

WILDLIFE CORRIDOR DEVELOPMENT

CONSERVATION MANAGEMENT SHEET

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Natural Resources Conservation Service

Michigan



Wildlife Corridor

What is a Wildlife Corridor?

A wildlife corridor is an avenue along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, and populations can move in response to environmental changes. This avenue consists of rows of trees, including conifers, fruit bearing shrubs and herbaceous plantings; alone or in combination; which provide wildlife food and secure cover for wildlife moving between habitats.

How a Corridor Works

These plantings provide important food and cover for many species of wildlife. Conifers provide year around, low growing protective cover, and dense wind, snow and sight breaks. Fruit bearing shrubs provide cover as well as high quality fall and winter food sources for many species of wildlife, especially

birds. Herbaceous plantings provides cover, food for grazers and important areas for insect production.

Where Corridors Apply

Corridor developments are beneficial to farmers and land owners in areas where habitats are fragmented and discontinuous. Agricultural areas where fencerows have been removed or narrowed are especially suitable for corridor developments.

Where to Get More Assistance

Additional local assistance may be obtained from the local office of a Michigan Conservation District or the USDA Natural Resources Conservation Service (NRCS) office at:

Design Criteria

Design Elements:

1. Locate corridors in a manner which will connect two or more areas of wildlife habitat across areas in which the habitat is missing. These habitat areas include woodland, old field, wetlands or grassland types.
2. The minimum corridor width is 66 ft and the maximum width is 198 ft.

Considerations for Design

1. Proper site preparation is essential for successful establishment of trees, shrubs and herbaceous vegetation. Plan to use either chemical or mechanical weed control for site preparation prior to planting. Provide seedlings and plants an environment free from competition for sunlight, space, soil moisture and soil nutrients. If the area is mowed, do not mow during the prime nesting time of April 1 - July 31.
2. When planning the vegetative composition of the corridor, either use plants which replicate the habitats being connected or use a U-shaped corridor. For example, if two hardwood woodlots are being connected, either use hardwood trees in the corridor or use a typical U-Shape design. A U-shaped design corridor consists of 2-4 rows of trees along both outside edges, followed by 1-4 rows of fruit bearing shrubs with the center area maintained as open herbaceous cover.
3. Use native plant species when possible which are adapted to the soil and site conditions. The best conifers for this practice include White Spruce, Norway Spruce, Blue Spruce and White Cedar. Recommended fruit bearing shrubs are gray, silky or redosier dogwood, highbush cranberry, elderberry, nanny berry, serviceberry, crabapple or hawthorn. Best herbaceous plants include a mixture of grasses and forbs such as little bluestem and indian grass mixed with wildflowers. A mixture of timothy and orchardgrass with red clover and alfalfa is also possible.
4. Space trees 6 to 8 feet apart in the row with 10 feet between rows. Shrubs are planted 8 to 10 feet apart in the rows with 8 feet between rows.

Other considerations

Consider travelers and corridor dwellers when designing the wildlife corridor. Travelers include the species which will be moving along the corridor including deer, turkeys, fox, raccoons, etc. Corridor dwellers include insects, amphibians reptiles and small mammals such as mice and voles which need all life requirements from the corridor.

A number of effects to environmental conditions will occur on fields where a wildlife corridor is established. A consideration of these effects will allow for incorporation of companion planning elements to achieve an ecosystem-wide conservation plan for the area in which the wildlife corridor is established. Effects to be considered include:

Sheet and Rill Erosion - RUSLE: Wind Erosion - WEQ, Ephemeral Gully (Tons/ac/yr.), increased plant productivity and diversity, improved winter food requirements, increased wildlife habitat suitability, improved wildlife cover/shelter, greater wildlife diversity, and improved human social relations in rural areas.

Natural Resource area(s) expected to be addressed by the use/application of this conservation sheet:

Soil, Water, Air, Plants,
 Animals, Human Socio-economics.

Maintenance

Weed control will be required for 2-3 years following the planting of seedlings. Over time, trim back and remove any undesirable species which become established.

For More Information

For additional information regarding wildlife corridors. Contact the local soil conservation district office or local office of the Wildlife Division of the Michigan Department of Natural Resources.

This Conservation Information Sheet

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Reference/File Indexes

Topic Application:

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Resource Series:

- Agronomy
- Biology
- Engineering
- Forestry
- Hayland
- Livestock
- Pastureland
- Recreation

References:

- USDA-NRCS National Biology Handbook [X]
- USDA NRCS (MI) Conservation Practice Associations:
 - # 645 Wildlife Upland Habitat Management
 - # 422 Hedgerow Planting
 - #660 Tree /Shrub Establishment
- #380 Windbreak Establishment
- USDA NRCS (MI) Associated Conservation Sheets:

FOCS (MI) Reference Number:

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