



# International Symposium on Genetic Biocontrol of Invasive Fish

Doubletree Hotel, Minneapolis, Minnesota, USA, June 21-24, 2010

## Purpose

To discuss prospects and risks associated with managing invasive finfish and mussels with genetic biocontrol strategies and to provide decision support for future genetic biocontrol endeavors.

## Symposium Website and Registration

Register online at <http://www.seagrant.umn.edu/ais/biocontrol> using the secure payment system. Opt to reserve a room at the Doubletree Hotel Minneapolis-Park Place at the same time.

Early registration (by April 1, 2010) – \$350?? (student: \$50)

Late registration (April 2, 2010 – June 1, 2010) – \$400?? (student: \$75)

**Registrations will not be accepted after June 1, 2010.**

The Doubletree Hotel Minneapolis-Park Place is located 16 miles from the Minneapolis - St. Paul International Airport at 1500 Park Place Blvd., Minneapolis, Minnesota. The hotel's phone number is 952-542-8600. The website is <http://www.doubletree.com>.

For additional information, contact: Leah Sharpe (phone: 802-698-0259, e-mail: [sharp092@umn.edu](mailto:sharp092@umn.edu))

## Expect to Contribute

Join the world's leading experts in a highly interactive scientific exchange about the genetic biocontrol of invasive fish. By participating in this first-time-ever symposium you will help to build a shared understanding of genetic biocontrol issues and to stimulate new collaborations.

**The International Symposium on Genetic Biocontrol of Invasive Fish** is a step toward turning genetic biocontrol methods into practical tools. The symposium is designed to create opportunities for fisheries managers, scientists, government regulators, industry representatives, and others with interests in the use of genetic biocontrol to:

- Review the status of genetic biocontrol technologies with a focus on invasive finfish
- Create a framework for conducting risk assessments before genetically modified organisms are released
- Discuss opportunities for stakeholders to contribute to developing and assessing genetic biocontrol technologies
- Examine the regulatory context for genetic biocontrol of invasive fishes and mussels
- Consider the economic impacts of aquatic invasive species and of genetic biocontrol technologies
- Develop a plan to guide further research

## Agenda

Access the complete agenda at <http://www.seagrant.umn.edu/ais/biocontrol>.

### ***Monday, June 21: Focus on the development of genetic biocontrol technologies***

Participants will review the status of genetic biocontrol technologies, including chromosome-based, gene-based, and other targeted methods. Presenters will offer information about combining genetic biocontrol methods with other control methods before participants discuss genetic biocontrol research needs.

### ***Tuesday, June 22: Focus on environmental risk assessment of genetic biocontrol applications***

Participants will hear presentations and contribute to discussions about environmental risk assessment with an emphasis on early steps, the status of the science, research needs, and methods for stakeholder deliberation. Small groups will begin formulating a research agenda.

### ***Wednesday, June 23: Focus on regulations and economics affecting technology and risk assessment***

Participants will learn about the regulatory and economic contexts governing the development and application of genetic biocontrol technologies. Small groups will draft outlines for a technology development research agenda, and a risk assessment research agenda.

### ***Half-day writing retreat--Thursday, June 24: Working groups***

If you are committed to contributing text to one of the papers resulting from this symposium, you are invited to participate in a post-symposium working group. Lead authors for symposium syntheses have been selected. During the morning, working groups will integrate draft outlines into an expanded outline and agree on writing tasks and deadlines.



## Keynote Speakers and Participants

**Robert Devlin, Ph.D., Fisheries and Ocean Canada**, is one of the world's leading scientists in developing genetically modified fish and defining their ecological risks. He applies molecular and general genetics to questions of salmonid biology, particularly the enhanced growth of coho salmon.

**Keith Hayes, Ph.D., Commonwealth Scientific and Industrial Research Organisation, Australia**, is an international expert on quantitative risk assessment for aquatic invasive species. He is working with the daughterless carp team and is a senior research scientist responsible for developing and applying novel risk assessment techniques.

**Anne Kapuscinski, Ph.D., Dartmouth College, USA**, is a biotechnology advisor to the U.S. and Canadian governments, the United Nations, and the Consultative Group on International Agricultural Research. She earned a Pew Marine Conservation Fellowship for research and policy work on ecological effects of aquatic biotechnology.

**Dan Simberloff, Ph.D., University of Tennessee in Knoxville, USA**, studies susceptibility of ecosystems to invasion, the implications of these invasions, and interactions between invasive species. He earned an Eminent Ecologist Award from the Ecological Society of America, and has been critical of the U.S. government's inaction in combating invasive species.

**Ron Thresher, Ph.D., Commonwealth Scientific and Industrial Research Organisation, Australia**, is renowned for leading the daughterless carp team, the first group in the world to explore genetically modified organisms for combating invasive species. He is a marine ecologist and was the foundation head of the CSIRO Centre for Research on Introduced Marine Pests.

## Steering Committee

### Anne Kapuscinski (Chair)

Sherman Fairchild Distinguished Professor of Sustainability Science, Dartmouth College  
*Former Sea Grant Extension Specialist in Biotechnology and Aquaculture, University of Minnesota*

### Leah Sharpe (Coordinator)

Ph.D. Candidate, Conservation Biology, University of Minnesota  
National Science Foundation IGERT trainee

### Dan Ashe

Science Advisor to the Director, U.S. Fish and Wildlife Service

### Jim Barrett

Manager of the Native Fish Strategy, Murray-Darling Basin Authority

### Robert Clarkson

Fishery Biologist, U.S. Bureau of Reclamation

### Doug Duncan

Fish Biologist, U.S. Fish and Wildlife Service, Region 2 (Southwest)

### Jeff Gunderson

Associate Director and Fisheries and Aquaculture Extension Educator, University of Minnesota Sea Grant College Program

### Mike Hoff

Regional Aquatic Nuisance Species Coordinator, U.S. Fish and Wildlife Service, Region 3 (Great Lakes-Big Rivers Region)

### K. Bruce Jones

Chief Scientist for Biology, U.S. Geological Survey

### Glen Knowles

Fish and Wildlife Biologist, U.S. Fish and Wildlife Service, Region 2 (Southwest)

### Weiming Li

Professor of Fisheries and Wildlife and Physiology, Michigan State University

### Marshall Meyers

Executive Vice President and General Counsel of Pet Industry Joint Advisory Council

## Major Sponsors

Major sponsors of **The International Symposium on Genetic Biocontrol of Invasive Fish** include the University of Minnesota Sea Grant Program, Dartmouth College, the U.S. Fish and Wildlife Service, the U.S. Bureau of Reclamation, and Murray-Darling Basin Authority of Australia.

