

# iMapInvasives

## An Overview



# What is iMapInvasives

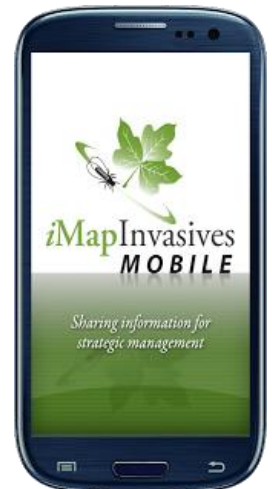


An online invasive species mapping tool and database for managers, scientists and citizens

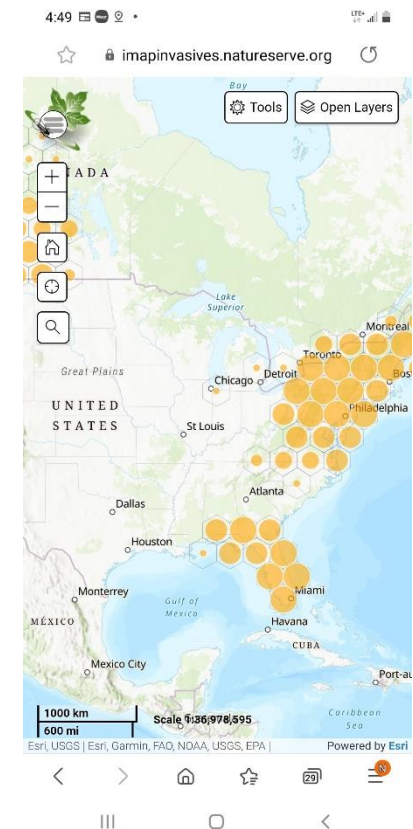
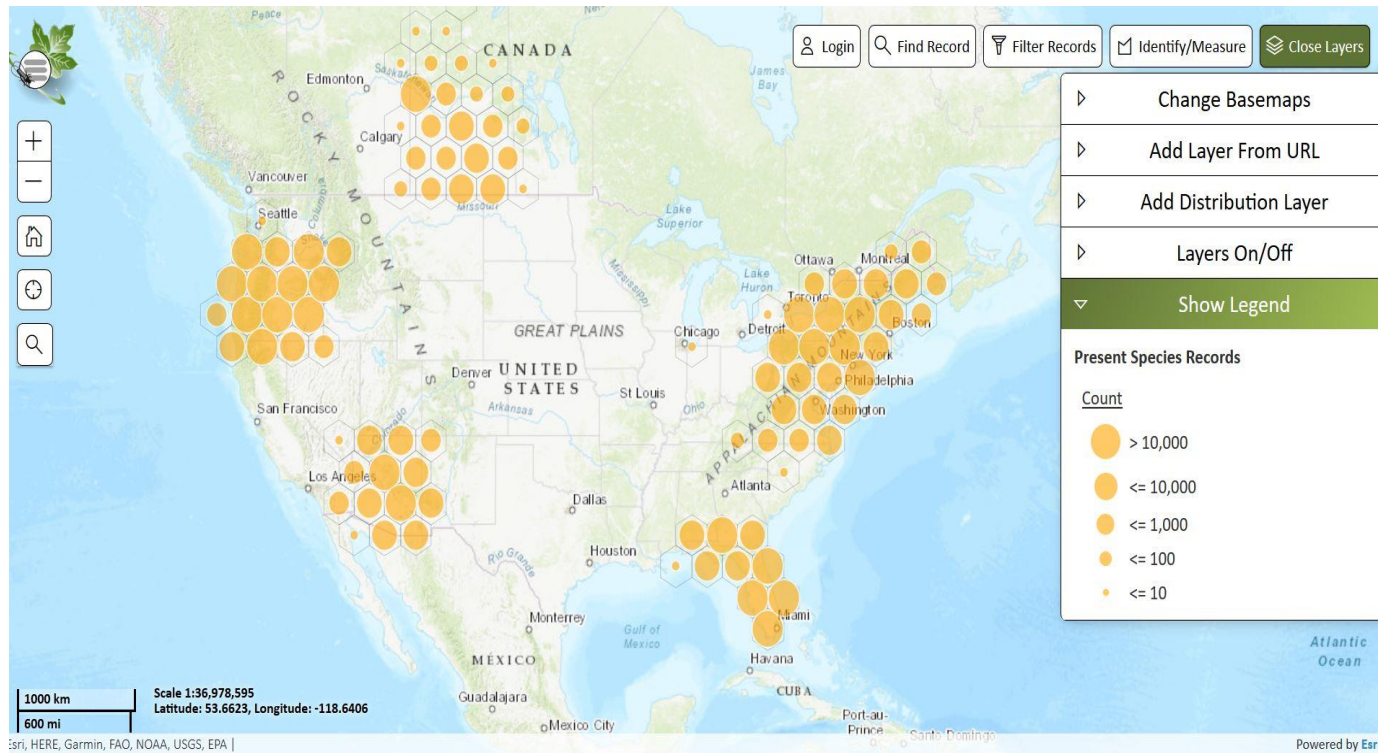


# Main iMapInvasives Features

- Upgraded and Modernization of the iMapInvasives mapping and data management system (multiple devices)
- North America to Local View and reporting
- Field Mobile Applications
- Email Alerts (Early Detection and Rapid Response)

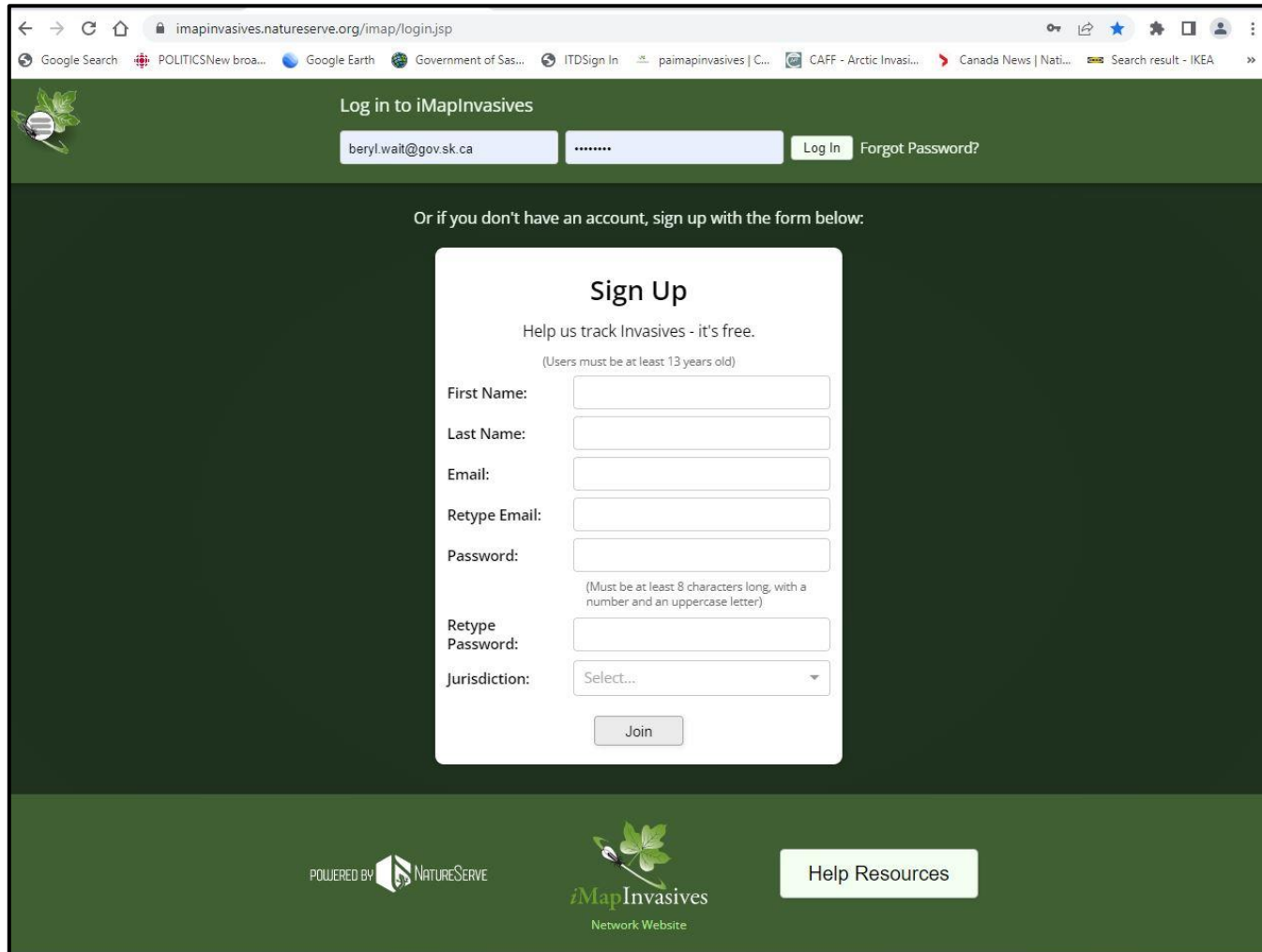


# Landing Page – The Map



<https://imapinvasives.natureserve.org> OR <https://imapinvasives.natureserve.org/imap/login.jsp>

# Sign Up and Login



The screenshot shows a web browser window with the URL `imapinvasives.natureserve.org/imap/login.jsp`. The page has a dark green header with the text "Log in to iMapInvasives". Below this, there is a login form with a text input field containing "beryl.walt@gov.sk.ca", a password field with masked characters, and buttons for "Log In" and "Forgot Password?".

Below the login form, a message states: "Or if you don't have an account, sign up with the form below:". This leads to a "Sign Up" form with the following fields:

- 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:

A "Join" button is located at the bottom of the sign-up form.

The footer of the page includes the text "POWERED BY NATURESERVE", the "iMapInvasives Network Website" logo, and a "Help Resources" button.

## TIPS

- Check your junk folder for confirmation email (time sensitive/goes inactive)
- DONOT USE internet Explorer as browser
- Only one user per valid email address
- Clearing your cache may resolve some issues

<https://imapinvasives.natureserve.org/imap/login.jsp>

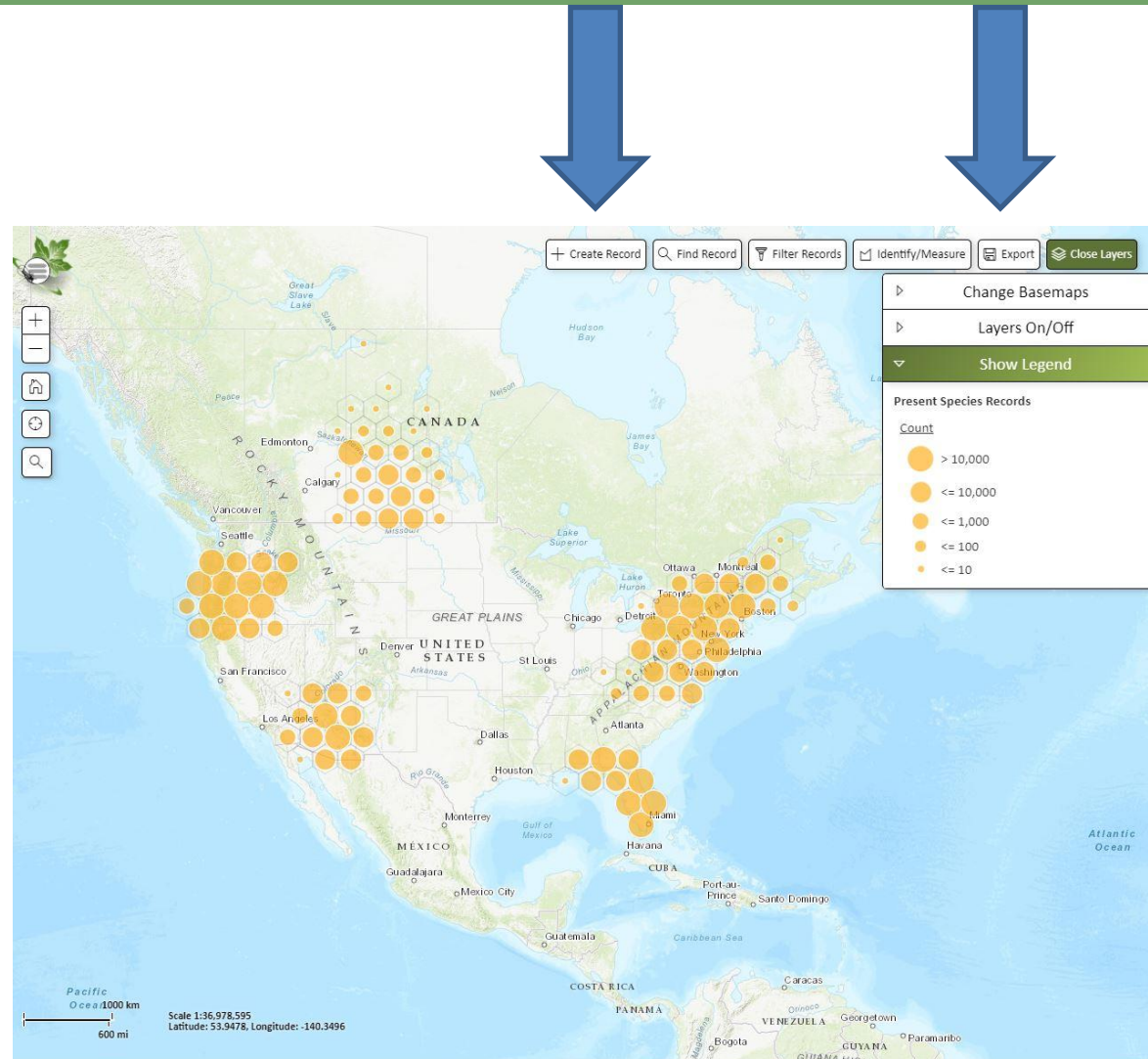


# Basic User

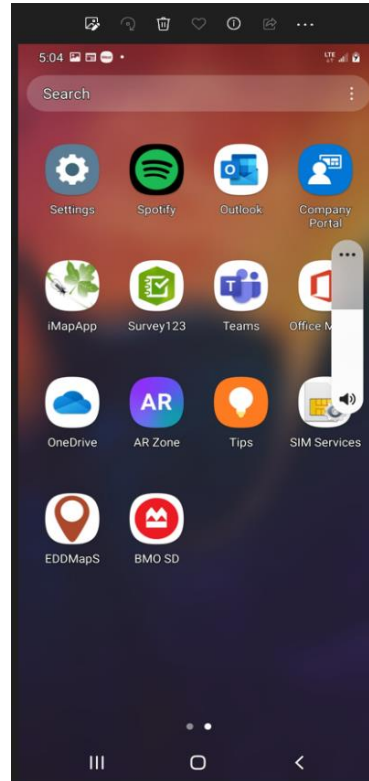
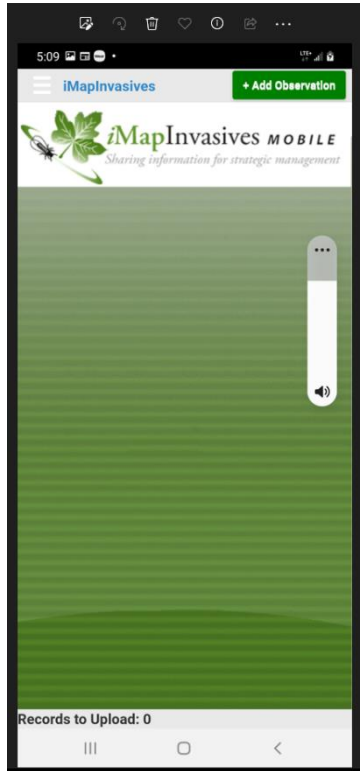
Once you have your user password proceed to the Login

A Basic User with an email account and password will be able to view confirmed, unconfirmed, approximate records, create presence records and view basic treatment information

You should now have access to CREATE records and EXPORT data buttons

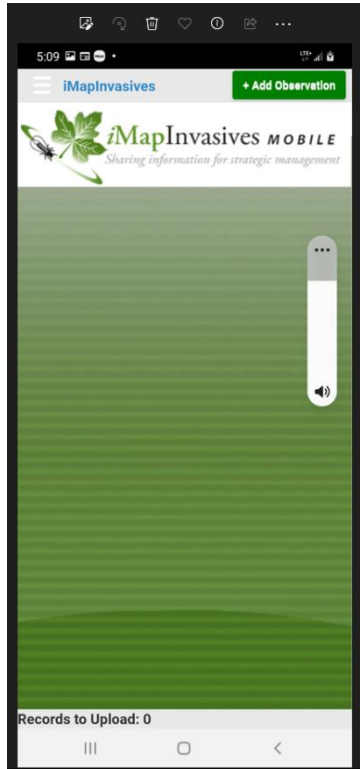


# Mobile Field Collection Applications



There are two mobile applications that can be used out in the field.  
Download field apps from the Apple Store (Apple) or Google Play Store (Android)  
iMapInvasives Mobile or Survey 123  
You must have an iMapInvasives Account to use mobile applications

# iMapInvasives Mobile Application



- Download field app from the Apple Store (Apple) or Google Play Store (Android)
- You must have an iMapInvasives Account to use mobile applications
- Easier (more) basic of mobile apps
- Collects only point data
- Must set and save preferences
- Application works offline. You can record data out in the field then upload data into main platform when you get back into wifi service or to avoid using up limited data plans
- Newer Android devices may encounter difficulties in downloading app (working on recent security upgrade issue fix pending)

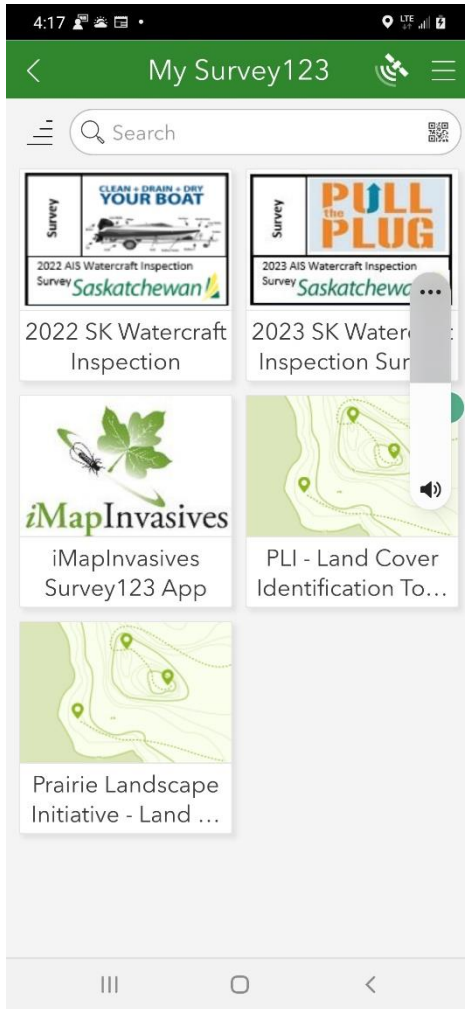


# Survey 123 iMapInvasives Mobile App



- Download Survey123 app from the Apple Store (Apple) or Google Play Store (Android)
- You must have an iMapInvasives Account to use mobile applications
- More Complex – requires more tech skills of the user
- Can collect more detailed information out in the field including points and polygons
- Must know your account person Id number case sensitive name and email address and know how to set favorites to avoid having to input repetitive information
- Download the Survey123 iMapinvsives Form by typing <https://arcg.is/vfeTW> into your browser to download the survey form
- You DONOT need an ArcGis Online Account choose the continue without signing in that appears at the bottom of the screen

# Survey 123 iMapInvasives Mobile App



- The iMapInvasives form should now be available under My Surveys
- Tap on the icon to open the form and start collecting data
- Knowing how to setup and save favorites will let you populate your form with your person id number, name, email address and other repetitive information. Please note name and email address **MUST BE CORRECT**
- organization and project numbers (if applicable and must be setup with the SK administrator ahead of time)
- There is a quick take a point and record basic information only (Simple) choice to the form but this form allows you to record very detailed information (Advanced) if you want

# Exploring The Map - Left Side Menu

Menu – Jurisdiction Species List  
– Login

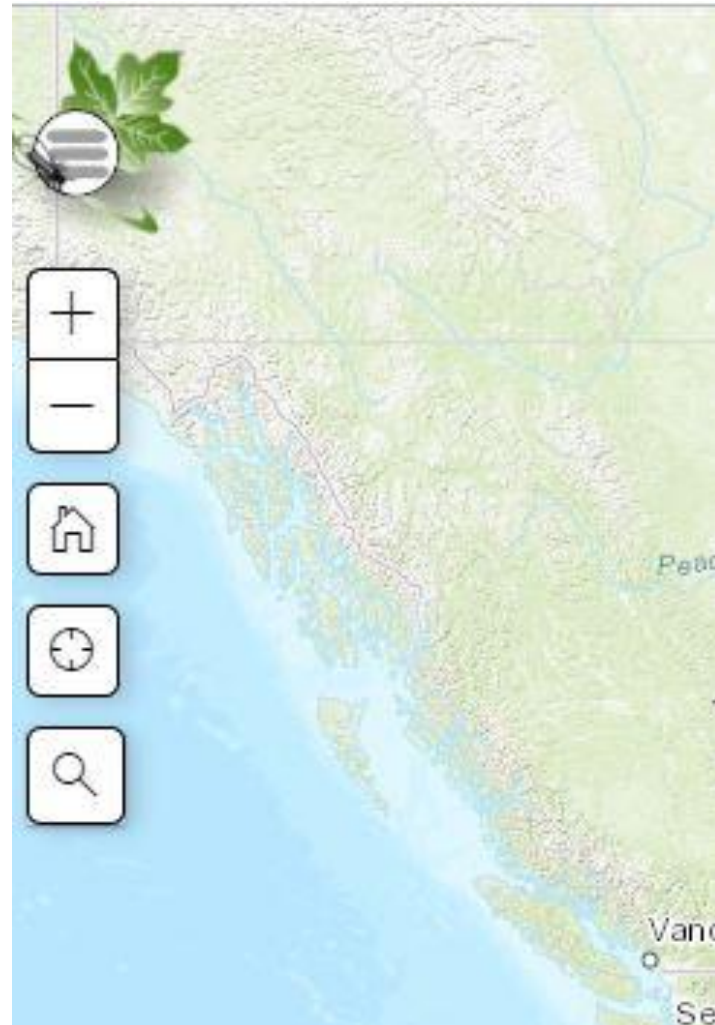
Zoom In

Zoom Out

Home

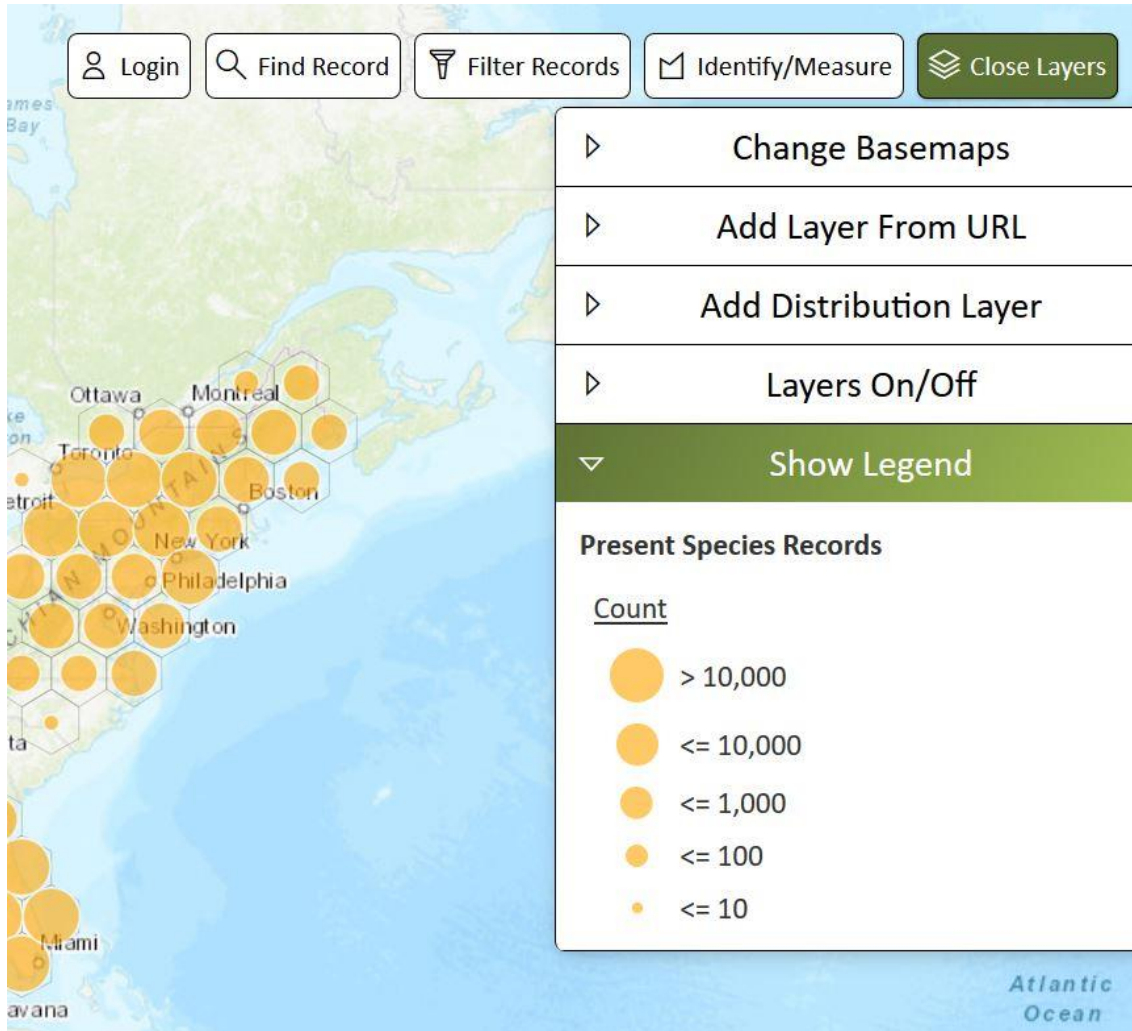
Acquire current location

Search - type in location name, input  
Decimal Degrees Longitude and  
Latitude Coordinates (Y, -X)



# The Map - Upper Right Menu

Login Record Search Filter Search Identify/Measure Layers



Base Maps Choices  
(topographic, satellite etc.)

Adding your own layers

Adding Distribution layers

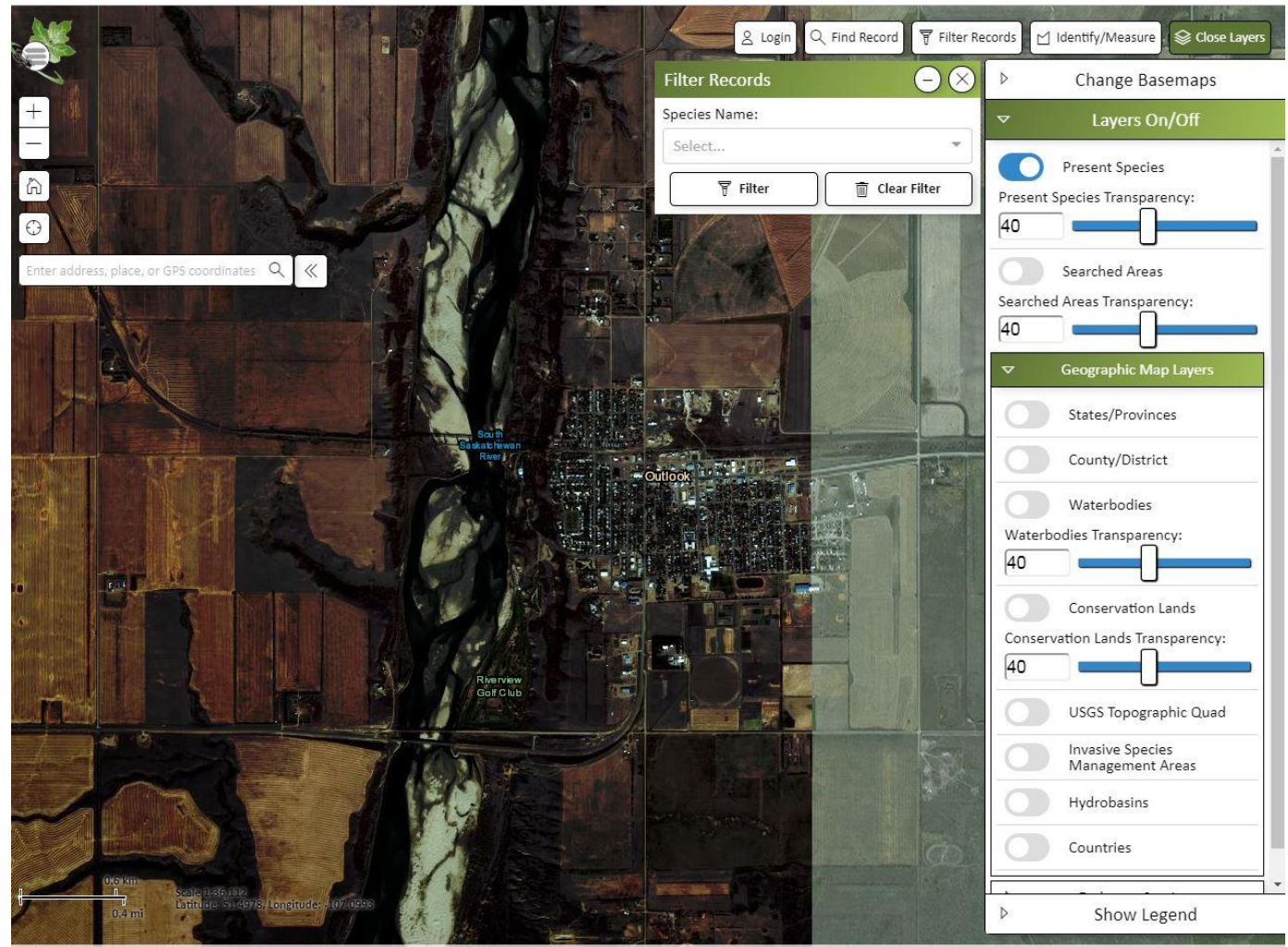
Layers Choices (counties,  
watersheds etc.)

Legend



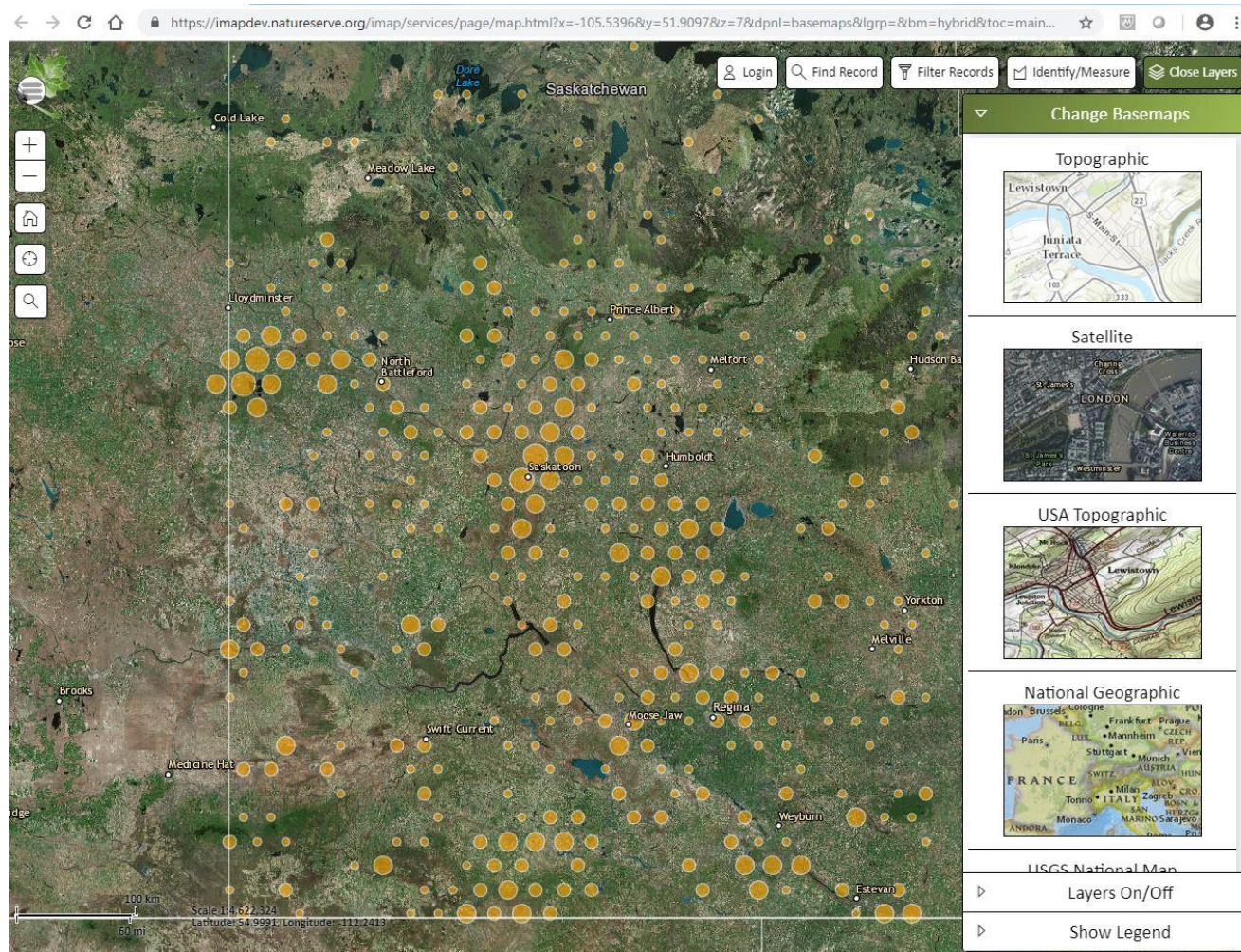
# The Map - Search

Type in Location  
name or put in  
Decimal Degrees  
Longitude and  
Latitude to zoom  
into a specific  
location (Y, -X)





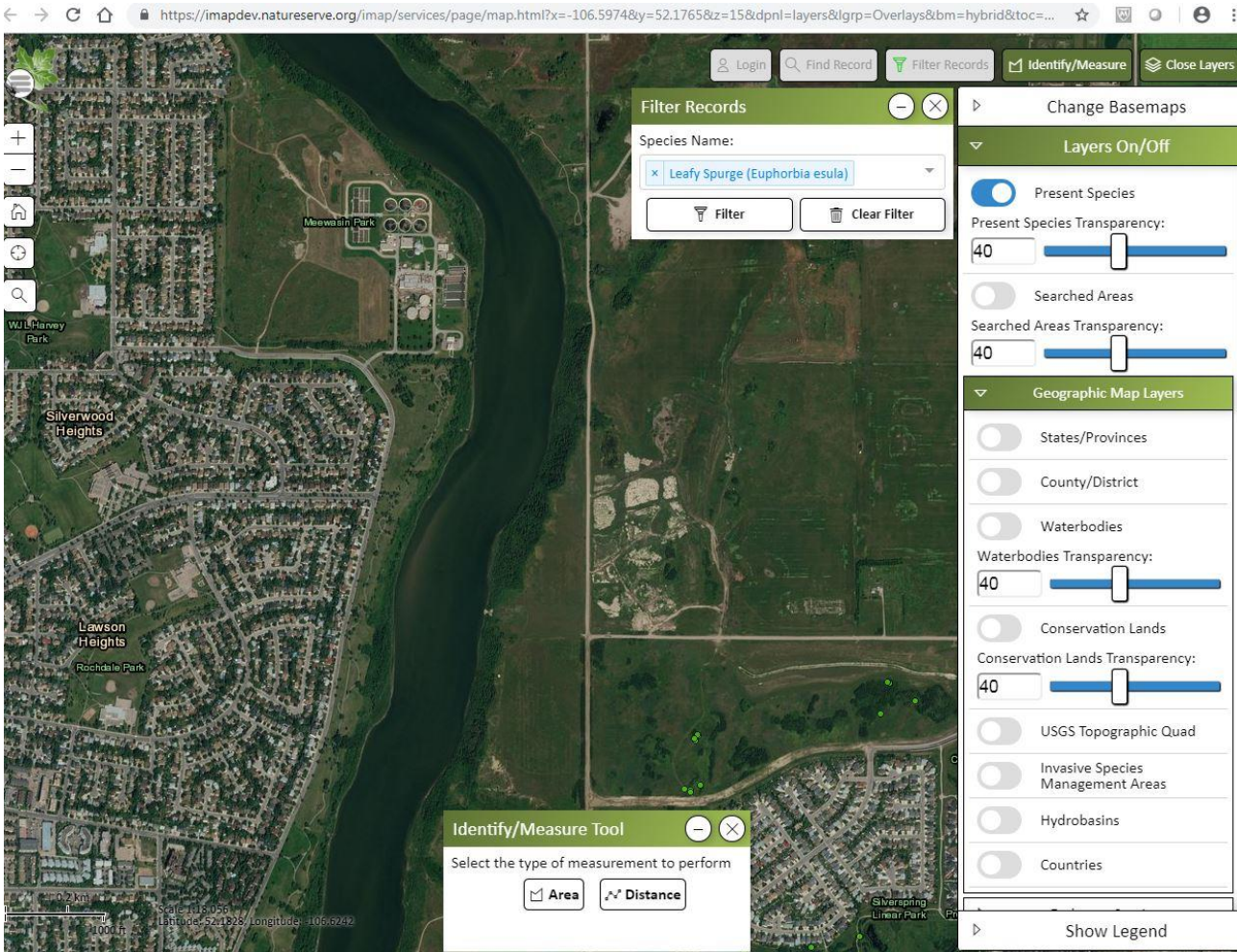
# The Map – Base Map



You Can Change  
Your Base Map



# The Map - Layers



https://imapdev.natureserve.org/imap/services/page/map.html?x=-106.5974&y=52.1765&z=15&dpnl=layers&lgrp=Overlays&bm=hybrid&toc=...

Login Find Record Filter Records Identify/Measure Close Layers

**Filter Records**

Species Name:

Leafy Spurge (Euphorbia esula)

Filter Clear Filter

**Change Basemaps**

**Layers On/Off**

☒ Present Species  
Present Species Transparency: 40

☐ Searched Areas  
Searched Areas Transparency: 40

**Geographic Map Layers**

☐ States/Provinces

☐ County/District

☐ Waterbodies  
Waterbodies Transparency: 40

☐ Conservation Lands  
Conservation Lands Transparency: 40

☐ USGS Topographic Quad

☐ Invasive Species Management Areas

☐ Hydrobasins

☐ Countries

**Identify/Measure Tool**

Select the type of measurement to perform

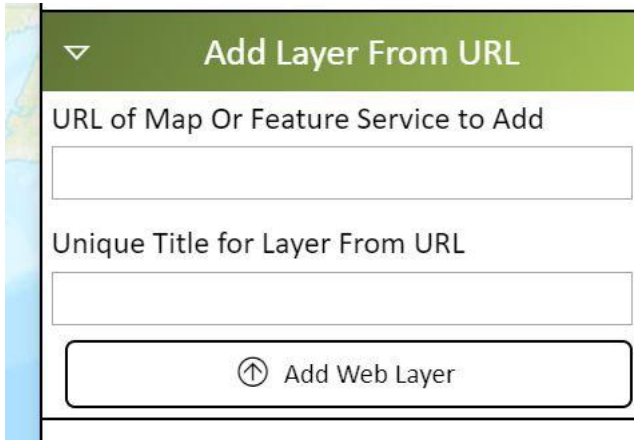
☒ Area ☐ Distance

Scale: 1:18,000  
Latitude: 52.1765 Longitude: -106.5974

On/Off Switches for  
various layers

Transparency Slides

# The Map – Add Your Own Layers



▼ Add Layer From URL

URL of Map Or Feature Service to Add

Unique Title for Layer From URL

⬆ Add Web Layer

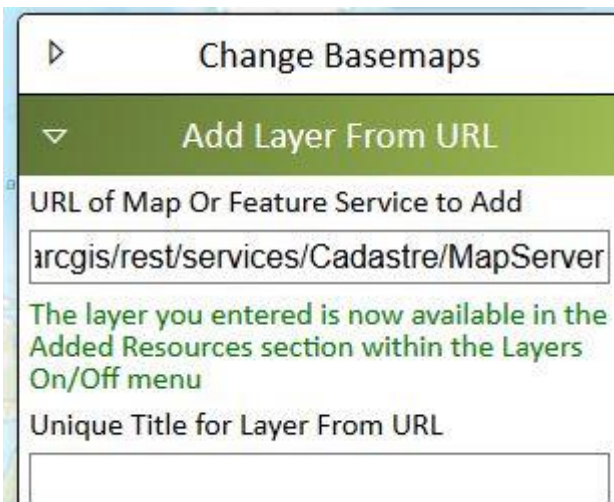
Adding your own layers - Example adding the CADSTRE layer (township, range sections), Watersheds, Ecoregions

Add a map layer on top of the map by opening the Add Layer From URL button on the Right hand side of the map - Click on the button

Copy and paste or type in the following URL address into the URL of Map or Feature Service to Add in the text box

<https://gis.saskatchewan.ca/arcgis/rest/services/Cadastre/MapServer>

Click on the Add Web Layer button a green colored message of “ The layer you entered is now available in the Added Resources section within the Layers On/Off menu” should show up



► Change Basemaps

▼ Add Layer From URL

URL of Map Or Feature Service to Add

The layer you entered is now available in the Added Resources section within the Layers On/Off menu

Unique Title for Layer From URL

# The Map – Add Your Own Layers

Go to the Layer On/Off button click it open and the added layers should show up under the Added Resources Button you can now turn the various parts of the layer on or off to speed up drawing

Make sure to

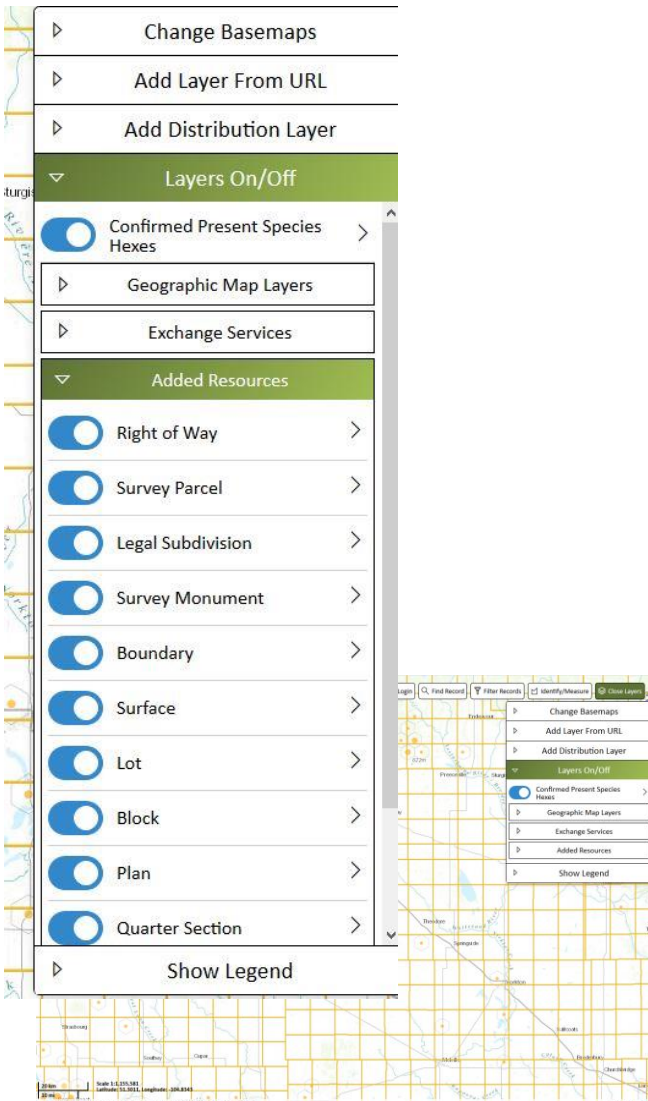
Turn on the Section Layer

Turn on the Township Layer

Turn on the Quarter Section Layer

These feature should now be on the map as you zoom in and out at a scale of at least 1:144,448

You will have to add these layers each time you login so save the urls/paths/links in a document you can copy paste from readily



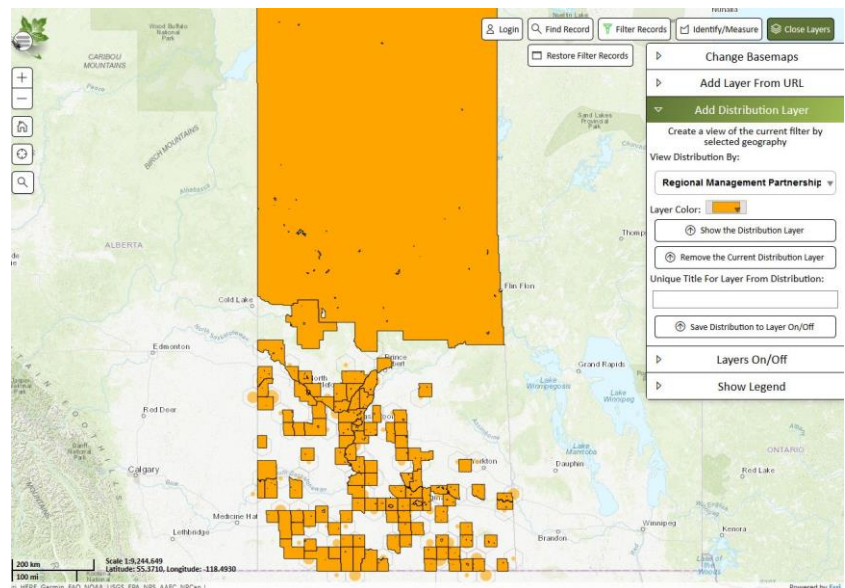
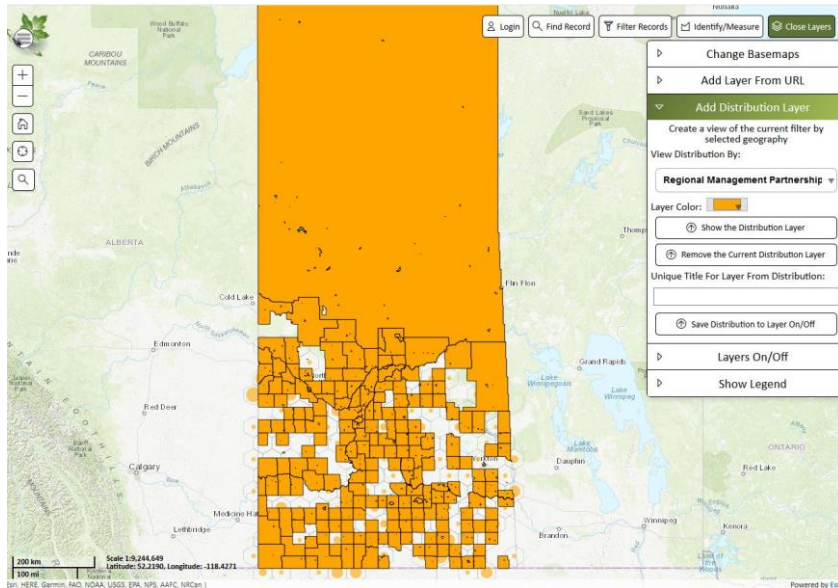


# The Map – Distribution Layer

To show a Distribution layer based on a filter use the Add a Distribution Layer function  
For Saskatchewan the Rural and Urban Municipalities are located under the Regional Management Partnership layer

Every time you change the filter you will have to minimize the filter window and refresh the layer by clicking the show the Distribution Layer Button

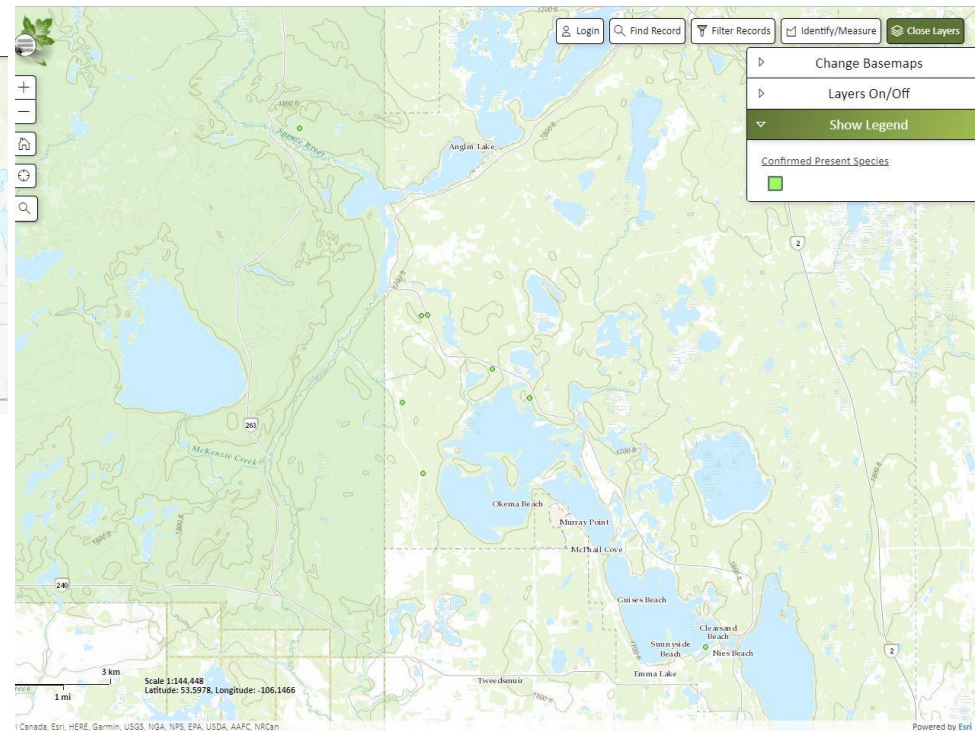
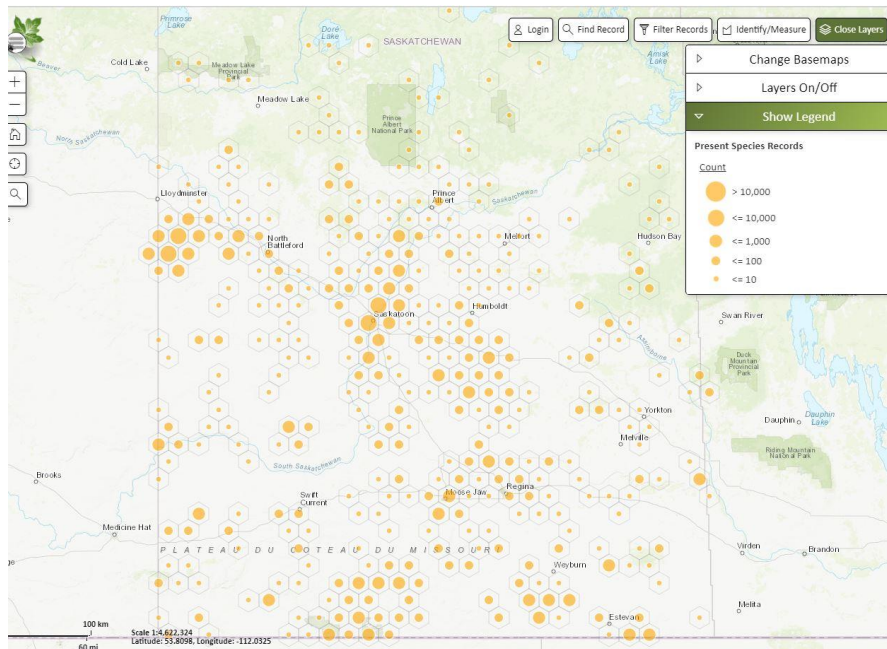
On the left is the Distribution Layer showing all confirmed species by RM/UM on the right is the Distribution Layer showing confirmed observation of leafy spurge by RM/UM



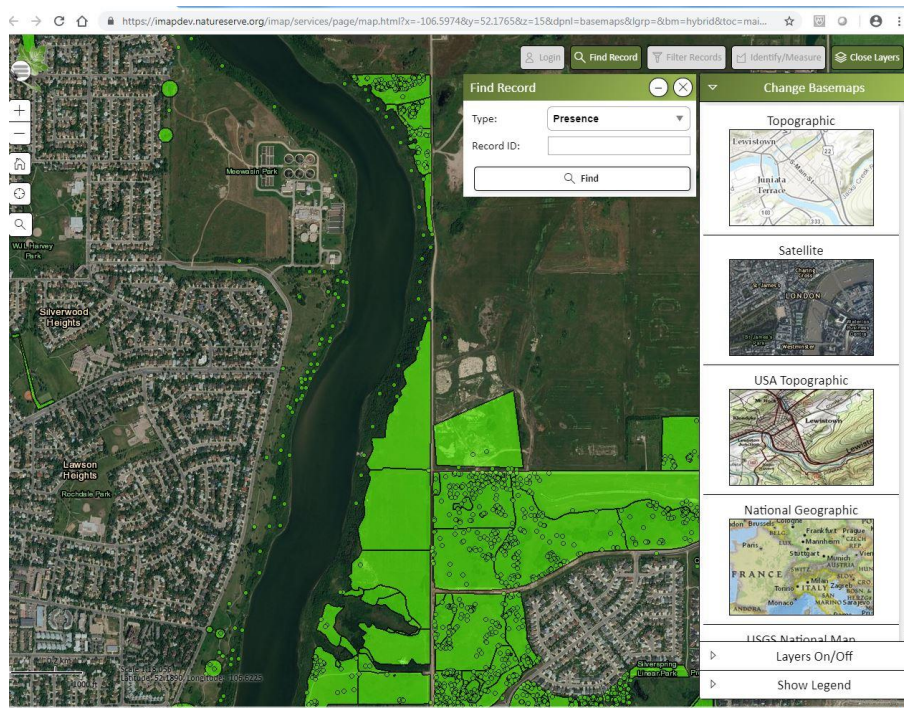


# The Map – Zoom in

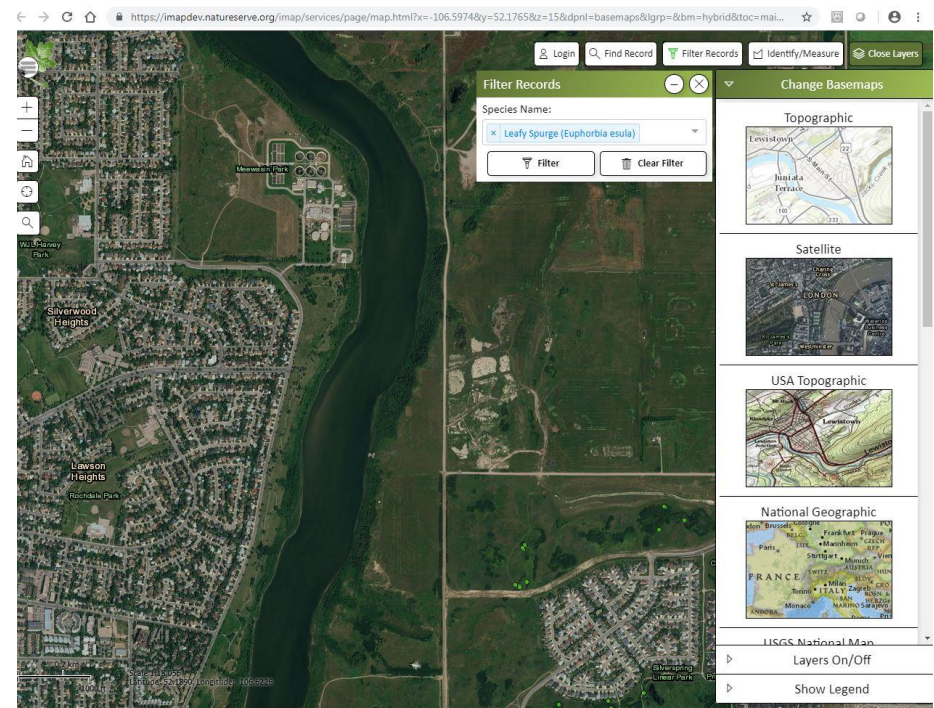
As you zoom in the records will eventually separate into individual records



# The Map - Filter



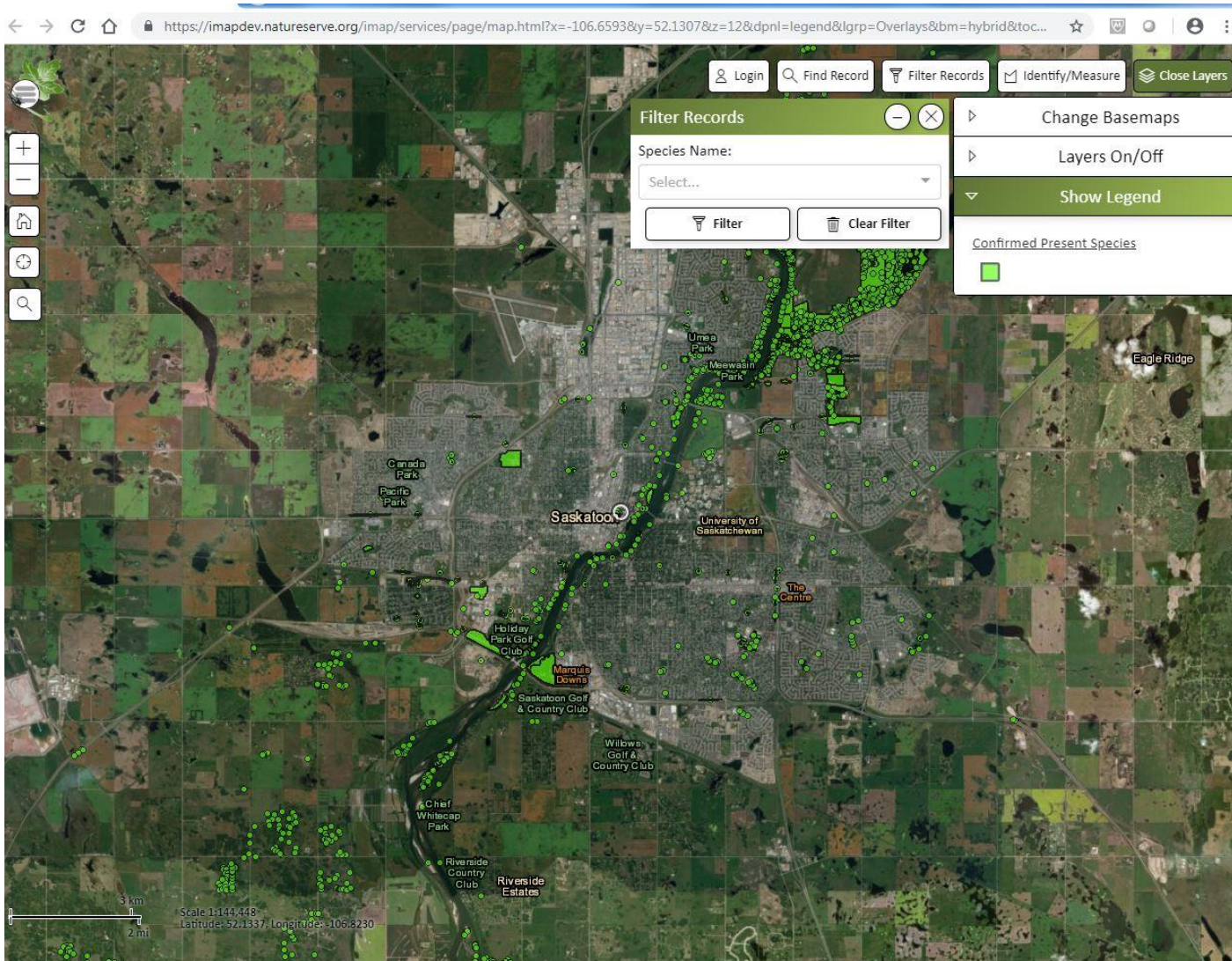
All confirmed records shown



Records filtered for leafy spurge only

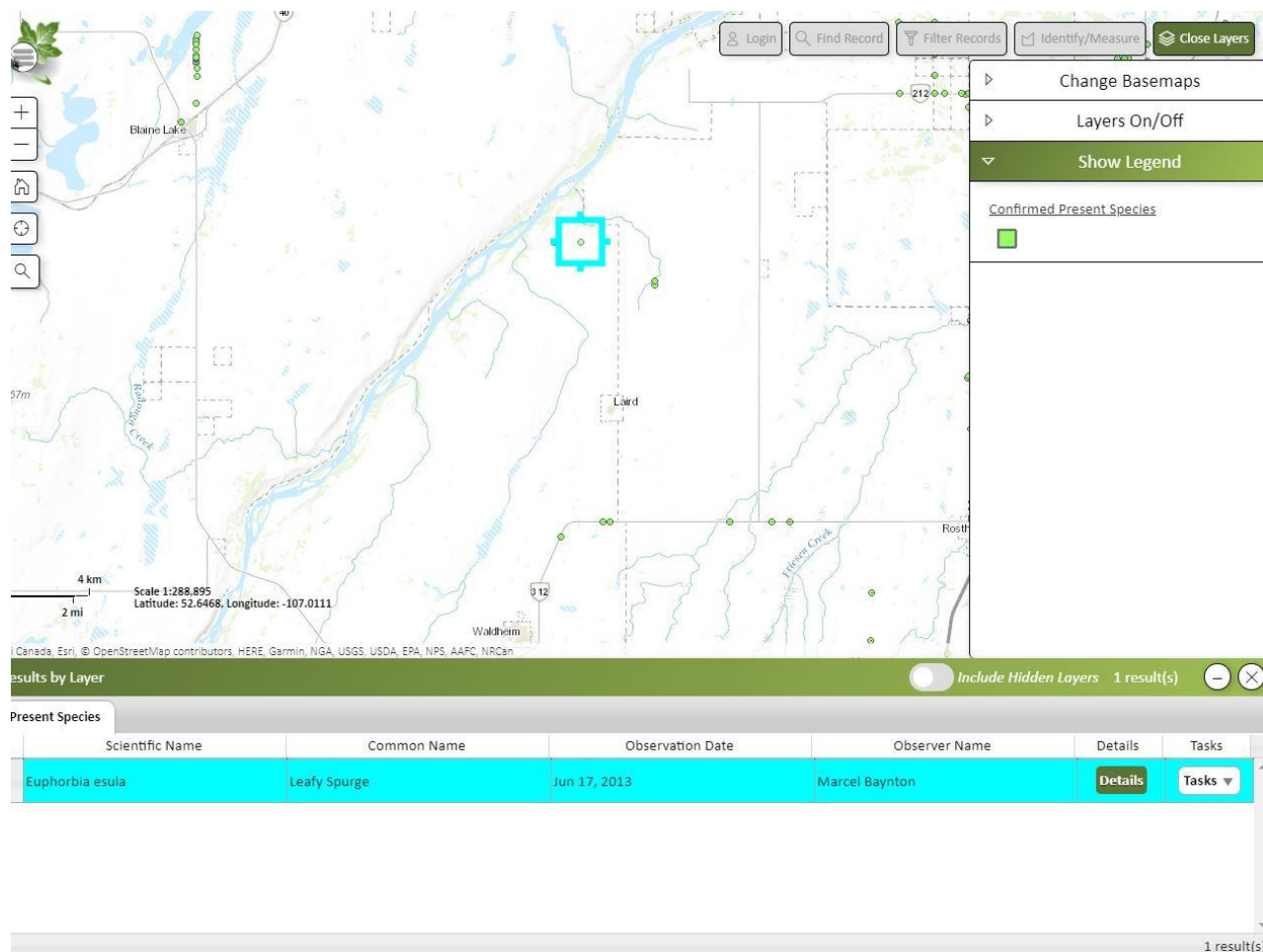


# The Map – Confirmed Records



Confirmed Records

# Individual Record



Click on an individual record for basic details

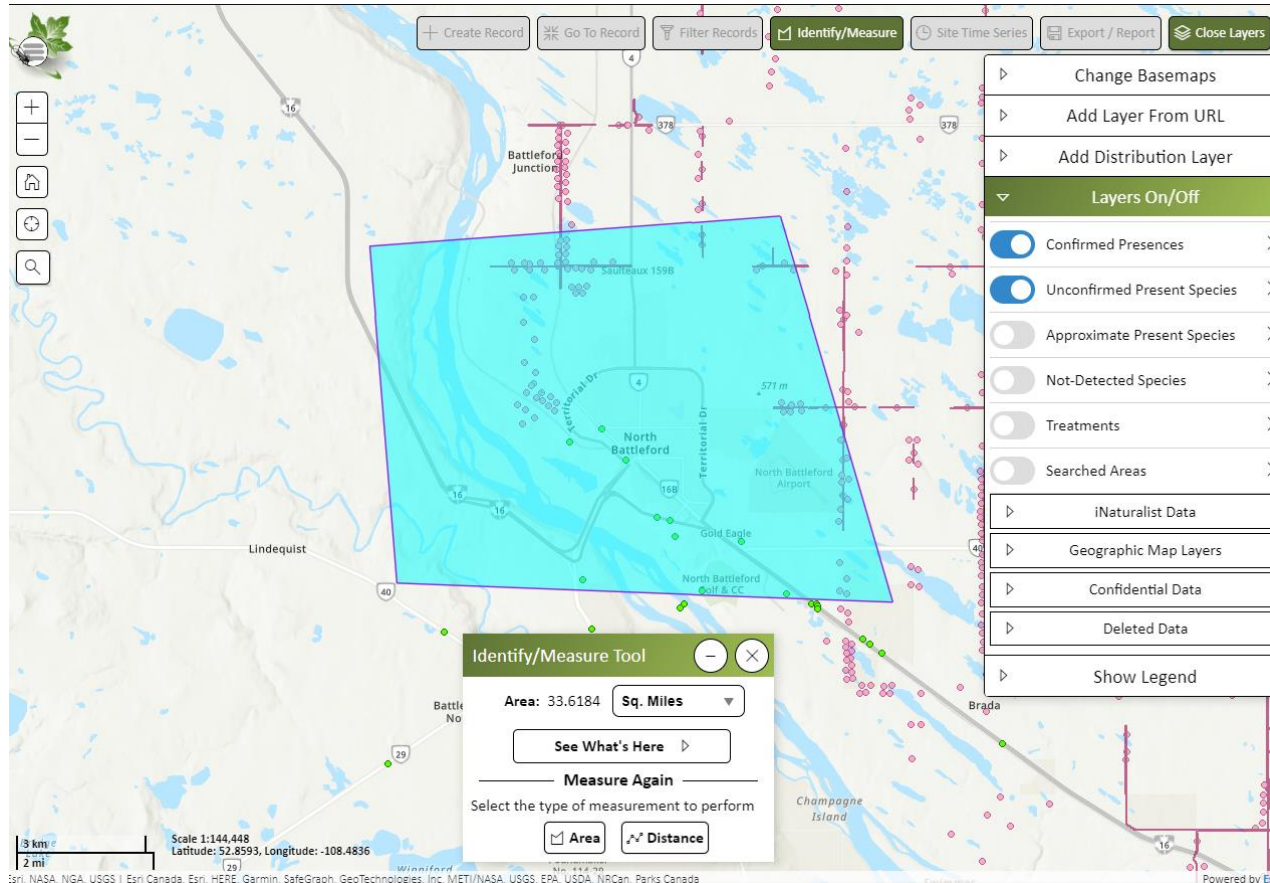
- Species scientific name
- Species common name
- Date of Observation
- Observer

Details and Task Buttons

Scientific Name	Common Name	Observation Date	Observer Name	Details	Tasks
Euphorbia esula	Leafy Spurge	Jun 17, 2013	Marcel Baynton	Details	Tasks



# Identify/Measure Tool



Click on the  
Identify/Measure Tool

Click Area and draw a  
box around a portion of  
the map. Double click


Choose See What's Here  
button

The details of up to  
1000 records will appear  
at the bottom of the  
screen




# Presence Record

Click on an presence record to get more details



## Presence Record



Latitude: 52.76138° Longitude: -106.81134° [Go To Map](#)

**Presence #915475**

**Date:** 6/16/2013  
**Observer:** Marcel Baynton - 14073  
**Time Searched:** Not Listed  
**Species Found:** Leafy Spurge

[Go To Searched Area Page](#)


**1 Species Present**

**Leafy Spurge**  
*Euphorbia esula*  
(Euphorbiaceae Family)

[See More](#)

Confirmed  
Not Confidential  
Under Treatment

Created By: Ahdia Hassan - 14056 Last Updated By: Ahdia Hassan - 14056 Last Updated On: Not Listed Entry Method: Bulk Upload



## Presence Record

**USGS Topographies:** Not Listed

**Bodies of Water:** Not Listed

**1 Species Present**

**Leafy Spurge**  
*Euphorbia esula*  
(Euphorbiaceae Family) [See Less](#)


**Photos of Present Species:**  
None

**Comments:**  
Not Listed

**Number Found:** Not Listed  
**Evaluation Type:** Not Listed  
**Follow Up:** Not Listed  
**Impact of Invasive:** Not Listed  
**Repository Information:** Not Listed  
**Biocontrol Species Found:** Not Listed  
**Biocontrol Species Comments:** Not Listed  
**Distribution:** Not Listed  
**Percent Cover:** Not Listed  
**Phenologies:** Not Listed  
**Age of Woody Plants:** Not Listed  
**Intentional Planting:** No  
**Tagged Projects:** None

**General Reference Info**

**Reference Photo:**



Robert Videli, Doronicum Kitz, Bugwood.org


**Reference Links:**  
[External Info Page](#)  
[iMap Jurisdiction Species Page](#)

Last Updated By: Ahdia Hassan - 14056 Last Updated On: Not Listed Source Unique Id: SK-SEPTEMBER252014-88

Created By: Ahdia Hassan - 14056 Last Updated By: Ahdia Hassan - 14056 Last Updated On: Not Listed Entry Method: Bulk Upload

See More Drop Down

# Species List

 **Jurisdiction Species List**

Select Jurisdiction: Saskatchewan

216 Species in Saskatchewan:

☐ Species Type Filter: Off ☐ Habitat Type Filter: Off ☐ Regulated Filter: Off ☐ Confidential Filter: Off

Sort By: Select...

(1 - 15 of 216)

Jumping Worms (species unknown)  
*Amyntas spp. (species unknown)*  
Animalia > Oligochaeta > Megascolecidae

Absinthe  
*Artemisia absinthium*  
Plantae > Dicotyledoneae > Asteraceae

Alfalfa  
*Medicago sativa*  
Plantae > Dicotyledoneae > Fabaceae

Alkali Swainsonpea  
*Sphaerophysa salsula*  
Plantae > Dicotyledoneae > Fabaceae

Annual Sowthistle; Common Sowthistle  
*Sonchus oleraceus*  
Plantae > Dicotyledoneae > Asteraceae

Asian Clam, Asiatic Clam  
*Corbicula fluminea*  
Animalia > Bivalvia > Corbiculidae

Asian Long-horned Beetle  
*Anoplophora glabripennis*  
Animalia > Insecta > Cerambycidae

Asian Tiger Mosquito


Legally Regulated

Legally Regulated

Legally Regulated

< Prev 1 2 3 4 5 6 7 Next >

# Species Record



## Saskatchewan Species Record

### Network-Level Data

[Go to the Network Species Record Page](#)

[See Less ^](#)

General Identification	
<b>Common Name:</b>	Common Wormwood
<b>Scientific Name:</b>	Artemisia absinthium
<b>Kingdom:</b>	Plantae
<b>Class:</b>	Dicotyledoneae
<b>Family:</b>	Asteraceae
<b>Genus:</b>	Artemisia
<b>Taxonomic Name Comments:</b>	Not Listed


Status and Specifications	
<b>Jurisdictions Tracked In:</b>	Arizona, New York, Oregon, Saskatchewan
<b>Jurisdictions Regulated In:</b>	Arizona, Saskatchewan
<b>Growth Habit:</b>	Not Listed
<b>Species Type:</b>	Plant
<b>Habitat Type:</b>	Terrestrial
<b>Minimum Separation Distance:</b>	0 m

**Additional Species Information**

<b>Species ID:</b>	2-128954
<b>ITIS TSN:</b>	35445

[External Info Page](#)  
[NS Explorer Page](#)

### Jurisdiction-Level Data

General Identification	
<b>Common Name:</b>	Absinthe
<b>Scientific Name:</b>	Artemisia absinthium
<b>Reference Photo:</b>	

Current Status	
<b>Tracking Comments:</b>	Not Listed
<b>Legally Regulated:</b>	Yes
<b>Legal Status:</b>	Noxious Weed (since 1/8/2017)
<b>Legal Status Comments:</b>	Listed under Saskatchewan's Weed Control Act
<b>Invasive Rank:</b>	Not Listed (since 1/8/2017)
<b>Invasive Rank Details:</b>	Not Listed
<b>Common Species:</b>	No
<b>Confidential:</b>	No

# Why use iMapInvasives?

- **Anybody can sign up for an account**
  - no need to purchase special software, licenses or hardware
  - no special training required
- **Use the mobile field application**
  - directly upload field observations into the database
  - use photos to confirm species no travel required
- **Store and share your data electronically**
  - share and manage invasive species information and data available to a wider audience
  - contribute scientific knowledge to the database for risk assessments, species distribution, modelling spread, treatment efforts, survey conditions and results
- **Setup Email Alerts**
  - facilitates early detection and rapid response based on species or geographic areas

# Mobile Quickstart Guide



## SASKATCHEWAN QUICK START GUIDE FOR

### iMap Invasives Mobile App for Android or Apple

Report invasive species locations in Saskatchewan using your tablet or smartphone

Step 1: Before beginning you will need an iMapInvasives account.

If you don't have one, Sign Up for a login online at  
<https://imapinvasives.natureserve.org/imap/login.jsp>

Step 2: Download the iMapInvasives Mobile App from Google Play or Apple Store

#### Step 3: Set Preferences

"Preferences" are the customized user settings.

iMapInvasives Mobile Users will need to setup their email address and password before proceeding with invasive species observation data collection

1. Select Jurisdiction choose State or Province
2. Enter your email address (case sensitive)
3. Enter your password (case sensitive and setup during sign-up)
4. Retrieve iMap Lists
5. Select species name display and create a custom species list if desired.
6. Select picture quality

7. Save your photos to your device (optional)
8. Select map preference Road or Satellite
9. Set Default zoom level
10. Select Measurement System
11. Select Project (if applicable)
12. Select Organizations (if applicable)
13. Turn welcome instruction on or off
14. SAVE



#### Home Page

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

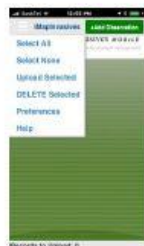
Step 4: Add Observation (See next table)  
Complete and Save the observation form

Open Menu  
Incomplete Observation (red)  
Completed Observation (yellow)



Add new Observation  
Edit Observation  
Select Observation  
Number of Completed Observations

Select all observations  
Unselect selected observations  
Upload selected observations  
Delete selected observations  
Open Preferences  
Help



Step 5: Upload Observations  
Once back in WiFi (using a highspeed connection is recommended) select the observations you want to upload  
Then choose Upload Selected



## SASKATCHEWAN QUICK START GUIDE FOR

### iMap Invasives Mobile App for Android or Apple

Step 4: Add Observations - The Observation Record is where a new observation can be recorded or an existing record can be modified prior to upload

Take your Photo  
or  
Select another from your device  
(if enabled on device)

Select Species  
Species detected  
or  
Species not detected

Date Default  
Uncheck to manually enter location

Zoom Map In (+)  
Zoom Map Out (-)

Coordinates can be edited manually by unchecking the GPS box and typing in desired coordinate

Select Project (if applicable)

Select Organization (if applicable)

Enter time searched (optional)

Saves new observation record or record updates



Tap to Change Date

Check location and accuracy

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

Type in any observation comments  
Cancel deletes new observation record or cancels unsaved changes



# Exploring iMapInvasives Mobile



Upload the new version of the iMapInvasives Field Application for Mobile Devices it should be available for both Android and iPhone.

In your preferences use your user name (which will be your email address) and password.

Upload a new record to make sure it is working before you head out into the field

# Exploring iMapInvasives Mobile



Quickly and easily capture observation data while out in the field by using the iMapInvasives mobile app, available for both Android and iPhone.

It's easy

Take a picture of the invasive species you've found, select the name of the species, add your observation and let your phone select the date and mark your location. To upload your observation(s) to iMapInvasives, simply return to a location with Wifi and "Viola!", you're done!

For more information on how to use the iMapInvasives mobile app, review the user manual found on the Resources tab at [www.iMapInvasives.org](http://www.iMapInvasives.org)

# Exploring iMap Invasives Mobile



You must set up your Google or Apple ID accounts to download the FREE Application to your devices

You must have a FREE iMapInvasives Account to use the iMapInvasives Application

Browsers: Google Chrome, Firefox, Safari  
(NOTE Explorer is NOT supported)

Your GPS on your device must be enabled to automatically collect you location

Your camera on your device must be enabled to capture a picture

This application collects point data



# Mobile – Main Menu



Tap the main menu icon  
in the upper left hand  
corner)

Select Preferences

# Mobile – Setting Your Preferences



## Preferences

### Welcome to iMapInvasives 3!

To create or manage your iMapInvasives 3 account, please visit the [iMapInvasives website](#).

If you used iMapInvasives prior to version 3, please first reset your password (at the [iMapInvasives website](#)). Once complete, enter the email address and new password associated with your iMap account here to upload data.

Jursidction Species List:

iMapInvasives Email Address:

*(Enter the email address associated with your iMapInvasives account)*

You must have an active user account on the new iMapInvasives 3.0 Platform Please Sign-Up or for those with active accounts reset your password for your account. Once you have a valid account please download the iMapInvasive Field App from the Google Play or Apple Store

Choose: Saskatchewan

Enter your email address (must be a valid email address and can only be used by one person)

# Mobile – Setting Your Preferences

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%

Enter your password for your iMap Invasives account  
(must be at least 8 characters with one capital and one number)

Use this link if you need to reset your password

Retrieve iMap Lists - these are lists of Projects and  
Organizations you are part of in iMapInvasives

Species Names choose either Scientific or Common  
You can Customize the List that shows up (there are  
currently 219 species on our Saskatchewan Listing)

Choose Picture Quality



# Mobile – Setting Your Preferences

**Save Photos Taken In  
iMapInvasives App To Device  
Photo Library**  
(If Permitted By Device)

☒

Default Basemap Type:

**Road** **Satellite**

Default Map Zoom:

13

Measurement System:

Metric (meters/hectares)

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).*

If your Device allows you can choose a photo from its library or album

Choose the Map Type Road or Satellite

Set Default Zoom

Select measurement system (metric or imperial)

Projects are set up in the main system and are retrieved or updated periodically by using the retrieve iMap Lists above

**SAVE YOUR INFORMATION**

# Mobile – Setting Your Preferences



## Default Organization:

Map 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 22, 2019

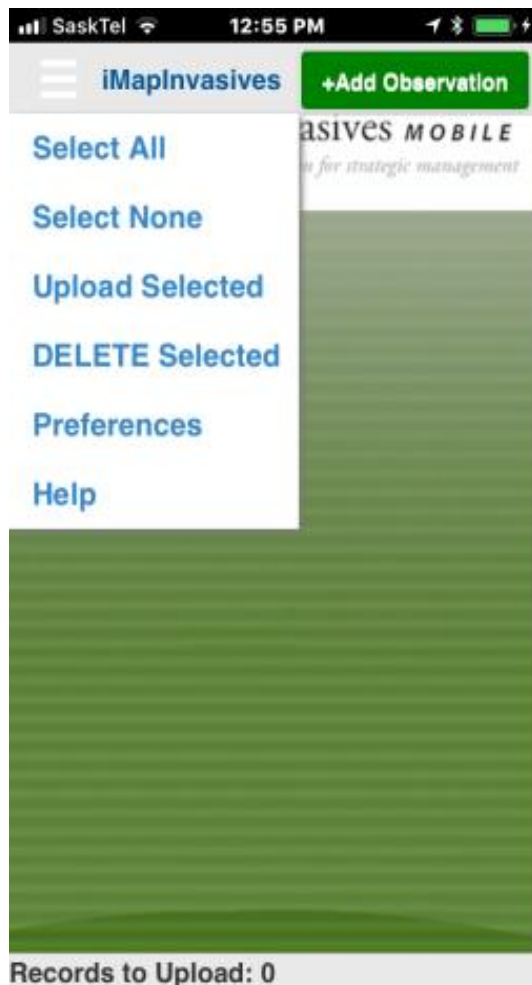
Organizations are set up in the main system and are retrieved or updated periodically by using the retrieve iMap Lists above

Turn the Welcome screen On or Off

## SAVE YOUR INFORMATION

You can change or update your preferences and periodically update your lists or reset your password just remember to **SAVE YOUR CHANGES**

# Mobile – Creating an Observation



Tap the add observation button (upper right of the screen)

Take a photo (currently able to save one photo)

Select the Project if applicable (leave blank if not)

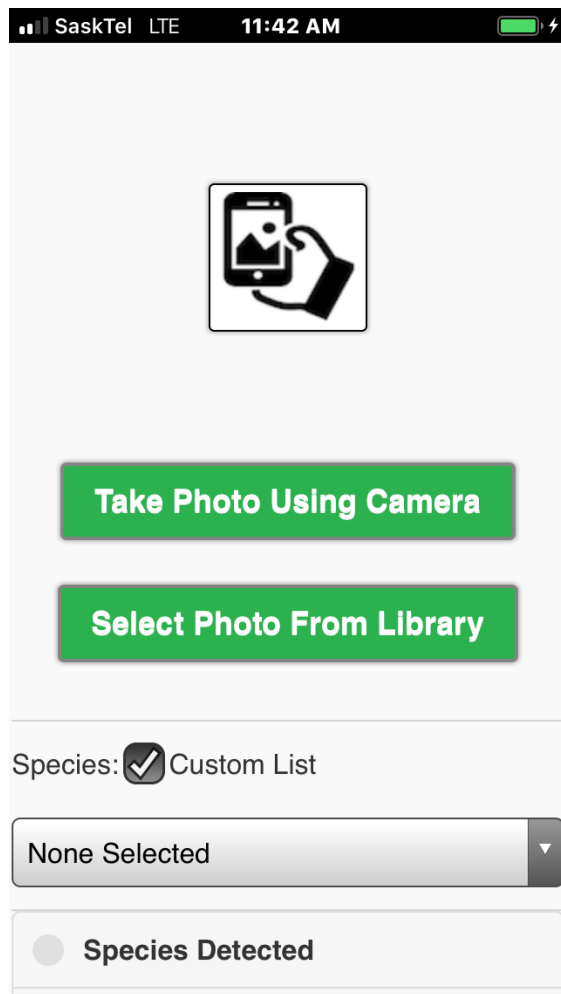
Select the species you are observing, select DONE

Check your map to ensure your point is correct

Hit Save



# Mobile – Photo



Take a photo:

We use the photo to “confirm” observations

Currently the mobile application stores 1 photo per observation

Take a good photo close enough that identifying features are visible.

However please be aware that the larger (higher resolution, more pixels) an image is the longer it takes to download.

It is suggest that your camera resolution be set at 1Mb or less

# Mobile – Species, Date, Map

Species: ☒ Custom List

None Selected ▼

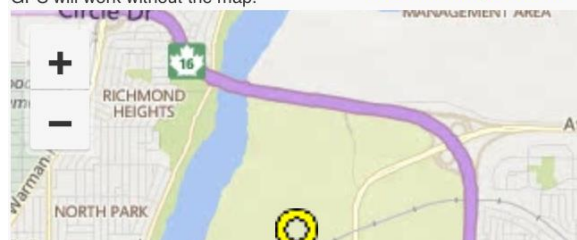
☐ Species Detected  
☐ Species Not Detected

Date:  
Apr 22, 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 Accuracy: 5051 m  
GPS will work without the map.



Select the species you are observing or looking for

Choose Species Detected if present

Or

Choose Species Not Detected if not present

Date is default to current date

Map is set to default preference but can toggle between Road or Satellite

You should let your device collect your location automatically but you can manually place your point

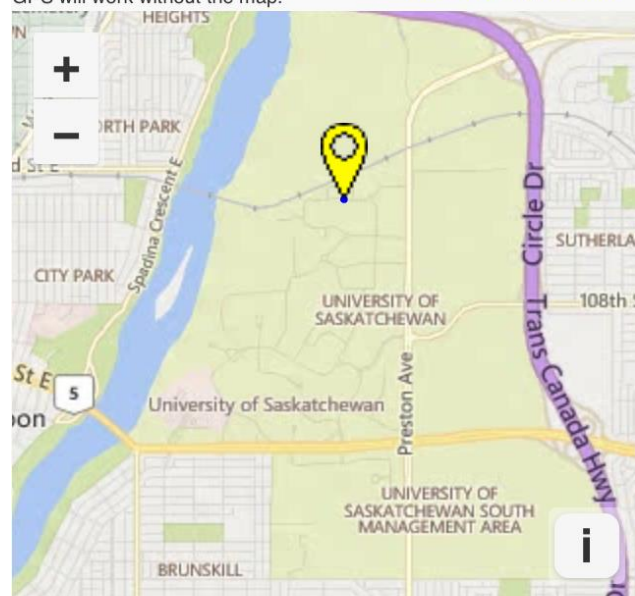
CHECK YOUR LOCATION AND ACCURACY

# Mobile – Location

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: 5051 m



Location (Longitude, Latitude):

-106.6282864, 52.1422426

If the map is not visible, your phone probably does not have connectivity (or did not at the time the app was opened). As long as your GPS is enabled, the coordinates should still reflect your location. If you know you will be out of data coverage while collecting data, you can pre-load the maps while in connectivity by opening the app, and zooming to the location you plan to be, then leave the app open until the data is collected.

OR

Place the point: If you would like to manually move the point, make sure to uncheck the GPS box just below the date field, then hold your finger on the point for 2 seconds to move to your desired location. Once you are satisfied with your location select the “Save” button on the lower left corner of the tablet.



# Mobile – Project, Organization

iMap 3 Project: (Optional)

iMap 3 Organization: (Optional)

Time Searched (in minutes):

**Observation Comments:**

**Save**

**Cancel**

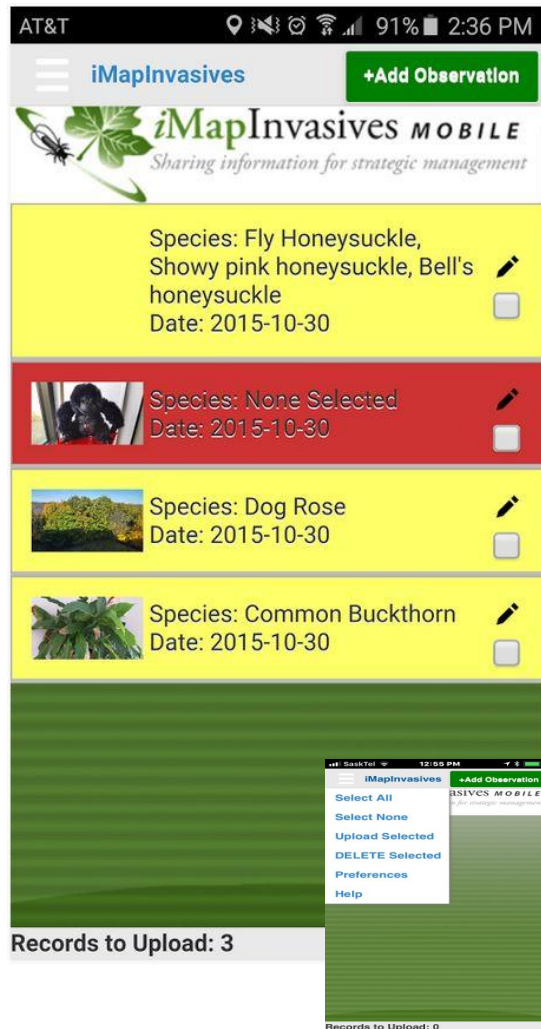
Project and Organizations are setup using your account and are part of the lists retrieved and are chosen if you want your observation associated with a specific organization or project.

Enter time searched if applicable (optional)

Enter any additional information in the comment box.

Once you are satisfied with your observation select the “**Save**” button on the lower left corner of the tablet.

# Mobile – Uploading your observation



After you have created the observation(s) for your desired location(s), you will need to upload them into the iMapinvasives database online. Please remember your device will need to have WIFI or data connectivity. We recommend uploading only once connected to a stable WiFi signal since the photo files can be quite large. If you are using a mobile network, data fees may be assessed by your wireless carrier.

Your newly created observation(s) will be located on the top of the homepage, most recent first. To begin the upload process, select each individual observation or press the upper left menu bar and choose “Select All”. Make sure the observation(s) you intend to upload have a small check mark below the edit icon on each record. Once you are satisfied with your selection(s), return to the upper left menu bar and select “Upload Selected”. Your selection will be verified and the point will be added to the database.

# Exploring iMap Invasives Mobile



You must set up your Google or Apple ID accounts to download the FREE Application to your devices

Browsers: Google Chrome, Firefox, Safari  
(NOTE Explorer is NOT supported)

Your GPS on your device must be enabled to automatically collect your location

Your device's camera must also be enabled to take photos

This application collects more detailed information including point, polygon, and line data.

However, it requires more technical information and expertise on the part of the user



# Survey 123 Mobile Guide

## Setup and Usage Guide for the iMapInvasives Survey123 Form

Installing the app and downloading the survey form

### 1. Download the Survey123 for ArcGIS app

- a. For easy reference, use one of the following links to download the app, depending on your device's operating system.

Link to the Apple App Store:

<https://apps.apple.com/us/app/survey123-for-arcgis/id993015031>

Link to the Google Play Store:

<https://play.google.com/store/apps/details?id=com.esri.survey123>

- b. After opening the Survey123 app for the first time, you do **not** need to click "Get Surveys" or sign-in to an ArcGIS Online Account – instead simply proceed to the next step.

### 2. Setup the iMap Survey Form

- a. Once the Survey123 app has downloaded and installed, open a web browser on the device and go the following short URL:

<https://arcg.is/vfeTW>

- b. Once the page loads, tap the gray box titled: **Open in the Survey123 field app** (circled in orange, right).



*Note, on iOS devices, this step may happen automatically.*

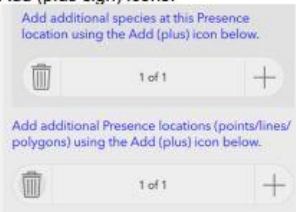
- c. The iMapInvasives Survey123 form will then download into the Survey123 app.

Once the survey form is visible (similar to the screenshot at right), it is downloaded and ready for use offline.



### General iMap Survey123 Form Tutorial

1. Complete the **General Questions** section, which includes information about the observer, date, and the state/province in which the record is being created.
2. Create a **Searched Area Polygon**. (Ensure that the polygon is large enough to encapsulate and Presence and/or Treatment records which will also be associated with the record.)
3. Complete any **Searched Area Attribute Fields**, as desired to describe the searched/surveyed area.
4. Create **Presence** record(s).
  - a. Select the geometry type to represent the Presence – point, line, or polygon.
    - Use the Map icon  to create a line or polygon.
    - If representing the location as a Point, tap the Target icon  to place a point at your current location.
  - b. Indicate the **Present Species** associated with the Presence record.
    - Start by entering the species. Search for a specific species by either scientific or common name using the auto-complete dropdown. (Note that the species list will be filtered to the tracked state/province list which was selected in the **General Questions** section.)
    - Complete any remaining fields representing the Present Species as desired.
    - Once your Present Species record is complete, you have two options:
      - i. Create an additional Present Species (to record additional species at this particular point/line/polygon location) using the first set of Delete (trash) or Add (plus sign) icons.
      - ii. Create another Presence record (to create a new Presence point/line/polygon) using the second set of Delete (trash) or Add (plus sign) icons.




# Survey 123 Mobile Guide


## 5. Create **Not Detected** record(s)

- To create a Not Detected record, select the plus icon within the **Not Detected Records** section.
- There is no polygon to create, as the entire **Searched Area** polygon will represent the area in which the species was not detected.
- Complete any other desired fields.
- If needed, add additional Not Detected records using the Delete (trash) or Add (plus sign) icons within the **Not Detected Records** section.

## 6. Create **Treatment** record(s)

- Within the **Treatments Applied** section, add a new treatment record using the plus icon.
- Create a polygon to represent the treated area.
  - To use the Searched Area polygon to represent the treatment area polygon, select **Yes** to the **Use entire Searched Area for this Treatment record?**
  - Otherwise, select the map icon  to create a new polygon. (Note that the treatment polygon should fall within the Searched Area polygon.)
- Complete the remaining treatment fields as desired. Note that certain fields will be displayed based on selections to other fields.
- If needed, add additional Treatment records using the Delete (trash) or Add (plus sign) icons within the **Treatments Applied** section.

## 7. Upload the record

- Once the record is complete, click the Check icon  at the bottom right of the survey form
  - The survey form will be validated for errors.
  - If connected to the internet and the form passes validation, it can either be uploaded immediately or saved to the **Outbox** (which queues records for later upload).
  - If offline, the validated record can only be saved to the Outbox.



- To upload records from the outbox:  
Once connected to the internet, return to the main iMapInvasives Survey123 App menu and select the **Outbox**, where the records pending upload will be visible. To upload all records pending upload at once, select the **Send** button.



- Note that it may take up to an hour for the record to be visible in the iMapInvasives online platform, and that all Presence records will be entered as "Unconfirmed."

# Survey 123 Mobile Guide

## General Usage Tips

- If you have an iMapInvasives account, determine your **Person ID** before using the survey form.

To do so, sign-in to your account from a web browser:  
<https://imapinvasives.natureserve.org/imap/login.jsp>

Then select the main menu at the top left and select **My Account**. Your Person ID will be visible on this page.

For example, in the screenshot (right), the Person ID is **90333**.



- Create a Searched Area polygon that is large enough to contain the Presence, Not Detected, and Treatment areas.
- Once a Searched Area polygon is created, it can be utilized as the Presence polygon and/or Treatment polygon. See specific instructions above for more details.
- Treatment target species should have an intersecting Presence record for the same species. If you are not certain if a Presence record already exists in iMapInvasives for the treatment target species, please create an accompanying Presence record in Survey123.
- Utilize GPS for polygon or polyline:

When creating a line or polygon, your current GPS location can be utilized to create a vertex at your current location. To do so, select the icon of a target accompanying a vertex (circled in orange in screenshot, right).



- Utilize the **Favorite Answers** feature after you have completed the **General Questions** section. Subsequent surveys can then have this information automatically copied into the fields captured by the "favorite answers" to help speed data collection. (Although be sure the correct state is selected when collecting data.)

For more information on using the **Favorites** feature, see the section of this Esri support document titled *Favorite answers*:  
<https://doc.arcgis.com/en/survey123/desktop/create-surveys/prepopulateanswers.htm>

## Favorite answers

After you've entered answers into the Survey123 field app, you can save them to use in subsequent surveys by setting your favorite answers. Using the menu in the upper right corner, you can set the current state of your survey to act as your favorite answers.

Once you've set your favorite answers, you can insert them into new surveys by opening the menu and clicking **Paste answers from favorite**.

If at any time you need to change your favorite answers, enter them into your current survey and click **Set as favorite answers**. If you enter repetitive information in a field, you can use your current answers to prepopulate subsequent surveys. The survey that you use to set your favorite answers is marked with a star.

### Note:

If the **Sent** folder has been disabled, you cannot use a sent survey for favorite answers. In this case, saving your survey with favorite answers as a draft allows the **Paste answers from favorite** option to work.



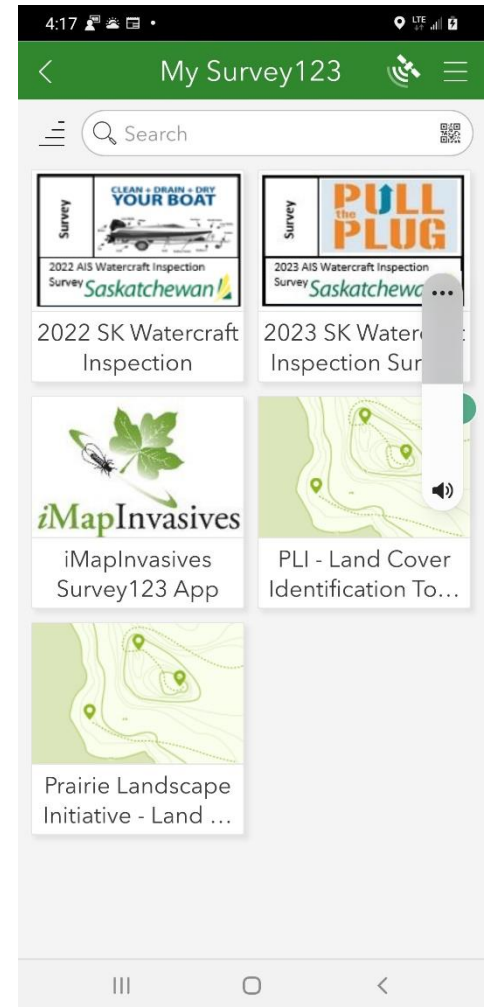
# Survey 123 – Download the Form



You must have an active user account on the main iMapInvasives Platform Please Sign-Up. Once you have a valid account please download the Survey 123 App from the Google Play or Apple Store

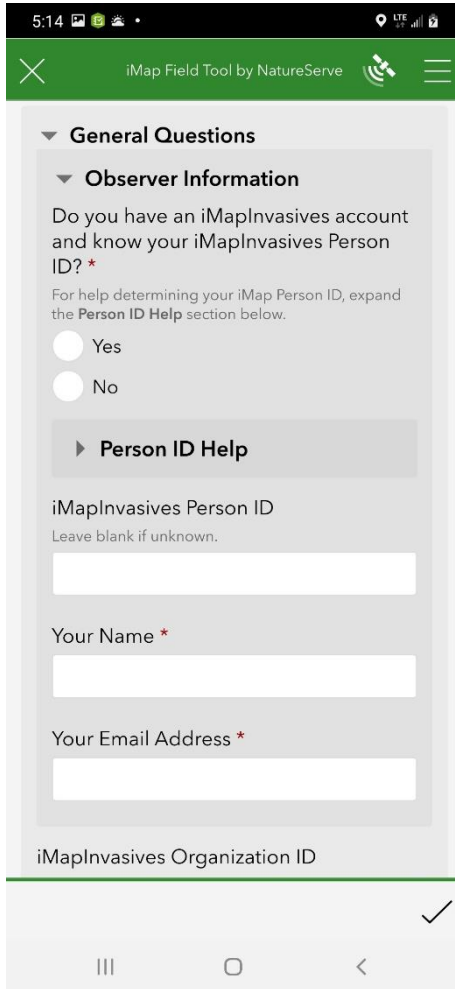
Download the iMapinvasives survey form by typing <https://arcg.is/vfeTW> in your browser

You should now be able to collect data by opening the Survey 123 app choose continue without signing in and select the iMapInvasives Icon in My Surveys





# Survey 123 – Data Collection



5:14 iMap Field Tool by NatureServe

General Questions

Observer Information

Do you have an iMapInvasives account and know your iMapInvasives Person ID? \*

For help determining your iMap Person ID, expand the Person ID Help section below.

☐ Yes

☐ No

Person ID Help

iMapInvasives Person ID

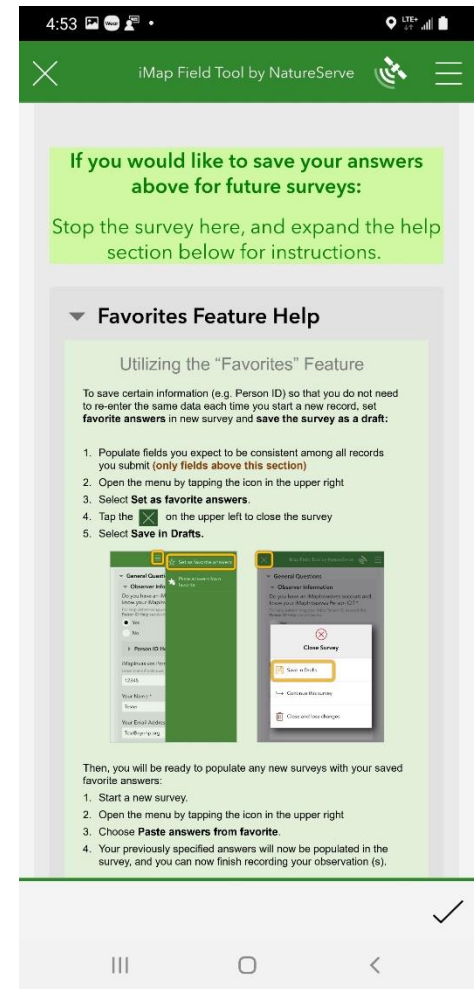
Leave blank if unknown.

Your Name \*

Your Email Address \*

iMapInvasives Organization ID

- Unless you want to input you Person ID number, Name and email address each time you collect data. You will want to save this repetitive data in your Favorites
- You will need your Person ID Number Your Name (case sensitive) and Your Email Address (case sensitive) that is associated with the iMapInvasives User Account you signed up for
- Numbers will also be associated with any Organizations or Project that are subsequently setup
- Set Saskatchewan as your jurisdiction



4:53 iMap Field Tool by NatureServe

If you would like to save your answers above for future surveys:

Stop the survey here, and expand the help section below for instructions.

Favorites Feature Help

Utilizing the "Favorites" Feature

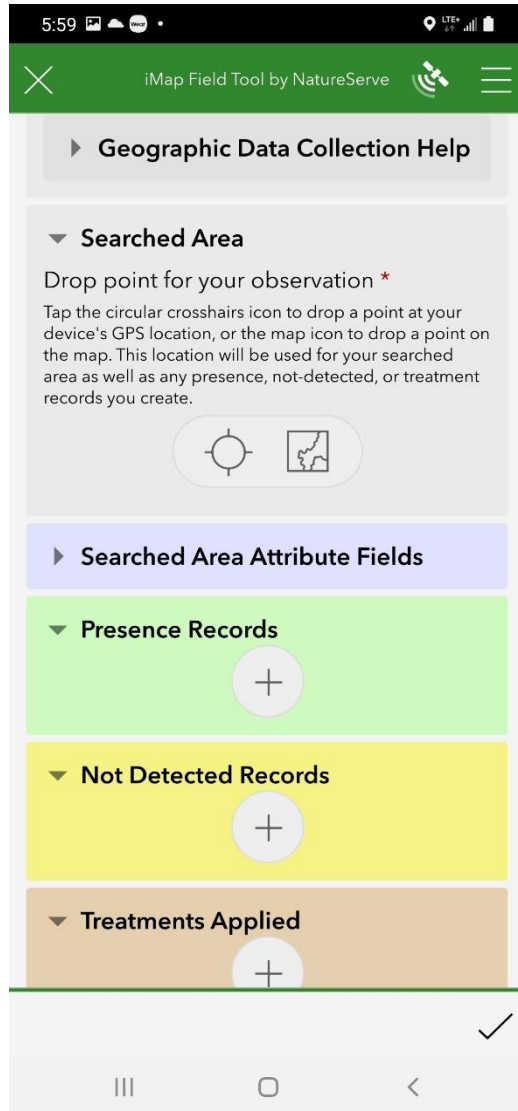
To save certain information (e.g. Person ID) so that you do not need to re-enter the same data each time you start a new record, set favorite answers in new survey and save the survey as a draft:

1. Populate fields you expect to be consistent among all records you submit (only fields above this section)
2. Open the menu by tapping the icon in the upper right
3. Select Set as favorite answers.
4. Tap the ☒ on the upper left to close the survey
5. Select Save in Drafts.

Then, you will be ready to populate any new surveys with your saved favorite answers:

1. Start a new survey.
2. Open the menu by tapping the icon in the upper right
3. Choose Paste answers from favorite.
4. Your previously specified answers will now be populated in the survey, and you can now finish recording your observation (s).

# Survey 123 – Data Collection



5:59

iMap Field Tool by NatureServe

Geographic Data Collection Help

**Searched Area**

Drop point for your observation \*

Tap the circular crosshairs icon to drop a point at your device's GPS location, or the map icon to drop a point on the map. This location will be used for your searched area as well as any presence, not-detected, or treatment records you create.

Icons: Circular crosshairs, Map icon

**Searched Area Attribute Fields**

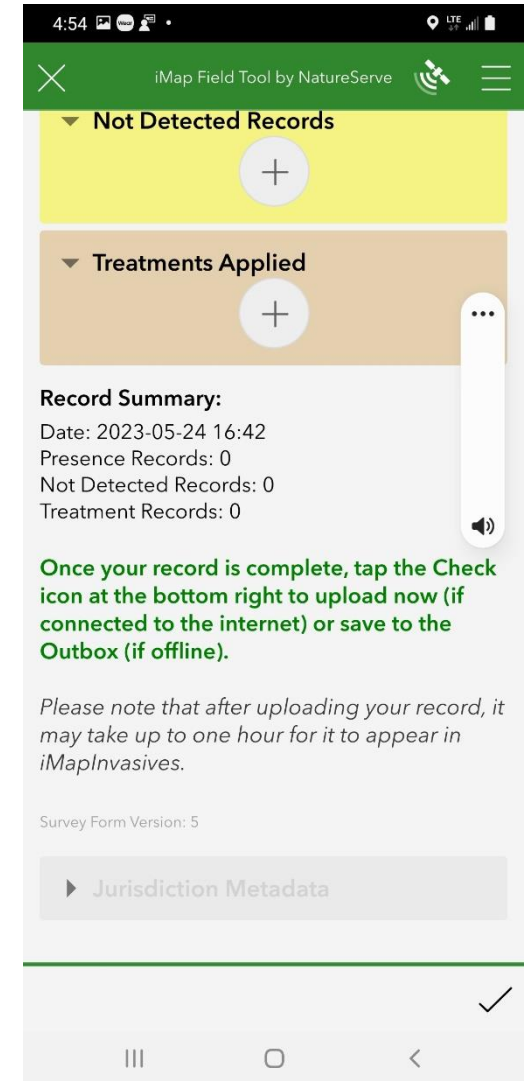
**Presence Records** (+)

**Not Detected Records** (+)

**Treatments Applied** (+)

✓

- There are various data fields that can be filled out in each section
- Searched area is used to define you location use the point target or draw you own
- Tap on the Title of Each Section to open the sections and add as much or as little information as you want in the various fields
- Tap the Presence + Plus sign to add an invasive species, take photos and add other information
- Do the Same With Not Detected and Treatment Applied Sections
- Use the Green Check Mark when finished collecting data for your record



4:54

iMap Field Tool by NatureServe

**Not Detected Records** (+)

**Treatments Applied** (+)

**Record Summary:**

Date: 2023-05-24 16:42  
Presence Records: 0  
Not Detected Records: 0  
Treatment Records: 0

Once your record is complete, tap the Check icon at the bottom right to upload now (if connected to the internet) or save to the Outbox (if offline).

Please note that after uploading your record, it may take up to one hour for it to appear in iMapInvasives.

Survey Form Version: 5

**Jurisdiction Metadata**

✓

# How much data is coming and how



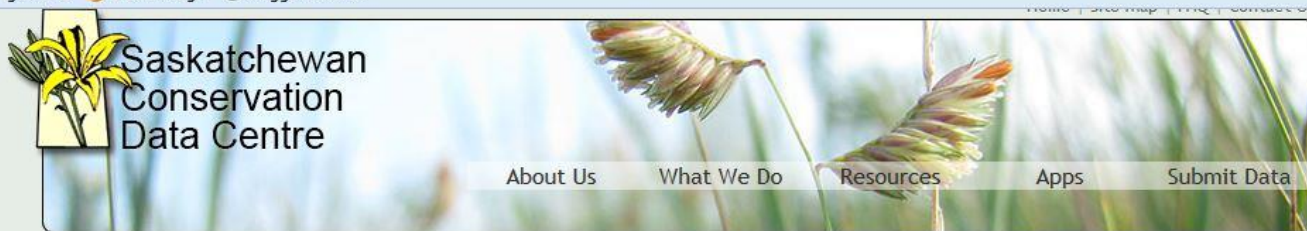
- 898 registered users
- 104 species reported from 226 species (plants, animals, insects) tracked including all noxious, prohibited and nuisance species in the provincial Weed Control Act and Fisheries Act. Current list is made up of alien/non-native/introduced species in Saskatchewan considered “invasive” (negiliable/persistent to very/highly invasive) in native habitats
- Submissions by mobile, bulkloads, email submissions, and account users
- Observations approximately 45000 mostly points



# *Invasive Species Concerns in SK*







What is iMapInvasives?	iMapInvasives: Data Entry Resources	Adult Invasive Mussel Monitoring (AIMM)	Invasive Species Campaigns & Outreach Material	Additional Resources
------------------------	-------------------------------------	---	--	----------------------

- Species Lists
- Invasives
- Publications
- Protocols & Guidelines
- Image Database
- Ecoregions
- Related Links
- FAQ

The Saskatchewan Conservation Data Centre administers a GIS-based invasive species mapping & data management tool, **iMapInvasives**, which provides a platform for open data exchange and communication between regional invasive species efforts. By providing a central data repository for invasive species information, the SKCDC provides easily accessible, up-to-date information for land managers and citizen scientists.



#### What is iMapInvasives?

- An online, interactive invasive species mapping tool for Saskatchewan
- Stores occurrence, treatment, and survey records for non-native animal and plant species
- Facilitates Early Detection/Rapid Response through email alerts
- Data can be submitted through bulk uploads or quality-controlled online submissions

#### Who is iMapInvasives for?

- Land Managers (provincial, local, & community agencies, NGOs): explore existing data & manage your data
- Researchers: access current and historic non-native species occurrence, treatment, and survey records
- Citizen Scientists: become a registered user and enter your invasive species sightings
- Educators: engage students in science lessons while increasing the coverage of the database

#### How will iMapInvasives support my work?

- Free access to a province-wide database where you can store and manage your data
- Newly developed ArcGIS REST service provides organizations with in-house GIS and the ability to access a live link to the iMapInvasives database
- Stay connected! Keep up-to-date on other invasive species initiatives in the province
- Perform GIS spatial analyses and query data by species, location, organization, etc.
- Set up email alerts for your area and/or species of interest
- Produce customizable maps and reports

# *Thank you!*



Beryl Wait  
Invasive Species Coordinator  
Saskatchewan Conservation Data Center

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