

UI Extension Forestry Information Series

Silvicultural Decisions II - Mechanized vs. Conventional Logging

Ron Mahoney

Environmental Impact. The feller-buncher is a machine weighing about 50,000 pounds. It can cause considerable soil disturbance when it turns while holding a large tree. This weight is distributed, however, over a large surface area of track, so the weight per square inch of soil surface is less than that of a horse's hoof or some other logging equipment with wheels. Because most timber in our region is in natural stands with a clumpy distribution of trees, conventional felling with chain saws is difficult to do without bucking tops and scarring trunks of residual trees. Even the best of sawyers are limited in the direction they can

Economics. Economic concerns involve the displacement of logging jobs and the cost-efficiency of the operations. A high-tech mechanized operation reduces the number of people required to do the job. In this situation, a five-person crew did the work of a twelve to fifteen person conventional crew. Some segments of the economy - equipment manufacturing for example - benefit from increased job opportunities; however, the number of logging jobs decreases while skill requirements increase. The mechanized operation we viewed involved an investment exceeding a million dollars, is only feasible on larger acreage, high-volume timber

This information first appeared in Woodland NOTES, Vol. 4, No. 2.

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