



Fish Health Section



The official link to the FHS website is: <http://www.afs-fhs.org/>

FHS NEWS

GREETINGS FISH HEALTH MEMBERS,

Probably, the coolest news is that Dr. Jerri Bartholomew has been appointed the new chair of the Oregon State University Department of Microbiology. Congrats Jerri! Along with this announcement is the ascendance to the throne of the Section list serve by our esteemed colleague, Ben LaFrentz. Thanks Benjamin!

My objective in these FHS update messages is to make the readership aware of what other members of the section are communicating with the officers (ExCom). Over the last month Dave Groman (FHS Vice President) heard about how the European Association of Fish Pathologists are reaching out for new members by encouraging colleagues to e-mail folks that have not joined. Is that something AFS-FHS professionals would be willing to take on? Former FHS President Larry Hanson and I are forming an ad-hoc committee to discuss whether the section should encourage more international members to become certified as Aquatic Animal Health Inspectors and Fish Pathologists. Full time and affiliate membership already conveys the right to participate in the FHS professional certification program. As part of that discussion, one question we might be asking in consultation with the Professional Standards Committee is, "Should the exams be modified to include a wider diversity of fish and shellfish species and their pathogens?" What do you think? And probably most dear to my sentimental heart, Rocco Cipriano, Diane Elliot, and Gary Wedemeyer (members of the FHS Archives Committee) are taking on the task of including a brief description of the achievements of the past S. F. Snieszko Award Winners on our section web site (with photos of course). If you have contributions to this effort, their e-mail links are on the committee page <http://afs-fhs.org/committees.php>.

Finally, the local organizing committee of this summer's AFS-FHS Annual Meeting here in Ithaca July 13-15 2014 has its first sponsor, the Fish Vet Group. If another business or organization would like to join them as an official sponsor of the meeting or the CE session, please contact me.

Holiday Cheer to you and yours.

Rod Getchell

JOURNAL OF AQUATIC ANIMAL HEALTH

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STUDENT AND EARLY CAREER MEMBERS

For students and early career members (and everyone else) interested in learning more about becoming either a certified Aquatic Animal Health Inspector or Fish Pathologist, our most recent post on the blog (<http://afs-fhs-students.blogspot.com/2014/12/inspector-pathologist-certification.html>) details the process.

Our LinkedIn page

(http://www.linkedin.com/groups?home=&gid=8129129&trk=groups_guest_about-h-logo) is up and running and we encourage all to check it out. The goal of the page is to help fish health students and budding professionals find each other and get connected. We are hoping that this will allow students to gain mentorship from young professionals and provide a platform to post jobs, interesting questions and general ideas surrounding fish health. Hope to see you on there!

Finally, we're always looking for more members to profile on the blog. Previous profiles can be found here <http://afs-fhs-students.blogspot.com/search/label/profiles>. If you're interested in participating or have any questions/suggestions for us, please contact us at student.section.fhs@gmail.com.

WORKSHOPS AND COURSES

"HEALTH AND COLONY MANAGEMENT OF LABORATORY FISH" Mount Desert Island Biological Laboratory, Salisbury Cove, Maine 16 – 21 August 2015

Applications are being accepted for this 1-week educational opportunity for individuals with maintenance, management or research responsibilities in which fish are used as laboratory animals.

APPLICATION DEADLINE - JUNE 12, 2015.

The course is offered at the Mount Desert Island Biological Laboratory, Salisbury Cove, Maine during the period of 16 - 21 August 2015. Topics to be discussed will include general system design and water quality management, anatomy and histology of fish, general fish diseases and disease management strategies. Infectious and non-infectious diseases common to all fish as well as specific diseases of importance to laboratory-maintained zebrafish will be discussed. The course will consist of lecture, laboratory exercises and discussions. During the course there will be an opportunity for students to discuss unusual and/or unsolved diagnostic case experiences from their home laboratories as problem-solving exercises. The course should be particularly valuable to technical staff, graduate students, postdoctoral fellows, junior faculty and investigators needing skills to monitor the health of a colony of aquatic organisms. The course also provides a unique educational opportunity for Residents in Laboratory Animal Medicine Programs.

For more information on the course, please see the course web site at:

<http://mdibl.org/course/hcmlf-2015/>

EARLY ANNOUNCEMENT – SALMON DISEASE WORKSHOP

Dates are not yet set, but the workshop will be offered this summer at Oregon State University. If you are interested in getting on the list or have questions, please contact me.

Jerri Bartholomew
bartholj@science.oregonstate.edu

JOBS

TERM POSITION (GS-5) IN FISH HUSBANDRY

USGS - Marrowstone Marine Field Station

Details about the position and how to apply can be found at <https://www.usajobs.gov/GetJob/ViewDetails/389434700>. Application materials must be submitted by January 2, 2015.

AQUACULTURE - MOLECULAR BIOLOGY POSITIONS

Aqua Bounty Technologies is seeking motivated scientists for research positions in aquaculture genetics and molecular biology. We are expanding our research team in Prince Edward Island, Canada. A strong background or degree in fish genetics or molecular biology is required, with some experience in any of the following areas preferred:

1. Recombinant DNA techniques and cloning, PCR, real-time PCR, DNA/RNA purification, Southern blotting, northern blotting, genotyping (SNPs), and basic bioinformatics
2. Protein techniques including ELISA, western blotting, immunoprecipitation, immunolabeling, and protein expression and purification
3. Aquaculture research including ploidy manipulation, gynogenesis, sperm cryopreservation, nutrition work, infectious disease work, and physiology
4. Breeding programs, heritability and breeding valuations.
5. Research experience in a GLP environment.

Candidates must be independent, with the ability to multi-task in a fast-paced environment. Excellent interpersonal and communication skills along with problem-solving expertise are essential. We are considering positions at the research associate,

post-doctoral, and research scientist levels. Salary will be commensurate with experience.

RESOURCES AND INPUT

EAFP – SEE ATTACHED EAFP leaflet December 2014.pdf

The European Association of Fish Pathologists (EAFP) will soon post a second announcement on the organization website (www.eafp.org) for the 17th International Conference on Diseases of Fish and Shellfish, which will be held in Las Palmas de Gran Canaria, Spain, on September 7-11, 2015. Although the EAFP is based in Europe, it has members in many countries of the world and branches in several non-European countries, including the U.S. and Canada. Among the benefits of EAFP membership are receipt of the Bulletin published six times per year, and discounted registration fees for the biennial international conferences. Application forms can be obtained from the appropriate branch officer listed in the attached informational brochure, or directly from the EAFP.

Diane Elliott, EAFP U.S. Branch Officer
dgelliott@usgs.gov (An older but still valid e-mail address is given in the brochure)

WESTERN FISHERIES SCIENCE NEWS - NOVEMBER 2014 - ISSUE 2.11

Dear WFRC Colleagues, Partners and Friends; Please enjoy the latest issue of our Center newsletter, designed to update you on science, new publications, events and news from the U.S. Geological Survey, Western Fisheries Research Center (WFRC). WFRC scientists conduct research on aquatic animal health; restoration ecology; and drivers of ecosystem change at six different field stations throughout Washington, Oregon and Nevada. We hope that this newsletter will help familiarize you with WFRC science and update you on our latest developments. Please forward to colleagues who may also benefit from these communications. To subscribe (or unsubscribe) to the “Western Fisheries Science News” mailing list, please do so at <http://wfrc.usgs.gov/newsletter/maillist.html> Read online: <http://wfrc.usgs.gov/newsletter/> In this issue . . . FEATURE STORY Noted Scientist Emeritus Dr. Wm. Toshio Yasutake Retires “Again! After a research career lasting more than 60 years and spanning two centuries, WFRC Senior Scientist Emeritus Dr. Tosh Yasutake has decided to retire for the second and (perhaps) final time. RESEARCH USGS Visits China for Project with the World Organization for Animal Health Fishery Biologist Appointed Co-Leader of Fish Migration Team for Mekong River Fish Biology Project USGS Provides Fish Disease Diagnostic Training to Chilean Scientist EVENTS USGS Scientist Provides Science Café Lecture on the Science Supporting the Elwha River Dam Removal and Restoration Project USGS Scientist Presents Research at Middle Columbia Wildlife Adult Steelhead Tributary Bypass Workshop PUBLICATIONS New Publication Describes Variation in Susceptibility of Steelhead Trout Populations to a Lethal IHN Virus

GENTLE REMINDER OF REQUEST FOR INPUT DUE TOMORROW

Dear Aquatic Animal Health Stakeholders,

In the September/October 2014 report from the Aquatic Animal Health Standards Commission of the World Organisation for Animal Health (OIE), eleven (11) documents were provided for stakeholder comment.

These are exiting Chapters that have been amended. As such only the changes in these documents are open for comment. New verbiage is shown with Double Underlines and ~~deleted verbiage is shown with Strikethroughs~~.

Chapters for comment are:

1. Guide to the Use of the Aquatic Animal Health Code
2. Glossary
3. Notification of diseases and epidemiological information
4. Diseases listed by the OIE
5. Import Risk Analysis
6. Control of Pathogenic Agents in Aquatic Animal Feeds
7. General Obligations Related to Certification
8. Certification Procedures
9. Infection with *Batrachochytrium dendrobatidis* *
10. Infection with Ranavirus *
11. Articles X.X.7. and X.X.11. of disease-specific chapters (The Aquatic Animals Commission recognized that the text in Articles X.X.7. and X.X.11. in disease-specific chapters is almost identical. These articles apply to importation of live aquatic animals (Article X.X.7.) and importation of aquatic animal products (Article X.X.11.) from a country, zone or compartment declared free from Disease X. The Aquatic Animals Commission proposed to merge these two Articles to improve readability.)

* The Aquatic Animals Commission recognized that Articles 8.1.10. and 8.2.10. of amphibian disease-specific chapters needed amending as they currently include reference to live aquatic animals intended for use in laboratories, zoos and the pet trade which reflect particular aspects of international trade in amphibians. The Commission noted that the importation of live amphibians to be kept in laboratories or zoos or as pets carries a different level of risk compared to agricultural, industrial or pharmaceutical use.

The Aquatic Animals Commission therefore proposed new Articles 8.1.13. and 8.2.13. to address live amphibians intended for use in laboratories and zoos. In addition, the Commission proposed amending Articles 8.1.10. and 8.2.10. to specifically address the different level of risk for animals intended for use in laboratories and zoos compared with those intended for agricultural, industrial or pharmaceutical uses.

For Infection with *Batrachochytrium dendrobatidis* (Chapter 8.1.) the Aquatic Animals Commission recognized the inconsistency between the *Aquatic Code* and *Aquatic Manual*, in the recommendations for treatment prior to importation of amphibians intended for the pet trade. The Commission agreed, as described in the *Aquatic Manual*, that treatment of live animals prior to importation is not considered an adequate risk management measure. The Commission therefore proposed the removal of the provision for treatment of live aquatic animals to eradicate infection from Articles 8.1.8. and 8.1.10. The Aquatic Animals Commission acknowledged that the aquatic animal pet trade is an important importation pathway and should be addressed in the future.

When submitting comments, please note the following due date and procedures:

- **Due date of December 19, 2014** for comment submission to

Paul.G.Egrie@aphis.usda.gov

-If you do have comments on the attached document, please utilize the following procedures in their preparation:

- a) identify the specific Article and text you are commenting on
- b) indicate the changes you believe should be made
- c) provide suggested language that should replace the changes you are making (if any)
- d) provide a scientific justification or rationale for such changes

CHAPTERS ARE POSTED ON THE OIE WEB PAGE:

http://www.aphis.usda.gov/wps/portal/aphis/ourfocus/animalhealth!/ut/p/a1/04_Sj9CPykssy0xPLMnMz0vMAfGjzOK9_D2MDJ0MjDzdgy1dDTz9wtx8LXzMjf09TIAKIoEKnN0dPUzMfQwMDEwsjAw8XZw8XMwtfQ0MPM2I02-AAzgaENlfrh-FpsTd1QmoxM0nwNzby8jA2xSqAJ8TwQrwuKEgNzTCINNTEQDfLcka/?1dmy&urile=wc%3apath%3a%2FAPHIS_Content_Library%2FSA_Our_Focus%2FSA_Animal_Health%2FSA_OIE_International_Standards%2F

Feel free to contact me if you have any questions, and please feel free to share these documents with others whom you believe would provide valuable input.

Thank you for your participation!

P. Gary Egrie, VMD

Aquatic Animal Focal Point for OIE Activities

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VHSV DETECTED IN COHO SALMON AT TWO WISCONSIN HATCHERIES
<http://www.jsonline.com/sports/outdoors/fish-virus-detected-in-coho-salmon-b99409509z1-286006681.html>

DNR SURVEILLANCE EFFORTS DETECT VHS VIRUS IN WILD COHO USED FOR EGG COLLECTION

Two batches of eggs destroyed as a precaution, but no impact expected on spring 2016 stocking

MADISON -- Ongoing surveillance efforts detected viral hemorrhagic septicemia virus in wild coho salmon processed this fall for egg collection at the Root River Steelhead Facility operated by the Wisconsin Department of Natural Resources.

The fish virus was detected in ovarian fluid samples taken from coho salmon used to produce eggs for DNR's ongoing Lake Michigan stocking program. After receiving test results indicating the presence of VHS in females donating to two batches of eggs, these eggs and others that lacked complete data were destroyed as a precaution despite undergoing federally approved disinfection procedures as part of the department's established biosecurity measures.

Ron Bruch, DNR fisheries chief, said no impact is expected on spring 2016 stocking plans. This year's successful spawning run resulted in the collection of approximately 25 percent more coho eggs than anticipated and this additional volume should cover the number of eggs that were destroyed, providing for the 2016 stocking of 400,000 yearlings.

"Wisconsin DNR is committed to maintaining the integrity of our hatchery system, as well as the health of state fisheries, and our fish health surveillance work is a key part of that commitment," Bruch said. "Our testing and biosecurity protocols exceed state and federal standards and our operational firewalls prevent wild brood stock from coming in contact with young fish in our hatcheries. The conservative approach taken by destroying the eggs was implemented as an additional precaution."

The Root River facility serves as one of the state's two sources of wild steelhead or rainbow trout eggs and also serves as a collection point for coho eggs. VHS, which has been found in the Great Lakes since 2003 and, since 2007, in the Wisconsin waters of Lake Michigan, Superior and Winnebago. The virus can kill fish by weakening their blood vessels, although no large scale die-offs of game fish have been observed in these waters since the disease was first detected.

DNR officials credited a partnership with the U.S. Fish and Wildlife Service for providing an efficient means of laboratory sample processing and disease detection. As part of

the fall egg collection procedures at Root River, as well as at Strawberry Creek Chinook Facility in Sturgeon Bay and the C.D. "Buzz" Besadny Anadromous Fish Facility near Kewaunee, ovarian fluid samples are sent to the La Crosse Fish Health Center for analysis. The lab uses cell culture testing to detect VHS, a process that takes 30 days to complete and the only process recognized by the USDA for confirmation of the presence or absence of the virus in a sample.

"We are applying the best scientific practices to monitor and ensure the health of the fishery," Bruch said. "I am not surprised we found VHS in Lake Michigan coho salmon, given the presence of the disease in other game fish such as brown trout and chinook. The finding validates our proactive disease surveillance program to protect our hatchery system as well as our wild fish stocks."

DNR has been in communication with the U.S. Department of Agriculture and state Department of Agriculture, Trade and Consumer Protection regarding the VHS detection and preventive actions. DATCP is responsible for regulating the health of fish that are found on private fish farms and DNR hatcheries while USDA has oversight on trade restrictions involving VHS.

"The DNR is very thorough in its efforts to ensure fish health beyond state and federal requirements and we are working with the department's fisheries management team to ensure the health of fish being raised in Wisconsin," said state Agriculture Secretary Ben Brancel. "We appreciate DNR's surveillance efforts as a way to further understanding of VHS and its impact."

To learn more search the DNR website, dnr.wi.gov and for "VHS." More information about actions to limit the spread of VHS can be found by searching "[preventing VHS](#)." FOR MORE INFORMATION CONTACT: Ron Bruch, DNR fisheries chief, (920) 427-9831, Ronald.Bruch@wisconsin.gov; Jennifer Sereno, DNR communications, (608) 770-8084, Jennifer.Sereno@wisconsin.gov

FISH VACCINATION -

http://www.researchandmarkets.com/publication/m9egu4i/fish_vaccination