

**NRCS MONARCH BUTTERFLY WILDLIFE HABITAT EVALUATION
GUIDE FOR RAPID SCREENING OF LOW-VALUE PLANT
COMMUNITIES:
MISSOURI EDITION**

NOTE: This guide sheet is only to be used when conducting Step 1 and Step 2 of the Monarch Wildlife Habitat Evaluation Guide Datasheet (Monarch WHEG Datasheet). Please refer to USDA NRCS MONARCH BUTTERFLY WILDLIFE HABITAT EVALUATION GUIDE AND DECISION SUPPORT TOOL: MIDWEST EDITION (dated 3-28-16) for more information and definitions.

INSTRUCTIONS

STEP 1: Develop a Project Base Map (Figure 1).

- a. Delineate the area to be evaluated on an aerial photograph. The area to be considered for monarch habitat improvements is referred as the “*project area.*” *Note: The project area will commonly be the USDA Tract boundaries, but not always. In some situations it may be a single field or portion of field. The decision of the project area boundaries is left to the discretion of the conservation planner and decision-maker.*
- b. Subdivide the remainder of the project area into unique assessment areas. As appropriate, subdivide the remainder of the project area into smaller areas to be assessed. These unique area are referred to as *assessment areas* (AA). Each AA will have consistent ecological sites, vegetation, soils, slope, and management. Identify each assessment area on the base map.
- c. Determine size of each area. Determine and denote the acres in each AA (including each subarea) on the base map.

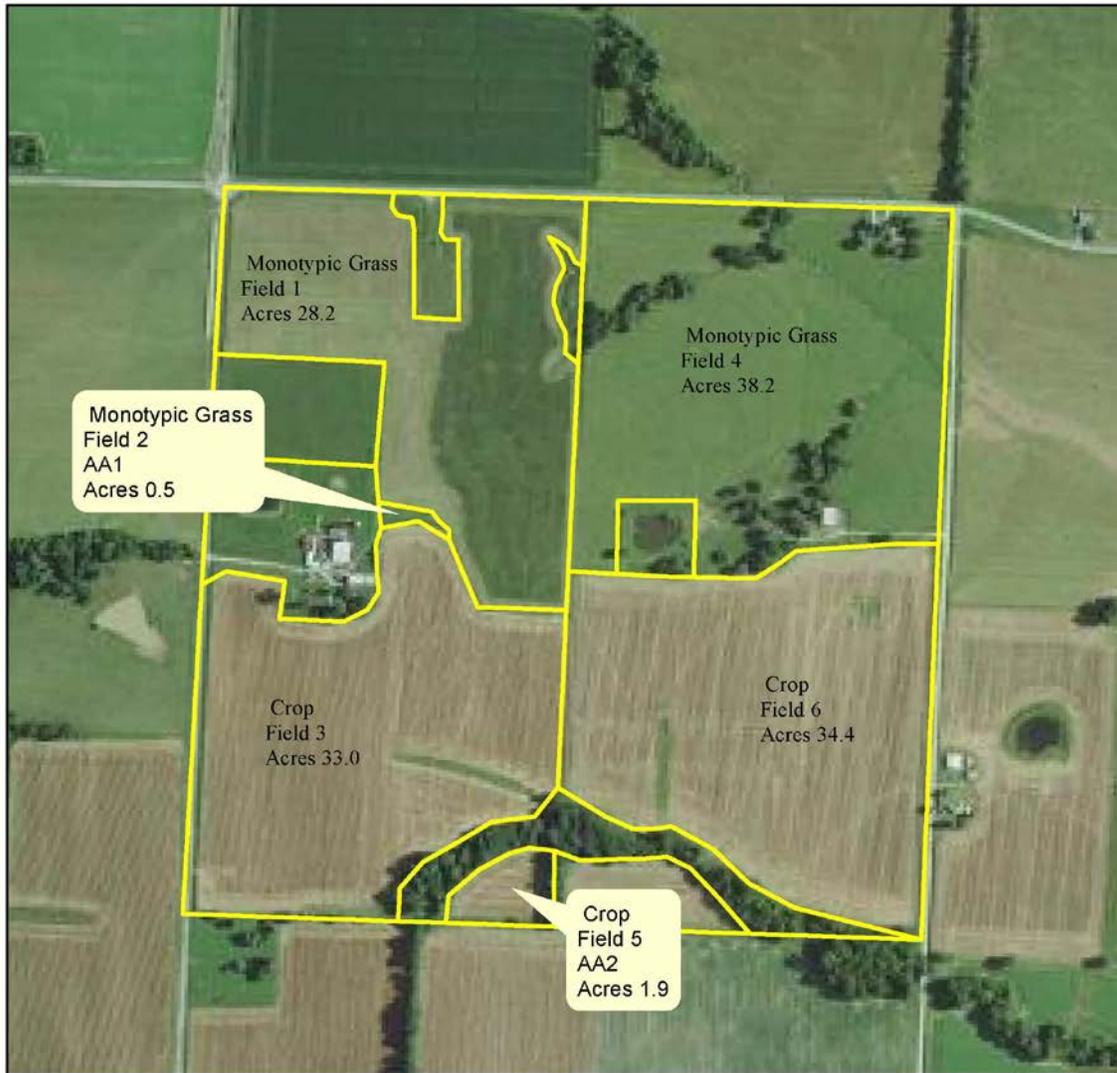
Conservation Planning Map
Monarch Habitat

Date: 4/28/2016

Customer(s): Butterfly Farms
District: COUNTY SOIL & WATER CONSERVATION DISTRICT
Approximate Acres: 160
Legal Description: Farm 2016 Tract 428

Field Office: SERVICE CENTER
Agency: USDA-NRCS
Assisted By: Mike Monarch

Land Units:



Legend

□ WHEG example

1 inch = 542 feet



Figure 1: Example of a monarch habitat development base map for a less complex project. Note that an assessment area need not be contiguous. This assessment area (A) is divided into two subareas (A1 and A2). ROP denotes Representative Observation Point.

STEP 2: Rapid Screening of Low-Value Plant Communities (Crop, Monotypic Grasses, and Brush).

USER NOTE: *The Crop, Monotypic Grasses, and Brush communities were selected because they lack milkweed and/or nectaring species, therefore, sampling vegetation (Step 3 of the Monarch WHEG Datasheet) is not necessary. The Benchmark Rating condition rating of “Poor” has been completed in Step 2 for these communities.*

- a. Determine the Monarch WHEG Plant Community Type and document the decision on the Monarch WHEG Datasheet for the assessment area.
 - i. **CROP** – Any area that is being annually planted for harvest of a product.
 - A. **Document a benchmark condition rating of poor and end the assessment of benchmark habitat conditions on the datasheet.**
 - B. If the planning considerations below are selected by the decision maker, document a planned condition rating of good or excellent under the planned habitat conditions on the Monarch WHEG Datasheet.

Alternatives and Planning Considerations:

- Implement Conservation Cover (327), Field Border (386), or Riparian Herbaceous Cover (390), with a monarch plot of the recommended monarch seed mix (refer to the seeding specification in the Monarch Information Sheet (IS-MO-643Monarch)).
 - In addition, the decision maker will implement a 125-foot wide, pesticide-free buffer around the entire AA or area encompassing all implemented practices.
- ii. **MONOTYPIC GRASSES** – These areas support primarily monotypic non-native or native grass species and may include pasture, managed hay, farmsteads, and other frequently- managed or grass-dominated native grasslands. Plant species richness is low. Examples include areas dominated by reed canary grass (*Phalaris arundinacea*), Kentucky bluegrass (*Poa pratensis*), smooth brome (*Bromus inermis*), fescue (*Schedonorus* spp.), bluestems (*Andropogon* spp.), switch grass (*Panicum virgatum*), and other non-native pastures, hayland, and grass fields. There may be some woody encroachment, but not to such a level to warrant a Monarch WHEG Plant Community Type of *Brush*.
 - A. **Document a benchmark condition rating of poor and end the assessment of benchmark habitat conditions on the datasheet.**
 - B. If the planning considerations below are selected by the decision maker, document a planned condition rating of good or excellent under the planned habitat conditions on the Monarch WHEG Datasheet.

Alternatives and Planning Considerations:

- Implement Conservation Cover (327), Field Border (386), or Riparian Herbaceous Cover (390) with a monarch plot of the recommended monarch seed mix (refer to the seeding specification in the Monarch Information Sheet (IS-MO-643Monarch)).
 - In addition, implement Herbaceous Weed Control (315), Prescribed Burning (338), or Early Successional Habitat Development / Management (647), if needed, with “improve wildlife habitat” as at least one of the purposes and the target habitat conditions of “increase in the forb component.”
 - In addition, the decision maker will implement a 125-foot wide, pesticide-free buffer around the entire AA or area encompassing all implemented practices.
- iii. **BRUSH** – These areas support woody vegetation (brush) at a density that prohibits implementation of other management options (e.g. herbaceous vegetation is minimized due to shading). The planner and decision-maker agree that the brush must be addressed prior to implementation of any other monarch habitat efforts. This Monarch WHEG Plant Community Type should not be used if the AA is forested. Rather, it is used for historic grasslands invaded and dominated by woody plants (e.g. cedar, boxelder, green ash). This decision may be reached through a variety of methods, such as soil maps, ecological site descriptions, historic aerial photos, existing herbaceous vegetation, and/or landowner knowledge.
- A. **Document a benchmark condition rating of *poor* and end the assessment of benchmark habitat conditions on the datasheet.**
 - B. If the planning considerations below are selected by the decision maker, document a planned condition rating of good or excellent under the planned habitat conditions on the Monarch WHEG Datasheet.

Alternatives and Planning Considerations:

- Implement Brush Management (314), and convert all or a substantial portion of AA to productive monarch breeding habitat using Conservation Cover (327), Field Border (386), or Riparian Herbaceous Cover (390) with a monarch plot of the recommended monarch seed mix (refer to the seeding specification in the Monarch Information Sheet (IS-MO-643Monarch)).
- In addition, the decision maker will implement a 125-foot wide, pesticide-free buffer around the entire AA or area encompassing all implemented practices.

Note: These pesticide risk prevention restrictions do not apply to activities intended to establish or maintain the AA as productive monarch breeding habitat such as Herbaceous Weed Control (315), or use of herbicide spot-treatments to remove weeds post-planting.