



United States Department of Agriculture
Natural Resources Conservation Service

Early Successional Habitat Development/Management Natural Regeneration

Virginia Conservation Practice Job Sheet

647(d)



Natural regeneration shall include a cover crop at the time of practice installation, if slopes exceed 3%. Plant the cover crop at a rate of 30lbs per acre during the first year.

Specifications

Site-specific requirements are listed on the back page and additional provisions are entered on the job sketch sheet. Specifications are prepared in accordance with VA NRCS Field Office Technical Guide. Refer to practice standards Prescribed Burning code 338, Upland Wildlife Habitat Management code 645, and Early Successional Habitat Development code 647.

Definition

Natural regeneration is allowing uncontrolled vegetation to become established without planting.

Purpose

Natural regeneration is used to allow an early successional habitat to develop on its own. It stimulates establishment of herbaceous plants that provide food and cover for early successional wildlife species.

Requirements

Natural regeneration areas should be manipulated/managed at a minimum of 3 years and not more than 5 years after succession is allowed. Options include light disking, herbicide spraying, prescribed grazing, prescribed burning or mowing.

A minimum of 60% ground cover must be established by the second growing season. If the field is in fescue, the fescue must be eradicated prior to allowing the area to naturally succeed.

If prescribed burning is chosen as the management alternative, then a VDOF certified burner should be consulted for a fire management and smoke plan. Conservation Practice Standard 338 shall be followed.

Natural regeneration shall not be performed on soil types that have an SCI (Soil Conditioning Index) value of less than zero.

Operation and Maintenance

Weedy type forbs and grasses are highly desirable for many wildlife species. However, infestations of Johnsongrass and other certain non-beneficial noxious plants should be controlled. Participants should consult with NRCS, Virginia Department of Game and Inland Fisheries, or a Technical Service Provider to determine appropriate control measures.

Inspect and repair managed areas after storms to fill in gullies, remove sediment, reseed disturbed areas, and take other measures to ensure the integrity of the desired habitat.

Competition Control

Pastureland

Competition control of unwanted species is critical to ensuring good natural regeneration. Conventional tillage, herbicide application or both may be used to control competition.

Several steps are required to get successful competition control. This is especially true on fields with fescue sod. The first step in killing fescue is to mow the area in late summer for a fall herbicide burn down. If possible after mowing and prior to herbicide application, remove the cut vegetation by prescribed burn. Removing the vegetation and thatch will provide a better seed bed and allow for better herbicide contact with vegetation.

If needed, a second herbicide application should be planned. This application should occur after the remaining vegetation has regrown to a 4 – 6 inch height. A second herbicide application is required for dense fescue or orchard grass stands and other areas where competition may not be controlled by one herbicide application. All herbicide applications shall be made when vegetation is actively growing. Table 1 provides herbicide treatment options.

Cropland

If vegetation is present, one herbicide burn down will be required. Table 1 provides herbicide treatment options.

Cover Crops

If a field border is being installed on cropland, participant may sow a cover crop to stabilize soil and prevent possible erosion during the first year. Table 1 provides options for sowing cover crops. **If enrolled in CRP or WHIP, cover crops may not be harvested.**

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Table 1. This table contains several options for controlling competing, non-desirable vegetation during natural regeneration. If two burn downs are planned, records should indicate that the herbicide was applied to the field twice. All herbicides shall be applied and used according to label recommendations and may slightly differ from that listed below.

Option	Current Condition	Timing	Method
1 Single Burn Down	Grassland Or Cropland	Spring	<p>(This option should not be used when tall Fescue or Orchardgrass is the predominant cover. Two herbicide burndowns are required when Fescue is the predominant cover.)</p> <ol style="list-style-type: none"> 1. Remove excess vegetation in fall or winter. 2. Apply tank mixture after vegetation has grown 4 to 6 inches. <u>Tank Mixture: per acre in April – June</u> Apply 1.5 quarts glyphosate base product. May be tanked mixed with a glyphosate/imazameth mixture at a rate of 10.7 oz/acre. <p>If imazameth alone is available, it can be applied instead of the glyphosate/imazameth mixture at a rate of 4-8 oz per acre. Follow all label instructions.</p>
2 Two Burn Downs	Grassland	Fall And Spring	<ol style="list-style-type: none"> 1. Remove excess vegetation in late summer (Aug/Sept.). 2. Apply tank mixture after vegetation has actively grown to 4 to 6 inches. <u>Tank Mixture: per acre in Sept./Oct.</u> 1 to 2 quarts glyphosate based product. Follow all label instructions. <p>AND</p> <ol style="list-style-type: none"> 3. Apply tank mixture just prior to planting and after remaining vegetation grows 4 to 6 inches <u>Tank Mixture: per acre in April-June</u> Apply 1.5 quarts glyphosate based product. May be tank mixed with glyphosate/imazameth mixture at a rate of 10.7 oz/acre. If imazameth alone is available, it can be applied instead of the glyphosate/imazameth mixture at a rate of 4-8 oz per acre. Follow all label instructions.
3 Two Burn Downs	Grassland	Spring And Spring	<ol style="list-style-type: none"> 1. Remove excess vegetation in fall or winter 2. Apply tank mixture after vegetation has actively grown 4 to 6 inches. <u>Tank mixture: per acre in April</u> 1 to 2 quarts glyphosate based product. <p>IF green-up occurs two to four weeks after initial spraying:</p> <ol style="list-style-type: none"> 3. Apply tank mixture just prior to planting and after remaining vegetation grows at least 4 to 6 inches. <u>Tank mixture: per acre in April-June</u> Apply 1.5 quarts glyphosate based product. May be tank mixed with glyphosate/imazameth mixture at a rate of 10.7 oz/acre. If imazameth alone is available, it can be applied instead of the glyphosate/imazameth mixture at a rate of 4-8 oz per acre. Follow all label instructions.

*NRCS does not require specific herbicides by trade name and recommendations on herbicides and specifications on rate and timing should come from an extension agent.