

#### Established 2010

A 501(C)3 Non-Profit Science
Based Organization

#### The U.S. Federal World - No lead agency!

**USA** - Federal agencies/institutions with entities that have authority, and/or have divisions or programs pertaining to

Source: NISC

non-native & invasive species ~ 176 ~

#### **Federal Agencies:**

- **U.S.** Department of Agriculture (82)
- **U.S.** Department of the Interior (53)
- **U.S.** Department of Commerce (10)
- **U.S.** Department of Defense (5)
- U.S. Department of Health and Human Services (2)
- **U.S.** Department of Homeland Security (4)
- **U.S.** Department of State (1)
- **U.S.** Department of Transportation (2)
- **U.S. Environmental Protection Agency (10)**

**NASA (3)** 

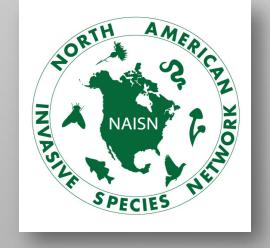
**NSF (2)** 

**Smithsonian Institution (2)** 



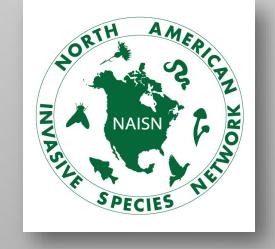
### "What is everybody's business is nobody's business."





### The North American Invasive Species Network (NAISN):

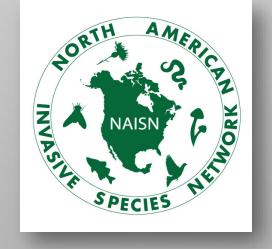
Needed <u>Lead</u> infrastructure in a multi-jurisdictional environment



In 2010, there were numerous Regional Centers, Institutes, and Labs plus two networks in North America dealing with Invasive Species on public conservation lands and waterways

#### NAISN's Overall Goal -

Link existing invasive species regional efforts (Centers/Institutes/Labs/Networks) into an overall coordinated network



#### **Mission Statement:**

A consortium that uses a coordinated network to advance science-based understanding and enhance management of non-native invasive species

#### NAISN Hubs (8) and Nodes (2) 2015

- California Invasive Plant Council California
- Center for Aquatic and Invasive Plants Florida
- National Institute of Invasive Species Science Colorado
- Center for Invasive Species and Ecosystem Health Georgia
- Canadian Aquatic Invasive Species Network Canada
- Conabio Mexico

- MIPN.org
  Midwest Invasive Plant Network
- Texas Invasive Species Institute Texas
- Invasive Species Centre Ontario, Canada



- Invasive Species Council of British Columbia Canada
- Midwest Invasive Plant Network -- Indiana









Comisión nacional para el conocimiento y uso de la biodiversidad





#### NAISN HUBS/NODE 2015





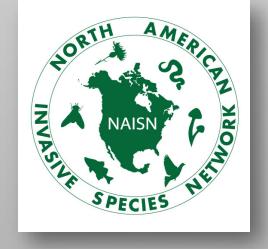
#### NAISN HUBS/NODE Existing Services

- Information Technology
- Research and Mapping
- Plant and Animal Data
- Regional Databases
- Hosts >32 websites
- EDD MAPS, Apps
- Education and Extension
- On-line courses and webinars
- Coordination and collaboration

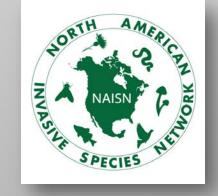








Ten areas NAISN is targeting to improve Invasive Species Management in NA



# 1. NAISN working to become the lead coordinating entity for invasive species on PCLs in the NA

(With adequate funding, essentially the CDC for invasive species)

#### 2. Defining the Problem

- Track Invasive Species Expenditures
   by Each State on Public Conservation Lands
- <u>Define Invasive Species ranges</u> and what do they actually threaten (surveys, impacts)
- Conduct, Fund, Track, and Coordinate
   Economic Impact Studies in North America



### The Ten Most Important Invasive Species or Invasive Species Assemblages in North America in 2015

#### Asian Carp Assemblage:

Grass carp (Ctenopharyngodon idella)
Silver carp (Hypophthalmichthys molitrix)
Bighead carp (H. nobilis)
Black carp (Mylopharyngodon piceus)

Asian gypsy moth (Lymantria dispar)
Burmese python (Python bivittatus)
Emerald Ash borer (Agrilus planipennis)
Eurasian wild pig (Sus scrofa)
Lionfish (Pterois spp.)
Hydrilla (Hydrilla verticillata)

#### Mussel Assemblage:

Quagga Mussels (Dreissena bugensis) Zebra mussels (Dreissena polymorpha)

Purple loosestrife (Lythrum salicaria)
Salt cedar (Tamarix spp.)

## 3. Prioritize Invasive Species Management at Landscape level

- Make CDC-like <u>recommendations based on</u> <u>science</u> (not all invasive species are equal)
- Collect and interpret scientific and technical information regarding invasive species risks
- Through risk and pathway analyses, identify, assess, and <u>prioritize new threats</u>

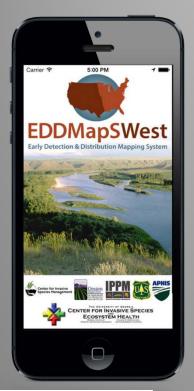
## 4. Developing realistic management goals for each species

- Develop recommendations if quarantine, eradication, or maintenance control can achieved
- Develop <u>protocols for emergency quarantine</u> especially around ports-of-entry

### 5. Offering Help with Early Detection and Rapid Response

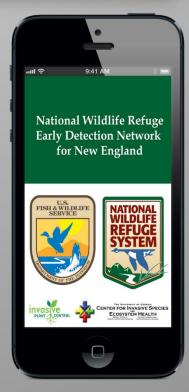
- 1. Emergency Management Coordination
- 2. Coordinate funding and help develop response priorities at the local level CISMAs
- 3. Provide technical assistance and other resources
- 4. Work with the public & develop easy web based ID tools & pathway to ID new arrivals, phone apps!















>25 Smart phone apps

### 6. Local Participation - help form and nurture partnerships or CISMAs within all the states



#### Example:

#### Florida CISMAs

(Cooperative Invasive Species Management Areas )

#### 17 CISMAs -

Ownership of the issue Private landowners CISMA workdays Distribution maps Early warning system Species information Tools, BMPs Public awareness

### 7. Help coordinate, disseminate research



- Track research in U.S.
- Encourage research on IS pathways, dev. exclusion technology
- Increase and host more webinars aimed at dispersing current research
- Develop IS Watch List for each state



# Climate Shift – a wildcard for invasive species



#### 8. Climate Shift – Strategies

- Many ecosystems will depend on early detection and rapid response to invasive species as the climate warms
- Help with identification and diagnostics
- This will call for more cooperation and coordination that exists today





9. NAISN working to establish a national public awareness campaign along with education

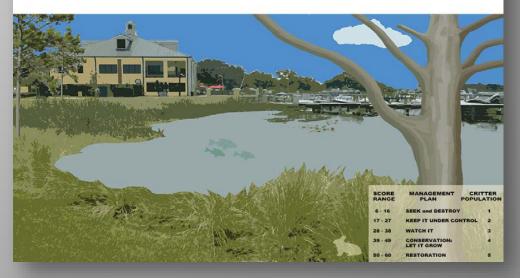


NAISN working to expand this effort throughout North America's public schools and include all invasive species and ecosystems.



#### Lakeville

A Natural Resource Management Activity





CURRICULUM

UF UNIVERSITY OF FLORIDA
IFAS Extension.
Conterfor Agustic and Invasive Plants

RESOURCES

A Bardon's CLAB 1- The ABC 1

Bardon Assessment The ABC 1

Bard

PLANT CAMP

RESOURCES

#### Welcome!

The Florida Invasive Plant Education Initiative was created to provide educators with the information and resources needed to teach students about the harmful impacts some non-native, invasive plants are having on our natural areas and neighborhoods. Our ultimate goal is for today's youth to draw on this knowledge as they mature into responsible environmental stewards.

### CDC-like Website



Mission: NAISN is a consortium that uses a coordinated network to advance science-based understanding and enhance management of non-native invasive species.

#### Join NAISN

NAISN is recruiting new hubs, nodes, and affiliate members. To learn more and fill out an application, click here.

NAISN Services Member Organizations Contact Press Releases

#### New Invasive Species Publications/Websites

Invasive Species of Mexico

A Comparative Analysis of State Programs and Funding for Terrestrial Invasive Plant Control (2013)

Invasive Species: Major Laws and the Role of Selected Federal Agencies (2013)

#### Global Invasive Species Information Network (GISIN)

GISIN provides a platform for sharing invasive species information at a global level via the internet. Visit NAISN's Species section to access GISIN resources.

#### Directory of Invasive Species Organizations in North America

This directory offers a comprehensive list of management, research, and outreach resources for invasive species in North America.

#### Connect with NAISN

NAISN is on Facebook. Like our page for news and updates.



#### Support Provided By



The Commission for Environmental Cooperation (CEC) is providing financial support to grow the NAISN network and support its member organizations. The CEC has a tri-national mandate to promote healthy ecosystems in North America and protect transboundary landscapes and ecosystems from adverse environmental impacts, including the threat of invasive species. NAISN gratefully acknowledges the CEC's ongoing support, which has been instrumental in promoting knowledge transfer, training, and development of data management tools for invasive species.



10. Provide a forum for international policy and invasive species management efforts in NA



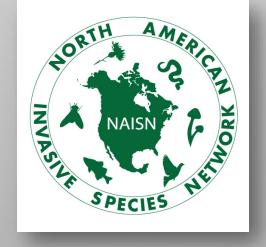
#### North American Invasive Species Forum Conference

- Formerly Weeds Across the Border Conference
- Conference topics will include jurisdictional issues, international policy issues, planning, and big picture matters such as prevention, etc.
- Conference focus invasive plants but will include invasive animal species too.



#### North American Invasive Species Forum Conference

- Sessions on invasive species tracking, mapping, prevention, and international jurisdictional matters and others along with panel discussions
- Looking at February 2017
- Conference location South Florida, field trips to the Everglades, likely 100-150 participants



#### www.naisn.org