

Wildlife Tree Plantings

Design and placement of wildlife friendly tree plantings

12/10/14

Blocks of tree plantings are needed to provide adequate winter cover for pheasants and other wildlife. These tree plantings serve to provide thermal protection for pheasants in extreme winter weather such as blizzards and ice storms. Quality cover can make the difference for your wildlife.

Purpose for trees in your wildlife plantings:

- Most pheasants will not move outside of a 2 mile range. Making it crucial to provide proper winter cover within the 2 mile area.
- Establishing and maintaining blocks of tree habitat is beneficial to wildlife including pheasants. These plantings provide the forage and cover needed to get them through each winter. With good quality habitat pheasants can overcome even the most extreme weather.
- Supplementing the tree plantings with other wildlife practices such as; grasslands, food plots, pollinator species, and insect producing habitat, will further enhance the cover. For best success trees should be protected from cattle, deer, or other harmful animals for the first few years after planting.



Ring-necked Pheasants in a good example of a wildlife tree planting during the winter months.

Forage

- Conifers (pine, spruce, etc.)
 - Pine cones, needles, bark, and new growth all have a high nutrition value for wildlife.
- Deciduous (oak, aspen, maple)
 - Bark and fresh buds are a great source of nutrition for many wildlife species.
- Shrubs (Hazelnut, Serviceberry, Dogwood)
 - Provides fruits and increases insects for wildlife to consume.

Cover

- Conifers
 - Provide thick cover to escape predators and reduce wind or rain penetration to resting areas.
- Deciduous
 - Avoid tall species
 - Provides pheasants with roosts and the thick canopy adds shade and blocks predator's vision of wildlife
- Shrubs
 - Provides a snow catchment area leaving more habitable area in the rest of the planting.



Design Considerations

- A minimum of 10 rows and 600 feet in length is suggested for establishing or creating wildlife tree planting
- Multiple-row shrub windbreaks may be enhance for wildlife by spacing plants within rows as wide apart as guidelines allow to enhance fruit and seed production
- Shrub rows should be located on the outside rows (most windward rows) of the windbreak to create a diverse edge zone for an enhanced woodland edge zone or lane. Use a curvilinear planting design rather than straight rows when planting for wildlife habitat enhancement
- Between the windbreak rows (depending on competition with primary windbreak species) plant grasses, herbs and/or forbs that provide food and shelter for the targeted wildlife species.
- Use plants of different sizes, growth forms and food bearing capabilities and densities to increase plant diversity
- Take into consideration the surrounding land use and existing cover types
- Avoid tall deciduous trees as they can provide perch sites of avian predators
- If possible place the tree plantings close to a food source
- Typical Wildlife tree planting should consist of 2 rows of shrubs on windward side, 4+ rows of conifers, and 2 rows of shrubs on leeward side

Table 1. Spacing guidelines for linear or block tree/shrub plantings.

Between Row Types/Heights	Minimum Row-to-Row Spacing
Between shrubs less than 10' in height	10 ft.
Between shrubs and small trees from 10' to 25' in height	12 ft.
Between small trees less than 25' in height	12 ft.
Between small and tall trees greater than 25' in height	16 ft.
Between tall trees greater than 25' in height	16 ft.
Between any wide crowned species and conifers	20 ft.
Between faster growing species and conifers	20 ft.
Within Row Types/Heights	Minimum Row-to-Row Spacing
Shrubs	3 – 8 ft.
Small Trees	8 – 16 ft.
Tall Trees	8 – 20 ft.
Conifers - Cedars	6 – 10 ft.
Conifers – All Others	8 – 16 ft.

NRCS 380 Standard Recommendations

Please consult with your local USDA Service Center for a more in depth look at your site's specific wildlife tree planting eligibility and design.

