

PRAIRIE FORESTRY

IN NORTH DAKOTA

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We do not have any records that tell of planned tree planting before the coming of the white man to what is now North Dakota. However, the Mandans, Hidatsas and Arikaras, who were probably the most advanced agriculturists of all the Indian tribes in this region, did plant trees, but as an accidental by-product of their wild fruit harvesting and processing operations.

Much logging was carried on in North Dakota before settlers started to plant trees. The extensive bottomland hardwoods were logged to provide fuel for the riverboats operating on the Red and Missouri Rivers. Early settlers established their homes near naturally wooded areas that supplied both building materials and fuel.

In 1873, Congress passed the Timber Culture Act, which demanded that 40 acres of a quarter-section be planted to trees. The act was amended many times, but the act is important because it started prairie forestry.

In 1862, when the Homestead Act went into effect, many settlers planted trees to **improve their surroundings**. The first records of environmental plantings in North Dakota preceded the Timber Culture Act.

Over the years, many laws were passed and many agencies were formed to assist the farmers and ranchers with conservation know-how, all aimed at protecting the topsoil.

Soil particles or particulate matter in the air today, are the most abundant pollutants, and soil in our waters as sediment is close behind.

For more than 100 years, North Dakota farmers and ranchers have been fighting pollution, long before the now common term "quality environment" was definable.

Today, North Dakota leads the nation in the number of trees and shrubs planted for protection purposes, an honor held consecutively for the past 13 years. Those who work with tree plantings, (one of many conservation activities), are proud of this

record. However, any pride retained because of the honor of planting the most must be shared with the farmers and ranchers of North Dakota who pay for and tend these tree plantings.

North Dakota farmers and ranchers planted more than 2,500 miles of single-row field windbreaks in 1970, plus some 3,000 acres to farmstead shelterbelts. In addition, some are providing plantings (both trees and shrubs) to protect wildlife and livestock and to screen unsightly areas.

Some environmentalists blame farming and ranching as our biggest polluters, because farming and ranching are our biggest industries. These same environmentalists have a "tread lightly" attitude because they do not wish to irritate the farmers and ranchers of our state. Most people are well aware of our biggest polluter, wind-blown soil, and North Dakotans will continue to fight this problem as they have for more than 100 years.

One current research project in the area of prairie forestry in North Dakota is a tree establishment study in which various treatments and sizes of stock are used to determine the best growing methods of stock larger than seedling size (McS-12-1 6201-511-3511 and Army Corps 4204-511-4536). Another ongoing study concerns shelterbelt influence, to determine in dollars the benefit offered adjoining crops (NDSU Cooperative Extension Service, Economic Crop Reporting Service and the Agricultural Research Service).

Research in the planning stage is aimed toward identifying superior trees and shrubs. Grafts or seed will be collected from trees and shrubs showing superior growth, form, resistance to disease and insects. The progeny should yield seed of better quality than is now used for seedlings in the windbreak and shelterbelt program.

An area in need of research is that of shelterbelt renovation. Trials of various practices could include (a) sod removal, (b) thinning of stand density, (c) underplanting, (d) replanting entire rows, (e) additional rows of trees and shrubs, and (f) removing the old belt.

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