NRCS Natural Resources Conservation Service

Creating Brush Piles for Upland Wildlife

New Hampshire Conservation Practice Job Sheet 645

Definition

A brush pile is built from excess forest slash or blow down to enhance or supplement wildlife cover.

Program Notes:

Limit of 4 piles per landowner 15 feet round by 6 feet high.

Purpose

- Provide supplemental dense cover for wildlife such as: Cottontail Rabbits, Bobwhite Quail, Pheasants, Turkeys, Thrashers, Skunks, Raccoons, Mockingbirds, and Sparrows.

- Provide a variety of cover needs for wildlife, including nesting in dense cover, escape from avian predators such as hawks and owls, and mammalian predators such as raccoons and coyotes; perching on brush pile tops; and thermal cover created by shading; and protection from wind and precipitation.

Where used

For edge habitats, such as along field borders, fence rows, or riparian areas, one brush pile every 200 - 300 feet will provide adequate cover and travel lanes between food sources for most species.

- In abandoned fields, on edges of working crop fields, harvested or thinned forests, and other early successional habitat where shrub recovery is expected, create 2 piles per acre.
- Along woods roads and used to deter ATV use from wetland sections of road.
- Avoid the bottoms of drainage ways and low spots where standing water or flooding will reduce the usefulness of brush pile for upland wildlife species.

PLANNING CONSIDERATIONS

- Conduct a habitat assessment to determine if cover is a limiting factor for the targeted species. If natural ground cover is insufficient, brush piles may be appropriate as a short-term solution.
- If state or federally listed species are in the landscape consider potential risks of adding brush piles as they may benefit predators such as Foxes, Coyotes, Owls and Hawks.
- Brush piles should be a by-product of storm events or other land treatments, such as, forest stand improvement, brush management, or agricultural land clearing, rather than a specific practice.
- Consider planning additional practices, such as, Tree & Shrub Establishment (612), Early Successional Habitat Development (647), and Riparian Forest Buffer (391) to accompany brush pile establishment to provide more valuable cover and food resources in the long-term.
- Brush piles are usually most effective when located in habitat edges, such as, along forest roads and edges, agricultural field borders and corners, and along riparian areas.
- Brush piles situated in close proximity to other habitat elements required by the targeted species will be more beneficial.
- Several strategically placed medium-size piles (roughly 15’ in diameter and 6’ high) are better than one large one. Isolated piles are not as beneficial, nor as likely to be used.
- Avoid placing brush piles in grasslands since the addition of vertical structure in these settings can be detrimental to many native grassland birds.
- Keep brush piles away from houses and lawns to avoid problems with nuisance wildlife.
- Brush piles are flammable. Keep them away from buildings.
- Do not use materials that contain toxic substances (i.e. pressure treated lumber/posts, creosote railroad ties, lead painted surfaces, tires, etc.). These substances can cause wildlife mortality either through contact, consumption, or inhalation.

Operation and maintenance

This practice component will be inspected periodically and restored as needed to maintain the stated purpose. Additional operation and maintenance requirements will be developed on a site-specific basis to assure performance of the component as intended over time.

Specifications

Location

Brush piles should be constructed along edges of other cover types such as brush or

woodland. It is helpful if they are located near cultivated land or grassland since wildlife will need food and nesting cover close by. Spacing the brush piles at intervals of 100 to 200 feet will provide adequate cover as well as travel lanes.

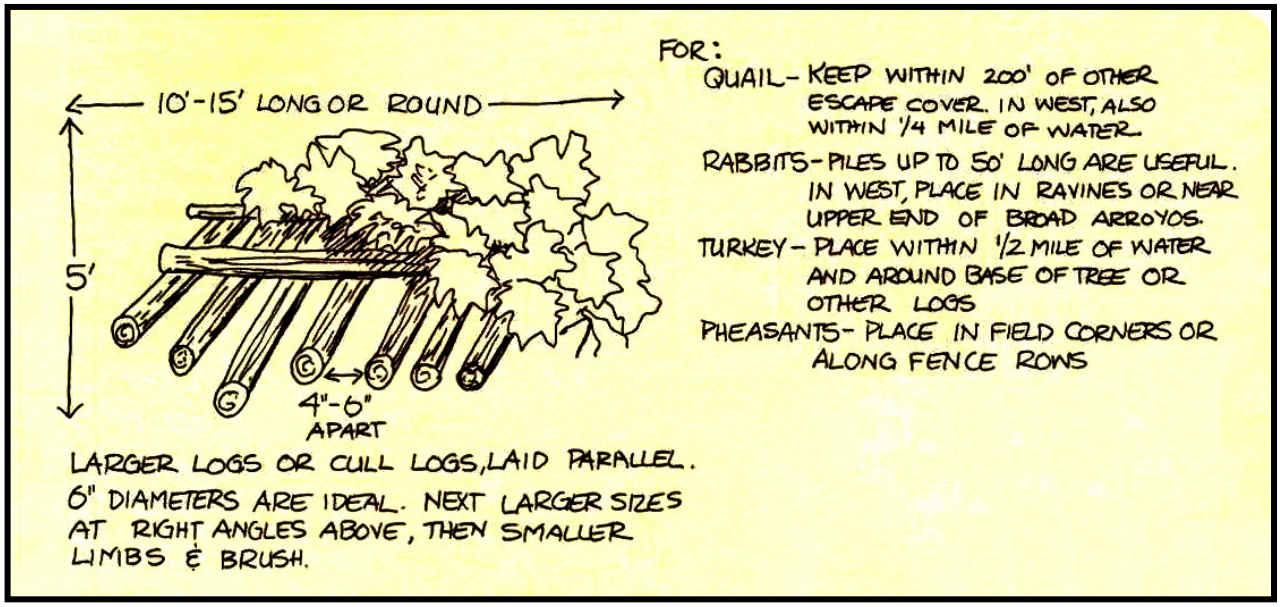
Construction

Properly constructed brush piles are more than just an armful of limbs in a pile. They will serve more wildlife, for a longer period of time, if they are carefully planned and constructed. The pile must be dense enough to constrain predators and provide shelter during bad weather and be loose enough around the edges to provide easy access.

The first step in brush pile construction is to build a base. Start with logs preferably, that are six to ten inches in diameter and six to eight feet long. Place four to ten poles on the ground parallel to each other, eight to twelve inches apart. Place more poles of the same size perpendicularly across the top of the first set of poles. Other materials can be used for the base such as large rocks or stumps or combinations of each. The large materials will serve to keep "tunnels" open under the pile after the brush is stacked on top.

After the base is constructed, pile limbs and brush on top until the brush pile is five feet high. Start with larger limbs first and gradually add smaller sized limbs. Make the pile denser in the middle and looser near the edge. It may be necessary to add more limbs in years to come as the pile decomposes and settles. Planting vines and shrubs near the edge will add years to the life of the brush pile.

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 NRCS Field Office Technical Guide. See practice standard Upland Wildlife Habitat Management, Code 645.



Creating Brush piles for Upland Wildlife – Job Sheet

Landowner_____ Field number_____

Purpose (check all that apply)	
☐ Provide escape cover from mammalian predators such as raccoons and coyotes.	☐ Create thermal cover by creating shade.
☐ Provide escape cover from avian predators such as hawks and owls.	☐ Provide elevated resting sites.
☐ Provide a dense area of cover for wildlife.	☐ Provide wildlife cover for nesting and/or brood rearing.
☐ Create cover from precipitation	☐ Create cover from winds by creating a wind barrier

Layout		
Height (feet)	**Width (feet)**	**Length (feet)**
	Log Diameter (average)	**Log Diameter (average)**
	Log Length (average)	**Log Length (average)**
	Number of logs Used	**Number of logs Used**
Notes list any other materials used such as rocks or stumps.	Notes:	Notes :
Distance to nearest water source (ft):		
Distance to nearest brushpile or other source of cover (ft)		
Type of nearest cover		
☐ Check this box if tile is to be used to create burrows under the brushpile.		

Woody Plant Materials Information (If planted near brush pile to enhance use by wildlife)				
Species/cultivars:	Plants/acre:	Kind of stock[1]:	Planting dates:	Avg. Spacing[2]:
1				
2				
3				
4				

[1]BAreroot, COntainer, CUtting, Seed; include size, caliper, height, and age as applicable. [2]Spacing between plants to achieve plants/acre.

Temporary Storage Instructions (Refer to Practice Standard 612 Tree & Shrub Planting)

Planting stock that is dormant may be stored temporarily in a cooler or protected area. 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:

Site Preparation (Refer to Practice Standard 612 Tree & Shrub Planting)

Remove debris and control competing vegetation to allow enough spots or sites for planting and planting equipment. Additional requirements:

Planting Methods (Refer to Practice Standard 612 Tree & Shrub Planting)

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. Additional requirements:

Operation and Maintenance (Refer also to Practice Standard 612 Tree & Shrub Planting)

The brush pile must be inspected periodically and protected from damage so proper function is maintained. Replace or add material to compensate for decayed wood in the pile. Replace dead or dying tree/shrub stock and continue control of competing vegetation to allow proper establishment when planting is done near the brush pile.. Keep large dead and dying trees for cavity nesting birds and a source of large wood in upland habitats. Additional requirements: