

Have you:

- Created an iMapInvasives account?
- Logged-in online?
- Downloaded the iMapInvasives Mobile app onto your smartphone or tablet?



iMapInvasives training



New York
Natural Heritage
Program

Meg Wilkinson
Invasive Species Database Program Coordinator
NY Natural Heritage Program

Wednesday November 13th, 2019

- I. iMap3 Online
- II. iMap Mobile App
- III. iMap3 Web Map Services (WMS)

NYimapinvasives.org

[Home](#)[Report an Invasive](#)[About](#)[Data and Maps](#)[Resources](#)[Training](#)[WISPA](#)[Login](#)[Create Account](#)

[CTN Training Webinar Opportunities Available](#)

Welcome to New York's Invasive Species Database

Multiflora rose
Rosa multiflora
photo: Jessica Ingham

WHAT WE DO

Providing Invasive Species
Mapping Resources in New York

TRAINING

[Training Opportunities](#)

OUR PROJECTS

[Spatial Prioritization Tools](#)
[WISPA](#)

GET INVOLVED

[Contact Your Local PRISM](#)
Partner



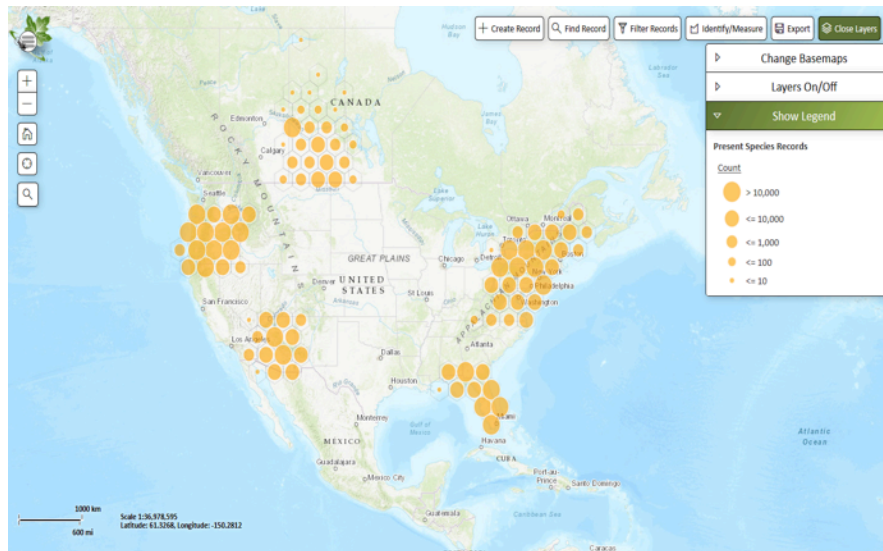
iMapInvasives

Sharing information for strategic management



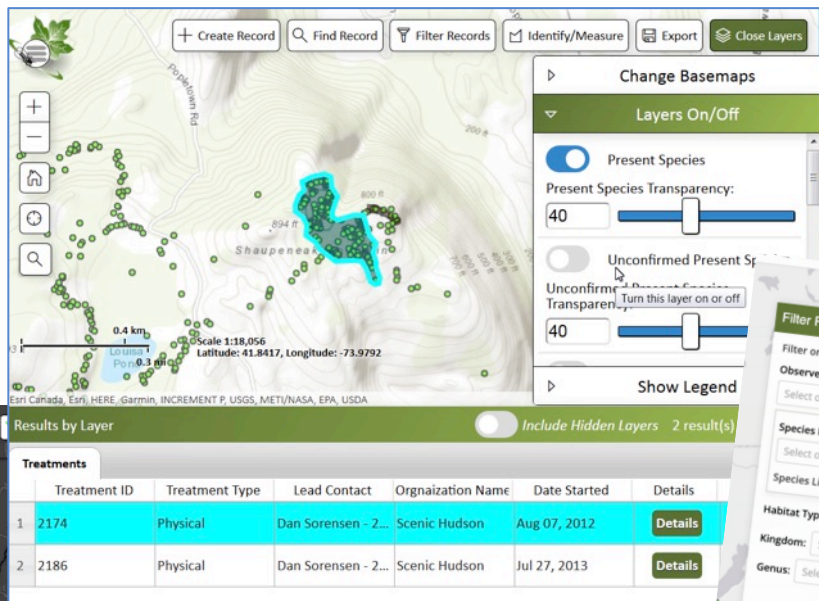
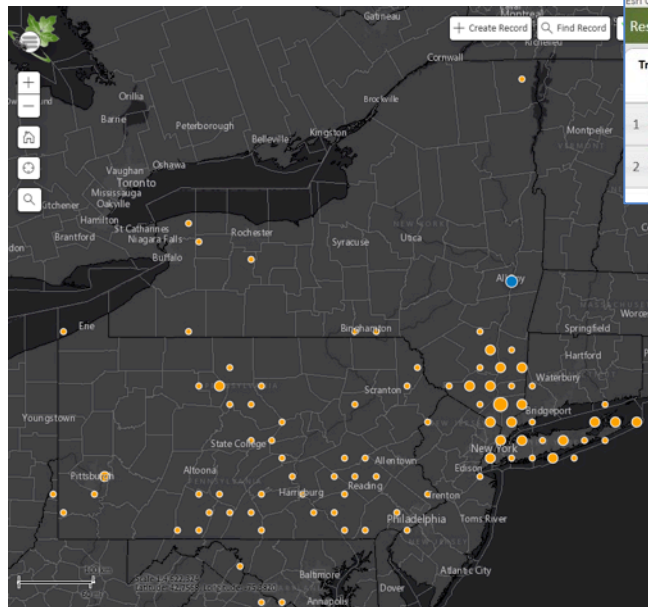
iMap3

- ❖ Live in April
- ❖ With NatureServe
- ❖ US & Canada
- ❖ Map-centric



iMap3!

Launched April 18, 2019



iMap3 Online:

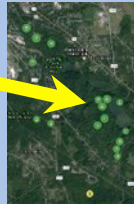
- Maps
- Filters
- Submit data
- Export data
- Email alerts
- More!



Email alerts



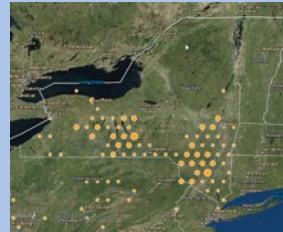
New York's Invasive Species Database



**Reporting tools
and data
uploads**



**Tracking Control
Efforts and
Results**



**Species Distributions
and Reports**

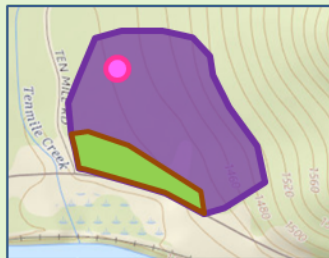


**Early Detection
Alerts**

Presence

What did you find?

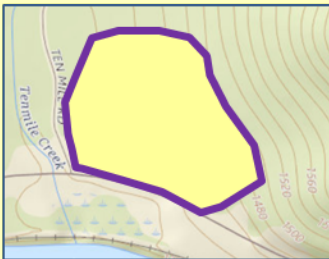
Location(s) (polygon, line, or point) that document one or multiple species present per location



Not Detected

What didn't you find?

One or more species looked for but not found.

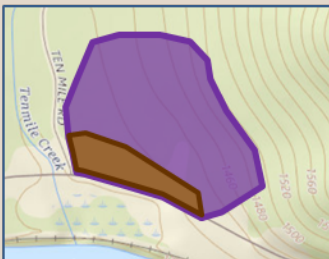


Treatment

What did you treat?

Polygon(s) within, or same area as, the parent Searched Area record

- mechanical, chemical, or biological



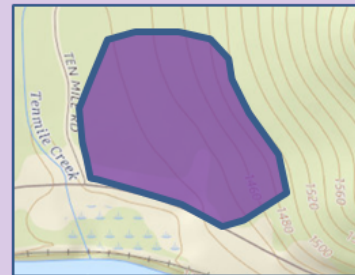
iMapInvasives – Data Types

Searched Area

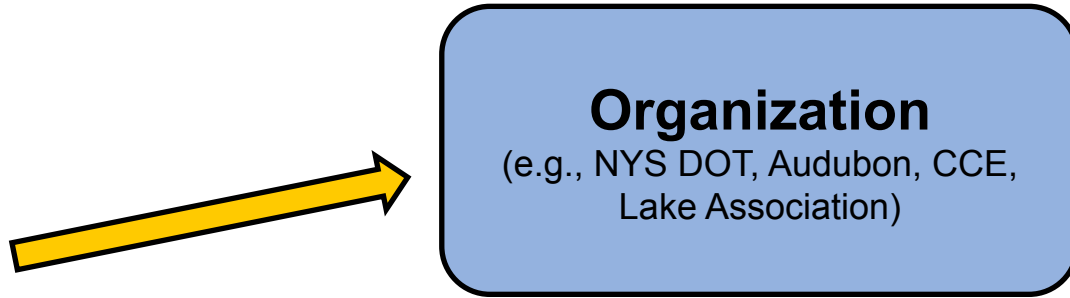
Where did you look?

Polygon showing the area covered that day, at that site, while looking for and/or treating invasive species.

- Base record to all other types.



iMapInvasives – User Roles



Active iMap states have:
Data manager/admin
Treatment tracking
Custom species list
Users into organizations

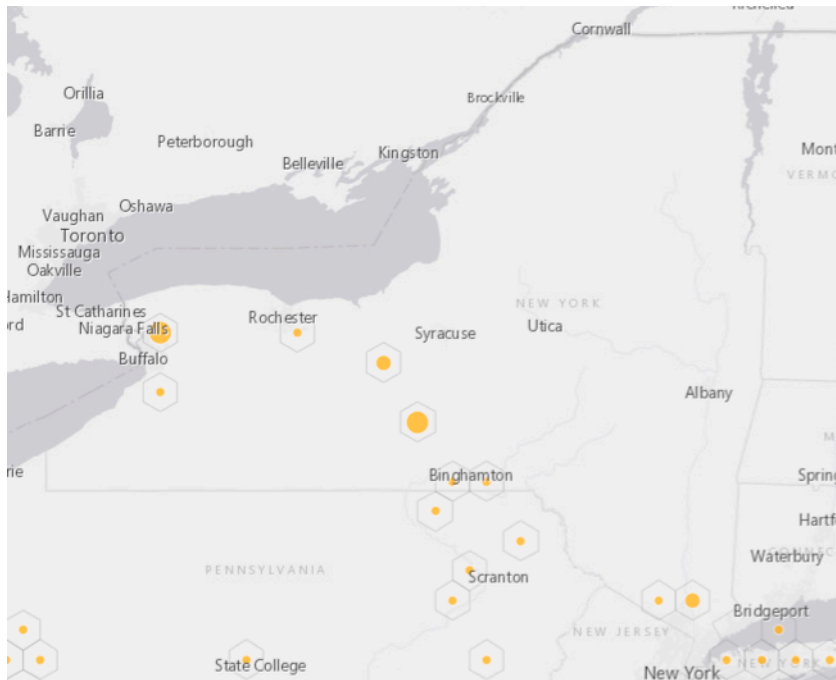
All iMap Members can:

- Enter/view/export presence and Not Detected records
- View, but not enter, basic treatments
- Create personal projects

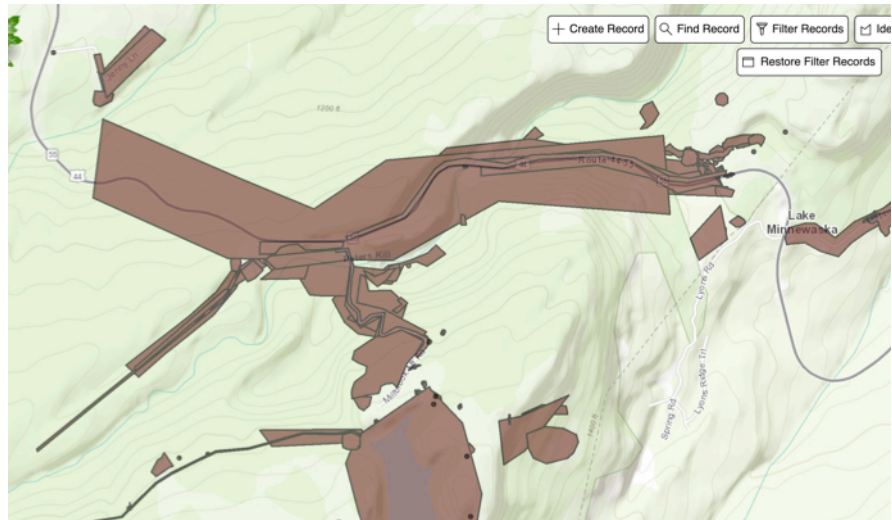
iMap Member
Everyone, everywhere

Scale

- State Level:
 - Email alerts
 - prioritization



- Local level:
 - Presence
 - Treatment work
 - Follow-up surveys
 - → Progress over time




Options for entering data into iMapInvasives

Invasive Species Study of School Grounds

NAME OF OBSERVER: _____ Period: _____

DATA COLLECTION DATE: _____

Number On Map	Photo Number (Date taken)	What was found (Scientific Name or Common Name)	Where (Observation and GPS Number on Map)	Observation Size (Other map record and observations)
1				
2				
3				
4				



1

Collect on paper forms,
then enter onto computer
and upload photos



Create Record

Single Presence

Single Treatment

Single Not-Detected

Multi-Record Searched Area



2 Enter online!



3

Collect photos and
location with app, then
upload into computer

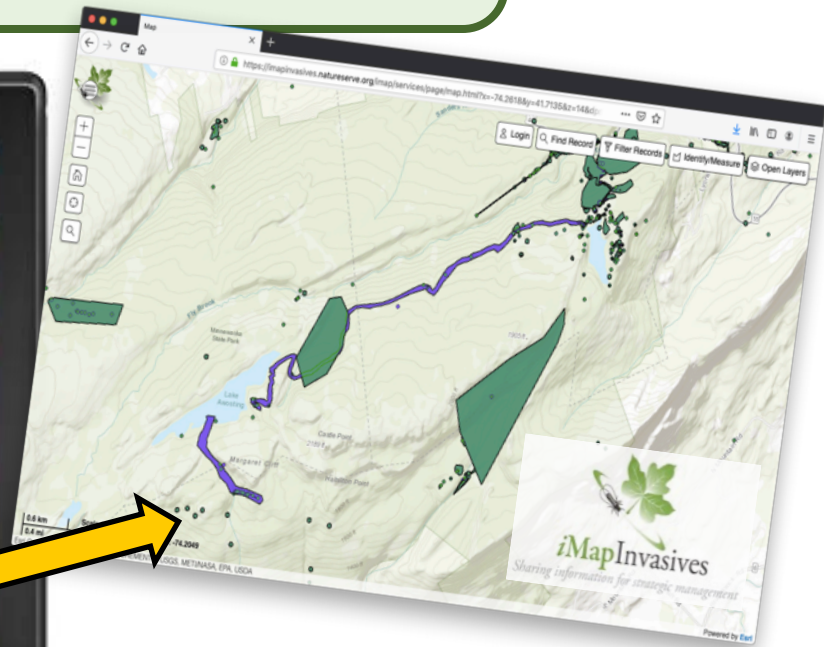
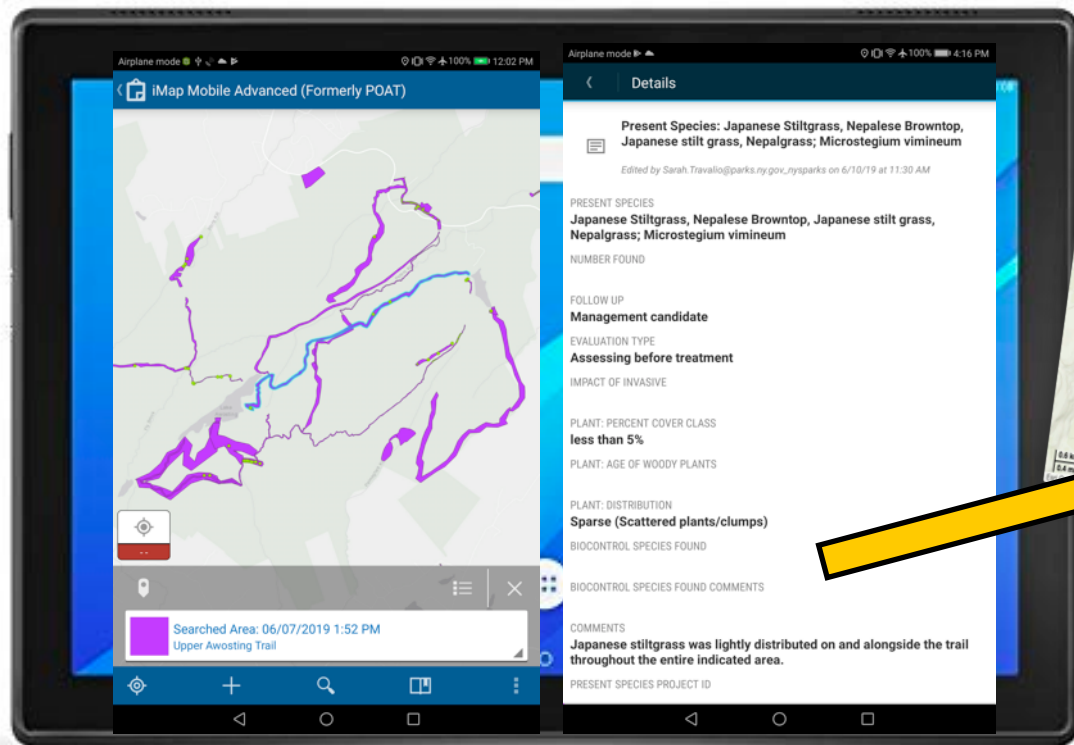


#4

iMap Mobile Advanced:

Connecting Field Work to iMap

Could the iMap Collector app be helpful for your agency/organization?



5. Simple Aquatic Survey “SAS”

- Two rake tosses per record
- Aquatic-specific survey fields



Hydrilla

Water Chestnut



Brittle Naiad

Curly Pondweed



Eurasian Watermilfoil

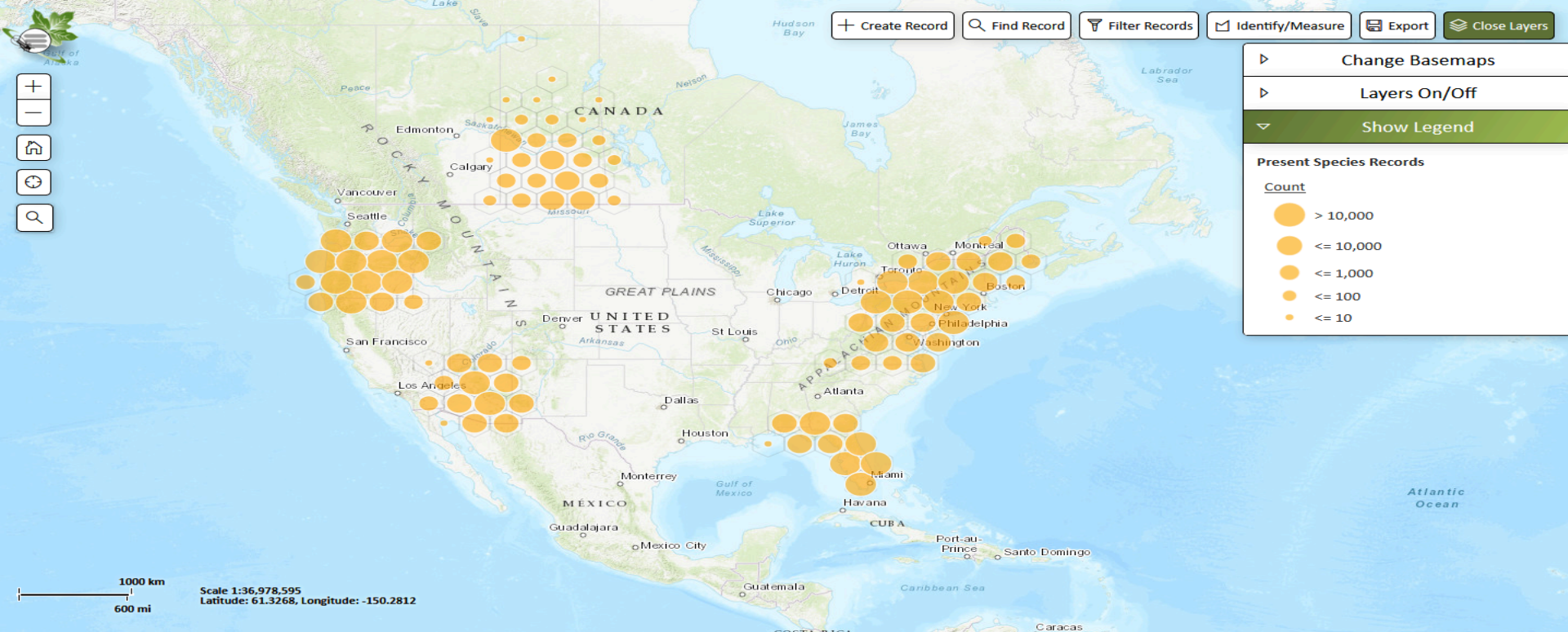
Starry Stonewort



And: Lake Management Tracker app?

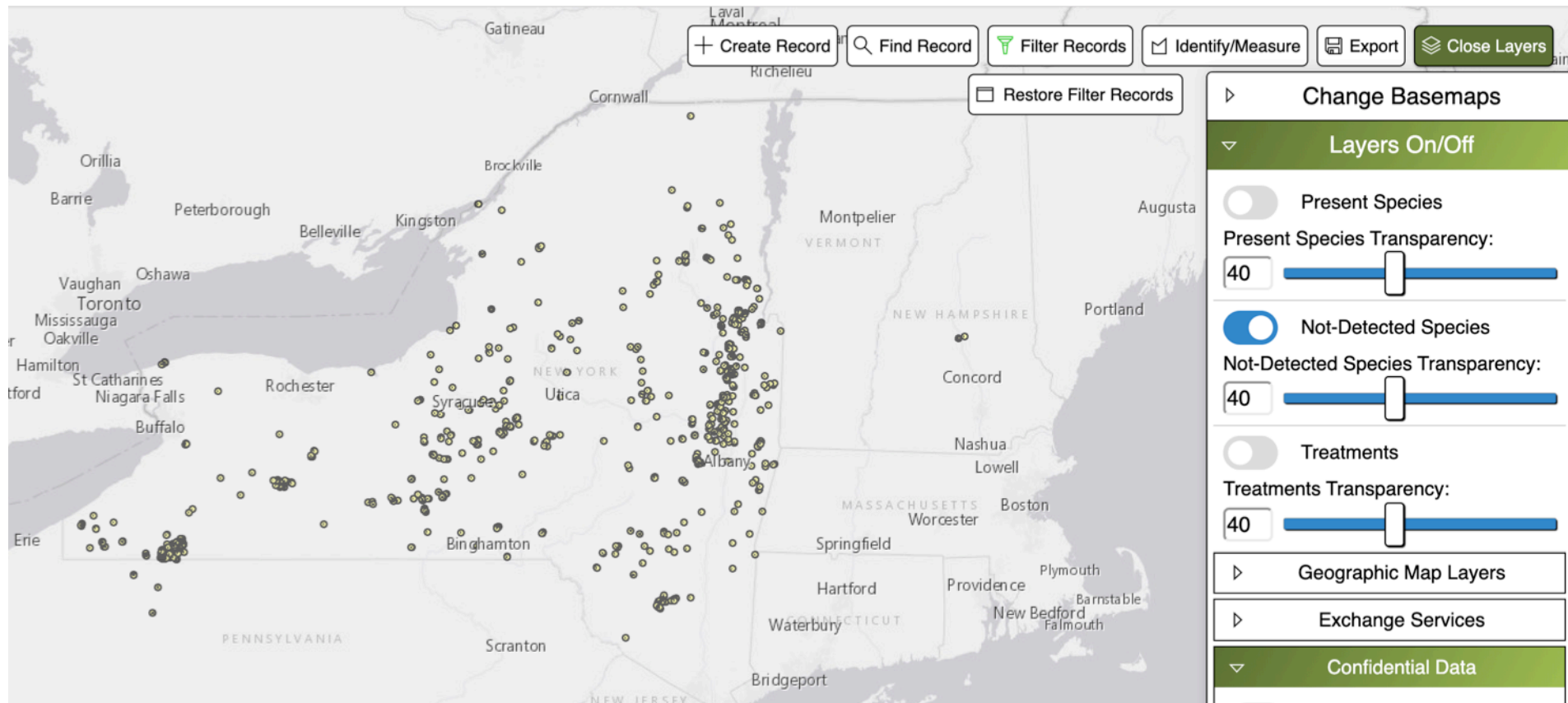
Developing your own Survey123 app?

- Talk with us ahead of time
- Align fields
- → Backend Crosswalk into iMap

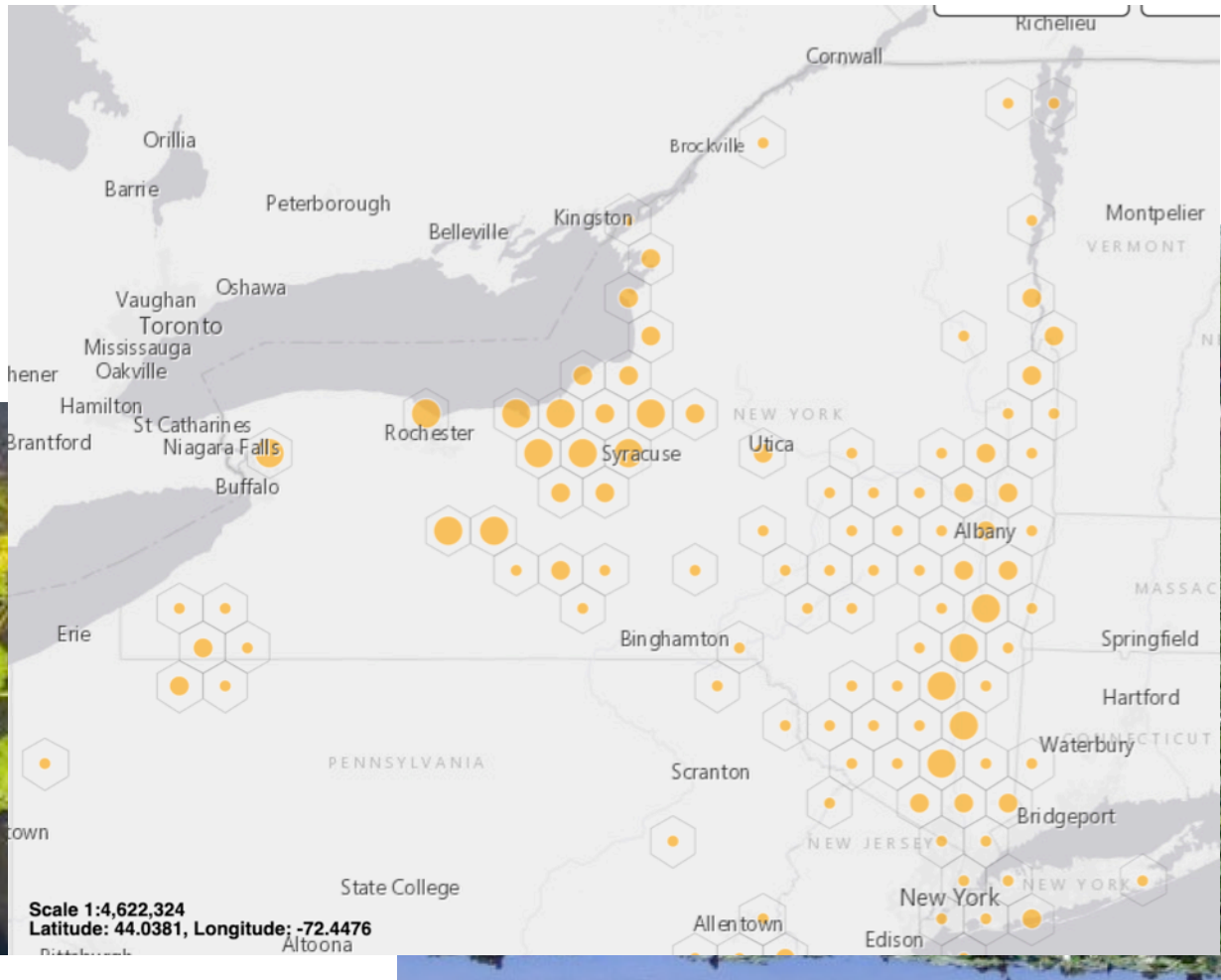


iMapInvasives Online
www.nyimapinvasives.org

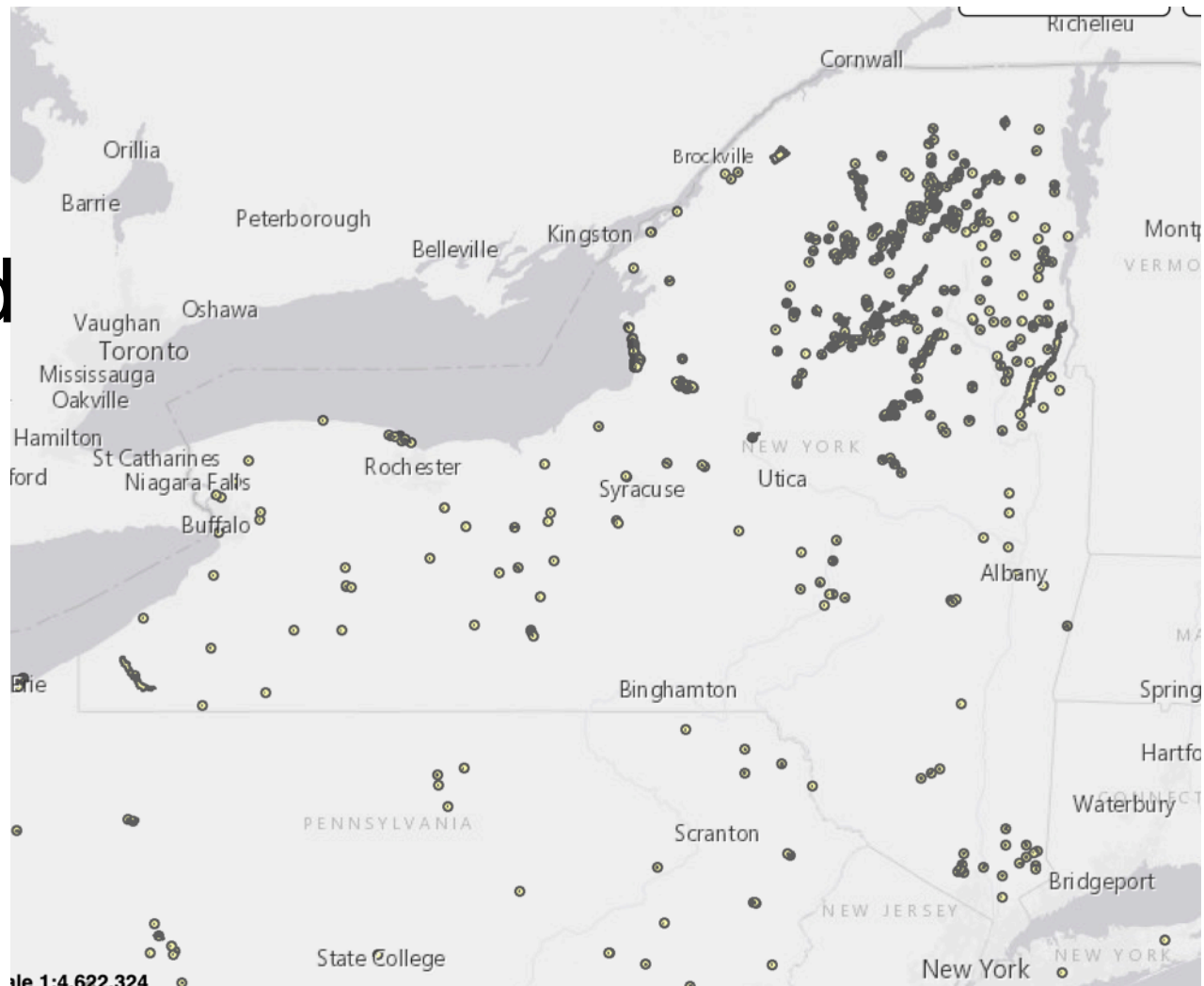
HWA – Not-Detected



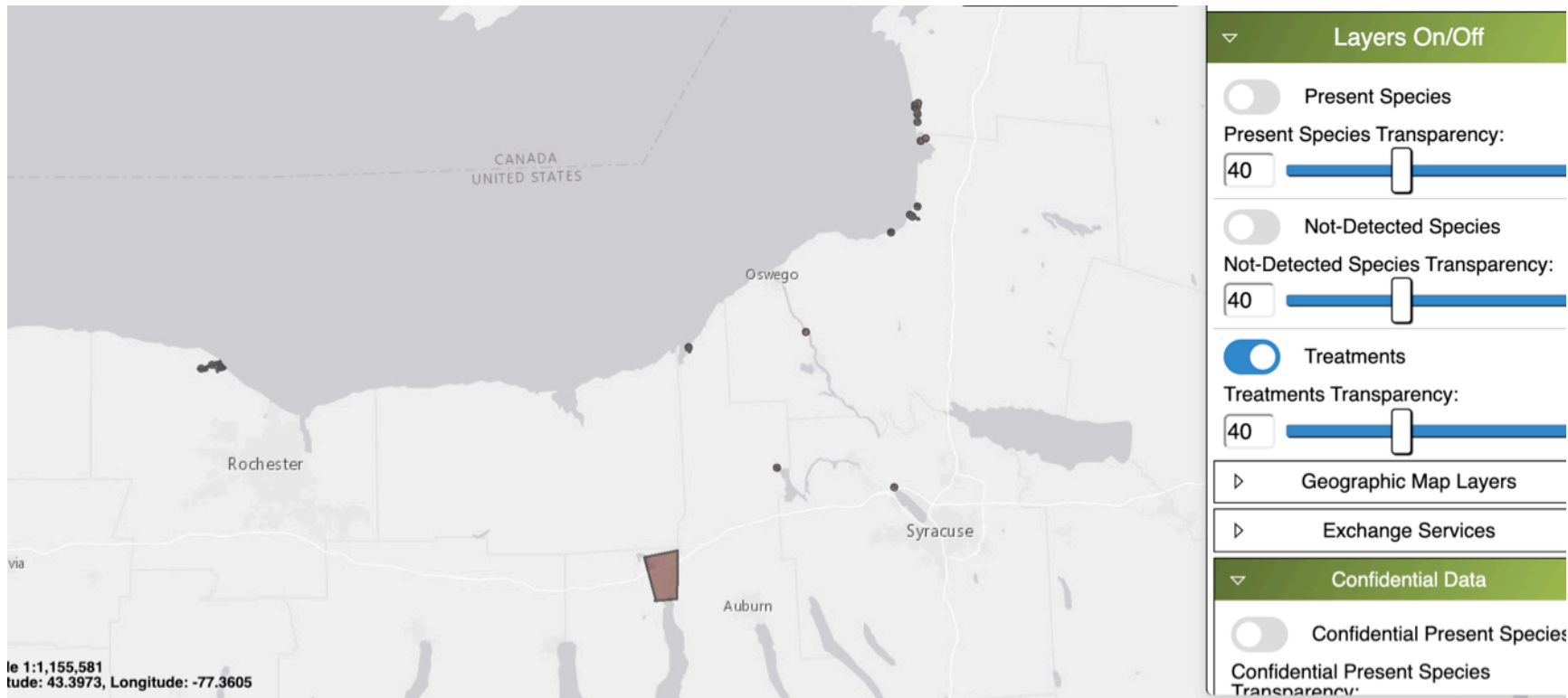
Water Chestnut - Present



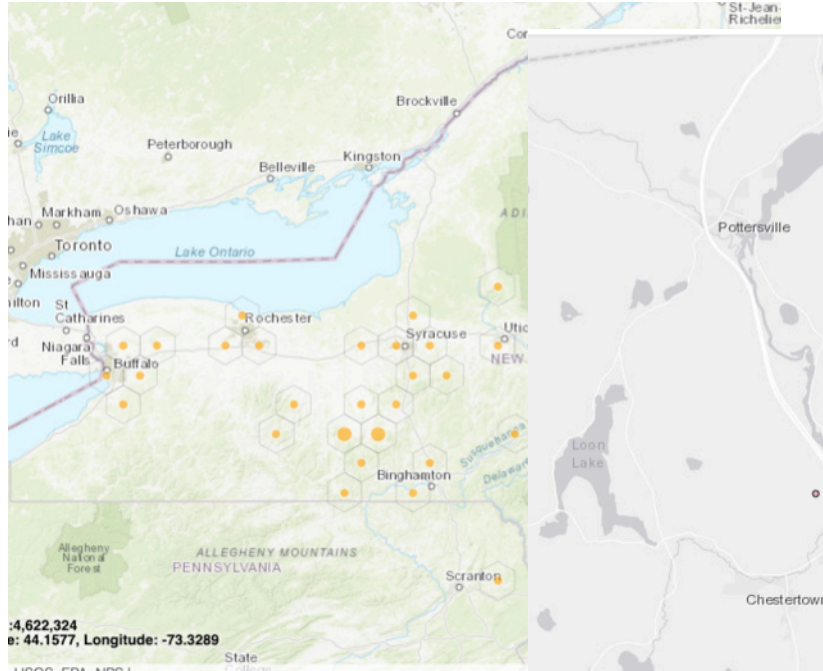
Water Chestnut – Not-Detected



Water Chestnut – Treatment

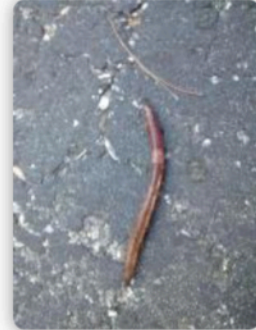


Jumping Worm – good photos important



Jumping Worms (species unknown)
Amyntas-Metaphire spp. (species unknown)
(Megascolecidae Family)

Photos of Present Species:



Comments:

Per A. Davalos SUNY Cortland: Not Sure

Number Found: Not Listed

Evaluation Type: Not Listed

<https://modernfarmer.com/2019/03/meet-the-asian-jumping-worm-the-farmers-new-threat/>

Tree-of-Heaven and Spotted Lanternfly

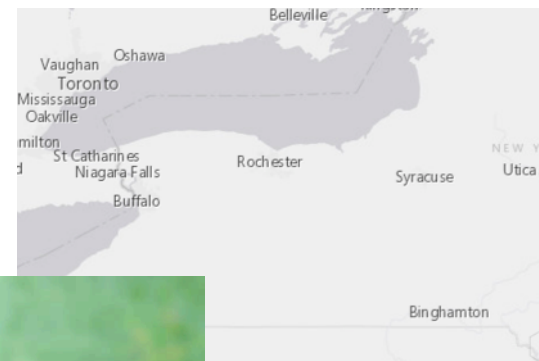


This Invasive Bug Could Hurt Pa. Beer and Wine Production

The spotted lanternfly feeds on more than 65 species of plants (including vegetables) and is a threat to timber, tree fruit orchards, grape, stone fruit and berry production — plus, researchers are now saying that it can kill hops. Read: It's threatening to hurt Pennsylvania beer and wine production.

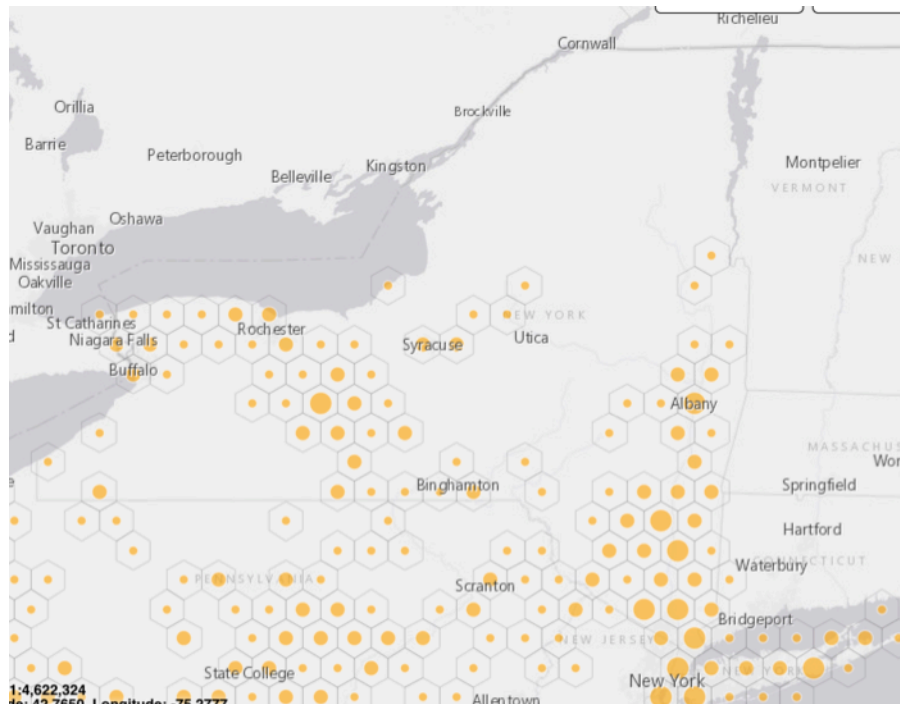
<https://www.phillymag.com/news/2018/08/23/spotted-lanternfly-wine-beer/>

SLF - *Confidential*



Adult spotted lanternfly
Lawrence Barringer, Pennsylvania Department of
Agriculture, Bugwood.org

Tree of Heaven



1 Species Present

Tree-of-heaven; Chinese Sumac; Ailanthus

Ailanthus altissima
(Simaroubaceae Family)

Photos of Present Species:



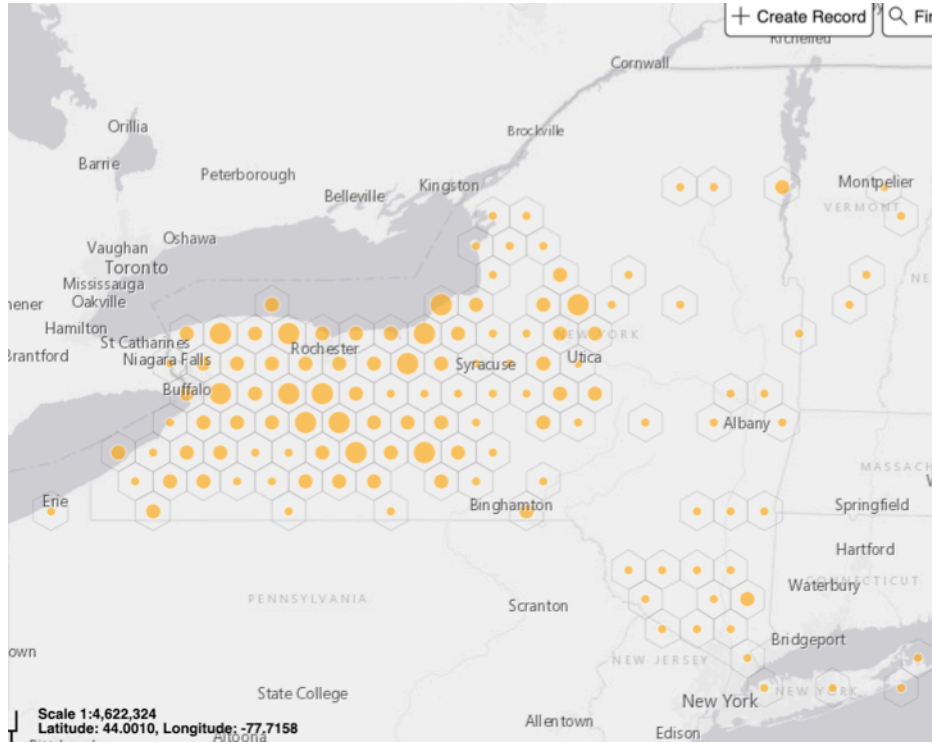
us-east-1.amazonaws.com/514622/p/photourl2_2017_09_19_zacsimek_93n7vum8.jpg



UGA1150026

Future

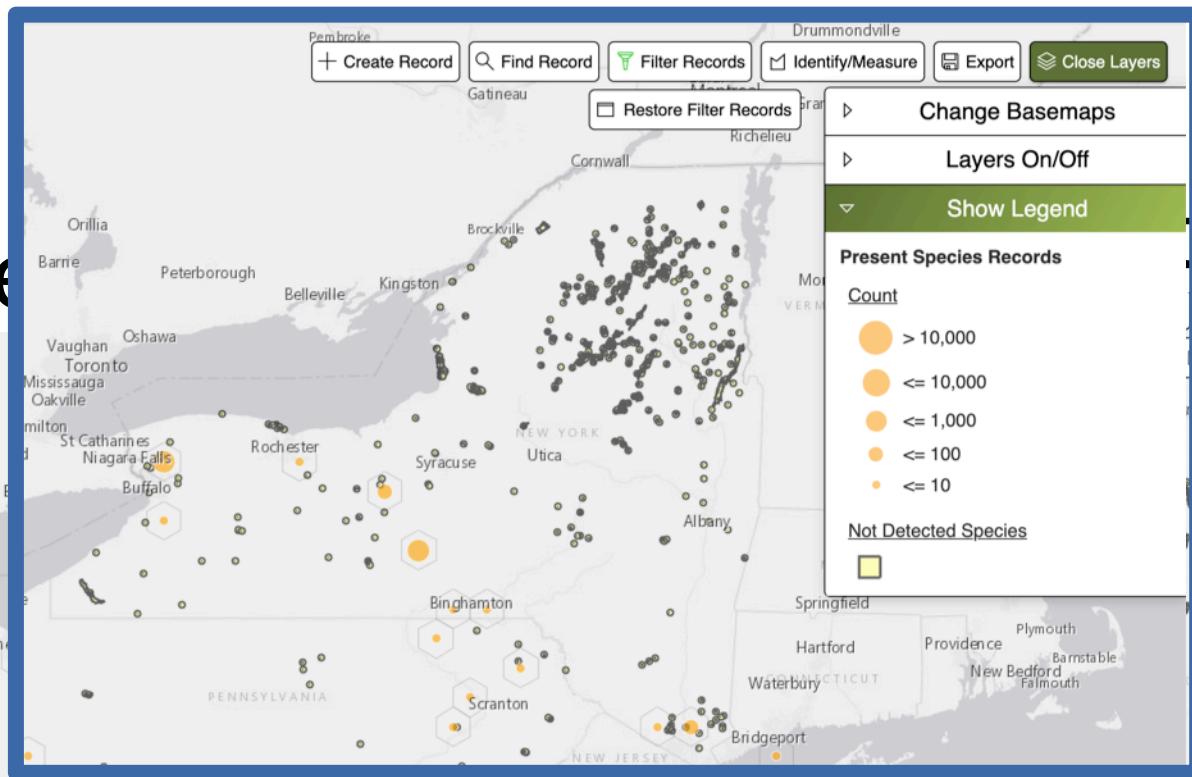
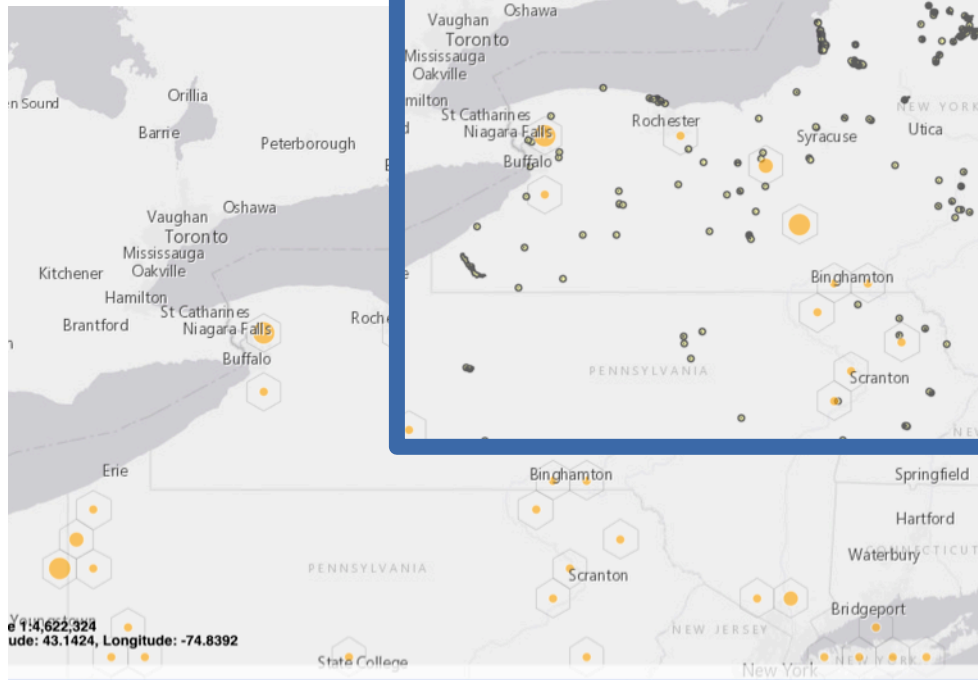
Giant Hogweed → Change over Time



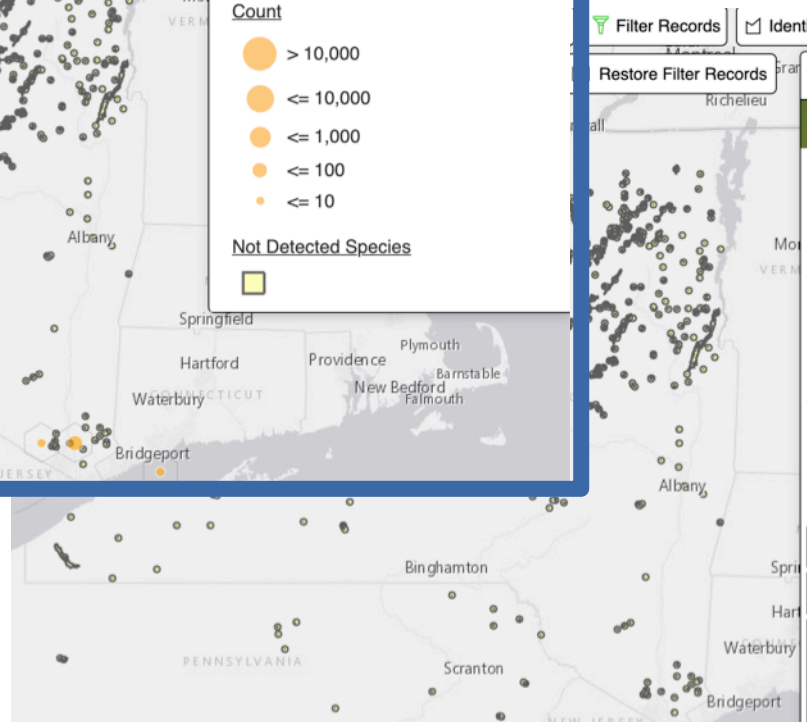
☐ Treatment

☐ Presumed Eliminated

Hydrilla Presence



ected



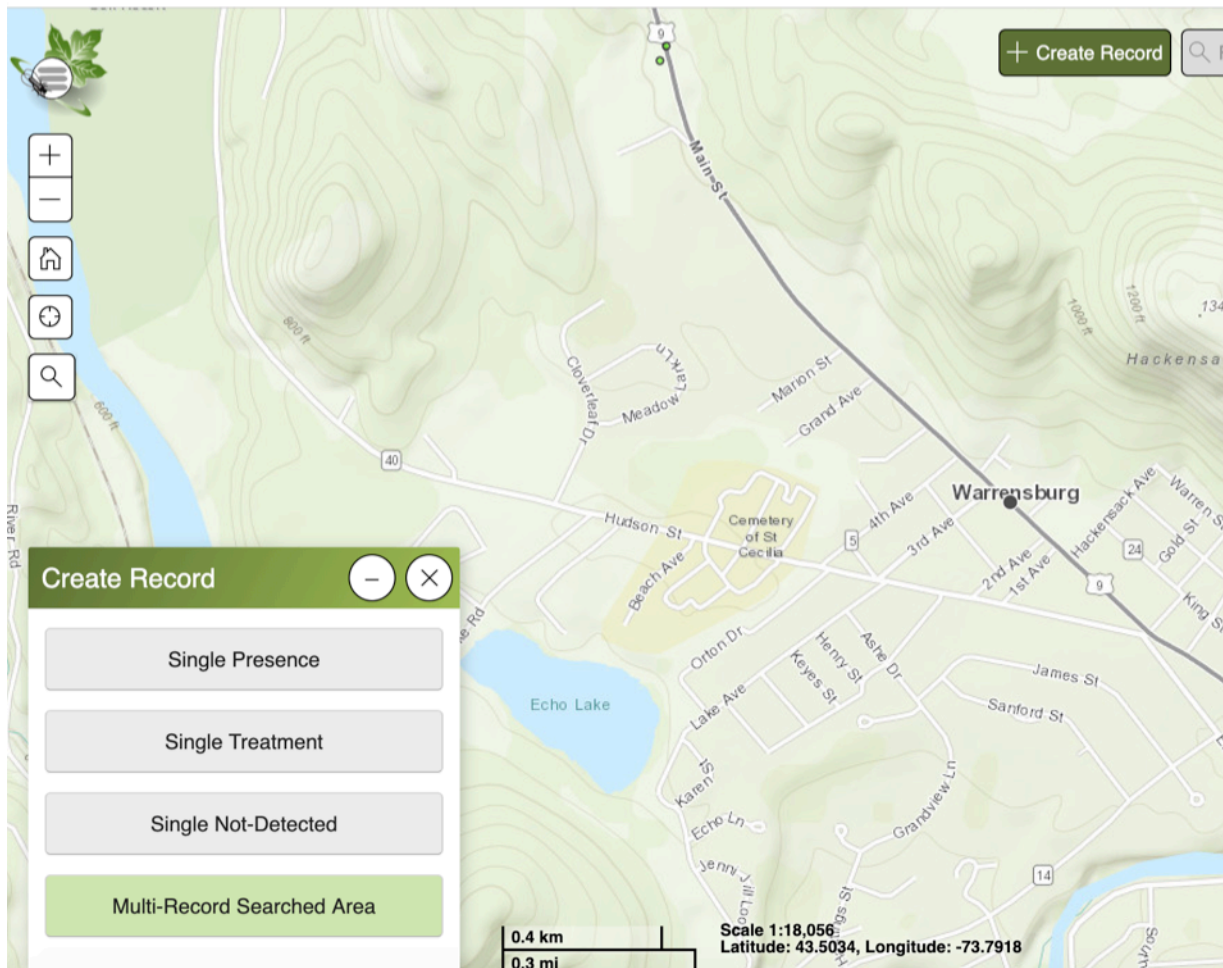
“Lasso Tool”

Measure/Analyze Results by Layer

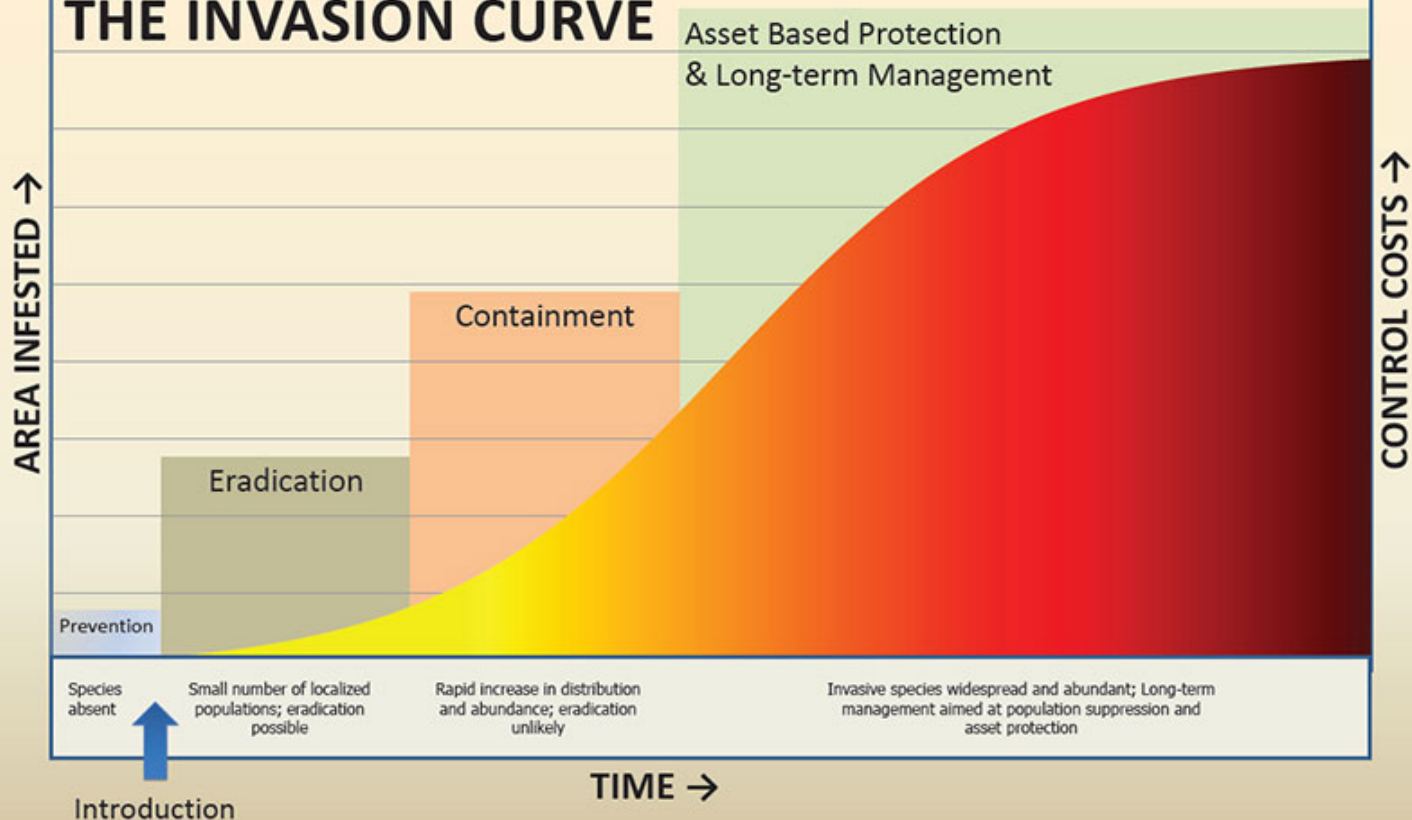
Include Hidden Layers 52 result(s)

Present Species	Unconfirmed Present Species	Treatments	Searched Areas	County/District	Waterbodies	Conservation Lands	USGS Topographic Quad	Regional Ma	
Presence ID	Scientific Name	Common Name	Observation Date	Observer Name	Organization Name	Details	Tasks		
1 1030143	Fallopia spp.	Knotweed (species unkno...	Wed, Sep 19, 2018	Kathy Vanselow - 4231	Regional Inlet Invasive Pla...	Details	Tasks		
2 335023	Lonicera spp (species unk...	Honeysuckle (species unk...	Mon, May 13, 2013	Julie Nathanson - 4310	Cornell Cooperative Exten...	Details	Tasks		
3 518212	Phragmites australis ssp. a...	Common Reed, phragmite...	Wed, Aug 31, 2016	Ethan Miller - 7496	Adirondack Park Invasive ...	Details	Tasks		
4 424546	Phragmites australis ssp. a...	Common Reed, phragmite...	Mon, Jul 09, 2012	Brendan Quirion - 2095	Adirondack Park Invasive ...	Details	Tasks		

14 result(s)



THE INVASION CURVE



Email Alerts



"APIPP - JK & Bohemian & Giant" Daily Alert

Active

Email Settings:

Alert Name: APIPP - JK & Bohemian & Giant

Frequency: Daily

Send an email digest every day at: 7:00 AM

Criteria:

Alert on: New/modified records, including unconfirmed

Species: Species Name

Location: Geography Type

Species Names: Japanese Knotweed (*Polygonum cuspidatum*), Giant Knotweed (*Fallopia sachalinensis*), Bohemian knotweed (*Polygonum x bohemicum*)

Geography Type: Regional Management Partnership

Regional Management Partnership: APIPP

Created On: 7/1/2019

Last Updated On: 9/16/2019

NOW

Web Application

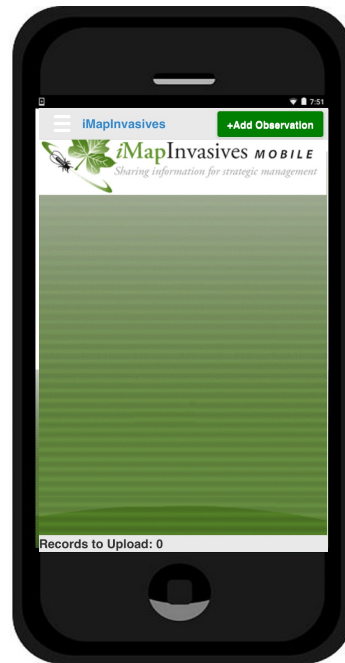


The whole Database: On the web

Browser-based interface for your desktop or mobile phone, *with connectivity*

Next “#3”

Mobile App



Collecting Simple Data: iMap Mobile app

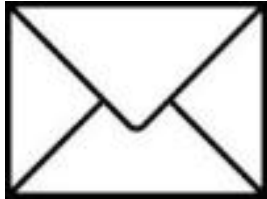
Download to your mobile phone or tablet, *no connectivity needed to collect data*

iMap Online to do list:

- ☐ Open your web browser via smart phone or tablet
- ☐ Type in www.nyimapinvasives.org
- ☐ Login
- ☐ View map and check out tools (i.e. zoom function, find my location, search, etc.)
- ☐ Change base maps (i.e. topographic, satellite, etc.)
- ☐ Use the lasso tool
- ☐ Create record – “fake species”

Create an iMapInvasives
Account at:
www.imapinvasives.org

*Pick your home state



Check your email
for the activation
link!

Log in to iMapInvasives

Email

Password

Log In

Sign Up

Help us track Invasives - it's free.

(Users must be at least 13 years old)

First Name:

Last Name:

Email:

Password:

(Must be at least 8 characters long, with a
number and an uppercase letter)

Retype

Password:

Jurisdiction:

Select...



Join

iMap Online to do list:

(Completed?)

- ☐ Open your web browser via smart phone or tablet
- ☐ Type in www.nyimapinvasives.org
- ☐ Login
- ☐ View map and check out tools (i.e. zoom function, find my location, search, etc.)
- ☐ Change base maps (i.e. topographic, satellite, etc.)
- ☐ Use the lasso tool
- ☐ Create record – “fake species”



“Connectivity Sandwich”

- WITH connectivity: Download & Initialize
- In the Field: NO connectivity required
- WITH connectivity: Upload data to iMap

Mobile Application

iMap Mobile App to do list:

- ☐ Login
- ☐ Set preferences
 - NY
 - Username – email address
 - Password; iMap3 password; must set online
 - Retrieve Lists
 - Create Custom species list
- ☐ Add an observation for “Fake Species”
- ☐ Select and upload the “Fake Species” Record
- ☐ Check online – zoom to location, then:
 - Identify/Measure Tool (aka the “Lasso Tool”)
 - “See what’s here”



Home Page

From the home page users can add a new observation record, view records already collected and access all other functionality via the Menu.



Preferences

Jurisdiction Species List:

New York

iMapInvasives Email Address:
(Enter the email address associated with your iMapInvasives account)
colleen.lutz.77@gmail.com

iMapInvasives Password:
(Must match your iMapInvasives password)

[Create Account or Reset Password](#)

[Retrieve iMap Lists](#)

Species Name:

Customize Species List

Picture quality:
25% 50% 100%

☒ Save Photos Taken in iMapInvasives App
To Device Photo Library
(If Permitted by Device)

Default Basemap Type:
[Road](#) [Satellite](#)

Default Map Zoom:
12

Measurement System:
US Customary (feet/acres)

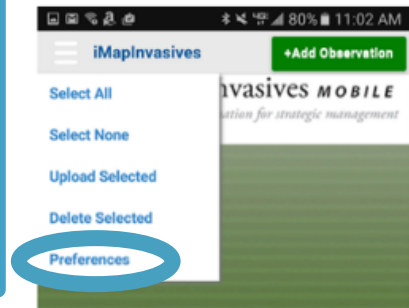
Default Project:
iMap 3 Projects associated with your account appear in this list
(after being retrieved). Select a Project Name to automatically
associate each new record with it (optional).

Default Organization:
iMap 3 Organizations associated with your account in this list
(after being retrieved). Select an Organization here to
automatically associate each new record with it (optional).

☒ Show Welcome Instructions

[Save](#) [Cancel](#)

Last iMap Lists Refresh: Apr 9, 2019



Preferences

Jurisdiction Species List:
New York

iMapInvasives Email Address:
(Enter the email address associated with your iMapInvasives account)
colleen.lutz.77@gmail.com

iMapInvasives Password:
(Must match your iMapInvasives password)

[Create Account or Reset Password](#)

[Retrieve iMap Lists](#)

Species Name:

Preferences

“Preferences” are your customized user settings. You will need to fill in your iMapInvasives account information to upload reports to the database.

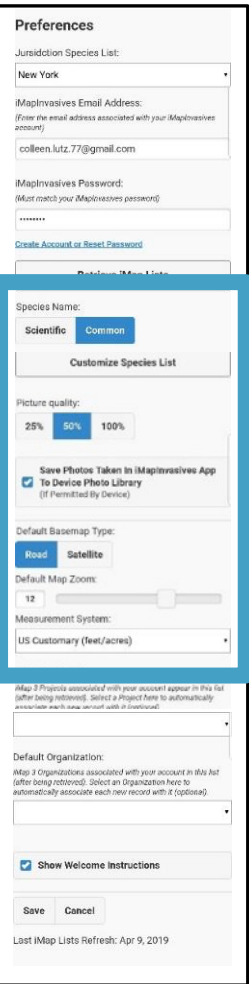
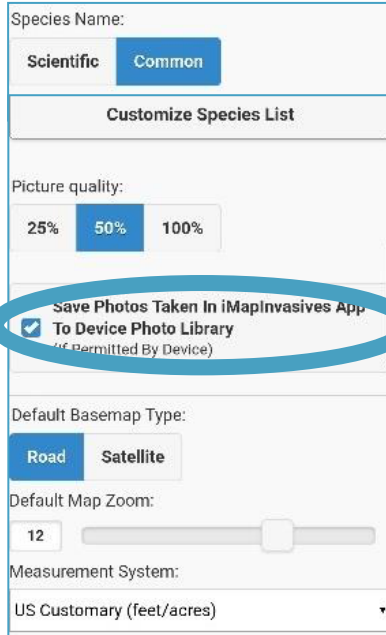
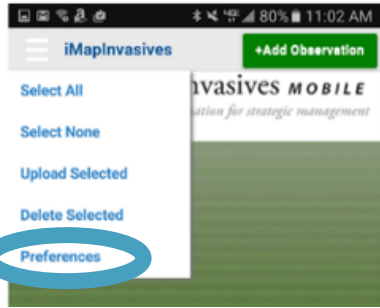
1. Select Jurisdiction: New York; used across North America
2. User ID: Email (must match online account!)
3. Password: Make sure you reset if you had iMap2 account
4. Create Account or Reset password
→ Opens web browser!

1. Retrieve iMap Lists (for your Jurisdiction)
App will notify you once completed

Preferences

“Preferences” are your customized user settings. You will need to fill in your iMapInvasives account information to upload reports to the database.

1. Species name: View lists as scientific or common names
2. Create a custom list (optional)
Can base on what you know, what's in your region
Makes creating species observations faster
3. Picture Quality: Size of photo being uploaded
Recommend 100% for best quality 😊
4. Save your picture to your devices photo library
This requires permission from the device



Preferences

Jurisdiction Species List:
New York

iMapInvasives Email Address:
(Enter the email address associated with your iMapInvasives account)
colleen.lutz.77@gmail.com

iMapInvasives Password:
(Must match your iMapInvasives password)

[Create Account or Reset Password](#)

Retrieve iMap Lists

Species Name:
Scientific **Common**

Customize Species List

Picture quality:
25% 50% 100%

Save Photos Taken in iMapInvasives App To Device Photo Library
(If Permitted by Device)

Default Basemap Type:
Road **Satellite**

Default Map Zoom:
12

Measurement System:
US Customary (feet/acres)

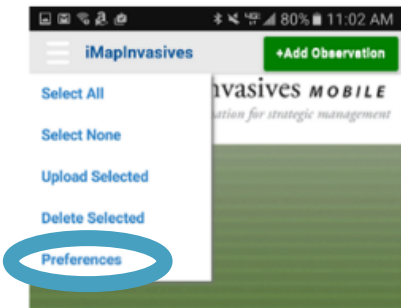
Default Project:
iMap 3 Projects associated with your account appear in this list (after being retrieved). Select a Project here to automatically associate each new record with it (optional).

Default Organization:
iMap 3 Organizations associated with your account in this list (after being retrieved). Select an Organization here to automatically associate each new record with it (optional).

☒ **Show Welcome Instructions**

Save **Cancel**

Last iMap Lists Refresh: Apr 9, 2019



Preferences

“Preferences” are your customized user settings. You will need to fill in your iMapInvasives account information to upload reports to the database.

1. **Default project**
Only projects users has been added to will appear
PROJECT LEADERS:
Check your projects
Ensure your users have been added
Or email them as a group and have them check 😊
2. **Default organization**
Must set-up online
3. **Remember to save your changes!**

Default Project:
iMap 3 Projects associated with your account appear in this list (after being retrieved). Select a Project here to automatically associate each new record with it (optional).

Default Organization:
iMap 3 Organizations associated with your account in this list (after being retrieved). Select an Organization here to automatically associate each new record with it (optional).

☒ **Show Welcome Instructions**

Save **Cancel**

Last iMap Lists Refresh: Apr 9, 2019

Home Page

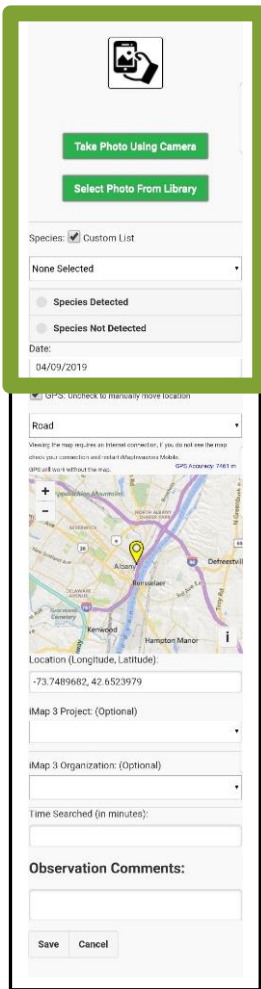
From the home page users can add a new observation record, view records already collected and access all other functionality via the Menu.



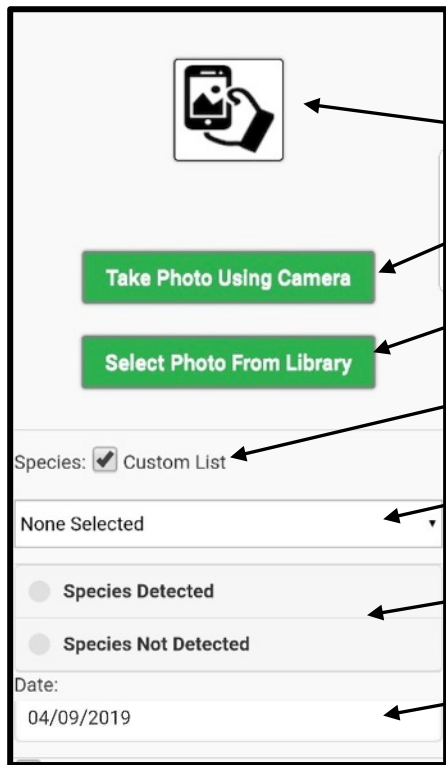
**+Add
Observation**

Observation Record

Make new reports of invasive species and edit existing records here!



The image shows a mobile application interface for recording observations. At the top, there is a camera icon. Below it are two green buttons: "Take Photo Using Camera" and "Select Photo From Library". The "Species" section has a checkbox for "Custom List" (which is checked) and a dropdown menu currently showing "None Selected". Below this are two radio buttons: "Species Detected" (selected) and "Species Not Detected". The "Date" field shows "04/09/2019". At the bottom, there is a map view showing a location in Alcorn, Mississippi, with coordinates -73.7489682, 42.6523979. There are also fields for "iMap 3 Project (Optional)", "iMap 3 Organization (Optional)", "Time Searched (in minutes)", and "Observation Comments". At the very bottom are "Save" and "Cancel" buttons.



The image shows a desktop version of the "Observation Record" form. It features a camera icon at the top left. Below it are two green buttons: "Take Photo Using Camera" and "Select Photo From Library". The "Species" section has a checkbox for "Custom List" (checked) and a dropdown menu showing "None Selected". Below this are two radio buttons: "Species Detected" (selected) and "Species Not Detected". The "Date" field shows "04/09/2019". At the bottom, there are "Save" and "Cancel" buttons.

Take photo with camera

Upload photo from library

Toggle species list: Custom or Full

Select Species

Select Detected or Not Detected

Date - auto



Take Photo Using Camera

Select Photo From Library

Species: ☒ Custom List

None Selected

☐ Species Detected

☐ Species Not Detected

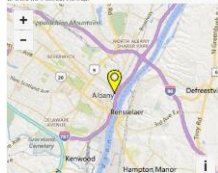
Date:

04/09/2019

☒ GPS: Uncheck to manually move location

Road

Viewing the map requires an internet connection. If you do not see the map, check your connection and restart iMapInvasives Mobile. GPS will work without the map.



Location (Longitude, Latitude)

-73.7489682, 42.6523979

iMap 3 Project: (Optional)

iMap 3 Organization: (Optional)

Time Searched (in minutes):

Observation Comments:

Save Cancel

Observation Record

Make new reports of invasive species and edit existing records here!

Checked to automatically track location

To manually edit location, uncheck the GPS box, touch and hold the map push pin. Drag it to the location of the invasive.

Change basemap view

Zoom In or Out

Your location

Your coordinates: If 0,0 is displaying in the Location box, make sure your GPS is enabled on your device

☒ GPS: Uncheck to manually move location

Road

Viewing the map requires an internet connection. If you do not see the map, check your connection and restart iMapInvasives Mobile. GPS will work without the map. GPS Accuracy: 7461 m

Location (Longitude, Latitude):

-73.7489682, 42.6523979

iMap 3 Project: (Optional)

Observation Record

Make new reports of invasive species and edit existing records here!



Take Photo Using Camera

Select Photo From Library

Species: ☒ Custom List

None Selected

☐ Species Detected

☐ Species Not Detected

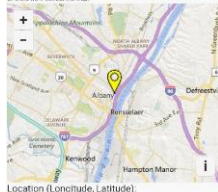
Date:

04/09/2019

☒ GPS: Uncheck to manually move location

Road

Viewing the map requires an Internet connection. If you do not see the map, check your connection and restart iMap3Macroscape Mobile. GPS Accuracy: 718.1 m
GPS will work without the map.



Location (Longitude, Latitude)

iMap 3 Project: (Optional)

iMap 3 Organization: (Optional)

Time Searched (in minutes):

Observation Comments:

Save

Cancel

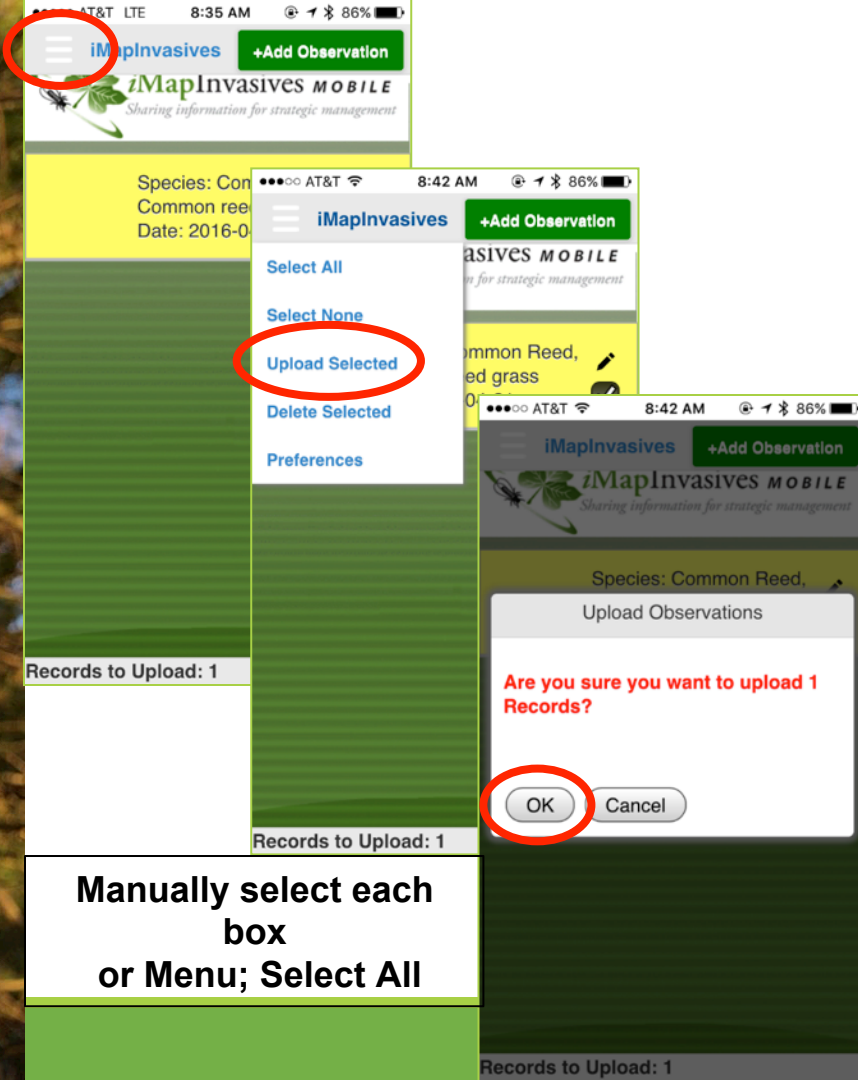
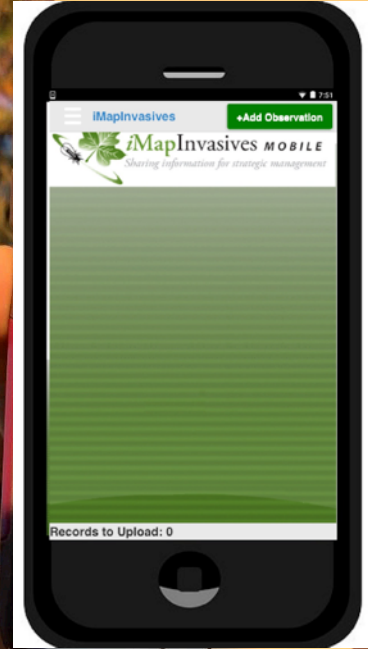
Select your project

Select your organization

Enter the approximate time you were searching for invasive species

Add any comments that may enhance the quality of your observation report

Remember to save your changes!

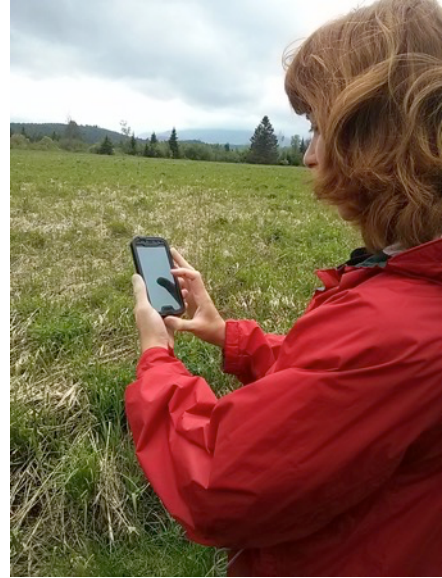


**Manually select each
box
or Menu; Select All**

Completed?

iMap Mobile App to do list:

- ☐ Login
- ☐ Set preferences
 - NY
 - Username – email address
 - Password; iMap3 password; must set online
 - Retrieve Lists
 - Create Custom species list
- ☐ Add an observation for “Fake Species”
- ☐ Select and upload the “Fake Species” Record
- ☐ Check online – zoom to location, then:
 - Identify/Measure Tool (aka the “Lasso Tool”)
 - “See what’s here”



Can you identify this species?
What are some key features in the photos?
How could you improve the photos?



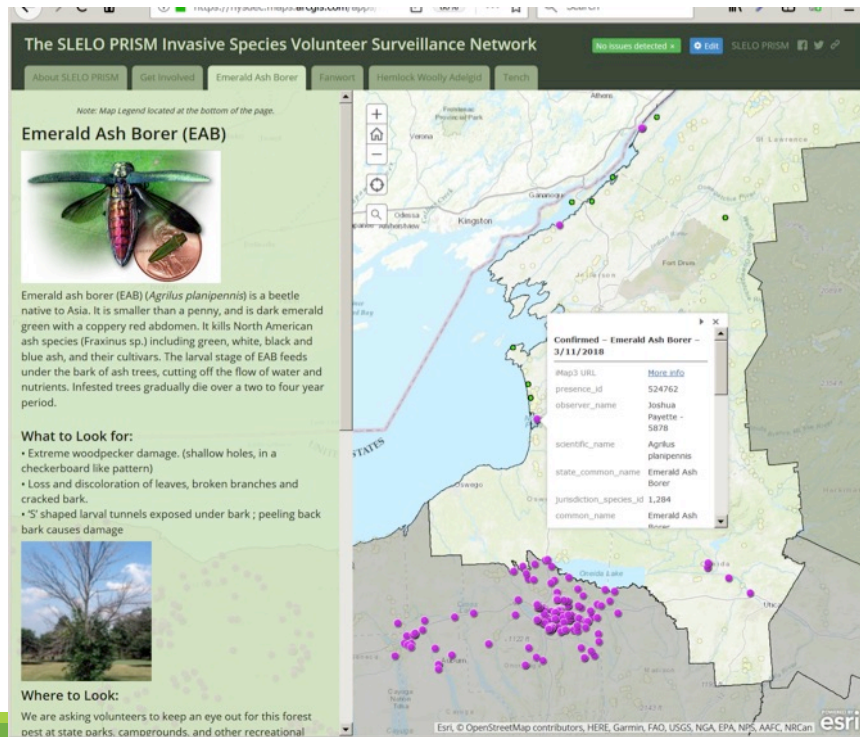
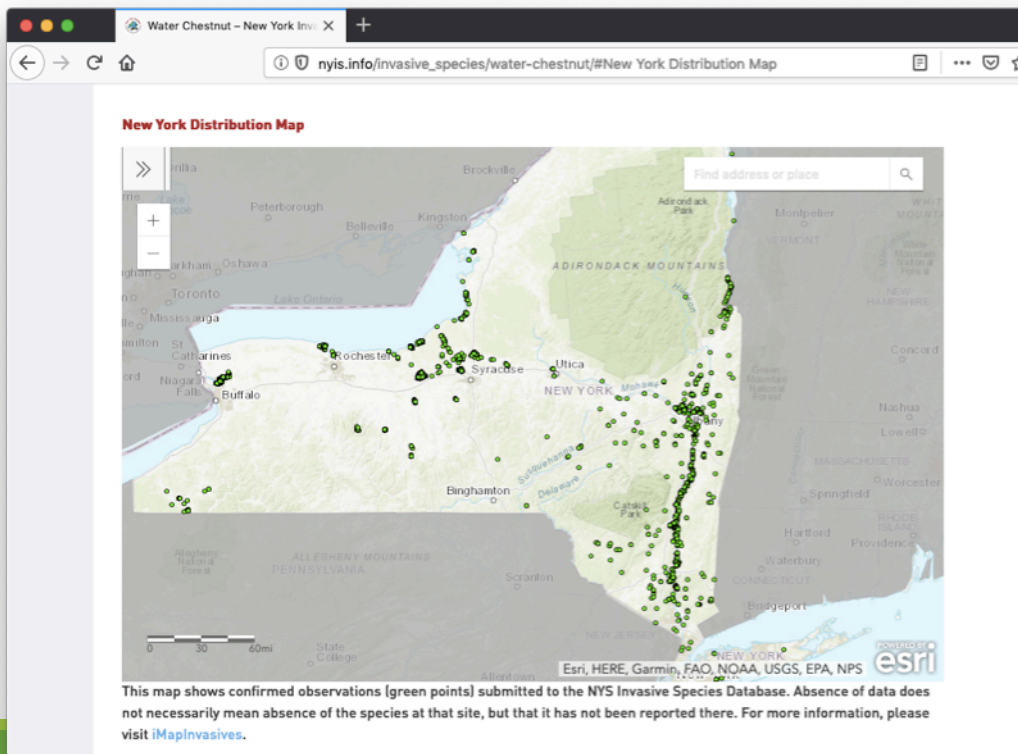
Not-so-Great Photos!



-
- I. iMap3 Online
 - II. iMap Mobile App
 - III. → iMap3 Web Map Services (WMS)

Web Map Services (WMS)

→ *Custom Views of iMap data*





Development and Assessment of the iMapInvasives Certified Trainers Network

To become a Certified Trainer, individuals were required to

- 1) attend a standardized initial training webinar
- 2) submit a certification plan
- 3) host their first training.

➤ **Basic Trainer:**

- Host 1+ trainings in your community
- Host 1+ training per year

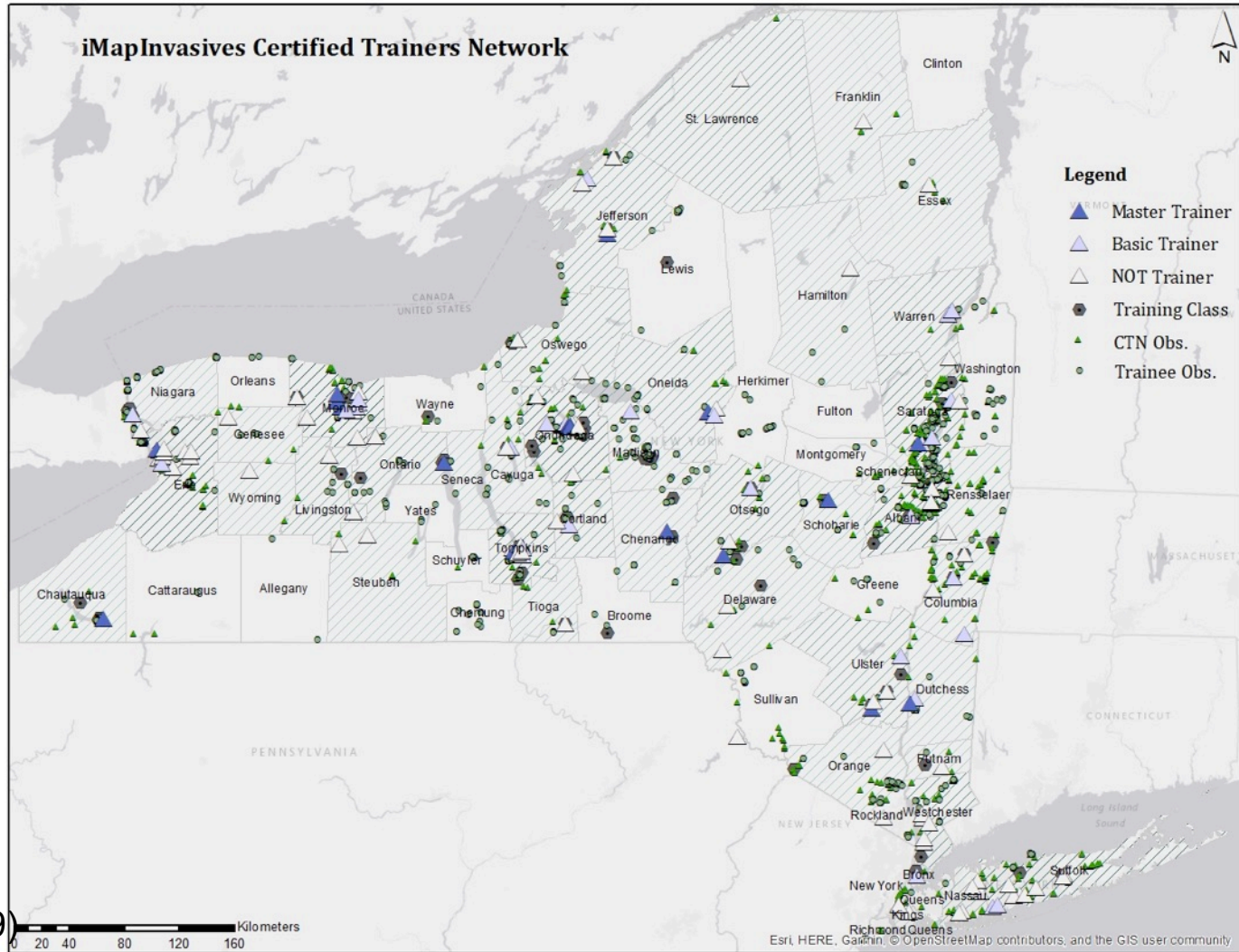
➤ **Master Trainer:**

- Host 3+ trainings in your community
- Host 2+ training per year



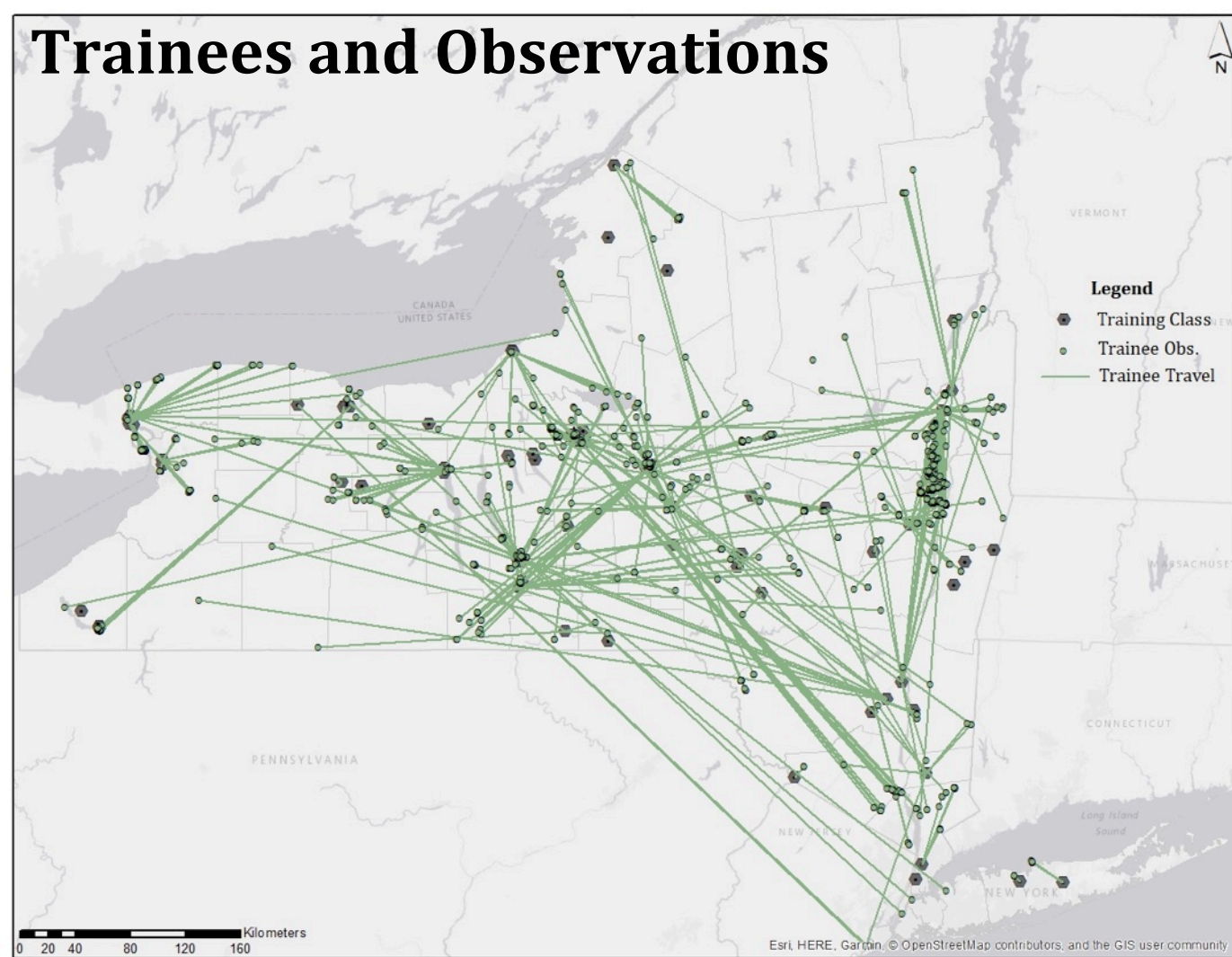
BRITTNEY ROGERS

**Trainers
Network:
131 Members
53 Trainers
77 Trainings
1,020 Trainees**



(October 2017-March 2019)

Trainees and Observations



1,020 Trainees
24.1 % Reporters
2,942 Total Obs.

Travel:
Minimum: .06 km
Maximum: 482 km
Average: 39.7 km

Questions? *Thank You!!*

iMapInvasives Help Resources

iMap Network help documents
www.imapinvasives.org/help

New York iMap Resources
www.nyimapinvasives.org

iMap Email
iMapInvasives@dec.ny.gov



**iMapInvasives 3.0
Webinar Training
Series**

A screenshot of the iMapInvasives website. The header features the iMapInvasives logo with a green leaf and a black insect, the tagline "Sharing information for strategic management", and a green "Login" button. Below the header is a navigation bar with links: "About iMap", "Who We Are", "Help and Resources", "Action!", and "Contact Us". The main content area shows a close-up photograph of red, round fruits on a branch, identified as Oriental Bittersweet (Celastrus orbiculatus). Below the photo is the heading "Help Documents and Community Toolbox" and a paragraph of text describing the resources available in the community toolbox.

iMapInvasives
Sharing information for strategic management

Login

About iMap | Who We Are | Help and Resources | Action! | Contact Us

Help Documents and Community Toolbox

In our Community toolbox, you'll find a wide variety of resources and help documents on iMapInvasives including videos, PowerPoint presentations, brochures, and handouts. Each item can be viewed, downloaded, or printed for free and all are encouraged for use at special events where invasive species are a relevant topic, outreach tools when speaking with individuals who have an interest in tracking invasive species, or as training materials.

Oriental Bittersweet
(Celastrus orbiculatus)