



Thinking Differently about Early Detection & Rapid Response and Invasive Species Outreach



UNIVERSITY OF
GEORGIA

Center for Invasive Species
and Ecosystem Health





It has been almost 25 years since the first Executive Order on Invasive Species was signed by President Bill Clinton.



Since then, hundreds of millions of dollars have been spent on preventing, detecting, managing, and researching invasive species, but what difference have we truly made?

A high-angle, close-up photograph of a diverse group of people holding their hands together in a circle. The image is brightly lit, creating a warm and positive atmosphere. The people are of various ethnicities and ages, and their faces are partially visible, showing smiles and engagement. The central focus is the hands clasped together, representing collaboration and shared effort.

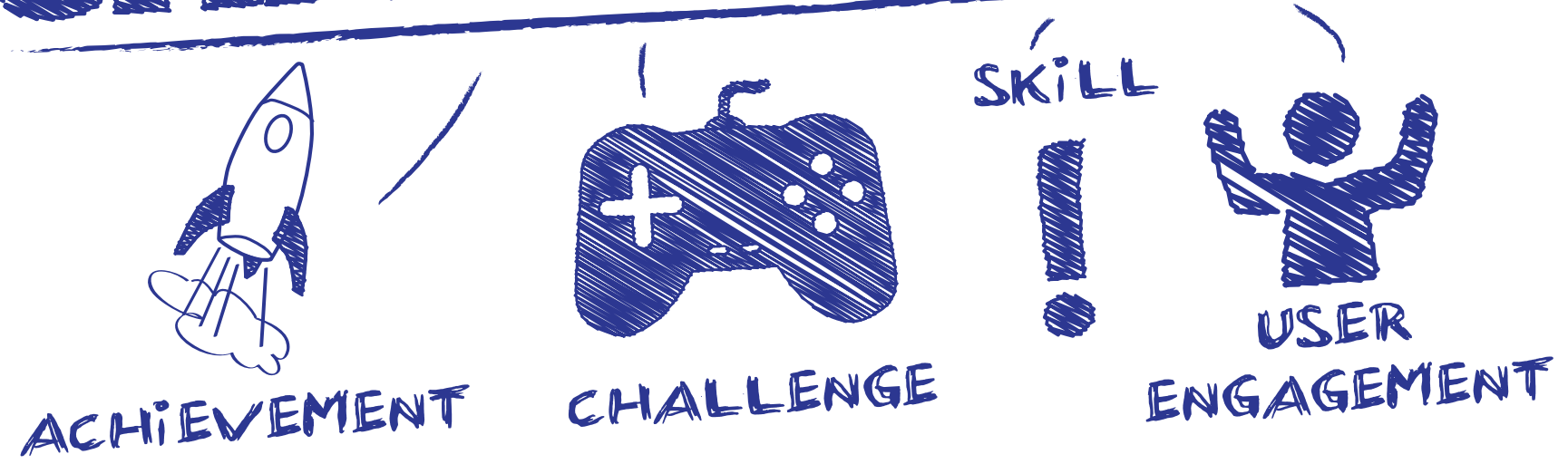
**What can we do better? How
can we better work together to
solve the problem
of invasive species?**

And most importantly, how can we get more of the public engaged and involved in protecting and restoring their favorite places?





GAMIFICATION





*I don't do this to kill things, I
do this to protect the places I
love*



Brian Connely

**Natrona County Weed and Pest
District, Wyoming**



**Glacier National Park
Montana**



**Arches National Park
Utah**



**Grand Canyon North
Arizona**



**Pololū Valley Lookout
Hawaii**



**Watkins Glen State Park
New York**



**Cuyahoga Valley National Park
Ohio**



**Niagara Falls
New York**



**New River Gorge
West Virginia**



**Platte River
Nebraska**



Take Action



REASONS

REASONS

REASONS

REASONS

REASON

REASONS

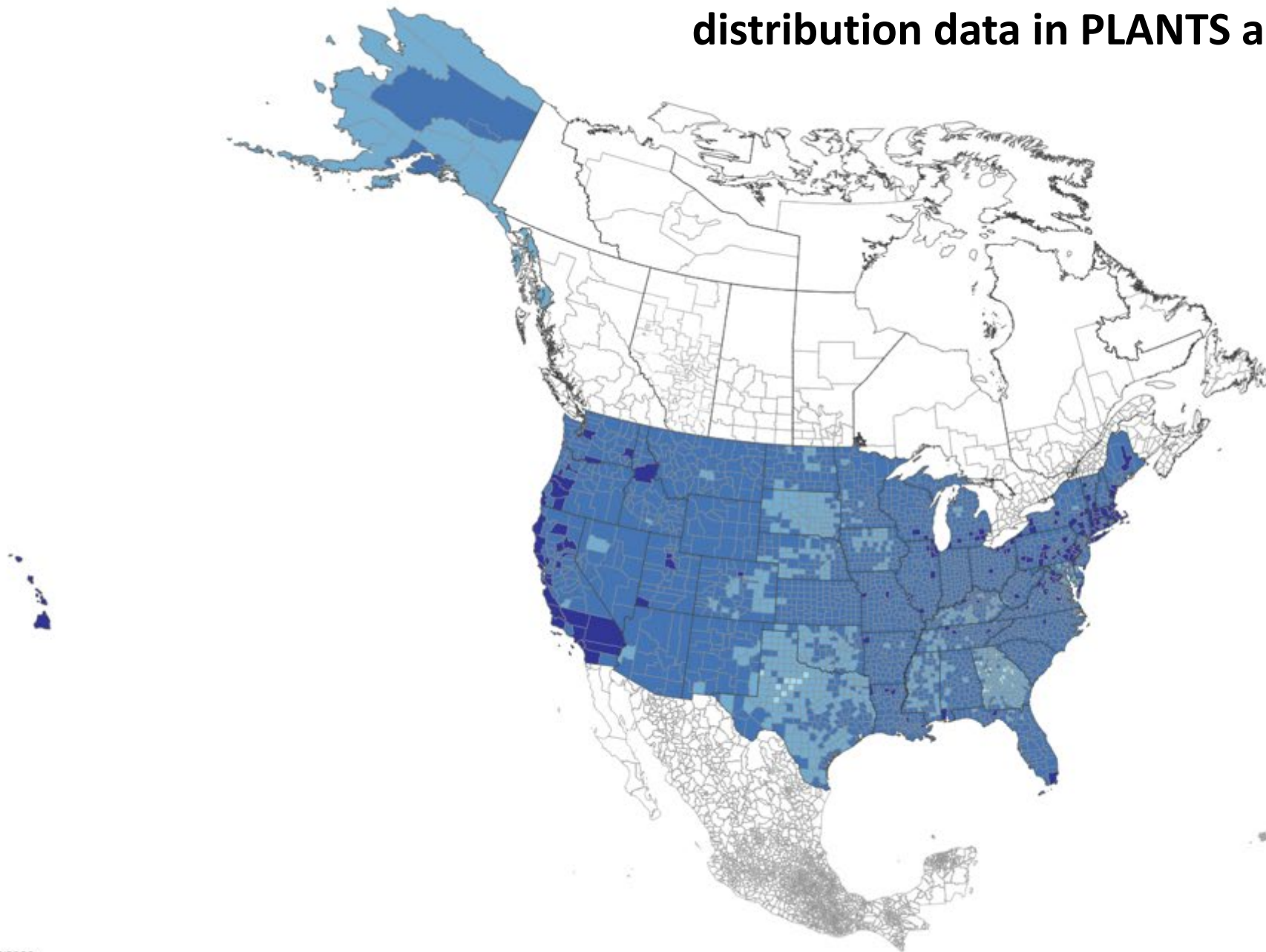
REASONS

EDD **Maps**

find • map • track



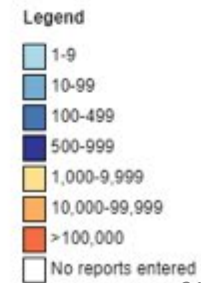
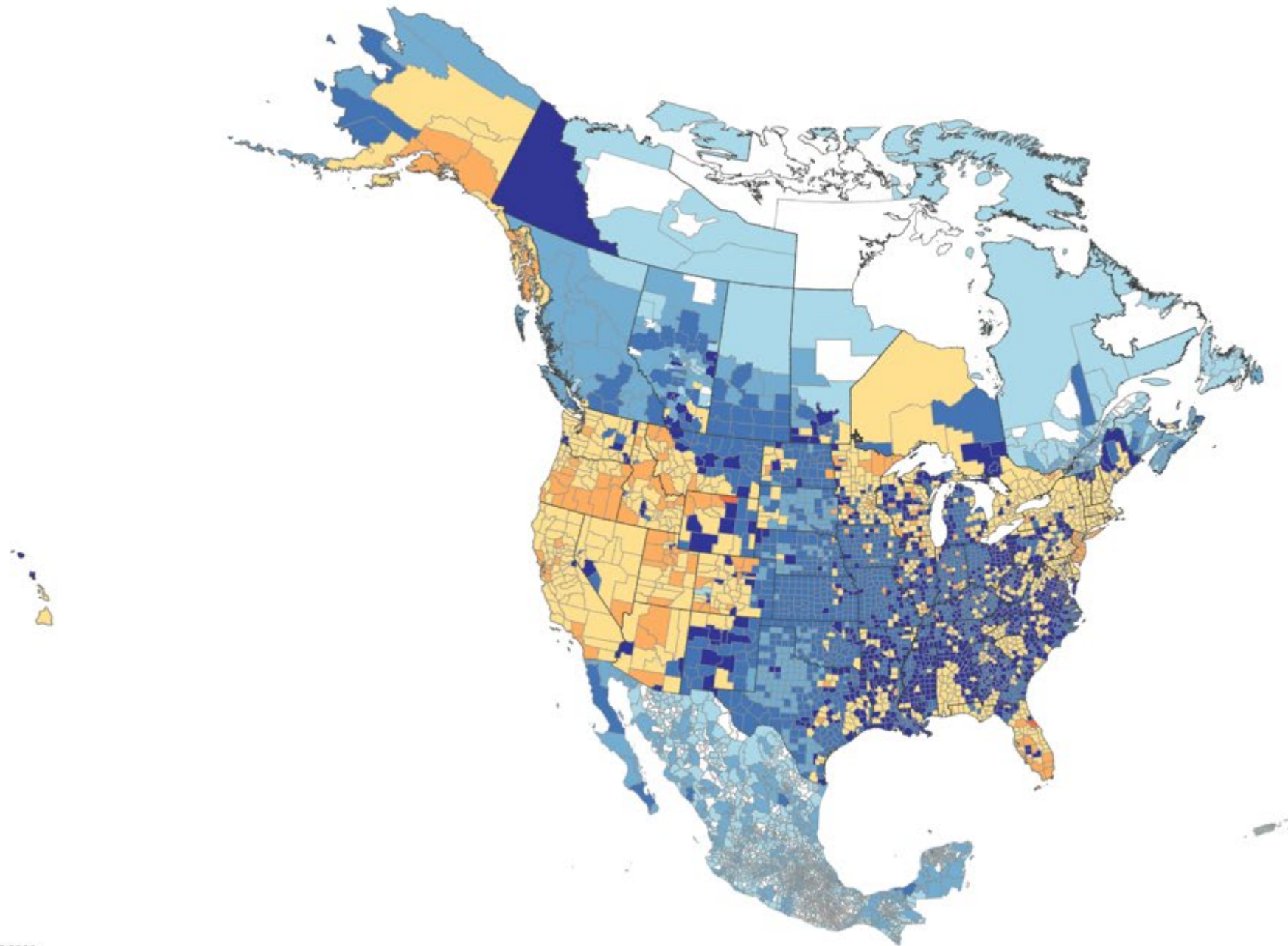
Where we started – Pre-EDDMapS distribution data in PLANTS and BONAP



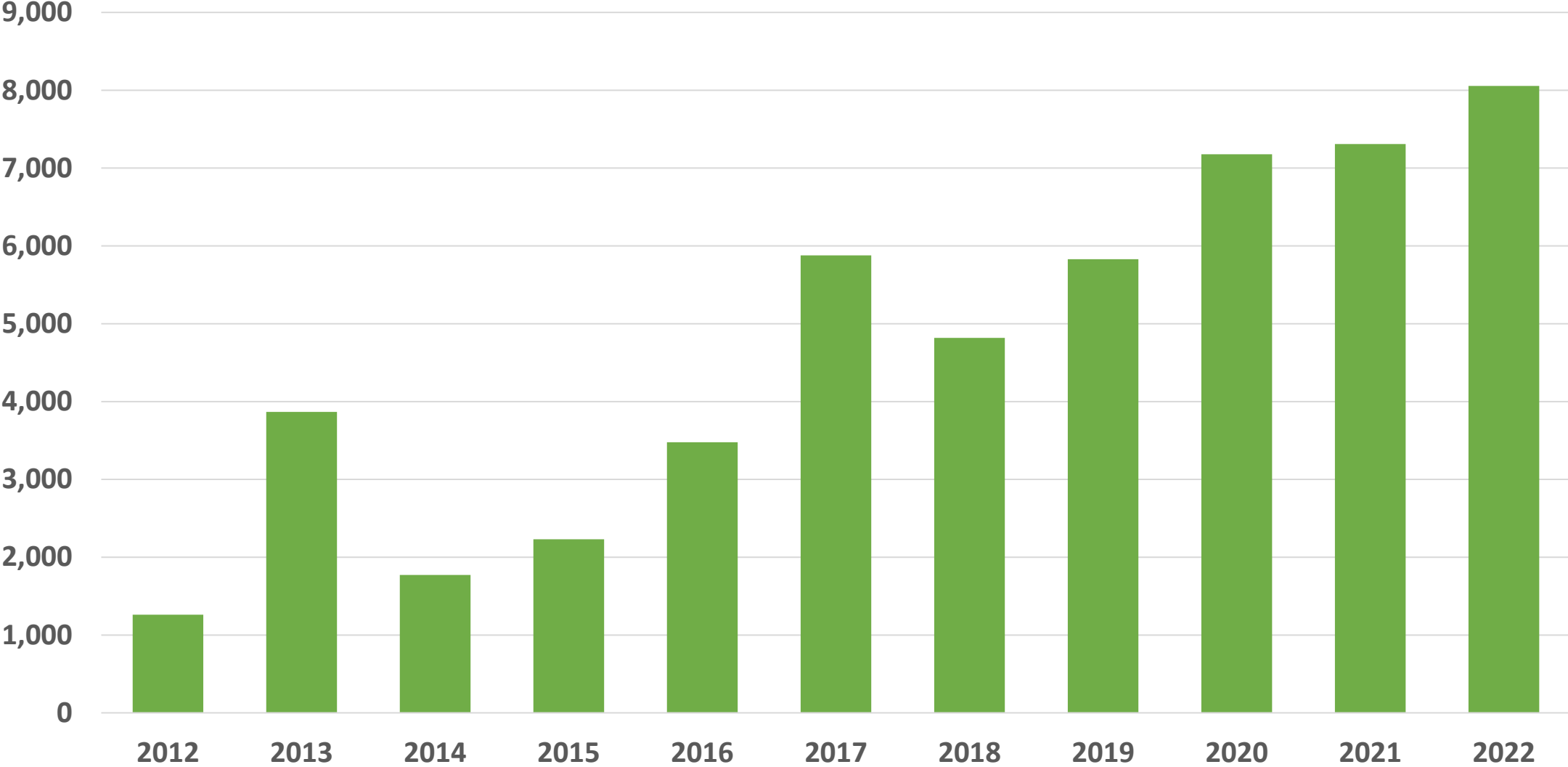
Legend

- 1-9
- 10-99
- 100-499
- 500-999
- 1,000-9,999
- 10,000-99,999
- >100,000
- No reports entered

Where we are now!



Active Users by Year





Joro Watch – What?

- Joro spider (*Trichonephila clavata*) was identified in GA in 2014
- First known infestation of this species in the US
- Highly charismatic and visible
 - Bright colors
 - Large size (for a spider)
 - Prolific where established
 - Webs in open areas; backyards
- Timing - Adults most visible in Autumn





Joro Watch - Results 2022

- Report Source
 - Joro Watch – 957
 - iNaturalist – 474
 - EDDMapS App – 277
 - EDDMapS Website – 149
 - Literature – 4
 - EDDMapS Pro – 2
- Reporters
 - Unique Reporters – 1111
 - Reporters who've only reported Joro spiders – 1085
- Joro Spider Spotting Contest
 - Reports – 320
 - Reporters – 203
 - New Counties – 5
 - Most Counties – 6
 - Most Reports – 15



Joro Watch - Results 2023

- Report Source
 - Joro Watch – 567
 - iNaturalist – 67
 - EDDMapS App – 259
 - EDDMapS Website – 84
- Reporters
 - Unique Reporters – 659
 - Reporters who've only reported Joro spiders – 649
- Joro Spider Spotting Contest
 - Reports – 623
 - Reporters – 409
 - New Counties – 6
 - Most Counties – 4
 - Most Reports – 20



Joro Watch – Rewards

Digital, Sharable Badges



Sticker mailed out



EMERGENCY

The image shows a close-up, low-angle view of a brick building's exterior. The word "EMERGENCY" is written in large, bold, red, three-dimensional block letters. The letters are mounted on a light-colored, textured stone or concrete ledge. Above the ledge, there is a row of large, dark-framed windows that reflect the sky and clouds. The building's facade is made of reddish-brown bricks. The perspective is from below, looking up at the sign and windows.



ISDA confirms quagga mussel larvae in the Snake River

Boise, Idaho – The Idaho State Department of Agriculture (ISDA) confirmed yesterday the presence of quagga mussel larvae in the Centennial Waterfront Park area of the Snake River. Multiple samples of quagga mussel at larval life stages have been found in the Twin Falls area by ISDA's early detection monitoring program.

The findings mark the first time a rapid response plan has been put into action for quagga mussels in Idaho. ISDA is implementing a rapid response plan that includes notifying impacted entities, implementing containment measures, conducting delimiting surveys and evaluating for potential treatment options.

"These invasive pests will clog pipes that deliver water for drinking, energy, agriculture, and recreation," Governor Little said. "This is a very high priority for Idaho and for me, given the gravity of the risk. If we are not successful, an unchecked spread – which we are doing all we can to stop – has the potential to cost Idaho hundreds of millions of actual and indirect costs. Thankfully, we caught the mussels early on and have already started a robust response to get these mussels OUT of our waters. We need everyone to support these efforts."

ISDA is asking for the public's cooperation in staying out of the water in the Centennial Waterfront Park area, in an effort to contain the mussel populations. ISDA staff and boats will be in the water performing delimiting surveys to determine the physical range of the impacted area. Boat ramps and public access to the water are closed temporarily.

"Our Invasive Species Program is prepared to respond to these findings quickly in an effort to contain mussel population growth in such a vulnerable area," said Chanel Tewart, ISDA Director. "We greatly appreciate the public's cooperation and plan on opening the area as soon as possible to minimize the impact to businesses that rely on the Snake River."

Quagga and zebra mussels pose a major threat to Idaho's water systems, native species, agriculture, utilities and more. ISDA's early detection monitoring program works to detect new outbreaks early, which allows ISDA to quickly control mussel populations. While working to determine the scope of the impacted area, ISDA officials will be exploring potential control strategies for the mussels.

All watercraft users are encouraged to follow the "Clean, Drain and Dry" actions for watercraft and equipment before entering and after leaving Idaho waterbodies. ISDA watercraft inspection stations are also currently operating across the state and mandatory for watercraft users to stop at.

For updates on the issue and to view a map of the impacted area, visit agri.idaho.gov/main/plants/snake-river-quagga-mussel-veligers/.

Quagga Mussel Larvae Detection Snake River

September 2023 - The ISDA has confirmed the presence of quagga mussels at larval life stages in the Centennial Waterfront Park area of the Snake River. These findings mark the first time a rapid response plan has been put into action for quagga mussels in Idaho.

Closures are in place in and along the Snake River until further notice as the investigation in the area continues. See map below for closures.

If your watercraft has been in the Snake River Centennial Park area in the last 30 days, please call (208) 332-8620 or visit a hot wash location for decontamination.



Invasive species of mud snails found in Lake Tahoe, a ‘concerning’ discovery



The New Zealand mud snail is much smaller than a U.S. dime. (U.S. Geological Survey)

BY CHRISTIAN MARTINEZ | STAFF WRITER

SEPT. 22, 2023 6 AM PT



In the vastness of the second-deepest lake in the United States, a tiny snail is posing a threat of “concerning” proportions. The invasive New Zealand mud snail has been discovered in Lake Tahoe.

It’s unclear how this Kiwi species wound up in the [cobalt blue waters](#) of the Sierra Nevada. But, officials said Thursday, the mud snails “are able to colonize new waters quickly” and are “difficult to detect” because of their small size.

The announcement of the discovery was made by the Tahoe Regional Planning Agency and the Tahoe Resource Conservation District.

Contract divers with Marine Taxonomic Services, Ltd. surveying invasive weeds on the South Shore discovered tiny snails on the bottom of the lake nearly a half mile offshore from the mouth of the Upper Truckee River. Consultation with experts and a DNA lab analysis confirmed the species is New Zealand mud snail, an aquatic invasive species (AIS) that has been detected in nearby waterways including the Lower Truckee River downstream from Lake Tahoe near Reno, Nevada.

The snails are thought to have been brought to the U.S. by shipping activity or aquaculture, and they have spread throughout the country probably because of aquatic recreation and fishing gear not being properly cleaned. California saw its first New Zealand mud snail population in the Owens River in 2000, according to the Center for Invasive Species Research, University of California Riverside, with all the western states, except New Mexico, now having permanent populations of the species.



11488756

old world climbing fern (Lygodium microphyllum)

Last Visit: Aug 16, 2023

Current Status: Positive

[Revisit Record](#)

11488756

Original

Aug 16, 2023

Positive

Record ID

11488756

Species Information

Location Information

Habitat

Edge: Field/forest

Locality

Found on the edge of a planted pine stand.

Location

Long, Georgia, United States

Infestation Information

Abundance

Single Plant

Infestation Status

Positive

Reporter Information

Reporter

[Ryan Bohannon](#), Clemson University

Observation Date

August 16, 2023

Date Entered

August 17, 2023

Updated By

EDDMapS Administrator

Identified By

Ryan Bohannon

Source Type

Web Report

Verification and Review

Verification Method

Photographs

Identification Credibility

Verified

Observation Identifier

Eamonn Leonard

Reviewed

Verified

Reviewer

Rebekah Wallace

Date Reviewed

September 27, 2023

Stay informed on topics that matter to you. [Get 3 months for 99¢!](#)

Bee-eating cousin of the 'murder hornet' found in Georgia

Yellow-legged hornet isn't supposed to be in the U.S. But officials say it's been found in Georgia



< Caption

Credit: Yellow-legged hornet (*Vespa velutina*, formerly called Asian hornet) by Gilles San Martin is licensed under CC BY-SA 2.0 (cropped)

GEORGIA NEWS

By [Drew Kann](#)

Aug 15, 2023



LOCAL

What the crab is that? Researchers ask public for help in tracking new arrival to NC coast

A non-native land crab that dwarfs the state's native crab species has been spotted at the N.C. coast. Now officials want the public's help in tracking its impacts



Gareth McGrath
USA TODAY NETWORK

Published 5:24 a.m. ET Sept. 28, 2023 | Updated 5:24 a.m. ET Sept. 28, 2023



PHOTOS: Blue land crabs in North Carolina

A non-native crab species has been spotted along the N.C. coast, and now researchers want the public's help in tracking it.

Imagine a ghost crab combined with a fiddler crab. Now imagine that hybrid on steroids, like the performance-enhancing drugs used by professional baseball players in the 1990s.

That image effectively describes one of the newest non-native species to make North Carolina home, at least for a visit.

Now researchers, teaming up with fellow scientists in South Carolina, want the public's help to find out if a crab native to warmer climates thousands of miles south of North Carolina will become a permanent member of the Tar Heel State's environment.

"If you see one, you know it's something different," said Dr. Bronwyn Williams, research curator with the [N.C. Museum of Natural Sciences](#), about the blue land crab.



Photo by South Carolina Dept of Natural Resources

A fast-growing vine is one of the newest invasive species identified in Maine

Maine Public | By [Caitlin Andrews](#)
Published October 2, 2023 at 8:53 AM EDT



▶ LISTEN • 4:14



Caitlin Andrews / Maine Public

Doug Cygan, an Invasive Species Coordinator for the New Hampshire Department of Agriculture, Markets and Food, pulls a mile-a-minute vine out from a stone wall in Seabrook, New Hampshire.

MICHIGAN

'One of the world's most invasive aquatic plants' found for first time in Michigan



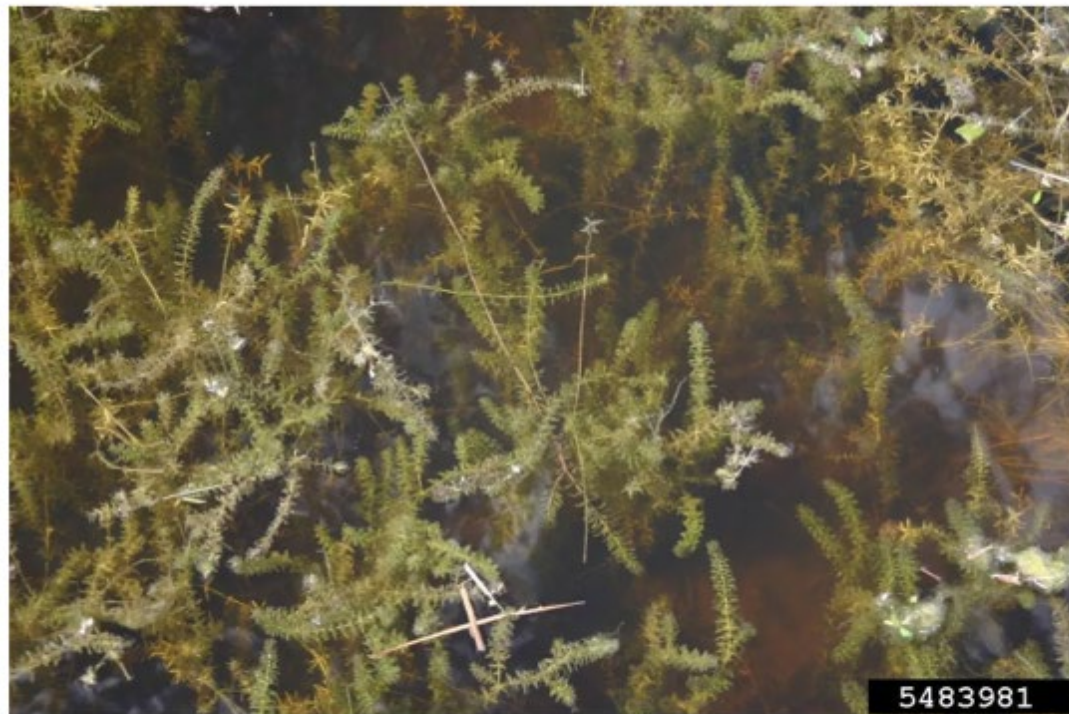
[Keith Matheny](#)
Detroit Free Press

Published 5:16 p.m. ET Oct. 2, 2023 | Updated 9:36 p.m. ET Oct. 2, 2023

[View Comments](#)



Hydrilla, called "one of the world's most invasive aquatic plants," by Michigan Department of Environment, Great Lakes and Energy (EGLE) officials, has been found for the first time in Michigan waterways.



5483981

Hydrilla is characterized by serrated leaves, generally in whorls of five, surrounding long stems. *Leslie J. Mehrhoff, University Of Connecticut, Bugwood.org*

2 species of invasive insects found in Minnesota for first time

WCCO NEWS

BY WCCO STAFF
SEPTEMBER 13, 2023 / 11:13 AM / CBS MINNESOTA



MINNEAPOLIS – Two species of invasive insects were reported for the first time in Minnesota last month. The state's Department of Agriculture is asking residents to be vigilant.

Two separate homeowners reported an elm seed bug and an Asiatic garden beetle to the department's Report a Pest service in August.



Asiatic garden beetle (left) and Elm seed bug (right)

MINNESOTA DEPARTMENT OF AGRICULTURE

The ag department said the elm seed bug is a nuisance pest that is native to Europe. It first appeared in the U.S. in 2012. They are about one-third of an inch long and are dark red and black in color.

READ MORE: [All Minnesota worms are invasive, but which ones do you need to worry about? An expert weighs in](#)

Asiatic garden beetles feed on fruit, vegetables, perennials and annuals, according to officials.

Another invasive species found in North Carolina, Apple Snails now confirmed

October 3, 2023 Submitted



NOMINATE YOUR FAVORITE
OBX RESTAURANTS, RETAIL,
ENTERTAINMENT & MORE!



An Apple Snail. (N.C. Wildlife Resources Commission)

The N.C. Wildlife Resources Commission (NCWRC) announced Monday that Apple Snail, a harmful invasive aquatic species, have been identified along the Lumber River in Lumberton. Native to South America, this is the first known population of Apple Snails in North Carolina. Globally, Apple Snails are a problematic invasive species and have been introduced in Europe, Asia, and multiple states within the U.S.

A concerned citizen sent photographs of suspected Apple Snail egg clusters to the NCWRC. An NCWRC biologist inspected multiple sites along the Lumber River and collected additional egg masses for submission to the N.C. Museum of Natural Sciences, which confirmed the identification of Apple Snail eggs. Subsequent surveys by an NCWRC biologist detected adult snails and eggs near the I-95 bridge crossing of the Lumber River, at the High Hill Boating Access Area, and in Fivemile Branch, a tributary to

Prolific invasive species that's hard to eradicate is found in NC wild, officials say

BY MAKIYA SEMINERA

SEPTEMBER 25, 2023 3:55 PM

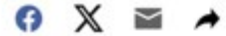


Zebra mussels are considered to be a harmful, invasive species that can spread quickly in waterways. They have now been found in North Carolina, officials say. *Photo from the U.S. Fish and Wildlife Service*

Spotted lanternfly found in Nashville area. Why Tennessee officials want you to kill it.

Jordan Green Nashville Tennessean

Published 10:23 a.m. CT Sept. 29, 2023 | Updated 11:22 a.m. CT Sept. 29, 2023



The spotted lanternfly has been spotted in Davidson County, making Tennessee the 16th state to identify the insect since it was first discovered in 2014.

“Our Plant Certification Section inspectors responded to a tip from a vigilant citizen about a sighting of spotted lanternfly,” Commissioner Charlie Hatcher said in a statement from the Tennessee Department of Agriculture. “This non-native insect is harmful to a range of crops and natural resources in our state. Wood products businesses and fruit growers could be especially vulnerable, and we want your help in watching out for this pest and eliminating any you find.”

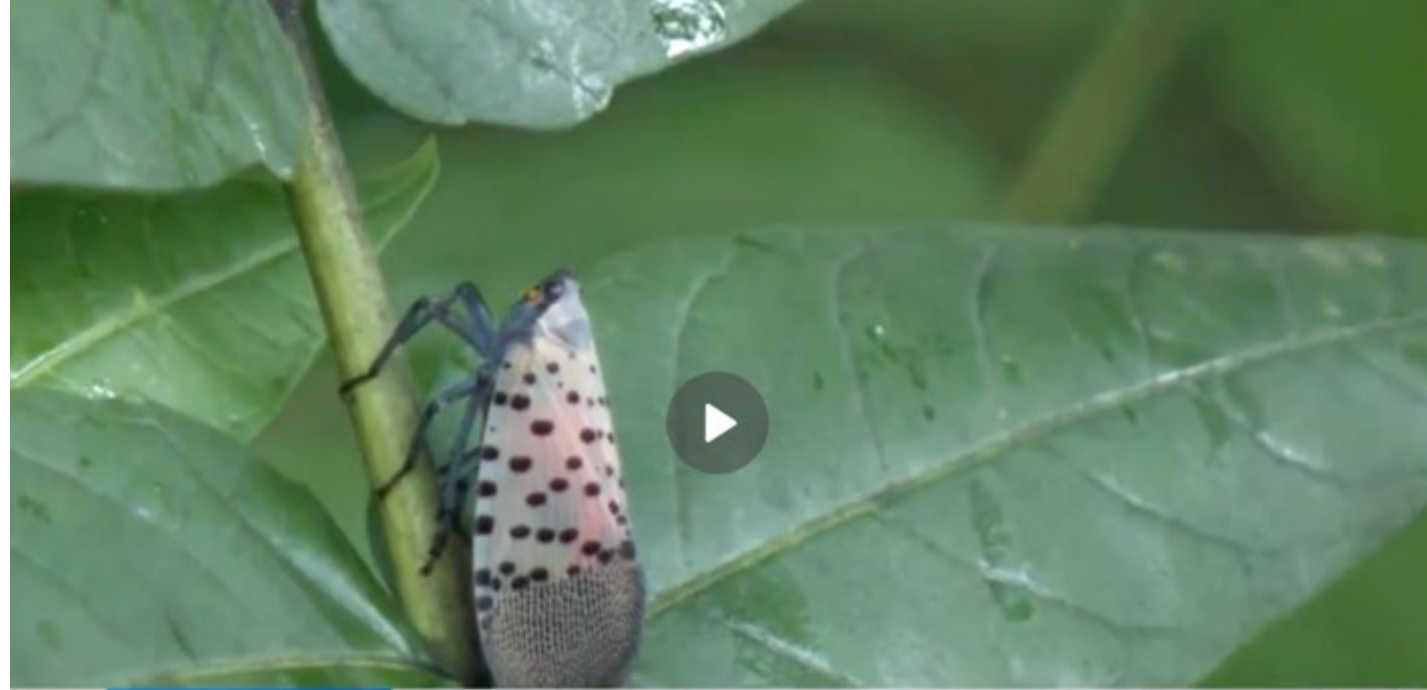
So far, it has only been identified in Davidson County. The [Tennessee Department of Agriculture](#) advises residents and travelers to check their vehicles to reduce the spreading of the insect's eggs.


What's the problem with the spotted lanternfly?

The spotted lanternfly is an invasive plant hopper that was first detected in 2014. It is a sapsucking insect that feeds on water and nutrients in plants. It is an invasive species that gathers in large numbers on host plants and flat surfaces.

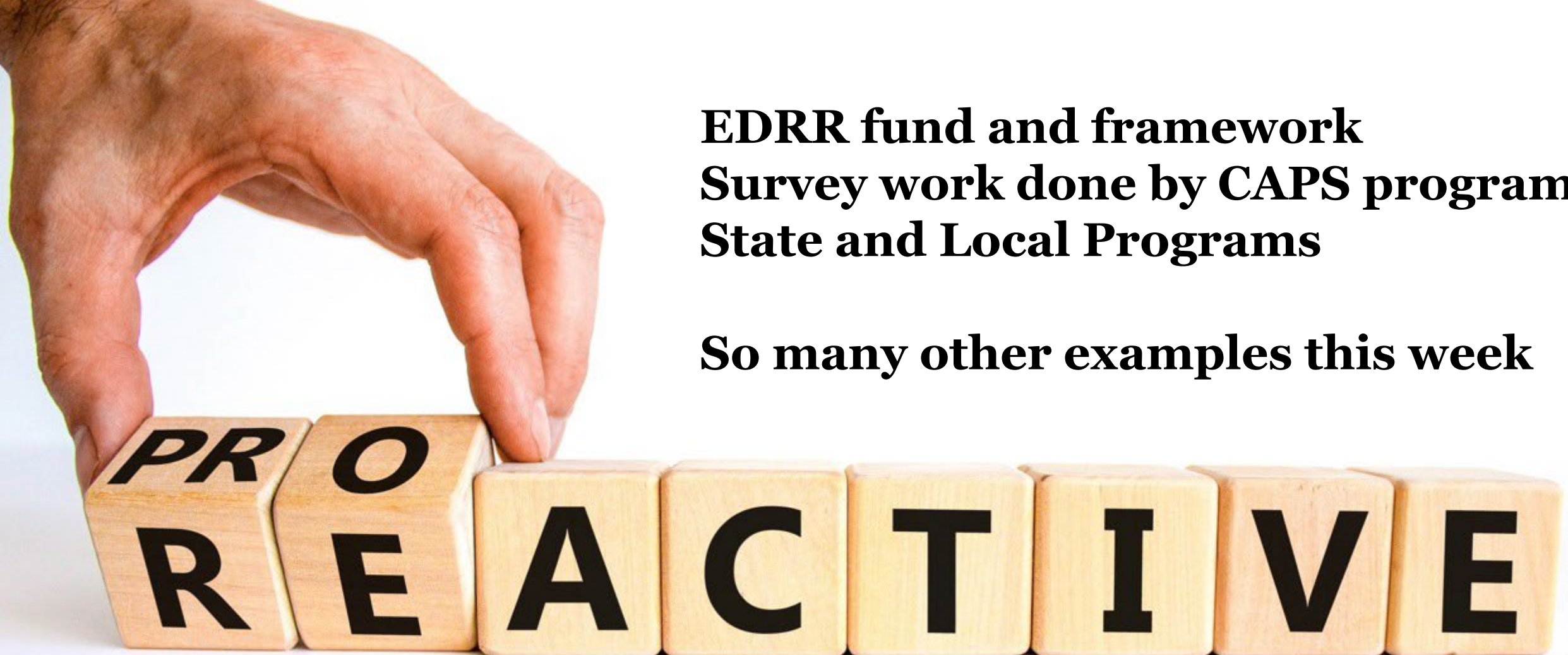


Image of the spotted lanternfly from the Tennessee Department of Agriculture on Sept. 28, 2023 Tennessee Department Of Agriculture



 **CBS NEWS CHICAGO** **INVASIVE SPOTTED LANTERNFLY DETECTED IN ILLINOIS FOR THE FIRST TIME**



A close-up photograph of a person's hand, with fingers positioned to place or adjust wooden blocks. The blocks are arranged in a row on a white surface, spelling out the word 'PRO REACTIVE'. The top row of the first two blocks contains the letters 'P', 'R', 'O', and the bottom row contains 'R', 'E'. The remaining seven blocks each have a single letter: 'A', 'C', 'T', 'I', 'V', 'E'. The text to the right of the blocks is in a bold, black, sans-serif font.

**EDRR fund and framework
Survey work done by CAPS program
State and Local Programs**

So many other examples this week



ARE YOUR SHOES CLEAN?
You could be spreading invasive species on the trail.

CLEAN YOUR SHOES. STOP INVASIVE SPECIES.
Mud and seeds carry invasive plants. Use the brush to clean under the sole to clean off before and after hiking.

HOW TO PREVENT THE SPREAD OF HABITUOUS PLANTS

1. Hike with clean gear—Clean your shoes, clothes, socks and pants before exploring.
2. Stay on marked trails to reduce the chance of picking up seeds and that may carry invasive species.
3. Leave with clean gear—Clean your shoes, clothes, pants and pants after exploring.

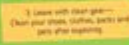
WHAT ARE INVASIVE SPECIES?
Any organisms that are not native to an area and cause harm.

WATER BOTT
You can help protect your water while you hike!

THESE CONTRIBUTORS ARE COMMITTED TO PREVENTING INVASIVE SPECIES

LOWER PLAINS WOOD MANAGEMENT AREA
www.parks.ny.gov

Play Clean Go PlayCleanGo.org



PlayCleanGo.org

NEBRASKA
GAME PARKS



CLEAN



DRAIN



DRY

F-150



STATE OF NEBRASKA

PROTECT OUR
WATERS
from invasive species

www.OutdoorNebraska.org

FLEX FUEL

NEBRASKA
19303
STATE GOVT

Prevention Campaigns

**BUY IT WHERE
YOU BURN IT.**

**DON'T MOVE
FIREWOOD.org**

**CLEAN
DRAIN
INITIATIVE**™



**STOP INVASIVE SPECIES
IN YOUR TRACKS.**

PlayCleanGo.org

**Now we need a
Detection
Campaign!**



WILDTM SPOTTER

Mapping Invasives in America's Wild PlacesTM



Wild Spotter is another interface for EDDMapS, it is not a new database! All data is part of EDDMapS which is a part of the EDRR Framework!

EDD **MapS**
find • map • track





- Not just an App!
- The Detection Campaign
- We can't get people to report invasive species if they don't understand and care about the problem of invasive species
- We need the public help us protect the places we all care about!



Then we need to challenge ourselves and work toward making your favorite place Invasives Free





Join us for the Inaugural
**Wild Spotter Invasive Species Ambassador
Training Course**



This intensive training will include building relationships, partnerships and engaging stakeholders; branding and marketing programs; using innovative tools and technologies; and volunteer citizen-science coordination, recruitment, and retention to meet invasive species management goals and expand local community capacity for action.

This gathering will have limited attendance through a merit selection process; please apply now at www.invasivesfree.org to submit your candidacy and reserve your space for this unique opportunity....More to come!

December 5th - 7th, 2023

Coeur d'Alene Lake Resort

Northern Idaho

<https://www.cdaresort.com/>



 **WILD SPOTTER**
The Official App for the National Wild Turkey Federation

 **INVASIVES FREE USA**

20:00



**Invasive Species Ambassador Training
Lake Guntersville State Park, Alabama
February 4-6, 2025**

**Apply Now at:
www.invasivesfree.org**





Challenge

1. Present invasive species to a new audience
- #invasivesfree or @invasivesfree
2. Adopt Wild Spotter as the Detection Campaign for your public lands
3. Pick your favorite place and help make it Invasives Free - set a date and work toward it



QUESTIONS?



cbargero@uga.edu

www.wildspotter.org

<https://invasivesfree.org>

