

## Shrub Clump Wildlife Plantings



Photo by Dave Dewald, North Dakota (ND) NRCS

### DEFINITION

A shrub clump wildlife planting is a native perennial planting of shrubs and trees that provide habitat for a variety of wildlife on rural land.

The information contained in this fact sheet may or may not meet other conservation program requirements. Producers are encouraged to check with your local Natural Resources Conservation Service (NRCS) office for additional information on conservation programs.

### USES OF SHRUB CLUMP PLANTINGS

- Shrub clump plantings provide plant diversity, food, and cover to the landscape.
- Plantings must mimic naturally occurring shrub clumps and/or thickets. Shrub clump plantings are not continuous in extent or linear in shape.
- Plantings can occur anywhere on the landscape and may be particularly attractive to wildlife in close proximity to high quality grassland cover and watering sources.

### PLANNING CONSIDERATIONS

- Plant species must be selected from the list found in this fact sheet.
- Plantings should be native to the ecological site whenever possible.
- Plantings shall be native to South Dakota and meet soil suitability requirements.

- 75 percent of the shrubs planted must be fruit (nut) bearing.
- The recommended shrub clump size is 0.25 acres with a maximum of 2.0 acres. Shrub spacing between plants shall be 3-5 feet (').
- If the shrub clump planting occurs in a naturally wooded draw then the entire draw and/or riparian area may be designed with multiple clumps.
- Consider multiple clumps wherever possible. Clumps should be placed no closer than 100' to each other.
- Shrub clumps shall not be grazed by livestock at any time.
- Shrub clump plantings do not have a minimum width. Rather the size of the clump and planting pattern should dictate the clump width.
- Shrubs may or may not be able to be co-mingled in clump plantings.
  - Highbush cranberry, gooseberry, sumac, false indigo, and currants may be co-mingled in clump plantings.
  - Buffaloberry, chokecherry, elderberry, and American plum shall be planted in separate clumps and not co-mingled with other species due to their aggressive root and/or basal suckering potential (e.g., these species can readily form thickets).

- Plantings shall contain no more than two trees per shrub clump from the recommended species list included in this fact sheet.
- If trees are used then trees should be limited to 1 or 2 individuals (bur oak and/or prairie crabapple) per clump at 12' spacing. Shrubs shall be planted around the tree at 3-5' spacing.
- Caution should be used if including a tree in clump plantings near embankment ponds and other earthworks where tree roots could cause failure.
- Cedars, junipers, and other trees may provide wildlife habitat but are not allowed in shrub clump wildlife plantings.

## SITE PREPARATION AND PLANTING

- Initial planting site management preparation is critical for success.
- Rows may be planted with a machine or by hand planting.
- If planting into a cultivated field, existing weeds, and soil seed banks should be controlled prior to seeding. Planting into chemically treated (killed) sod is acceptable.
- Clump plantings are able to have fabric weed barrier installed and can have weed control conducted between the rows.
- CAUTION: It is recommended that fabric weed barrier may be used ONLY until establishment of the trees/shrubs is accomplished. Once established the fabric weed barrier should be removed.
- CAUTION: United States Department of Agriculture (USDA) Conservation Programs may not allow the removal of fabric weed barrier. If this is the case then do not use fabric weed barrier as part of the shrub clump planting.
- Consult your local Cooperative Extension Service office for chemical application information. When using chemicals, follow all label directions. Check site for chemical carryover and do not use chemicals with carryover.

## OPERATION AND MAINTENANCE

- Control noxious weeds as identified by state and local laws by (1) treating with chemicals per label directions, or (2) spot mow before seed heads form. If possible, delay the use of control measures until after August 1 to protect nesting wildlife.
- Protect the acres from unplanned grazing. Fences may need to be constructed and maintained to exclude livestock.
- Tree tubes or other wildlife deterrent may need to be employed if wildlife damage becomes too severe.

## RECOMMENDED SHRUB CLUMP SPECIES

- Some species may not be suitable for your location. Consult your local NRCS staff for further assistance.
- Plant only in the spring of the year after the frost is out of the ground. Deciduous shrubs should be planted by June 1.
- The following is a list of native shrub species and two tree species acceptable for clump wildlife plantings:

COMMON NAME	SCIENTIFIC NAME	Wildlife Food	Wildlife Cover
Buffaloberry, silver	<i>Shepherdia argentea</i>	Y	Y
Chokeberry, black	<i>Photina melanocarpa</i>	M	Y
Chokecherry	<i>Prunus virginiana</i>	M	Y
Cranberrybush, American	<i>Viburnum trilobum</i>	M	Y
Currant, American black	<i>Ribes americanum</i>	M	Y
Currant, golden	<i>Ribes, aureum</i>	M	Y
Dogwood, redosier	<i>Cornus sericea</i>	M	Y
Dogwood, gray	<i>Cornus racemosa</i>	Y	Y
Dogwood, silky	<i>Cornus amomun</i>	Y	Y
Elderberry	<i>Sambucus canadensis</i>	Y	Y
False indigo	<i>Amorpha fruticosa</i>	Y	Y
Gooseberry, Missouri	<i>Ribes missouriense</i>	M	Y
Nannyberry	<i>Viburnum lentago</i>	Y	M
Ninebark, common	<i>Physocarpus opulifolius</i>	M	M
Plum, American	<i>Prunus americana</i>	Y	Y
Sandcherry, western	<i>Prunus pumilla besseyi</i>	M	M
Saskatoon serviceberry	<i>Amelanchier alnifolia</i>	M	Y
Shadblow serviceberry	<i>Amelanchier canadensis</i>	M	Y
Silverberry	<i>Elaeagnus commutate</i>	Y	M
Snowberry	<i>Symphoricarpos occidentalis</i>	M	M
Sumac, skunkbush	<i>Rhus trilobata</i>	M	M
Sumac, smooth	<i>Rhus glabra</i>	Y	M
Willow, Bebb's	<i>Salix bebbiana</i>	M	M
Willow, sandbar	<i>Salix interior</i>	M	Y
Woods rose	<i>Rosa woodsii</i>	Y	Y
Crabapple, prairie	<i>Malus ioensis</i>	Y	M
Oak, bur	<i>Quercus macrocarpa</i>	Y	M

### Wildlife Food

Y = This plant is an excellent source of winter food.

M = This plant provides food prior to winter, with most food being utilized during the growing season.

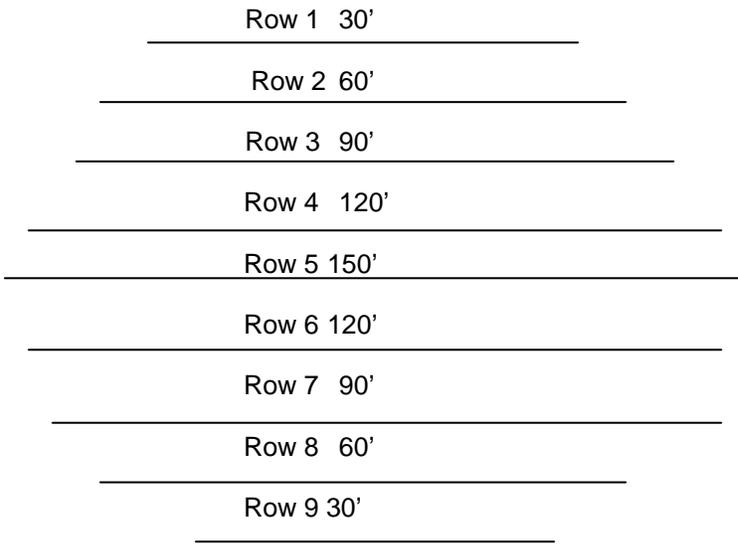
### Wildlife Cover

Y = Provides three or more of the following cover types: *nesting, loafing, escape, winter cover.*

M = Provides two of the needed cover types.

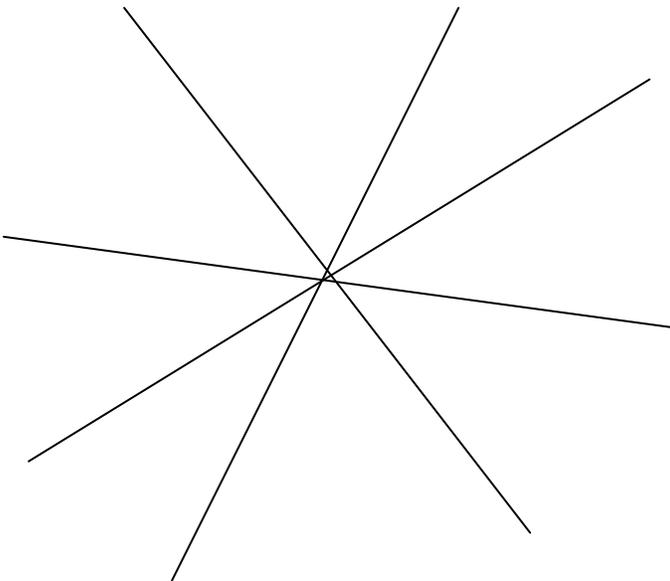
## DESIGN EXAMPLES:

### Example 1: Clumpy Design – 150' row length example



- If the longest row in the design will be less than 100' in length, all of the rows may be planted the same length.
- If the longest row will exceed 100' in length each adjacent row length will decrease by at least 20 percent of the previous row length.

### Example 2: Star Design



- The Star Design may be planted by machine or by hand. This design allows fabric weed barrier installation with some thought given to this process.

- The pattern of this design is developed based on the center point being the same for each row.
- The rows are designed by planting the first row in a linear direction of chosen distance.
- The second row is planted perpendicularly to the first row planted to form a “plus sign.”
- The design now contains four quadrants. Each quadrant is divided in half by a row.
- When installing fabric, the last row of trees installed is the first row of fabric installed. The other option is to utilize fabric squares.

### Example 3: Expanding Designs

The last method used by wildlife personnel is to plant shrubs/trees in an expanding triangle or square as shown below. The row length varies by site limitations.

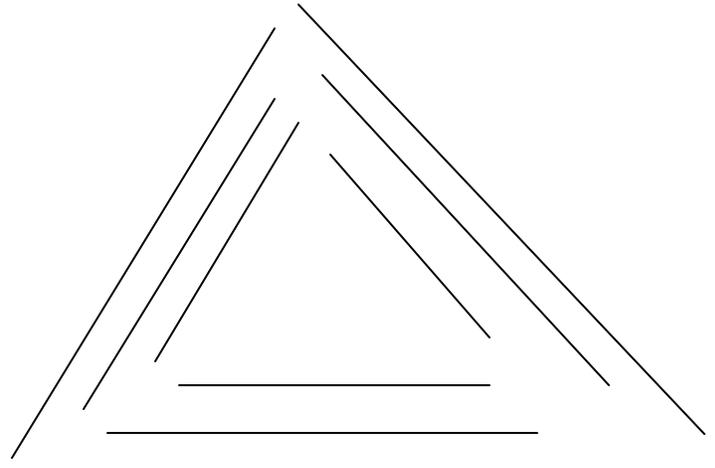


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