

Begin by watching the Online Training Videos for WI NatureMapping in order to learn how to register with the website, become familiar with the map tools, and learn how to submit other types of wildlife observations. These videos will set the stage for the following Worm Watch Data entry steps and will make learning these steps much easier. **Then, follow the steps below to learn how to enter Worm Watch data.**

1) Login to WI NatureMapping.

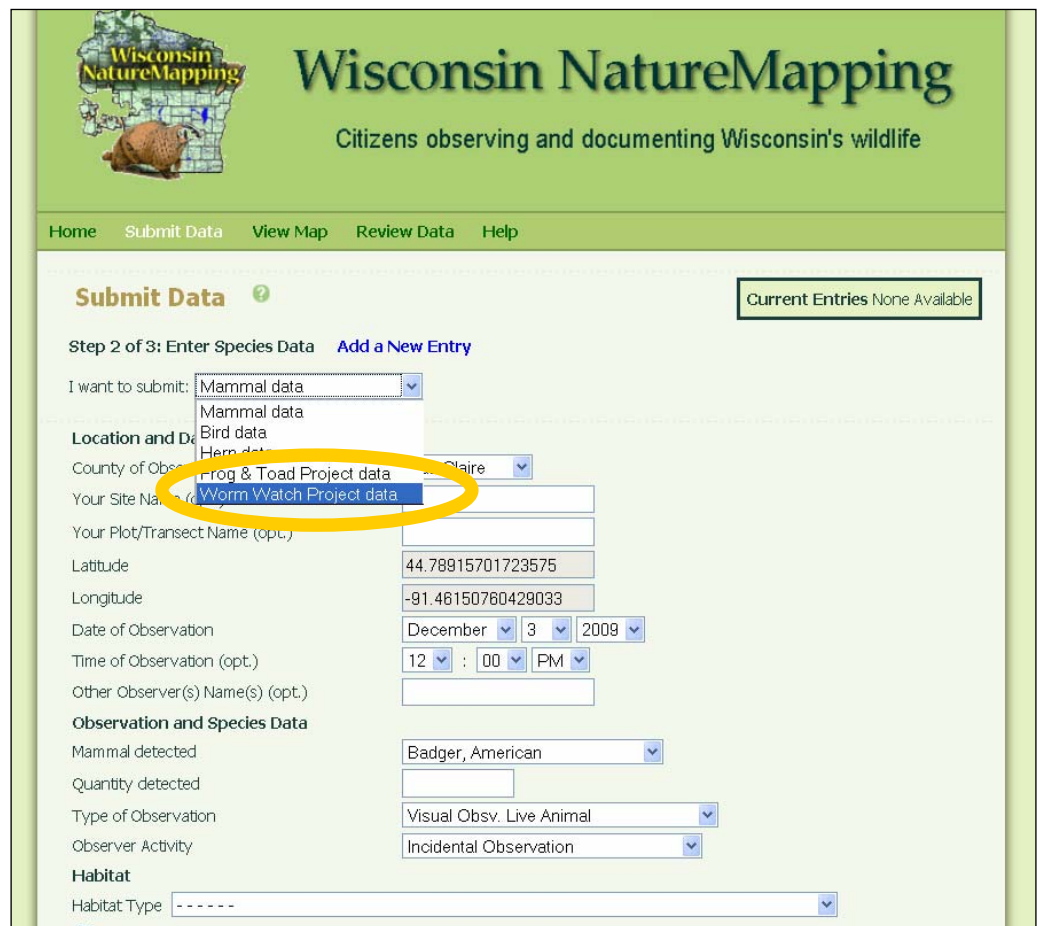
2) Once logged in, click on the **Submit Data** tab.

The screenshot shows the Wisconsin NatureMapping website. At the top left is a logo with a map of Wisconsin and a beaver. The main title is "Wisconsin NatureMapping" with the tagline "Citizens observing and documenting Wisconsin's wildlife". Below the title is a navigation bar with links: Home, **Submit Data** (circled in yellow), View Map, Review Data, and Help. The main content area is divided into two columns. The left column has a "Welcome, Sarah" heading, followed by "News from WNM Staff:" with a welcome message and a link to wisnatmap.org. Below that is "Wisconsin Nature Mapping" with a message about a website overhaul and a feedback link. The right column has "Additional Information" with contact details for Sarah Braun at Beaver Creek Reserve, including her email and the website dnr.wi.gov. There are also logos for Beaver Creek Reserve and the Wisconsin DNR. At the bottom right, contact information for Loren Ayers, a Research Scientist at the Wisconsin DNR, is provided. A "Getting started with the new NatureMapping" section offers three options: submitting an observation, viewing a map, or reviewing data in a spreadsheet. A hint at the bottom left explains how to use the interactive maps.

3) Map your observation by zooming in to your location and setting your map point as close to your actual location as possible or by entering the latitude and longitude coordinates in the Lat/Long boxes. Then click **Continue**.



4) On the data entry screen, select **Worm Watch Project Data** from the “I want to submit” dropdown.



5) The data entry screen will change to a screen specific to Worm Watch data. Select the appropriate dropdown from the “What type of Worm Watch survey are you reporting?” box. You can:

Document an Earthworm-free Site (use when you tried to sample for earthworms but did not find any)

OR

Document an Earthworm Occurrence in a Site (non-quantitative) (use when you found worms but weren’t sampling a particular plot)

OR

Enter Plot-Level Data for an Earthworm Survey (quantitative) (Level 1, 2 or 3 data sheets)

Then fill in the remaining boxes: **Site Name** (this should be the same as what you wrote on your field data sheet), **Date of Observation**, **Other Observer(s) names**, **Habitat Type**, **Disturbance**, and **Size**. Then click **Continue**.

Document an Earthworm-free Site

1) If you are documenting an **Earthworm-Free Site**, you will see the sequence of screens shown to the right. Choose the *Earthworm-Free Site* option if you sampled for worms at a location but did not find any. Enter the appropriate data in the boxes on each screen. These boxes should correspond to the Worm Watch Data sheets you filled out in the field.

Home Submit Data View Map Review Data Help

Submit Worm Watch Project Data

Step 2 of 3: Enter Species Data

I want to submit: Worm Watch Project data

Surrounding Land Use

Urban Development Suburban Development(select all that apply)

Rural Development Forested

Wetlands Lakes

Streams and Rivers Mostly similar to the habitat sampled

Other:

Basic Soil Features

1. Excluding any fresh or whole dried leaf litter from last fall; what percent of the surface is composed of bare or exposed soil? ---

2. Is there any Forest Floor layer (spongy partially decomposed leaf material) present? Yes No

2a. If yes, what is the average thickness? ---

2b. If yes, is layering of the forest floor apparent? i.e. fresh litter on top of a layer of fragmented and partially decomposed litter and perhaps even a layer of very decomposed litter beneath that? Yes No

3. Soil Texture ([click here](#) to use the Simplified Key to Mineral Soil Texture) ---

Back Continue

Home Submit Data View Map Review Data Help

Submit Worm Watch Project Data

Step 2 of 3: Enter Species Data

I want to submit: Worm Watch Project data

Earthworm Sampling Information

Sample method(s) used (select all that apply)

Hand sampling Liquid Mustard Extraction

Midden Counts Other:

Earthworm Identification reference used (select all that apply)

Book- "Earthworms of the Great Lakes" Great Lakes Worm Watch - guide to ecological groups

No reference used Other:

Back Submit

2) On the last screen, you will be able to Review your data. Check to make sure you have no errors. Then click “Submit Worm Data” at the bottom of the screen.

Home Submit Data View Map Review Data Help

Submit Data

Step 3 of 3: Review Species Data

County of Observation	Eau Claire
Your Site Name (opt.)	
Latitude	44.789157
Longitude	-91.461507
Date of Observation	Thu Dec 03 10:32:39 CST 2009
Other Observer(s) Name(s) (opt.)	
Habitat Type	FUC
Disturbance	recreation-motorized
Size	0-2 acres
Land Use	Forested, other:
Percent of Bare/exposed soil	50-75%
Depth of Duff Layer	N/A
Is Layering Apparent?	no
Soil Texture	N/A
Identification Used	Great Lakes Worm Watch - guide to ecological groups, other:
Sampling Methods Used	liquid mustard sampling, other:
Specimen Submitted	no
Type Of Survey	Earthworm-free

Submit Worm Data

Document Earthworm Occurrence in a Site (non-quantitative)

1) If you are documenting an **Earthworm Occurrence in a Site**, you will see the sequence of screens shown to the right. *Choose this option if you found earthworms at a site AND identified them to SPECIES but weren't sampling a particular plot.* Enter the appropriate data in the boxes on each screen. These boxes should correspond to the Worm Watch Data sheets you filled out in the field.

Home Submit Data View Map Review Data Help

Submit Worm Watch Project Data

Step 2 of 3: Enter Species Data

I want to submit: Worm Watch Project data

Surrounding Land Use

Urban Development Suburban Development(select all that apply)

Rural Development Forested

Wetlands Lakes

Streams and Rivers Mostly similar to the habitat sampled

Other

Basic Soil Features

1. Excluding any fresh or whole dried leaf litter from last fall; what percent of the surface is composed of bare or exposed soil? ---

2. Is there any Forest Floor layer (spongy partially decomposed leaf material) present? Yes No

2a. If yes, what is the average thickness? ---

2b. If yes, is layering of the forest floor apparent? i.e. fresh litter on top of a layer of fragmented and partially decomposed litter and perhaps even a layer of very decomposed litter beneath that? Yes No

3. Soil Texture ([click here](#) to use the Simplified Key to Mineral Soil Texture) ---

Back Continue

2) On the second screen, you will see options to enter Earthworm Species information

Home Submit Data View Map Review Data Help

Submit Worm Watch Project Data

Step 2 of 3: Enter Species Data

I want to submit:

Earthworm Sampling Information

Sample method(s) used (select all that apply)

Hand sampling Liquid Mustard Extraction
 Midden Counts Other

Earthworm Identification reference used (select all that apply)

Book- "Earthworms of the Great Lakes" Great Lakes Worm Watch - guide to ecological groups
 No reference used Other

Have you sent specimens to Great Lakes Worm Watch? ([Explain How?](#)) Yes No

Earthworm Species

Earthworm species #1

Earthworm species #2

Earthworm species #3

Earthworm species #4

Earthworm species #5

Earthworm species #6

Earthworm species #7

Earthworm species #8

3) After entering the required information click the **Submit** button at the bottom of the screen.

4) Review your data on the next screen and make sure it is correct. Then click **Submit Worm Data**.

Submit Data

Step 3 of 3: Review Species Data

County of Observation	Eau Claire
Your Site Name (opt.)	
Latitude	44.789157
Longitude	-91.461507
Date of Observation	Thu Dec 03 11:15:14 CST 2009
Other Observer(s) Name(s) (opt.)	
Habitat Type	-1
Disturbance	N/A
Size	N/A
Land Use	Rural Development, Lakes, other:
Percent of Bare/exposed soil	25-50%
Depth of Duff Layer	N/A
Is Layering Apparent?	no
Soil Texture	sand
Identification Used	Great Lakes Worm Watch - guide to ecological groups, other:
Sampling Methods Used	liquid mustard sampling, other:
Specimen Submitted	no
Type Of Survey	Earthworm Occurance in a Site (non-quantitative)
Earthworm species #1	Lumbricus terrestris
Earthworm species #2	Dendrodrilus rubidus (juvenile or adult)
Earthworm species #3	
Earthworm species #4	
Earthworm species #5	
Earthworm species #6	
Earthworm species #7	
Earthworm species #8	

Enter Plot Level Data for an Earthworm Survey

1) If you are entering **Plot-Level Data for an Earthworm Survey (quantitative)**, you will see the sequence of screens shown to the right. *Choose this option if you sampled for worms and sorted them as juveniles/adults OR as juveniles/adults and by ecological group (corresponds to the **Level 1, 2, and 3 data sheets**).* Enter the appropriate data in the boxes on each screen. These boxes should correspond to the Worm Watch Data sheets you filled out in the field.

Home Submit Data View Map Review Data Help

Submit Worm Watch Project Data

Step 2 of 3: Enter Species Data

I want to submit: Worm Watch Project data

Surrounding Land Use

Urban Development Suburban Development(select all that apply)

Rural Development Forested

Wetlands Lakes

Streams and Rivers Mostly similar to the habitat sampled

Other

Basic Soil Features

1. Excluding any fresh or whole dried leaf litter from last fall; what percent of the surface is composed of bare or exposed soil? ---

2. Is there any Forest Floor layer (spongy partially decomposed leaf material) present? Yes No

2a. If yes, what is the average thickness? ---

2b. If yes, is layering of the forest floor apparent? i.e. fresh litter on top of a layer of fragmented and partially decomposed litter and perhaps even a layer of very decomposed litter beneath that? Yes No

3. Soil Texture ([click here](#) to use the Simplified Key to Mineral Soil Texture) ---

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2) Fill out the information on the next screen, noting the size of your plot, the number of plots sampled, and how you chose your plot location. Also indicate your sample method and the identification reference you used and at the bottom, select the Level of Detail you want to enter. Level 1 corresponds to Level 1 data sheets, Level 2 to Level 2 data sheets, and Level 3 to Level 3 data sheets.

Home Submit Data View Map Review Data Help

Submit Worm Watch Project Data

Step 2 of 3: Enter Species Data

I want to submit: Worm Watch Project data

Earthworm Sampling Information

Sample plot size 33cm x 33 cm or Other

Number of plots sampled

Plot location method used

Sample method(s) used (select all that apply)

Hand sampling Liquid Mustard Extraction

Midden Counts Other

Earthworm Identification reference used (select all that apply)

Book- "Earthworms of the Great Lakes" Great Lakes Worm Watch - guide to ecological groups

No reference used Other

Have you sent specimens to Great Lakes Worm Watch? ([Explain How?](#)) Yes No

Select a level of detail to enter your data: ([Explain This](#))

Level 1: Report the density (number per sample plot) of adult and juvenile earthworms

Level 2: Report the density (number per sample plot) of adults by ecological group and juveniles by pigmentation.

Level 3: Report the density (number per sample plot) of adult and juvenile earthworms

Back Continue

3) The level you select in the previous step will determine your data entry fields and screens from this point forward. If you select Level 1 or Level 2, you will be asked to enter the **type of quantitative unit used, the type of data you will enter, and how the data will be summarized.**

Home Submit Data View Map Review Data Help

Submit Worm Watch Project Data

Step 2 of 3: Enter Species Data

I want to submit: Worm Watch Project data

Earthworm Sampling Information

Sample plot size 33cm x 33 cm or Other

Number of plots sampled

Plot location method used Arbitrary

Sample method(s) used (select all that apply)

Hand sampling Liquid Mustard Extraction

Midden Counts Other

Earthworm Identification reference used (select all that apply)

Book- "Earthworms of the Great Lakes" Great Lakes Worm Watch - guide to ecological groups

No reference used Other

Have you sent specimens to Great Lakes Worm Watch? (Explain How?) Yes No

Select a level of detail to enter your data: ([Explain This](#))

Level 1: Report the density (number per sample plot) of adult and juvenile earthworms

What type of quantitative unit will you use? per plot

What type of data will you enter? density

How will your data be summarized? average

4) If you select Level 3, you will be asked to enter the number of species you will report, the **type of quantitative unit used, the type of data you will enter, and how the data will be summarized.**

Home Submit Data View Map Review Data Help

Submit Worm Watch Project Data

Step 2 of 3: Enter Species Data

I want to submit: Worm Watch Project data

Earthworm Sampling Information

Sample plot size 33cm x 33 cm or Other

Number of plots sampled

Plot location method used Arbitrary

Sample method(s) used (select all that apply)

Hand sampling Liquid Mustard Extraction

Midden Counts Other

Earthworm Identification reference used (select all that apply)

Book- "Earthworms of the Great Lakes" Great Lakes Worm Watch - guide to ecological groups

No reference used Other

Have you sent specimens to Great Lakes Worm Watch? ([Explain How?](#)) Yes No

Select a level of detail to enter your data: ([Explain This](#))

Level 3: Report the density (number per sample plot) of adult and juvenile earthworms

How many species will you report (including unknowns)?

What type of quantitative unit will you use? per plot

What type of data will you enter? density

How will your data be summarized? average

There are a number of combinations of data entry screens that can appear following the selection of the Level and the type of data you plan to enter, so screen shots of these will not be shown here. Rather, we will review some terminology to help you determine which data entry combination is right for your data.

Quantitative Unit

The options for quantitative unit are “**per plot**” or “**per square meter**”. If you collected your data in a plot that was NOT a square meter, then select “**per plot**”. If your plot was a square meter, select “**per square meter**”.

Type of Data

The options for type of data are “**density**”, “**biomass**”, or “**both**”. Choose “**density**” if you want to enter the number of worms per your plot area (this will be entered on the next screen). Choose “**biomass**” if you want to enter the grams of earthworms per your plot area. Choose “**both**” if you would like to enter both types of data.

How data is Summarized

The options for how data are summarized are “**average**” or “**per plot**”. If you want to enter data averaged over all of your plots, select “**average**”. If you want to enter data for each plot, select “**per plot**”.

After you have selected your options for the above fields, click **Continue** and enter data for the remaining screens. The final screen will be a review screen. Review your data and then click **Submit**.