement Award

This award nonmember individuals or groups for outstanding contributions or service to fisheries conservation.

Please help the Chapter Awards Committee by suggesting nominees for these important awards. Give some thought to the people you encounter in your professional life that you think may deserve an award, and pass your suggestions along to the committee. You can accomplish this by sending names, along with a brief justification, to Pat Coulston at pcoulsto@dfg.ca.gov. We need your suggestions by February 18, 2000.

First CALFED Science Conference

Larry Brown, Program Co-chair

The CALFED Comprehensive Monitoring, Assessment, and Research Program (CMARP) announces the First CALFED Science Conference, October 3–5, 2000 at the Sacramento Convention Center.

What is the purpose of the conference? The CALFED Science Conference is a forum for scientists and engineers who are conducting scientific investigations addressing technical issues pertinent to CALFED programs (ecosystem restoration, levee system integrity, water quality, etc.). The conference program will be developed around technical themes and will feature a mix of invited and contributed talks and poster presentations that describe recent study results, models, and syntheses that are relevant to the accomplishment of CALFED's goals and objectives in the San Francisco Bay-Delta watershed. Talks and posters are not limited to CALFED funded projects but are open to all projects with significant findings relevant to CALFED goals. The conference is intended specifically for sharing of information among scientists and engineers working on studies relevant to CALFED technical issues. A comprehensive summary of the management implications of the information presented at the conference will be prepared for later distribution to interested individuals and groups via mail or on our conference website.

What sessions are currently scheduled?

Session Topics

- Salmonids
- Species of Special Concern
- Effects of Exotic Species
- Effects of Contaminants
- Fluvial Processes
- Tidal wetland Processes
- Organic Carbon and Lower Trophic Web Processes
- Drinking Water Quality
- Delta Hydrodynamics
- Levee Rehabilitation

Session Chairs

Randy Brown
Bill Bennett (aquatic) and Peter Stine (terrestrial)
Kim Webb
Val Connor
Matt Kondolf
Larry Brown
Jim Cloern and Tim Hollibaugh
Elaine Archibald
Jon Burau (tentative)
Lauren Hastings

Do you have something to present? The technical program chairs are Larry Brown (lrbrown@usgs.gov) and Bill Bennett (wabennett@ucdavis.edu). A call for papers will be distributed in early March 2000. The deadline for submitting abstracts is Friday, June 2, 2000.

How do I register? Program details, with abstract submittal and registration information, will be available soon at the following website: <http://iepwatcagov/calfed/sciconf>.

International Congress on the Biology of Fish

Don MacKinlay

The next International Congress on the Biology of Fish will be held in Aberdeen, Scotland, July 23–26, 2000. Information about this meeting is available at the following website: <http://www.fishbiologycongress.org>.

The complete proceedings of the 1998 Congress are also available at the website, free for downloading in Adobe® Acrobat format. Information on how to get printed copies of previous proceedings is also provided.

Planning for the individual Symposia for the Aberdeen Fish Biology Congress is underway. If you have suggestions, or would like to be involved in organizing a session, please contact me at the following address:

Don D. MacKinlay
Habitat and Enhancement Branch, Fisheries and Oceans Canada
555 West Hastings Street
Vancouver BC V6B 5G3 CANADA
Phone: (604) 666-3520
Fax: (604) 666-6894
E-mail: mackinlayd@pac.dfo-mpo.gc.ca

Cal-Neva Dynamic Duo Wins!

Jeff Hagar, Past Membership Chairperson

In December, I received a list of Cal-Neva Chapter recruiters and recruits for the period of August 1998 to September 1999 from Trish Milburn in Bethesda, Maryland. A blind drawing was held on December 5, 1999 and Cal-Neva had a winning entry! The winners are Mike Meinz and his recruit, Sharon Stohrer. The prize for this dynamic duo, as you may know, is fully paid registration and lodging at the Chapter's 2000 Annual Meeting. Congratulations to you both and see you in Ventura!

Annual Meeting Hotel Reservation and Transportation

Elise Holland and Mike Meinz, Annual Meeting Coordinators

The Symposium and 34th Annual Meeting will be held at the *Holiday Inn* in Ventura, California. Room rates are \$79 plus tax for either a single or double room. For reservations call (800) 842-0800 or (805) 648-7731. Be sure to mention you are with the Cal-Nevada Chapter of the American Fisheries Society.

If you are flying into LAX, Burbank, or Santa Barbara, the *Roadrunner Shuttle* is available: (800) 247-7919, (805) 389-8196, or www.rrshuttle.com. The *Ventura County Airporter* also is available from LAX and Oxnard: (805) 650-6600.

The Ventura County Airporter has eight daily departures and is considerably cheaper than the Roadrunner Shuttle, which provides door to door service. Adult fares to and from LAX on the Ventura County Airporter are \$20 per way.

NEWS FLASH—Fish Fashion Show Will Highlight Cal-Neva's 2000 Annual Meeting

Alice Low, Annual Meeting Social Coordinator and Treasurer

Fish hats, fish ties, fish shirts, fish costumes, fish glasses, fish underwear... ? At the reception before the banquet at this year's annual meeting, wear your best fish garb and win valuable prizes! Appropriate refreshments will be provided, as well as appropriate prizes for Best, Most Original, Funniest, Strangest, Most Endangered, and Most Alcohol-tolerant fish. So migrate on down to Ventura on Friday, March 31, 2000, for a great time!

2000 Annual Meeting Call for Posters

Robert Blizzard, Poster Session Coordinator and FIN Manager

Once again the annual meeting will sponsor a Poster Session. So if you would like to present (but don't feel like standing in front of a room full of people and having to imagine them sporting only limited coverage to fight off stage fright), then consider submitting a poster. Everyone is welcome, especially students. To submit your poster send me the following information: your name, your e-mail address, a phone number where I can reach you, the name of any organization you will be representing, the poster title, and a 250-word (maximum) abstract of your poster. Send this information to Robert_Blizzard@dot.ca.gov by March 1, 2000. Posters should not be larger than 4 feet by 8 feet. Thanks and see you in Ventura

Student Lodging and Job Fair

Elise Holland and Mike Meinz, Annual Meeting Coordinators

The Cal-Neva Chapter, in conjunction with a number of private consulting firms, will be sponsoring a Student Job Fair and Social at the annual meeting in Ventura. The event will be held on the afternoon of March 31. It will provide students with an opportunity to meet potential employers and ask questions about job opportunities and the types of skills employers are currently seeking.

In addition, lodging will be provided for students presenting a paper, exhibiting a poster, or volunteering to help at the conference.

If you're a student in need of lodging or a consultant wanting to participate in the Job Fair, contact Raymond Jay at (213) 576-6689 or Rjay@rb4.swrcb.ca.gov. Also, check out the Cal-Neva website (www.afs-calneva.org) for registration material and up-to-date conference information.

American Fisheries Society

California-Nevada Chapter
Symposium and 34th Annual Meeting

*Sierra to the Pacific:
Fishery Management and Restoration in the New Millennium*

March 30, 31 & April 1, 2000

Holiday Inn
450 East Harbor Boulevard
Ventura, California
(800) 842-0800

Program Coordinators

Elise Holland, Cal-Neva Chapter President-elect
(415) 495-5660 or Elise.Holland@tpl.org

Mike Meinz, Cal-Neva Chapter President
(916) 657-2048 or mmeinz@waterrights.swrcb.ca.gov

Thursday March 30, 2000
Symposium

Restoration of Native Trout and Riparian Plants in the Western United States

Coordinators: Brian Finlayson, California Department of Fish and Game
(916) 358-2950, bfinlays@dfg.ca.gov
and

Joel Trumbo, California Department of Fish and Game
(916) 358-2952, jtrumbo@dfg.ca.gov

- 7:00** Symposium Registration
- 8:00** Welcome and Announcements
- 8:15** Morning Session: *Restoration of Native Trout*
- 11:45** Lunch
- 1:00** Afternoon Session: *Restoration of Native Riparian Plants*
- 6:30** Social & Poster Session Hosted by Cal-Neva AFS
- Poster Session Coordinator:
Robert Blizard, California Department of Transportation
(510) 286-6238 or Robert_Blizard@dot.ca.gov

*Friday March 31, April 1, 2000
Annual Meeting*

Sierra to the Pacific: Fishery Management & Restoration in the New Millennium

- 7:00** Annual Meeting Registration
- 8:00** Welcome and Announcements
- 8:15** Opening Remarks
Robert C. Hight, Director, California Department of Fish and Game
The Role of Science in Decision Making
- 8:45** Plenary Session: *Essential Marine and Freshwater Fish Habitats*
Coordinator: M. James Allen, Southern California Coastal Water Research Project
(714) 894-2222, or jima@sccwrp.org
- 12:00** Peanut Butter & Jelly Lunch and Cal-Neva AFS Business Meeting
- 1:30 – 4:30** Technical Session 1: *Exotic Species: Management Issues Statewide*
Coordinator: Larry Brown, US Geological Survey
(916) 278-3098 or lbrown@usgs.gov
- Technical Session 2: *Contributed Papers: Marine and Freshwater Topics*
Coordinator: Dan Logan, National Marine Fisheries Service
(707) 575-6053 or dan.logan@noaa.gov
- Technical Session 3: *Fish Passage Technologies and Fish Barrier Removal*
Coordinators: Ted Frink, California Department of Water Resources
(916) 327-1648 or tfrink@water.ca.gov
Darryl Hayes, CH2M Hill
(916) 920-00212 or dhayes@ch2m.com
- Technical Session 4: *Current Marine Research*
Coordinators: Sandy Owens and Pete Haaker, California Dept. of Fish and Game
(562) 590-4840 or slowen@dfg.ca.gov
(562) 590-5109 or phaaker@dfg.ca.gov
- Technical Session 5: *Coastal-Bay-Estuarine Fish Ecology, Management and Restoration*
Coordinator: Fred Feyrer, California Department of Water Resources
(916) 227-2552 or ffeyer@water.ca.gov
- 5:00** Student Job Fair
Coordinator: Raymond Jay, Regional Water Quality Control Board, Los Angeles
(213) 576-6689 or Rjay@rb4.swrcb.ca.gov
- 6:30** Hosted Poolside Social & Fish Fashion Show
Coordinator: Alice Low, State Water Resources Control Board
(916) 657-1985 or alow@waterrights.swrcb.ca.gov
- 7:30** Seaside Banquet & Music at the Top of the Hotel

Saturday April 1, 2000

Annual Meeting

Sierra to the Pacific: Fishery Management & Restoration in the New Millennium

8:15 Announcements

8:30 Technical Session 6: *Reconsidering Floods: A Foundation for Restoring River Ecosystems*

Coordinators: Scott McBain, McBain & Trush

(707) 826-7794 or mcbtrsh@northcoast.com

Tim Ramirez, The Resources Agency

(916) 653-5672 or tim@ceres.ca.gov

Technical Session 7: *Nearshore Fishery Issues Entering the New Millennium*

Coordinators: Carolyn Lundquist and Christopher Dewees

University of California, Davis

(530) 752-1497, cjlundquist@ucdavis.edu, or cmdewees@ucdavis.edu

Technical Session 8: *Steelhead Restoration: Success Stories*

Coordinator: Dennis McEwan, California Department of Fish and Game

(916) 327-8850 or dmcewan@dfg.ca.gov

Technical Session 9: *Fish Passage Technologies and Fish Barrier Removal (continued)*

Coordinators: Ted Frink, California Department of Water Resources

(916) 327-1648 or tfrink@water.ca.gov

Darryl Hayes, CH2M Hill

(916) 920-00212 or dhayes@ch2m.com

Technical Session 10: *Emerging Marine Technologies*

Coordinator: Marty Gingras, California Department of Fish and Game

(831) 649-2885 or mgingras@dfg.ca.gov

12:00 Adjourn

Essential Marine and Freshwater Fish Habitats

Coordinator: M. James Allen, Southern California Coastal Research Project

Evolving Perspectives of Deepwater Habitat on Hecate Bank, Oregon

Dr. Waldo Wakefield, National Marine Fisheries Service, Northwest Fisheries Science Center

National Marine Fisheries Service Essential Fish Habitat Issues off California with Special Emphasis on San Francisco Bay

Brian Mulvey, National Marine Fisheries Service, Southwest Region

Break

Deepwater Habitat in Marine Protected Areas

Dr. Mary Yaklovich, National Marine Fisheries Service, Southwest Fisheries Science Center

California Department of Fish and Game's Vision for Essential Fish Habitat Studies in California

Rob Collins or Eric Knaggs, California Department of Fish and Game

Carrying Capacity of Commercially Important Species Relative to Long-term Climate Trends

Dr. Richard J. Beamish, Pacific Biological Station, Nanaimo, British Columbia

Exotic Species: Management Issues Statewide

Coordinator: Larry Brown, US Geological Survey

1:30-1:50

Introduced Species in the Lower San Joaquin River from the National to Local Scales

Larry Brown, US Geological Survey

1:50-2:10

Fish and the Food Web in *Egeria Densa* in the Sacramento-San Joaquin Delta

Lenny Grimaldo, California Department of Water Resources

2:10-2:30

Centrarchids and Tule Perch in the Sacramento-San Joaquin Delta

Mike Chotkowski, US Bureau of Reclamation and Matt Nobriga, California Department of Water Resources

2:30-2:50

Mitten Crabs, Abundant One Minute, Rare the Next

Kathy Heib, California Department of Fish and Game

2:50-3:10

Break

3:10-3:30

Distribution Patterns of Introduced Fishes in San Francisco Estuary Streams Before and After El Nino

Rob Leidy, US Environmental Protection Agency

3:30-3:50

Arroyo Chubs and Exotic Species in the Santa Margarita River

Camm Swift, Robert Fisher, US Geological Survey, and Manna Warburton

3:50-4:10

Control of Exotic Vertebrate Species in Southern California: Impacts to and Management Considerations for Sensitive Native Amphibian and Reptile Species

Dan Holland, Camp Pendleton Amphibian and Reptile Survey, and Mark Jennings, Department of Herpetology, California Academy of Sciences

4:10-4:30

Large Scale River Channel Reconstruction to Eliminate Black Bass Habitat on the Tuolumne River

Darren Mierau, McBain & Trush

Contributed Papers: Marine and Freshwater Topics

Coordinator: Dan Logan, National Marine Fisheries Service

- 1:30-1:50** **Smoltification in Central Valley Chinook Salmon**
Jamie J. Alonzo and R. Bruce MacFarlane, National Marine Fisheries Service, Southwest Fisheries Science Center, Tiburon/Santa Cruz Laboratory
- 1:50-2:10** **Shellfish and Human Subsistence: The Archaeological Evidence of Predator-Prey Relationships**
Michael Kennedy, University of California, Davis, CA
- 2:10-2:30** **Archaeological Fish Remains from Bodega Bay, California: Exploitation Strategies Among Coastal Hunter-Gatherers**
Michael Kennedy and Brian McEneaney (presenter), University of California, Davis
- 2:30-2:50** **Assessment of Heavy Metal Contamination in Juvenile Chinook Salmon and Selected Fish-Forage Organisms in the Upper Sacramento River, California**
Barbara A. Martin and Michael K. Saiki, United States Geologic Service, and Larry D. Thompson and Daniel Welsh, US Fish and Wildlife Service
- 2:50-3:10** **Break**
- 3:10-3:30** **A Smolt Hormone Modifies Swimming and Muscle Performance in Juvenile Coho Salmon**
Shana M. Katzman and Joseph J. Cech, Jr., University of California, Davis
- 3:30-3:50** **Temperature Effects on Green Sturgeon Bioenergetics**
Ryan B. Mayfield and Joseph J. Cech, Jr., University of California, Davis
- 3:50-4:10** **A Functional View of Vegetation in the Behavior of Foraging Fish**
Michael Karagosian and Joseph J. Cech, Jr., University of California, Davis
- 4:10-4:30** **An Ecological Assessment of the Grassland Bypass Project on Fishes Inhabiting Surface Waters within the Grassland Water District and Adjacent Reaches of the San Joaquin River, California**
Michael K. Saiki, Barbara A. Martin and Thomas W. May, US Geological Survey, and Steven E. Schwarzbach, US Fish and Wildlife Service

Fish Passage Technologies and Fish Barrier Removal
Coordinators: Ted Frink, California Department of Water Resources and Darryl Hayes, CH2M Hill

Fish Passage Technologies

**What We Know about Fish Passage and
What the Fish Wish We Knew**

Ken Bates
Washington Department of Fish and Wildlife

**NMFS Policy for Fish Passage at Stream Crossings
with Case Examples**

Jon Mann
National Marine Fisheries Service, Santa Rosa

**Facilitating Fish Passage at Ultra-Low Head Dams:
An Alternative to Dam Removal**

Mufeed Odeh
U.S. Geological Survey, Turner Falls, MA

Fish Passage on the Lower Truckee River

Brent Mefford, Hydraulic Research Engineer
U.S. Bureau of Reclamation, Denver, CO

**Monitoring Fish Passage at Culverts
on Coastal Streams**

Margaret Lang Ph.D., P.E.
Humboldt State University, Arcata

**The San Lorenzo River Inflatable Dam Fish Passage:
Alternatives to Removal**

Woody Trihey
Trihey & Associates

**FishXing: Fish Passage Software
for Culvert Design and Assessment**

Mike Love
Michael Love & Associates Hydrologic Engineering

**Comparative Vulnerability of Delta Fishes to Fish
Screens**

Christina Swanson
Department of Wildlife, Fish and Conservation Biology
University of California, Davis

Fish Passage Technologies and Fish Barrier Removal
Coordinators: Ted Frink, California Department of Water Resources and Darryl Hayes, CH2M Hill

Fish Barrier Removal

**Anadromous Fish Restoration and Barrier Removal:
A New Approach**
Paul Ward
California Department of Fish and Game

**Butte Creek Fish Passage Restoration:
A Water District's Perspective**
Matt Colwell
WCWD

**Decommissioning and Site Restoration of Non-Federal
Hydroelectric Projects**
John Schnagl
FERC

**Overcoming Fish Passage Obstacles
on the Ventura River**
Mark Capelli
Environmental Studies Program,
University of California, Santa Barbara

**Rivers Reborn:
Restoring Rivers and Removing Dams in California**
Steve Evans
Friends of the River

**Fish Passage in an Urban Setting: Barrier Removal
in the Upper Guadalupe River, San Jose**
Kenn Reiller and Afshin Rouhani
Santa Clara Valley Water District

**The Removal of Edwards Dam, Kennebeck River:
The Changing of a Nation's Perspective**
Margaret Bowman
American Rivers

**Restoring Rivers Through Dam Removal and
Non-Traditional Passage Alternatives**
Laura Wildman, P.E.
Milone & McBroom, Inc., Cheshire, CT

Current Marine Research

Session Coordinators: Sandra Owen and Pete Haaker, California Department of Fish and Game

Aspects of the Ecology of White Abalone, *Haliotis sorenseni*

Daniel V. Richards, Channel Islands National Park

Review of the California Department of Fish and Game Shark Tagging Program, 1983–1999

Leeanne Laughlin, California Department of Fish and Game

Serial Depletion and the Collapse of the California Abalone Fishery

Konstantin A. Karpov, California Department of Fish and Game

Radiometric Age Determination of the Giant Grenadier (Family Macrouridae: *Albatrossia pectoralis*)

Using ^{210}Pb : ^{226}Ra Disequilibria In Otolith Cores

Erica Janis Burton, Moss Landing Marine Laboratories

Observations on Fishes Associated with the 1997–1998 El Niño off California

Robert N. Lea, California Department of Fish and Game

The Assemblage and Abundance of Fish in Four Southern California Embayments

Michael A. Shane, San Diego State University

Catch and Effort for Highly Migratory Species Taken by the Commercial Passenger Fishing Vessel Fleet

Deborah A. Aseltine-Neilson, California Department Fish and Game

Assimilation Efficiency, Gut Morphology and Ph, and Digestive Enzyme Activity of *Atherinops affinis* (Teleostei: Atherinopsidae), A Stomachless Omnivore Feeding on Macroalgae

Elaine Logothetis, California State Univeristy, Fullerton

Coastal-Bay-Estuarine Fish Ecology, Management and Restoration

Coordinator: Frederick Feyrer, California Department of Water Resources

**Examining the Relative Predation Risks of Juvenile Chinook Salmon
in Shallow Water Habitats of the Central Delta: The Effect of Submerged Aquatic Vegetation**

Chris Peregrin, Environmental Services Office, California Department of Water Resources

**Physiological Ecology of Juvenile Chinook Salmo
in the San Francisco Estuary and Gulf of the Farallones**

R. Bruce MacFarlane, National Marine Fisheries Service, Southwest Fisheries Science Center

**Vertical Migration and Retention of Native and Exotic Larval Fishes
within the Entrapment Zone of the San Francisco Estuary, 1994–1996**

William A. Bennett, John Muir Institute of the Environment & Bodega Marine Laboratory,
University of California, Davis

**Diet Shift in Response to Prey Scarcity: Observations from a Non-coevolved Fish Assemblage
in the Sacramento-San Joaquin Estuary**

Frederick Feyrer, Department of Biological Sciences, California State University, Sacramento

Break

The Nearshore Fish Assemblage of Catalina Island

Daniel Pondella, II, Moore Laboratory of Zoology, University of California, Los Angeles

Patterns of Settlement in a Temperate Reef Fish, *Paralabrax clathratus*

Amy McClean, California State University, Northridge

**Factors Influencing the Structure of an Estuarine Fish Community:
The Role of Interspecific Competition**

Andrew Brooks, University of California, Berkeley

**Tidal Influence on Spatial Dynamics of Leopard Sharks, *Triakis semifasciata*,
in Tomales Bay, California**

Matt Kondratieff, Department of Wildlife, Fish and Conservation Biology, University of California, Davis

Reconsidering Floods: A Foundation for Restoring River Ecosystems

Coordinators: Scott McBain, McBain & Trush, and Tim Ramirez, The Resources Agency

Theme: The Geomorphic Roles of Floods & Floodplains in River Ecosystems

8:30-8:50 **Linking Flood and Floodplain Dynamics to River Ecology and Fishery Biology**

Betty Andrews, Phil Williams & Associates

8:50-9:10 **Establishing a Channel Migration Corridor**

Eric Larsen, University of California, Davis

9:10-9:30 **1997 California Central Valley Floods: Lessons Learned?**

Jeff Mount, University of California, Davis

9:30-9:50 **Prescribing Floods in Mono Basin Tributaries for Restoration**

Bill Trush, McBain & Trush

Theme: The Ecological Roles of Floods and Floodplains in River Ecosystems

9:50-10:10 **Break**

10:10-10:30 **How Floods Support Food Webs**

Mary Power, University of California, Berkeley

10:30-10:50 **Managing Floods to Provide Floodplain Habitat for Delta Smelt**

Peter Moyle, University of California, Davis

10:50-11:10 **Flood Induced Channel Avulsion on the Sacramento River: Implications for Riparian
Vegetation and Yellow Billed Cuckoo Habitat**

Steve Grecco, University of California, Davis

11:10-11:30 **Fish Use of Newly Accessible Floodplains on the Consumnes River**

Ramona Swenson, The Nature Conservancy

11:30-11:50 **Discussion: The Future Role of Managed Floods in the Central Valley**

Scott McBain and Tim Ramirez

Nearshore Fishery Issues Entering the New Millennium

Coordinators: Carolyn Lundquist and Christopher Dewees, University of California, Davis

The PISCO Project and Nearshore Fisheries

Jenn Caselle, University of California, Santa Barbara (invited)

Rockfish and Oil Platforms

Donna Schreder, University of California, Santa Barbara (invited)

Population Genetics of Nearshore Rockfishes

Russ Vetter, National Marine Fisheries Service, La Jolla (invited)

Human Dimensions of the Squid Fishery

Carrie Pomeroy, University of California, Santa Cruz (invited)

Break

Collaborative Approaches to Fisheries Research and Management

A series of short presentations and a panel discussion including fishery participants and scientists

Moderator: Christopher Dewees, University of California, Davis

Steelhead Restoration Efforts

Coordinator: Dennis McEwan, California Department of Fish and Game

- 8:30-8:50** **Status and Restoration of San Mateo Creek Steelhead**
Alex Vejar, California Department of Fish and Game
- 8:50-9:10** **Matilija Dam Removal and Ventura River Steelhead Restoration**
Mark Capelli, California Coastal Commission
- 9:10-9:30** **Using Life-History Analysis and Mesohabitat Monitoring to Determine Habitat Restoration Criteria for Steelhead**
Rob Titus, California Department of Fish and Game
- 9:30-9:50** **Hatchery Influence on Pajaro River Steelhead Analyzed with Microsatellite DNA**
Ruth Sundermeyer, ENTRIX
- 9:50-10:10** **Break**
- 10:10-10:30** **Feather River Steelhead Studies: Turning Research into Effective Restoration Strategies**
Bradley Cavallo, California Department of Water Resources
- 10:30-10:50** **Restoring Southern California Steelhead: Dam, Why Care?**
Jim Edmonston, CalTrout
- 10:50-11:10** **Steelhead Restoration in the Santa Ynez River: Putting it in Action**
Laura Riege, ENTRIX
- 11:10-11:30** **Returning Steelhead to the Santa Clara River: Progress, Observations, and Future Plans**
Larry Wise, ENTRIX

Emerging Marine Technologies

Coordinator: Marty Gingras, California Department of Fish and Game

Aquamap: Applications for Advanced Underwater Navigation and Tracking
Andrew Goldstein, Desert Star Systems

Laser Measure and Point Locator: Cost-effective Tools for Getting Size Data from Underwater Video or Still Images
Daniel Davis, Ph.D., Senior Research Engineer, Monterey Bay Aquarium Research Institute

Deep Water Seabed Classification at Short Range Using an Autonomous Digital Echosounder
John Hedgepeth, BioSonics Incorporated

Mapping Shallow Subtidal Benthic Substrate in the Big Creek Ecological Reserve
James Downing, California Department of Fish and Game

An Application of the Use of Thematic Substrate Maps for the Estimation of Fish Abundance in Two Marine Ecological Reserves
Marty Gingras, California Department of Fish and Game

The Use of Data from a Moored CTD
Jerry Norton, NMFS, Pacific Fisheries Environmental Laboratory, Southwest Fisheries Science Center

REGISTRATION FORM

Name: _____
 Affiliation: _____
 Address: _____ City: _____ State: _____ Zip: _____
 Phone: _____ Fax: _____ E-mail: _____

**Symposium
 Thursday, March 30, 2000**

	Postmarked By March 15	Postmarked After March 15 or Day of Registration
Member *	\$ 50.00	\$ 75.00
Non-member	\$ 75.00	\$100.00
Student	\$ 10.00	\$ 15.00
Subtotal		\$ _____

**Annual Meeting
 Friday & Saturday, March 31 & April 1, 2000**

	Postmarked By March 15	Postmarked After March 15 or Day of Registration
Member *	\$ 100.00	\$ 125.00
Non-member	\$ 125.00	\$ 150.00
Student	\$ 10.00	\$ 15.00
Subtotal		\$ _____

**Annual Meeting
 Friday, March 31, 2000 Only**

Member *	\$ 75.00
Non-member	\$ 100.00
Student	\$ 10.00
Subtotal	\$ _____

**Seaside Social & Banquet
 Friday Evening, March 31, 6:30 p.m.**

Number of People _____ X \$35.00 =
Subtotal \$ _____

Annual Chapter Dues \$10.00 \$ _____
 (If not paid through National membership)

Total Amount Enclosed \$ _____

FORM OF PAYMENT

Make check or money order* payable to **Cal-Neva AFS**. All receipts, if requested, will be issued at the conference.

Send form and payment to:
Lauren Buffaloe
5525 Second Avenue
Sacramento, CA 95817-1611

Cash, checks, money orders, or purchase orders also will be accepted for day of registration.

* Credit card payments will be accepted in advance or for day-of registration. If you elect to pay by credit card please provide the following information.

Name of Card Holder
 (as it appears on the card):

Accepted Credit Card Types:
 ___ MC ___ Visa

Credit Card Number:

Expiration Date: _____

Amount: \$ _____

Signature:

* Member discounts for National AFS members only. Cancellation policy: 80% refund if notified by e-mail (to buffaloe@softcom.net) by March 20. After March 20, no refunds will be given.



National Conservation Training Center Training Announcements

Multivariate Statistical Analysis Techniques for Ecological Data Course # FIS 4101

Fish Stock Assessment Course # FIS 2203

Date: March 20–24, 2000
Location: Sacramento, California
Tuition: \$650 (no charge for USFWS staff)
CEU's: 2.4
College Credit: 2 semester hours

Date: June 12–16, 2000
Location: California Department of Fish and Game
Training Center (Sacramento, California)
Tuition: \$650 (no charge for USFWS staff)
CEU's: 3.6

Closing date for applications is March 8, 2000

Closing date for applications is April 15, 2000

Course Description:

This course covers a variety of descriptive and inferential multivariate statistical methods that are useful for analyzing biological data. Topics include the following:

- An introduction to matrix algebra, eigenvalues, and eigenvectors, multivariate normality.
- Techniques for displaying relationships and position (principal components analysis, factor analysis, biplot displays, correspondence analysis, multidimensional scaling, and cluster analysis).
- Techniques for group separation (MANOVA, canonical variate analysis, discriminant analysis, logistic regression).
- Techniques for determining relationships between sets of variables (canonical correlation analysis and canonical correspondence analysis).
- Analysis of repeated measures.

Participants will use computers to analyze ecological data using the various multivariate procedures covered by the instructor.

Course Objectives:

After completion of this course the student will be able to do the following:

- 1) Understand various mathematical approaches for describing mortality rates in fish populations.
- 2) Select appropriate methods for estimating annual mortality and fishing mortality.
- 3) Reconstruct the cohort dynamics (numbers and fishing mortality) from historical harvest at age data.
- 4) Fit appropriate growth or stock-recruitment models to fisheries data and evaluate the adequacy of the model.
- 5) Quantitatively compare the efficacy of different fishing regulations for improving management objectives.
- 6) Explicitly consider the influence of uncertainty on management decisions.
- 7) Understand the necessary, quantitative elements that are part of routine fish stock assessments.
- 8) Integrate basic growth, mortality, and recruitment models into usable models for fish stock assessment.

**For more information contact Dr. Alan Temple
phone: (304) 876-7440, fax: (304) 876-7225, e-mail: Alan_Temple@fws.gov**

1999-2000 Cal-Neva Chapter Executive Committee

Chapter Officers

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Past President	Pat Coulston	pcoulsto@dfg.ca.gov	(831) 649-2882
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Secretary	Scott Wilcox	sdw@eaest.com	(916) 924-7450

Committee Chairs

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