



# MAPPING INVASIVE SPECIES IN MONTANA

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AN EDDMAPS WEST USER GUIDE



*Android  
Edition*

# CONTENTS

Introduction.....3  
About EDDMapS West.....6  
**Android App Version**  
    Getting Started: Dashboard.....7  
    Before You Begin.....7  
    Finding Species Within the App.....8  
    Species Profiles.....9  
    Distribution Maps.....9  
    Report a Sighting.....10  
    Negative Survey.....12  
    Upload Queue.....12  
**Desktop Version**  
    Getting Started: Homepage.....13  
    Navigation Bar.....13  
    Create an Account.....14  
    Report Sightings.....14  
    I Submitted a Report. What Happens Next?.....16  
    Distribution Maps.....17  
    Species Information.....18  
    Tools and Training.....19  
    My EDDMapS.....20  
    Verification Process.....21  
Frequently Asked Questions.....22  
Montana Noxious Weed List.....23

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Cover photos (top, left to right): University of Alaska – Fairbanks Cooperative Extension Archive, [invasive.org](http://invasive.org); Michael Shephard, USDA Forest Service, [invasive.org](http://invasive.org); Chris Evans, Illinois Wildlife Action Plan, [invasive.org](http://invasive.org); (bottom) Bureau of Land Management.

*Funding for this publication was provided by the Montana Noxious Weed Trust Fund.*



## Introduction

*By Kim Goodwin, Montana Weed Prevention Areas Program*

Noxious weeds are non-native or exotic plants with the ability to affect beneficial land uses or harm native plant communities when introduced (Montana Code Annotated, title 7, chap. 22). The noxious weeds of Montana (see page 23) are regulated by state laws that provide management guidance and penalties for lack of control by landowners. Some noxious weeds can be invasive, for instance through rapid spread and displacement of native plants, resulting in significant losses of grazing land and wildlife habitat. Accordingly, the public and private sectors expend considerable resources in preventing and managing invasions in Montana.

Invasive noxious weeds are difficult to manage and therefore likely to spread to new sites. Successful management requires an integrative approach that combines public support and policy, interagency and landowner coordination, and multiple control strategies. Information for control strategies that takes into account abundance and distribution data of weeds is important for prioritizing weed species and targeting sites for management and monitoring. For example, non-infested habitat vulnerable to invasion should be targeted for conservation under early detection and rapid response management. EDRR relies on continuous monitoring to find and remove invasions early, while infestations are small and can be affordably eradicated, minimizing total costs of control.

Comprehensive, range-wide maps of the distribution (presence and absence) and relative abundance of invasive weeds, regularly updated over time, provide valuable data for delivering effective management with limited resources. Understanding the spatial proximity and relative magnitude of weeds in a geographic area enables managers to conduct accurate weed risk assessments, develop specific control strategies, prioritize monitoring and outreach efforts, and establish baselines for long-term conservation of habitats. Despite the strong need for distribution data, this information is largely unavailable or incomplete and may be partly attributable to the high cost and effort required to collect field data over large areas. For example, due to

funding constraints, managers will often allocate limited resources to weed control monitoring efforts. Uncertainty by managers on the value of mapping and monitoring to weed program operations may hinder decisions on resource investments in mapping and monitoring. Spatially biased coverage (gaps) is common and usually results from manager reliance on surveying and mapping areas with a high likelihood of weeds, such as along roads, trails, waterways, etc. Such purposely biased surveys are an effective approach when the objective is to locate invasions. Unbiased surveys that target areas at a lower risk of invasion, for instance remote areas of low human activity, are also important for locating weeds in unlikely areas and establishing baselines for long-term conservation of habitats.

Another explanation for the unavailability of data on species distributions is that these data may exist but are difficult to find or simply not accessible. Data on invasive plants often exist in a large variety of formats as isolated and off-line datasets among the hundreds of public and private organizations and agencies in the western United States currently collecting data. For example federal land management agencies use proprietary systems to store and retrieve data on the lands they manage. These databases are not accessible to other agencies or the public, making information sharing of distribution data difficult. State agencies and county weed management programs vary widely in how they collect, store, share, re-use, and redistribute weed data. Most state agencies do not play key roles in centralizing access to and redistribution of their state's invasive plant data which could ensure data preservation and accessibility.

Data sharing and integration frameworks can minimize these problems of inconsistency in data collection and reporting and accessibility to data, as well as address gaps in our knowledge of invasive plant distributions. The Early Detection and Distribution Mapping System West (EDDMapS West) captures and integrates data from multiple sources, fostering data sharing through a single gateway by holding data and making it readily available to users. EDDMapS West was originally developed in 2010 for the Missouri River Watershed Coalition and its respective states: Colorado, Montana, Nebraska, North Dakota, South Dakota, and Wyoming. In 2011, EDDMapS West expanded to include seven additional states (Idaho, Kansas, Missouri, Nevada, Oregon, Utah, and Washington) with funding support from the Montana Noxious Weed Trust Fund, administered by the Montana Department of Agriculture, and the US Forest Service, State and Private Forestry Program.

EDDMapS West is a web-based data management system for reporting, storing, mapping, and retrieving invasive species data in the western US. This system exists as a publicly available data repository in support of data sharing and integration of invasive plant distribution data. These data are contributed by multiple data providers and mapping projects through file uploads or web services. This information is combined with data from other databases and such diverse sources as volunteer observations, and then aggregated into a centralized database for public dissemination via a web portal.

The desktop version of EDDMapS West provides interactive state, county, and point distribution maps using JavaScript, Google Maps, and ArcGIS Server. This version also provides online archives of data, species profiles, and automatic delivery of customized e-mail alerts. For instance, users can be notified of new occurrences by species and within a geographic area of interest. The desktop version allows users to submit, edit, or update their reports on invasive species observations. Reporting of observations does not require GPS or GIS experience or software. Rather, infestations are indicated by marking the location with a point or drawing polygons using Google Maps. A slightly scaled-down version of EDDMapS West is available as smartphone applications for Android and Apple iPhone, iPad, and iPod Touch platforms. This version provides species profiles and distribution maps, and allows users to submit reports on invasive plant presence (sightings) or absence (negative surveys). Users indicate presence or absence of infestations automatically using their mobile device GPS system or by navigating to the location and dropping pins or drawing polygons. User reports are submitted in real-time directly from their mobile device to the EDDMapS West database. Both the desktop and app versions require invasive species photos with the sighting report. Experts verify identifications as new sightings are submitted to ensure data accuracy.

The purpose of this publication is to illustrate the steps for reporting invasive species observations to EDDMapS West using the desktop and mobile device versions, as well as viewing invasive species profiles and distribution maps, generating reports, customizing e-mail alerts, and formatting and uploading bulk data. Several other web-based GIS data management and aggregation programs exist to store and retrieve distribution data, although these systems are generally for smaller geographic areas. These include CalWeedMapper ([calweedmapper.cal-ipc.org](http://calweedmapper.cal-ipc.org)), which also records whether populations are spreading and if they are under management, and Oregon WeedMapper ([www.weedmapper.org](http://www.weedmapper.org)) and iMapInvasives ([www.imapinvasives.org](http://www.imapinvasives.org)), which provide integration and management of invasive plant data for natural resource managers in Oregon.

## About EDDMapS West

The Early Detection and Distribution Mapping System (EDDMapS) was developed in 2005 by the Center for Invasive Species and Ecosystem Health at the University of Georgia as a way to map and keep track of invasive species infestations in the southeastern United States. The web-based system was designed to fulfill three basic needs: simplify the reporting process, alert managers to new reports, and generate distribution maps for the reported species. EDDMapS was designed to work across agency, organization, and disciplinary boundaries to offer a real-time picture of invasive species distribution across the country.

Over the past 10 years, EDDMapS has grown along with new technology and been expanded to cover all of the US and Canada. In 2010, several states, including Montana, pooled their resources to launch a new version of EDDMapS customized for the western US, spearheaded by the Missouri River Watershed Coalition and Center for Invasive Species Management at Montana State University. The resulting product, EDDMapS West, focuses on species that are new or potential new invaders to the western states. EDDMapS West was designed with multiple user groups in mind, including local, state, and federal agencies, private landowners, educational institutions, outreach groups, and concerned citizens.

## How EDDMapS West Works

Each partner state maintains a list of target species that is updated constantly. When a user submits a report, it is automatically sent to an official state verifier (usually the state weed coordinator or a designated alternate). The verifier forwards the alert to the county weed coordinator or Extension agent who uses the report details and GPS coordinates to track down the reported species and physically verify it. Only confirmed reports are added to the EDDMapS database. If the verifier is unable to confirm the report, a specimen is taken and sent to a diagnostic laboratory for verification. Incorrect reports (for example, a non-invasive species) are deleted. Confirmed EDDMapS West reports are added to the broader EDDMapS database, which can be searched, queried, and downloaded in a variety of formats, all without the use of specialized software.

## States and Partners Involved

Center for Invasive Species and Ecosystem Health (University of Georgia), Center for Invasive Species Management (Montana State University), Colorado Department of Agriculture, Greater Yellowstone Coordinating Committee, Idaho State Department of Agriculture, Kansas Department of Agriculture, Missouri Department of Agriculture, Missouri River Watershed Coalition, Montana Department of Agriculture, Nebraska Department of Agriculture, Nevada Department of Agriculture, North Dakota Department of Agriculture, Oregon Department of Agriculture, South Dakota Department of Agriculture, US Forest Service, Utah Department of Agriculture and Food, Washington State Department of Agriculture, Wyoming Department of Agriculture.

# Android App

Get it for free on the Google Play store.  
Compatible with most Android devices.

## Getting Started: Dashboard

The Dashboard is the app's main menu. You may return to it from any page by tapping the back/return icon (<), which you will see at the top left corner of each screen, next to the EDDMapS West logo.

### SPECIES BY CATEGORY

View species lists by type: aquatics, forbs, grasses, insects, etc.

### MY SPECIES LIST

Customize a list of species you report or survey for regularly.

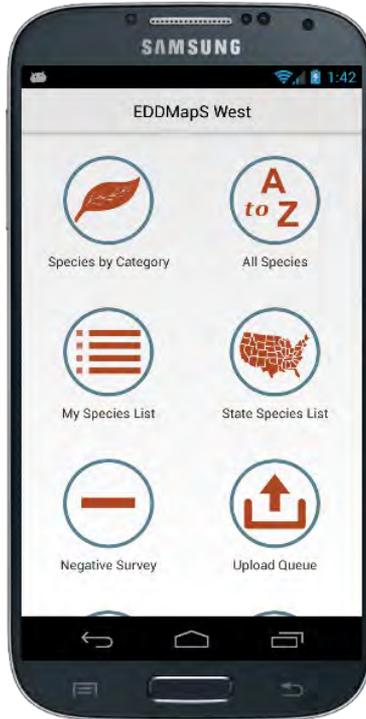
### NEGATIVE SURVEY

Track and report species which were not seen in a designated area.

Scroll down for:

### EDDMAPS LOGIN

Login to submit reports in your upload queue, or create an account.



### ALL SPECIES

A searchable list of all species included in the app.

### STATE SPECIES LIST

View noxious weed lists for 13 western states.

### UPLOAD QUEUE

Species reports are held in your queue until you are signed in and have a network or wi-fi connection.

Scroll down for:

### MORE OPTIONS

Learn more about EDDMapS, submit feedback to the developers, and more.



### Before You Begin: Sign Up and Login

On the Dashboard menu, scroll down and tap the EDDMapS Login icon. Tap *Register with EDDMapS* below the password field.

Complete the form and tap *Submit*. You may be prompted to enter your new username and password on the Login page. You are now ready to submit reports.

If you already have a

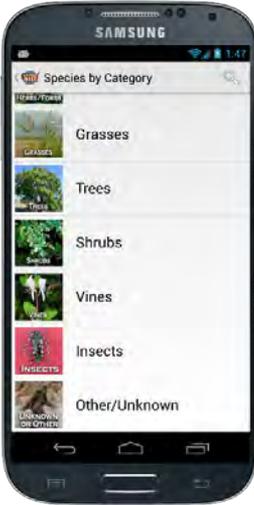
username and password for any of the EDDMapS websites, you may use it to login to the app.

*Note: You will use this same info to login to [www.eddmaps.org/west](http://www.eddmaps.org/west).*

## Finding Species Within the App



**SPECIES BY CATEGORY**



If you can't find a species tap Other/ Unknown.



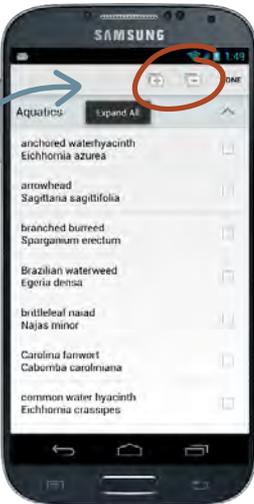
**ALL SPECIES**



Search for a species by scientific or common name.



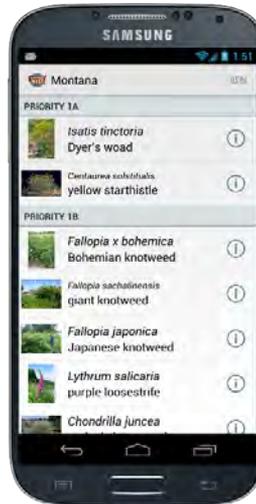
**MY SPECIES LIST**



Tap the plus and minus icons to add or remove species from your list.



**STATE SPECIES LIST**



## Species Profiles

View a species profile by tapping the species name or the  icon.

### IMAGES

View more images of the species.

### INFO

See a detailed description.

### MAP

View species distribution on a map.

### REPORT

Report a sighting of the species.

Tap the EDDMapS icon to return to the previous page.



Pinch the image inward to zoom out.



Pinch the image outward to zoom in.



Tap the star to add to your Species List.



Swipe the image right or left to view more photos.

## Distribution Maps

View confirmed species sightings on a map and access report details. Note: All verified reports of the species in the EDDMapS database appear on the distribution map.



Pinch the map outward to zoom in, and use your finger to navigate around the map.

Large circles indicate the number of reports in that particular area. Zoom in for detailed info.



Tap to toggle between map and satellite view.

Zoom in until you see an individual pin, then click it and tap More Information to view the report source, date, etc.

## Report a Sighting

View a species profile by tapping the species name or the icon.

### 1. ATTACH IMAGE

It is important to include images with your report to assist the verifier. Try to include an image of the whole plant (or infestation), as well as close ups of the leaves, flowers, or stems.

Tap the camera icon, then tap *Take a Picture* or *Choose from Gallery* to upload a photo from your phone's photo gallery. Tap the camera again to add another image (you may include up to five).

### 2. LOCATION

Your current location is automatically entered. To change the location, tap the green grid icon. A map will appear with your current location, then tap *Point* or *Polygon* (above the map).

**Point:** A pin will appear on your current location. Pinch to zoom in/out until you find the correct area. Tap and hold to drop a pin in the correct location, then tap *Done*.

**Polygon:** Pinch to zoom in/out until

you find the correct area of the infestation. Then choose *Scribble* or *Vertices* mode to mark the infestation (see instructions on page 11).

### 3. TIME SPENT IN MINUTES

Estimate the time it took you to walk the perimeter of the infestation.

### 4. INFESTATION

Estimate the overall size of the infestation. Be sure to mark the correct unit of measure: acres or square feet.

### 5. DENSITY

Mark the density of the infestation: low, medium, or high.

### 6. NOTES

Add any pertinent information for the verifier in this field.

### 7. SAVE

Tap *Save* to add the report to your Upload Queue. To submit the report, see page 12.



Tap the camera icon attach images.

Tap the green grid icon to change the report location.



Add notes for the verifier, such as helpful details about the location.

Tap Save to add the report to your Upload Queue.

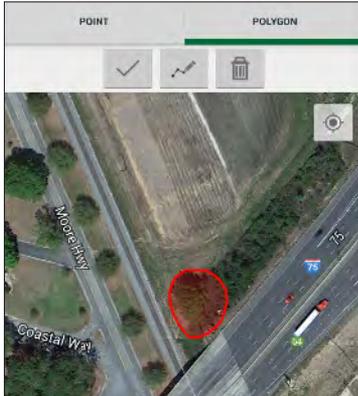
## Report a Sighting (continued)

Enter a location using a polygon.



### SCRIBBLE MODE

Draw the perimeter of the infestation

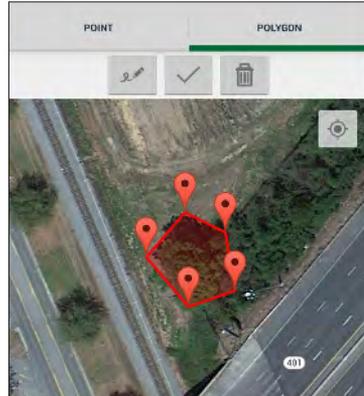


1. Tap the area where the infestation occurs. A blue dot will appear; tap and hold the blue dot and, without releasing your finger, trace the perimeter of the infestation.
2. Tap the check mark icon to view the total area of the polygon. If it is correct, tap *Done*. To erase the polygon and start over, tap the trash icon.



### VERTICES MODE

Drop pins to outline the infestation



1. Tap the map to drop a pin.
2. Continue to tap and drop pins to outline the perimeter of the infestation. You may use as many pins as needed.
3. Tap the check mark icon to view the total area of the polygon. If it is correct, tap *Done*. To erase the polygon and start over, tap the trash icon.



### More

*Additional features.*

#### LOGOUT OF EDDMAPS

Tap *User Information*, then tap *Logout*.

#### STATE CONTACTS

Tap *State Contacts* to

view contact details for weed coordinators in the western US.

#### PLANT TERMINOLOGY

Tap *Glossary* for a list of plant identification terms.

#### VIEW PLANT DIAGRAMS

Tap *Diagrams* for an

illustrated guide to leaf shapes, flower parts, root types, and more.

#### SEND FEEDBACK

Tap *Feedback* to send comments or questions to the app developer.

## Negative Survey

A negative survey is used to report which species were not seen in a given area.

### 1. DATE & TIME

This time is automatically entered. Date and time can be changed by tapping on the date/time displayed.

### 2. LIST OF SPECIES

Tap *Edit* to bring up the complete list of species included in the app, sorted by category. Tap the name of each species being surveyed for. When finished, tap *Done*.

### 3. TIME SPENT IN MINUTES

Indicate the time (in minutes) spent surveying.

### 4. AREA SURVEYED

Tap *Edit*. A map, in satellite mode, will

show your current location. Pinch to zoom in/out to find the correct location, then tap *Point* or *Polygon*.

**Point:** A pin will appear on your current location. Pinch to zoom in/out until you find the correct area. Tap and hold to drop a pin in the correct location, then tap *Done*.

**Polygon:** Use *Scribble* or *Vertices* mode to delineate the area of the negative survey (see page 11). When finished, tap *Done*.

### 5. NOTES

Add any extra information, such as details about the location.

### 6. SAVE

Tap *Save* to add the report to your upload queue.

## Upload Queue

*Submit your report(s).*

From the Dashboard menu, tap the Upload Queue icon. Your saved report(s) will appear in a list. Tap a report to make changes before uploading. When you are ready to submit your report(s), tap *Upload*. All reports in your list will be uploaded at the same time.

### Helpful Hints

- If you are not logged into the app when attempting to upload reports, an error popup message will appear. Navigate back to the Dashboard menu and login, then return to the Upload Queue and try again.
- If a report is unable to be uploaded due to a poor data connection, it will remain in your Upload Queue and you can try again later.
- To edit or delete a report, or to check its verification status, visit [www.eddmaps.org/west](http://www.eddmaps.org/west). See page 20 for more on editing, viewing, and deleting reports.



Saved reports are separated by type: positive reports and negative reports (negative surveys).

# Desktop Version

Use the Desktop version to edit or update reports, download distribution maps, set up species alerts, and more.

## Getting Started: Homepage

[www.eddmaps.org/west](http://www.eddmaps.org/west)

**EDDMapS West**  
Early Detection & Distribution Mapping System

Home | Report Sightings | Distribution Maps | Species Information | Tools & Training | My EDDMapS | About | Login | Register

**EDDMapS West**

EDDMapS West was originally developed and launched for the six Missouri River Watershed Coalition headwater states of Colorado, Montana, Nebraska, North Dakota, South Dakota, and Wyoming in September 2010.

Thanks to tremendous interest throughout the West, and support from the Montana Noxious Weed Trust Fund and the US Forest Service-State and Private Forestry Program, the system quickly expanded to include seven additional western states (Idaho, Kansas, Missouri, Nevada, Oregon, Utah, and Washington) in 2011.

EDDMapS West is:

- ✓ Fast and easy to use - no knowledge of GIS required
- ✓ Allows for reporting of select invasive plant species in the western states
- ✓ Automatically alerts state weed coordinators when

**Statistics**

959,841 County Reports  
779,617 Point Reports  
2,434 Species

**Recent Reports in EDDMapS West**

- ✓ medusahead by Allison Gonzales in Washoe County, Nevada
- ✓ spotted knapweed by Samantha Cisney in Elko County, Nevada
- ✓ spotted knapweed by Samantha Cisney in Elko County, Nevada
- ✓ spotted knapweed by Samantha Cisney in Elko County, Nevada
- ✓ spotted knapweed by Samantha Cisney in Elko County, Nevada
- ✓ More Reports

## Navigation Bar

[www.eddmaps.org/west](http://www.eddmaps.org/west)

### HOME

Return to the homepage.

### REPORT SIGHTINGS

Report an invasive species sighting.

### DISTRIBUTION MAPS

View species distribution on a Google map.

### SPECIES INFORMATION

Information on hundreds of invasive species.

Home | Report Sightings | Distribution Maps | Species Information | Tools & Training | My EDDMapS | About | Login | Register

### TOOLS & TRAINING

Watch training videos and more.

### MY EDDMAPS

Set up species alerts, edit reports, and more.

### ABOUT

Learn more about EDDMapS.

### LOGIN/REGISTER

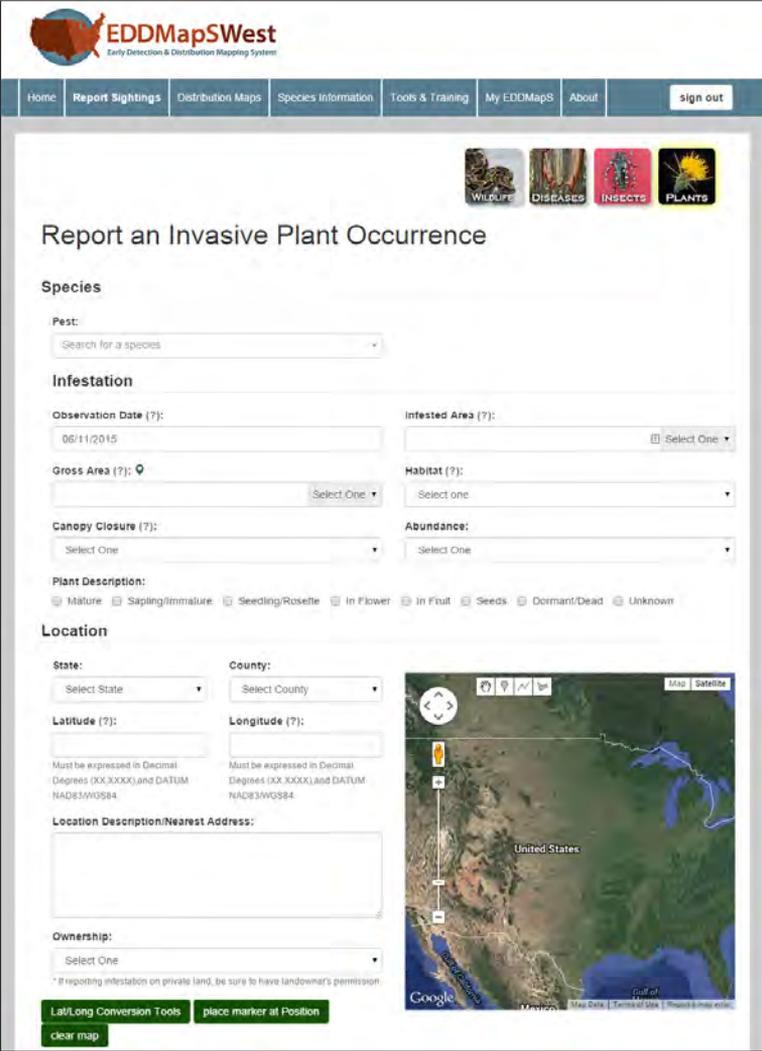
Login to your account or create a new one.

## Create an Account and Login

To begin using EDDMapS West, you need to create a free account. From the homepage, click Register in top right corner. Complete the registration form, then use your new username and password to login to EDDMapS West. *Note: You will use the same username and password for both the desktop and app versions.*

## Report Sightings

Take a few minutes to get familiar with the reporting form.



The screenshot shows the EDDMapS West web interface. At the top is the logo and navigation menu. Below the menu are icons for Wildlife, Diseases, Insects, and Plants. The main heading is 'Report an Invasive Plant Occurrence'. The form is divided into several sections: Species, Infestation, Location, and Ownership. Each section contains various input fields, dropdown menus, and checkboxes for data entry.

**EDDMapS West**  
Early Detection & Distribution Mapping System

Home | **Report Sightings** | Distribution Maps | Species Information | Tools & Training | My EDDMapS | About | sign out

WILDLIFE | DISEASES | INSECTS | PLANTS

### Report an Invasive Plant Occurrence

**Species**

Pest:  
Search for a species

**Infestation**

Observation Date (?): 06/11/2015  
Infested Area (?): Select One

Gross Area (?): Select One  
Habitat (?): Select one

Canopy Closure (?): Select One  
Abundance: Select One

**Plant Description:**  
 Mature  Sapling/Immature  Seedling/Rosette  In Flower  In Fruit  Seeds  Dormant/Dead  Unknown

**Location**

State: Select State  
County: Select County

Latitude (?):  
Must be expressed in Decimal Degrees (XX.XXXX) and DATUM NAD83/WGS84

Longitude (?):  
Must be expressed in Decimal Degrees (XX.XXXX) and DATUM NAD83/WGS84

Location Description/Nearest Address:

Ownership: Select One  
\* If reporting infestation on private land, be sure to have landowner's permission.

Lat/Long Conversion Tools | place marker at Position  
clear map

Map interface showing United States, Google, Mexico, Gulf of Mexico, and Map Data | Terms of Use | Privacy Implications.



Using the map tools to enter the species location:



### ADD A MARKER

Pinpoint the exact location of the sighting.



1. Zoom in to find the correct location.
2. Click on the map where the sighting occurred.
3. The GPS coordinates of the location will automatically be entered into the Location form.



### DRAW A LINE

Pinpoint the length of the infestation.



1. Zoom in to find the correct location.
2. Click the map to start the line, then click to continue drawing. Double-click the end point when complete.
3. Draw as many lines as needed.
4. To start over, click *Clear Map*.



### DRAW A SHAPE

Outline the perimeter of the infestation.



1. Zoom in to find the correct location.
2. Click the map to begin drawing a shape, then click to continue drawing. Double-click the start point to complete the shape.
3. Draw as many shapes as needed.
4. To start over, click *Clear Map*.

---

## I Submitted a Report. What Happens Next?

When you click *Submit*, your report is automatically sent to a designated state verifier (such as the state weed coordinator) for review. After a report is submitted, it is automatically added to your My EDDMapS reports list (see page 20), and is only visible to you and the verifier. After the report is confirmed, it will appear on the distribution maps and in the Recent Reports section on the EDDMapS West home page. *Note: If the verifier is unable to find the species you reported, he or she may contact you for more information.*

## Distribution Maps

View confirmed reports of a species on an interactive map.

To find a species quickly, type its name into the search bar.

Subject Name	Scientific Name ^	View				Records
velvetleaf	<i>Abutilon theophrasti</i>	State	County	Point	List	29
black wattle	<i>Acacia mearnsii</i>	State	County	Point	List	3
biddy-biddy	<i>Acaena novae-zelandica</i>	State	County	Point	List	3

Click the Subject or Scientific Name header to sort the list alphabetically.

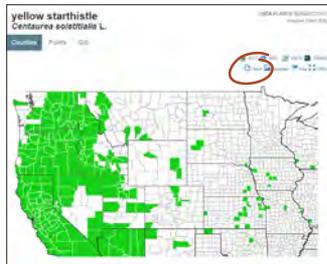
View a searchable list of all records for the species.

### STATE/COUNTY VIEW

Species distribution by state or county.

Hover over the map to view county names.

Click on a county for a list of all confirmed records.

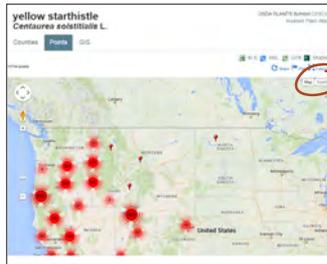


Click Share for a direct link to the map, social media and e-mail sharing links, static map embed code, and dynamic map embed code. Click Download to download the map in .jpeg format.

### POINT VIEW

Species distribution as points on a map.

Zoom in until you see an individual pin, then click it. A dialog window will appear; click *More Information* to view the report record.

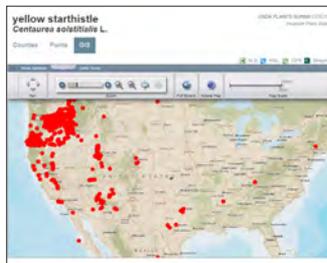


Click to toggle between map and satellite view.

### GIS VIEW

Similar to Point View, but with more features.

Print the map, upload a Shapefile, measure between records, and more.



Click the appropriate icon to download all of the species records in .xls, .kml, .gpx, or .shapefile formats.

## Species Information

View species profile, distribution, images, resources, and more.

*Note: This list includes all the species in the EDDMapS database. Many of these may not be a problem in your area, but are considered invasive elsewhere in the US.*

Quickly find a species by typing its name in the subject or scientific name search field.

Click the species name to view its profile:

Detailed physical description

Invasive listing sources

Identification and management resources

Species codes and symbols

Species distribution (based on the number of EDDMapS records)

Taxonomic rank

Synonyms and other names for the species

States in which the species is regulated

## Tools and Training

*EDDMapS report statistics, advanced database and mapping tools, and more.*

### Database Tools

- **Access/Download Point Data:** View and download all point data for a specific species in Google Earth (.kml) or Excel (.xls) format.
- **Recently Added Records:** A searchable list of recent records that can be sorted by subject, user, location, or date.
- **View Plants by County:** A list of all species found in a county. Click the species name to view individual records within the county. *Note: Not all species listed are considered invasive in the county, but are considered a problem elsewhere in the US.*
- **View Plants by State:** A list of all species found in a state. Click the species name to view distribution of the species within the state. *Note: not all species listed are considered invasive in the state, but are considered a problem elsewhere in the US.*
- **Invasive Plant Status by State:** A list of all confirmed invasive species reports in a state, as well as the total number of records for that state in the EDDMapS database (including data from other mapping programs), a list of the top ten most abundant invasive plants in that state (by number of reports), and more.
- **Advanced Query Options:** Search for records by location, observation date, reporter, and more. This action will produce a map customized to your search parameters and the data can be downloaded in .xls, .kml, .gpx, or .shapefile formats.

### Mapping Tools

- **Find a Location:** Get coordinates for a particular location using Google Maps
- **Latitude/Longitude Converter:** Conversion options include: degrees-minutes-seconds; decimal degrees; UTM (Universal Transverse mercator) to decimal degrees; and degrees and decimal minutes.
- **Geocode a Physical Address:** Enter a street address to get its coordinates.

### Control Resources

This section includes several invasive species control resources, including handbooks, guides, and more.

### Training Materials

Watch EDDMapS training videos, learn about herbarium collecting, and more.

## My EDDMapS

Keep track of your reports, set up alerts, and more.

### REPORTS

View and manage past reports.

### DOWNLOAD

Generate an Excel file with your report data.

### ALERTS

Get e-mail alerts when a species has been confirmed in your state or county.

### PROJECTS

This feature is not yet optimized for EDDMapS West.

My EDDMapS - Emily Rindos

User Statistics

	Overall	This Year	This Month
Reports	3	3	0
Species	2	2	0
States	1	1	0
Counties	1	1	0

Recent Reports

ID	Subject	Location	Date	Manage
418750	yellow starthistle	Gallatin County, Montana	Feb-02-2015	<a href="#">View</a>   <a href="#">Edit</a>   <a href="#">Delete</a>
418751	spargannose knapweed	Gallatin County, Montana	Feb-02-2015	<a href="#">View</a>   <a href="#">Edit</a>   <a href="#">Delete</a>
418750	yellow starthistle	Gallatin County, Montana	Feb-02-2015	<a href="#">View</a>   <a href="#">Edit</a>   <a href="#">Delete</a>

View 1 - 3 of 3

Click here to return to the EDDMapS West homepage.

### EDIT PROFILE

Update your EDDMapS profile.

### VIEW PROFILE

View your public EDDMapS profile.

### MY UPLOADS

Upload files containing large amounts of data.

### MY SURVEYS

This feature is not yet optimized for EDDMapS West.

## My EDDMapS Features

### Reports

This section allows you to manage your existing reports.

*View:* Shows the report and its status.

*Edit:* Make changes to a report record, and add additional information.

*Revisit:* Use this form for site revisits, including treatments and monitoring.

*Delete:* Remove a report from the database.

### Download

Capture all of your reporting data in an Excel (.xls) spreadsheet.

### Alerts

Alerts are automatically generated e-mail notifications based on specific criteria.

There are three types:

*State Alert:* Sends an alert when any invasive plant or animal report is verified in the selected state. Check *New Only* to receive an alert only the first time a plant or animal is verified in the state.

*County Alert:* Sends an alert when any invasive plant or animal report is verified in the selected county. Check *New Only* to receive an alert only the

first time a plant or animal is verified in the county.

*Species Alert:* Sends an alert when a selected species is verified in the US. Start typing the name of a species and click its name in the list. Check *New County Record Only* to receive an alert only the first time the species is reported in a county.

*Manage Alerts:* Edit or delete alerts.

### Projects

This feature is not yet available for EDDMapS West.

### Edit Profile

Add information to your EDDMapS profile, such as your affiliation and title, phone number, level of expertise, and more. You can choose to make your profile public (visible to all users) or private (visible only to verifiers and administrators).

### View Profile

View your public profile. If your profile is set to Private, you won't see anything on this page.

### My Uploads

Use this feature to upload files containing a large amount of data. Specific instructions and data entry templates are displayed under the *Helpful Resources* header. Accepted data formats include: ArcGIS files; spreadsheets (.xls, .xlsx, .dbf, and .csv); Microsoft Access database files; .kml and .kmz files; and Garmin database files. Images attached to the data may be included as .jpg files. To view the status of an upload, or to view a list of all previous uploads, click *View Uploads*.

### My Surveys

This feature is not yet available for EDDMapS West.

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## EDDMapS Verification Process

All records entered into EDDMapS are considered unverified (and not visible to the public) until they have been reviewed and confirmed. All new reports are automatically sent to an authorized verifier (such as a state weed coordinator) for review. After the report has been confirmed, it becomes publicly available and will appear on distribution maps and species record lists, and can be downloaded.

The verifier uses several criteria to determine the accuracy of the report:

- If the report was submitted by a trusted observer and/or the photos included are clear, the verifier will confirm the report.
- If the previous criteria are not met, the verifier may follow-up with the observer who submitted the report and request more details or photos before confirming the report.
- The verifier or designated proxy may visit the location and confirm or deny the report.

## Frequently Asked Questions

**What if I'm not 100% certain that the plant I'm seeing is an invasive species? Should I still report it?** If you have an idea of what invasive species it might be, look it up in the built-in species guide, available in both smartphone and desktop versions of EDDMapS West. Species profiles offer a detailed physical description as well as several photos. If you're still not sure, go ahead and submit a report, but be sure to add an explanation in the Notes section of the reporting form.

**What if the invasive species I wish to report isn't on the list?** You may still report it. If using the Android or iPhone app, use the Other/Unknown species feature under Species by Category on the Dashboard menu. If using the desktop version, select "Unlisted" from the Pest pull-down list. Include the name of the species in the Notes section of the reporting form.

**If anyone, even those with little experience, can submit a report, does that mean that there is a lot of bad or erroneous data in the EDDMapS database?**

No. All reports submitted via EDDMapS West (and other similar EDDMapS versions) are verified by a designated authority, such as a state weed coordinator, before they are entered into the database. Incorrect reports are omitted.

**Can I go back and make updates to my report(s)?** Yes. On the EDDMapS West homepage, click on My EDDMapS, then click Reports from the sidebar menu. You will see a list of your reports and can edit (if not yet verified), revisit, or delete them.

**What is the difference between the smartphone app and the desktop version?**

The smartphone app is a simplified version of the desktop version and is meant to be used in the field. The desktop version, for which you use the same username and password, has more features, including the ability to edit or revisit reports, set up species alerts, download data and distribution maps, and more. When submitting a report, it doesn't matter which version you use.

**What if I have a poor data connection when in the field, and I can't upload my reports?** All reports completed in the app are saved in your Upload Queue. You can upload your reports when you return to your office, or have a wi-fi connection.

**I think the sighting I wish to report may already have been reported. Should I still submit my report?** Yes. The verifier can remove duplicate entries.

**Can multiple users use the same EDDMapS account?** While this is possible, we strongly recommend that each user have his or her own account.

**How can I upload my county's weed mapping data to EDDMapS West?**

See "My Uploads" on page 21 for bulk data upload information and instructions.

## Montana Noxious Weed List

Effective December 2013

### Priority 1A

These weeds are not present or have a very limited presence in Montana.

Management criteria will require eradication if detected, education, and prevention.

- Yellow starthistle (*Centaurea solstitialis*)
- Dyer's woad (*Isatis tinctoria*)

### Priority 1B

These weeds have limited presence in Montana. Management criteria will require eradication or containment and education.

- Knotweed complex (*Polygonum cuspidatum*, *P. sachalinense*, *P. × bohemicum*, *Fallopia japonica*, *F. sachalinensis*, *F. × bohémica*, *Reynoutria japonica*, *R. sachalinensis*, *R. × bohémica*)
- Purple loosestrife (*Lythrum salicaria*)
- Rush skeletonweed (*Chromola lutea*)
- Scotch broom (*Cytisus scoparius*)

### Priority 2A

These weeds are common in isolated areas of Montana. Management criteria will require eradication or containment where less abundant. Management shall be prioritized by local weed districts.

- Tansy ragwort (*Senecio jacobea*)
- Meadow hawkweed complex (*Hieracium caespitosum*, *H. praealtum*, *H. floribundum*, *Pilosella caespitosa*)
- Orange hawkweed (*Hieracium aurantiacum*, *Pilosella aurantiaca*)
- Tall buttercup (*Ranunculus acris*)
- Perennial pepperweed (*Lepidium latifolium*)
- Yellowflag iris (*Iris pseudacorus*)
- Blueweed (*Echium vulgare*)
- Hoary alyssum (*Berteroa incana*)

### Priority 2B

These weeds are abundant in Montana and widespread in many counties.

Management criteria will require eradication or containment where less abundant.

Management shall be prioritized by local weed districts:

- Canada thistle (*Cirsium arvense*)
- Field bindweed (*Convolvulus arvensis*)
- Leafy spurge (*Euphorbia esula*)
- Whitetop (*Cardaria draba*, *Lepidium draba*)
- Russian knapweed (*Acroptilon repens*, *Rhaponticum repens*)
- Spotted knapweed (*Centaurea stoebe*, *C. maculosa*)
- Diffuse knapweed (*Centaurea diffusa*)

- Dalmatian toadflax (*Linaria dalmatica*)
- St. Johnswort (*Hypericum perforatum*)
- Sulfur cinquefoil (*Potentilla recta*)
- Common tansy (*Tanacetum vulgare*)
- Oxeye daisy (*Leucanthemum vulgare*)
- Houndstongue (*Cynoglossum officinale*)
- Yellow toadflax (*Linaria vulgaris*)
- Saltcedar (*Tamarix* spp.)
- Flowering rush (*Butomus umbellatus*)
- Eurasian watermilfoil (*Myriophyllum spicatum*)
- Curlyleaf pondweed (*Potamogeton crispus*)

### **Priority 3 Regulated Plants**

(Not Montana listed noxious weeds)

These regulated plants have the potential to have significant negative impacts. The plant may not be intentionally spread or sold other than as a contaminant in agricultural products. The state recommends research, education and prevention to minimize the spread of the regulated plant.

- Cheatgrass (*Bromus tectorum*)
- Hydrilla (*Hydrilla verticillata*)
- Russian olive (*Elaeagnus angustifolia*)

