Submitting Rare Species Data to MNFI via Survey123

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Getting Started

Downloading the app and uploading the form is a two-step process. If you have not yet downloaded the Survey123 app to your device, copy and paste this link into your device's web browser and proceed to download. *You do not need to create a login to access the form, select 'continue without signing in'.

https://www.esri.com/en-us/arcgis/products/arcgis-survey123/resources#settingup

To upload the Rare Species App Form into the app, copy and paste this connection into your device's web browser:

arcgis-survey123://?itemID=8d239cb2d3bd45d9adf55a3fbfd18f57

The Survey123 app should open immediately on your device with the Rare Species App Form now uploaded. A new survey form may appear right away or the home page will open. If you are on the home page click the 'Rare Species App Form' card to be directed to the survey's main page. Click 'Collect' at the bottom to open a new survey form.

Species Identification

Choose the 'Species Type' (plant or animal) you want to search for, and how you want to search for it (scientific or common name). A dropdown list of species will appear in the field below. Type in your species name to find and select it. The text below will be auto populated with information about the species including its scientific or common name, federal and state status, and a link to the species' NatureServe Explorer page. The link is useful if you need help selecting key features for identification. You can also view the species range and distribution across the state or country and explore its habitat and management descriptions.

Adding Photos & Audio Recordings

You may add up to 8 photos. Clicking the camera icon connects to your device's camera to snap a photo. You can also upload photos from your device's storage by selecting the file folder icon. Examples of great photos include close-up shots highlighting any identifying features. Photographing the habitat is also very helpful. Good focus, angle and multiple shots are helpful, but MNFI understands this can be difficult to achieve for every observation. Add the best photos you can, some evidence is better than none! Audio recordings are helpful for identification of birds via song or herptiles such as frogs. Only one audio recording is allowed.

Animal Information

Click the plus or minus sign to add or delete the number of adults or juveniles you have observed and note if it was an estimate or actual count. Next, select the evidence type you want to list. If you have multiple, list the others in the following notes section below (*Evidence Type: Specimen, Sample, Photographed, Heard, Seen, Telemetry, Nest, Scat, Tracks, Other*). In the notes section list any information you were able to collect about the species including size, sex, behavior or how you identified it.

Plant Information

Click the plus or minus sign to add or delete the number of individuals you have observed and note if it was an estimate or actual count. Next, note the abundance using the DACOR scale (*Abundance: Dominant, Abundant, Frequent, Occasional, Rare*). Click the plus or minus sign to add or delete the percent of plants in flower or in fruit. You can also click the field and type in any number between 0-100. Note the apparent vigor of the plant or population. Does it look weak and colorless or vibrant and healthy (*Apparent vigor: Excellent, Good, Fair, Poor, Unsure*)? List any associated plant species found nearby and in a similar habitat to the species of interest. This helps MNFI determine the community type and get a better understanding of the occupied habitat. In the notes section record any information you collected about the species including its distribution pattern and any unique features that helped you to identify the species.

Mapping

The mapping class question pertains only to animals, specifically bird species that occupy or migrate through geographically disjunct locations at different seasons. If you are unsure of a bird species' breeding or migration season, refer to the NatureServe Explorer link within the survey or the species' Rare Species Explorer page on the MNFI site. Select 'Not applicable' for all animals, except birds (*Mapping Class: Breeding, Nonbreeding, Migratory, Nonmigratory, Not applicable*).

Choosing how to map your observation depends on the species type and the occupied habitat. Below are a few examples to help you determine the best option when selecting a feature type. If you are not confident with your mapping choice, feel free to leave a note in the 'Survey Details' section.

Mapping Continued

Feature Type:

Point – *Observations within a small area, less than or equal to 9 meters.*
- An individual plant such as a rare orchid.
- A small population of 12-20 plants.

Line – *Observations that follows a linear path such as a river or powerline corridor.*
- Aquatic species such as fish, mussels or aquatic plants.
- A plant population that occupies a disturbed habitat such as a powerline corridor or roadside ditch.

Polygon – *Observations that are within a large area, greater than 9 meters.*
- A large population of plants scattered across a forest floor or dune landscape.
- A songbird heard calling in the distance (may also be mapped as a point if the estimated distance and direction is described in the notes).

Describe how to get to the mapped area from the nearest town or major highway. If you are unfamiliar with the location, you can click on the map again and zoom in and out without disrupting your pinned location. Next, choose a major landmark that is nearby. A lake, major road, town or city will suffice.

Habitat

Be as detailed as possible when describing the habitat. Is it within a protected area or on private property? Is it within a natural community type? Near a wetland or lake? If needed, refer to the map again. Be sure to add any notable disturbance the site has including a list of invasive species, any pollution or waste problems as well as issues with fragmentation or hydrology. Rank the site's overall quality based on how well it functions as an ecosystem for the species (*Overall site quality: Excellent, Good, Fair, Poor, Unsure*).

Survey Details

There is a long list of survey types to choose from. Often, listing the observation as 'causal or 'incidental' will suffice. However, if you are out conducting a specific type of survey such as a breeding bird survey or a line transect, please specify. You can also briefly describe your survey protocol in the survey notes field. Record the date as either a singular day (exact date) or a survey period (date range). Fill in the name of all observers and provide contact information for one person. Lastly, let MNFI know if you would like a copy for your records.

Submission

To submit your observation, click the checkmark at the bottom right of the app. An alert would appear if you missed any important fields, otherwise an option box. If you are ready to submit your data and are in service, click 'Send now'. If you are out of service and want to send the survey later, select 'Save in Outbox'. The Outbox folder houses completed surveys that you can bulk send later when service is restored. This is especially helpful for saving your device's data.

Tips and Tricks

Drafts

If you want to exit the app but save a survey you have started, click the 'X' at the top left and an option box will appear. Select 'Save in Drafts' to add it to a draft folder on the main page. You can now exit the app safely without losing your mapped location or other information and return when you are ready.

Favorite Answers

You can create a survey template with your favorite answers in the draft folder to save time on future surveys. To do so, start a new survey and fill out the desired fields that you want in the template such as observer(s), email address, phone number, etc. Click the three-lined icon at the top right of the app and select 'Set as favorite answers'. Next, click the 'X' at the top left and save the survey as a draft. The next time you open a new survey, click the three-lined icon again to select 'Paste your favorite answers'. This will populate the blank survey with your favorite answers. The draft with your favorite answers will be marked with a star in your draft folder.

If you have any additional questions on how to use Survey123 or enter Rare Species information into the form, contact Courtney Ross, rosscour@msu.edu