

REPORT OF THE USAHA/AAVLD COMMITTEE ON AQUACULTURE

Co-Chairs: Scott E. LaPatra, Buhl, ID
Kevin Snekvik, Pullman, WA

Deborah L. Brennan, MS; Jones W. Bryan, SC; William W. Buisch, NC; Tony A. Caver, SC; Fred Cunningham, MS; Robert G. Ehlenfeldt, WI; James M. Foppoli, HI; Nancy A. Frank, MI; Andrew E. Goodwin, AR; Burke L. Healey, NC; Donald E. Hoenig, ME; Robert F. Kahrs, FL; Myron J. Kebus, WI; Lester H. Khoo, MS; Vader M. Loomis, PA; John R. MacMillan, WV; Phillip M. Mamer, ID; Larry D. Mark, VA; Otis Miller, NC; Brian M. O'Quin, OR; Lanny W. Pace, MS; Charles Palmer, CA; Jill B. Rolland, MD; John P. Sanders, WV; A. David Scarfe, IL; Norman G. Willis, CAN; Ria de Grassi, CA.

The Committee on Aquaculture met on October 20, 2007 from 1:00-6:30 p.m. at John Ascuaga's Nugget Hotel in Reno, Nevada. Scott LaPatra called the meeting to order and introduced individuals attending the meeting.

Randy MacMillan provided an update from the National Aquaculture Association (NAA). Key points including a number of topics. First, he reviewed the NAA mission, followed by key National Domestic Aquaculture Issues. These topics include: Fish Health Management; Environmental Stewardship; Organic Standards; Off-Shore Aquaculture; Aquatic Nuisance Species; Food Safety; Public Perceptions and Dominant Aquaculture Issues.

The next topic covered by MacMillan was regarding aquatic animal health. First was viral hemorrhagic septicemia (VHS) disease. A review of the disease noted that Congressional appropriations of \$5.6 million in House and \$1.8 million in Senate could become available. Concern exists regarding adequate surveillance funding. He addressed wild versus farmed, and related concern regarding how the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) will respond to a Viral Hemorrhagic Septicemia (VHS)-positive farm. A contingency plan for domestic producers was also discussed, as well as the lack of scientifically credible information regarding VHS.

Chapters 1 through 9 have been posted through the federal review process for the National Aquatic Animal Health Plan (NAAHP). The NAA is supportive of plan. There is concern regarding European Union audit of United States health management program.

MacMillan discussed the U.S. health management tools. The first point discussed was vaccine development, including the Joint Subcommittee on Aquaculture (JSA) Biologics. Vaccine survey results were presented at the Drug Approval Workshop in August 2007. There is existing concern regarding small size of the industry and the inability of biological companies to invest in vaccine development. Final Minor Use/Minor Species (MUMS) Rule for Drug Designation was published in July 2007, which includes seven years of market exclusivity. MUMS and tax exemptions include 50 percent credit for safety and effectiveness testing. In the area of new drugs, 35 percent PEROX-AID (Feb. 2007) and Aquaflo Type A (March 2007) are available.

Regarding food safety and antimicrobial resistance, NAA sent a letter to Food and Drug Administration Commissioner Von Eschenbach in May 2007 regarding imported seafood safety due to the import of farm raised fish with antibiotic residues. MacMillan also discussed the United Nations Food and Agriculture Organization (FAO) /World Health Organization (WHO) Codex Alimentarius Commission, regarding the following events:

- FAO good aquaculture practice (GAP)- 2008
- Hazard Analysis and Critical Control Points (HACCP) plans for aquaculture- 2008
- Developing international guidelines for certification in aquaculture (food safety/quality, animal health and welfare, social and environmental aspects)
- Stakeholder meeting Nov. 26, 2007

MacMillan reviewed environment and off shore aquaculture. First was the Clean Water Restoration Act of 2007, which includes House of Representatives bill 2421 (169 co-sponsors) and Senate bill 1870 (19 co-sponsors). NAA sees concern due to inclusion of aquaculture ponds/

effluent in the act. For the National Offshore Aquaculture Act of 2007, which includes House of Representatives bill 2010- (1 co-sponsor). NAA provided oral and written testimony in July 2007 and Senate bill 1609- (1 co-sponsor) NAA submitted written comments to the Senate in April 2007.

On National Animal Identification System, the NAA's position is opposed because of practicality and expense. NAA plans to closely monitor this issue.

For Organic Standards, MacMillan noted the Organic Aquaculture Symposium scheduled for November 27, 2007. Key issues include open cage net pens and alternative nutritional technology fish oil and fish meal

On Country of Origin Labeling (COOL), which is still operating under the Interim Final Rule, effective 2005, is for traceability in retail only. USDA, Agriculture Marketing Service (AMS) audits are currently in progress. There is also preparation of a final rule for Mandatory Fish and Shellfish Country of Origin Labeling. The comment period ended Aug. 20, 2007.

Aquatic Nuisance Species were discussed. Big scaled and black carp are listed as injurious. Other species discussed included Channeled apple snail and the New Zealand mud snail.

For public education, NAA and the National Fisheries Institute (NFI) have begun collaboration. The American Association for the Advancement of Science (AAAS) Symposium was held February 2007 regarding education.

MacMillan concluded with the NAA concerns for 2008, which are:

- VHSV management
- Escalating imports
- Continually escalating domestic production costs
- Public perceptions
- Sustainability

David Scarfe provided an update from the American Veterinary Medical Association (AVMA) – Aquatic Veterinary Medicine Committee (AVMC). A copy of the AVMC report from the Proceedings of the 144th Session of the AVMA House of Delegates in Washington, D.C. July 13, 2007 was shared. See the above document for complete review; Key points covered included:

- One World-One Health-One Medicine Initiative
- AVMA Legislative and Regulatory Issues
 - National Offshore Aquaculture Act of 2005
- Biological and Therapeutic Agents
 - Aquaculture Sub-Committee (JSA) Working Group for Aquaculture Drugs, Biologics and Pesticide Liaison
 - Veterinary Feed Directive Regulations
 - CODEX ad hoc Intergovernmental Task Force on Antimicrobial Resistance
 - Ornamental Bacterial Flora and Antimicrobial Use
- Aquatic Animal Health and Diseases
 - Association of Fish and Wildlife Agencies (AFWA) National Fish and Wildlife Initiatives
 - World Animal Health Organization (OIE) Global Conference on Animal Health
 - Bergen, Norway on October 9-12, 2006

Andy Goodwin provided an update from the Fish Health Section (FHS) of the American Fisheries Society (AFS). He provided background regarding the organization. The next meeting of the AFS-FHS is at Prince Edward Island in July 2008.

Goodwin indicated that the Bluebook and Standardized Inspection Manual is available. The diagnostic and inspection sections have been re-worked. The VHS section has been updated and posted on AFS website, www.fisheries.org. The diagnostic section has new chapters for shrimp and shellfish.

Regarding the re-evaluation of certification of fish health inspectors, it has been revised and inspectors would have to show specific expertise in aquatic animal health. For fish pathologists, the plan is to be revised soon.

Jerry Heidel provided an update on the National Animal Health Reporting System (NAHRS). He covered the background of the NAHRS. Reporting procedures would include five diseases listed with OIE. Progress has included adding committee members so that the group has members in fish, shellfish and shrimp. The group is looking for member associated with catfish. Discussions are ongoing regarding if reporting is with either presence of infectious agent or if there is a need to have both infectious agent and clinical disease. Utilization of definitions typically for terrestrial animals are in debate; for example do all production activities meet the definition of an animal maintained in captivity for food production? Additionally, the group includes native American tribes

Norm Willis provided an update from the Committee on International Standards. He discussed the background and function of the Committee, and highlighted the importance and the desire to interact with the Committee on Aquaculture.

Jill Rolland provided an update from Animal and Plant Health Inspection Service (APHIS). She first discussed Infectious salmon anemia virus. After providing a background of disease in Maine, she spoke on the transition from trying to eradicate to surveillance and mandatory testing. There have been no new cases since March 2006. Rolland discussed the transition to Federal-State-Industry Coop Program in FY 2007, and that funds are in place for FY 2008. APHIS is working on import protocols.

Regarding Viral Hemorrhagic Septicemia Virus (VHSV); Great Lakes strain, Rolland provided a background with timeline of VHS in the Great Lakes. She covered Federal Emergency Order in Oct 2006; two modifications have been made to the order since then. APHIS held meetings with interested parties in January, 2007. There is development of an interim rule to replace the emergency order. Regulatory text and a risk analysis are currently in draft form. An environmental analysis is in an incomplete draft form. For funding, Administrators' contingency funds are being used for Surveillance/ Education-Outreach/ Infrastructure at National Veterinary Services Laboratories (NVSL). Rolland discussed a surveillance plan, which involves states, Canada and the United States Fish and Wildlife Service (USFWS). Eleven states requested funding, while eight states did not request funding.

On the National Aquatic Health Plan, Rolland gave some background and rationale. It involves the National Oceanic and Atmospheric Administration (NOAA), APHIS and USFWS. A draft document is complete and has been submitted for first review. Moving ahead, it needs to go to agencies, Joint Subcommittee of Aquaculture and the National Science and Technology Council (NSTC)-Office of Science and Technology Policy (OSTP) then published for public review. She then provided an overview of the plan.

Rolland next discussed the European Union Audit, providing background on the June 2007 event. It included NOAA, FWS, Regional APHIS Offices and aquaculture industries in Washington and Oregon. From the exit interview there were the following improvements and actions:

- training of veterinarians
- surveillance program lacking
- Standard Operating Procedure's (SOP) lacking
- "Evidence" written records lacking
- Cessation of live mollusks to EU for grow out

In response to Exit Interview, funding was received to develop training modules for the National Veterinary Accreditation Program (NVAP). Regarding general funding, underfunding continues, though the House and Senate look to include funding \$5.6 million and \$1.8 million, respectively, for VHS

David Morris provided an update on the National Animal Identification System (NAIS). NAIS has developed and printed a new business plan which describes the NAIS plan for the next three to four years. It has been developed into a two tier segregation of importance for animal species to be incorporated into to NAIS:

- Tier 1: cattle, swine, poultry, goats and competitive equines

- Tier 2: all other animal species including fish

Francois Elvinger provided an update on The National Animal Health Surveillance System (NAHSS). He provided the origin of NAHSS, and partners in surveillance. Elvinger noted NAHSS Steering Committee Aquaculture Representative, Ken Cline, Cline Trout Farms, Inc., Boulder, Colorado. He went on to discuss NAHSS accomplishments, integration of surveillance and comprehensive surveillance. He concluded by discussing a resolution from the NAHSS for evaluation by the Committee on Aquaculture. The Committee opened discussion of the resolution. After minor modifications to the document the committee voted and accepted the resolution.

Judy Akkina provided an overview of the project Assessing Infectious Disease Emergence Potential in the U.S. Aquaculture Industry.

Scott LaPatra conducted old business. First he reviewed last year's Resolutions passed by Committee on Aquaculture. Progress reports of actions taken were then discussed.

Scott LaPatra conducted new business. A Resolution from the National Aquaculture Association was presented by Randy MacMillan. The Resolution was ultimately passed. A second Resolution from the American Fisheries Society-Fish Health Section was presented by Scott LaPatra. This resolution was withdrawn.