



CONSERVATION ENHANCEMENT ACTIVITY
E643139X

CONSERVATION
STEWARDSHIP
PROGRAM

Creating native plant refugia

Conservation Practice 643: Restoration and Management of Rare or Declining Habitats

APPLICABLE LAND USE: Forest

RESOURCE CONCERN ADDRESSED: Fish & Wildlife – Inadequate Habitat

PRACTICE LIFE SPAN: 1 year

Enhancement Description

Provide protection from adverse environmental conditions to create refugia for documented occurrences of sensitive plant communities.

Criteria

- States will apply general criteria from the NRCS National Conservation Practice Standard (CPS) Restoration and Management of Rare or Declining Habitats 643 as listed below, **and additional criteria as required by the NRCS State Office.**
- All necessary local, state, and federal permits shall be obtained by the landowner (or designee) prior to the constructing the refugia.
- Sites where refugia will be designated are those that: 1) currently harbor plant species listed by the State as State Endangered, State Threatened, State Sensitive (or similar designation), or other native plant species determined to be in decline, or, 2) provide an appropriate ecological site for rescuing these plant species if relocation is needed.
- Specific location, size, shape, and number of refugia will be based on occurrences of sensitive plants or plant communities, and/or on the existence of environmental conditions suitable for the rescue of sensitive plants whose habitat will be destroyed. The size of refugia is also affected by site features (e.g., slope, rock outcrops, water bodies, etc.).



CONSERVATION STEWARDSHIP PROGRAM

- Refugia sites will be protected from adverse environmental impacts, including trampling by humans, using an 8 foot high woven wire fence and appropriate signage, with a locked gate to provide access for management. Each installation shall be at least ¼ acre in size.
- A forested area surrounding refugia will be large enough to provide a buffer from wind and temperature effects of adjacent non-forested areas.
- Methods used during refugia construction shall be designed to protect the soil resource from erosion and compaction, and to protect the plant community from adverse impacts.
- Invasive plant and animal species and noxious weeds shall be controlled in and around the refugia. When possible, control will be limited to that necessary to control undesirable species while still protecting habitat that benefit native pollinators and other fish and wildlife species that depend on the site for food, cover, and water.
- Undisturbed areas shall be conserved on a sufficient extent of the area surrounding refugia to sustain typical plant communities and help protect the refugia.
- Plants rescued and brought to refugia for protection will be those species ecologically adapted to site conditions, in quantities appropriate for best survival, which will not displace desired existing vegetation.
- Site preparation, planting dates and methods, and plant care and handling shall optimize vegetation survival and growth.
- A pretreatment assessment of the targeted habitat will be conducted to provide a baseline for comparison with post-treatment habitat conditions. Goals or success criteria will be established using reference sites for guidance and comparison. Where no such reference site exists, use ecological site descriptions or historic data to establish goals.
- Use of fertilizers, pesticides and other chemicals shall not compromise the intended purpose of this practice.
- Use criteria in other CPSs to facilitate the restoration and management of rare and declining habitats as appropriate for the site. Depending on site conditions and natural disturbance regimes, these may include:



CONSERVATION STEWARDSHIP PROGRAM

- Fence (382)
- Access Control (472)
- Brush Management (314)
- Herbaceous Weed Control (315)
- Tree and Shrub Establishment (612)

Documentation Requirements

- Specifications for this practice shall be prepared. Specifications shall be recorded using approved specifications sheets and job sheets. Narrative statements in the conservation plan or other acceptable documentation may provide supplemental information to the specifications and job sheets.
- Document condition of the sensitive and/or declining native plant communities at the time of refugia construction, and also during follow-up inspections, to expand knowledge of refugia effects on these plant species.
- **Additional documentation as required by NRCS State Office.**