

Worksheet C Teacher's Key

Name: _____ Date: _____

Supplementary Worksheet for Trees for Tomorrow: Texas Forest Service (1960)

Produced by the Texas Forest Service, this film describes the Texas Tree Improvement Program, which is dedicated to "meeting the challenge of our future wood needs with better quality trees for tomorrow."

This worksheet is designed to help you gather information from the film about the benefits and disadvantages of the timber industry. Answer the questions completely and determine which position the filmmakers and the film's participants would take.

Why does the Texas Forest Service conduct forest tree improvement research? What are the objectives of the program?

To produce better trees to ensure future supplies of good quality timber

- To improve tree growth rate and form
- To increase drought resistance
- To provide wood with better properties

What are some of the methods used by researchers to improve the quality of trees?

Vegetative propagation, grafting, controlled pollination

What are some of the properties that a forest geneticist looks for in tree selection and breeding? Why would these traits be beneficial to the production of lumber?

Good tree form
Straight boles
Horizontal branches
Small, compact crown
The ability to bear cones
Free of disease and insects
Show a good growth rate

These properties make lumber easier to harvest and make trees more productive.

What is specific gravity and what are the cases when having a high specific gravity is beneficial? When it is not beneficial?

Specific gravity is a measure of wood density. It determines wood strength. Beneficial for lumber for construction and the plywood industry. Not beneficial in paper manufacture.

Worksheet C Teacher's Key

Why does the video state that there is an increased demand in the lumber industry?

The population is growing rapidly and cities are expanding, development of new and better uses of wood. The wood supply will have to be grown on less land and be of the quality needed by industry

Does the video talk about forest conservation for environmental reasons? Why or why not?

[The only mention of environmental reasons is couched in an argument to preserve the land for higher production. This should be the student's analysis of why the film was made – as a support for the lumber industry]

Vocabulary:

Residual trees –

lower quality trees used to produce next crop

Increment core –

Wood sample taken from a tree that shows growth rate and other wood properties

Vegetative Propagation –

Using cuttings to produce genetically identical offspring