



Fisheries and Aquatics Bulletin

(Fisheries and Aquatic Resources (FAR) Program)

Fisheries and Aquatics Bulletin (FAB) is an electronic info-journal designed to distribute and exchange information about the USGS's Fisheries and Aquatic Resources Program to interested scientists and managers throughout the Bureau.

From the Program Coordinators Desk

Great Lakes Science Center Visit:

On June 5, 2002, Paul Dresler (Status and Trends Program Coordinator) and I had an enlightening visit with the Great Lakes Science Center, in Ann Arbor, Michigan. We met with staff scientists and were briefed on research related to fisheries and aquatic resources and monitoring programs. The following day we visited the Cheboygan Vessel Base where we boarded and toured the research vessel R/V Siscowet. We then visited the Hammond Bay Biological Station, which is the nexus of sea lamprey research and control. Thanks to Center Director Jaci Savino, John Gannon, Jeff Schaeffer and staff for their hospitality and support during the visit. These Center visits are a tremendous learning experience for us at Headquarters. On-site visits enable us to better grasp and transport the field knowledge we gain into a clearer understanding of your Center's activities and challenges, which in turn assists us in providing a stronger support base for your research activities.

Thanks,
Jim Preacher

In's & Out's

Welcome **Dr. Jim Meade** to the HQ Fisheries and Aquatics Resources Program staff. Dr. Meade, formerly the Director of the Leetown Science Center's Northern Appalachian Research Laboratory in Wellsboro, Pa. joined the FAR staff on June 2, 2002. In his new position as an Assistant Program Coordinator for FAR, Jim will be located in Philadelphia, PA where he will serve as the science liaison between USGS and EPA Region 3. (570-724-2794, jim_meade@usgs.gov.)

Dr. Harold Kincaid, Research Geneticist, has been selected as the acting Director of the Northern Appalachian Research Laboratory, in Wellsboro, Pa. Congratulations Harold! (570-724-3322 (ext.232) hkincaid@usgs.gov)

Request for Proposals

The Aquatic Ecosystem Restoration Foundation is conducting a Request for Proposals (RFP) to study the economic affects of aquatic invasive species. Models that result from this program will aid resource managers in decision making and defending goals in regard to aquatic plant management. The deadline for submission is October 1, 2002. The RFP is posted at: <http://tncweeds.ucdavis.edu/news/weeder.html>



Upcoming Request for Proposals:

Sea Grant expects to publish in the Federal Register early this summer a request for proposals for Aquatic Nuisance Species Program, which seeks to fund research and outreach projects for the prevention and control of introduction and spread of aquatic nuisance species. This upcoming request for proposals will also cover the Oyster Disease Program and the Gulf of Mexico Oyster Industry Program.

Depending on the date that this request for proposals is published, proposals are expected to be due about September 15, 2002. Check the website: www.nsgo.seagrant.org/research/nonindigenous for up-to-date information.



Historical Fisheries

The Nation's first Federal conservation agency, today known as NOAA's National Marine Fisheries Service (NMFS), was initiated in 1871.

This is a fantastic historical fisheries website complete with a detailed timeline from 1870 to 2000. www.nefsc.nmfs.gov/history



Fisheries and Aquatic Resources Related Meetings, Workshops, and Seminars



June 25
Great Lakes Fish Commission's
Reintroduction of Native Fish
Theme Workshop
& June 26
Early Mortality Syndrome (EMS)
Workshop
Both at Webers Inn, Ann Arbor, MI
Contact: scott.brown@ec.gc.ca

Aug 18-22
132nd American Fisheries Society
Annual Meeting
Baltimore, MD
Contact: bfritz@fisheries.org

Sept. 17-21
International Association of Fish
and Wildlife Agencies (IAFWA)
Annual Meeting—Celebrating 100
years of service!
Big Sky, Montana
www.iafwa.org



Fish and Aquatic Animal Health II: A Bilateral Exchange Between Russia And The United States

Approximately 28 years ago, an agreement was initiated between the former Soviet Union and the United States to increase bilateral emphasis and collaboration within areas of environmental conservation. In 1982, this program was amended to address issues within "Fisheries and the Environment." This annually recurring program is administered through the Russian Federation Inter-Department Ichthyological Commission, the Russian Academy of Sciences, the Ministry of Agriculture and Foodstuffs of Russia, and the U.S. Department of the Interior.

Interactions in fish health/disease have been spearheaded through the bilateral leadership of Laboratory of Ichthyopathology of the All Russian Research Institute of Freshwater Fisheries (Rybnoe, Russia) and the National Fish Health Research Laboratory (Leetown Science Center). Under the direction of co-chairs, Dr. Igor S. Shchelkunov (Laboratory of Ichthyopathology) and Dr. Rocco C. Cipriano (NFHRL), approximately 40 Russian, 16 American, and 2 Canadian scientists, convened at the Laboratory of Ichthyopathology in Rybnoe from 12-19 July 1998 to review the status of fish health/disease research in Russia and the United States. That symposium initiated research collaborations between individuals from both countries and their respective institutions.

The Living Oceans Foundation has recently agreed to sponsor *Fish and Aquatic Animal Health II: A Bilateral Exchange Between Russia And The United States*. The conference will be held in Shepherdstown, West Virginia and is tentatively scheduled for May 2003. Dr. Rocco Cipriano and Dr. Igor Shchelkunov will once again serve as co-chairs and organizers of the conference. Frank M Panek, National Fish Health Research Laboratory, Leetown Science Center

4th World Fisheries Congress

(www.worldfisheries2004.org)

The American Fisheries Society has been honored to be selected as the host of the 4th Congress at the Beijing, China assembly of the 3rd World Fisheries Congress, thanks to the fine efforts of the International Fisheries Section. Vancouver, British Columbia, has been selected as the host city, thus will provide an opportunity for all to easily attend the upcoming Congress, 2-6 May, 2004. This is the first time this global event has been held in North America. The Theme of the 4th Congress is: "Reconciling Fisheries with Conservation: The Challenge of Managing Aquatic Ecosystems"

An international array of prestigious fisheries scientists will be giving keynote addresses, and chairing program sessions. In addition, the program contains over 40 sessions that address the most pressing issues in fisheries management in both freshwater and marine ecosystems, along with a special forum for interested industry representatives and non-governmental organizations. The details of the program and venue are provided as they become available on the web page.

Co-Chairs of the 4th World Fisheries Congress are:
Bruce Ward & Dana Schmidt



FROM THE SCIENCE CENTERS

UMESC Research Supports the Nation's Fisheries

Upper Midwest Environmental Sciences Center (UMESC) scientists recently developed and validated a flow model to describe the discharge and dispersion characteristics of the fish drug, chloramine-T, from aquaculture facilities. As part of the Fish Drug Approval Program, UMESC is developing critical data to support approval by the U.S. Food and Drug Administration of waterborne drugs such as chloramine-T, formalin, and hydrogen peroxide that are effective in treating a variety of external fish infections. Bacterial gill disease and other external infections cause substantial fish production losses on federal and state hatcheries.

It is anticipated that the UMESC flow model will be widely applicable to predict concentrations of most waterborne drugs discharged from hatcheries, which is an important component of environmental assessments that are required to support the approvals of these drugs. Research results were presented at the American Society of Limnology and Oceanography meeting, Victoria, British Columbia, Canada on June 13. Contact Mark Gaikowski, La Crosse, WI, 608.781.6284, mark_gaikowski@usgs.gov for additional information on the flow model.



Midcontinent Ecological Science Center: New Publication

Habitat measurement and modeling in the Green and Yampa Rivers Zachary Bowen, Ken Bovee, Terry Waddle, USGS Midcontinent Ecological Science Center and Tim Modde, Chris Kitcheyan, USFWS, Vernal, UT.

An excellent example of collaborative research between USGS and USFWS, this study evaluates two of the potential reproductive bottlenecks that might limit recruitment of razorback sucker in the Green River Drainage; (1) reduced larvae production due to sediment deposition on spawning areas, and (2) reduced survival of larvae or juveniles due to lack of timely access to food-rich backwater and floodplain habitats. Contact Zach, Ken or Terry at MESC for further details on this impressive 181 page research report.

Alaska Science Center: Pacific Salmon in Alaska

Alaska Science Center (ASC) has been researching global change and sockeye salmon production in the Bering Sea using growth patterns derived from laser analysis of historic collections of sockeye salmon scales from the archives of Alaska Department of Fish and Game and the University of Washington (1955 – 2001). These analyses have shown a negative correlation between third-year ocean growth in Bering Sea sockeye and the production of Asian pink salmon in odd-numbered years. Results showed that sockeye growth at sea declined significantly and salmon abundance decreased 26% (7 million fish per biennium) following years of high Asian pink abundance, resulting in a \$29 million biennial loss to the Alaska fishery.

Contact: **Joy Geiselman** (907-786-3668)

Columbia Environmental Research Center

Michael Mac, and Denny Buckler of the Columbia Environmental Research Center (CERC) and David Galat of the Missouri Cooperative Research Unit visited the Institute for the Biology of Inland Waters (IBIW) in Borok Russia the week of June 10. This year marks the 30th Anniversary of a scientific exchange program between CERC and IBIW. The trip provided an opportunity for Mike to make his first visit to Russia and to recommit to this fruitful exchange program.

During their trip, Mike, Denny and Dave visited a commercial facility that is raising sturgeon from eggs. A system developed from research carried out by one of the IBIW ichthyologists, has been very successful in achieving high survival rates. The travelers also visited a new hatchery on a tributary of the Volga River being constructed by the Russian government that will employ these techniques on a much larger scale. In addition this facility will maintain outdoor ponds for holding wild spawners. These efforts are the consequences of failing natural reproduction in the highly valued sturgeon populations due to damming the Volga River (sounds familiar). Techniques used in this hatchery have application to sturgeon restoration in the U.S., such as for the Missouri River pallid sturgeon.

Contact: **Michael J. Mac** (573-876-1900)

In the NEWS (E&E Publishing)

Gulf sturgeon gains critical habitat after 8-year lawsuit Natalie M. Henry, *Greenwire* staff writer

The anadromous Gulf of Mexico sturgeon will gain critical habitat in seven river systems from Louisiana to Florida under a court-ordered proposal by the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

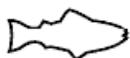
The proposal responds to an eight-year legal battle between the services and Earthjustice Legal Defense Fund, culminating in a decision by a U.S. District Court judge in Louisiana forcing the agencies to designate critical habitat.

LAKE ERIE: Dead zone may be sign that enviro progress is ending

The dead zone discovered last year in Lake Erie may return again this summer, leaving scientists baffled as to what may be causing the lake to shift back to its lifeless state of the early 1980s.

Forty researchers from 17 universities will start heading out on boats next week to take a closer look at what may be causing the apparent reversal of Lake Erie's environmental progress -- regarded as one of the major successes of the environmental movement. A recent U.S. EPA report says that last year's dead zone duplicated the prevalence of anoxia in the late 1960s but said there were no clear reasons for its reappearance. In 1983, about 90 percent of the lake's central basin had no oxygen.

Scientists this summer will collect thousands of water samples to measure the dead zone's boundaries, depths and progress. Scientists suspect there may be several causes of the oxygen depletion, including the prevalence of zebra mussels and other invasive species, climate change or excess wastes dumped by sewage plants. (Bill Sloat, Cleveland *Plain Dealer*, June 14)-EG



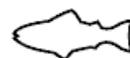
Federal council takes up West Coast regs; shelf faces closure Brian Stempeck, *Greenwire* staff writer

Federal fisheries managers on the West Coast met in mid June to forge a recovery plan for the region's severely depleted groundfish populations, following on the heels of a report recommending closures on the continental shelf. Fishermen and environmentalists are predicting an economic hit to the industry that could dwarf the effects of recent groundfish cutbacks in New England.

Last month, the Groundfish Management Team of the Pacific Fisheries Management Council released findings that the canary, bocaccio and yelloweye rockfish populations are severely depleted (*Greenwire*, June 3). This week, PFMC, which along with the National Marine Fisheries Service decides West Coast fishing policies, will meet to decide how to respond to that report.

Pete Leipzig, executive director of the Fishermen's Marketing Association, predicted the continental shelf will largely be closed to fishing, from Canada to Mexico. The three rockfish populations are so depleted that even fishermen who catch them accidentally could do further harm to the species, he said. So fishermen who have demonstrated high levels of bycatch, or accidental catch, in the past will not be allowed to continue.

In the past, if one groundfish area was closed, fishermen would simply head elsewhere, said Mark Powell, acting director of fish conservation with the Ocean Conservancy. That kind of flexibility is vanishing this year, he said, and is unlikely to return anytime soon. Groundfish stocks are below 10 percent of their historic levels, with "really no evidence of recovery," he said. "Predictions are it could take up to a century to recover some of these stocks."



FAB NEEDS YOUR INPUT: Thanks to all who have provided information for FAB. We've received some great abstracts and local news from a variety of science centers, but we have not highlighted everyone yet. Remember, FAB is your opportunity to share your ongoing research and FAR news with your peers. Please submit articles of interest, science accomplishments, announcements, notification of conferences-meetings-workshops, etc. that you would like to see in the FAB. -Emily Tracy, Editor