

Appendix M. Roadside and Streambank Management Guidelines for Covered Plants

1.1 Introduction

Management of vegetation on roadsides and some waterways frequently requires actions that disturb the existing vegetation. These activities have the potential to harm or benefit populations of Covered Species. The recommendations in this section ensure that management actions avoid or minimize negative effects on Covered Species in such areas, including Special Management Areas on roadsides and banks along urban streams. Habitat management recommendations for areas specifically designated as Prairie Conservation Areas are presented in Appendix J: Prairie Habitat Vegetation Management Guidelines.

1.2 General recommendations for Management of Roadside and Streambank Vegetation for Covered Plants

- To prevent the spread of noxious weeds and non-native plants by seeds or live plant parts, all equipment (hand tools, vehicles and heavy machinery) should be cleaned to remove mud, debris, and vegetation prior to entering the site.
- Human activities, including walking, in areas occupied by Covered Species will be limited to minimize potential negative effects to Covered Species.
- Vehicle use will be minimized to reduce damage or mortality to covered plants and butterflies.
- Soil disturbance should be avoided to the maximum extent possible during road maintenance activities.
- Projects should minimize alterations to hydrology.
- Weed-free products such as soil, gravel, mulch, and seeds should be used whenever possible.
- Re-vegetation of disturbed areas should be done with native grass/forb seed mixes or transplants.
- Vegetation control will be maintained in "sight distance zones" (areas required to be kept clear of obstructing vegetation for safety reasons), despite the presence of Covered Species.
- Woody plant and noxious weed encroachment should be minimized.

1.3 Specific Guidelines

1.3.0 Mowing

- Mowing will generally occur during the fall and winter, after covered plants have senesced for the season (August 15-February 28).
- Mowing deck must be set a minimum of 15 cm (6 in) above the ground for all covered plants.
- Where possible, mowing with a tractor driving on non-paved surfaces should be avoided when soil is saturated to minimize compaction and rutting. If such mowing must occur, use of rubber tracked equipment is preferred
- Spring mowing is only allowed where necessary to control a weed infestation involving a weed species reproduced mainly by seed (e.g., meadow knapweed), in which case up to ½ of the covered plant population may be mowed in an effort to control seed set.
- No flail mowers will be used.

1.3.1 Cutting/Thinning/Removing Tree Stumps

- Handheld power tools may be used to remove woody vegetation.
- Such activities will occur when Covered Species are dormant or during the flowering season so long as workers take precautions (e.g., marking plant patches with posts and flagging) to avoid trampling of any Covered Species.
- No trees will be removed from Fender's blue butterfly habitat during the flight season, unless a tree is deemed a hazard, and immediate removal is required.
- Stump removal will occur only during dry periods.
- All cut material will be piled or chipped and spread away from any covered plant populations or hauled off-site for disposal.
- If activities occur during the wet season, tree debris may be left on site away from the covered plant species, until the dry season when equipment can access the work area to remove the debris.

1.4 Chemical Treatment

- Chemical treatments may be used to control invasive, non-native species.
- Herbicides will be applied by a licensed applicator, using appropriate equipment and best management practices.
- Exposure of non-targeted species to herbicides, especially covered species, associated with drift, leaching to groundwater, and surface runoff will be avoided or minimized.
- Chemical treatments will follow labeled restrictions, including limitations for use near water.
- Acceptable chemicals are listed in Table J.1

- If new, more effective or less toxic herbicides become available, Benton County will coordinate with USFWS to update this Appendix for their inclusion.
- Precautions to protect Covered Species and control herbicide drift are listed in Appendix J: Prairie Habitat Vegetation Management Guidelines, and Table J.1.