



PISCES

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PRESIDENT'S MESSAGE

JOINT 2003 WDAFS/37TH CAL-NEVA ANNUAL MEETING A HUGE SUCCESS!

Chuck Knutson, President

I want to congratulate the many Cal-Neva Chapter members and volunteers who went the extra mile to pull off a truly great meeting in San Diego! Many of us on the planning committee were a little nervous when we were faced with many agencies undergoing budget cuts due to a slow economy, preventing many people from attending the meeting who normally would have come. In addition, the budget for this meeting came out at \$165,000, not what I would call a small chunk of change, but fairly reasonable for San Diego, which is considered a high cost area. We haven't added up all of the dollar figures yet, but it looks like our Chapter will come out about even, and the Western Division AFS will come out ahead about \$15,000. Any profits above \$15,000 will go to the Cal-Neva Chapter, if there are any.

Regardless of how the revenues fall out, the most important result is that feedback from many attendees was very positive on all aspects of the meeting. One fisheries professor even told me it was the best organized fisheries conference she had ever attended, and she had attended many. So all of you can give yourself a well-deserved pat on the back! Also, congratulations to all Chapter members for our winning of the WDAFS Chapter of the Year Award! We have submitted our application for the North American Chapter of the Year Award and will have to wait and see what happens with that.

Here are a few items of interest about the meeting. We had 264 AFS members and 89 non-members fully



Chuck Knutson addresses the WDAFS business luncheon at the Annual Meeting.

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***Pisces* has gone electronic!**

If you would like to receive a hard copy in the mail, contact the Editor, Chris Wilkinson, at (916) 227-4504 or cdw@water.ca.gov.

registered. In addition, we registered 12 Mexican Professionals, 2 retired AFSers, 57 students, 46 daily attendees, 28 volunteers, 18 commercial exhibitors, and 25 guests. The California Estuarine Research Federation Inaugural Annual Meeting attracted 47 professionals and 19 students. We also had 65 participate in the Grunion 5K Run, 60 attend the 4 continuing education classes, and 28 sign up for the Scripps Aquarium Social only.

As a CDFG employee, I was very worried about reduced attendance from that agency, which normally attends Cal-Neva meetings in very high numbers. Severe budget cuts to CDFG had been announced and some implemented prior to the meeting. However, 59 from CDFG still managed to attend, followed by 52-NOAA-Fisheries, 37-USFS, 31-USFWS, 23-UC Davis, 20-USGS, 14-CDWR, 12-Entrix, Inc., 10-Arizona Game and Fish, 10-UCLA, 8-San Diego State, 8-USBR, 5-Bodega Marine Lab, 5-S.Calif. Coastal Water Research Project, 5-Univ. of San Diego, 5-Parent AFS, 4-Sonoma Co. Water Agency, 4-EBMUD, 4-NW Marine Technology, 4-BC Dept. of Fisheries and Oceans, and 4-Hubbs Sea World Research Institute. In addition, 14 entities sent 3 registrants, 29 sent 2 registrants, and 96 sent 1 registrant each. The wide diversity of meeting attendees was amazing! Thank you all for attending and making this meeting a success!



Leafy seadragon in the Birch Aquarium at Scripps Oceanographic Institution
(Send native fish photos to the Editor!)

Planning for the 2004 Joint Annual Meeting in Redding with the Humboldt Chapter has already begun. For this meeting, Jim Steele will be the incoming Chapter President in mid-August, Tina Swanson is the Program Chair and Tricia Parker is the Local Arrangements Chair, so contact them to help out! I have recently learned how important fundraising is to having financial success at annual meetings, so please contact any of the Chapter officers if you have ideas about possible contributors. It's not too hard to ask people for money if it's for a good cause, and our Chapter certainly qualifies as a good cause! I am personally very excited about the possibility of a Mexican AFS Chapter being formed. I will be working with the Eric Knudsen of the WDAFS and Lourdes Rugge of the Cal-Neva Chapter to help make this happen. If things go well, the WDAS may hold its annual meeting in Mazatlan, Mexico in 2007, with the Mexican Chapter handling the local arrangements. Mexico is planning to hold its chapter formation meeting in La Paz, Baja California, in 2005. If anyone wants to help out on this effort, please let me know! Also, the 4th World Fisheries Congress will be held in Vancouver, British Columbia, on May 2-6, 2004. I guess you can tell that I'm starting to think globally. You can, too!

Mexican Chapter of American Fisheries Society Being Formed!

Lourdes Rugge, Chair

Cal-Neva Chapter Mexican Fisheries Relations Committee

As a result of a roundtable discussion at the 2003 Annual Meeting of the Western Division of the American Fisheries Society, an exciting opportunity to support and partner with our counterparts in Mexico through the creation of a Mexico AFS Chapter was identified.

Eric Knudsen, WDAFS Past President, is spearheading the formation of a Mexican AFS Chapter with Mexican fishery representatives. Chuck Knutson, Cal-Neva Chapter President, and Lourdes Rugge, Chapter member, attended the discussion and both saw the need to create a Cal-Neva Chapter ad hoc committee that will help facilitate this goal, as well as catapult a growing partnership between Mexican, Canadian and U.S. fisheries scientists, advocates, educators, and managers alike.

The overall goal is to create a unique trilateral partnership where those interested in Mexican fisheries can come together to exchange ideas and approaches to fisheries research and management, discuss current conditions of Mexican freshwater and saltwater fisheries, and collaborate on future action plans. The Mexico AFS Chapter can be designed to bridge political, cultural, and geographic barriers to enable discussion and reflection on environmental issues of common concern. Since California is a state that shares a common border and associated fisheries with Mexico, it became apparent that our Chapter should form a Mexican Relations Fisheries Committee to work with the Western Division AFS and Mexico to help make the Mexico Chapter a reality by the year 2005 in La Paz, Baja California.

The committee's preliminary goals for this year are to:

- 1) identify and define the challenges, obstacles, and opportunities for establishing this innovative partnership;
- 2) bring together fisheries professionals from all three nations who are interested in sharing experiences, scientific knowledge and management strategies, as well as networking and acquiring new skills; and
- 3) create a source where one can find information and opportunities for exchange and partnership building, which will strengthen the capabilities of all three countries to improve fisheries resource protection in areas of common concern.

This committee is calling on the Chapter membership to become involved not only in the environmental issues that affect Mexican fisheries, but also the processes and strategies that will permit us to effectively influence the creation of better fisheries management in the USA, Canada, and Mexico.

Chapter Presents Nine Awards

Pat Coulston, Awards Committee Chair

Members of the California-Nevada Chapter have the pleasure of working with some of the finest professionals and dedicated conservationists in the nation. One of the most important functions of our Chapter is acknowledging the professional accomplishments of our fisheries colleagues and the fisheries conservation efforts of members and others. At this year's annual meeting held in San Diego, the Chapter presented awards to nine deserving individuals.



Mike Meinz (left) receives his Special Contribution Award from Pat Coulston at the Cal-Neva business meeting in San Diego.

Special Contribution Awards were presented to five members, **Mike Meinz**, **Kathy Hieb**, **Dave Manning**, **Sharon Shiba**, and **Fred Feyrer**, for their involvement in Chapter leadership. Mike received an award for his multi-faceted and continuous 20-year service to the Chapter, including service as Pisces Editor, President, and Secretary. Kathy was honored for her lengthy and effective tenure as Continuing Education Committee Chair, during which she has provided many great educational opportunities for biologists and substantial income for the Chapter. Dave was recognized for leading the arrangement efforts for the Chapter's last three annual meetings, which have been among our highest quality and best attended meetings. Sharon Shiba was acknowledged for her productive years of organizing the sale of Chapter merchandise at meetings and special events, which has provided the Chapter with a steady income and great outreach. Fred was honored for his very effective leadership as Membership Committee Chair, establishing our e-mail "ListServe" and producing a wonderful Chapter brochure. Finally, non-member **Jim White** was acknowledged for his generous contribution of time and expertise in helping the Chapter prepare a comment letter regarding the fisheries impacts of Central Valley water management.

The Chapter presented its Conservation Achievement Award, which is given to recognize the outstanding contributions or service of non-member individuals to fisheries conservation, to **John Merz**. John has long been Executive Director of the Sacramento River Preservation Trust. He and his organization are recognized leaders and active, persistent participants in environmental restoration and related education in the northern Central Valley. Of particular merit in the Chapter's view is their promotion of the use of good scientific information in river management and restoration.

The Chapter's Distinguished Professional Achievement Award is presented for outstanding education, conservation, and scientific contributions by member professionals. Two individuals were granted this award in 2003. **Dr. Tina Swanson** of UC Davis and the Bay Institute received the award for her wide participation and voluminous and technically sound contributions to important ongoing Bay-Delta restoration and protection processes, including the EWA (Environmental Water Account) and the CALFED Operations Group. The Chapter also honored the career achievements of **Dr. Don C. Erman**, an accomplished fisheries scientist and UC Professor Emeritus. Although "retired" Dr. Erman is still very active in fisheries science and conservation. He serves on science panels for CALFED and the Tahoe Conservancy, regularly reviews journal papers, and often comments on environmental documents in his areas of interest.

A list of all current and past Chapter award recipients can be found on the Chapter website.



Tina Swanson received one of two Distinguished Achievement Awards from the Chapter. Don Erman received the other.

Conservation Committee Report

Delivered at AFS Cal-Neva Chapter Annual Business Meeting in San Diego, April 2003

Ted Frink, Conservation Committee Chair

- ***Delta B(2) Water letter of comment***

The Chapter provided a letter to the US Bureau of Reclamation after reviewing proposed changes to the CVPIA section 3406 b(2) on Environmental Water contributed by the Central Valley Project for the protection of fisheries. Proposed changes were viewed by the Chapter as backing away from commitments to protecting aquatic resources related to availability of a full 800,000 ac/ft. The letter identified other proposed actions that the Chapter supported: 1) Target contribution of 200,000 ac/ft of water in October-January to support anadromous migration, spawning and rearing, and 2) full use of modified operation of CVP facilities to allow flexibility in meeting aquatic resources protection.

- ***Review of RBDD DEIR/S Alternatives comment letter***

A comment letter was sent to Mr. Art Bullock of the Tehama-Colusa Canal Authority supporting Alternative 3 the Full Gates Out alternative described in the DEIR/S. In the Chapter's opinion Alternative 3 had the most benefits to recovery of listed species fishes. The Alternative would require full build-out of a new pumping plant at the head of the TCCA Canal. The impacts of the full pumping plant would be offset by required fish screens and operations restrictions.

- ***Letter of comment on Paiute Cutthroat Trout***

The Chapter sent a letter of comment to the District Ranger of the Humboldt-Toiyabe National Forest on the proposed approach to the rotenone treatment to remove introduced trout in the historic range of the PCT. A follow-up letter of support for the proposed rotenone treatment was drafted and sent to DFG Regional Manager for the project.

- ***Following Nevada Bull Trout habitat protection and road reconstruction in Jarbidge Wilderness, Elko, Nevada***

There was a hearing held by House Resources Committee in July '02 on the issues and resolution of habitat destruction of Bull Trout and impacts to designated Wilderness area regarding propose rebuilding of a road that had washed out along the West Fork Jarbidge River. A Draft EIS was received for comments which are due June 23, 2003. A decision to comment on the alternatives of the DEIS is pending as of this writing.

- ***Following petition to list Golden Trout as endangered***

We are looking for volunteers to follow and report on the proposed listing of golden trout. Anyone familiar with this proposal is welcome to call the Conservation Chair and be a subcommittee lead.

- ***Southern California Steelhead Coalition***

Camm Swift has been attending the SCSC to monitor and report on activities to the ExComm.

Subcommittees established:

- ***Lamprey subcommittee - state of the knowledge***

Chair: Shawn Chase; members: Larry Brown, Peter Moyle

Any other volunteers are welcome to assist in this effort to assess the state of the knowledge of Lamprey spp. within California. The group is going to summarize all information available on populations, absence/presence of lamprey within the state. This is in response to a proposed listing of the species on the west coast.

2004 Plans

- Coordination with Urban Creeks Council - public outreach and education
- ESA issues - Paiute & Golden Trout, Delta Smelt, Lamprey, splittail
- Legislative review of bills concerning fisheries issues
- Lamprey subcommittee report on state of the knowledge in California

The Western Division AFS and the California Resources Agency Criticize the Federal Government's Management of the Klamath River

Two recent letters to Secretary of the Interior Gale Norton, one from Western Division AFS President Don MacDonald and the other from California Resources Secretary Mary Nichols, criticize federal water management in the Klamath River Basin.

The **WDAFS** letter, dated May 13, states that “the WDAFS strongly believes that it is time to adopt a different management strategy on the Klamath River Basin. Instead of those who depend on fisheries resources for their living having to ‘prove’ that instream flows are necessary to protect downstream fisheries resources, there needs to be a shift toward adoption of a precautionary principle of proving that large-scale water withdrawals are not harming terrestrial and aquatic ecosystems.”

The letter, which can read in its entirety at <http://www.afs-calneva.org>, also outlines the following concerns:

1. The September 2002 fish kill, that resulted in the loss of over 34,000 fish, mostly fall Chinook but including 344 federally listed adult coho salmon. Although low water conditions due to drought, and large numbers of adult returns were important, we believe water management decisions by the federal government were an important contributing cause to this fish kill. These decisions were scientifically flawed because they were based on the adoption of a single-species management approach (i.e., for coho salmon).
2. That there is a lack of essential habitat modeling to help inform federal water managers. In the case of species that are extremely rare in the Klamath River, like coho salmon, suitable habitat and habitat modeling are extremely important for species recovery.
3. That there are deficiencies in the U.S. Bureau of Reclamation's (USBR) 10-year Biological Assessment (BA) and resulting Biological Opinion (BO) that govern Klamath Project Operations with respect to compliance with the Federal Endangered Species Act (ESA).
4. That the completion of the Hardy Phase II report has been delayed. We urge the timely completion of this report, as it may substantially aid federal agencies in developing a more ecosystem based, multi-species flow management regimen for the Klamath River.
5. That the scientific standards and associated burden of proof used by the National Academy of Sciences/National Research Council (NAS/NRC) group investigating the Klamath appear to us to be incompatible in philosophy and intent with the ESA. In particular, we view that under law and current policy federal water managers should be using a precautionary approach to water management that is designed to reduce risk to endangered species given the absence of complete data and the resulting scientific uncertainty in how best to manage flows in the Klamath.
6. That the approach taken by the NAS/NRC does not adequately consider the healthy river approach advocated by many scientists and scientific organizations. This view recognizes that the best approach for protecting instream uses is adherence to the natural hydrograph because it protects target species, prey species, spawning behavior, and more importantly the geomorphology necessary to support a healthy riverine ecosystem. We understand that water rights and federal agency obligations constrain the ability to fully achieve natural hydrographs on the Klamath, but believe that maximum practicable achievement of this goal should be a central consideration by NAS/NRC.
7. That, to more fully understand the effects of current water management, a detailed economic study of the impacts of

water diversions on recreational, commercial, and tribal fisheries, and associated cultural resources and support industries, is needed. Currently, such a comprehensive study is lacking. Even though the NAS/NRC report will focus on coho, we believe that a final assessment should include a comprehensive evaluation of the impacts on all Klamath River fisheries.

8. That the NAS/NRC should not complete its final report until it is able to review and consider three critical reports that are currently being prepared.

a) U.S. Fish and Wildlife Service (USFWS) report on “Estimate of Mortality”. We understand that this report should be finished in the near future.

b) USFWS final report on the “cause of the fish kill”. We understand that this report should be finished in the near future.

c) California Department of Fish and Game (CDFG) final fish kill assessment report. The CDFG is currently drafting a final report on the fish kill. We believe that an NAS/NRC review that is released without first reviewing the information within these critical reports would represent an incomplete evaluation of the most recent pertinent science. This, in turn, increases the risk that the NAS/NRC will be scientifically “obsolete” soon after it is published. In addition, federal water managers should have the benefit of NAS/NRC review and consideration of these reports, rather than having to consider them in isolation from the rest of NAS/NRC’s work.

9. That the various Tribal Fisheries programs within the Klamath Basin have extensive experience and information relevant in the NAS/NRC review. We therefore strongly encourage the NAS/NRC, in their review and analysis, to aggressively seek out and include all applicable published and unpublished data and reports produced by the various Tribal Fisheries programs and other science-based organizations within the Klamath Basin.

In her May 19 letter, the second she has written to Interior Secretary Norton, **Secretary Nichols** states that “In light of the loss of over 30,000 salmon last year on the Klamath River, I strongly urge the U.S. Bureau of Reclamation (USBR) to revisit their approach to operations of the Klamath River Project. Unfortunately, the 2003 Klamath Project Operations Plan - released on 10 April - does not reflect any change in the 10-year plan and flow schedules put in place.... California strongly feels that the current flow schedule is inadequate to protect the Klamath River’s Coho and Chinook salmon and steelhead trout.” Secretary Nichols’ complete letter can be read at <http://www.pcffa.org>.

Got Lamprey?

Larry Brown, Past-President

As some of you are already aware, the U.S. Fish and Wildlife Service was petitioned in January of this year under the federal Endangered Species Act, to list four species of lamprey as threatened or endangered. The petition was filed by a coalition of 11 conservation organizations in California, Oregon, and Washington. The eleven petitioning conservation organizations are: Klamath-Siskiyou Wildlands Center, Siskiyou Regional, Education Project, Umpqua Watersheds, Friends of the Eel, Environmental Protection Information Center, Native Fish Society, Center for Biological Diversity, Northcoast Environmental Center, Umpqua Valley Audubon Society, Washington Trout, and Oregon Natural Resources Council. The petition and accompanying press release can be viewed at: <http://www.onrc.org/info/lamprey/>

The species proposed for listing are all found in California and are Pacific lamprey *Lampetra tridentata*, river lamprey *Lampetra ayersi*, western brook lamprey *Lampetra richardsoni*, and Kern brook lamprey *Lampetra hubbsi*. The Kern brook lamprey is a California endemic and has only been collected from rivers of the San Joaquin Valley from the Merced River and south.

A review of the petition clearly demonstrates the lack of hard numbers for the assessment of the status of populations of each species in many of the drainages where they are found. Some data exists for Pacific lamprey but the information for the other species is extremely limited and is mostly limited to isolated collections by individual researchers. Some of these records are decades old.

In an effort to gather additional information on lamprey populations, Shawn Chase, incoming Cal-Neva Chapter Treasurer has volunteered to head a committee of interested individuals with the charge to obtain additional information on lamprey. The committee includes individuals from all 3 states. Within California, Larry Brown (U.S. Geological Survey, lrbrown@usgs.gov) and Peter Moyle (University of California Davis, pumoyle@ucdavis.edu) have volunteered to help Shawn (shawnc@scwa.ca.gov). Our goal in California is to do the following:

1. Gather and compile contemporary information on the distribution and abundance of lamprey in California streams.
2. Analyze the data and produce an article comparable to an article produced for coho salmon from similar data:

Brown, L.R., P.B. Moyle, and R.M. Yoshiyama. 1994. Status of coho salmon (*Oncorhynchus kisutch*) in California. *North American Journal of Fisheries Management* 14:237-261.

3. Obtain funding for a student to conduct tasks 1 and 2.

We would like to begin compiling lamprey observations immediately. **If you have observed lamprey in a stream where you work please inform one of us.** We will accept all observations but observations where the lamprey have been identified to species are especially valuable. Quantitative information is more valuable still, but for most streams we do not even have presence/absence data, so simple observations can be valuable. If possible, include size, location, and date.

The keys in P. B. Moyle's new (2002) *Inland Fishes of California* can help you to identify lampreys, but any adult lamprey over 300 mm TL is almost certainly a Pacific lamprey. If you would like a lamprey identified for you contact Peter Moyle (pumoyle@ucdavis.edu) or Larry Brown.

Notes from the Field

Editor's Note:

The first installment of "Notes from the Field," a new column for contributions from the Cal-Neva Membership, is an article about the life and legacy of David Starr Jordan, written by Marty Brittan, Professor Emeritus at CSU Sacramento. Marty's article is a fitting way to begin the column because it will be of broad interest to the chapter membership and will help connect many of us with our ichthyologic roots. However, a wide variety of subjects would be of interest to the membership, so we hope Cal-Neva members throughout California and Nevada will use this column to share their opinions, stories, and experiences with the Chapter. We want to hear from you!

Guidelines: Contributions for "Notes from the Field" should be submitted to Chris Wilkinson, *Pisces* Editor (cdw@water.ca.gov), in the body of an email or as an attachment in MS Word, Word Perfect, or Portable Document Format (PDF). There is no length limit to contributions, but files should be 2MB or smaller.

Submissions for the next issue of *Pisces* are due by August 1, 2003.

David Starr Jordan (1851-1930): A Pioneer In Ichthyology, Fisheries Biology, and Collection Building

Martin R. Brittan, Professor of Biological Sciences, Emeritus, California State University, Sacramento, CA. E-mail: brittanm@saclink.csus.edu

David Starr Jordan is remembered as the best known American ichthyologist of his day, as one who was world-famous in that field, as one who produced superior students who became superior colleagues, as one who, with these students and colleagues laid much of the foundation of modern ichthyology and fisheries biology, and as the first president of Stanford University.

Jordan was born in 1851, on a farm in upper New York State. He entered Cornell in 1868 at the age of 17, graduating 4 years later with both a B.A. and M.A. His best friend was Herbert Copeland, who, had he not drowned, might have become Jordan's best collaborator and coauthor.

Between 1872 and 1891, Jordan taught a year at Lombard College, spent two years as a high school-level teacher in Indianapolis, two years as professor of natural history at Butler University, and in 1878 became department



Jordan at age 75

head at Indiana University, and served as president from 1885 to 1891, when he accepted the presidency at Senator Leland Stanford's new university in Palo Alto, California.

Jordan's prize student from the high school was Charles Henry Gilbert, who later was considered to be the father of modern fisheries biology. His superior students at Butler and Indiana included Barton Warren Evermann, Charles Bollman, Karl Eigenmann, Oliver Peeble Jenkins, Seth Meek, and Joseph Swain. Gilbert and Jenkins were to go to Stanford with him, Eigenmann was to stay at Indiana and become the greatest collector of, and publisher on, South American freshwater fishes, and Meek went to the Chicago Museum of Natural history, to become an authority of U.S. and Mexican freshwater fishes.

While teaching high school, Jordan and Copeland participated in two summer courses on Penikese Island, Maine, held by the great Louis Agassiz and his son Alexander, who became the "father of American oceanography." One of

his young professors from Cornell was there, Burt Green Wilder, who forms the link between Agassiz and latter Cornell zoologists, specifically Edward Raney, who taught post-WW2, and his many modern students. Jordan regarded his first summer at Penikese with Louis Agassiz, who died the next year, as the most formative of his life. On his way home he visited Washington, D.C., to study fishes at the Smithsonian; he met Spencer F. Baird and George Brown Goode of the Fish Commission, men who were later to ask Jordan and his students and colleagues to make so many pioneer research expeditions.

From his student days, Jordan organized collecting trips, one a memorable and productive “travelling school” through the South. In 1878-9, he and Gilbert were sent by Goode on a collecting trip from San Diego. This was a key trip in delineating the fish fauna of the Pacific Coast, and began Gilbert’s and Jordan’s key involvement with the fishes of the Puget Sound region, its fishes and its fisheries. Gilbert is regarded as the father of salmon biology. Between them, with the support of Baird and/or Goode, one or the other of them collected in the western U.S., Mexico and Panama, and in the Gulf of Mexico. In 1888, Gilbert, with Jordan’s support (he considered Gilbert his best student and colleague), and financed by Goode, began the first of his 7 trips on the Fish Commission steamer Albatross.

In 1891, Jordan took Gilbert and Jenkins with him to Stanford, Jenkins as Professor of Physiology and Gilbert as Professor, and, subsequently, Chairman of the Zoology Department. Two of the early students were John Otterbein Snyder and Edwin Chapin Starks, who became prominent as collectors of and publishers on the fishes of the Pacific Coast, Alaska, Mexico and South America, California, and the West. Gilbert and Jenkins collected heavily in Hawaii, and described dozens of new species. As time went by, the “Stanford School of Ichthyology” spun off students who themselves started other satellite schools, some surviving longer than Stanford’s and turning out as many (or more) students. One of them was that of Carl L. Hubbs at Michigan; he and his students Karl Lagler, Robert R. Miller, and Reeve Bailey (to mention just a few), are the source of many of many ichthyology and fisheries programs today. When Hubbs went to Scripps, the same thing happened again. Two Stanford students, Willis Rich, and William Thompson have had a great effect on Pacific Coast fisheries, following Gilbert and Starks, and on the early University of Washington programs. This is one of the key things in Jordan’s educational and scientific programs: the spreading of men and knowledge into new positions, where they themselves started new programs and departments.

The Smithsonian, Indiana, Stanford, the American Museum of Natural History, the California Academy of Sciences, where Evermann eventually ended up, and other institutions, freely exchanged duplicates.

Jordan died in 1931, at age 80, and Gilbert in 1928, Eigenmann in 1927, and Starks and Evermann in 1932, marking the end of an era. In 1926, George S. Myers came as a student to Stanford, sent out by Eigenmann. He got his Master’s degree under Snyder, who retired and went to the California Department of Fish and Game, and his Ph.D. under Willis Rich. He subsequently became professor at Stanford, and produced about 50 advanced degree students before his retirement in 1970, producing papers for several years, and dying in 1985. Carl Hubbs had died in 1975, working almost to the end.

Shortly before retirement, Myers had the Stanford collection of 70,000 lots (including about 8,000 lots from the Indiana collection) and the George Vanderbilt Foundation collection of 45,000 lots (which had been turned over to Stanford) sent up to the California Academy of Sciences in San Francisco, to join the 34,000 specimens of the CAS collections, making nearly 150,000 lots, about two million specimens, making this one of the largest and most widely representative collections in the world. Since the Smithsonian, Michigan, Tulane, Chicago MNH (Field

Museum), AMNH, Harvard, Cornell, UCLA, Scripps, and most other, collections all have a connection with Jordan and his primary or derivative students or proteges, the influence of Jordan has been pervasive.

Jordan's Manual of the Vertebrate Animals of the Northern United States, his Guide to the Study of Fishes, his Genera of Fishes and Classification of Fishes, the monumental 4-volume Fishes of North and Middle America by Jordan and Evermann, Jordan and Evermann's American Food and Game Fishes, the "Fur Seal Reports", and Jordan, Evermann, and Clark's Checklist of the Fishes and Fishlike Vertebrates of North and Middle America, covering a period from 1876 to 1930, just to mention a few of the more prominent ones, have proven the basis of the more recent faunal and systematic works, culminating in the modern handbooks. Jordan was a constant researcher and publisher, even while guiding Stanford through perilous financial and organizational times to become one of the most prestigious universities in America.

Jordan had nearly 3,000 publications, nearly 650 on ichthyology and fishery biology, and about 275 on other scientific subjects. His immediate students and proteges (such as Gilbert, Evermann, Eigenmann, Meek, Snyder, Starks, Hubbs, Herre, Myers, and Seale), had (I estimate) between 3,000 and 4,000 publications, mostly on fishes. Jordan had an eye for talent, and attracted superb students; he was like a stone thrown in the water: his students and proteges generated more of the same, going to new positions, and developing new centers of education and research. He literally "knew everybody who was anybody" in American and international ichthyology and fisheries biology, and indeed in American science in general. As a measure of his great versatility, he was much respected as an international peace activist before the Spanish American War and World War One.

Jordan's autobiography, *Days of a Man*, published eight years before his death, is a wonderful source of information, until recently almost forgotten. A more recent source (1995) is *Collection Building in Ichthyology and Herpetology*, edited by Theodore W. Pietsch and William D. Anderson, Jr., with especially pertinent articles relating to Jordan and his ichthyological and fisheries biology descendants by Brittan, Pietsch, J. Richard Dunn, Mark Jennings, A. W. Herre, Robert Rush Miller and Elizabeth N. Shor, W. F. Smith-Vaniz and R. M. Peck, and Eugenia B. Bohlke. The extremely large and complete bibliographies are particularly useful.

Virtually every American ichthyologist, and perhaps the majority of fisheries biologists, and many foreign ones who studied in the U.S. (or under one who did), can trace their educational ancestry back to Jordan, and through him to Louis Agassiz and Baron Cuvier. Try it. Drop me a line—I'd like to know your connections!

News Releases and Announcements

Department of Fish and Game Busts 10 in Tri-State Sturgeon Poaching Investigation Called Delta Beluga

May 9, 2003

Contacts: Steve Martarano, DFG Information Officer; (916) 804-1714 Patrick Foy, DFG Information Officer (916) 825-7120; Sgt. Walt Markee, Oregon State Police, (503) 378-3387, ext. 255

SACRAMENTO - A two-year joint federal and state investigation into a network of sturgeon poachers culminated with 10 arrests early Friday in the Sacramento area, the Department of Fish and Game (DFG) has announced. Three search warrants were served in Sacramento, and a state search warrant also was served in Oregon, officials said. Additional suspects may be arrested today pending the ongoing investigation.

Since March 2002, the DFG, U.S. Fish and Wildlife Service, the Oregon State Police's Fish and Wildlife Division, and the Washington Department of Fish and Wildlife, have cooperated in a multi-jurisdictional covert investigation to identify and apprehend persons involved in the unlawful taking, possessing, transporting, and/or selling of sturgeon, or sturgeon parts, including caviar, in the states of Oregon, Washington, and California. Sturgeon is mostly poached for the caviar, called "roe" which is only found in females and sells for up to several hundred dollars per pound on the black market. Included in the arrests were the mother and son team of Yuriy, 27, and Tamara, 51, Bugriyev, both of Fair Oaks. The pair had been under investigation by the DFG since January 2001 after they reportedly had solicited people to help sell sport caught sturgeon. They were observed purchasing and selling sturgeon almost a dozen times during the next two years, and were both taken to Sacramento County Jail early Friday morning.

"This was the largest operation we've ever conducted involving sturgeon," said DFG Assistant Chief Fred Cole, who added that 18 teams consisting of 43 DFG wardens and three USFW agents were involved in the California portion of the operation dubbed Delta Beluga. "This operation was very important because sturgeon is a species severely impacted by poaching. Because female sturgeon spawn only every four years, poaching targeting female sturgeon can have disastrous effects on the sturgeon populations."

Charges filed ranged from illegal possession of sturgeon to illegal sales. A suspect convicted of felony conspiracy to illegally take sturgeon is subject to a maximum fine of \$15,000 fine and three years in state prison, Cole said. Each non-felony charge is subject to up to \$15,000 fine and a year in county jail. That is in addition to loss of fishing privileges for life.

"The DFG has zero tolerance for the illegal commercialization of fish and wildlife resources," Cole said.

White sturgeon (*Acipenser transmontanus*) is a fish species indigenous to the Sacramento River in California, and the Columbia River in Washington. The Kootenai population of white sturgeon in Idaho and Montana is federally listed as endangered. However, other white sturgeon populations in the Sacramento and Columbia rivers are not federally protected. California does not allow for the commercial catch or sale of white sturgeon. Currently, fish can only be legally taken for sport between the sizes of 46 to 72 inches in length. In Oregon and Washington, commercial take of white sturgeon is allowed in the Columbia River during an open season with various size, gear and license restrictions. All three states prohibit the sale of sport-caught sturgeon, and the roe from sport-caught sturgeon.

White sturgeon is one of the most spectacular native species in the state. They live a long time - approximately 50 years or more - and grow to a size of 400 to 500 pounds and larger. Populations were severely depleted by unrestricted commercial fishing in the last two decades of the 1800s in both the Columbia and the Sacramento-San Joaquin systems and as a result, California imposed a total closure of the sturgeon fishery from 1916 until 1955. Since that time, sturgeon can only be taken through sport fishing regulated by a closely managed slot limit, which is currently one take/possession per day.

Sturgeon populations vary through time and are affected by drought conditions, long-term exposure to chemical contaminants, collisions with boat and ship propellers, and other causes. Populations peaked in the mid 1960s, the mid 1980s and the late 1990s. In 1997 the white sturgeon population was estimated at 147,000, probably the highest population since before 1900. The present population is estimated at 70,000 with a present annual harvest rate of 5 percent.

“There are a lot of factors involved, but probably the best reason for the present down cycle is weather and water use practices,” said Dr. Perry Herrgesell, Chief of DFG’s Central Valley Bay-Delta Branch. “The numbers do tend to fluctuate, but the recent dry years probably have had a big impact.”

This investigation is the direct result of legitimate anglers giving their local wardens and the CalTIP program information about poachers who were blatantly disregarding the regulations imposed to protect the resources, said Cole. By contacting the 1-888-DFG-CALTIP number to report poachers and polluters, callers can remain anonymous and may be eligible for a cash reward.

Five People Arrested for Illegally Trading in American Caviar from Fish in Southeast Waters

Contact: Jim Rothschild, (678) 296-6272

Jackson, TN — On April 16, 2003, five individuals from Russia and other Eastern block nations were arrested in New York and Los Angeles on an 8-count indictment handed down by a Federal grand jury in Jackson, Tennessee for illegally trading in caviar derived from paddlefish and domestic sturgeon unlawfully taken and sold from U.S. lakes and rivers in Tennessee and Kentucky. The arrests resulted from a 2-year undercover investigation conducted by special agents of the [U.S. Fish and Wildlife Service](#) and State wildlife officers from the [Tennessee Wildlife Resources Agency](#).

Valeri and Gennady Akselrud, owners of D & G Trading Company of Staten Island, New York, Arkady Voloshin, owner of Kashtan Wholesale Groceries/Kashtan Russian Cuisine of West Hollywood, California, and Marc and Irina Akselrud, operators of Caviar and Delicatessen Trading Company of Los Angeles, California, were charged with conspiracy and violations of the Federal Lacey Act by unlawfully dealing in what is known as “American caviar” in interstate commerce. The American caviar was often labeled and sold as Russian caviar.

In addition to the illegal purchase and sale of caviar through cash transactions, Valeri and Gennady Akselrud also acquired illegally obtained paddlefish and sturgeon roe, by barter, providing undercover investigators with counterfeit “name brand” goods such as: Rolex, Cartier and Chopard style watches, designer-name clothes, sunglasses, and Monte Blanc pens in exchange for caviar. Under the indictment, Valeri and Gennady Akselrud were each charged with one count of conspiracy and six counts of violations of the Lacey Act and Arkady Voloshin and Marc Akselrud were each charged with one count of conspiracy and three counts of violations of the Lacey Act. Irina Akselrud was charged with one count of conspiracy to violate the Lacey Act.

After their arrest, Valeri and Gennady Akselrud were released awaiting trial after each posted a bond of \$250,000. Arkady Voloshin was released under \$100,000 bond and Marc and Irina Akselrud were released under \$10,000 bond each.

These arrests follow the convictions of eight other individuals and four other businesses in Tennessee, Kentucky and New York whose illegal caviar dealings were exposed during the course of the investigation. Another subject and business remain under indictment and are awaiting trial in Kentucky at this time. Service and State conservation agencies launched this investigation in 1998 to stem the growing illegal take of U.S. caviar-producing species, such as paddlefish, short-nosed sturgeon, and the endangered pallid sturgeon. Depletion of sturgeon populations in the Black and Caspian Sea regions and continued global demand for caviar have prompted increased exploitation of U.S. fish and profiteering in domestic roe, much of it falsely labeled and sold as high-price Russian caviar.

“The natural resources of the United States are part of our cherished heritage and, if properly managed, a source of continued benefit to all Americans,” said Thomas M. Riley, Special Agent in Charge of the [U.S. Fish and Wildlife Service’s Southeastern Region](#). “History repeatedly shows that species subjected to unrestricted commercial trade quickly vanish. We can only conserve resources if we use them wisely.”

The Lacey Act makes it a violation of Federal law to knowingly transport, sell, receive, acquire and purchase in interstate commerce, any fish and wildlife taken, possessed, transported and sold in violation of any law and regulation of any State; and to knowingly make and submit any false record, account, and label for any false identification of any fish, wildlife which has been and intended to be transported in interstate commerce. The maximum criminal penalty, per Lacey Act violation is 5 years imprisonment and a fine of \$250,000 for individuals and the fine doubles to \$500,000 for a corporation or business.

Ventura Judge Rules Regulations for Channel Islands Marine Areas Will Take Effect April 9

March 28, 2003

Contacts: Chamois Andersen, Information Officer, (916) 657-4132; John Ugoretz, Marine Region, (805) 560-6758

Regulations restricting fishing and other extractive uses in certain areas of the Channel Islands National Marine Sanctuary will take effect April 9, despite an effort by some fishermen to seek a temporary restraining order (TRO) to halt their implementation. The California Department of Fish and Game's (DFG) marine wardens will begin patrolling 12 newly created marine protected areas (MPAs), and will continue to monitor fishing activities in the other open areas of state waters (shore to 3 miles), as more than three-quarters of the Sanctuary remains open to fishing.

Ventura County Superior Court Judge Steven Hintz on Wednesday provided a written ruling denying the requested TRO filed in early March by a coalition of commercial and recreational fishing groups. Counsel for the fishermen argued that marine reserves would financially impact their businesses and that the Fish and Game Commission and DFG did not follow state and federal law during the multi-year process to establish the MPAs around the Channel Islands off the coast of Santa Barbara. Judge Hintz wrote that, after reading the "voluminous exhibits submitted by the parties," he believed blocking the reserves is against the public's interest. "[T]he likelihood that plaintiffs will ultimately prevail in the litigation is not proved to be likely; and the interim harm to plaintiffs compared to the interim harm to the interests of the state is not proved to be comparably greater," Hintz said. More than 30 public meetings were held by the DFG, the Channel Islands National Marine Sanctuary, and the Commission during the four-year public process. In addition, nearly 10,000 letters, e-mails, and faxes were received in support of a network of MPAs within the Sanctuary.

As a result of Wednesday's court ruling, regulations and the formal establishment of the 12 MPAs around the Channel Islands National Marine Sanctuary will take effect as scheduled.

"This is a huge win for the marine resources of the Channel Islands, and there are a lot of people who had a hand in this effort," said DFG Director Robert C. Hight. "Department staff and many key stakeholders have worked long and hard to make this a reality. My hat is off to them."

DFG has developed a comprehensive Web site at www.dfg.ca.gov/mrd/channel_islands/index.html that includes regulations and detailed maps of the newly formed MPAs.

The Commission on Oct. 23 formally adopted DFG's preferred alternative to protect approximately 20 percent (175-square miles) of the waters within NOAA's Channel Islands National Marine Sanctuary. The 12 established MPAs represent the largest network of underwater marine reserves off the entire West Coast. Each area was created to protect a diverse array of marine life, including slow-producing rockfishes, invertebrates such as abalone and lobster, and lush undersea forests of giant kelp.

The marine reserves extend around portions of state waters surrounding the five islands that form the Channel Islands National Marine Sanctuary: Anacapa, Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara. The alternative adopted by the Commission also includes a recreational-only fishing zone off Santa Cruz Island, and an area with limited commercial and recreational fishing off Anacapa Island.

DFG's Web site for the Channel Islands MPAs was developed as a tool for the public to learn about the locations, boundaries and regulations for each established area. Available online is a complete map of the network of marine reserves, as well as individual area maps that include geographical coordinates and the water depths of each reserve.

The Channel Islands network is composed of 10 marine reserves and two conservation areas. The following are general regulations for each classification:

State Marine Reserve - Commercial and recreational fishing are prohibited; scientific collecting of marine plants and animals may be permitted.

State Marine Conservation Area - Some forms of commercial and/or recreational fishing may be restricted; scientific collecting of marine plants and animals is permitted.

For detailed regulations for each area, check out DFG's Web site www.dfg.ca.gov/mrd/channel_islands/index.html for the following MPA listings:

Anacapa Island State Marine Conservation Area, Anacapa Island State Marine Reserve, Carrington Point State Marine Reserve, Gull Island State Marine Reserve, Harris Point State Marine Reserve, Judith Rock State Marine Reserve, Painted Cave State Marine Conservation Area, Richardson Rock State Marine Reserve, Santa Barbara Island State Marine Reserve, Scorpion State Marine Reserve, Skunk Point State Marine Reserve, and South Point State Marine Reserve.

Endangered Species Act “Broken” — Flood of Litigation Over Critical Habitat Hinders Species Conservation

May 28, 2003

Contacts: Hugh Vickery 202-501-4633; Megan Durham, FWS 202-208-5634

Faced with mounting numbers of court orders from six years of litigation, the Interior Department’s U.S. Fish and Wildlife Service will soon run out of funds to designate critical habitat for threatened and endangered species, Assistant Secretary of the Interior for Fish and Wildlife and Parks Craig Manson said today. More important, the flood of court orders requiring critical habitat designations is undermining endangered species conservation by compromising the Service’s ability to protect new species and to work with states, tribes, landowners and others to recover those already listed under the Act, Manson said.

In July, the U.S. Fish and Wildlife Service will exhaust the funds required to meet its obligations to designate critical habitat under court orders and settlements for FY 2003. The administration has requested authority from Congress to shift money from other endangered species programs to cover the shortfall. These include programs to work with landowners on conservation projects to keep imperiled species from needing listing under the Act, consultation with other federal agencies to protect species, and recovery work for species already threatened or endangered. The Service will also approach plaintiffs and courts to seek extensions to deadlines in affecting 32 species. These extensions will be sought solely in order of the due dates of the court orders.

“The Endangered Species Act is broken. This flood of litigation over critical habitat designation is preventing the Fish and Wildlife Service from protecting new species and reducing its ability to recover plants and animals already listed as threatened or endangered,” Manson said. “Imagine an emergency room where lawsuits force the doctors to treat sprained ankles while patients with heart attacks expire in the waiting room and you’ve got a good picture of our endangered species program right now.”

The President’s FY 2004 budget request for listing totals nearly \$12.3 million, an amount that, if approved by Congress, is almost double the \$6.2 million appropriated in FY 2000 and a 35 percent increase over FY 2003. But Manson emphasized that additional funding alone will not solve the long term problem.

“Conserving habitat is essential for endangered species, but critical habitat as mandated by the ESA frustrates that goal,” he said. “This is a classic example of good intentions failing the test of reality.”

Manson noted that two-thirds of the endangered species listing budget is being consumed by court orders and settlement agreements requiring designation of critical habitat for species already on the endangered species list. In most instances, designation of critical habitat provides little additional protection for endangered species.

“This is not a new problem,” he said. “The previous administration also testified before Congress that this situation is detrimental to species conservation and needs to be resolved. The ever-increasing number of lawsuits has now brought this problem to a crisis where we are simply out of funds for this year.”

Designating an area as critical habitat means that federal agencies are required to consult with the Fish and Wildlife Service on the impacts of actions they authorize, fund, or carry out, on designated critical habitat. However, these requirements provide little additional protection for most species. This is because, as soon as a species is listed, federal agencies are already required to consult on the impacts of their activities on the species, whether or not critical habitat is officially designated. In almost all cases, recovery of listed species will come through voluntary cooperative partnerships, not regulatory measures such as critical habitat. Habitat is also protected through cooperative measures under the ESA including Habitat Conservation Plans, Safe Harbor Agreements, Candidate Conservation Agreements, and state grant programs. In addition, voluntary partnership programs such as the Service’s Private Stewardship Grants and Partners for Fish and Wildlife program also restore habitat.

Many national wildlife refuges, managed by the Fish and Wildlife Service, provide habitat for endangered species, and states also provide for endangered species on their wildlife management areas.

The ESA requires that critical habitat be designated at the time of listing to the maximum extent prudent and determinable. Facing many species in need of protection, a limited budget, and incomplete knowledge about the distribution and needs of species, the previous administration made designation of critical habitat a lower priority than other listing actions. Moreover, that administration found that designation was “not prudent” for the vast majority of species as critical habitat would not provide a benefit to the species. Lawsuits have greatly increased since 1997, when an appeals court ruled that this “not prudent” standard did not comply with the ESA. Another appeals court shortly thereafter held that courts must order the Service to designate critical habitat, even if it is lower in priority than other actions required by the ESA. Since that time, the Service has been sued over failure to designate critical habitat for species at the time they were listed, and when resources were diverted to address that issue, for missing other statutory deadlines. In addition, there have been challenges to the merits of the critical habitat designations made pursuant to these court orders.

Critical habitat designations impact species listings because both activities are funded from the same part of the Fish and Wildlife Service’s budget. Critical habitat designations are far more time consuming and costly than listings. Congress provided a total of \$6 million in the FY 2003 to designate critical habitat for already listed species, nearly two-thirds of the \$9.077 million budget for the Service’s endangered species listing program. The Service estimates the total cost of complying with all court orders and court-approved settlement agreements requiring the Service to work on critical habitat for already listed species in FY 2003 to be approximately \$8 million, leaving a shortfall of \$2 million.

“Spending more than two-thirds of our listing budget on critical habitat for already listed species flies in the face of logic and the intent of the Endangered Species Act. We need to make decisions about how to use our limited resources based on the most urgent needs of species, not on who can get into a courtroom first,” Manson said.

Status of Court-Ordered Critical Habitat Actions

The following court-ordered critical habitat actions (proposed or final rulemakings) requiring work in FY 2003 will be proposed for deferral into FY 2004 due to lack of funding:

<i>Case Name</i>	<i>Species</i>
Building Industry Legal Defense Foundation, et al. v. Gale Norton, et al. Case No. 01-cv-231 1 JDB (D.D.C.)	Southwestern Arroyo toad (proposed and final rule) Riverside fairy shrimp (proposed and final rule)
Biodiversity Legal Foundation Civ. No. 00-1180 (D. Colo.)	Topeka shiner (final rule)
CBD v Norton (01-cv-2101 IEG (LAB)) and BILD v Norton (01-cv-2145 IEG (LAB)) (cons.)	Lane Mountain milk-vetch (proposed rule) Fish slough milk-vetch (proposed rule) Spreading navaretia and San Jacinto crown scale (proposed rule)
National Association of Home Builders v. Norton and Defenders of Wildlife (CIV-00-0903-PHX-SRB)	Cactus ferruginous pygmy-owl (final rule)
Alliance for the Wild Rockies Inc., Friends of the Wild Swan, Inc v. Badgley et al. (CV 01-127 -JO (D. Ore.))	Bull trout (St. Mary, Puget Sound and Jarbidge DPS) (proposed rule) Bull trout (Columbia Basin/Klamath DPS) (final rule)
CBD v. USFWS, (C-01-0352 SI (ADR) N.D. Cal.)	Ventura Marsh milk-vetch (final rule)
CBD, Dine Care, and Center for Native Ecosystems v. Norton (CIV-01-409-TUC ACM)	Mexican spotted owl (proposed rule)

SWCB et al v. Babbitt et al (C-99-2992 CRB; D-CA/N)	La Graciosa thistle (final rule)
Southern Appalachian Biodiversity Project v. Norton (CN 2:00-CV-3 61 (E.D. TN))	Eggert's sunflower (proposed rule) Mobile basin bivalves (includes 11 TN bivalves) (final rule) Cumberlandian elktoe and 4 TN bivalves (final rule)
CBD and BLF v. Babbitt (CV 00-1980 D. CO)	Colorado butterfly plant (proposed rule)
Home Builders Association of Northern CA, et al. v. Norton et al. (CV01-1291 RJL) D.D.C.	California red-legged frog (proposed rule)
Santa Ana Sucker, California Trout v. Babbitt, No. 97 -3779 SI (N.D. Cal.)	Santa Ana Sucker (final rule)

PIKE THREATEN POPULAR NEVADA TROUT FISHERY

December 5, 2002

Contact: Rich Haskins, Nevada Division of Wildlife, Fisheries Bureau (775) 688-1569

Northern pike, a voracious predatory fish, has become established and could threaten the rainbow trout fishery that is now found in Comins Lake near Ely, according to the Nevada Division of Wildlife (NDOW). Bob Layton, NDOW supervising fisheries biologist, said biologists discovered a number of pike during their fall surveys of the lake, which is located nine miles south of Ely. The fish were 13-14 inches long and are believed to be offspring of fish that were illegally introduced into the lake.

“More than likely they were brought from Bassett Lake northeast of Ely by someone who wanted to establish a pike fishery at Comins,” Layton said.

Stomach samples of the pike showed that they are feeding primarily upon juvenile largemouth bass that were spawned in the lake this spring. Biologists believe that they may be capable of eating stocked rainbow trout as well. Layton said that Comins had a pike fishery from the early 1970s through the late 1980s. Over the years that fishery declined and the size and body condition of the pike diminished because the lake is too small and doesn't have the forage to support a pike fishery. After it dried up and the remaining pike died in the late 1980s, NDOW decided to maintain Comins as a trout and largemouth bass fishery.

In recent years, Comins has become an extremely popular trout rainbow fishery with it having some of the state's highest growth rates for trout. Anglers are now consistently catching rainbow trout that weigh from four to six pounds or more. Layton said the pike may be eliminated from the lake in the next couple of years because there are plans to drain it in order to build a new dam. After the dam is constructed, rainbow trout and largemouth bass will be put back into the lake.

“It is not only illegal, but very irresponsible to conduct illegal plants of this type. This is a prime example of how an outstanding fishery that provides tremendous recreational opportunities, as well as economic benefits for a community like Ely, can be harmed by the thoughtless acts of one or a few individuals,” Layton said.

Several years ago Comins was obtained by NDOW from private landowners when it was included in the purchase of the 3-C Ranch. The ranch has since become the Steptoe Valley Wildlife Management Area.

Global Fisheries May Be In Crisis But Most Local Fisheries Remain Robust, Sustainable

Fishermen Say Consumers Can Help Preserve Fish Stocks and the Oceans By Selecting Locally and Sustainably Harvested Seafood

May 16, 2003

Contact: David Goldenberg (916) 933-7050; Larry Collins (415) 585-5711; Natasha Benjamin (415) 561-3474; Zeke Grader (415) 561-5080

San Francisco, May 16 – “What’s happening globally is not happening locally,” was the message today from California fishing industry leaders describing generally healthy fish stocks and the efforts that have gone in to making a number of west coast fisheries sustainable. During a briefing this morning at San Francisco’s historic Fisherman’s Wharf, fishing leaders responded to two reports that came out this week painting a generally bleak picture of the status of fish populations across the globe and in many parts of the U.S. “California’s fishing industry got its wake-up call with the collapse of the sardine fishery 50 years ago and a few years later when we nearly lost our salmon,” said Zeke Grader, Executive Director of the Pacific Coast Federation of Fishermen’s Associations. “Although recent data indicates the sardine decline was not directly due to fishing pressure and the salmon losses, as everyone knows, came about due to in-river habitat destruction and massive water diversions, these events made activists out of many fishermen knowing they had to control their catches and fight to protect our rivers and oceans.”

No one at the morning briefing refuted the study done by Drs. Ransom Meyers and Boris Worm of Dalhousie University in Canada that appeared in Thursday’s edition of the scientific journal *Nature* finding that as many as 90 percent of the world’s largest fish are gone. A National Marine Fisheries Service report released this week on the status of U.S. fish populations for the year 2002 found 86 overfished stocks and 66 stocks subject to overfishing. What local leaders said, however, is that most fish stocks along the California coast, with the exception of groundfish, are in good shape because fishermen have been proactive, working to put in place regulations to prevent overfishing and protect habitats.

“I can’t comment about fisheries in other parts of the world, but I think governments, conservationists and even other nation’s fishermen could learn a lot from what we’ve done here in California to sustain our fisheries,” said Larry Collins, a San Francisco fisherman and Chairman of the California Salmon Council. “Our fishing men and women have taken the lead in restoring fish habitat and making sure our fishing is well-managed. And, if this past crab season and this salmon season are any indication, we’re succeeding.”

David Goldenberg, the Executive Director of the California Salmon Council described the process California is now going through to get certification for its troll-caught king (Chinook) salmon as a sustainable fishery by the Marine Stewardship Council (MSC). To date, only a handful of fisheries in the world have applied for and gotten certification; the only U.S. fishery to date with MSC certification is Alaska salmon, although California hopes to be next with its salmon. Other west coast fisheries that are in the process of applying or considering applying for certification are Pacific halibut and blackcod, Dungeness crab, albacore tuna, and California lobster (probably jointly with Baja California). The MSC is London-based and the only credible international certifier of sustainable fishing practices at this time.

Joining the fishing leaders was Dr. John McCosker of the California Academy of Science’s Steinhart Aquarium. McCosker, an expert on global fisheries, backed up statements by the fishing leaders that many California and west coast fishing stocks are well-managed and healthy. Steinhart Aquarium has developed a seafood guide for consumers to help them select seafood by informing them on which fisheries are sustainable, which ones people should ask questions about and which ones to avoid. The Monterey Bay Aquarium and San Francisco’s Aquarium of the Bay also have developed guides, and the three are in near total agreement with their recommendations.

While the news from many west coast fisheries is good, the fishing leaders also warned that conservation of fish stocks is a work in progress. Continued health of many salmon stocks and the restoration of others will depend on continued availability of adequate fresh water flows in streams and to estuaries, said Grader. Collins also said crab fishermen need help to get trap limit measures put in place in the Dungeness crab fishery to maintain it as a sustainable fishery. They also warned

against new efforts to allow offshore oil drilling and proposals to permit genetically modified fish in aquaculture operations where these “frankenfish” could get loose into the wild and devastate native fish populations.

The leaders went on to say the public could greatly help the cause of fish and ocean conservation, assuring there will be fisheries in the future and healthy fish populations for future generations of Americans, by:

- 1) Supporting efforts to get State Legislatures and the Congress to do a better job of protecting fish habitats and ensuring fisheries are conducted responsibly; and
- 2) Taking care in their purchase of seafood, by asking questions about what the fish is, where it's from and how it was caught and using the seafood guides to help direct purchases. “Think local and sustainable.”

Just last week the City of San Francisco passed two resolutions by Supervisor Gerardo Sandoval encouraging the consumption of locally-caught and sustainably harvested seafood, along with better seafood information so consumers can make better choices as to sustainability and health.

“People who are concerned about our fish and oceans don’t have to give up eating seafood, but they need to ask more questions and be more discerning - buying only sustainably harvested and, whenever possible, locally-caught fish,” said Natasha Benjamin, Southwest Regional Director for the Institute for Fisheries Resources. Benjamin continued saying, “fish are one of the very best sources of protein. Consumers can reward themselves and reward those fishing men and women who fish responsibly by becoming informed seafood buyers.”

USGS Announces Online Access to Nationwide Fish Community Data

Data on fish communities are now available for 960 stream sites in more than 50 major river basins across the Nation. More than 1,900 fish community samples, collected from 1993 through 2002 by the National Water-Quality Assessment (NAWQA) Program, can be downloaded from <http://water.usgs.gov/nawqa/data>. USGS fish community samples document the presence of all fish species and their relative abundances within designated stream reaches.

These fish data are part of the NAWQA Data Warehouse, which also provides online access to 8 million records of water-quality information, enabling water-resource managers, scientists, and the public to find data about the quality of water or chemical concentrations in aquatic tissue at 4,100 stream sites and 6,500 wells across the United States.

For more information on fish sampling protocols, please refer to, “Revised protocols for sampling algal, invertebrate, and fish communities as part of the National Water-Quality Assessment Program” at <http://water.usgs.gov/nawqa/protocols/OFR02-150/index.html>

Online access to macroinvertebrate and algae data are anticipated this spring and summer, respectively.

For questions regarding online data retrievals, please contact gs.nawqa.data@usgs.gov or Mr. Sandy Williamson, 253-428-3600, ext. 2683. For technical questions, such as regarding biological collection methods and taxonomy, please contact Dr. Steve Moulton, smoulto@usgs.gov, 703-648-6874. Additional information about NAWQA ecological studies also is available at <http://water.usgs.gov/nawqa/ecology>.

We encourage you to share this information with your staff, colleagues, and (or) membership. Thank you for your continued interest in USGS information and findings.

Letter from CDFG Regional Manager Patricia Wolf

May 22, 2003

To All Parties Interested in California's Market Squid Fishery:

The Department of Fish and Game (Department) has prepared the draft market squid fishery management plan (MSFMP) which is currently undergoing internal Department review. Once internal review is completed and preferred alternatives are identified, the draft MSFMP will be submitted to the Fish and Game Commission (Commission) in July and be available to the public. The current version is the result of revisions to the [preliminary draft MSFMP](#) which was released for public review in May 2002. On behalf of the Department, I thank the peer review panel, fishery participants, scientists, conservationists, and other interested constituents who have provided input thus far.

Under the proposed timeline, the draft MSFMP is to be presented to the Commission at its August 1-2, 2003 meeting in Long Beach; public comments will be taken at that meeting and at a special hearing in Monterey in September (date to be announced). The Commission will again take public comments and consider adoption at its November 6-7, 2003 meeting in San Diego.

The MSFMP will establish a management program for California's market squid resource including procedures by which the Commission will manage the fishery. There are several option categories for fishery management based on four management components: fishery control rules, harvest replenishment areas, restricted access and ecological concerns. Within each option category, a range of alternatives has been provided for the Commission to consider. The Commission may select any of these alternatives, modify the alternatives, or request new alternatives. The Commission must determine how to best manage the market squid fishery in order to achieve the optimum level of squid harvest while maintaining a sustainable squid population and the marine life that depends on it.

A table of the proposed options with the full range of alternatives has been enclosed and is posted on the Department's web page at <http://www.dfg.ca.gov/mrd/marketsquid/options.html>. Please keep in mind that the Commission desires a full range of alternatives from which to make an informed selection. A summary of both the environmental and socio-economic impacts of all the options and their alternatives will be presented in the draft MSFMP.

If you have questions or need additional information on the MSFMP, please contact Mr. Dale Sweetnam, Senior Biologist with the California Department of Fish and Game, 8604 La Jolla Shores, La Jolla, California 92037, at (858) 546-7170.

Sincerely,
Patricia Wolf
Regional Manager
Marine Region

DWR ANNOUNCEMENT: Public Review Draft on Fish Passage Program Just Released

The public review draft of the Bulletin 250, Fish Passage Improvement Program, is available for public comment until August 1, 2003. The document describes challenges and successes facing salmonids and other anadromous fish in CALFED watersheds of Central and Northern California. Details: <http://www.isi.water.ca.gov/fish/b250.shtml>

CALL FOR PAPERS

INVASIVE-SPECIES SYMPOSIUM

*Accidental and Purposeful Introductions of Animals:
Investigating Species Interactions at
Different Trophic Levels*

*October 14–16, 2003
Sacramento, California*

This symposium will examine both intended (purposeful) and unintended (accidental) animal invasions in terrestrial and aquatic ecosystems. Introduced vertebrate species and their interactions with native animal and plant species will be the central theme of the symposium. Animal invaders can have roles as competitors, predators, herbivores, and granivores. In turn, the distribution, abundance, and population dynamics of the invader can be affected by these same relationships, as well as by changes in habitat structure from invasive plants. Outcomes of these interactions are often considered harmful; others are considered acceptable or, in some cases, even beneficial.

Not only do introductions have ecological implications, they are further complicated by sociological, political, economic, and cultural influences. Although many animal introductions are accidental, some introductions are deliberate. Purposeful introductions that are done as part of commonly accepted land- and resource-management programs are ongoing in most parts of the world. This symposium will examine both types of introductions from ecological, conservation, and policy perspectives, with views encouraged from areas throughout the world.

Presentations will address invasive-species characteristics, invaded communities, invader impacts, and positive and negative outcomes of control programs in sequential, rather than breakout, sessions. Because of the nature of the sequential sessions, only a limited number of oral presentations will be accommodated.

Contributed posters will be an essential part of the program. A special evening poster session and reception with authors present will allow plenty of extended discussion among conference participants. Symposium proceedings will be published and distributed to all registrants.

Abstract Format

Abstracts should be in 12-point, Arial font, no more than 300 words, and submitted with associated information as an electronic-mail attachment in "rich text format" (.rtf) to Cynthia Graves Perrine, symposium chair, at cperrine@dfg.ca.gov for the following sessions:

- Invader Characteristics
- Community Characteristics and Susceptibility to Invasion
- Control Methods/Trials
- Impacts on Native Ecosystems, Populations, Processes

Abstracts for contributed posters and oral sessions must be received no later than 5 p.m. (PST) Saturday, June 15, 2003. Successful abstracts will be assigned a session by the program committee. All submitting authors will be notified no later than August 1, 2003.

The following information should accompany submissions.

- 1) Author to contact
- 2) Institution
- 3) Complete mailing address (street address, city, state, country, zip/postal code)
- 4) Phone number
- 5) E-mail address (Important note: if your e-mail address is incorrect, you will not receive notification of acceptance or other information)
- 6) Person presenting the paper (must be a registered participant in the symposium)
- 7) Session of interest
 - a. Invader Characteristics
 - b. Community Characteristics and Susceptibility to Invasion
 - c. Control Methods/Trials
 - d. Impacts on Native Ecosystems, Populations, Processes

Students: Please write "student" at the top of your abstracts.

NOTE: An online abstract-submittal form is available.

Sample Abstract

Please follow the format exactly as shown below (12-point, Arial font).

APPROACHES TO THE REMOVAL OF FERAL PIGS FROM ISLAND ECOSYSTEMS

GARCELON, DAVID. Institute for Wildlife Studies, P.O. Box 1104, Arcata, CA 95518, USA, E-mail: dgarcelon@iws.com.

RYAN, KEVIN. Institute for Wildlife Studies, P.O. Box 1104, Arcata, CA 95518, USA, E-mail: kryan@iws.com.

Feral pigs (*Sus scrofa*) cause considerable damage to island ecosystems around the world. Efforts to eradicate these animals from islands can be extremely challenging and may require many years. Removal efforts generally require a variety of techniques and a willingness to modify methods over the course of the project. Different seasons, habitat types and pig densities all have an effect on the techniques employed. Some of the techniques used in removal programs include trapping, aerial hunting, dogs, poison, ground hunting, and spotlighting. Having a flexible and adaptable field staff is crucial to the success of any feral animal-removal program. An important component to the success of any removal program is the financial backing to see the project through to completion. Without the funding to ensure completion of a project, all the financial resources previously spent may be wasted. Our experience suggests that on islands with complex vegetation communities, specifically those containing dense woody vegetation, partitioning the island with fences into manageable units may be required. Having a well-developed plan to advise the public and respond to animal rights groups regarding the need to conduct the removal is vital to avoid costly litigation and negative publicity.

Preliminary Schedule

Tuesday, October 14th: Registration begins at 11:00 a.m.
Plenary Session: 1:00–5:00 p.m.
Welcome Reception: 5:30–8:30 p.m.

Wednesday, October 15th: Symposium Contributed Papers
Poster Session with Authors

Thursday, October 16th: Symposium Contributed Papers
Symposium Panel Discussion to 5:00 p.m.

2002-2003 Cal-Neva Chapter Executive Committee

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Conservation	Ted Frink	tfrink@water.ca.gov	(916) 327-1648
Fisheries Information Network	Robert Blizard	Robert_Blizard@dot.ca.gov	(510) 286-6238
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American Fisheries Society
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