

SHRUB PLANTINGS FOR WILDLIFE

CONSERVATION MANAGEMENT SHEET - Biology Series

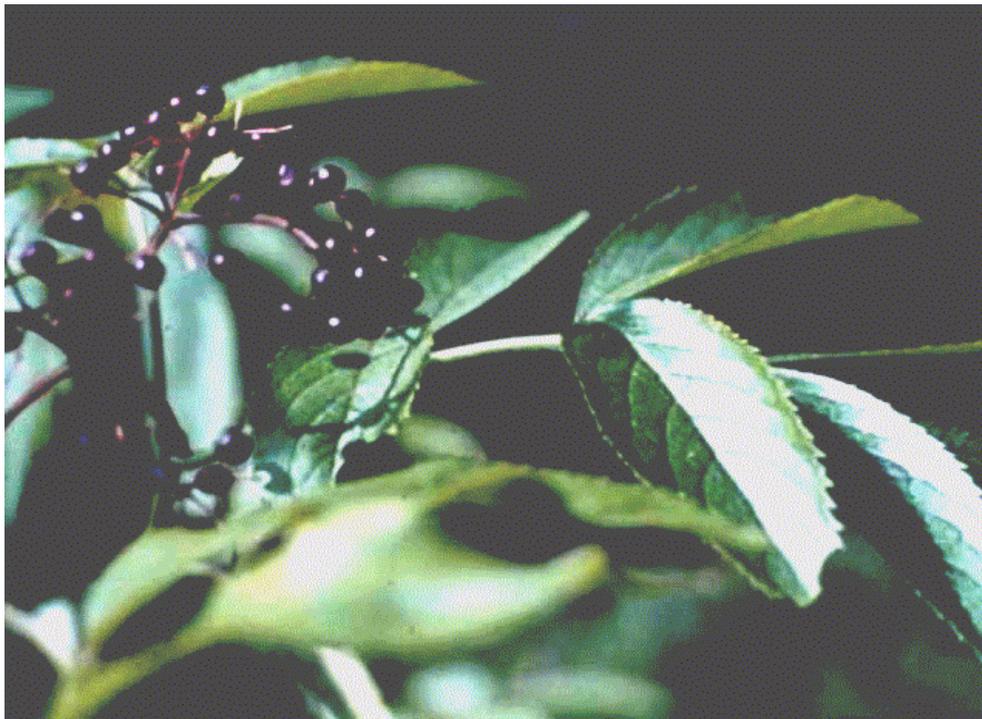
645



Natural Resources Conservation Service



Michigan



Elderberry Planting

What is a Shrub Planting?

A shrub planting refers to the establishment of woody perennial shrubs. Shrubs differ from trees by their low growth form and, generally, by their production of several basal shoots instead of a single stem.

How a Shrub Planting Works

These plantings provide important food and cover for many species of wildlife. Shrubs provide year-round, low growing protective cover, and dense wind, snow, and sight breaks. Fruit-bearing shrubs provide cover as well as high quality summer, fall, and winter food sources for many species of wildlife, especially birds. When flowering, shrub plantings provide important nectar and

pollen for pollinating insects and birds. Shrubs also add diversity and beauty to the landscape.

Where Shrub Plantings Apply

Shrub plantings are beneficial to farmers and landowners wherever they are established. Fence rows, property boundaries, and odd areas are ideal places for shrub plantings. Shrub plantings planted in rows can provide corridors and travel lanes for wildlife where habitats are fragmented and discontinuous. Clump plantings of shrubs provide areas of dense cover and add diversity to our landscape. Shrubs may be planted in the understory of existing woodlots to provide wildlife food and low growing cover.

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:

Planting Criteria

Planting Elements:

1. Select shrub species which are adapted to the soil and sunlight conditions for the area you choose for the planting (see chart). Use healthy, good quality planting stock that has been grown at or near the same latitude as where the planting will be done. Locate plantings in a manner which will connect with other habitat types if possible.
2. Space shrubs anywhere from 6 to 12 feet apart. Shrubs planted further apart tend to branch more and provide denser cover close to the ground. This provides excellent escape cover and shelter for rabbits and birds.

Considerations for Planting

1. Proper site preparation is essential for successful establishment of shrubs. This can be accomplished through either mechanical or chemical treatment. Prepare the seedbed the fall before planting by plowing and cultivating or by herbicide treatment.
2. Plant in early spring according to the techniques presented in Figures 1-4. Shrubs may also be planted in the fall on sandy soils.
3. Herbicides may be used to control competing vegetation by spot or band treatment in an area a minimum of 3 feet

around the plant. Always follow application directions explicitly. For further information on weed control, refer to Conservation Design Sheet: "Weed Control for Tree and Shrub Establishment."

4. Small mammals such as voles and rabbits, along with deer, may browse on young seedlings. Good weed control practices help to reduce rodent damage. Protective measures such as tree shelters, repellents, or wire cages are effective where browsing will be a problem.

Other Considerations

Consider wildlife needs when designing the shrub plantings. When desiring winter food for resident birds, consider species which retain their fruit and berries for long periods such as Highbush Cranberry, Sumacs, and Crabapples.

A number of environmental effects will occur on areas where shrub plantings are 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 shrubs are established. Effects which may be considered include:

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

Maintenance

Weed control will be required for 2 to 3 years following the planting of the seedlings. Many shrubs will not produce fruit or berries until 6 to 8 years after planting. Over time, remove undesirable species which may invade the planting.

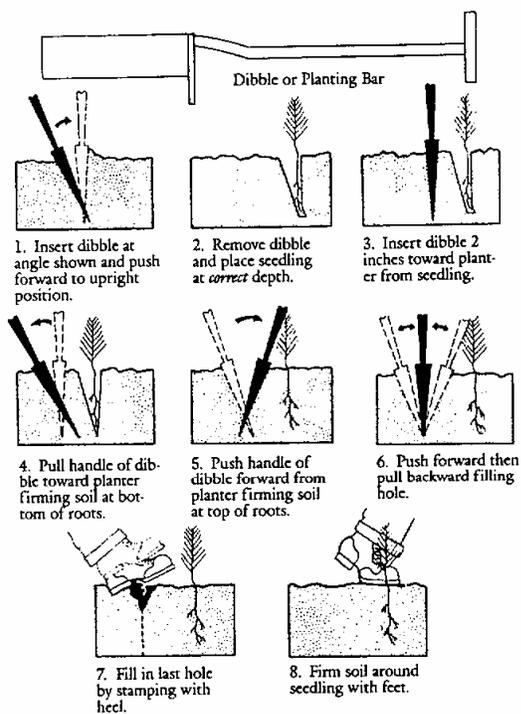


Figure 1 : Using a dibble (planting bar) to plant seedlings.

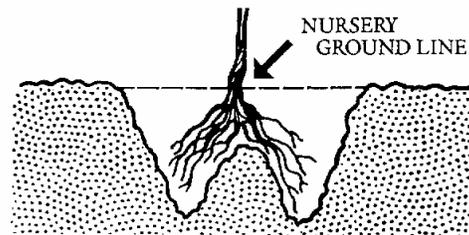


Figure 2 : An example of the hole and shovel method of planting seedlings.

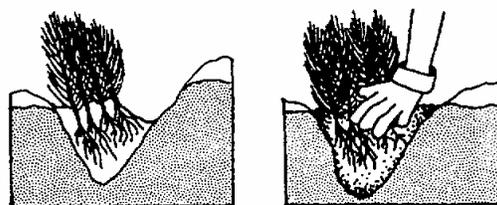
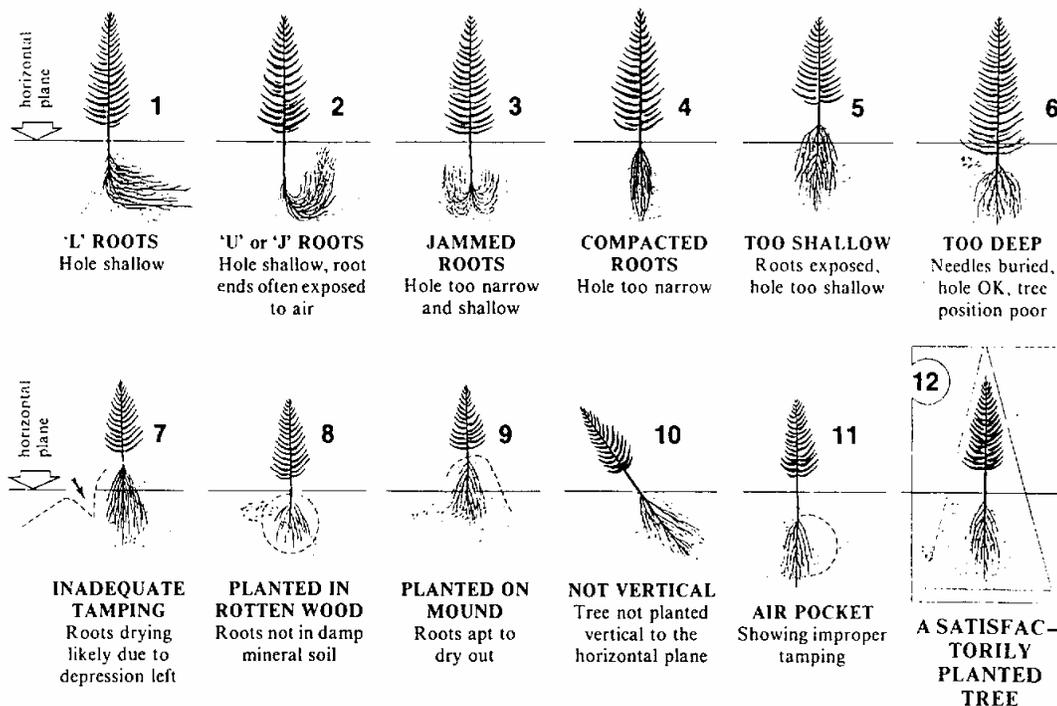


Fig. 3 . One method of long-term tree storage is the "heeling-in" technique. Roots must be packed tightly in soil and kept moist, and the heel-in trench must be shaded and protected from the wind.



SHRUBS TO PLANT FOR WILDLIFE

Species	Soil Condition	Sunlight Needs
Highbush Cranberry (Leelanau germplasm, other varieties)	Moist to well drained	Shady to sunny
Nannyberry	Wet or poorly drained	Shady to sunny
Redosier dogwood (“Ruby,” other varieties)	Poorly drained	Sunny
Silky dogwood (Indigo,” other varieties)	Poorly drained or organic	Sunny
Grey stemmed dogwood	Well to poorly drained	Shady to sunny
Elderberry	Wet to poorly drained	Shady to sunny
American Hazelnut (Southern Mich.)	Wet to dry	Sunny
Serviceberry (small tree)	Moist to dry	Shady
Sumac (staghorn, smooth)	Dry and infertile	Sunny
Crabapple (“Roselow,” “Magenta,” other varieties)	Moist to dry	Sunny
Hawthorn	Poorly drained to moist	Sunny
Ninebark	Moist, sandy or rocky	Sunny
American plum (Southern Mich)	Moist to well drained	Sunny

NOTE: Named species have proven performance as tested through the NRCS National Plant Materials Program.

This Conservation Information Sheet

Originally Prepared By:

Brian Hart Private Lands Wildlife Biologist
Lynn Sampson, Biologist, USDA NRCS (MI)

Technical Review By: Lynn Sampson

USDA NRCS (MI) State Biologist
 David Burgdorf, USDA NRCS Plant
 Materials Specialist

Reference/File Indexes

Topic Application:

- Construction
- Design
- Fact
- Information
- Management
- _____
- _____

Resource Series:

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

References:

- USDA-NRCS National Biology Handbook
- 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:
- CS _____

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual’s income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA’s TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.