

# Restoration and Management of Declining Habitats

## **Vermont Conservation Practice Job Sheet**

**643**



*Lakeside Floodplain Forest Photo by: Eric Sorenson*

### **Definition**

Restoring and conserving rare or declining native vegetated communities and associated wildlife species.

### **Purpose**

To restore land or aquatic habitats degraded by human activity, provide habitat for rare and declining wildlife species by restoring and conserving native plant communities, increase native plant community diversity, and manage unique or declining native habitats. (Note: NRCS uses the term “wildlife” to include all animals, terrestrial and aquatic.

### **Where used**

This practice may be used on any landscape which once supported or currently supports the habitat to be restored or managed.

### **Considerations**

Habitat management activities should be prioritized, initiated, and orchestrated in concert with an existing state or regional conservation plan for the habitat, species and associated relationships. Confer with other agencies and organizations to develop guidelines and specifications for conserving declining habitats. Follow up habitat assessments shall be performed on a regular basis. Only certified, high quality, native and naturalized seed and plant material

will be used. Seed and plant material native to the local area should be used whenever possible. Species will be adapted and appropriate to soil-site conditions. Refer to “*Wetland, Woodland, Wildland – A Guide to the Natural Communities of Vermont*” for specific plant community descriptions. Also, refer to ‘Soils Series of Vermont and their associated natural communities’ under Section II, A. Soils Information, 1. Statewide Soils Information in the Vermont electronic Field Office Tech Guide.

All habitat manipulations will be planned and managed according to soil capabilities and recommendations for management will avoid excessive soil loss. Residual chemical carryover should be evaluated prior to planting. Species considered locally invasive or noxious should not be used. Refer to Pest Management (595) when planning invasive plant control in the restoration plan.

### **Operation and maintenance**

Replace dead and dying woody species in newly established plantings. New plantings must be protected from grazing during the establishment (prescribed grazing, use exclusion) period, as well as fire and pests, including insects, diseases, competing vegetation and animals (deer, beaver and mice). Supplemental water as well as periodic applications of nutrients maybe needed to maintain plant health and vigor. Any use of fertilizers, pesticides and other chemicals shall not compromise the intended purpose of this practice.

### **Specifications**

Site-specific requirements are listed on the specifications sheet. Additional provisions are entered on the job sketch sheet. Specifications are prepared in accordance with the VT NRCS Field Office Technical Guide. See practice standard for Restoration and Management of Declining Habitats, code 643, Tree/Shrub Establishment, code 612, Pest Management, code 595, Forest Site Preparation, code 490, Conservation Cover (340), and Critical Area Planting (342).

## Restoration and Management of Declining Habitats – Job Sheet

<i>For:</i>	<i>Farm #:</i>
<i>Field(s):</i>	<i>Tract #:</i>
<i>Designed By:</i>	<i>Approved By:</i>
<i>Drawing No(s):</i>	<i>Signature:</i>
<i>Date:</i>	<i>Date:</i>

Purpose (check all that apply)	
Restore land or aquatic habitats degraded by human activity	Increase native plant community diversity
Provide habitat for rare and declining wildlife species by restoring and conserving native plant communities	Management of unique or declining native habitats

Method (check all that apply)		
Planting seedlings	Natural Regeneration	Seeding
Prescribed Burning	Mechanical weed control	Chemical weed control
Rotating treatments	Other (describe in notes)	

<b>Existing Plant Community=</b>	<b>Restored Plant Community =</b>
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<b>Location and Layout Specifications:</b> (Include a sketch, or aerial photo on page 4.)	
<b>Width</b> (feet; include widths of maintenance areas next to outer rows):	
<b>Length</b> (feet):	<b>Area</b> (acres):
<b>Total area of site managed, enhanced or restored</b> (acres):	
<b>Additional requirements:</b>	

**Plant Materials Information** – For planting/Seeding, refer to Attachment 1 – VT Supplemental Specifications, page 612-5 of the VT Standard 612 for plants per acre and avg. spacing. Refer to VT FOTG Section II or other VT technical references for species to plant. For natural regeneration, complete, Field, Ac., Species/Cultivars, Plants/acre, Total, Avg. Spacing.

Field	Ac	Species/cultivars:	Plants/acre or seeding rate <sup>3</sup> :	Total No.	Kind of stock <sup>1</sup> :	Planting dates:	Avg. Spacing <sup>2</sup> :
							Ft X Ft
							Ft X Ft
							Ft X Ft
							Ft X Ft
							Ft X Ft
							Ft X Ft
							Ft X Ft

<sup>1</sup>Bareroot, Container, Cutting, Tubelings; Seed; include size, caliper, height, and age as applicable. <sup>2</sup>Spacing between plants to achieve plants/acre. <sup>3</sup>Pounds/Acre of Pure Live Seed (PLS) where available.

$$\text{Plants/acre} = 43,560 \text{ (ft}^2\text{/ac)} \div \{\text{Between-Row Spacing (ft)} \times \text{In-Row Spacing (ft)}\}$$

Note: Sources of Plant Materials can be found in the Vermont Field Office Technical Guide Section I-A. Refer to Reference Lists – Ecological Science – References 1 and 2. Contact your local USDA-NRCS office for more information regarding these references.

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<b>Temporary Storage Instructions (Refer to VT Standard 612)</b>		
<p><i>Planting stock that is dormant may be stored temporarily in a cooler or cool, moist, darkened area up to 3 days. For more than 3 days or for stock that is expected to begin growth before planting, dig a V-shaped trench (heeling-in-bed) sufficiently deep and bury seedlings so that all roots are covered by soil. Pack the soil firmly and water thoroughly. Additional requirements:</i></p>		
<b>Site Preparation See VT Standard and Specification 490 – Forest Site Preparation, 340 Conservation Cover, or 342 Critical Area Planting</b>		
<p><i>Remove debris and control competing vegetation. The following method of site preparation is planned: ___Mechanical means such as plowing, disking or rototilling, ___Chemical control of vegetation, ___Prescribed burning, ___Hand scalping the area where vegetation is to be planted, ___Other:_____ Apply recommended amendments as needed, including the following:_____Tons/Ac. Lime, _____lbs/Ac. N-P<sup>2</sup>O<sup>5</sup>-K<sup>2</sup>O and prepare a firm seeding bed. Additional requirements:</i></p>		
<b>Planting Method (Refer to VT Standard and Specification 612, 340 or 342)</b>		
	<b>Hand</b>	<b>Machine (circle and indicate amount)</b>
<p><i>For container and bareroot stock, plant stock to a depth even with the root collar in holes deep and wide enough to fully extend the roots. Pack the soil firmly around each plant. Cuttings are inserted in moist soil with at least 2 to 3 buds showing above ground. Plants will be established prior to <b>May 30</b> unless containerized seedlings are used or plants will be watered. Drill small grass and legume seed <math>\frac{3}{4}</math> inch deep uniformly over area. Additional requirements or special planting instructions:</i></p>		
<b>Cultural Practices (Refer to VT Standard and Specification 643, 340, 342, and 612 for specific requirements)</b>		
<p><i>Pest Management is required. Weed control, especially of non-native, invasive species, is necessary, either by prescribed burning, mechanical cutting, herbiciding or mulching for at least 2 years after planting or seeding. Vegetation Mat-Size_____#_____ Tree Shelter-Size_____#_____ Mulch- coverage_____#_____ Other_____ Additional requirements or special management instructions:</i></p>		
<b>Operation and Maintenance (Refer to VT Standard and Specification 643)</b>		
<p><i>The treatment area must be inspected periodically and protected from damage so proper function is maintained. Replace dead or dying vegetation to provide adequate plant densities as described in the 612, 340 or 342 standard and continue control of competing vegetation to allow proper establishment for at least 2 years. Any use of fertilizers, pesticides and other chemicals shall not compromise the intended purpose of this practice. Additional requirements:</i></p>		

Installation shall be in accordance with the specified drawings, specifications, and special requirements. No changes are to be made in the drawings or specifications without prior approval of \_\_\_\_\_ at \_\_\_\_\_.

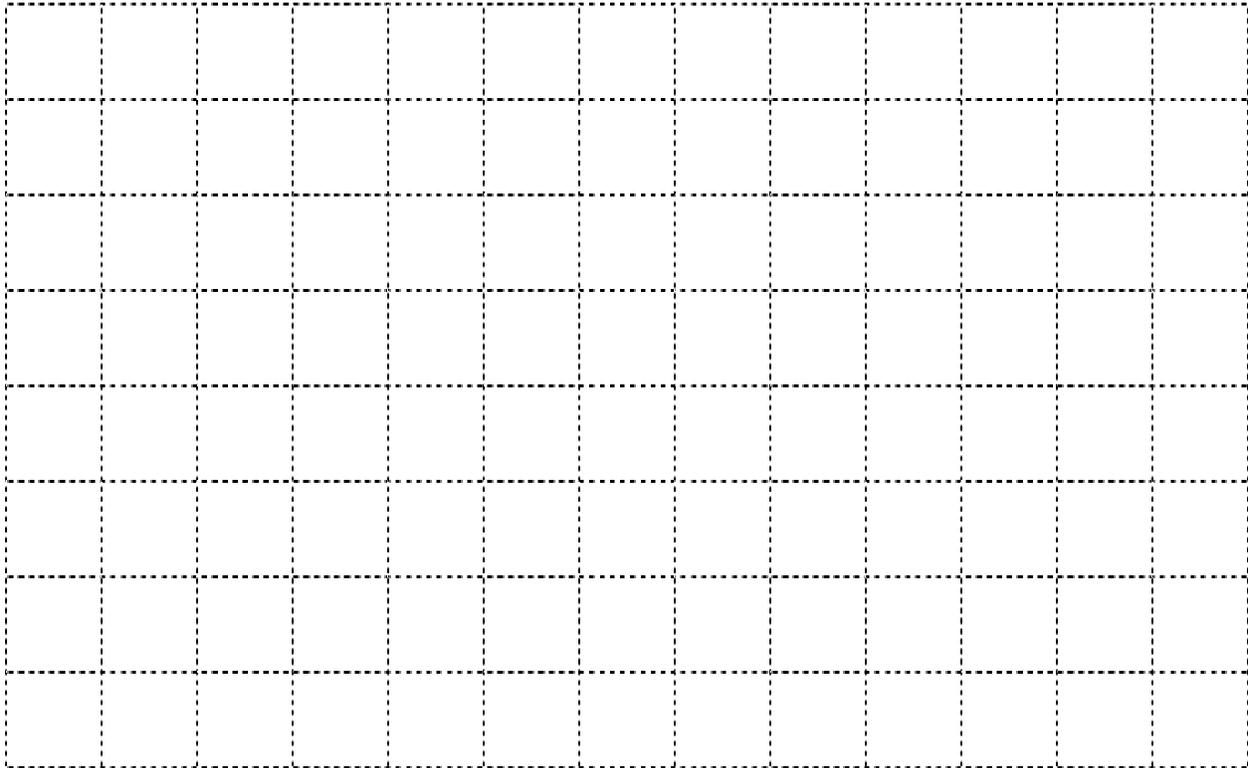
Questions regarding the planting or maintenance of the tree/shrub establishment should be directed to \_\_\_\_\_, at \_\_\_\_\_.

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If needed, an aerial view or a side view of the practice can be shown below. Other relevant information, complementary practices and measures, and additional specifications may be included.

Recommendation: Import digital photographs to indicate practice before and after effects. For instructions regarding importing graphics to this doc go to: [ftp://ftp-fc.sc.egov.usda.gov/VT/Technical/Help/Adobe\\_PDF\\_Help\\_1.pdf](ftp://ftp-fc.sc.egov.usda.gov/VT/Technical/Help/Adobe_PDF_Help_1.pdf)

Scale 1"= \_\_\_\_\_ ft. (NA indicates sketch not to scale: grid size=1/2" by 1/2")



Additional Specifications and Notes:

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