

# TECHNICAL NOTE NUMBER F-33

FOREST PRODUCTS LABORATORY  
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UNITED STATES FOREST SERVICE  
REVISED OCTOBER, 1931

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## COMPARATIVE DURABILITY OF GREEN AND SEASONED TIMBER

Experiments conducted by the Forest Products Laboratory have failed to show any practical difference in the durability of untreated green and untreated seasoned timbers when exposed to weather in contact with the ground.

The following results were obtained in an experiment with railway ties in cooperation with the Northern Pacific Railway.

### Green and Seasoned Ties (Untreated)

Place	Species	Average Life in Years
Maywood, Wash.	Douglas fir, green	7.7
	Douglas fir, seasoned	7.8
Plains, Mont.	Douglas fir, green	7.6
	Douglas fir, seasoned	7.7
	Western larch, green	7.3
	Western larch, seasoned	7.4

In each of these cases the average life of seasoned ties was only one-tenth of a year longer than that of the green ties. This difference is obviously so slight as to be negligible. In two experiments under observation by the Forest Products Laboratory in which both seasoned and unseasoned untreated posts are being used under comparative conditions, the seasoned posts are giving better results in one case and the unseasoned in the other case.

In service data being obtained on several groups of poles, the rate of decay in the green poles is a little less than in the seasoned poles.

The fact that green and seasoned timbers have similar durability when used in exposed places may be explained as follows: Moisture content is an important factor in the rate at which a stick of timber decays. As soon as the timber is placed it begins to take up or give off moisture, according to its condition of seasoning and the conditions of exposure. Within a relatively short time in exposed construction both green and seasoned timbers reach the same moisture content.

When used in buildings, however, wood often does not dry out rapidly after being placed. Wood for interior construction must be seasoned before used; otherwise, it is likely not only to shrink to a serious extent but also to decay before it seasons. Very expensive building repairs have been necessitated by the use of green lumber.