FOREST PLANTING IN NEW JERSEY

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Forest Planting in New Jersey by Alfred Gaskill

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ALFRED GASKILL

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REPORTS OF THE FOREST PARK RESERVATION COMMISSION OF NEW JERSEY

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FOREST PLANTING

IN NEW JERSEY

BY
ALFRED GASKILL
State Forester



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The Forest Park Reservation Commission.

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JAMES O. HAZARD, Trenton, Assistant Forester.

CHARLES P. WILBER, Trenton, State Firewarden.

OFFICE, State House, Trenton.

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FIG. 1. The kind of land that should be restored to forest. It can be farmed but washes badly and will do better in trees. The scattered evergreens are volunteer red cedars.

STATE AID IN FORESTRY.

The Forest Commission wants to assist farmers, and all woodland owners, to practice forestry. See offer on page 28.

Forest Planting in New Jersey.

THE NEED OF PLANTING.

The Forest Commission lays little stress upon forest planting because the State's woodland area is now as great as it should be, and because it is easier, cheaper, and, for the present, better to make good forests out of the abused and neglected natural forests. To do this requires, in most cases, no outlay; simply protection against fire and proper thinnings at the proper time are enough. The result will rarely be as good, silviculturally, as from a planted forest, but the crop will come quicker and it will cost less.

Where planting is proper. There are places and conditions, however, that justify planting; they are where land cleared for cultivation or pasture is found unfit, or is no longer wanted, and where forest is desired for pleasure or to simplify the administration of an estate (Fig. 1). In the first case the land, being fit for nothing but forest—true forest soil, would naturally have a low value; a plantation therefore should be expected to yield a profit. In the latter cases satisfaction rather than profit would be the object.

Underplanting, or filling gaps, in woodlots is often advisable. The procedure is the same as in open plantations but greater care in the choice of species is required on account of the deficient light afforded—see tolerance, p. 9.

Shade trees not considered. The present discussion deals solely with the production of timber. Beauty and shade are entirely apart.

NO QUICK RICHES.

Intending forest planters are reminded that an investment in forestry will yield returns in proportion to the skill and wisdom that underlie it; that the income from a plantation may equal from four to eight per cent., compound interest, yet can rarely be more because there is a limit to the rate at which trees grow. Sure, steady, moderate returns, rather than quick riches are always the foresters aim. See p. 25.

CLIMATE AND SOILS.

The climate of New Jersey is everywhere suitable for many kinds of trees, and highly favorable to some. No part is too hot, too cold, or too dry to produce vigorous trees.

Its soils, on the contrary, are very diverse, and make necessary a careful adaptation of species to local conditions. No part of the upland, except the beaches and about 25,000 acres on "The Plains," is incapable of supporting a forest of some kind. Even the sandy soils of the pine section are less sterile than is commonly supposed. Solely for the guidance of tree planters the soils of the State may be divided into six classes. See p. 14.

WHAT TO PLANT.

When a forest is founded by Nature one wisely uses what he finds; when a forest is to be planted the aim should be to choose the best for given conditions.

Pure or mixed forests? Many foresters advocate mixed plantings (two or more species) upon the ground that that is Nature's way, that one species helps another, that insects and disease do less harm than in pure (one species) forests. All these arguments have weight, yet most authorities now favor comparatively small groups of a single species, each group representing the fittest tree when climate, soil, markets and all other factors are considered. Under this rule pure forests of several hundred acres may be established. For these reasons, and because it is hard to determine the character and proportions of a mixed forest without a careful study of local conditions, only pure forest plantations are here considered.

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