NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATIONS

HEDGEROW PLANTING
(Feet)
CODE 422

DEFINITION

Establishment of dense vegetation composed of shrubs and/or trees in a linear design in, across, or around a field to achieve a natural resource conservation purpose.

GENERAL SPECIFICATIONS

Hedgerows shall be established using woody plants, or perennial bunch grasses producing erect stems attaining average heights of at least 3 feet and persisting well over winter. Minimum hedgerow width, at maturity, shall be 25 feet and shall include 2 or more rows of woody plants.

Plants selected must be suited and adapted to the soils, climate and conservation purpose. Establish at least two species of native vegetation. Herbaceous vegetation will be included in plantings for ground-nesting birds. Wider widths shall be used to reduce nest predation. At least 25% of the species selected will be evergreen to provide year-around cover. A variety of fruit and nut producing trees and shrubs will be used. Selected plants shall provide cover and/or food to support the landowner's wildlife objectives.

No plant listed by the state as a noxious weed shall be established in a hedgerow.

The practice shall be protected from livestock grazing and trampling to the extent necessary to ensure that it will perform the intended purpose(s).

Competing vegetation shall be controlled until the hedgerow becomes established. Control shall continue beyond the establishment period, if necessary.

All planned work shall comply with federal, state and local laws and regulations.

In plantings adjacent to small watercourses, the plantings shall be site-adapted, large enough at maturity and installed close enough to shade the watercourse.

If the purpose is to establish living fences, selected plants shall attain a size adequate to create a barrier to contain livestock or humans, as needed. Species that are thorny or spiny should predominate the planting. If the purpose is to contain livestock, selected plants shall not be poisonous or hazardous to the animals.

Hedgerows shall be aligned along boundaries of fields, or forestlands to differentiate land management units.

Align the grade of the hedgerow as closely as possible to the contour so they provide permanent contour markers supporting implementation of Contour Farming (330) or Stripcropping (585) and for enhanced erosion reduction. Refer to those conservation practice standards for alignment criteria.

Screening hedgerows provide privacy, hide unsightly areas from view or reduce noise. Hedgerows shall be located where they most completely obstruct a line of sight or offensive sound. Selected plants shall attain a height and fullness sufficient to break the line of sight or baffle sound.

The hedgerow design shall meet the aesthetic objectives of the landowner. Plants shall be selected based upon the landowner's

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

preferences for color, texture and growth habit.

The hedgerow will be oriented as close to perpendicular to the prevailing wind direction as possible. Hedgerow density on the upwind side shall be at least 50% at maturity. Hedgerow density adjacent to the particulate source shall be at least 65% at maturity.

If the purpose is to reduce odor movement or chemical drift orientation of the hedgerow shall be as close to perpendicular to the prevailing wind direction during the period of concern, and between the source of the odor or chemical drift and the sensitive and the sensitive areas. Hedgerows shall be located upwind of the odor producing area and the chemical application area. Tree and shrub species used shall have foliar and structural characteristics that optimize interception, adsorption and absorption of airborne chemicals or odors.

Planting a hedgerow larger than the minimum length and width will increase the amount of carbon stored in the soil and biomass.

Hedgerows following land contours create meandering lines on the landscape, produce a natural appearance and increase the availability of "edge" wildlife habitats. Hedgerows can provide travel lanes, or corridors that allow wildlife to move safely across a landscape. In grassland ecosystems, hedgerows may adversely affect area-sensitive nesting birds by fragmenting habitat patches and increasing the risk of predation. Impacts from nest predators such as the cow bird may out weigh any benefits of the hedgerow.

Establishment of herbaceous vegetation along the edges of a hedgerow can further enhance the habitat functions of a hedgerow.

Installation of artificial nest boxes with predator guards can encourage cavity-nesting birds and small mammals such as bats to utilize a hedgerow. Interplant open areas within hedgerows with native vine, shrub or tree species that provide food and cover for wildlife. Add herbaceous strips to benefit ground-nesting birds, and mow periodically to prevent woody plant encroachment. Avoid mowing during the primary nesting season.

Hedgerows containing a mixture of native shrubs and small trees provide greatest environmental benefits.

Use of bareroot and containerized seedlings will accelerate hedgerow development.

Consider the amount of shading a hedgerow will provide at maturity. Shading may impact growth of adjacent plants, microclimate and aesthetics.

Limiting renovation events to one-third of a hedgerow's length or width will prevent sudden elimination of the practice's wildlife habitat function.

Periodic root pruning can reduce nutrient and water robbing from adjacent cropland.

Consider avoiding the use of plants that spread by root suckers as hedgerow may expand beyond the desired treatment area.

Specifications for this practice will be prepared for each site. Plans and specifications shall be recorded using approved specification sheets, job sheets, or narrative documentation in the conservation plan, or other acceptable documentation.

Specifications shall include, but are not limited to the following:

- Plan map showing the location of the pactice.
- A sketch map showing the planting patterns to be used.
- Plant species to be used and the number of each to be planted.
- Land preparation to be preformed.
- Liming and fertilization requirements.
- Planting rates, spacing, and dates.

- Control of competition needed for establishment.

REFERENCES

National Biology Handbook, Part 614.4, “Conservation Corridor Planning at the Landscape Level”. Natural Resources Conservation Service, August 1999.