

PRIORITY ACTIONS: A FRAMEWORK
AIS Vector Workshop
December 2, 2009 Admiral Fell Inn, Baltimore

Introduction

This is a summary of the ideas generated during the presentations and more fully developed during the afternoon work groups. The work sessions were tasked with identifying priority areas for short and long term action in research, management and education/public engagement for several vectors. Workshop participants identified vectors of interest through a pre-workshop online survey and during the presentations and panel discussions held prior to the work groups. The vectors were: Ship fouling; bait trade; and aquaculture/aquatic horticulture/aquarium trade. The results of the survey are presented on the workshop web site: www.mdsg.umd.edu/vectorworkshop/outcomes/

The table below was developed by Jim Carlton and the work session facilitators and presented to the workshop in a plenary discussion “the way forward” that followed the work session.

PRIORITY ACTION	OPPORTUNITIES: STEPS TOWARD IMPLEMENTATION (Near-term vs. long-term steps to be parsed out) (Federal vs. state-based to be parsed out) How do we fund all of these? Fee, tax, existing funding
Prevention: Identify new invasions to facilitate <i>Early Detection / Rapid Response</i>	* Monitoring: institute mandatory monitoring programs, focused on sites of high inoculation probability based upon knowledge of vectors (<i>HIP</i> sites: "smart searches")
Prevention of Introduction of Species via High-Risk Intentional Commercial Importations / Bait Trade	* Establish pre-import, pre-use screening programs * Stronger Enforcement
Prevention of Public-Mediated Movement of Species (intentional importations, intentional transplantations, accidental translocations):	* Education I: Import the fields of social marketing and sales marketing to assist development of best strategies: increase public awareness, but direct outreach with consistent messages crafted to be audience-specific is required to change behavior; <i>peer-to-peer sharing</i> is key; evaluate efficacy of programs focused on whether change was generated * Education II: Increase cultural and ethnic sensitivity in public outreach * Education III: Insure in-reach (agency staffer education and buy-in) as well as out-reach
Coordination: Increase power of limited resources by combining the resources of multiple stakeholders:	* Increase number of vested stakeholders to increase a sense of ownership (including responsibility) in invasive species issues * Elevate vector management on ANS Task Force agenda, including continuing inter-regional sharing of strategies

Regulation: Aggressively patch holes in invasive species management x vector:

Seek potentially low-hanging fruits for "best management practices" and shared goals across all vectors:

* **Ballast:** Increase understanding of efficacy of ballast water exchange in coastal systems

* **Fouling: General:** Increase understanding of potential role of ship-fouling (commercial and private, including stochastic vessel movements, but recognizing a vast range of vessel species and movement patterns), including research and understanding of cleaning, maintenance, and design practices for niche-area fouling on ships; increase regulatory grasp of, if not oversight and authority over, frequency of ship-maintenance. Outreach to funding agencies about importance of evolving advanced cleaning technologies and implementing their application.

* **Private Illegal:** Increase understanding of role of illegal / blackmarket movements (political will)

* **Vector Blitz:** Assess range of vectors one time one place – case study?

* **Live Trade: General:** Increase monitoring of live trade species by increasing genetic fingerprinting of traded stocks; seriously expand production of "white lists" (focused on preventing trade of species of high potential ecological or disease impact [disease screening protocols]; increase regulatory oversight of waste-water discharge; point of sale information about what we are buying; disposal protocols across broad menu of organisms; mechanism for reporting by vets of disease or other incidents with pets;

* **Live Trade: Bait:** Biological inventory of species in the trade and sale volumes (including value of industry to a particular state); a social inventory of bait use trade and use (including wholesalers, retailers, tournament activity, *et al.*); inventory of mid-Atlantic states regulation; replacement of live dunnage to ship bait with abiotic dunnage; strategies to reduce associated organisms ("hitchhikers"); inventory of trade species that are likely to be disease, parasite, and pathogen agents; develop protocols for bait disposal (to be distributed at point-of-sale); increase bait-tracking across mid-Atlantic states by implementing a uniform receipt program proving point-of-sale from approved vendor bait station ("bait certification program"); source of bait and others; emphasize native species as bait.