

Education and Outreach

Earth Day is Every Day: Spreading the news about invasive species

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Abstract

A special session at the 2009 ICAIS meeting offered participants a chance to experience an outstanding “free choice learning” center: the Montreal Biodome. The setting sparked an engaging discussion of AIS outreach opportunities with partners including members of the Association of Zoos and Aquariums and other educational institutions.

Key words: AIS outreach, free choice learning, AZA educators, Sea Grant, partnerships

Participants at the 2009 ICAIS meeting had a unique opportunity to consider aquatic invasive species outreach opportunities and challenges – all while in the midst of an outstanding “free choice learning” center. The *Aquatic Invaders* project team sponsored the special session at the Montreal Biodome, a facility that is an accredited member of the Association of Zoos and Aquariums (AZA). Held on April 22, 2009, the session — *Earth Day is Every Day: Spreading the news about invasive species* — was well received, with a waiting list for the 50 slots. The event celebrated Earth Day as an example of a prime time to capture the public’s attention regarding invasive species topics. However, environmental education in general — and invasive species in particular — can and should be shared with varied audiences all year. And as the *Aquatic Invaders* project evaluation revealed, many informal educators at AZA sites are eager to share appropriate information with their audiences.

Researchers, regulators, educators and others participated, representing many regions in the United States and Canada, as well as Romania, India and Brazil. The program included a behind-the-scenes tour of the Biodome, a research hub that is also a “free choice learning” center presenting science to audiences interested in environmental topics.

The session’s goal: To encourage scientists, agency staff and non-governmental organizations to identify and develop outreach partnerships with “free choice learning” centers and other educators to reach — and learn from — public audiences. Such efforts at the local and regional levels can help to maximize the integration of invasive species research and education topics into broader environmental outreach efforts. These partnerships will help to improve public understanding of invasive species issues — and eventually result in informed decisions and behavior change.

Participants were assigned to discussion groups that considered various aspects of and challenges in public outreach. Here is a sample of discussion highlights.

What elements have hindered past AIS efforts to reach public audiences?

To help bring about change on AIS issues (e.g., management, policy, resource allocation, education), we must first understand what are the perceived or real barriers, both internal and external, and benefits of actions that facilitate change. Public audience(s) behavior toward AIS is one example.

Audience attitudes

- Sense of hopelessness.

- Sense of helplessness (I don't know what to do).
- Complacency – I'm not really part of the problem.
- Sustaining audience interest.

Motivations

- Pocketbook/money.
- Crying wolf.
- Negativism – add some positive messages.
- Poster children (e.g., zebra mussel, green crab, sea squirts).

Funding

- Staff resources limited often lack of long-term funding.
- Sustaining outreach/interest.

Priority for public

- Economic and social woes.
- Other environmental issues, such as climate change, take precedence.

Comprehensive programs

- Conflicting messages.
- Conflicting management authorities/turf.
- Not using national and/or international guidelines.

What elements have contributed to successful AIS public outreach programs?

- Identifying audiences: Knowing whom you are trying to reach and knowing what they need to know.
- Tailoring messages so stakeholders buy in: Think globally. Act locally.
- Concentrating on children. They are like sponges taking in information and sharing with parents (On the other hand: Can we wait 20 years for the changes to occur?)
- Encouraging citizen science: Let audience view reports, contribute to reports and be part of the message.
- Requesting audiences take an action that can be measured.
- Offering alternatives if regulation removes a commonly used species, such as bait.
- Combining fun with science.
- Providing information to stop new invasions.
- Making sure that all partners get something out of the project or program.
- Avoiding jargon, yet at the same time, do not talk down to adults. Know your audience and introduce key terms when appropriate.
- Keeping a consistent message within your

program and with related programs offered by partners.

Consider different ways to share our messages, relating new information to something they understand:

- Messages need local meaning, but also to be linked globally. Start local. Think global.
- Global solutions may convey invasive species as more than a one-way problem.
- Institutionalize societal relevance.
- Better training from the start – to show societal relevance is important. Modify current norms so that a grant proposal is written for review not only by scientists, but also for society or policy makers.
- Parent/child teaching: Kids teach their parents to care about the environment.
- Education will never be 100 percent successful, but we need to keep doing it to minimize probabilities of invasion.
- Sustaining outreach programs: State programs need to have a large piece of their budget go to education and outreach. Program managers need to institutionalize education and outreach.

How to combine AIS outreach efforts with zoos, aquariums and other free choice learning centers:

- Build upon the learning centers' messages about ecosystems.
- Intertwine invasive species messages into overall message/exhibits of the center.
- Work with the learning center outreach teams that do events out in the community.
- Relate message in some way to the audience so they care — make sure message answers “So what, who cares?”
- Engage audiences and give them easy solutions (show how to clean a motorboat).
- Provide a personal message. Make sure it hits home.
- Have visitors go through the motion such as cleaning boots when leaving an exhibit.
- Show differences of native setting vs. invaded system — visual cues, not just words.

In light of tight budgets in research, government and educational programs around the world, the need for AIS outreach partnerships will only grow — as will the requirements to identify the social relevance, broader implications and behavior change associated with particular research projects.

This roundtable started a discussion about maximizing the integration of invasive species topics into broader outreach efforts. This session was organized by the Aquatic Invaders outreach project team, which includes members of the U.S. National Sea Grant Network and the Association of Zoos and Aquariums, with support from the National Oceanic and Atmospheric Administration.

The results of breakout group discussions are also posted online through the site Science-Outreach TALK: Targeting AIS, Linking Knowledge http://sgnis.org/science_outreach.htm.

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