University or Idaho

Forest Management No. 19

## UI Extension System

## **Silvicultural Decisions III - Thinning**

Ron Mahoney

Many landowners and loggers do not understand the basics of thinning and selective cutting, and usually need professional forestry assistance to understand and apply these cutting systems. Frequently, the simple act of leaving some trees standing without knowledge of their ability for further growth and forest stability is mistakenly considered good stewardship by some landowners and harvest operators.

Thinning is a cutting made in immature stands to redistribute the growth potential and fully utilize trees that would otherwise be lost to decay. Thinning should result in fewer, larger trees with increased quality, volume, and value when the stand is mature and ready for a harvest/regeneration cut.

The basic objective of thinning is to regulate the growing space in a stand, creating an advantage for the trees that are left. Consequently, *regenerating new seedlings is not a goal of thinning*. Regeneration will not only increase competition for growing space, but the composition of seedlings may not be what is desired because mostly shade tolerant, disease and insect prone species will be successful. A good time to do a thinning is on hard-packed snow to eliminate most ground disturbance that encourages seedlings and other competing vegetation.

Ideally, the trees removed during thinning would have enough commercial value to at least cover the cost of the operation. Thinnings that result in a net cost to the landowner are called *precommercial thinning*. With recent advances in wood-composite technology, products such as waferwood have made most thinnings a commercial operation that provides substantial profits while improving the health and future value of the forest. Thinning trees can dramatically affect the health, diversity, and potential value of the residual forest and the options the NIPF owner has for future silvicultural decisions. Professional assistance through Extension education programs, the Idaho Department of Lands and professional forestry consultant services usually result in goals met and increased profits. Your local Cooperative Extension system office can provide you with information on education programs, professional assistance, and the following publications:

- *Basics of Thinning For the Woodland Owner*, University of Idaho CIS No. 654. Covers the purpose, timing, and techniques of thinning.
- Diameter Limit Cutting A Questionable Practice. University of Idaho CIS No. 630, covering the advantages and disadvantages of diameter limit cutting in relation to timber harvest goals.
- *Thinning: An Important Timber Management Tool*, PNW 184 Describes the biology, impacts, and practice of thinning.
- Using Pre-Commercial Thinning to enhance Woodland Productivity, Oregon State University EC 1189 describes the opportunities of precommercial thinning.

This information first appeared in Woodland NOTES, Vol. 5, No. 3.

**About the Author:** *Dr. Ron Mahoney* is an Extension Forester and Professor at the University of Idaho.



The University of Idaho provides equal opportunity in education and employment on the basis of race, color, religion, national origin, gender, age, disability, or status as a Vietnam-era veteran, as required by state and federal laws.