

<b>No. 17</b>	<b>Fish Culture Section</b>	<b>Jim Bowker</b>
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TO: John Boreman, President  
 FROM: Jim Bowker, Fish Culture Section  
 DATE: July 11, 2013

## **I. Motion Report**

None

## **II. Activity Report**

### **Goal 1: Global Fisheries Leadership**

**Objective 1.1:** The Hatcheries and Management of Aquatic Resources (HaMAR, formerly Propagated Fishes in Resource Management II) is being spearheaded by FCS President-Elect Jesse Trushenski.

The HaMAR fact-finding symposium is slated for the AFS 2013 meeting in Little Rock. It has been challenging to secure external support for speaker travel, however, the Fish Culture Section and Fisheries Management Section have both committed funds to help defray these costs.

FCS President Bowker and President-Elect Trushenski convened a teleconference with Introduced Species member Jeff Hill to discuss HR 996 "Invasive Fish and Wildlife Prevention Act". President Boreman had asked Jeff to provide comments to this bill on behalf of the Society. Jeff was seeking input from others and arranged the telecom with Bowker and Trushenski. The letter submitted to The Honorable Louise Slaughter on behalf of AFS was reflective of our discussion.

**Objective 1.1, Strategy 2:** The FCS President continues to send an email message to primary authors of manuscripts published in issues of the North American Journal of Aquaculture. The message states that the AFS FCS thanks them and their co-authors, offers congratulations for their publications in NAJA, and concludes with "Publication of quality manuscripts such as those submitted by you ensure that NAJA will continue to be a relevant journal for fisheries professionals."

**Objective 1.2, Strategy 7:** The WGADCB met on February 23, 2013 in Nashville, TN, and updates were provided regarding several WGADCB projects. In previous meetings, participants had expressed interest in helping to generate needed data for drug approvals, but wanted to know more about the claims in development and what efficacy data were needed. WGADCB co-chair, Jim Bowker, prepared a 'wishlist' of needed efficacy data, which has now been made available on the FCS website (<https://docs.google.com/file/d/0B43dbIzIjQD3SjdoSkFsbHNyZ2M/edit>).

Others had described the reluctance of agency purchasing agents to purchase an approved drug product when a less expensive 'generic' product is available. With assistance from the WGADCB, the Food and Drug Administration Center for Veterinary Medicine drafted a letter

addressing the importance of purchasing approved products only. The letter is now available on the FDA CVM website

(<http://www.fda.gov/AnimalVeterinary/SafetyHealth/ProductSafetyInformation/ucm324048.htm>; also linked via FCS website), and can be downloaded and used as an attachment when submitting purchase request documents to agents responsible for placing aquaculture drug orders. As an outcome/deliverable from the AFS/FDA summit following release of the AFS Policy Statement on the Need for Immediate-release Sedatives, a 'FAQ with FDA' outreach article was planned to explain, in plain terms, the FDA approach to fish sedatives and other fish drugs. A draft article has been prepared, and is undergoing FDA internal review, with the intent to submit the final draft for publication in Fisheries magazine.

Progress continues regarding identifying a means by which certain fish pathogens could be grouped. WGADCB participants involved in this effort have focused their attention on Bacterial Gill Disease (BGD) and the bacteria commonly associated with this disease. They will soon be looking to collect isolates from documented cases of BGD in order to identify the specific pathogens typically involved.

*Current WGADCB co-chairs: Steve Sharon, Lester Khoo, Randy MacMillan, Jim Bowker, Scott LaPatra, Andy Lazur, and Jesse Trushenski*

## **Goal 2: Education/Continuing Education**

**Objective 2.1., Strategy 3:** The Fish Culture Section recognized three student presenters for their outstanding abstracts at the 2013 Aquaculture America Conference held in Nashville TN February 21-25 2013. FCS Best Student Abstract Awards winners were Paula Caldentey (Mote Marine Laboratory) and Lucius Caldwell (University of Idaho). Paula's presentation was entitled: Improving Post-Release Survival of Cultured Juvenile Common Snook *Centropomus undecimalis* Through Hatchery Conditioning (co-authors, Nathan Brennan, Kevan Main, and Ken Leber), and Lucius's presentation was entitled: Metabolic and Reproductive Endocrine Signals of Repeat Spawning in Post-Spawn Female *Oncorhynchus mykiss* (co-authors, Larry Riley, Christine Duncan, Andrew Pierce, and James Nagler). Both received a certificate and a \$250 cash award. Tyler Frankel (University of Maryland) won the joint FCS/USAS Best Student Abstract Award (as well as numerous other awards) for his presentation entitled: The Effect of Freezing Rate on the Quality of Striped Bass *Morone saxatilis* Spermatozoa (co-authors, Daniel Theisen, Howard Guthrie, Glenn Welch, and Lewis Woods III). Tyler received a certificate and a \$500 cash award. The three award winners were also selected to give speed presentations at the Conference during the Student Spotlight, which was immediately after the Plenary Session on February 22, 2013. Tyler Frankel won the award as the top presenter during this session.

FCS Student Member Carlin Fenn (Southern Illinois University – Carbondale) won the overall Best Student Presentation at the Conference for her presentation entitled: Insulin-Like Growth Factor Regulation in *Scaphirhynchus* Sturgeon (co-author, Brian Small).

The FCS will be soliciting abstracts from student members presenting at the 143<sup>rd</sup> Annual AFS Meeting this fall.

*Current Student Awards Committee: Bradley Ray (chair), Dan Carty, and Steve Lochmann*

**Objective 2.1., Strategy 1:** The FCS helped provide continuing education materials by contributing funds to help cover the cost of printing 1,000 copies of the revised Quick Desk Reference Guide to Approved Drugs for Use in Aquaculture. Over 1,000 of the original cost-effective and userfriendly Guides were mailed to fish culturists, fisheries managers, fisheries researchers, and educators around the world. There are currently 400+ back-ordered copies. Copies will be available to AFS members.

**Goal 3: Value of Membership**

Nine individuals were selected to receive the inaugural FCS Award of Excellence. This award was established in response to comments from FCS members to recognize current practitioners in the field of fish culturists or allied fields working for public or private entities, for their innovations that have helped advance our scientific discipline. Winners were:

1. Mike Mason – Iowa Department of Natural Resources - for his substantial contributions to numerous advances in fish culture during his successful career with the Virginia Department of Game & Inland Fisheries from 1974 to 1980 and Iowa DNR from 1981 to present. He is currently the Supervisor of the DNR's Fish Culture Section the Assistant Chief of the Fisheries Bureau.
2. Eric Wagner – Utah Department of Fish and Game - for his vast research accomplishments, his teaching expertise, and his exemplary professional service. During his nearly 25 years at the Fisheries Experiment Station in Utah, he has published over 60 peer-reviewed articles on evaluating novel culture techniques, stress and aquaculture, whirling disease, novel aquaculture drugs and disinfectants, and coldwater disease.
3. Jim Bomford, Engineer; Duaine Hardie, Fish Culture Technician; Brian Martin, Hatchery Manager; Ray Billings, VP Strategic Projects – Freshwater Fisheries Society of BC - for developing and implementing innovative, low cost, water re-use technology that can be retrofitted in conventional hatchery raceways and circular tanks. These systems reduce the amount of pumped water needed to sustain fish in rearing tanks by 50 – 75%, substantially reduce hatchery operational costs and groundwater consumption, and have provided evidence that fish quality has improved due to improved flows and consistent oxygen levels throughout the rearing containers.
4. Bonnie Johnson – USFWS Aquatic Animal Drug Approval Partnership Program – for development of the INAD Program Management System (IPMS), which is an on-line database she helped create to ease the data reporting requirements for INAD participants. On-line reporting and the ability to dump data directly into the database has eliminated mountains of paperwork, reduced redundancies, and improved the ability to better track study progress and data submission quality.
5. Dr. Aaron Barkoh – Texas Parks and Wildlife Division – has authored or co-authored 30+ publications/reports of research investigations into improved warm-water fish culture methods. He also provides research and editorial assistance to more than 150 TPWD fisheries staff and has helped advance fish culture methods and systems to provide better fishing opportunities for 1.9 million Texas anglers.

On May 11, 2013, Dr. Gary Wedemeyer and Mr. Wesley Orr were inducted into the Fish Culture Hall of Fame at the D.C. Booth National Historic National Fish Hatchery and Archives in Spearfish, South Dakota. Gary was recognized for his pioneering work in understanding the effects of the hatchery environment on fish physiology, and Wes was recognized for his significant contributions to rainbow trout broodstock development and husbandry methods.

President Jim Bowker inducted both into the Hall of Fame during the induction ceremony. Dr. Wedemeyer was unable to attend the ceremony but was put on speaker phone during his induction. Both stated that induction was the “highlight of their careers and they are honored to join the list of previous Hall of Fame inductees”. The ceremony was attended by friends and family, including Hall of Fame inductees Bob Piper, Arden Trandahl, and Laurie Fowler, as well as FCS Past Presidents Arden, Piper, and Mike Barnes, and FCS members Steve Brimm, Greg Kindschi, and Tom Pruitt. Biographies for Orr and Wedemeyer can be found at: <https://sites.google.com/site/fishculturesection/recognizing-excellence/fish-culture-hall-of-fame>

Donations were solicited to purchase two engraved bricks to put into the BrickWalk at the DC Booth Historic National Fish Hatchery in Spearfish SD for two long-time AFS and FCS members who are retiring. Vince Mudrak (21 years with the USFWS and FCS President 1990-1991) and Mike Masson (32 years with the Iowa DNR) each received a brick to be displayed in their home and a brick that will be placed in the BrickWalk for all to see. Bricks were engraved with their name, their agency, and years worked.

*Fish Culture Hall of Fame Committee: Jesse Trushenski (chair), Curry Woods, Mike Barnes, Ted Batterson, and Jeff Silverstein.*

*Award of Excellence Committee: Jim Bowker (Chair), Jesse Trushenski, Mike Barnes, Rob Schmidt, and Angela Smith.*

**Objective 3.1, Strategy 9:** The FCS has been publishing its Better Know a Hatchery series since Jan 2012 (20 facilities will have been featured by August 2013). The series has featured fish culture or research facilities ranging from state, federal, tribal, and commercial hatcheries to University and other research programs. Some features have been published in Fisheries and we are arranging to have some features published in Hatchery International. We solicit most of our participants at regional and national meetings but also have facilities contacting us directly to be featured.

A list of recent and upcoming features:

March- Florida Bass Conservation Center at Richloam State Fish Hatchery, Webster, Florida

April- The Gulf Coast Research Laboratory, Univ. of Southern Mississippi, Ocean Springs, Mississippi

May- Wolf Lake State Fish Hatchery, Mattawan, Michigan

June-Little Port Walter Marine Station, Sitka, Alaska

July-Ed Weed Fish Culture Station, Grand Isle, Vermont

August- Dubois Fish Hatchery, Dubois, Wyoming

September- Grace Fish Hatchery, Grace, Idaho

FCS Facebook page – As of June 28<sup>th</sup>, the page had 268 “likes” and that number continues to grow. More people are frequenting the Facebook page to comment on photos and learn about what is going on in the FCS. A “What’s in your glass?” campaign was recently started asking FCS members to send us photos of their FCS pint glasses in action. Photos have been received in which a FCS glass has been filled with hand tied flies for fly fishing, sunshine bass fry, and a beta. Photo albums from each of our Better Know a Hatchery facilities are posted on our Facebook page, and each month we change our cover photo to one from that month’s

BKAH. Our Facebook page is linked to the FCS website and when something is posted on Facebook, it automatically is posted on the FCS website.

The most recent FCS newsletter was published and posted on the FCS website in June 2013, and the link was provided to the AFS Webmaster with a request to post on the AFS home page under Latest News. We continue to get a few “shout out” emails from members after every newsletter is released.

The website continues to evolve as we post more dynamic and informative content. In addition to routine updates and additions, new content has been added to the WGADCB (see updates above) and Resources pages (information on federal aquaculture regulations), and the home page has been updated with an image slide show to attract visitors and direct them to some of the more essential pages within the website. The home page now also includes a live feed from our Facebook page, to integrate these two platforms more seamlessly. More than 21,500 people have visited the website to-date.

*Current Newsletter Committee: Heidi Lewis (chair), Mick Walsh, Bonnie Mulligan and Molly Bowman; Current Website Administrators: Jesse Trushenski, Jim Bowker, Dan Mosier, and Alan Johnson;*

*Current Facebook Page Administrator: Brian Gause;*

*Current Listserv Administrator: Alan Johnson*

**Objective 3.2, Strategy 1:** FCS Student Committee coordinated and worked with the U.S. Aquaculture Society’s Student Activity Committee and assisted in coordinating, collaborating and collecting questions to be used in the Aquaculture America 2013 Triennial WAS conference in Nashville TN in the student Quiz Bowl; solicited donations to be used as prizes for the annual Quiz Bowl and was responsible for collecting and distributing prizes to winners at the student reception; and collaborated with USAS student liaison Aaron Watson on topics and speakers for the student organized session to be held at the 2013 Triennial WAS conference.

*Current Student Committee: Bonnie Mulligan (Chair), Christine Savolainen, John Bowzer*

**Objective 3.5, Strategy 6:** Working with the Director of the DC Booth Historical National Fish Hatchery and the FHS Archivist in their efforts to compile biographical sketches of S. F. Snieszko Distinguished Service Award winners, getting plaques made for each, and finding space at DC Booth to display the plaques and information re: the Snieszko DSA. The group envisions that display to be similar to the Fish Culture Hall of Fame display.