



Monarch Conservation Database Questions and Answers from the Webinars

1. Will the database track habitat loss, as well as gains, so a net gain can be determined?

As part of the Monarch Status Assessment, we will track habitat loss, but not using information from the database. Instead, we will use land use change modeling to track habitat loss

(<https://landcover-modeling.cr.usgs.gov/>).

2. Will existing U.S. Fish and Wildlife Service databases (for example FWS RAPP & HABITS) be incorporated at the national level to capture all activities happening on public and private lands?

Yes, we are coordinating with U.S. Fish and Wildlife Service database managers to capture all of the Service's work on both public and private properties.

3. To estimate milkweed stem density, could we use the percent of milkweed seed in our seed mix (multiplied by the amount of seed planted) as a measure of milkweed density, or do we need to use density rates post planting, minus base line, for net gain results?

At this time, we believe that using percent of milkweed in a seed mix to calculate density would rely on too many assumptions and result in too many uncertainties. Baseline and post-effort milkweed stem density should be measured in the field using established protocols such as the Integrated Monarch Monitoring Program methodology, if possible. If field measurements are not feasible, we will rely on the "All Hands On Deck" publication to fill-in baseline and post-effort milkweed density (Thogmartin et al., 2017). The All Hands on Deck publication used expert elicitation and literature review to establish milkweed densities for various land use types in the upper Midwest. So, while using All Hands on Deck to fill-in milkweed density also involves some assumptions, these estimates are published in peer reviewed literature, and the estimated milkweed densities can be updated if and when more accurate information is available, particularly in other regions of the continental United States. Note that baseline milkweed density can come from the All Hands on Deck publication and post effort density can come from field measurements or vice versa, but baseline and post effort densities are required to calculate the net gain.

4. Will the data be available to state agencies?

Initially, registered database users will have the ability to query any plan in the database, and site and effort records they have created. Following future releases of the database (i.e. Summer 2018), registered users will be able to query all site and effort records in the database, though not all fields will be made available.

5. Gain areas or threats that may be missing in the Service's analysis are the pinch points on flyways where monarchs congregate, like Peninsula Point in upper Michigan. Do we need to track changes at these important areas?

As long as we can map important areas such as pinch points, we can quantify the amount of effort being implemented in the area. However, there are not currently activities or sub-activities that correspond to specific geographic areas.

6. Until the database is available, will you provide a written list of data desired, we pre- and post-implementation, so we can plan our 2018 monitoring efforts accordingly?

This information (i.e. proposed database fields and threats and activities table) is posted online at <https://www.fws.gov/savethemonarch/mcd.html> and will be updated as needed.

7. When we use the drag and drop, do we need to have all required fields populated for that record to go into the database?

We will make available two types of bulk upload templates for each plans and sites/activities: one with only required fields and one with all fields. As a reminder, there are two general types of required fields: those required for the bulk upload, and those required for the evaluation of efforts. For either template, the required fields for bulk uploads will be required, and includes basic information such as the organization authoring the plan or implementing the effort, and the plan or effort name. These fields will be specially marked. All other fields (including those required for the evaluation of efforts) are optional for the bulk upload templates and may be populated at a later time using the single record editor in the database user interface. Failure to populate fields required for evaluation of the effort may impact how we use analyze and use the data provided. Please refer to the February webinar (posted at <https://www.fws.gov/savethemonarch/mcd.html>) for the most current information regarding required fields.

8. Is there a way for state conservation plan information to be entered once, and then multiple people to use that information as they enter efforts (versus entering the same information again)? Perhaps a drop down menu for state conservation plans?

Yes, our current plan is to have the “plan” data table serve as the look up list library for the “effort” data table to easily link plans to efforts. In other words, once a plan is created in the database, it will be an option in the pulldown list for sites/efforts that will associate the two.

9. For a newer project to be evaluated, does milkweed have to be fully sprouted and measurable by density? If it's just been seeded, or seed mixes are purchased and not planted yet, are those efforts only considered a plan that do not provide a measurable "gain"?

We will be able to consider the “potential” milkweed as actual gains. Planned efforts are still considered efforts. We will use the “All Hands On Deck” publication to estimate the milkweed density if field data is not available.

10. What is the start date for efforts that can be added to the database?

The starting year for the database is 2014. So, any efforts that began in 2014 and since then – or are expected into the future.

11. If cooperators collect their own data on milkweed densities by sector, can those replace the numbers in the “All Hands On Deck” paper (Thogmartin et al. 2017)?

Yes, if you know the density of milkweed for your effort, we would prefer to have that measure. The estimates in the “All Hands On Deck” paper (Thogmartin et al. 2017) will only be used if information on milkweed density is not provided.

12. How do we ensure there is not duplication of effort? If a project is established with multiple partners (e.g., private NGOs, state partners, federal partners, etc.), it is conceivable that multiple partners could try to list the same project results.

The easiest method of ensuring no duplication of effort is to look for overlap in spatially explicit data (i.e. shapefiles). However, we are not expecting that everyone will be able or willing to provide spatially explicit information. Other methods we will employ to prevent duplication is to allow database users to invite other database users to view and edit records such that collaborators are aware that an effort is already accounted for in the database. We will also provide an option for database users with additional capabilities (i.e. Data Coordinators) to “approve” efforts to indicate that the record has been QA/QC’d, which includes checking for duplication. Data Coordinator approval of a record is not currently required for the initial release of the database. Other methods involve functional aspects of the database: reducing open text boxes to the extent possible, relying on drop down menus and checkboxes to ensure consistent data, including a question that asks users if the effort is funded by outside sources (flagging efforts that may be claimed by other organizations), and looking for similar records in the database.

13. How will you perform quality assurance and quality control to ensure data are accurate?

We will conduct spot checks to the extent possible (e.g. making sure required fields are populated, checking for business rule violations, etc.) but we are mostly relying on users to be honest about their conservation efforts. We will not ground-truth data.

14. Are all milkweed species eligible for counting/tracking?

We have not currently determined if any are NOT eligible for counting/tracking.

15. Can you provide more information about how acres protected and managed will be incorporated? Do these need to be new activities that haven't occurred before (for example, could a management activity implemented prior to 2014, and then again in 2018 be included)?

Acres protected and managed will be tallied and used as supporting information in our analysis, but unless there has been an increase in milkweed to go along with the acres protected and managed, we will not be able to associate the effort with a gain in milkweed. As long as an effort is being implemented that improves or protects or benefits monarch habitat relative to conditions at the start of 2014, it can be counted.

16. How does a project with a contract associated with it, whether 3, 5, or 10 years, weigh into the analysis versus one without an agreement for a given length of time (for projects that are not perpetually protected)?

We have discussed weighing projects differently based on certain attributes, but we have not gotten beyond general discussion.

17. Can efforts without an established plan/agreement with U.S. Fish and Wildlife Service still be evaluated?

Yes, we would like as many conservation efforts as possible entered in the database; a plan or agreement with the U.S. Fish and Wildlife Service is not needed for a conservation effort to be entered.

19. Will Mexico and California efforts need to be added for the science but not the U.S. listing potential?

The database will include habitat conservation projects throughout all of the U.S. (except Alaska, which is outside the monarch range). Efforts outside of the U.S. will not be added to the database.

We have discussed this and we expect to track efforts outside the U. S. using other methods and efforts, so it is not currently a planned feature of the database. After the webinar, it was also brought up that there are additional security concerns for collecting data outside the U.S.

20. Please clarify what information a state agency can access from the database. For instance, what about information entered by others for that state?

Initially, registered database users will have the ability to query any plan in the database and site and effort records they have created. Following future releases of the database (i.e. Summer 2018), registered users will be able to query all sites and efforts in the database, though not all fields will be made available.

We are soliciting feedback about important fields so we can allow users to query those critical fields from any plan or effort entered into the database.

21. Will the database allow for exporting an effort's data, as an Excel file or pdf? This would be helpful documentation for programs like Wildlife Habitat Council Conservation Certification.

We are hoping to be able to allow registered users to export select data fields as csv or excel or something similar for the second release of the database.

22. How many people per state would be authorized to enter data and how do we expect to limit duplication of entries?

There will be no limit on authorized users, even under a single plan or a single effort within a plan. Please see question 12 above for more information about avoiding double counting.

23. Can those who do not work for the Fish and Wildlife Service become users?

Yes, the database is open to anyone. However, registration is required.

24. Is there a minimum size of the area that can be entered? A tenth of an acre? A hundredth of an acre?

Any size effort can be entered into the database; there is no limit on size of efforts than can be entered.

25. Will there be a longer term look at how the efforts are doing over time?

The database will be available for people to update their information after the listing decision is made. The Service will not monitor monarch conservation efforts on the ground, but we expect to keep the database active, so that the database can help with strategic planning of future conservation efforts.

26. Would it be possible for organizations to report to one database that would fold into the U.S. Fish and Wildlife Service database?

While having one centralized database for all groups would be ideal, given the timeline of the Monarch Species Status Assessment and varying goals of the organizations that would be participating, this was determined to not be feasible. We are looking into options for batch uploads (imports) of existing databases that provide information similar to that being collected in the Monarch Conservation Database. When we know which databases will be batch uploaded, we will provide a list on our website - <https://www.fws.gov/savethemonarch/MCD.html>.

Literature Cited

Thogmartin, W. E., López-Hoffman, L., Rohweder, J., Diffendorfer, J., Drum, R., Semmens, D., ... Wiederholt, R.I (2017). Restoring monarch butterfly habitat in the Midwestern US: 'All hands on deck'. *Environmental Research Letters*, 12(7), [074005]. DOI: [10.1088/1748-9326/aa7637](https://doi.org/10.1088/1748-9326/aa7637)