Shades
of Northwest China!

Each Year in the Carolinas 6,400 Trains of 70
Cars Each Go Up in Smoke

By A STAFF WRITER

THINK of a stack of wood six feet high and four feet wide extending from the Atlantic to the Pacific ocean and back again with enough left over to reach from Charleston, S. C., to Chicago.

This should give you some idea of the magnitude of the 6,900,000 cords of fire wood that farmers of the Carolinas burn annually, each farmer using an average of around 15 cords a year to heat the home, cook meals and cure the tobacco crop.

To move this wood that Carolina farmers convert into heat, ashes and smoke each year would take 6,400 trains of 70 cars each!

Shortage Stark Reality

Yet farmers are doing comparatively little to safeguard and replenish the forests from which they take this wood.

Is it any wonder farm leaders are becoming alarmed over the approaching wood shortage—a shortage that is already a stark reality in such North Carolina counties as Edgecombe, Wilson and Pitt where farmers last year were forced to go 50 miles to buy wood and then haul it home in order to cure their tobacco.

Shades of Northwestern China!

There farmers years ago cut down the trees on the slopes and uplands. They tried to put every acre into intensive crops—but the slopes and uplands could not continuously bear intensive cultivation. The rain, no longer held back by trees and grass, rushed down from the mountains.. It carried the soil away. Millions of acres of sloping uplands be-

Black locust five years after planting on an eroded cecil clay hill on the farm of the W. E. Morrison estate, Iredell, N. C.

came waste and millions of people were forced to leave the higher lands and settle in dense hordes on the alluvial plains bordering the rivers.

Grain Roots for Fuel

And today in China wood is so scarce that even the roots of grain crops are dug up and used for fuel!

Physically, China is the farthest point from the Carolinas, but at the rate we are now going every day finds the states made famous by the long leaf pine approaching more closely China's predicament of a depleted forest.

"What can we do about it?" we asked our friend, R. W. Graeber, extension forester at N. C. State College.

The answer: Conserve the forests that are still left and practice reforestation by planting trees on idle lands before it is too late.

"We must use common sense in wood cutting," declared Graeber. "When a farmer thins corn or chops cotton, he doesn't go to the edge of the field and cut the first four or five rows down. Yet we see thousands of farmers who, when cutting firewood, go to the edge of the timber field and clear cut a strip.

System Necessary

"Neither do you see a farmer cut the best stalks of corn and leave the crippled corn, the cockleburs and other weeds. Yet you see thousands of farmers cutting straight, clear pines, good white oaks, clear hickories, or saleable ash, while leaving such trees as crippled, twisted pines, black jack and scarlet oaks, sourwood, black gum and others which are just weeds among our better tree species."

Graeber went on to say that most Carolina farmers can increase the average annual wood growth from the present one-half cord per acre to a full cord or even more by following a definite system of thinning the over-crowded stands and culling diseased, crippled, and otherwise defective trees in any type of stand. This policy gives the better species a chance to grow and makes possible a restocking of the better species in the

more open stands after such an improvement cutting.

The first forest planting in North Carolina was made by Jacob Tickle, a small but far-seeing farmer in Alamance County—small because his land holdings were not great, far-seeing because 48 years ago he had the initiative and foresight to reclaim 14 acres of gullies by planting them in pines.

Today the forest on what was once gullies is worth for fuel alone from $75 to $100 an acre, but what is more important, Tickle charted a course which other farmers may well follow.

"As a rule, forest trees should be planted in idle, open fields not suited for the annual crops," said Graeber. "Large openings in the woods where root competition is not too great may be planted. In the mountains and upper Piedmont where woods are open or poorly stocked, under plantings of white pine, red pine, or Norway spruce is advisable. Black locust and pines are the best species for eroding lands. Black walnuts should be planted as individual trees on every farm.
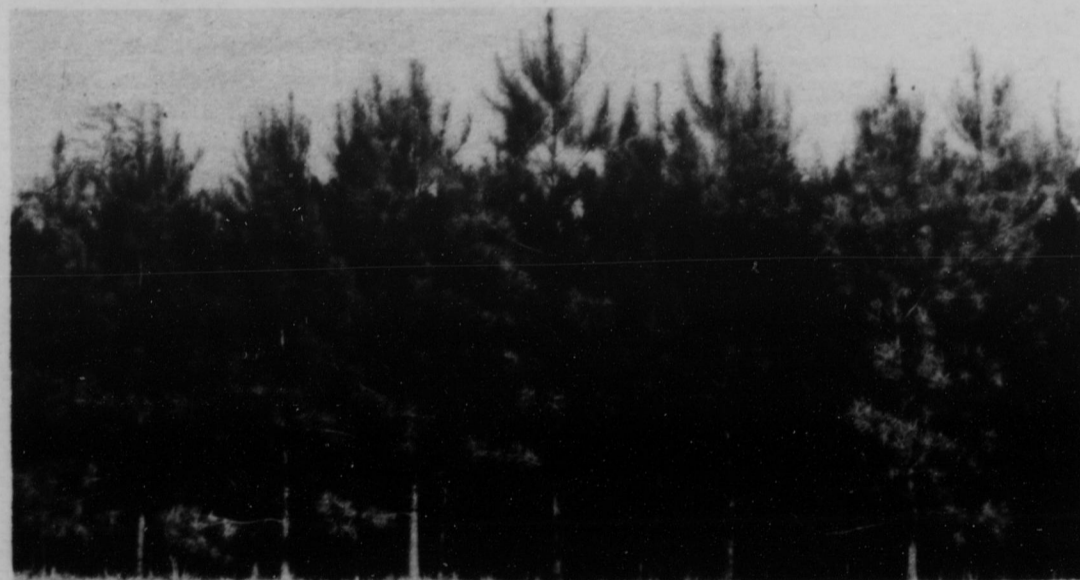
Consult County Agent

For general planting, Graeber recommended spacing forest trees six feet by seven feet, this requiring 1,000 trees per acre. In reclaiming gullies, a closer spacing may be advisable.

The broad-leaved or deciduous trees may be planted from Nov. 1 to April 30. Plant pines and other evergreens in winter and early spring. Your county agent will be glad to give you the source of trees and make recommendations.

"Plant the seedlings," Graeber said, "immediately after they are secured if possible. Otherwise, heel-in, getting the roots well covered and moist. When the package of seedling trees is opened do not expose the roots to sunlight and air. While planting, keep the roots moist in a bucket with thick, creamy mud, made with clay and water. Plant trees at same depth as they grew in the nursery.
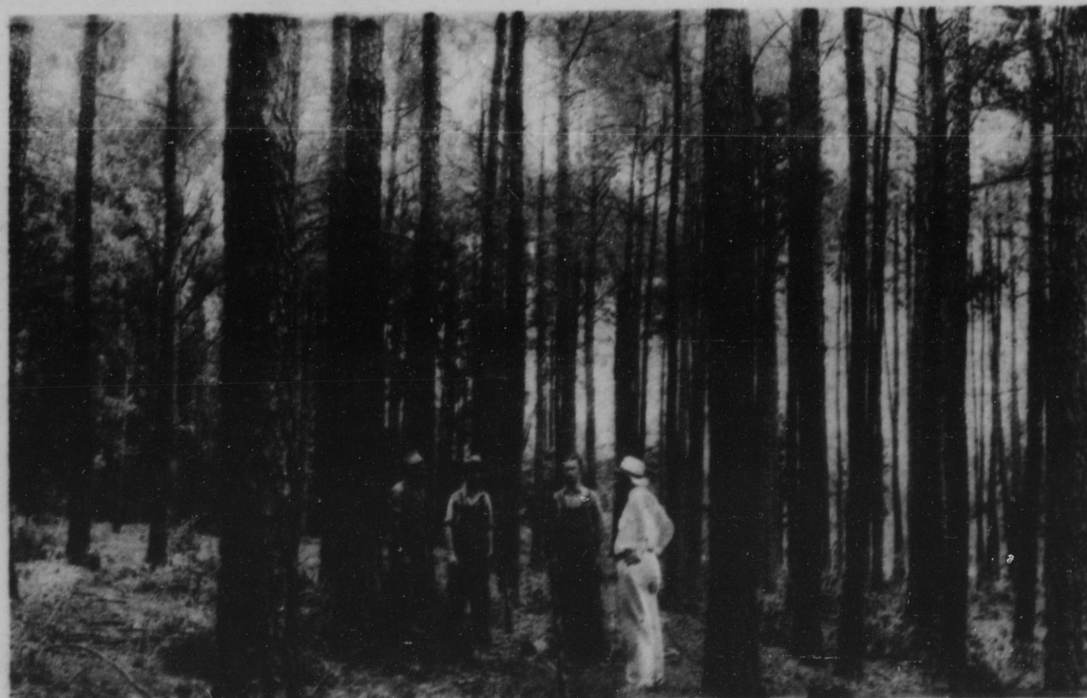

Loblolly pine at Piedmont Experiment Station, Statesville, N. C. One-year seedlings were planted on poor, eroded cecil clay in February of 1927. This picture was made in August of last year.

Looking into a stand of eight-year-old Loblolly pines planted March 3, 1927, by J. E. Vanhoy on land owned by A. C. Vanhoy in North Carolina. The trees are now 20 to 25 feet tall and measure four to six inches in diameter at breast height.

Timber stand improvement is demonstrated in mixed hardwoods and pines on the farm of E. H. Brookshire, Caldwell County, N. C.

Thinning demonstration in Loblolly shortleaf pines (mixed stand) on the farm of W. T. Parham, Vance County, N. C. After cutting 13 1-2 cords of firewood from the culls, 266 trees were left.