



# Suggestions to Strengthen Maine's Resilience to Invasive Species

Gary Fish  
State Horticulturist

# Why should Maine consider a new approach to invasive species management?

Deep concern for Maine's ecology and economy

Currently the disparate federal, state, local, non-profit and private programs are not able to address the invasive species onslaught of the 21<sup>st</sup> century

This is NOT about empire building

We are not prepared financially or with adequate human resources to rapidly respond to a new infestation which might be eradicated

Efforts to address invasive species are generally more efficient and cost effective the earlier they are implemented in the invasion process (Leung et al. 2002)



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## Should Maine Develop a More Comprehensive Approach to Invasive Species Management?

A 2022 Survey of Likely Invasive Species Managers in Maine and Policy  
Recommendations to Strengthen Maine's Resilience to Invasive Species

Gary Fish

Capstone paper for  
Master of Policy, Planning, and Management Program  
Muskie School of Public Service  
University of Southern Maine

December 2022  
Professor Yuseung Kim, Capstone Advisor



2022  
invasive  
species  
survey

Quick  
Summary



# Quick survey summary

- This paper analyzes the status of Maine's public and private invasive species management efforts and attempts to answer the question, “Should Maine develop a more comprehensive approach to invasive species management?”
- 197 respondents (Survey invite sent to approximately 600 IS representatives)
- **Top 3 impediments to effective IS management**
  - Public knowledge
  - Funding
  - Staffing

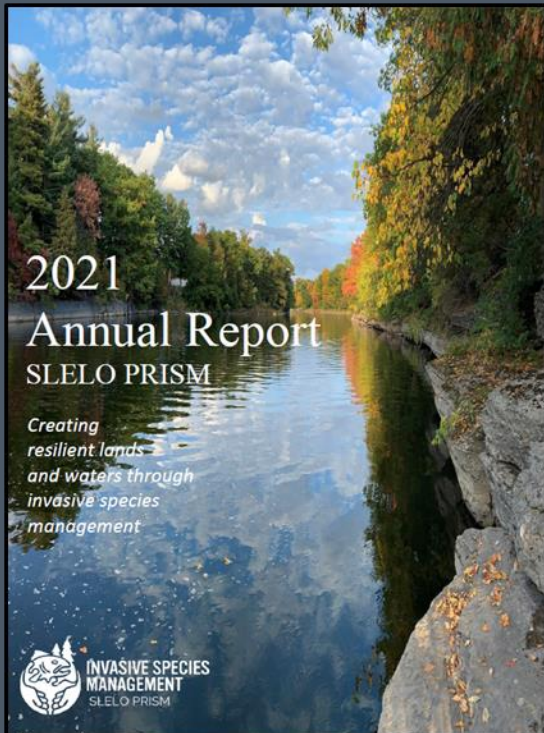
# Summary Continued



Britt Slattery, US FWS

- **Top regional species of concern**
  - Invasive terrestrial plants
  - Forest insects
  - Invasive aquatic plants
  - Ticks
  
- **Species currently managed or of concern**
  - 9 Invasive terrestrial plants
  - 3 invasive aquatic plants
  - 3 forest insects

# Summary Continued



- Suggestions for improvement
  - Increased funding
  - Education & Outreach
  - Agency coordination & partnerships
  - Increased staffing
  
- Alternative policy models suggested
  - Partnerships like New York PRISMs
  - Contingency plans
  - Rapid response teams
  - Landowner cost-share programs

# Summary Continued



## ■ Staffing and budgets

- Total staffing for all organizations 120 FTE
  - Total budgets for all organizations \$3.2 million
  - Lake associations employ the most staff and have the largest collective budgets
  - Followed by
    - State agencies
    - Forestry organizations
    - National parks & lands
    - Land trusts
- Numbers do not include all state agency staff or budgets

# Summary Continued



LAKES ENVIRONMENTAL ASSOCIATION  
Protecting Maine Lakes Since 1970



- Current invasive aquatic plant management programs provide a good example
  - Strong partnerships
  - Consistent funding from the “milfoil sticker”
  - Interagency task force
  - Rapid response capabilities
  - Strong feedback loop to the legislature
    - *Four bills passed this session 2023-2024*
      - LD 10 - Added new banned aquatic plants
      - LD 92 – Clean Drain Dry
      - LD 1342 – Increases boat sticker fees in 2025 & 2028 \$1.16 M
      - LD 2141 – One-time \$2 M appropriation for aquatic plants (Was not funded by the appropriations committee)



# Funding Increase

Carry-over bill became law, April 10, 2024

Increased fees for motorized watercraft:

|               | <u>Instate</u> | <u>Out of State</u> |
|---------------|----------------|---------------------|
| Current       | \$15           | \$45                |
| Starting 2025 | \$25           | \$60                |
| Starting 2028 | \$35           | \$75                |



# IAS Funding Increase

Adjusts distribution of revenue:

-Current:80% DEP; 20% DIFW

-2025+:70% DEP; 30% DIFW

DEP Revenue starting 2025~  
\$2,898,937

DIFW Revenue starting 2025~  
\$1,242,402

# Summary Continued



- Ideas for strengthening resiliency
  - Doing nothing seems imprudent
  - Develop ongoing, dedicated funding sources
  - Add state agency staff to continue this research (**Senior Planner?**) **stripped from the Governor's budget in 2023 and supplemental budget in 2024**
  - Add an ISAC who reports to the Governor's Office
  - Add IS management liaison positions at DACF, IF&W, DEP, DHHS, MDOT and DMR

# Summary Continued

**BILL S.563**  
192nd (2021 - 2022)

**AN ACT RESPONDING TO THE THREAT OF INVASIVE SPECIES**

By Ms. Jehlen, a petition (accompanied by bill, Senate, No. 563) of Patricia D. Jehlen, Michael J. Barrett, Paul R. Feeney, Mike Connolly and other members of the General Court for legislation to respond to the threat of invasive species. Environment, Natural Resources and Agriculture.

Presenter: Patricia D. Jehlen

[View Text](#)

[Print Preview](#)

[Download PDF](#)

Pennsylvania Department of Agriculture

Animals Business & Industry Consumer Protection Food

### Governor's Invasive Species Council



From left clockwise: Spotted lanternfly, Japanese knotweed, emerald ash borer, hydrilla

- About Us
- News
- Invasive Species of Concern for...
- Managing Invasive Species
- Proposed Partnerships for Regional...
- Report an Invasive Species

## ■ Suggestions

- Consider new legislation like MA and PA
- Put aside a robust \$1,000,000 rapid response fund (**\$40,000 Proposal Stripped from the Governor's supplemental budget.**)
- Develop partnerships (PRISMs or CISMAs?)
  - ***Maybe start with just one pilot PRISM***
- Increase funding, staffing, outreach
- Improve coordination with abutting landowners

# Why an invasive species council

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- The Council would provide a forum through which multiple state agencies and non-governmental entities meet with a common purpose to identify invasive species of concern that threaten the State's economic, natural and agricultural resources

The Council would:

1. Develop and implement a comprehensive state invasive species management plan
2. Provide guidance on prevention, control, and rapid response initiatives
3. Facilitate coordination among federal, regional, state, and local efforts



## A Minnesota State Management Plan for Invasive Species

This plan was developed by a workgroup of the Minnesota Invasive Species Advisory Council and revised based upon input gathered at a stakeholder workshop, a public review period, a Tribal meeting and review, MISAC member review, and other input.

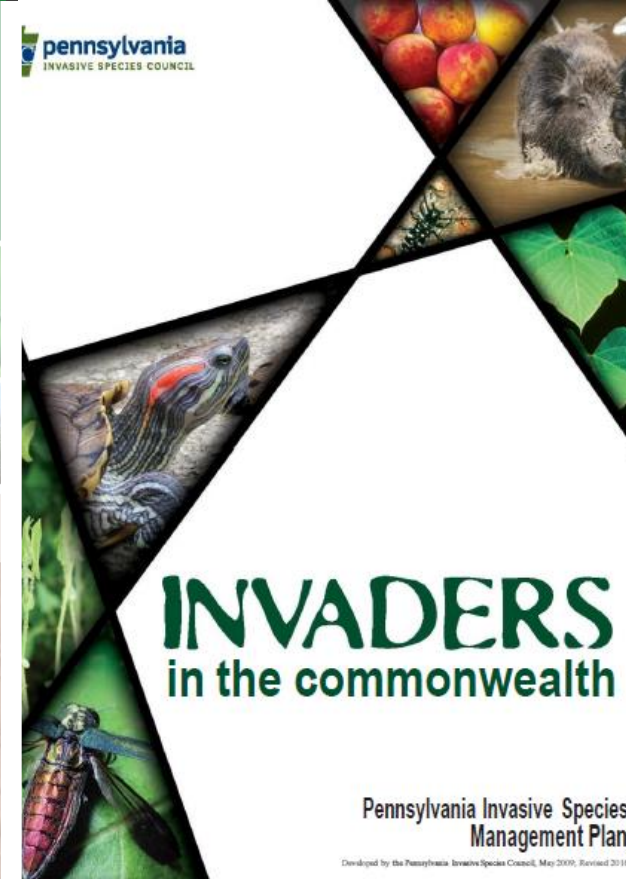
October 20, 2009

## Michigan's Terrestrial Invasive Species State Management Plan



A Cooperative Effort of the  
Michigan Department of Agriculture and Rural Development  
Michigan Department of Environmental Quality  
Michigan Department of Natural Resources  
Michigan Department of Transportation  
In Consultation and Partnership with Other Interested Parties

pennsylvania  
INVASIVE SPECIES COUNCIL



## INVADERS in the commonwealth

Pennsylvania Invasive Species  
Management Plan

Developed by the Pennsylvania Invasive Species Council, May 2010, Revised 2018



Department of  
Environmental  
Conservation | Agriculture  
and Markets

## NEW YORK STATE INVASIVE SPECIES COMPREHENSIVE MANAGEMENT PLAN

FINAL  
November 2018



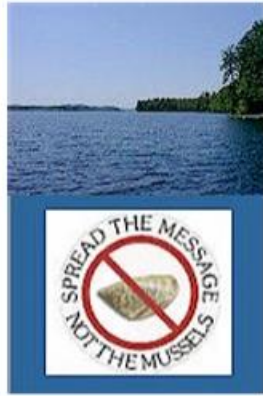
[www.dec.ny.gov](http://www.dec.ny.gov)

# Have other states done this?

An assortment of plans exist... some old some new.

## State of Maine

# Action Plan For Managing Invasive Aquatic Species



Maine has one  
22-year-old  
aquatic invasive  
species plan

Adopted by the  
**Land and Water Resources Council**

And the  
**Interagency Task Force On Invasive Aquatic Plants and Nuisance Species**

October 10, 2002

# What are PRISMs?

**2021 Annual Report**  
SLELO PRISM

*Creating resilient lands and waters through invasive species management*

INVASIVE SPECIES MANAGEMENT  
SLELO PRISM

LOWER HUDSON PRISM

**2019 ANNUAL REPORT**

FINGER LAKES PRISM  
Partnership for Regional Invasive Species Management

ANNUAL REPORT 2020-2021

HOBART AND WILLIAM SMITH COLLEGES  
FINGER LAKES INSTITUTE

2020

WNY PRISM Annual Report

WNY PRISM  
Partnership for Regional Invasive Species Management

Prepared By  
Andrea Locke, WNY PRISM Coordinator

**CAPITAL/MOHAWK PRISM**  
Partnership for Regional Invasive Species Management  
2018 ANNUAL REPORT

Hemlock Woolly Adelgid  
This is an Invasive Species. If you see it, report it to your local Soil & Water Conservation District!

Annual Report 2020 INVASIVE SPECIES MANAGEMENT LONG ISLAND

**2020 ANNUAL REPORT**  
THE ADIRONDACK PARK  
INVASIVE PLANT  
PROGRAM

WWW.ADKINVASIVES.COM  
PO BOX 66/8 NATURE WAY, KEENE VALLEY, NEW YORK 12943

INVASIVE SPECIES MANAGEMENT ADIRONDACKS

**CRISP**  
Catskill Regional Invasive Species Partnership

2020 Annual Report

Skyler Susnick performing Giant Hogweed Treatment, Delaware County 6/18/20

Prepared By:  
John Thompson  
Catskill Regional Invasive Species Partnership Coordinator  
Dan Snider  
Field Projects Manager

Catskill Regional Invasive Species Partnership  
Catskill Center for Conservation and Development  
Arkville, New York

CATSKILLCENTER  
conservation creates opportunity



# How Effective are PRISMs?



## A few of the NY State Lower Hudson PRISM accomplishments in 2018

- 41 signed partners who participate and have dedicated 15,069 hours
- Several new invasive species were discovered in our region including Italian arum (*Arum italicum*), Japanese primrose (*Primula japonica*), yellow archangel (*Lamium galeobaldon*), and sapphireberry (*Symplocos paniculata*).
- Held 66 training sessions where 895 participants learned how to identify, manage or monitor for invasive species.
- 189 events reaching 8795 individuals about invasive species, 68 presentations which reaching 2,640 individuals



Yellow archangel (*Lamium galeobaldon*)

# How Effective are PRISMs?



## A few of the NY State Lower Hudson PRISM accomplishments in 2018

- 1,571 volunteers dedicated 14,340 hours to invasive species efforts.
- Supported 71 interns who conducted invasive management, prevention, and education work.
- Conducted 323 removal projects targeting 172 invasive species by treating 2,116 acres throughout the region.
- Treated all reported populations of 10 out of 37 of our Tier 2 species and completed treatments on several populations of an additional 5 Tier 2 species. We are actively working to treat 40% of our Tier 2 species.



The mission of the Lower Hudson Partnership for Regional Invasive Species Management is to protect the rich biodiversity and ecosystems of the Lower Hudson region through partnerships and collaborations that focus on controlling the introduction, spread, and harmful impact of invasive species.

# How Pennsylvania is Moving Forward?

Partnerships for  
Regional Invasive  
Species Management

1. Develop implementation plan and program details
2. Governor's Office support
3. Line item in PDA budget or establish a restricted account
4. Outreach to Legislators
5. Agency advocacy
6. **Advocacy from industries, organizations, clubs, associations, etc.**

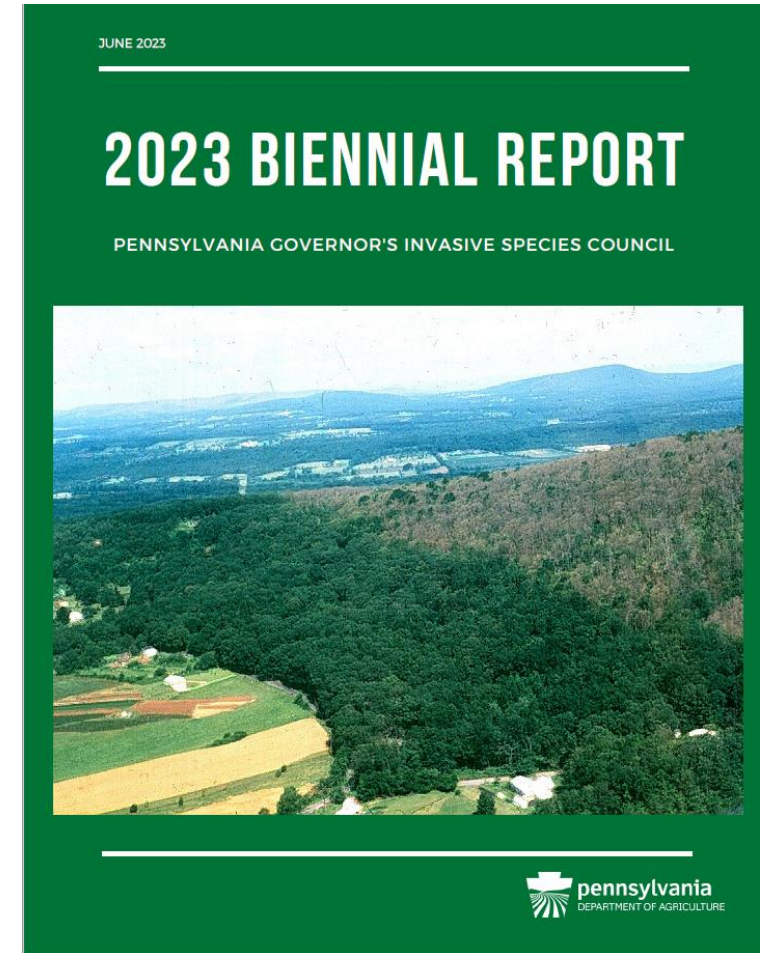
PA Invasive Species Council Celebrates  
Third Annual PA Native Species Day



Representatives from four state agencies on the Pennsylvania Governor's Invasive Species Council visited Big Elk Creek State Park in Franklin Township, Chester County, to celebrate the third annual Native Species Day. Pictured here is Agriculture Deputy Secretary Fred Strathmeyer delivering remarks during the event.

# Pennsylvania PRISM Program Committee

- Develop a Budget Proposal
- Implementation Plan Subcommittees
  1. Timeline
  2. Request for Funding Proposal
  3. Review Committee and procedures for evaluating RFPs
  4. Statement of Work/Contract – expectations, reporting, deliverables, etc.
  5. PRISM 5-Year Strategic Plan Guidelines
  6. GIS and Data Management – Central Clearinghouse
- Agency administration of program and staff needed



# NY State ISC Coordinator – Thomas Allgaier

“The Invasive Species Council has greatly improved inter-agency cooperation and allows for better use of limited resources and coordination of outreach on invasive species issues.”

“The PRISM’s have augmented the state agencies’ staff to survey and respond to IS issues. including:”

- outreach,
- trapping,
- visual survey,
- data collection,
- treatment,
- detector dogs, and
- acquiring additional federal funding.



# Pros and Cons of the NY PRISM system

- Pros
  - Local needs, local solutions
  - Flexible
  - Not state staff
  - Contracting process
- Cons
  - Local
  - Accountability
  - Not state staff
  - Contracting process

**New York State's Partnerships for Regional Invasive Species Management (PRISMs)**

What's a PRISM? They are Partnerships for Regional Invasive Species Management (PRISM) that stakeholders have formed across New York State to address the threat of invasive species and are key to New York's integrated approach to invasive species management. Partnerships will plan regional invasive species management, develop early detection and rapid response capacity, deliver education and outreach, implement eradication projects and more. PRISM partners include state agencies, resource managers, non-governmental organizations, industry, recreationists, and interested citizens. New York State Department of Environmental Conservation (DEC) will, within available funds, support a fiscal/administrative sponsor for each PRISM.

**PRISM Contacts and Listserves**

**APIPP** (Adirondack Park Invasive Plant Program)  
Brendan Quirion: (518)576-2082  
bquirion@inc.org

**Capital Mohawk PRISM**  
Laurel Gailor: (518)865-8995  
lrg3@cornell.edu

**CRISP** (Catskill Regional Invasive Species Partnership)  
Molly Marquand: (845)566-2611  
mmarquand@catskillcenter.org

**Finger Lakes PRISM**  
Hilary Mosher: (315)781-4385  
mosher@hws.edu

**LIISMA** (Long Island Invasive Species Management Area)  
Steve Young: (516) 402-8951  
steve.young@dec.ny.gov

**Lower Hudson PRISM**  
Linda Rohleder: (201)512-9348  
lrohleder@nynjtc.org

**SLELO** (St. Lawrence & Eastern Lake Ontario)  
Robert Williams: (315)367-3600  
rwilliams@inc.org

**Western New York PRISM**  
Andrea Locke: (716)878-4708  
lockeas@buffalostate.edu

**PRISM functions are:**

- Planning regional invasive species management
- Developing early detection and rapid response capacity
- Implementing eradication projects
- Educating - in cooperation with DEC-contracted Education and Outreach providers
- Coordinating PRISM partners
- Recruiting and training volunteers
- Supporting research through citizen science

PRISMs are a great way to get involved in invasive species management. Contact a PRISM leader for more information. All are welcome to participate in statewide PRISM monthly conference calls. Get PRISM updates, see excellent presentations, and learn about events. To receive announcements, join a PRISM listserve by e-mailing the address and typing JOIN in the message body.

For more information on PRISMs and to subscribe to a PRISM listserve visit:  
[WWW.NYIS.INFO](http://WWW.NYIS.INFO)

!PRISMs\Maps\prism2014.mxd

# Pros and Cons of the NY PRISM system

- Pros outweigh the cons
- All approaches are going to have positive and negative aspects
- As the relationships mature the various groups and agencies settle into roles and develop an understanding of how the pieces fit together.
- **PRISMS in New York have added value to the invasive species discussion and individual responses.**

Among the 12 recommendations of the 2005 NYS Invasive Species Task Force report to the Governor and Legislature was the formation of eight Partnerships for Regional Invasive Species Management (PRISMs) to help prevent or minimize the harm caused by invasive species on New York's environment, economy and the health and well-being of the State's citizens. PRISMs are intended to coordinate invasive species management functions including coordinating partner efforts, recruiting and training citizen volunteers, identifying and delivering education and outreach, establishing early detection monitoring networks and implementing direct eradication and control efforts.

# Invasive Species Advisory Council – Potential Maine Membership

## Government Members

- Maine Department of Agriculture, Conservation & Forestry
- Maine Department of Marine Resources
- Maine Department of Environmental Protection
- Maine Department of Inland Fisheries & Wildlife
- Maine Department of Transportation
- Maine CDC
- Maine Association of Conservation Districts or Conservation Commissions

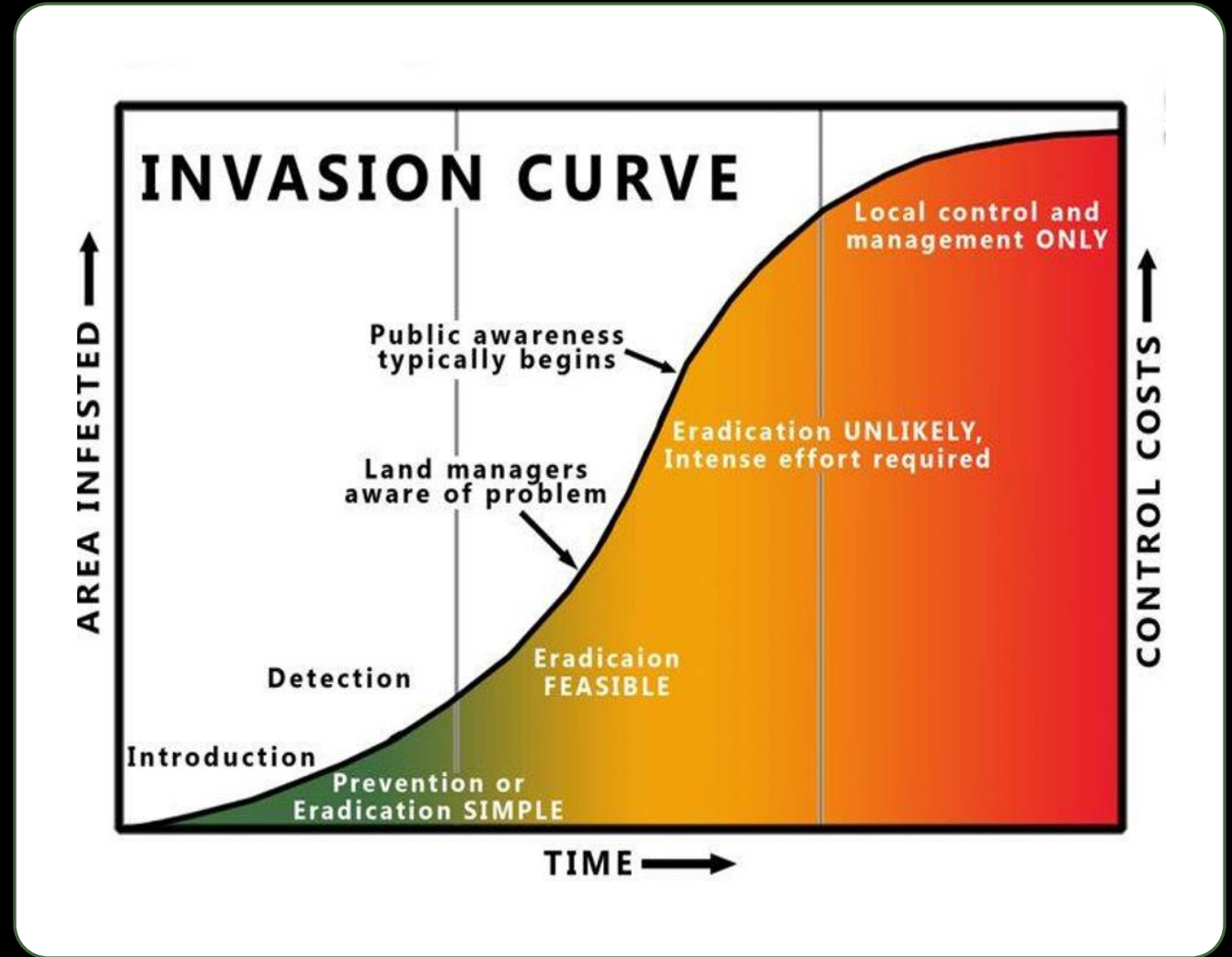
## • NGO/Industry Members

- Maine Audubon
- The Nature Conservancy
- Maine Forest Products Council
- Maine Woodlands
- Maine Invasive Species Network
- Tribal Governments
- Native Plant Trust/Wild Seed Project
- Maine Landscape and Nursery Association
- Maine Lakes
- Lake Stewards of Maine
- University of Maine Climate Center



# Major goal

- Establish a rapid response fund





# MEETING THE INVASIVE SPECIES CHALLENGE

Management Plan  
National Invasive Species Council  
2001



## Major Goal

Develop a 5-year  
comprehensive, multi-taxa  
invasive species  
management plan

# Invasive Species Stakeholder Meeting(s)

PENNSYLVANIA DEPARTMENT OF AGRICULTURE



COMING TOGETHER TO COMBAT INVASIVE SPECIES


Tags: [Invasive Species](#)

December 01, 2023 01:30 PM

By: [Governor's Invasive Species Council](#)




Invasive species are a costly problem in Pennsylvania, and their effects impact virtually every economic interest and ecosystem. Their impacts are felt on our farms, in our waterways, throughout our forests, and in our pocketbooks across

 Pennsylvania Department of Agriculture 20h · 🌐

Recently, the Pennsylvania Governor's Invasive Species Council met with groups from 13 counties in Northwest Pennsylvania.

Representatives from state government, national organizations, universities, and local groups spoke about their projects, solutions and struggles with invasive species to a gathering of county conservation districts, conservation organizations, government officials and concerned members of the public.



AGRICULTURE.PA.GOV

**Coming Together To Combat Invasive Species**

The Pennsylvania Governor's Invasive Species recently held a meeting to discuss how we can c...

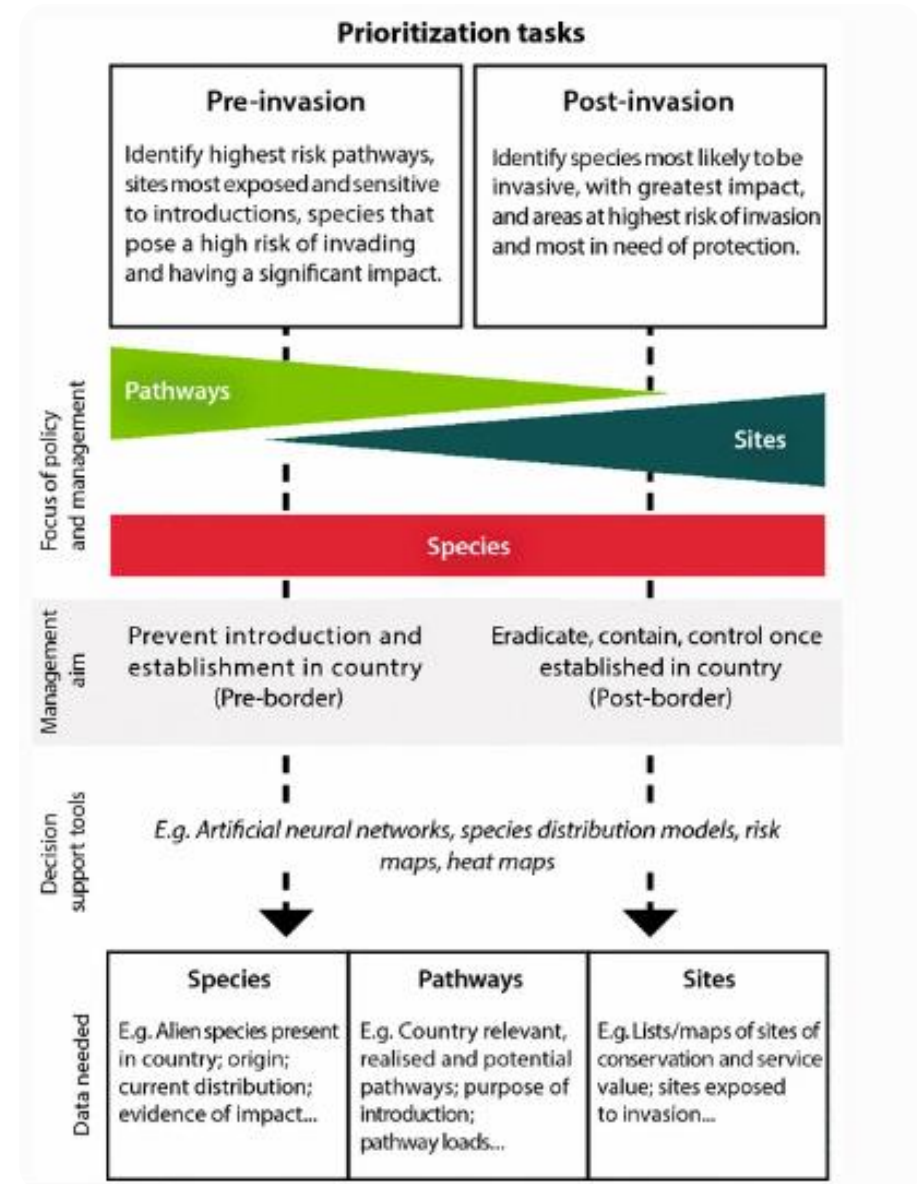
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👤 Write a comment...

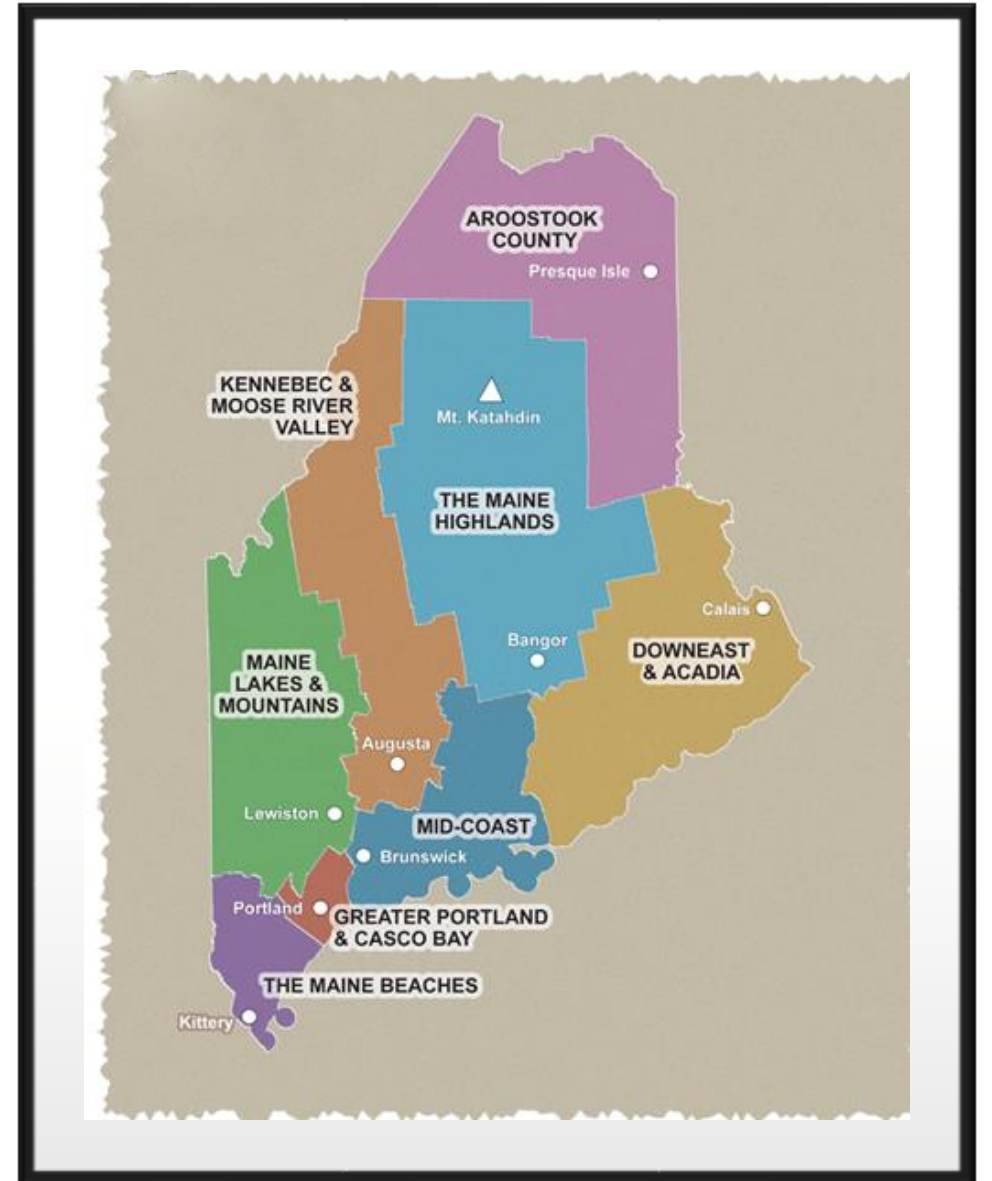
# Major goal

- Better understanding of species' risk and prioritization of management decisions
  - Utilize risk assessments or conduct new evaluations to prioritize non-native invasive species
  - Establish and prioritize:
    - a) a list of invasive species not present in Maine and that should be prevented from entry, and
    - b) a list of invasive species with occurrences in Maine and for which the prevention of expansion or establishment is intended
  - List these species on the Invasive Species Advisory Council website and communicate them to lawmakers, program managers, and the public



# Major goal

Develop Regional Invasive  
Species Management  
Partnerships



Better Prioritization, Better  
Funding, Better Management

# StoryMap



Major goal

Improve outreach and  
education on all  
invasive species taxa

I am dedicating  
all my 2024  
presentations to  
my lovely wife  
Kelli Conneely  
11/10/1960 – 3/15/2024





The best  
medicine!







# Discussion – Ideas?

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Maine State  
Horticulturist

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