



United States Department of Agriculture
Natural Resources Conservation Service

Plant Enhancement Activity – PLT06 - Renovation of a Windbreak, Shelter Belt or Hedgerow for Wildlife Habitat



Renovation of a Windbreak, Shelter Belt or Hedgerow for Wildlife Habitat

This enhancement is for the renovation of existing sites that are declining in vigor, need additional woody plants (trees or shrubs) or otherwise no longer provide wildlife habitat benefits. Existing rows of woody plants may be thinned, removed or replaced with new plantings. Existing woody plants may be pruned, either branches or roots or both, to improve windbreak function, health and vigor.

Land Use Applicability

This enhancement is applicable on cropland and pasture land.

Benefits

Renovation restores the function of existing windbreaks, shelterbelts or hedgerows to provide wildlife habitat benefits as well as other benefits such as reduced wind erosion, pesticide drift, mitigation of odor and noise and controlled snow deposition. Species composition may be upgraded by adding trees or shrubs that produce wildlife food and shelter as well as wood products and visual quality, such as spring blossoms or fall colors. Woody species threatened by pests such as emerald ash borer can be replaced with more resilient species that provide wildlife habitat benefits.

Criteria

- Identification of wildlife species to be benefited by the renovation.
- Develop a plan for new trees and/or shrubs that will provide the desired habitat and windbreak or shelter belt functions.
- Removal of dead or dying trees that do not provide the desired habitat unless habitat for cavity nesting wildlife is desired.
- Removal of other trees or invasives that do not provide the desired habitat.
- Replacement of removed trees by planting new trees or shrubs that will provide the desired habitat while serving the required windbreak or shelter belt function.
- Pruning or thinning of less desirable trees to encourage the growth of trees that will provide wildlife habitat and windbreak or shelter belt functions.

Documentation Requirements

- Brief written description of the tasks completed with dates and any receipts for planting stock, herbicides, etc.
- Delineations on a map or aerial photo of renovated windbreak



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NH State Supplement
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- *Identification of wildlife species to be benefited by the renovation.*

FOOD: A variety of species of wildlife could benefit from this enhancement. Common species such as native bees and honeybees would benefit from native flowering shrubs and trees. A variety of wildlife would benefit from addition of native soft and hard mast (fruit and seeds/nuts) producing shrubs and trees.

COVER: Windbreaks or hedgerows provide a good travel way between fragmented habitats. Deer, turkey and rabbits will travel these areas as will small mammals, birds and snakes. Hedgerows that are expanded to 25 feet wide or more may provide the best opportunities for wildlife corridors between habitat patches. Besides providing temporary cover, the windbreak or hedgerow may be providing an important refuge from inclement weather in agricultural settings where woody cover is sparse. Finally, the windbreak or hedgerow may be providing nesting, denning and primary cover sites for a variety of species. Wide hedgerows, with good cover including logs, rocks (e.g. old stonewalls) and thick shrubs are excellent cover. Kestrels will nest in cavity trees in hedgerows, snakes will use them as cover, foxes may den in the ground within the protection of the hedgerow, weasels may hunt here and a variety of birds will use these areas to nest within the thick cover (e.g. field sparrow, thrasher, etc) and sing and hunt from the elevated perch sites (e.g. hawks).

Develop a plan for new trees and/or shrubs that will provide the desired habitat and windbreak or shelter belt functions.

Suggested Tree and Shrub Species for Wildlife Habitat

Tree Species		Wet Site	Dry Site	Pollinator	Wildlife Mast
Scientific Name	Common Name				
<i>Quercus alba</i>	white oak	X			X
<i>Quercus rubra</i>	northern red oak		X		X
<i>Prunus spp</i>	Cherry (choke, black etc)			X	X
<i>Fraxinus pennsylvanica</i>	Green Ash	X			X
<i>Carya ovata</i>	Shagbark Hickory	X			X

Shrub Species					
<i>Amelanchier canadensis</i>	shadblow serviceberry		X	X	X
<i>Amelanchier laevis</i>	allegheny serviceberry		X	X	X
<i>Corylus americana</i>	hazelnut		X		X
<i>Rhus typhina</i>	staghorn sumac		X	X	X
<i>Sambucus canadensis</i>	common elderberry	X		X	X
<i>Viburnum dentatum</i>	arrowwood viburnum	X		X	X
<i>Aronia melanocarpa</i>	Black Chokeberry		X	X	X
<i>Cornus racemosa</i>	Grey Dogwood	X		X	X
<i>Cornus sericea</i>	Redosier Dogwood	X		X	X
<i>Hamamelis virginiana</i>	Witch Hazel	X		X	X
<i>Rubus</i>	Red and Black Raspberry		X	X	X
<i>Salix discolor</i>	Pussy Willow	X		X	
<i>Vaccinium corymbosum</i>	high bush blueberry	X	X	X	X
<i>Viburnum Casinoidies</i>	Northern Wild Raisin	X		X	X
<i>Viburnum lentago</i>	nannyberry	X		X	X
<i>Alnus rugosa</i>	Alder	X			
<i>Ilex verticillata</i>	Winterberry Holly	X			X

- *Removal of dead or dying trees that do not provide the desired habitat unless habitat for cavity nesting wildlife is desired.* In most instances, maintaining snags in the hedgerow is beneficial to wildlife.
- *Removal of other trees or invasive plants that do not provide the desired habitat.* Typically many of the invasive shrubs do provide the desired habitat. In general, it is best if invasive plants are removed and replaced with native shrubs. Often native shrubs provide higher fat content in the seeds/fruit which is an important component of a winter diet and is more beneficial to migrating wildlife. For more information either contact NRCS or <http://extension.unh.edu/forestry/Docs/invasive.pdf>

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