

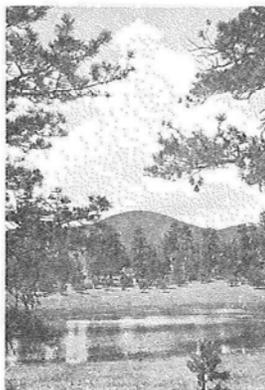
Technical Notes Woodland Conservation



FOREST MANAGEMENT



WINDBREAKS



WATERSHEDS



FOREST RECREATION

U. S. DEPARTMENT OF AGRICULTURE NEW MEXICO SOIL CONSERVATION SERVICE

January 5, 1973

WOODLAND TECHNICAL NOTE NO. 25

SUBJECT: Shading Young Conifers

Shading conifer seedlings of Ponderosa pine, Austrian pine, Rocky Mountain juniper and Arizona cypress has long been advocated by Soil Conservation Service. Shingles on the south and east sides for the first two or three years around newly planted seedlings has given consistently higher survival on hard-to-establish evergreens. The shingles provide protection from wind blast but more important reduce soil temperature around the root collar. Ground temperature is often critically high around tree seedlings.

Simple tests have been made in which shade was provided by shingles on the south and west side of a thermometer covered with approximately one-half inch of loose sand. Another thermometer was placed in the open adjacent to the shaded thermometer and covered to the same depth.

This experiment was made on May 3 when the air temperature reached a maximum of 72°F. This moderate day caused a temperature differential of over 40°F as seen in the following table. A much greater differential can be expected with warmer days and more hours of bright sun.

AO
WRTSC, Portland - 2
NMSO Records Management - 1
Adjoining States - 1

<u>Time</u>	Temperature °F		<u>Sky</u>
	<u>Sun</u>	<u>Shade</u>	
8:10 am	72	69	Bright
9:20 am	100	69	Bright
10:10 am	110	71	Bright
11:00 am	112	70	Bright
12:00 noon	94	70	Cloudy
1:00 pm	94	70	Partly cloudy
2:20 pm	100	72	Diffused overcast
3:45 pm	88	70	Partly cloudy
4:40 pm	78	67	Partly cloudy