New York’s Top AIS Priority: An Update on Watercraft Inspection Steward Programs

NYSFOLA Annual Meeting
May 4, 2018
Goal

Stop the introduction and spread of aquatic invasive species into and within New York State’s waters.
Prevention is key

• Reduce economic, ecological, and human health impacts

• Or never have them happen at all!

Ben Franklin – the forefather of boat steward programs
Prevention: Regulatory Efforts

- Amendment to Article 3 of the Navigation Law – “AIS spread prevention signs at public boat launches”

- 6 NYCRR Part 59.4 (DEC) & 9 NYCRR Part 377.1 (Parks) – “AIS spread prevention regulations for boat launching/retrieving at DEC and Parks-owned sites”
Prevention: Regulatory Efforts

6 NYCRR Part 575
“Regulated and Prohibited Plants and Animals”

6 NYCRR Part 576
“Reasonable Precautions to Prevent Spread of AIS”
Prevention: Watercraft Inspection Steward Program (WISP)

Supports NYS regulatory efforts

Statewide AIS spread prevention grant program: $2.2M (three years)
Prevention: Watercraft Inspection Steward Program (WISP)

Major players

- NYS Parks (OPRHP)
- Adirondack Watershed Institute – ADK AIS spread prevention program five year contract (NYSDEC participation since 2015)
- Finger Lakes PRISM/Institute
- Lower Hudson PRISM
- Capital-Mohawk PRISM
- Catskill Regional Invasive Species Partnership (CRISP)
Prevention: WISP

2017

• Coverage at 187 locations

• More coverage on the Hudson River and Mohawk River

• Coverage at Croton and Ossining (Croton River Hydrilla infestation)

• Pilot run of standardized data collection software and the start of minimum standardized data collection discussion
Prevention: WISP

2017
Adirondack AIS Spread Prevention Program:
• Deployed decontamination stations at strategic locations where there are small-bodied AIS or high risk of spread
• Along the western shore of Lake Champlain
• Great Sacandaga Lake
• Access points along upper Hudson River
• Saratoga Lake
• Spread hubs (based on data collected)
Prevention: WISP

2018

• Coverage at more than 200 locations

• Additional coverage on the Hudson River and Mohawk River

• Additional coverage in the Catskills and Western New York

• More major players using standardized data collection software and contributing to statewide database

• First season for Western NY PRISM

J. Clayton, NYSDEC
Prevention: Data standardization and centralized database (WISPA)

OPRHP, NYSDEC and New York Natural Heritage Program (NYNHP) collaboration

J. Clayton, NYSDEC
Watercraft Inspection Stewards Program App “WISPA”

• Many different boat launch steward programs across the state
• Some remote locations
• Paper forms lost/wet (LEGIBILITY)
• Data-entry post season
• Time delay in viewing “big picture”
• Aggregating the data to create the statewide “Big Picture” challenging
WISPA: 2017 Pilot

- Partnership: 6 agencies tested the app
- ESRI Survey123 platform for tablets (>30K records collected!)
- ArcGIS Online web apps for data display/download
The Survey

• Core of standardized questions
• Some customized questions
• Data can be saved in “outbox” until access to internet allows uploading to cloud

J. Clayton, NYSDEC
Some equipment needed to be part of the WISPA program

• Samsung Galaxy tablet Tab A = approximately $100 each
• Screen protector and ruggedized “box”
• AGOL (ArcGIS OnLine) account for map editing and data revisions
• At least one person with your organization has training in using the app in order to train and troubleshoot on behalf of stewards
Consistency

Standardized data collection and database

Standardized education and outreach products

Standardized training for stewards

Standardized signs

AIS disposal stations
Aquatic Invasive Species Boat Stewards

New York has more than 7,000 lakes, ponds, and rivers that could potentially be exposed to dozens of harmful aquatic invasive species (AIS) that have already been introduced and many more species that pose a threat. In July 2015, New York released its updated Aquatic Invasive Species Management Plan to help prevent the introduction and spread of aquatic invasive species into and within New York State’s waters.

One of the main pathways for transfer of aquatic invasive species between waterbodies is recreational water vehicles (boats, canoes, kayaks, and jet skis). For this reason the top priority of the statewide AIS management plan is to expand the coverage of boat stewardship programs across the state, particularly in popular, high-use areas. In-person interactions with boaters, anglers, and other recreational water users raises awareness about aquatic invasive species and practices (cleaning, draining, and treating) that reduce the chance of spreading aquatic invaders. Read more about the practices required to prevent the spread of AIS (PDF, 340 KB).

In 2016 more than 120,000 boats were inspected and boat stewards talked with more than 140,000 water recreationists.

Who are Boat Stewards and What Do They Do?

Boat stewards are volunteers or paid members of your community who help protect New York State’s waters. An encounter with a steward will involve being asked if you already practice preventive measures and receiving instruction about how to inspect and “clean, drain, and treat” your watercraft and equipment. You will also be asked which waterbody you last visited so that the steward can determine if you are coming from infested waters and what species are there. Boat stewards will have access to this information for many lakes and ponds through the iMapinvasives website (leaves DEC website). Boat stewards have a wealth of information about aquatic invasive species. Feel free to ask them questions!

Resources for Boat Steward Programs

Setting up and maintaining a boat steward program can seem daunting. NYSDEC, NYS OPRHP (Parks), New York Sea Grant (NYSG), and several other partners have teamed up to provide support for boat steward programs. This team of agencies is making every effort to standardize the training, messaging, and information that is distributed throughout the state. The following resources are available for organizations interested in learning more about what is involved in developing a program and how to improve existing programs.

Funding and Personnel
Boat Steward Training Programs 2018

- Western New York
- Adirondack Watershed Institute
- Parks/NYSeaGrant
- Finger Lakes Institute
- Catskill Regional Invasive Species Partnership

J. Clayton, NYSDEC
Season kickoff Memorial Day weekend

J. Clayton, NYSDEC

J. Clayton, NYSDEC
Thank you!

Cathy McGlynn
AIS Coordinator
Bureau of Invasive Species and Ecosystem Health
Invasive Species Coordination Section
catherine.mcglynn@dec.ny.gov
Watercraft Inspection Steward Program Application Overview

John Marino
GIS Applications Developer
New York Natural Heritage Program – iMapInvasives Team
john.marino@dec.ny.gov
iMapInvasives.org
What Kind of Data Is Collected?

- When did the inspection occur
- Where the boat launch and the steward were located
- Was the watercraft launching or retrieving
- What type of watercraft was inspected
- Did the operator agree to an inspection?
  - If so, were any invasive species detected (if so, which invasive[s])?
- Was a Watercraft Decontamination performed?
How Does It Work?

• Field data collection survey application (Survey123)
  ➢ Requires internet connectivity for setup
  ➢ Works offline once configured for data collection
  ➢ Internet connectivity required for data upload

• Central GIS database (ArcGIS Online)
• Data Dashboard (ArcGIS Online)
• Data Editor Maps (ArcGIS Online)
How It Works

WISPA Data Collection

Survey123
- Tool which boat launch stewards use to collect and upload data

ArcGIS Online
- Configured for each organization
- Allows for data editing of own organization’s data

Dashboard
- Viewable by program coordinators
- Allows for view-only of all state data

Editor Map
- Configured for each organization
- Allows for data editing of own organization’s data

iPad Photo Credit: Wikimedia Commons user Netspy
Data Viewing

Dashboard

• At-a-glance view of statewide data
• Filter by date or organization
• Data in charts and graphs matches the data visible in the map
Dashboard Demo
Data Editing

Editor Map

• View and edit all data submitted by stewards from the user’s organization
• Export data to different formats for detailed/custom analysis
How To Get Started? *(For 2019)*

- Contact Cathy McGlynn
- Tablets/mobile devices for boat launch stewards
- Coordinate with NYNHP to get launch locations and boat launch steward names loaded into WISPA
- Program coordinator needs access to an ArcGIS Online Organization Account to view/edit data
  - Data dashboard
  - Editor map
Thank you!

John Marino
GIS Applications Developer
New York Natural Heritage Program – iMapInvasives Team
john.marino@dec.ny.gov
iMapInvasives.org

The NY Natural Heritage Program is a partnership between the NYS Department of Environmental Conservation (NYSDEC) and the State University of New York College of Environmental Science and Forestry (SUNY ESF).