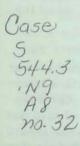
CIRCULAR A-32 REVISED

YOUR FARMSTEAD WINDBREAK



John Zaylskie Extension Forester

FARMSTEAD WINDBREAK

Every North Dakota farm needs a windbreak planting to protect the buildings, farmyard, feedlots, orchard, and garden. Well established windbreaks increase farm values as well as provide additional comforts for home life.

LOCATION AND SIZE

Protection against the winter snow and wind is the most important consideration in locating the farmstead windbreak. Since most winter storms come from the northwest, the windbreak should be located on both the north and west sides of the farmstead in the shape of an L.

The distance from the building to the outside shrub row of the tree planting should not be less than 180 feet.

The number of rows of trees to use should not be less than four, with a minimum spacing of 10 feet between the rows. The maximum spacing between rows should not exceed 15 feet. Spacing in the row should be 3 feet for shrubs and 6 to 8 feet for the trees.

PREPARING LAND FOR TREES

With rainfall varying from 14 to 22 inches as it does in North Dakota, it is necessary to have a reserve supply of moisture in the soil before planting. This is best accomplished by summerfallowing the land for at least the previous year.

Cultivation during this period should be frequent enough to prevent any weed or plant grows reand to keep the soil in suitable condition for absorbing moisture. If, however, the soil is sandy and subject to blowing, some cultivated row crop such as corn should be planted instead of summerfallowing.

Sod land should be plowed 3 or 4 inches deep and thoroughly worked the first year, then plowed deeply and worked as fallow during the second year. Trees should not be planted on ground showing any evidence of live sod or noxious weeds.

SELECTING AND ARRANGING SPECIES

For maximum protection and long life, the windbreak planting should include a combination of at least three different species of trees and shrubs.

Low, dense-growing shrubs should be selected for the outside rows; next should be the medium-sized trees, and the tall growing trees in the center.

Evergreens, such as spruces, cedars and pines should be planted on the side of the windbreak next to the buildings, and just inside of the shrub row.

RFF

12'-

12

12'

MEDIUN

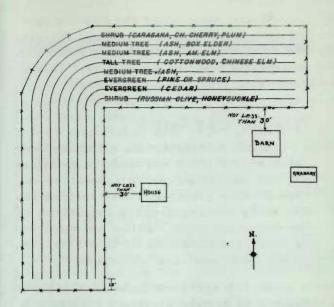
SHRUB

MEDIUM

VERGREEN

CEDAR

SHRUB



Suggested plan for a windbreak planting, showing the arrangement of the trees and their relation to the farm buildings.

In areas of heavy snow fall and heavy drifting of snow, it may be desirable to add a snow trap to the planting. The snow trap should consist of a 2 row shrub planting located at least 30 and not more than 60 feet to the windward side of the windbreak. Its purpose is to trap and stop the snow before it gets to the windbreak.

PLANTING THE TREES

Trees should be planted as soon as received from the nursery or as soon as weather conditions permit. When trees have to be held over for a few days, it is advisable to unpack the trees and heel them in until they are to be planted. They should be planted in straight, parallel rows and in accordance with a pre-determined planting plan. At all times during the planting operation, keep the tree roots moist. Allowing the roots to dry out for even a short time weakens the tree, or may kill it. This is especially true with evergreens.

CARE AND CULTIVATION

Clean cultivation to eliminate competition from grass and weeds is essential for the successful establishment of any type of tree planting. This cultivation has to be continued until the crowns of the trees have grown together and completely shade the ground so as to prevent the growth of competitive vegetation.

On extremely sandy soils which are subject to blowing it may be advisable to plant a row of corn or sorghum between each row of trees.

MULCHING

Mulching with straw, hay, or manure as a substitute for clean cultivation is not recommended. This practice is harmful since it tends to cause development of shallow root systems, harbors destructive rodents, and presents a serious fire hazard.

PROTECT AGAINST RODENTS

Protect windbreak trees against damage from rabbits and other rodents by the use of either strychnine poisoned bait or by repellents. Wrapping the trees with wire netting or other material is a satisfactory way to protect a few trees but is not practical on a large scale.

BENEFITS FROM FARMSTEAD WINDBREAK PLANTINGS

- Protect homes and reduce fuel requirements.
- 2. Protect livestock and reduce feed requirem 3.

- Produce fuel wood, fence post and occasional rough lumber.
- Protect gardens, orchards and ornamental plants.
- 5. Improve farmstead appearance.
- Attract insect-eating, song and upland birds.
- 7. Production of fruit for home and wildlife use.

OTHER RECOMMENDED PLANTINGS

- 1. Field shelterbelts or buffer strips.
- Livestock protection plantings around feed lots, water holes, etc.
- 3. Erosion control plantings.
- 4. Wildlife plantings.
- 5. School ground plantings.
- 6. Living snow fences.

WHY NOT?

Increase the value of your farm property? Have amore comfortable and attractive farm? Avoid snowdrifts in your yards? Reduce your fuel costs? Protect your livestock in winter? Enjoy an orchard and ornamental planting? Save money on fence posts? Attract song and game birds to your home?

PLANT A WINDBREAK

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