

Kansas State Agricultural College

EXPERIMENT STATION

DEPARTMENT OF HORTICULTURE AND FORESTRY



Kansas State Forestry Work

The State forestry work authorized by the Legislature of 1909 has during the past year consisted chiefly of preliminary observations concerning forest conditions in the several sections of the State. The forestry problems of Kansas are naturally divided into two groups — the maintenance and extension of the present forest area of Kansas, and the creation of artificial forests by planting. Reports on these two phases are now to be published, and Kansas has her forest policy determined.

The present forest areas of the State are of great importance. For the most part these areas are along the streams and upon hillsides and in ravines where a cover of trees is necessary for soil protection. Many of these natural forests may be made much more valuable by judicious thinning, and many may be considerably enlarged by protecting for a few years the young growth adjacent to the wood lot.

A part of the State forest policy will be to prepare plans for the care of these wood lots in order that they may add to the wealth and welfare of the State.

Recommendations for the creation of artificial forests will be made only after the forester is acquainted with the conditions of soil, exposure, adaptability of the location for tree growing, and the ability of the owner to execute such plans. Recommendations as to soil preparation and selection of species will be made in the light of the history and experience of plantations which have been carefully studied as to the causes of their success and failure. The three requisites for success are soil preparation, proper selection of species, and cultivation and care.

A summary of the discussion contained in the report upon artificial forest emphasizes these points:

Soil must be well prepared for tree growth.

Unless land has been in crops two or more seasons, it is not wise to attempt plantings that are to depend upon the soil moisture for support.

After a few years of good farming, most soils contain sufficient moisture to support trees.

Cultivation must be frequent and thorough.

If the soil is exposed and liable to blow, a light mulch should be applied in the fall and worked into the soil the following spring.

There should be a sufficient area planted to trees so that they will soon protect each other.

In exposed locations, low-headed trees are the only forms that can long survive.

One-year-old seedlings are best suited for transplanting.

For very trying localities, seed planted where the tree is to stand has a better chance for long life, but requires great care during the first season.

Species adapted for high, dry soils are: Honey-locust, Osage Orange, White Elm, Hackberry, Russian Olive, Red Cedar, Austrian Pine, and Scotch Pine.

For sandy soils and creek bottoms, Cottonwood and Russian Mulberry may be added.

For good soil, moist and rich, *Catalpa Speciosa* is permanently the most valuable.

The Forestry Stations will be continued as demonstration plantations, and nurseries for experimental and cooperative purposes continued.

Where possible, the State Forester will visit plantations and inspect soil and conditions and prepare planting plans for cooperative work. Every effort will be made to aid and assist all planters, no matter how small the operations, but planting plans cannot be made unless for an area of two or more acres, except in the case of school districts which wish to improve their premises by making forest and ornamental plantings. It is hoped that many districts will secure even larger areas for this work.

Inquiries concerning planting plans or other forestry questions should be addressed to State Forester, Manhattan, Kan.

Approved:

ED. H. WEBSTER,

Director.

MANHATTAN, KAN., Feb, 11, 1910.

ALBERT DICKENS,

State Forester.