

Tutorial outline

[Find the NEON Biorepository Data Portal](#)

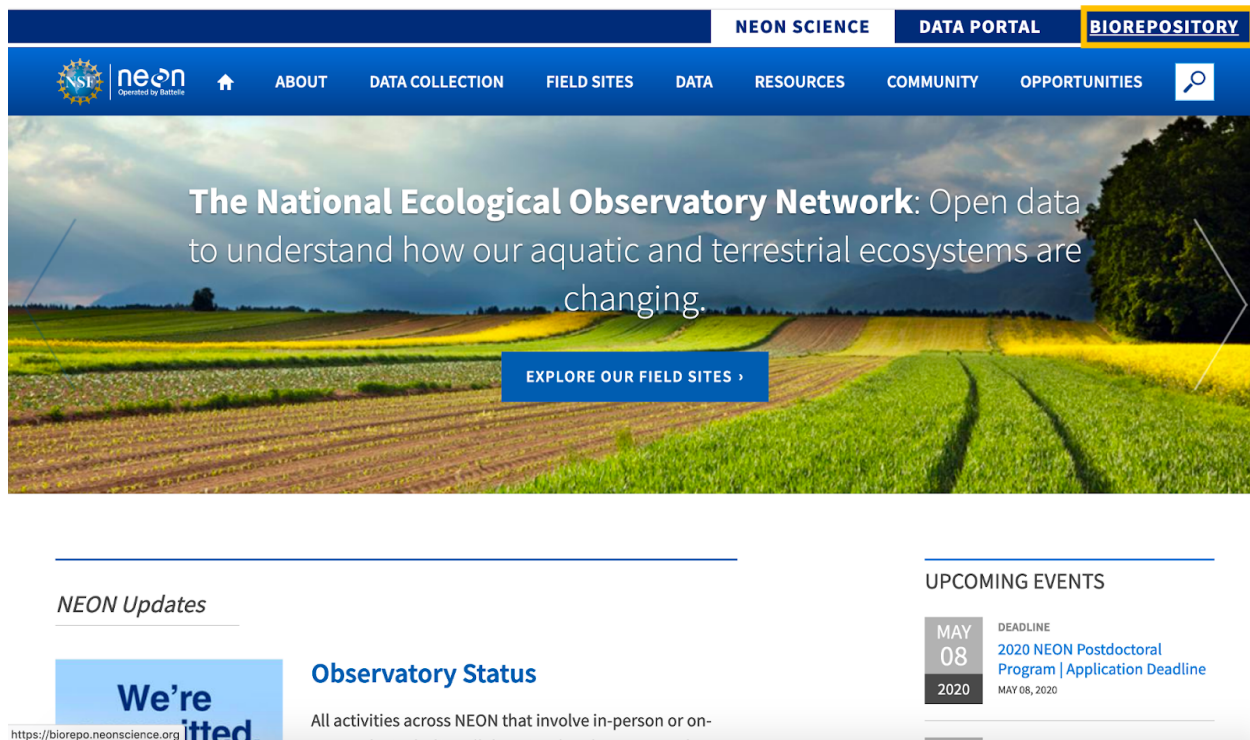
[View the homepage](#)

[Conduct a Sample Search](#)

[Conduct a Map Search](#)

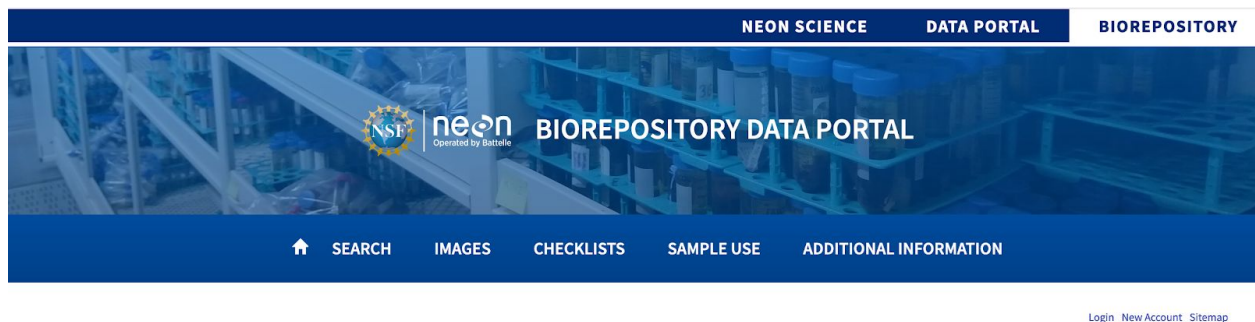
1. Find the NEON Biorepository Data Portal

To explore the NEON Biorepository data portal click “Biorepository” on the upper right hand corner of any page on the [main NEON website](#) or go to biorepo.neonscience.org.



2. View the homepage

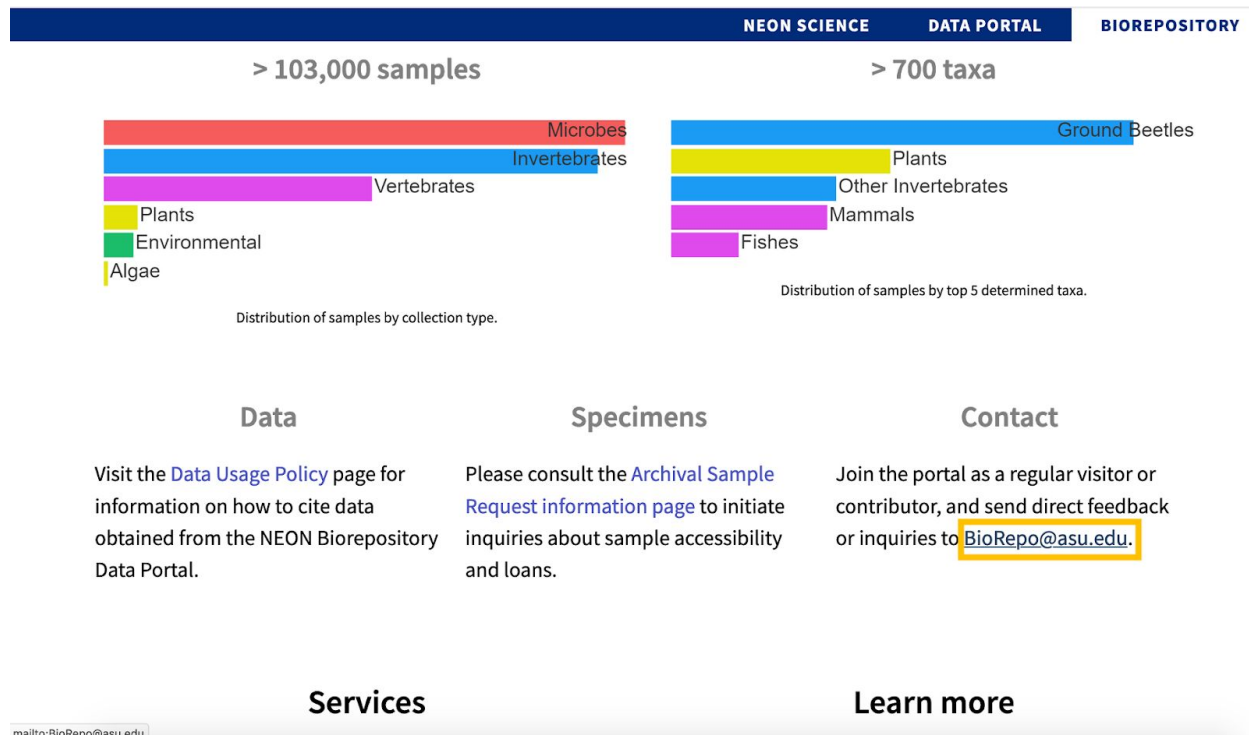
On the NEON Biorepository data portal homepage, you can view periodically updated summary statistics for our collections and find links to more information about NEON and the NEON Biorepository.



Discover and access sample-based data



On our homepage, you will also find contact information for the NEON Biorepository. Always feel free to email us at biorepo@asu.edu with any inquiries.



3. Conduct a Sample Search

Use the Sample Search feature of the NEON Biorepository data portal to search for, download, and map available NEON samples based on collection, taxon, location, and more. To do so:

- Navigate to “[Sample Search](#)” under “Search” in the main menu.

NEON SCIENCE DATA PORTAL BIOREPOSITORY

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SEARCH IMAGES CHECKLISTS SAMPLE USE ADDITIONAL INFORMATION

SAMPLE SEARCH


MAP SEARCH

DYNAMIC CHECKLIST

TAXONOMY EXPLORER

Login New Account Sitemap

Discover and access sample-based data



<https://biorepo.neonscience.org/portal/collections/index.php>

b. Note the disclaimer at the top of the search form:

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SEARCH IMAGES CHECKLISTS SAMPLE USE ADDITIONAL INFORMATION

Home >> Collections

Login New Account Sitemap

Please note: this search integrates NEON samples with voucher specimens from the same sites in other natural history collections, allowing for research on biodiversity at NEON sites over a broader taxonomic and temporal extent. **Scroll towards the end of the page to activate or deactivate the search in the external collections.**

Additionally, not all collections are currently available. If you would like to be notified via email when a collection becomes available, please sign up [here](#).

Specimens

☒ Select/Deselect All

☒ **Algae (NEON-AL)**

☒ Aquatic Macroalgae Collection (Chemical Preservation [Clip Harvests]) (NEON-AMAC-CPCH) more info...

SEARCH >

External Collections are of two types

- Collections of NEON samples not held at the NEON Biorepository (e.g. Essig and the Museum of Southwestern Biology). These samples are generally legacy samples collected before the initiation of the NEON Biorepository in late-2018.



- Make sure to deselect these collections at the bottom of the page if you only wish to explore NEON Biorepository samples.



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- c. Also, note that not all sample types are available for research use at this time.

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SEARCH
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SAMPLE USE
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Home >> Collections
Login New Account Sitemap

Please note: this search integrates NEON samples with voucher specimens from the same sites in other natural history collections, allowing for research on biodiversity at NEON sites over a broader taxonomic and temporal extent. **Scroll towards the end of the page to activate or deactivate the search in the external collections.**

Additionally, not all collections are currently available. If you would like to be notified via email when a collection becomes available, please sign up [here](#).

Specimens

☒ Select/Deselect All
☒ Algae (NEON-AL)


☒ Aquatic Macroalgae Collection (Chemical Preservation [Clip Harvests]) (NEON-AMAC-CPCH) [more info...](#)

SEARCH >

To be notified of when collections of interest are updated, fill out the linked [Google Form](#).

- d. To begin a sample search, select the collections that are of interest. Collections are broken down into five categories: Algae, Environmental, Invertebrate, Plant, Vertebrate, and External. For illustration, we will search for samples relevant to deer mouse physiology in the western continental United States. Therefore, we will begin by finding the small mammal fecal and hair samples under Vertebrates.
- e. Note that you can read more about any collection by clicking the “more info...” link at the end of the collection name. To see an example navigate to [this page for the fecal sample collection](#).

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☐ **Vertebrates (NEON-VE)**

☐ Fish Collection (DNA Extracts) (NEON-FISC-DNA) more info...

☐ Fish Collection (Vouchers) (NEON-FISC-V) more info...

☐ Herptile Voucher Collection (Ground Beetle Sampling Bycatch Archive Pooling) (NEON-HEVC-GBAP) more info...

☐ Herptile Voucher Collection (Ground Beetle Sampling Bycatch Trap Sorting) (NEON-HEVC-GBTS) more info...

☐ Herptile Voucher Collection (Small Mammal Sampling Bycatch) (NEON-HEVC-SMMB) more info...

☐ Mammal Collection (Blood Samples) (NEON-MAMC-BL) more info...

☐ Mammal Collection (DNA Extracts) (NEON-MAMC-DNA) more info...

☐ Mammal Collection (Ear Tissue) (NEON-MAMC-EA) more info...

☒ Mammal Collection (Fecal Samples) (NEON-MAMC-FE) more info...

☒ Mammal Collection (Hair Samples) (NEON-MAMC-HA) more info...

☐ Mammal Collection (Vouchers [Ground Beetle Sampling Bycatch Archive Pooling]) (NEON-MAMC-VGBA) more info...

☐ Mammal Collection (Vouchers [Ground Beetle Sampling Bycatch Trap Sorting]) (NEON-MAMC-VGBT) more info...

☐ Mammal Collection (Vouchers [Standard Sampling at Diversity Plots]) (NEON-MAMC-VDPP) more info...

☐ Mammal Collection (Vouchers [Standard Sampling at Pathogen Plots]) (NEON-MAMC-VPPP) more info...

☐ **External Collections**

<https://biorepo.neonscience.org/portal/collections/misc/collprofiles.php?collid=26>

Here, we can read a description and see the metadata for that collection.

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Mammal Collection (Fecal Samples) (NEON-MAMC-FE)

This collection contains fecal samples collected from small mammals during small mammal sampling (NEON sample class: mam_pertrapnight_in.fecalSampleID). Small mammal sampling is based on the lunar calendar, with timing of sampling constrained to occur within 10 days before or after the new moon. Typically, core sites are sampled 6 times per year, and relocatable sites 4 times per year. Small mammals are sampled using box traps (models LFA, XLK, H.B. Sherman Traps, Inc., Tallahassee, FL, USA) and, at sites in Puerto Rico, larger wire traps suitable for catching *Rattus* spp. (model 201, Tomahawk Live Trap, Hazlehurst, WI, USA). Box traps are arrayed in three to eight (depending on the size of the site) 10 x 10 grids with 10m spacing between traps at all sites. Where used, wire traps are used only in alternate bouts of trapping and placed at every other trap station in the 10 x 10 grid, such that a total of 50 wire traps are set. Small mammal trapping bouts are comprised of one or three nights of trapping, depending on whether a grid is designated for pathogen sample collection (3 nights) or not (1 night). Fresh, uncontaminated feces are collected from an animal using either forceps or scooping the sample directly with the cryovial. Fecal samples are archived in the NEON Biorepository at -80 degrees Celsius. See related links below for protocols and NEON related data products.

Contact: NEON Biorepository (biorepo@asu.edu)

Related link: <https://data.neonscience.org/data-products/DP1.10072.001>

Collection Type: Preserved Specimens

Management: Live Data managed directly within data portal

Global Unique Identifier: faa8a6e6-b2cd-4cda-9f17-a23972cabaec

Digital Metadata: [EML File](#)

Usage Rights: CC0 1.0 (Public-domain)

Collection Statistics

Note that this information includes a link to a related NEON data product for small mammal captures using the “[Related Link](#).”

At the bottom of the page, we can see some summary statistics for the collection. We can click on “Show Geographic Distribution” and “Show Family Distribution” to explore the number of samples at different geographic and taxonomic scales.

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DATA PORTAL

BIOREPOSITORY

Management: Live Data managed directly within data portal

Global Unique Identifier: faa8a6e6-b2cd-4cda-9f17-a23972cabaec

Digital Metadata: [EML File](#)


Usage Rights: [CC0 1.0 \(Public-domain\)](#)

Collection Statistics


- 8,222 specimen records
- 8,222 (100%) georeferenced
- 8,146 (99%) identified to species
- 5 families
- 27 genera
- 81 species
- 81 total taxa (including subsp. and var.)

Extra Statistics

[Show Geographic Distribution](#)
[Show Family Distribution](#)



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f. Returning to the “Sample Search” page, we select the mammal fecal and hair collections.


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☐ **Vertebrates (NEON-VE)**


☐ **Fish Collection (DNA Extracts)** (NEON-FISC-DNA) [more info...](#)


☐ **Fish Collection (Vouchers)** (NEON-FISC-V) [more info...](#)


☐ **Herptile Voucher Collection (Ground Beetle Sampling Bycatch Archive Pooling)** (NEON-HEVC-GBAP) [more info...](#)


☐ **Herptile Voucher Collection (Ground Beetle Sampling Bycatch Trap Sorting)** (NEON-HEVC-GBTS) [more info...](#)


☐ **Herptile Voucher Collection (Small Mammal Sampling Bycatch)** (NEON-HEVC-SMMB) [more info...](#)


☐ **Mammal Collection (Blood Samples)** (NEON-MAMC-BL) [more info...](#)


☐ **Mammal Collection (DNA Extracts)** (NEON-MAMC-DNA) [more info...](#)


☐ **Mammal Collection (Ear Tissue)** (NEON-MAMC-EA) [more info...](#)


☒ **Mammal Collection (Fecal Samples)** (NEON-MAMC-FE) [more info...](#)

☒ **Mammal Collection (Hair Samples)** (NEON-MAMC-HA) [more info...](#)


☐ **Mammal Collection (Vouchers [Ground Beetle Sampling Bycatch Archive Pooling])** (NEON-MAMC-VGBA) [more info...](#)

☐ **Mammal Collection (Vouchers [Ground Beetle Sampling Bycatch Trap Sorting])** (NEON-MAMC-VGBT) [more info...](#)

☐ **Mammal Collection (Vouchers [Standard Sampling at Diversity Plots])** (NEON-MAMC-VDP) [more info...](#)

☐ **Mammal Collection (Vouchers [Standard Sampling at Pathogen Plots])** (NEON-MAMC-VPP) [more info...](#)

☐ **External Collections**

☐ **Conservation of Small Vertebrate Collections (CSVCL) (Small Vertebrates)** [more info...](#)

Then, we will scroll back to the top of the page and click “Search.”

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Please note: this search integrates NEON samples with voucher specimens from the same sites in other natural history collections, allowing for research on biodiversity at NEON sites over a broader taxonomic and temporal extent. **Scroll towards the end of the page to activate or deactivate the search in the external collections.**

Additionally, not all collections are currently available. If you would like to be notified via email when a collection becomes available, please sign up [here](#).

Specimens

☐ Select/Deselect All

☐ **Algae (NEON-AL)**

☐ Aquatic Macroalgae Collection (Chemical Preservation [Clip Harvests]) (NEON-AMAC-CPCH) [more info...](#)

☐ Aquatic Macroalgae Collection (Chemical Preservation [Point Counts]) (NEON-AMAC-CPPC) [more info...](#)

☐ Aquatic Microalgae Collection (Chemical Preservation) (NEON-AMIC-CP) [more info...](#)

☐ Aquatic Microalgae Collection (Freeze-dried) (NEON-AMIC-FD) [more info...](#)

☐ Aquatic Microalgae Collection (Microscope Slides) (NEON-AMIC-MS) [more info...](#)

☐ Aquatic Plant, Bryophyte, and Lichen Collection (Herbarium Vouchers [Clip Harvests]) (NEON-APLC-HVCH) [more info...](#)

☐ Aquatic Plant, Bryophyte, and Lichen Collection (Herbarium Vouchers [Point Counts]) (NEON-APLC-HVPC) [more info...](#)

☐ Aquatic Plant, Bryophyte, and Lichen Collection (Herbarium Vouchers [Standard Sampling]) (NEON-APLC-HVSS) [more info...](#)



SEARCH >

- g. The next page brings us to a search form with several optional criteria. Only one criterion must be applied to conduct your search, but many criteria can be used to produce a narrower set of results.

NEON SCIENCE

DATA PORTAL

BIOREPOSITORY

BIOREPOSITORY DATA PORTAL

Home

Search

Images

Checklists

Sample Use

Additional Information

Home >> Collections >> Search Criteria

[Login](#)
[New Account](#)
[Sitemap](#)

Taxonomic Criteria

☒ Include Synonyms

Scientific Name

LIST DISPLAY

TABLE DISPLAY

RESET FORM

Locality Criteria

Country:

State/Province:

County:

Locality:

Some commonly used criteria are explained below.

- i. Taxonomic Criteria can be applied. When searching based on a taxon loaded into the portal's taxonomic tree, suggested criteria will help you populate the text. For illustration, we will search for deer mice (*Peromyscus*) specimens. With "include Synonyms" checked, we will see all specimens identified as being from within that genus. Otherwise we would see only those specimens identified as *Peromyscus* but not to species.

The screenshot displays the NEON Science Data Portal Biorepository interface. The header includes the NEON Science logo and the text "BIOREPOSITORY DATA PORTAL". The navigation bar contains links for SEARCH, IMAGES, CHECKLISTS, SAMPLE USE, and ADDITIONAL INFORMATION. The main content area shows the "Taxonomic Criteria" search form. The "Include Synonyms" checkbox is checked. The "Scientific Name" dropdown menu is open, showing a list of suggestions: *Peromyscus*, *Peromyscus attwateri*, *Peromyscus boylii*, *Peromyscus californicus*, *Peromyscus crinitus*, *Peromyscus eremicus*, *Peromyscus fraterculus*, *Peromyscus gossypinus*, and *Peromyscus gossypinus allapaticola*. The "Locality Criteria" section includes fields for Country, State/Province, County, and Locality, all of which are currently blank. On the right side of the form, there are three buttons: LIST DISPLAY, TABLE DISPLAY, and RESET FORM.

NEON SCIENCE DATA PORTAL BIOREPOSITORY

Home >> Collections >> Search Criteria

Login New Account Sitemap

Taxonomic Criteria

☒ Include Synonyms

Scientific Name: *Peromyscu*

Peromyscus

Peromyscus attwateri

Peromyscus boylii

Peromyscus californicus

Peromyscus crinitus

Peromyscus eremicus

Peromyscus fraterculus

Peromyscus gossypinus

Peromyscus gossypinus allapaticola

Locality Criteria

Country:

State/Province:

County:

Locality:

LIST DISPLAY

TABLE DISPLAY

RESET FORM

- ii. We can also search by Locality criteria. For this example, we will leave this blank, but we could narrow our search by state, county, or elevational range.

Taxonomic Criteria☒ Include SynonymsScientific Name

LIST DISPLAY

TABLE DISPLAY

RESET FORM

Locality CriteriaCountry: State/Province: County: Locality: Elevation (in meters): to **Latitude and Longitude****Bounding box**Northern Latitude: N Southern Latitude: N Western Longitude: W Eastern Longitude: W **Polygon (WKT footprint)****Point-Radius**Latitude: N Longitude: W Radius: Kilometers

Microsoft PowerPoint

- iii. Latitude and Longitude criteria can also be applied using a bounding box, spatial polygon, or point-radius area. Here, we will limit our search to within a bounding box drawn in the Google Earth pop-up window to correspond roughly with the western half of the continental United States

County: Locality: Elevation (in meters): to **Latitude and Longitude****Bounding box**Northern Latitude: N Southern Latitude: N Western Longitude: W Eastern Longitude: W **Collector Criteria**Collector's Last Name: Collector's Number: Collection Date: - **Specimen Criteria**Catalog Number: ☒ Include other catalog numbers and GUIDs

LIST DISPLAY

TABLE DISPLAY

Close mapping tool to transfer shape definition to search form.



- iv. Other Collector and Specimen Criteria can be used to limit the search. Of interest for a select number of NEON collections is the ability to “Limit to Specimens with Genetic Data.” This search will limit results to those linked to sequences available in the [Barcode of Life Database](#) (BOLD).

NEON SCIENCE		DATA PORTAL		BIOREPOSITORY
Western Longitude:	<input type="text" value="126.209961"/> <input type="button" value="W"/>		Radius:	<input type="text"/> <input type="button" value="Kilometers"/>
Eastern Longitude:	<input type="text" value="93.646484"/> <input type="button" value="W"/>			

Collector Criteria

Collector's Last Name:

Collector's Number:

Collection Date: -

Specimen Criteria

Catalog Number: ☒ Include other catalog numbers and GUIDs

☐ Limit to Type Specimens

☐ Limit to Specimens with Images

☐ Limit to Specimens with Genetic Data

☐ Include cultivated/captive occurrences



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- h. When all search criteria of interest have been applied, we will click “List Display” either at the top or the bottom of the search form.

Home >> Collections >> Search Criteria

[Login](#)
[New Account](#)
[Sitemap](#)

Taxonomic Criteria

☒ Include Synonyms

Scientific Name

LIST DISPLAY

TABLE DISPLAY

RESET FORM

Locality Criteria

Country:

State/Province:

County:

Locality:

- This brings us to the “Occurrence Records” tab of the [search results](#). At the top of that page, you see the search criteria used to generate the results. We can see that as of April 23, 2020, 3379 samples from the NEON-MAMC-FE (fecal) and NEON-MAMC-HA (hair) collections met our criteria.

Home >> Collections >> Search Criteria >> Specimen Records


Welcome Kelsey!
[My Profile](#)
[Logout](#)
[Sitemap](#)

Species List
Occurrence Records
Maps

Dataset: NEON-MAMC-FE; NEON-MAMC-HA
Taxa: Peromyscus
Search Criteria: Lat: 23.42108 - 49.15165 Long: -126.20996 - -93.64648; excluding cultivated/captive occurrences

1 2 3 4 5 6 7 8 9 10 11 >> Last
Page 1, records 1-100 of 3379

Mammal Collection (Fecal Samples)


Peromyscus leucopus (Rafinesque, 1818)

- j. Note that you can click the link button on the upper right corner of the page to copy a URL for these search results to your clipboard.

The screenshot shows the NEON Science Data Portal interface. The top navigation bar includes 'NEON SCIENCE', 'DATA PORTAL', and 'BIOREPOSITORY'. Below this is a header image with the 'NEON' logo and 'BIOREPOSITORY DATA PORTAL' text. A secondary navigation bar contains links: 'SEARCH', 'IMAGES', 'CHECKLISTS', 'SAMPLE USE', and 'ADDITIONAL INFORMATION'. The main content area shows the breadcrumb 'Home >> Collections >> Search Criteria >> Specimen Records' and a 'Login New Account Sitemap' link. A tabbed interface has 'Species List', 'Occurrence Records', and 'Maps'. The 'Occurrence Records' tab is active, displaying: 'Dataset: NEON-MAMC-FE; NEON-MAMC-HA', 'Taxa: Peromyscus', and 'Search Criteria: Lat: 23.42108 - 49.15165 Long: -126.20996 - -93.64648; excluding cultivated/captive occurrences'. It includes a pagination bar with '1 2 3 4 5 6 7 8 9 10 11 >> Last' and 'Page 1, records 1-100 of 3379'. A section titled 'Mammal Collection (Fecal Samples)' lists a record for *Peromyscus leucopus* (Rafinesque, 1818) with details: 'NEON-MAMC-FE', 'NEON017MG', 'mpike@battelleecology.org', '2018-08-15', and location 'United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m). 39.121218 -96.639897. 330m'. In the top right corner of the results area, three icons are visible: a list icon, a download icon (highlighted with a yellow box), and a link icon.

- k. We can also click the download button on the upper right corner of the page to download the results.

This screenshot is identical to the one above, showing the same NEON Science Data Portal interface and search results for *Peromyscus leucopus*. The layout, including the navigation bars, breadcrumb trail, and record details, is the same. The key difference is that the download icon (a blue square with a white download symbol) in the top right corner of the results area is now highlighted with a yellow box, indicating it is the button to be clicked to download the results.

This will bring up a pop-up window where we can select whether we would like to download our results as a [Symbiota](#) Native or [Darwin Core](#) file. These formats are very similar, but Symbiota Native files supports more fields. Click the icon to the right of these names for brief descriptions of these file structures.

The screenshot shows a web browser window with the URL <https://biorepo.neonscience.org/portal/collections/download/index.php>. The page title is 'Collections Search Download'. The main heading is 'Data Usage Guidelines'. Below this, a paragraph states: 'By downloading data, the user confirms that he/she has read and agrees with the general [data usage terms](#). Note that additional terms of use specific to the individual collections may be distributed with the data download. When present, the terms supplied by the owning institution should take precedence over the general terms posted on the website.'

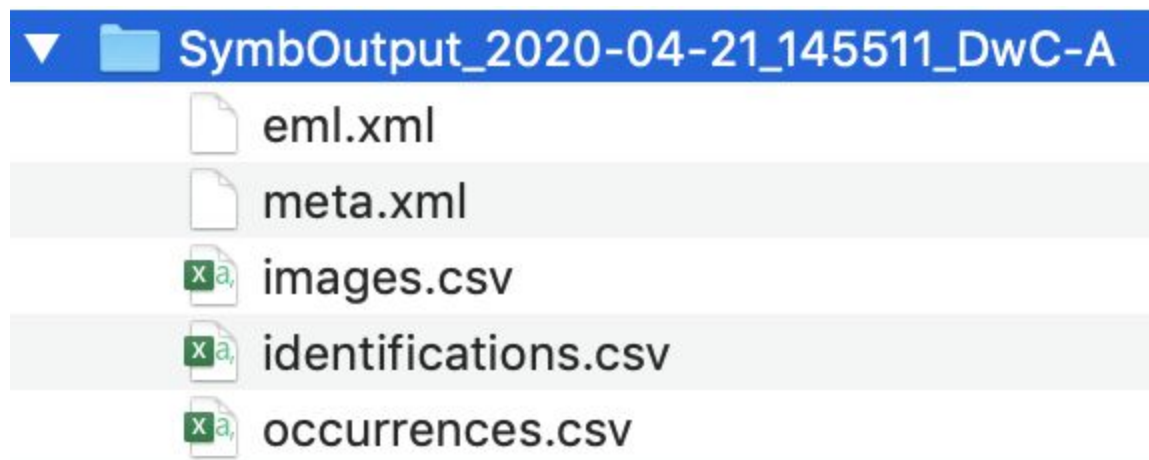
The 'Download Specimen Records' section contains the following options:

- Structure:**
 - ☒ Symbiota Native
 - ☐ Darwin Core
 - [*What is Darwin Core?](#)
- Data Extensions:**
 - ☒ include Determination History
 - ☒ include Image Records
 - *Output must be a compressed archive*
- File Format:**
 - ☒ Comma Delimited (CSV)
 - ☐ Tab Delimited
- Character Set:**
 - ☒ ISO-8859-1 (western)
 - ☐ UTF-8 (unicode)
- Compression:**
 - ☒ Compressed ZIP file

A blue button labeled 'DOWNLOAD DATA' is at the bottom of the form.

We can also choose the data extensions (determination history and/or images) that we would like to include in our download, the file format, and whether we would like the results as a zip file. We select “Download Data” when we have identified our preferences.

In a default download, we will see a folder like below in which the “occurrences.csv” file is the primary results file containing a table of all available sample-associated data.



- I. Returning to the portal results, we will navigate to the “Species List” tab to see a list of all taxa represented in the results.

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SEARCH

IMAGES

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Home >> Collections >> Search Criteria >> Specimen Records

Login New Account Sitemap

Species List

Occurrence Records

Maps

Taxonomic Filter: Raw Data

Taxa Count: 8

CRICETIDAE

Peromyscus
Peromyscus attwateri
Peromyscus boylii
Peromyscus eremicus
Peromyscus keeni
Peromyscus leucopus
Peromyscus maniculatus
Peromyscus truei

Note that you click on any of the taxon names to read more about that taxon. For some taxa, this page will include photos and/or detailed descriptions of the tax.

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***Peromyscus truei* (Shufeldt, 1885)**

Family: Cricetidae


Pion Deermouse



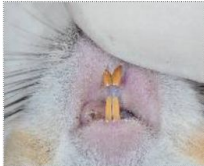
Flickr; Don Loarie

Web Links


- BOLD Systems - Barcode of Life Data Systems
- Encyclopedia of Life
- Google Images
- Google Search Engine
- NCBI - National Center for Biotechnology Information




Ken-ichi Ueda; Flickr




Flickr; Don Loarie



Ken-ichi Ueda; Flickr



Flickr; Don Loarie







Open Interactive Map

From there, you can click “Open Interactive Map” underneath the main text box on the Taxon Page to view the collection locations for samples from that taxon.



m. Back to the main Occurrence Records Tab, we can scroll through to explore the resulting records.

NEON SCIENCE				DATA PORTAL	BIOREPOSITORY
	<i>Peromyscus leucopus</i> (Rafinesque, 1818)				
NEON:MAMC-FE	NEON017MG	mpike@battelleecology.org	2018-08-15		
	United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m), 39.121218 -96.639897, 330m				
	Full Record Details				
	<i>Peromyscus maniculatus</i> (Wagner, 1845)				
NEON:MAMC-FE	NEON017MH	mpike@battelleecology.org	2018-08-15		
	United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m), 39.121218 -96.639897, 330m				
	Full Record Details				
	<i>Peromyscus maniculatus</i> (Wagner, 1845)				
NEON:MAMC-FE	NEON017MI	mpike@battelleecology.org	2018-08-15		
	United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m), 39.121218 -96.639897, 330m				
	Full Record Details				
	<i>Peromyscus maniculatus</i> (Wagner, 1845)				
NEON:MAMC-FE	NEON017MJ	thillman@battelleecology.org	2018-08-15		
	United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_013 (plot dimensions: 90m x 90m), 39.125776 -96.640728, 329m				
	Full Record Details				


Clicking on the species name to go to the Taxon Page and learn more about the identified taxon, as we could from the Species List tab.

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Mammal Collection (Fecal Samples)

 *Peromyscus leucopus* (Rafinesque, 1818)


NEON:MAMC- NEON017MG mpike@battelleecology.org 2018-08-15
FE United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m), 39.121218 -96.639897, 330m
Full Record Details

 *Peromyscus maniculatus* (Wagner, 1845)

NEON:MAMC- NEON017MH mpike@battelleecology.org 2018-08-15
FE United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m), 39.121218 -96.639897, 330m
Full Record Details

 *Peromyscus maniculatus* (Wagner, 1845)

NEON:MAMC- NEON017MI mpike@battelleecology.org 2018-08-15
FE United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m), 39.121218 -96.639897, 330m
Full Record Details

 *Peromyscus maniculatus* (Wagner, 1845)


NEON:MAMC- NEON017MI thillman@battelleecology.org 2018-08-15

<https://biorepo.neonscience.org/portal/taxa/index.php?tid=79479>


<https://biorepo.neonscience.org/portal/taxa/index.php?tid=79479>

Clicking on “Full Record Details” opens a pop-up window that allows us to read more about an individual sample.


Mammal Collection (Fecal Samples)

 *Peromyscus leucopus* (Rafinesque, 1818)
NEON:MAMC-FE NEON017MG mpik@battelleecology.org 2018-08-15
United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m), 39.121218 -96.639897, 330m


[Full Record Details](#)

 *Peromyscus maniculatus* (Wagner, 1845)
NEON:MAMC-FE NEON017MH mpik@battelleecology.org 2018-08-15
United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m), 39.121218 -96.639897, 330m

[Full Record Details](#)

 *Peromyscus maniculatus* (Wagner, 1845)
NEON:MAMC-FE NEON017MI mpik@battelleecology.org 2018-08-15
United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m), 39.121218 -96.639897, 330m

[Full Record Details](#)

 *Peromyscus maniculatus* (Wagner, 1845)
NEON:MAMC-FE NEON017MI thillman@battelleecology.org 2018-08-15

<https://biorepo.neonscience.org/portal/collections/list.php#>


In that pop-up window, we will see much of the available data relevant to that individual samples.

Details

Map

Comments

Linked Resources

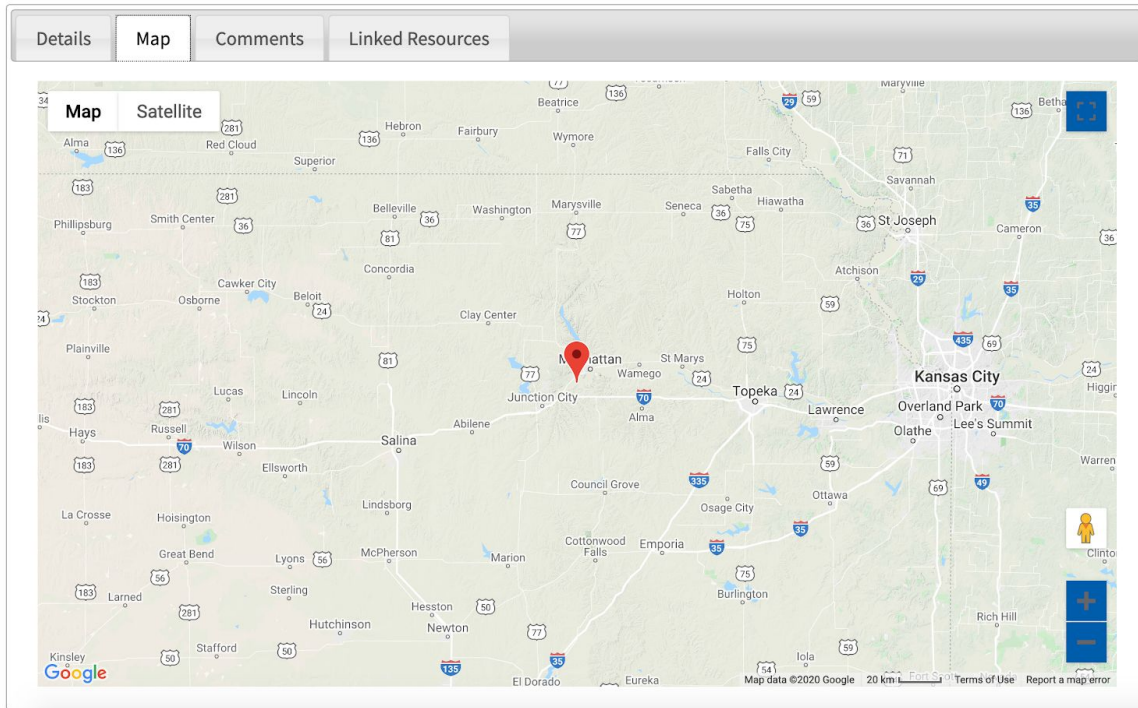
 **Mammal Collection (Fecal Samples) (NEON:MAMC-FE)**

Share 0

Tweet

Catalog #: NEON017MG
Occurrence ID (GUID): NEON017MG
Secondary Catalog #: KONA.20180815.R4020.F
Taxon: *Peromyscus leucopus* (Rafinesque, 1818)
Identification Qualifier: cf. species
Family: Cricetidae
Determiner: fschroyer@battelleecology.org (2018-08-15)
Collector: mpik@battelleecology.org
Date: 2018-08-15
Verbatim Date: 2018-8-15
Locality: United States, Kansas, Riley, Konza Prairie Biological Station - Relocatable, Plot KONA_016 (plot dimensions: 90m x 90m)
39.121218 -96.639897 +-64m. WGS84
Elevation: 330 meters (1082ft)
Habitat: cultivatedCrops; slope aspect: 74.72; slope gradient: 1.23; soil type order: Mollisols
Description: Fecal sample collected from a small mammal
Reproductive Condition: Scrotal
Life Stage: adult
Sex: Male
Preservation: liquid nitrogen

We can elect the "Map" tab to visualize where the sample was collected.



Some samples will have other information available, such as links to publications and online datasets using the sample.

- n. Back to the main search results page, we can navigate to the “Maps” tab to map of search results.

NEON SCIENCE
DATA PORTAL
BIOREPOSITORY

Species List
Occurrence Records
Maps

Google Map

[DISPLAY COORDINATES IN GOOGLE MAP](#)

Google Maps is a web mapping service provided by Google that features a map that users can pan (by dragging the mouse) and zoom (by using the mouse wheel). Collection points are displayed as colored markers that when clicked on, displays the full information for that collection. When multiple species are queried (separated by semi-colons), different colored markers denote each individual species.

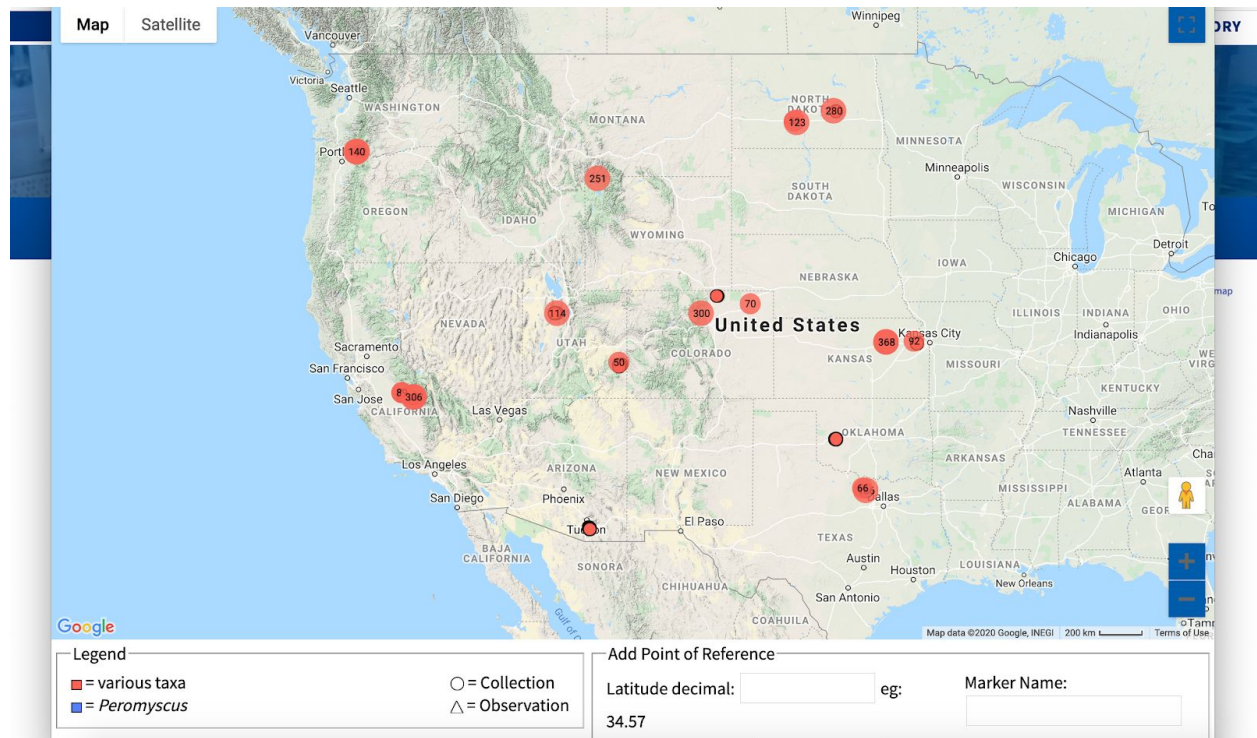
Google Earth (KML)

This creates a KML file that can be opened in the Google Earth mapping application. Note that you must have Google Earth installed on your computer to make use of this option.

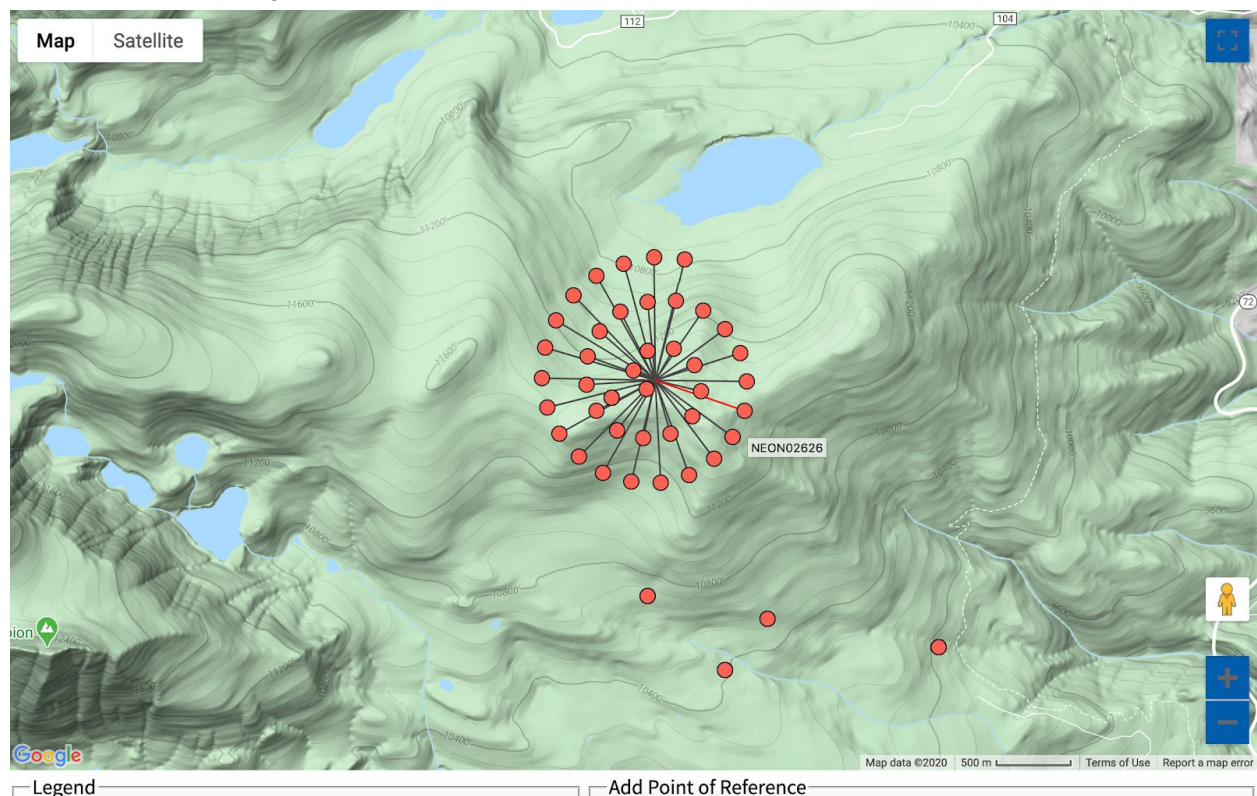
[CREATE KML](#)

Add Extra Fields

We can click “Display Coordinates in Google Map” to visualize the collection locations of the samples in a pop-up Google Maps window.



We can zoom in and click on individual markers to see the “Full Record Details” pop-up window for the corresponding sample like that we saw above from the “Occurrence Records” tab.



Back on the “Maps” tab in the search results, we can download a KML file of occurrences suitable for mapping in Google Earth.

NEON SCIENCE**DATA PORTAL****BIOREPOSITORY**

Species ListOccurrence RecordsMaps

Google Map

DISPLAY COORDINATES IN GOOGLE MAP

Google Maps is a web mapping service provided by Google that features a map that users can pan (by dragging the mouse) and zoom (by using the mouse wheel). Collection points are displayed as colored markers that when clicked on, displays the full information for that collection. When multiple species are queried (separated by semi-colons), different colored markers denote each individual species.

Google Earth (KML)

This creates an KML file that can be opened in the Google Earth mapping application. Note that you must have Google Earth installed on your computer to make use of this option.

CREATE KML

Add Extra Fields

Note that you can click “Add Extra Fields” to select additional Symbiota fields to include in the KML download.

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Google Earth (KML)

This creates an KML file that can be opened in the Google Earth mapping application. Note that you must have Google Earth installed on your computer to make use of this option.

CREATE KML

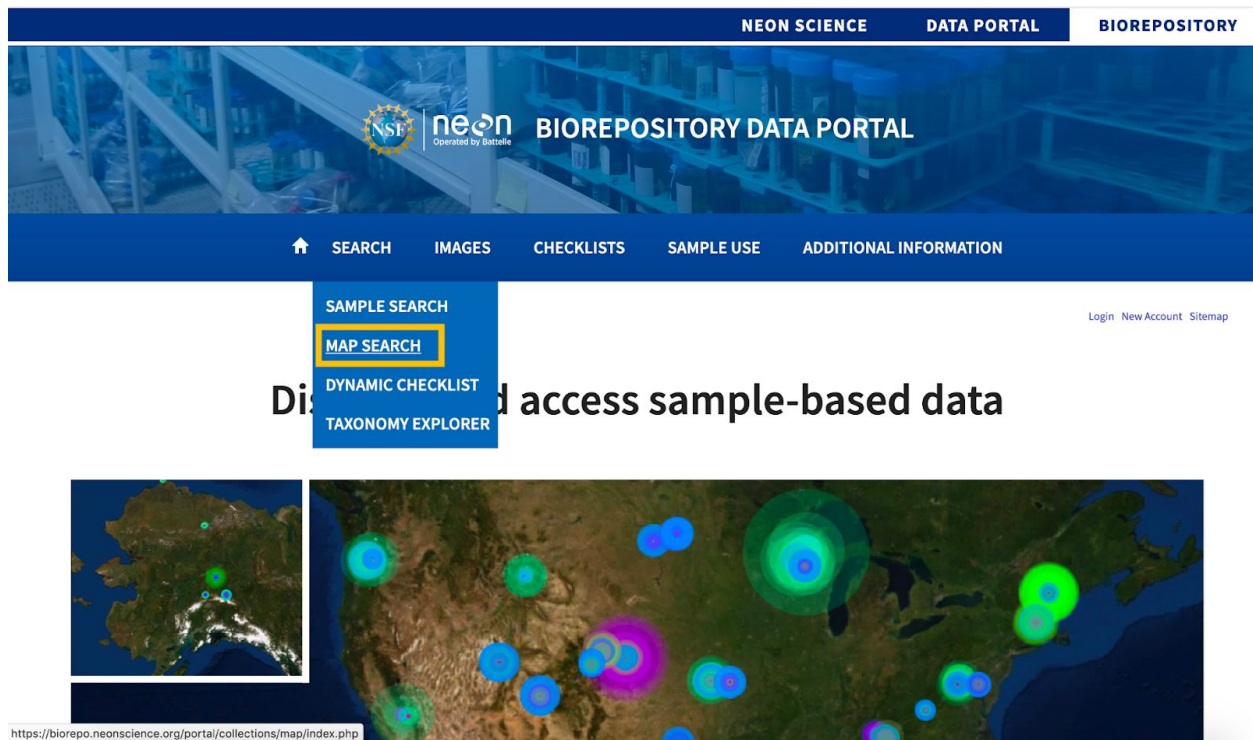
Add Extra Fields

☐ occurrenceid ☐ identifiedby ☐ dateidentified ☐ identificationreferences ☐ identificationremarks ☐ taxonremarks ☐ recordedby ☐ recordnumber ☐ associatedcollectors ☐ eventdate ☐ year ☐ month ☐ day ☐ verbatimeventdate ☐ habitat ☐ substrate ☐ occurrenceremarks ☐ associatedtaxa ☐ verbatimattributes ☐ reproductivecondition ☐ cultivationstatus ☐ establishmentmeans ☐ lifestage ☐ sex ☐ individualcount ☐ samplingprotocol ☐ preparations ☐ country ☐ stateprovince ☐ county ☐ municipality ☐ locality ☐ locationremarks ☐ coordinateuncertaintyinmeters ☐ verbatimcoordinates ☐ georeferencedby ☐ georeferenceprotocol ☐ georeferencesources ☐ georeferenceverificationstatus ☐ georeferenceremarks ☐ minimelevationinmeters ☐ maximelevationinmeters ☐ verbatimelevation

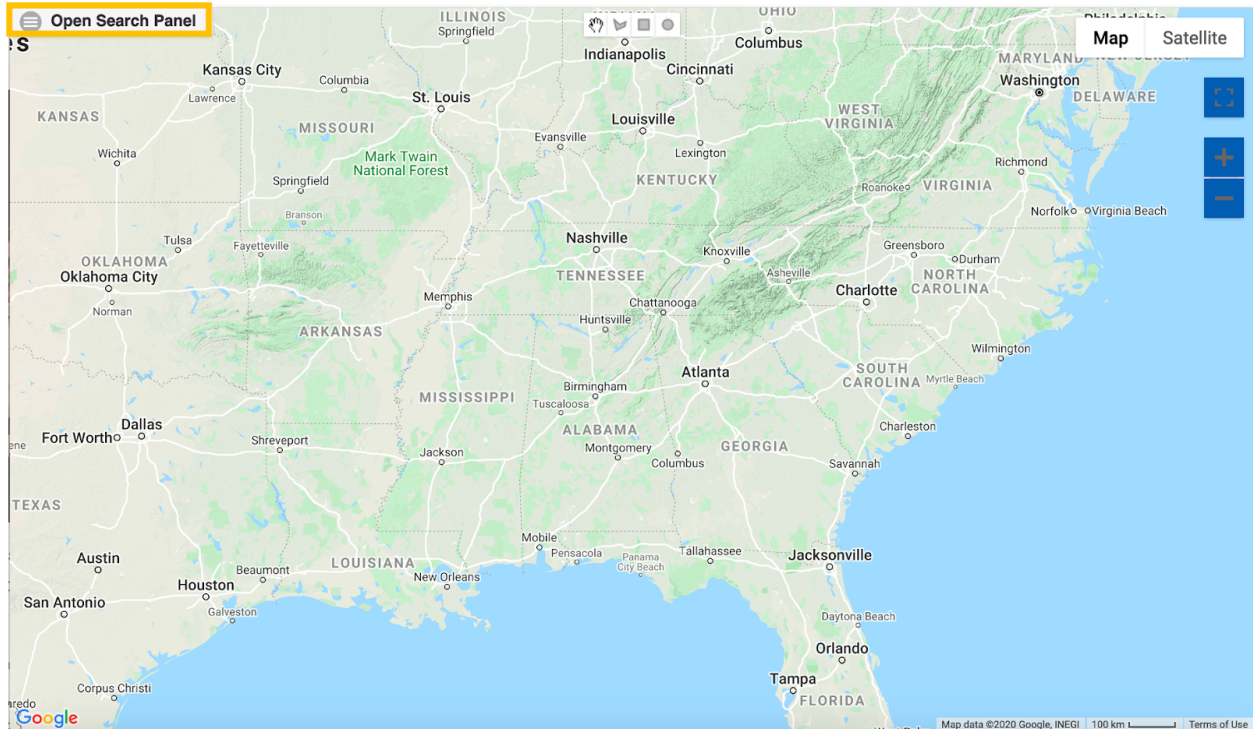
4. Conduct a Map Search

We can use the “Map Search” feature of the NEON Biorepository data portal to visualize and download available NEON samples based on collection, taxon, location, and more. To do so we will:

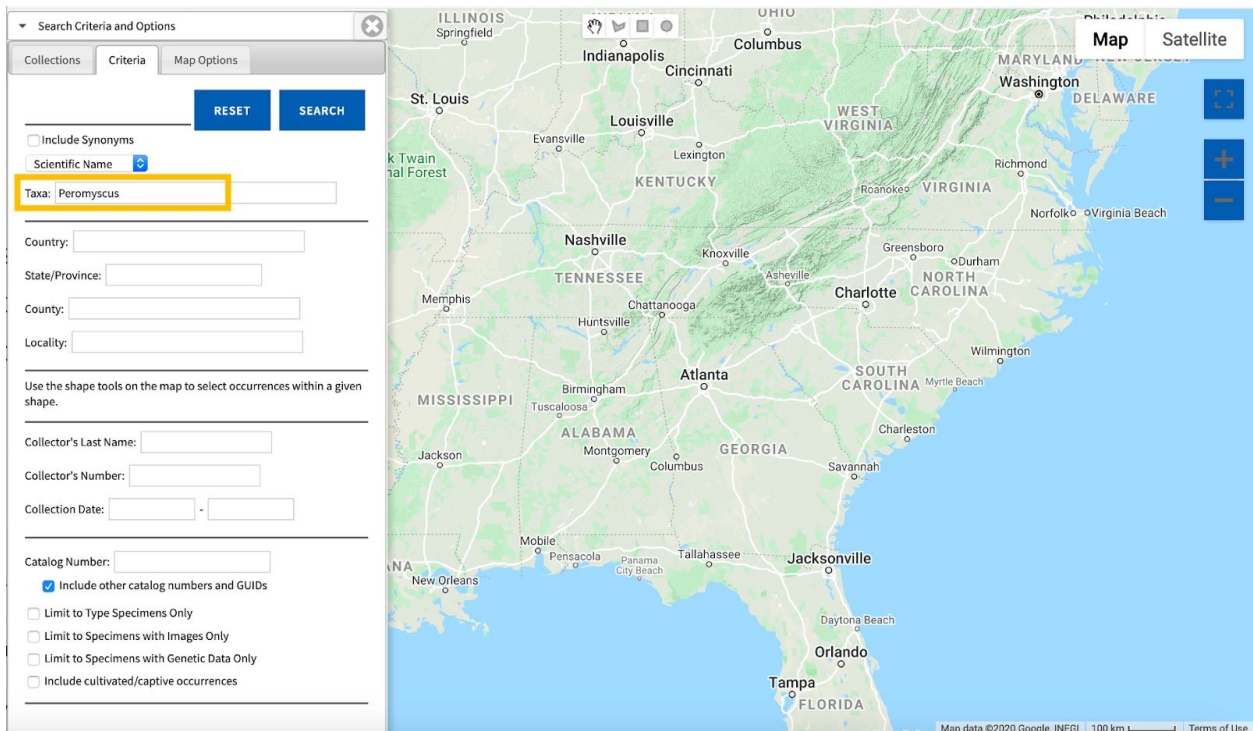
- a. We navigate to “[Map Search](#)” under “Search” in the main menu. This opens a new Google Maps tab.



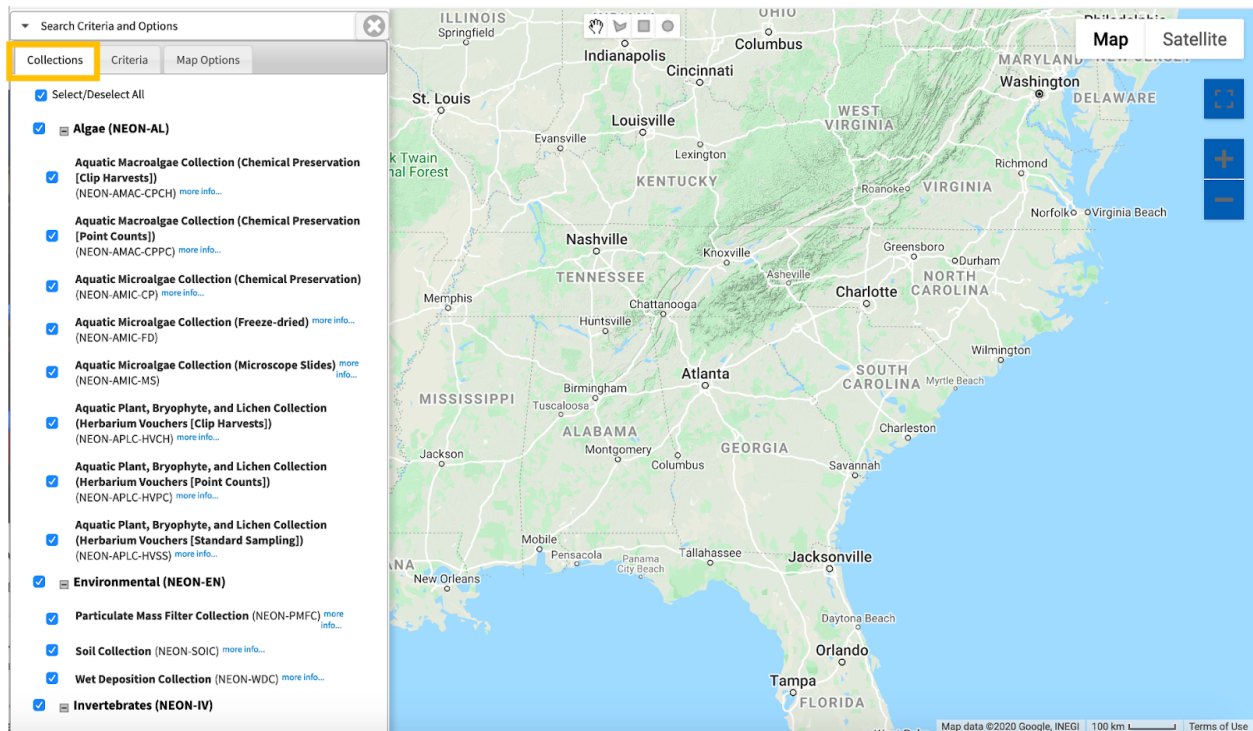
- b. We can click “Open Search Panel” in the upper left hand corner to expand a panel to input search terms.



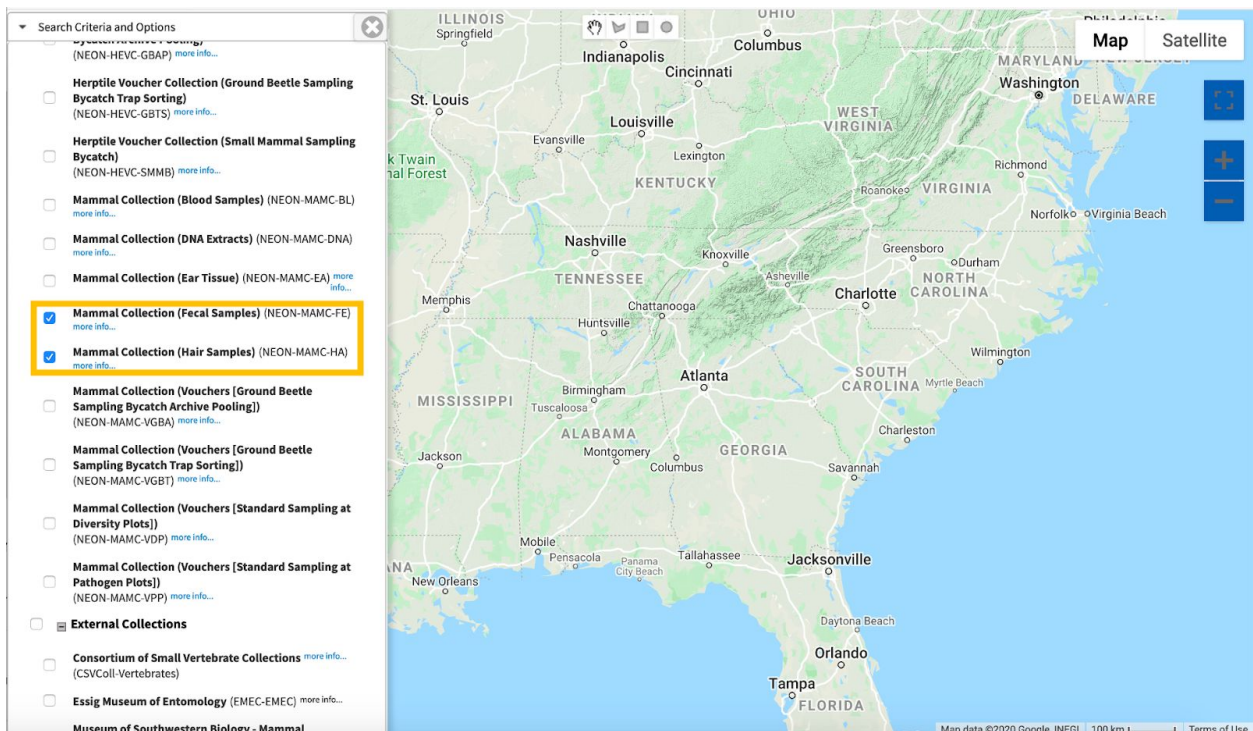
- c. In the now visible search panel, entering search criteria is done in the same way as in the “Sample Search” described above. We will again search for *Peromyscus*.



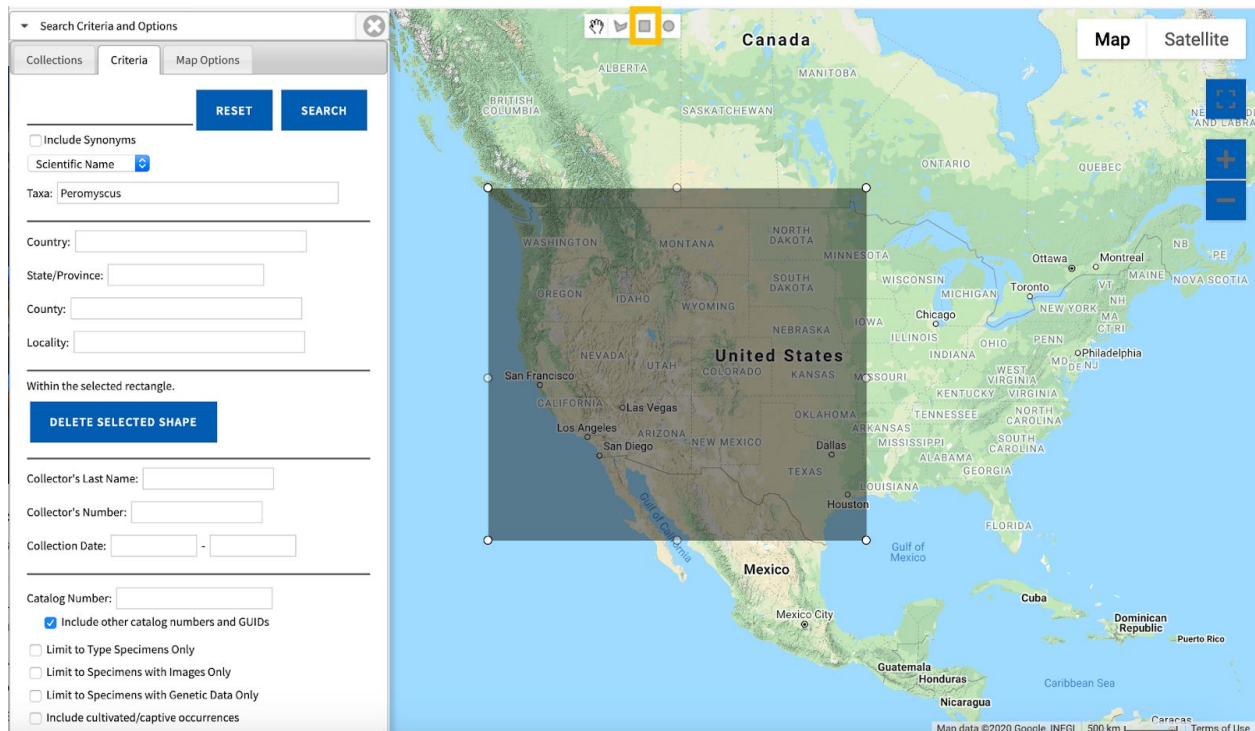
- d. Then, we then click the “Collections” tab to select the collections of interest.



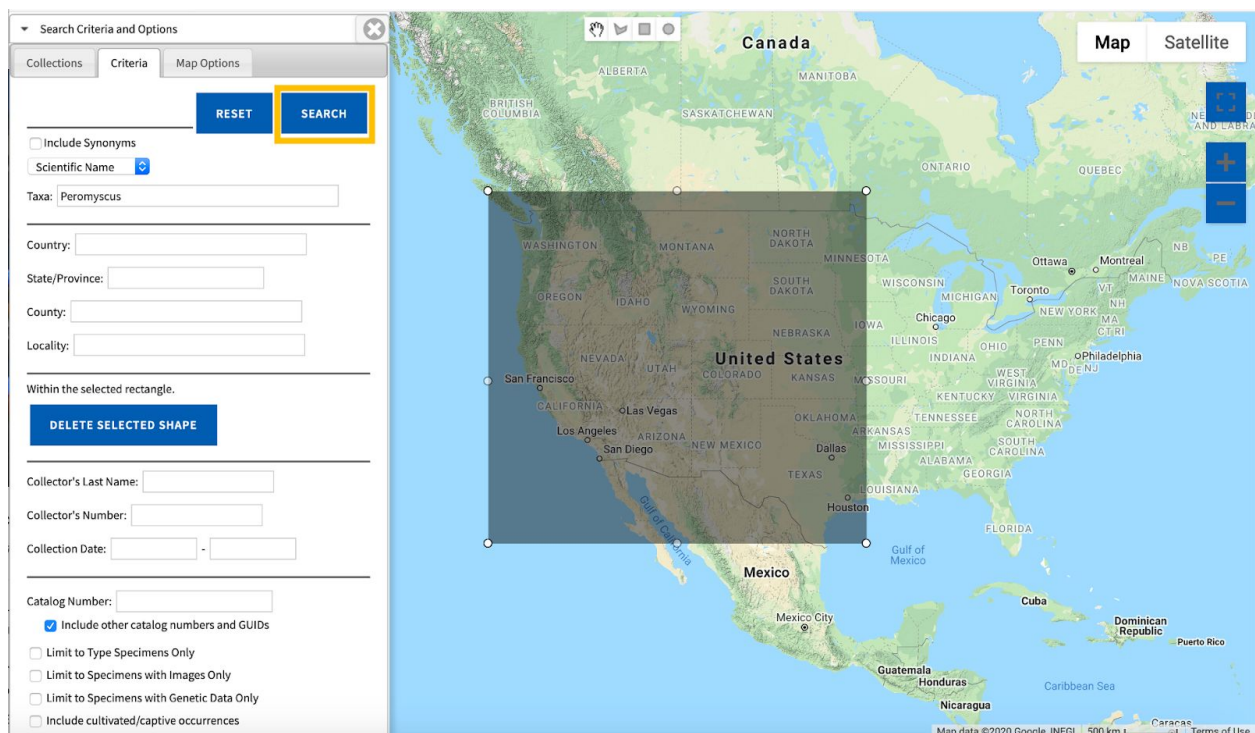
We will again focus only on the mammal fecal and hair samples.



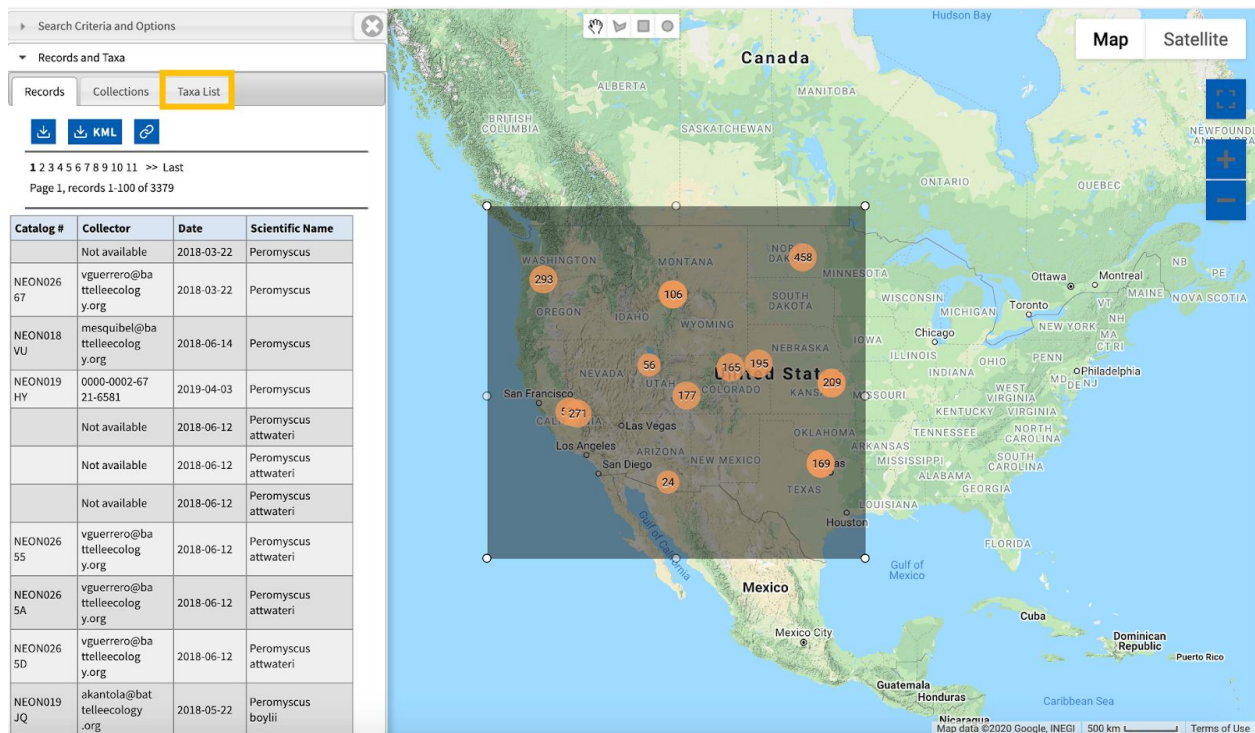
- e. We can use the map area selection tools at the center top area of the screen. We will again focus on the western half of the continental US.



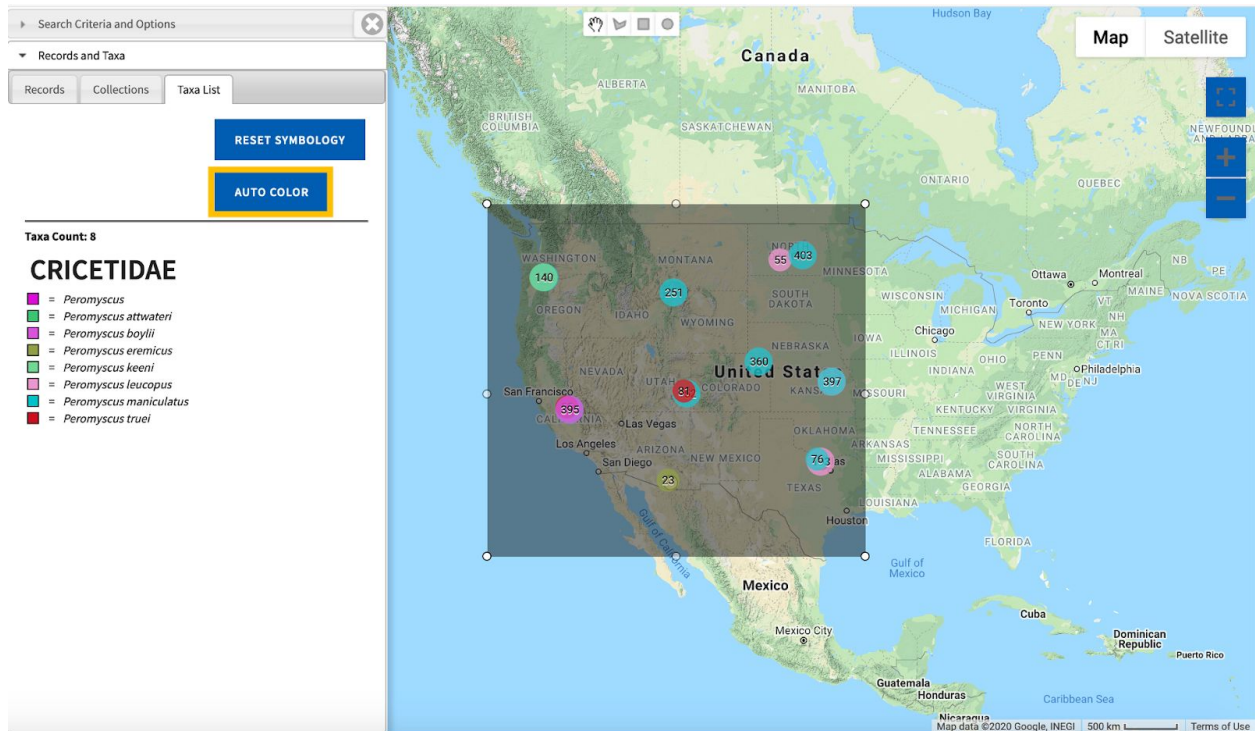
- f. We click “Search” in the “Criteria” tab of the search panel to see the collection locations for the samples.



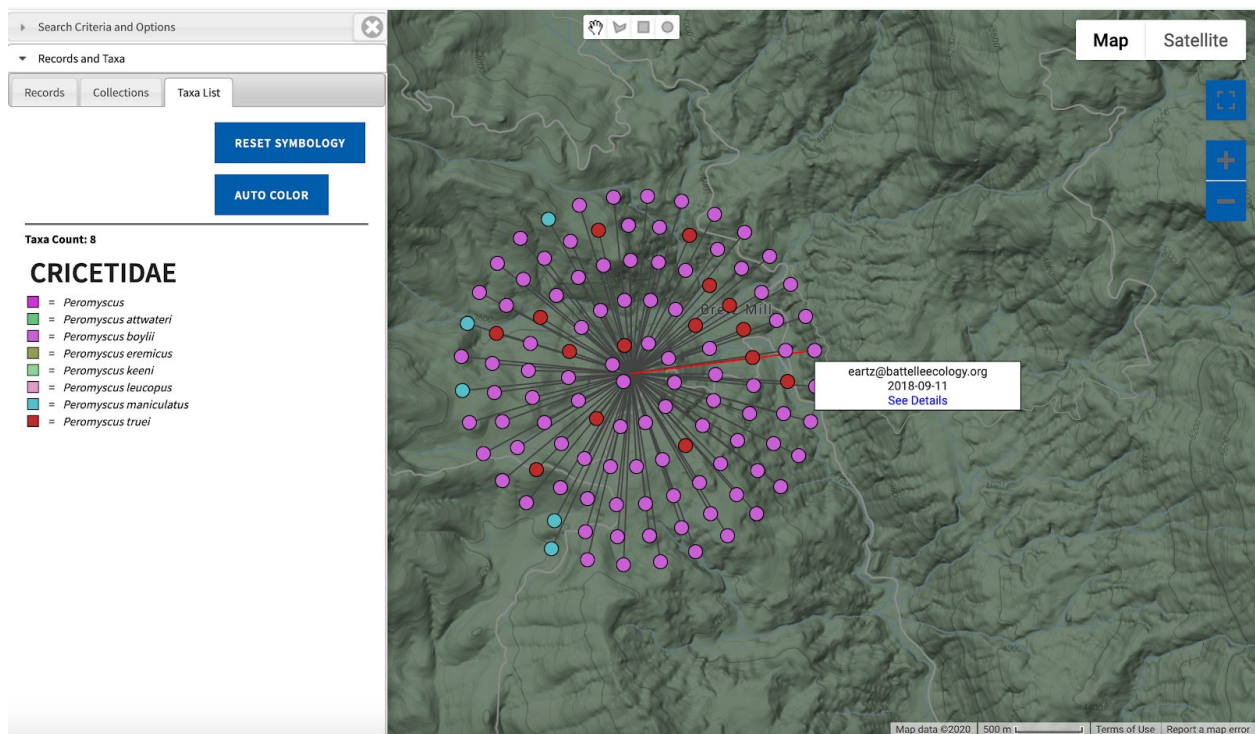
- g. When the results appear, we will open the search panel again to see the records and taxa. To color the points by taxa, we switch to the “Taxa List” tab.



h. We select “Auto Color” to color the points by taxon. There we also see a list of taxa. Each name links to the Taxon Page like those described in the above section on the “Sample Search” feature.



- i. As when the results of the “Sample Search” feature are mapped, we can zoom and select individual record. Clicking on “See Details” will bring us to the “Full Record Details” page.



- j. We can return to the “Records and Taxa” tab to download the Symbiota or Darwin Core records resulting from the search (download button), download the KML file (KML download button), and copy a link to the search results to the clipboard (link button).

Search Criteria and Options

Records and Taxa

RecordsCollectionsTaxa List

Download

KML

Share

1234567891011>>Last

Page 1, records 1-100 of 3379

Catalog #	Collector	Date	Scientific Name
	Not available	2018-03-22	Peromyscus
NEON02667	vguerrero@batteleecology.org	2018-03-22	Peromyscus
NEON018VU	mesquibel@batteleecology.org	2018-06-14	Peromyscus
NEON019HY	0000-0002-6721-6581	2019-04-03	Peromyscus
	Not available	2018-06-12	Peromyscus attwateri
	Not available	2018-06-12	Peromyscus attwateri
	Not available	2018-06-12	Peromyscus attwateri
NEON02655	vguerrero@batteleecology.org	2018-06-12	Peromyscus attwateri
NEON0265A	vguerrero@batteleecology.org	2018-06-12	Peromyscus attwateri
NEON0265D	vguerrero@batteleecology.org	2018-06-12	Peromyscus attwateri
NEON019JQ	akantola@batteleecology.org	2018-05-22	Peromyscus boylii

