

# Fisheries

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**Hydraulic Fracturing: Will There Be Impacts?**

**What Hatchery Fish Don't Remember**

**The World's First Ecological Observatory**

**Fish? Why Fish?**

**New AFS Policy Statement!**

**AFS's Role In Education**



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## Contents

### COLUMNS

#### President's Hook

##### 3 Teach Your Children Well

AFS should ensure that students and career professionals being trained in fisheries-related disciplines have the right educational foundation for meeting the challenges that lie ahead.

*John Boreman — AFS President*

#### Guest Director's Line

##### 43 The Four Fs of Fish: Communicating the Public Value of Fish and Fisheries

Do we, as professionals and as a profession, have a good answer to the common inquiry, "Fish? Why fish?!"

*Abigail J. Lynch and William W. Taylor*

### FEATURES

##### 4 Hydraulic Fracturing and Brook Trout Habitat in the Marcellus Shale Region: Potential Impacts and Research Needs

Hydraulic fracturing activities may have a range of implications for already vulnerable brook trout populations.

*Maya Weltman-Fahs and Jason M. Taylor*

##### 16 Adaptive Forgetting: Why Predator Recognition Training Might Not Enhance Poststocking Survival

The highly sophisticated predator recognition learning mechanisms of aquatic prey may limit the effectiveness of life skills training efforts in hatchery-reared fishes: lessons from behavioral ecology.

*Grant E. Brown, Maud C.O. Ferrari, and Douglas P. Chivers*

##### 26 The National Ecological Observatory Network: An Observatory Poised to Expand Spatiotemporal Scales of Inquiry in Aquatic and Fisheries Science

A new ecological observatory supported by the National Science Foundation promises to provide an unprecedented open-access resource for all ecologists and will work in aquatic ecosystems across the nation.

*Ryan M. Utz, Michael R. Fitzgerald, Keli J. Goodman, Stephanie M. Parker, Heather Powell, and Charlotte L. Roehm*



**36** SIUC IL-AFS member Jake Norman instructs beginning anglers on how to properly cast a rod and reel during the 2012 Illinois Department of Natural Resources' Urban Fishing program. Through this vital community resource, many children had the opportunity to catch their first fish, thus generating a newfound enthusiasm for fishing within the youngest members of the Southern Illinois community.

### STUDENT ANGLE

##### 36 SIUC Subunit Blends Research and Service in Pursuit of Professional Development.

*Carlin Fenn, Jeffrey Hillis, and Jesse Trushenski*

##### 37 Student Writing Contest Now Accepting Submissions!

### POLICY STATEMENT

##### 38 AFS Policy Statement on Lead in Tackle Approved

*Jesse Trushenski and Paul J. Radomski*

### AUTHOR GUIDELINES

##### 39 Fisheries 2013 Guide for Authors

### JOURNAL HIGHLIGHTS

##### 45 North American Journal of Fisheries Management, Volume 32, Number 6, December 2012

### CALENDAR

##### 47 Fisheries Events

### ANNOUNCEMENTS

##### 48 January 2013 Jobs

Cover: Brook Trout in front of a Hydraulic Fracturing Pad.  
Photo Credits: foreground: Miles Luo; background: Alessandro Farsi

# American Fisheries Society Adopts New Policy, Encourages Efforts to Understand and Limit Effects of Lead in Sport Fishing Tackle on Fish and Wildlife

**Jesse Trushenski and Paul Radomski**

American Fisheries Society, Resource Policy Committee

In October of 2012, the American Fisheries Society (AFS) voted to adopt a new policy statement on “Lead in Sport Fishing Tackle.” Like all AFS policies, this document represents the collective voice of the oldest, largest, and most influential professional organization dedicated to the fisheries sciences. The new policy draws attention to the negative effects of lead in the environment and encourages scientists, regulatory authorities, tackle manufacturers, the sport fishing community, and other stakeholders to work together to understand and limit any negative effects of lead-based tackle (e.g., sinkers, jigs) on fish and other organisms.

Lead is a naturally occurring but toxic element. Because of its negative effects on human and animal health, lead is banned in products such as gasoline, paint, and solder in many countries. However, lead is still commonly used in fishing tackle because it is readily available, dense, malleable, and inexpensive. Though lost fishing tackle can remain intact and relatively stable for decades or centuries in aquatic systems, if ingested by animals, the lead in these products becomes more biologically available and can result in lethal exposures. The effects of ingesting such tackle were established in waterbirds in the 1970s and 1980s, following lead poisoning events in localized populations of loons and swans. Although population-level effects have not been unequivocally demonstrated and lost tackle represents a relatively small fraction of the total amount of lead found in the environment (surface runoff, atmospheric deposition, and mining activities are more significant sources), given the likelihood of ingestion and the magnitude of organism-level effects of exposure following ingestion, it would seem prudent to assess, understand, and limit the negative effects of lead in sportfishing tackle on fish and other aquatic organisms.

This issue was reviewed by members of the AFS Resource Policy Committee (RPC), under the principal leadership of Paul Radomski, Tom Bigford, and Jesse Trushenski. In cooperation with a special committee established by then AFS President Wayne Hubert, Radomski and the other members of the RPC prepared a draft policy statement. Following review by the AFS RPC, governing board, and membership at large, the Society adopted the policy, calling for stakeholders to address the potential effects of lead in sportfishing tackle on fish populations.

Accordingly, the policy of the AFS, in regard to lead in sport fishing tackle, is to

1. Recognize that lead has been known for centuries to be toxic to biological organisms. Thus, the loss and subsequent ingestion of lead sinkers and jigheads by aquatic animals and the potential ramifications of lead ingestion is a natural resource management issue.
2. Understand that the impact of ingested lead on individuals of certain waterfowl species is generally accepted, but population-level impacts on fish and wildlife species are not well documented. Although conclusive scientific proof of these effects is not currently available, actions to inform, educate, and encourage sport-fishing tackle manufacturers, users, and researchers to reduce future introductions of lead into aquatic ecosystems appears advisable. Accordingly, collaborate with fish and wildlife professionals, tackle manufacturers, anglers, policy makers, and the public to encourage the use of non-lead forms of small fishing sinkers and jigheads that are protective of potentially affected fish and wildlife populations.
3. Encourage scientifically rigorous research on lead tackle aimed at generating toxicological and environmental chemistry data including bioavailability assessments; support monitoring and modeling of exposure and effects on at-risk populations; encourage studies predicting consequences of exposure and long-term population-level effects of different tackle material; and encourage studies on reducing the economic and social barriers to nontoxic fishing tackle development and use.
4. Recognize that the hunting and angling communities can be important advocates and forces of change regarding natural resources issues and support educational efforts to promote greater public awareness and understanding of the consequences of lead exposure in wildlife species and the potential gains in environmental quality from use of lead-free fishing tackle.
5. Update policy language as focused research provides additional data on lead tackle-related impacts.

To read the full text of the new policy statement or any of the society’s current policies, please visit the American Fisheries Society online at [http://fisheries.org/policy\\_statements](http://fisheries.org/policy_statements).