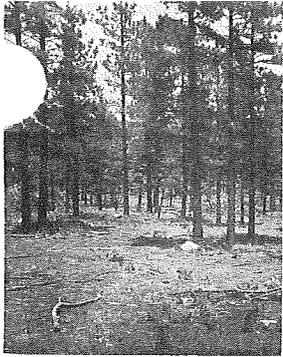


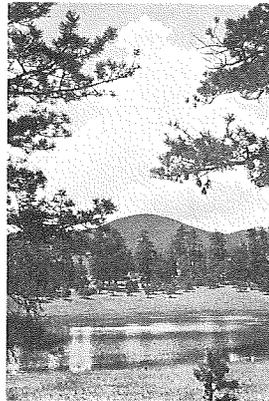
Technical Notes Woodland Conservation



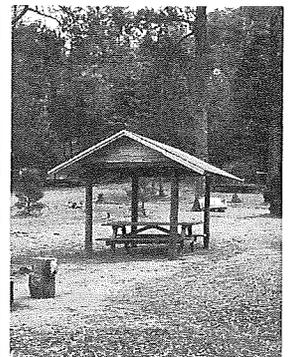
FOREST MANAGEMENT



WINDBREAKS



WATERSHEDS



FOREST RECREATION

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

WOODLAND NOTE NO. 9

February 9, 1965

SUBJECT: REDUCTION OF WINDFALL IN HARVESTING SPRUCE-FIR FORESTS

Heavy windfall losses have long been a problem in the cutting of Englemann spruce (*Picea engelmannii*) and cork bark fir (*Abies lasiocarpa*, var. *arizonica*). Protection from wind for the vulnerable leeward boundaries of such cutting areas is most important.

These guidelines have been developed by the Rocky Mountain Forest and Range Experiment Station:

1. Keep total cutting boundary perimeter to a minimum by making cutting units as large as reproduction requirements, topography, soil, and stand conditions permit.
2. Do not locate cutting boundaries where they will be exposed to accelerated winds funneling through saddles in ridges to the south and west of the sale area.
3. Avoid locating cutting boundaries on ridges or near saddles in ridges. Drop down at least 200 feet in both directions from ridgetop.
4. Lay out each unit so that the maximum amount of cutting boundary is parallel to the contour or along a road.
5. Plan irregular cutting boundaries, without sharp indentations or square corners. Avoid wind-catching indentations or long straight lines and square corners in the leeward boundary.
6. Do not locate cutting boundaries on poorly drained or shallow soils.

NOTE NO. 9 (Concluded)

7. Locate cutting boundaries in stands of sound trees.
8. Locate cutting boundaries in immature stands when possible.
9. Locate cutting boundaries in poorly stocked stands.
10. Avoid locating cutting boundaries in areas where there is evidence of old wind damage.
11. Where there are exceptionally hazardous windfall situations, eliminate leeward boundaries by progressive cutting into wind.