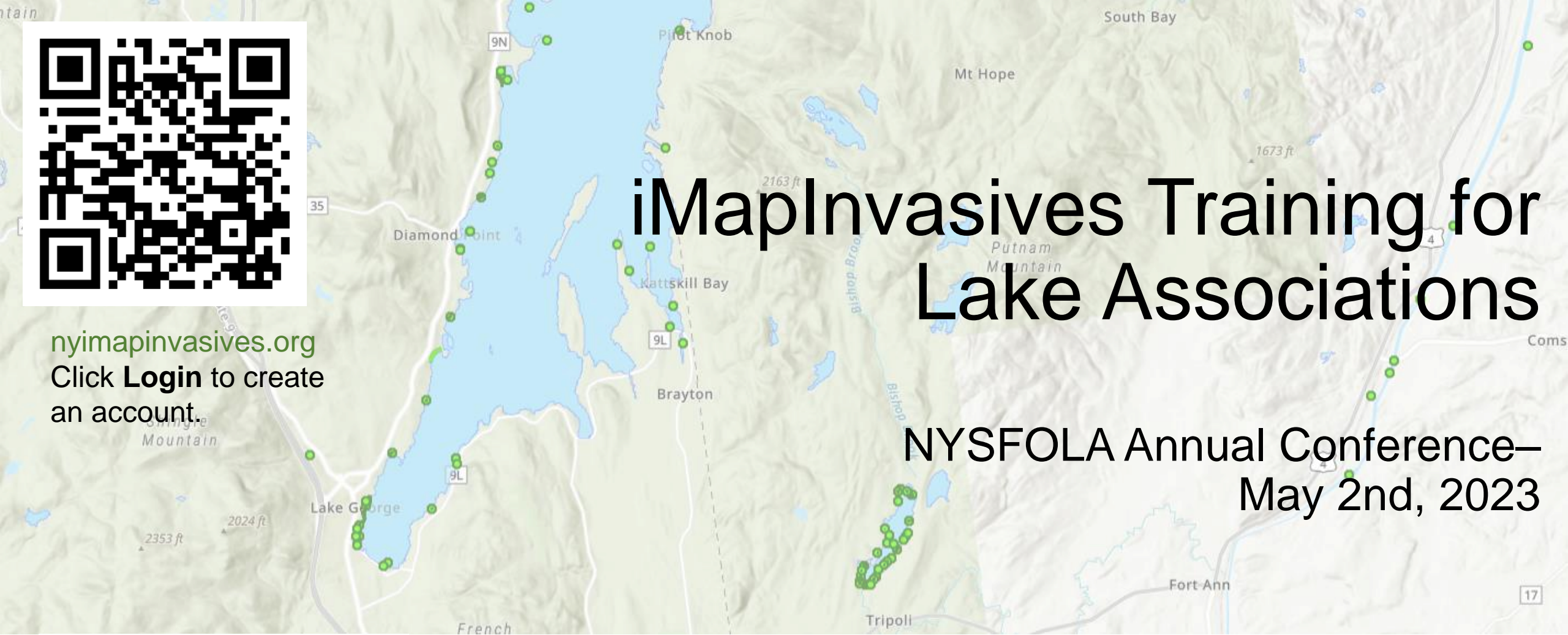




[nyimainvasives.org](https://nyimainvasives.org)  
Click **Login** to create  
an account.

# iMapInvasives Training for Lake Associations

NYSFOLA Annual Conference—  
May 2nd, 2023



Mitchell O'Neill, Douglas Knoph  
Invasive Species Database Team  
[imapinvasives@dec.ny.gov](mailto:imapinvasives@dec.ny.gov)



# Agenda

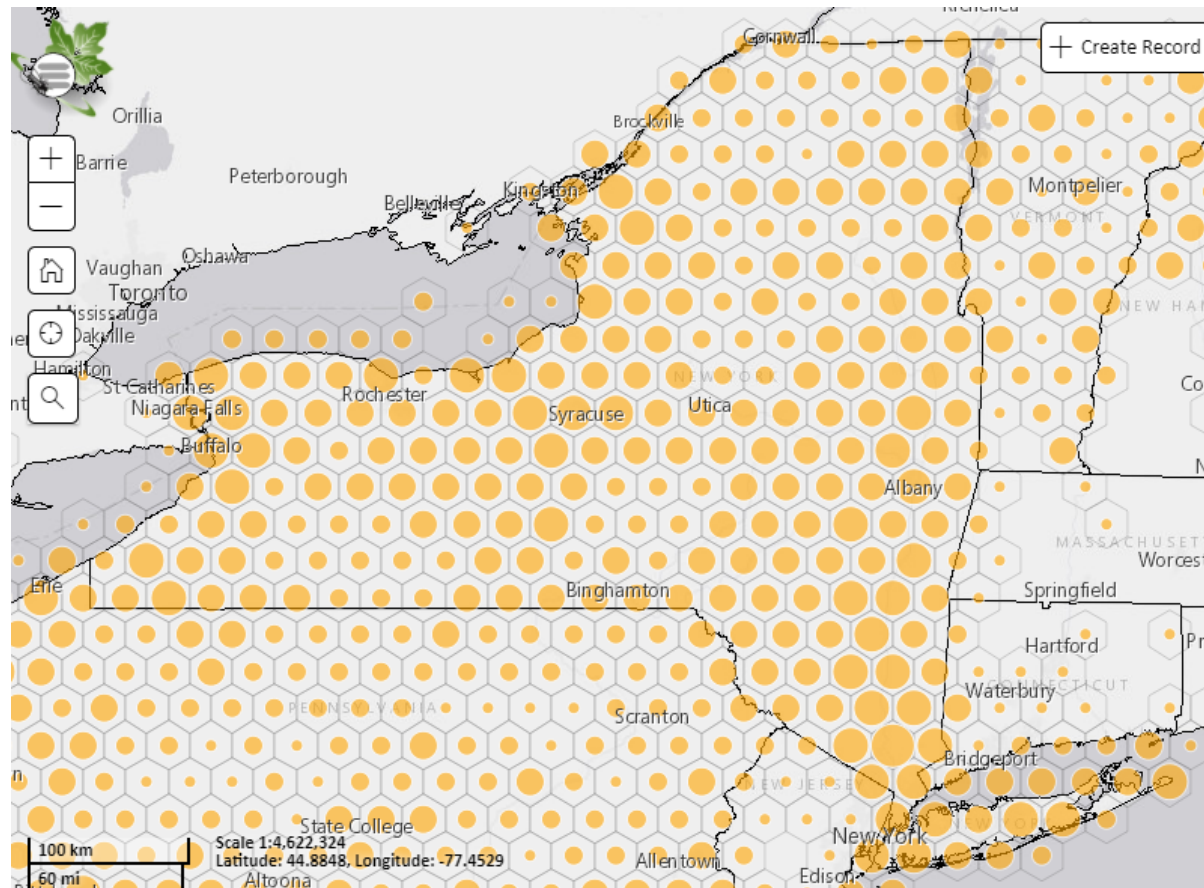
1. Intro, overview, and role of iMapInvasives
2. iMap Online – creating an account
3. iMap Mobile App
4. Outdoor practice



Download app from Google Play or iOS App Store (search “imapinvasives”)



[nyimapinvasives.org](http://nyimapinvasives.org) Click Login to create an account.



# Invasive Species

Invasive species are species of plants, animals, insects, and pathogens that are:

1. Non-native
2. Negatively impactful
  - Harm to environment, economy, and human health



Photo from iMap record 1344606

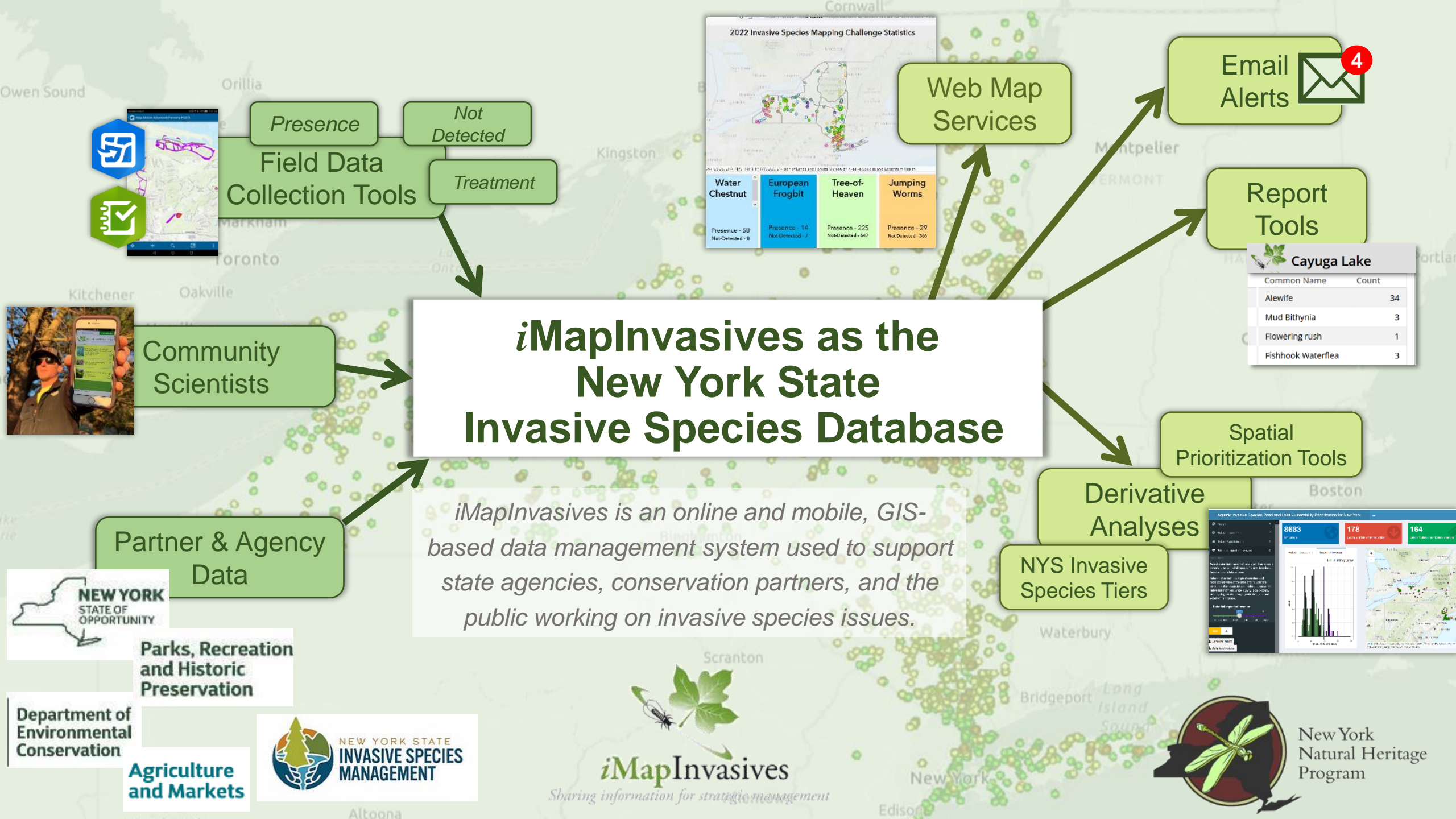
# PRISMs

## *Partnership for Regional Invasive Species Management*

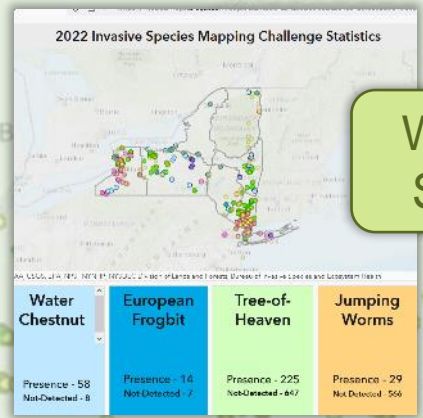
- **APIPP** Adirondack Park Invasive Plant Program
- **Capital Region**
- **CRISP** Catskill Regional Invasive Species Partnership
- **Finger Lakes**
- **Lower Hudson**
- **LIISMA** Long Island Invasive Species Management Area
- **SLELO** Saint Lawrence and Easter Lake Ontario
- **Western NY**

Learn more: [nyis.info/prisms](https://nyis.info/prisms)





Presence  
Not Detected  
Treatment  
Field Data Collection Tools



Web Map Services

Email Alerts

Report Tools

**Cayuga Lake**

Common Name	Count
Alewife	34
Mud Bithynia	3
Flowering rush	1
Fishhook Waterflea	3

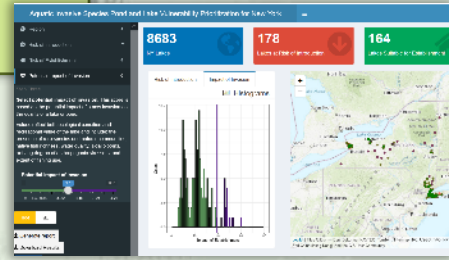
# iMapInvasives as the New York State Invasive Species Database

*iMapInvasives is an online and mobile, GIS-based data management system used to support state agencies, conservation partners, and the public working on invasive species issues.*

Spatial Prioritization Tools

Derivative Analyses

NYS Invasive Species Tiers



Community Scientists

Partner & Agency Data



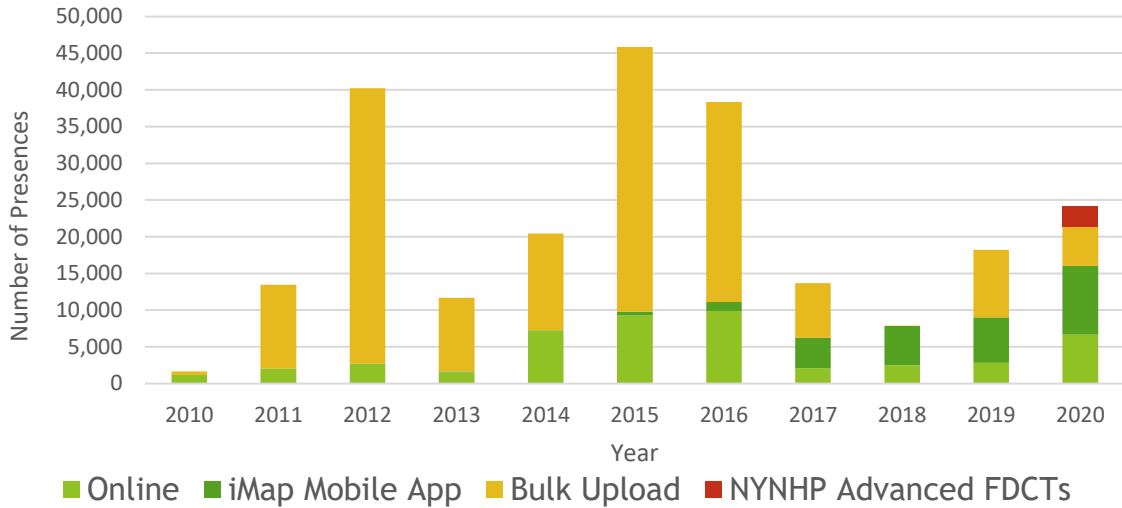
Parks, Recreation and Historic Preservation

Department of Environmental Conservation  
Agriculture and Markets



# Data sources

Presences by Data Entry Method



❖ **2010-2016:** Uploads of existing data from partner organizations

❖ **Now:** Data entered by community scientists & professionals *in real time*

- Species ID confirmed by experts



# Nyimapinvasives.org

 [Blog](#) [Volunteers](#) [Professionals](#) [Certified Trainers](#) [WISPA](#) [Educators](#) [View map](#) [Login](#)

Help us monitor **Spotted Lanternfly** in New York State!

[Report an Invasive](#) [Data & Maps](#) [Training](#) [Resources](#) [About Us](#)

Welcome to

## NY iMapInvasives

NY iMapInvasives is an online, collaborative, GIS-based database and mapping tool that serves as the official invasive species database for New York State. [Learn more about iMap.](#)

Featured species:



**Spotted Lanternfly**

[Create account](#)

[View public map](#)

### Confirmed Reports of Tree-of-Heaven in iMapInvasives



Esri, HERE, Garmin, FAO, NOAA, ... 

# Create Account/Login

*imapinvasives.natureserve.org*

Log in to iMapInvasives

Email  Password   

**Sign Up**

Help us track Invasives - it's free.  
(Users must be at least 13 years old)

First Name:

Last Name:

Email:

Retype Email:

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

Retype Password:

Jurisdiction:  **New York**

Login (if you have account)

Create Account

Check email for link ("[click here](#)"),  
click open the User Agreement.

Read User Agreement and accept



# Login

The screenshot displays the iMapInvasives web application interface. At the top, there are navigation buttons: Login, Find Record, Filter Records, Identify/Measure, and Close Layers. A notification dialog box is centered on the screen, stating: "iMapInvasives has been updated!" followed by a message about the update on 4/23/20 and instructions to clear the cache. Below the message are checkboxes for "Do not show in the future" and an "OK" button. The main map area shows a grid of orange circles representing species records across North America, with labels for major cities and geographical features. On the right side, there is a panel with a "Show Legend" button and a legend titled "Present Species Records" with a "Count" column. The legend uses five different sizes of orange circles to represent different record counts: > 10,000, <= 10,000, <= 1,000, <= 100, and <= 10. At the bottom left, there are scale bars for 1000 km and 600 mi, and a scale of 1:36,978,595. The bottom right corner indicates the application is "Powered by Esri".

**iMapInvasives has been updated!**

iMapInvasives was updated on 4/23/20. If this is your first time logging into iMapInvasives since then, you should [clear your cache](#) prior to using iMap to ensure you have the most recent updates.

For more information on what was included in this [current release](#), visit our [release page](#)

Do not show in the future  OK

**Change Basemaps**

**Add Layer From URL**

**Add Distribution Layer**

**Layers On/Off**

**Show Legend**

**Present Species Records**

Count

- > 10,000
- <= 10,000
- <= 1,000
- <= 100
- <= 10

1000 km  
600 mi  
Scale 1:36,978,595

Esri, HERE, Garmin, FAO, NOAA, USGS, EPA | Powered by Esri

# iMap Online Interface

## Main Menu:

- Set up email alerts

## Export/Report Tool

- Create species list for your waterbody

## Filter Tool:

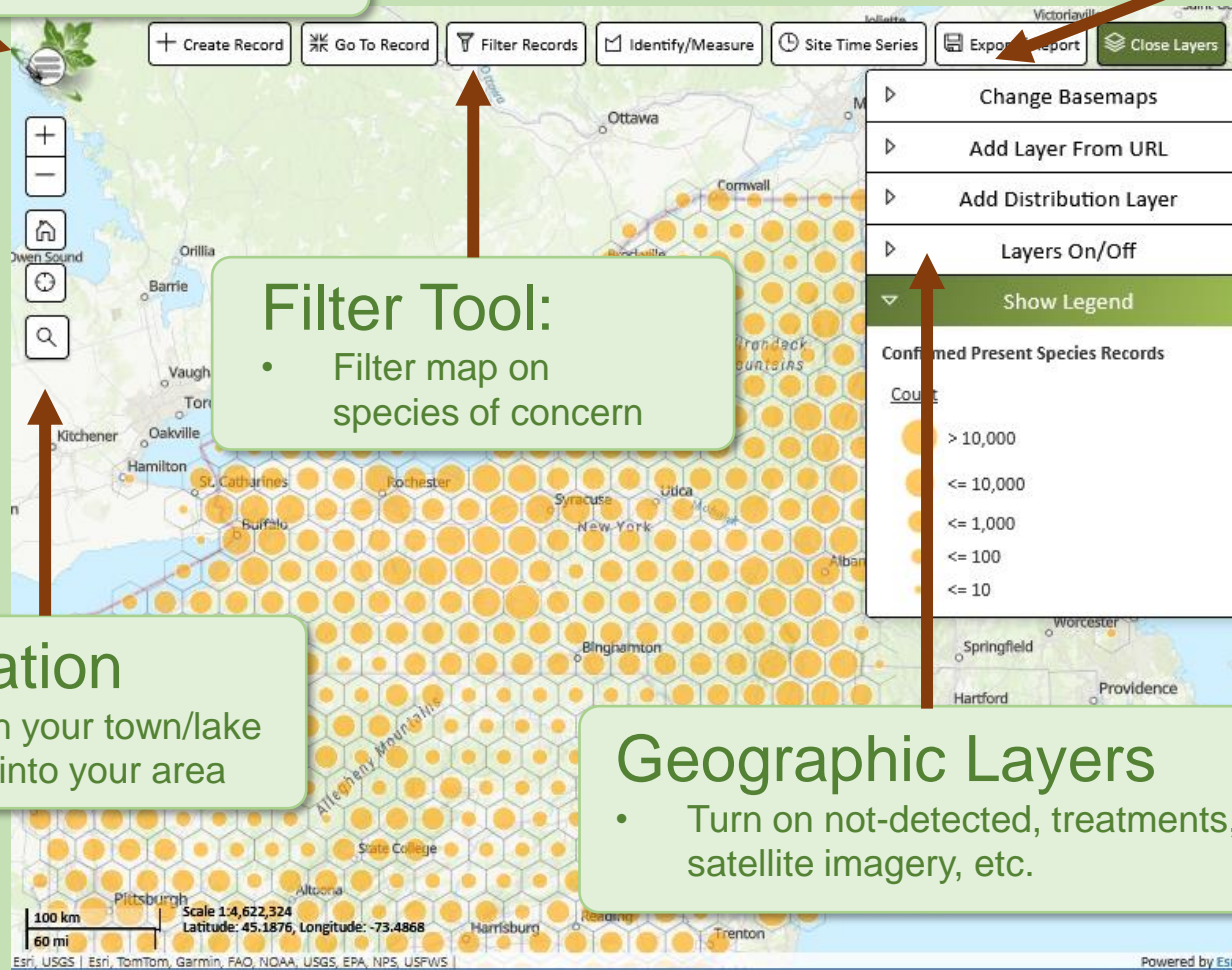
- Filter map on species of concern

## Navigation

- Search your town/lake
- Zoom into your area

## Geographic Layers

- Turn on not-detected, treatments, satellite imagery, etc.



### Species List by Geography Report

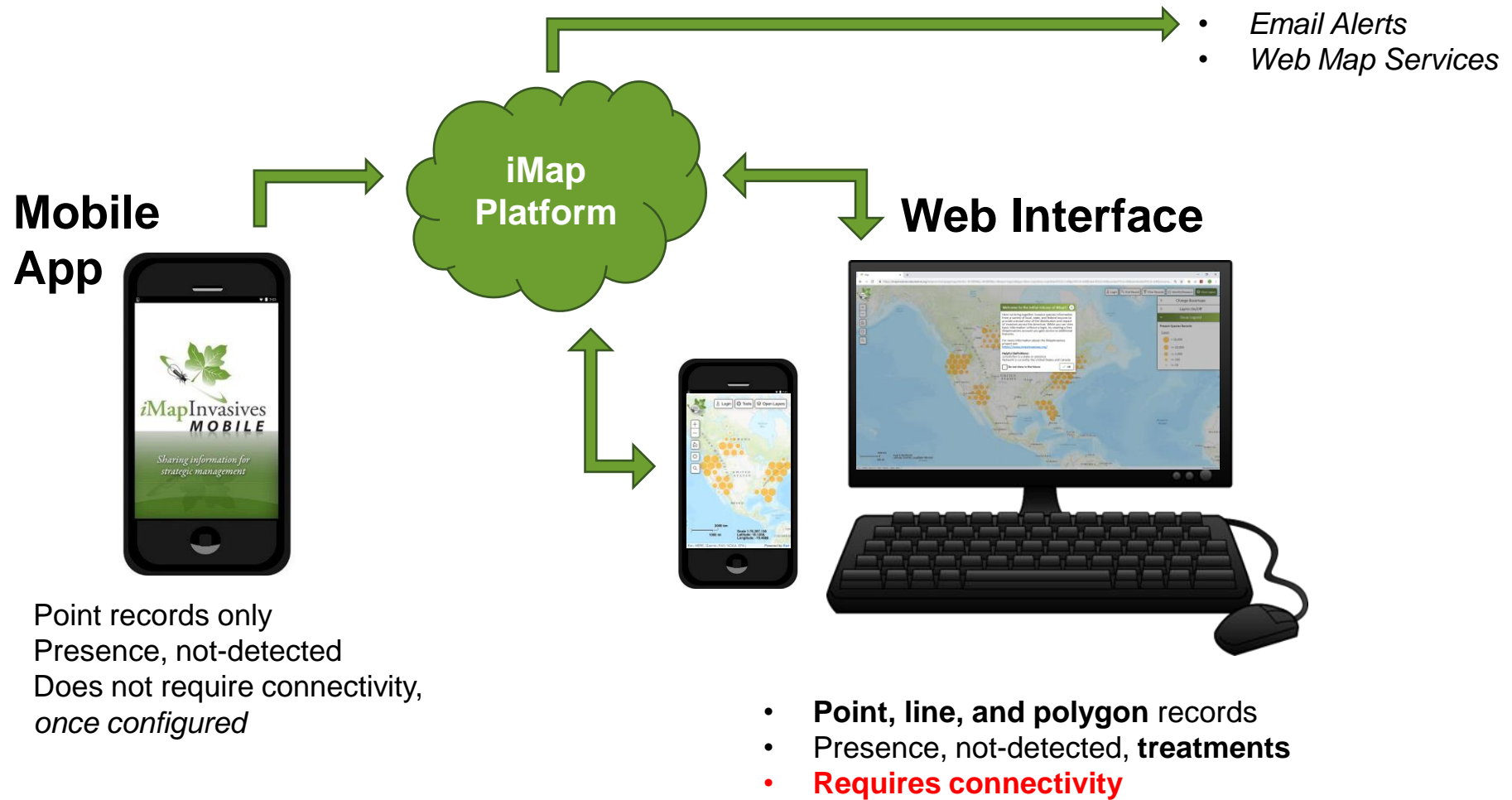
Habitat Type: Aquatic

Report Results:

Presence Records:

Common Name	Confirmed Count
Alewife	34
Mud Bithynia	3
Flowering rush	1
Fishhook Waterflea	3
Asian Clam	1
Common Carp	15
Quagga Mussel	40
Zebra Mussel	39
Scud, Euryhaline Amphipod	29
Bloody-red Shrimp	2
Hydrilla	193
European Frogbit: Common Frogbit	1

# iMap Data Inputs and Outputs



# Mobile App



Download app from Google Play or iOS App Store (search for “imapinvasives”)

*Please follow along*

Questions? Chatbox



# Good Photos are Essential!



- Need to focused and close-up enough
- Hand or sheet of paper behind plant provides scale and helps with focus

# Mobile App

1. Setup Account and App



*Connectivity required*

2. Record invasive species



*Connectivity **NOT** required*

3. Upload records to iMap



*Connectivity required*

# Mobile App Setup

**Preferences**

Jurisdiction Species List:  
*(Select the jurisdiction in which you will collect data)*

New York ▼

iMapInvasives Username (Your Email Address):  
*(Enter the email address associated with your iMapInvasives account)*

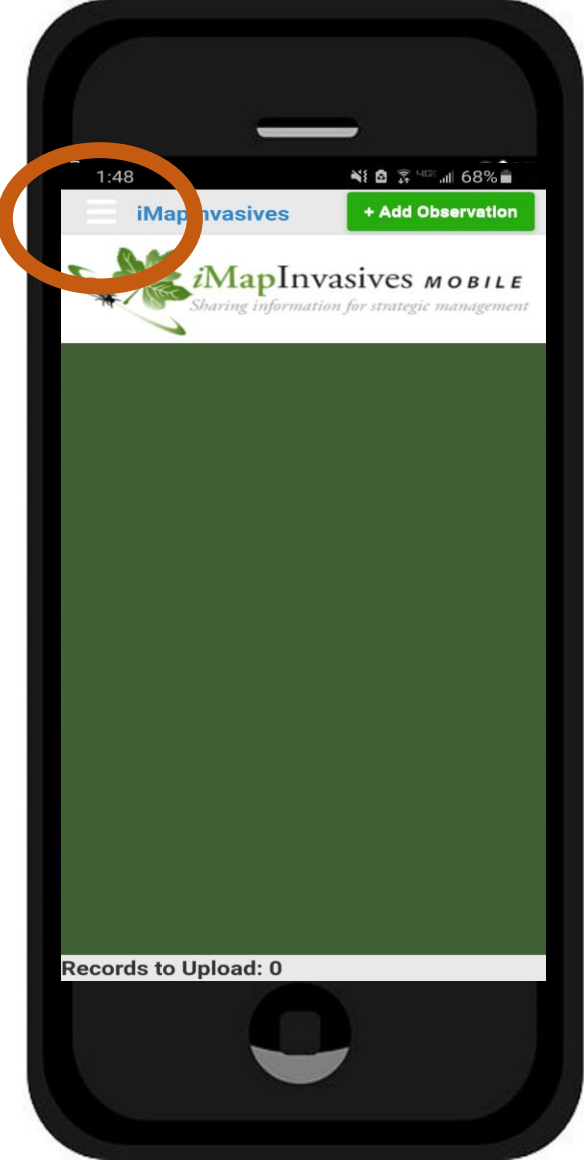
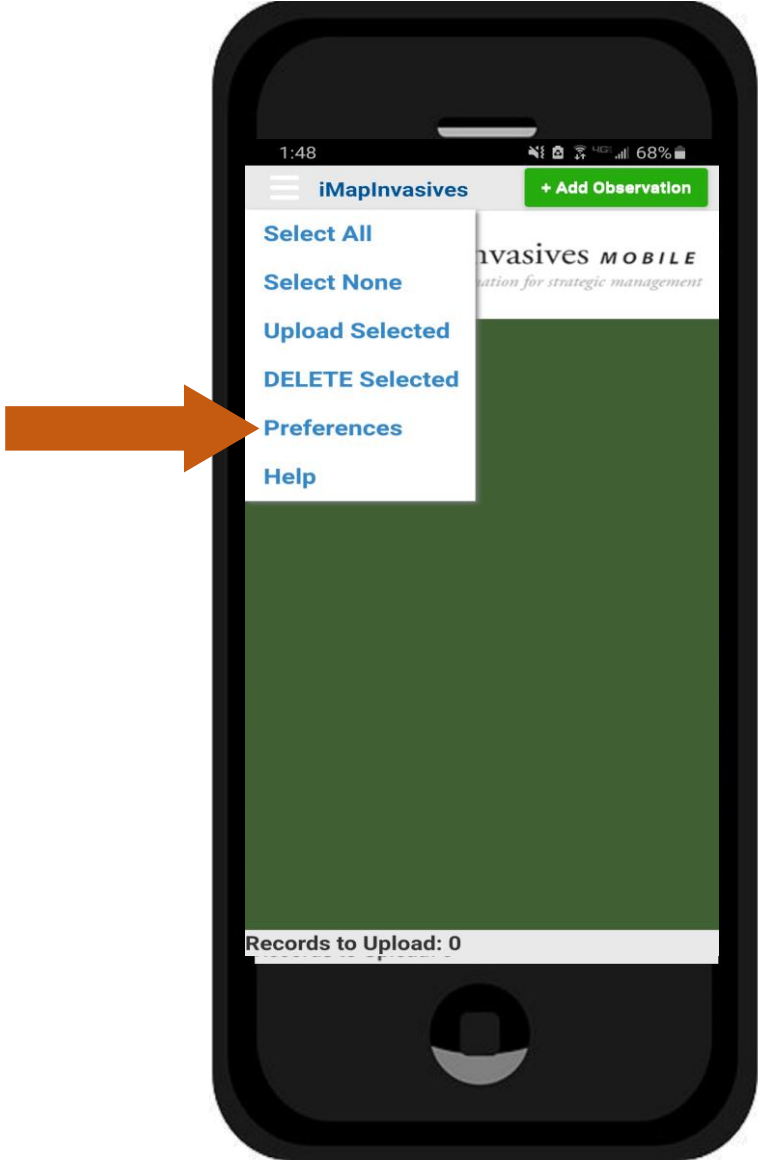
emailaddress@example.com

iMapInvasives Password:  
*(Must match your iMapInvasives password)*

.....

[Create Account or Reset Password](#)

**Retrieve iMap Lists**



# Mobile App Setup

## Preferences

Jurisdiction Species List:  
(Select the jurisdiction in which you will collect data)

New York

iMapInvasives Username (Your Email Address):  
(Enter the email address associated with your iMapInvasives account)

emailaddress@example.com

iMapInvasives Password:  
(Must match your iMapInvasives password)

.....

[Create Account or Reset Password](#)

Retrieve iMap Lists

Species Name Display:

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:

14

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: Jun 12, 2021

## Preferences

Jurisdiction Species List:  
(Select the jurisdiction in which you will collect data)

New York

iMapInvasives Username (Your Email Address):  
(Enter the email address associated with your iMapInvasives account)

emailaddress@example.com

iMapInvasives Password:  
(Must match your iMapInvasives password)

.....

[Create Account or Reset Password](#)

Retrieve iMap Lists

iMap Data Retrieval Successful

**Your iMapInvasives data was retrieved successfully (which includes your Species, Project, and Organization lists).**

OK

Save Photos Taken In iMapInvasives App To

- Username and password Must match iMap account online
- Sometimes iPhone's add space after password



# Preferences - optional

**Preferences**

Jurisdiction Species List:  
(Select the jurisdiction in which you will collect data)

New York

iMapInvasives Username (Your Email Address):  
(Enter the email address associated with your iMapInvasives account)

emailaddress@example.com

iMapInvasives Password:  
(Must match your iMapInvasives password)

.....

[Create Account or Reset Password](#)

**Retrieve iMap Lists**

Species Name Display:  
**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:  
14

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: Jun 12, 2021

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)

View lists as scientific or common names

Optional – Make a short list of species you know, are interested in, and expect to survey for in your area

Select Your Species

- European Turkey Oak: *Quercus cerris*
- European Water Fern; European Watercuck
- European Woodwasp: *Sirex noctilio*
- European trout lily: *Erythronium dens-can*
- Fake Species (for testing): Fake Species
- False Spiraea: *Sorbaria sorbifolia*
- False green kyllinga; Pasture Spike Sedg
- Fanwort; Carolina Fanwort: *Cabomba car*
- Far-eastern smartweed: *Persicaria extren*
- Feral Swine; Wild Boar: *Sus scrofa*

**OK** **Cancel**

Defaults are typically fine

# Mobile App

1. Setup Account and App



*Connectivity required*



2. Record invasive species



*Connectivity **NOT** required*

3. Upload records to iMap



*Connectivity required*

# Recording an observation



**+Add Observation**

- Please follow along
- Submit a record “A Fake Species”

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 install iMapInvasives Mobile. GPS will not work without the map. GPS Accuracy: 7461 m

Location (Longitude, Latitude): -73.7489682, 42.6523979

iMap 3 Project: (Optional)

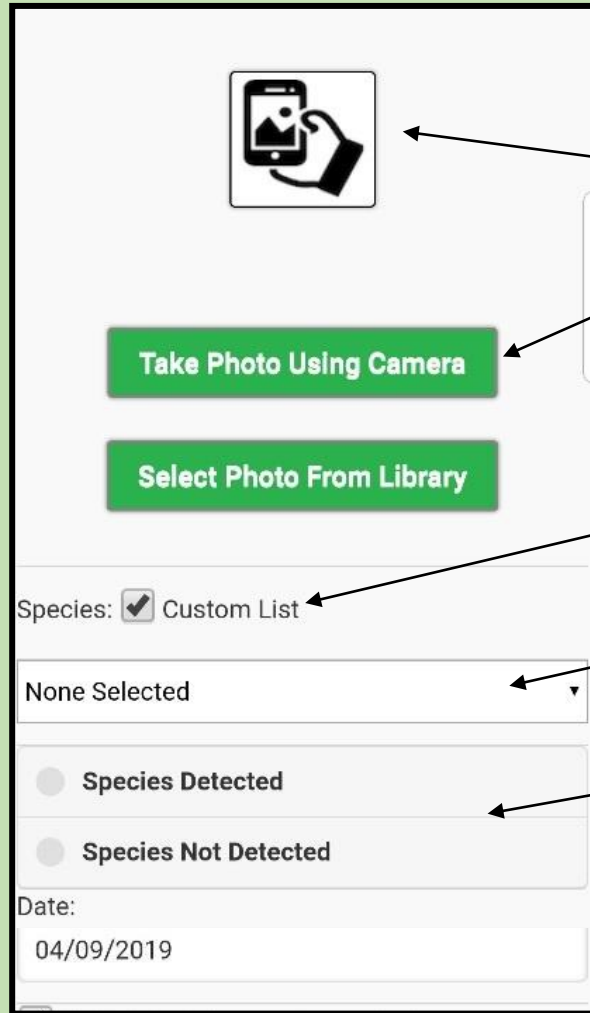
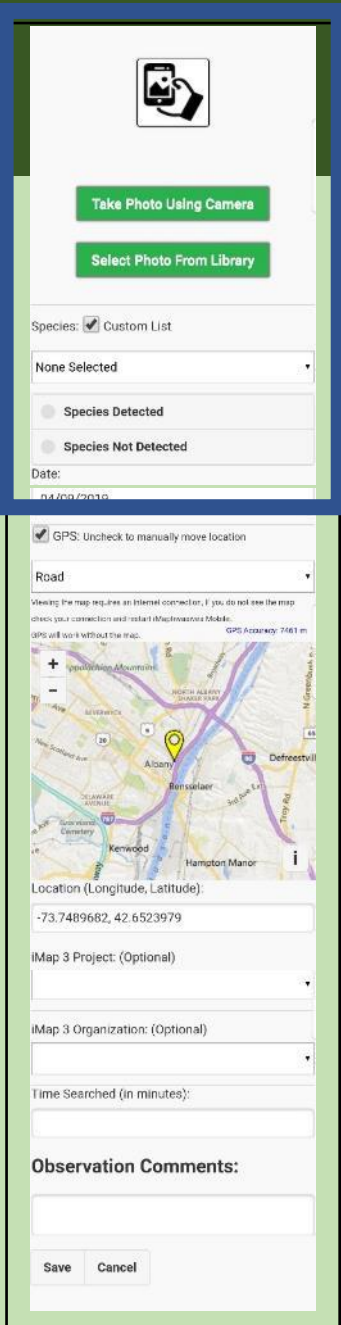
iMap 3 Organization: (Optional)

Time Searched (in minutes):

Observation Comments:

Save Cancel

# Add Observation



Take photo with camera

Enable your custom species list

Select Species – **A Fake Species**

Select Detected or Not Detected

\*\*\*Note: If you select photo from library, the iMap app will pull the location and date metadata from the photo (assuming your camera is set to capture metadata, and the appropriate permissions are available)

# Add Observation



Take Photo Using Camera

Select Photo From Library

Species:  Custom List

None Selected

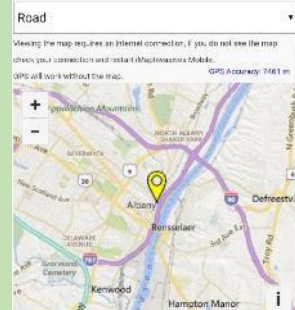
Species Detected

Species Not Detected

Date:

04/09/2019

GPS: Uncheck to manually move location



Location (Longitude, Latitude):

-73.7489682, 42.6523979

iMap 3 Project: (Optional)

iMap 3 Organization: (Optional)

Time Searched (in minutes):

Observation Comments:

Save Cancel

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)

Note: Map will be blank when out of connectivity

Your location

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

# Add Observation



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 install iMap3 on your mobile device. GPS Accuracy: 7.661 m



Location (Longitude, Latitude):

iMap 3 Project: (Optional)

iMap 3 Organization: (Optional)

Time Searched (in minutes):

Observation Comments:

Save Cancel

iMap 3 Project: (Optional)  
My Default Project

iMap 3 Organization: (Optional)  
My Default Organization

Time Searched (in minutes):

Observation Comments:

Save Cancel

Enter the approximate time you were searching for invasive species (very helpful)

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

Don't forget to save your changes!

# Mobile App

1. Setup Account and App



*Connectivity required*



2. Record invasive species



*Connectivity **NOT** required*

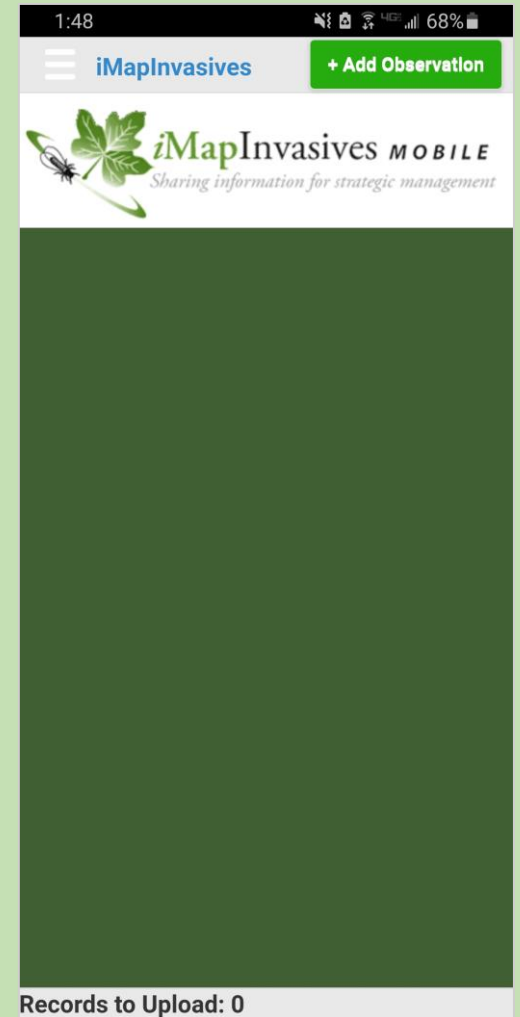
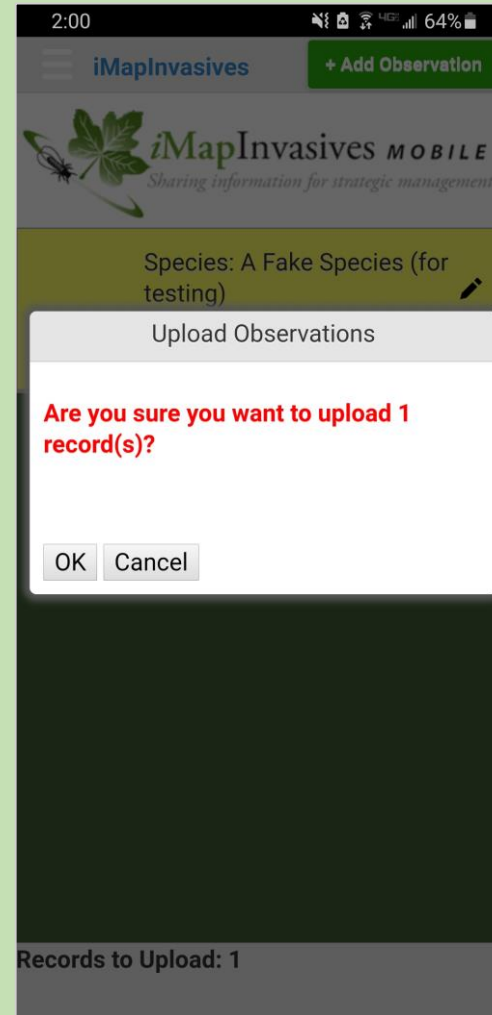
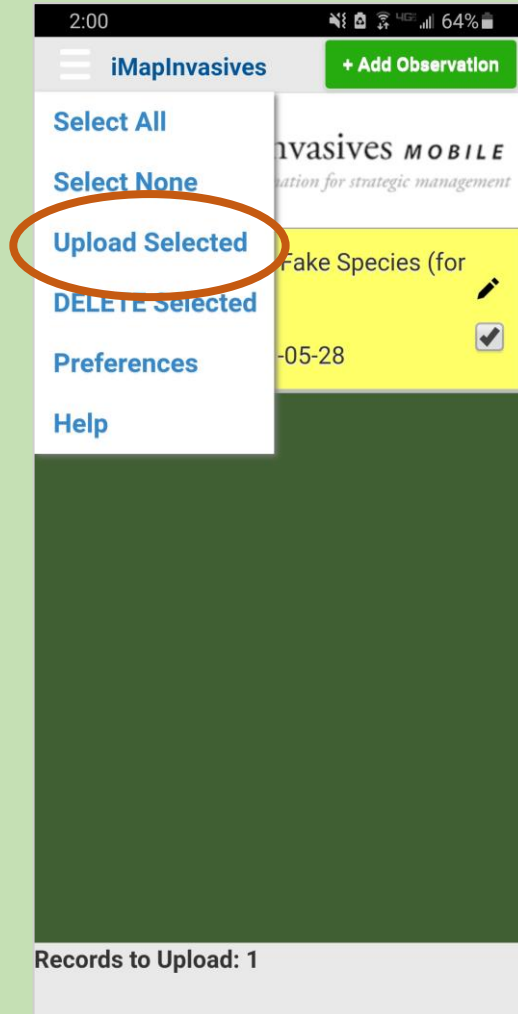
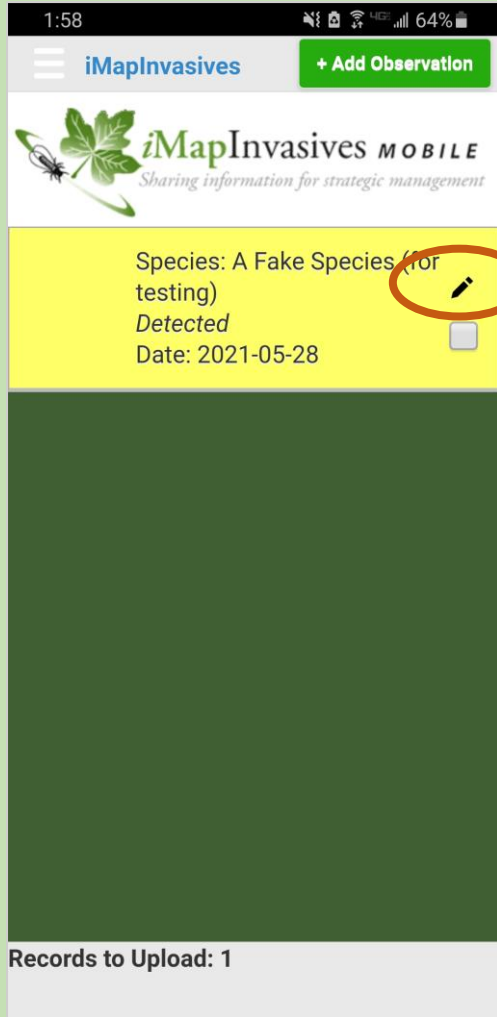


3. Upload records to iMap



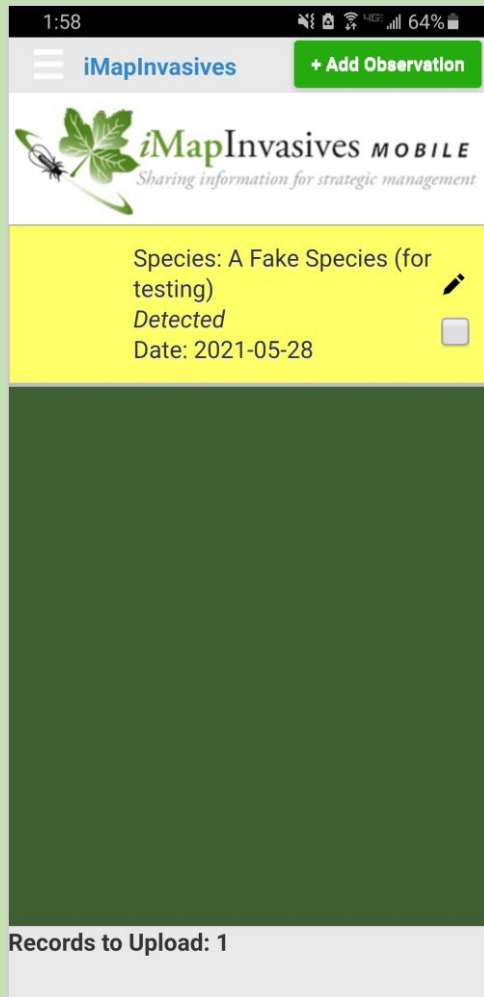
*Connectivity required*

# Uploading Records





# Uploading records



Record is on your device,  
NOT in the online database



Record has left phone,  
Is in online database

# Additional Functionality

1. Setting up Email Alerts for species/areas of interest
2. Viewing distribution data in the online interface
3. Advanced data collection (polygons, treatments, etc.)
4. Species List by Waterbody reports, Approaching Region Species list

**Learn more:** [NYimapinvasives.org/training](https://nyimapinvasives.org/training)

- Monthly iMapInvasives Webinar (last Wed. of month, 1pm)
- Other iMap trainings occurring across the state
- Self guided training (tutorial videos, etc.)

# Any questions?



Join us outside!

Self-guided training materials, and  
upcoming webinars and events:

[nyimapinvasives.org/training](https://nyimapinvasives.org/training)



New York  
Natural Heritage  
Program



**iMapInvasives**

*Sharing information for strategic management*



**@nyimapinvasives**

Email: [imapinvasives@dec.ny.gov](mailto:imapinvasives@dec.ny.gov)

Website: [nyimapinvasives.org](https://nyimapinvasives.org)