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The H.J. Andrews Experimental Forest

Robert E. Buckman

Professor
College of Forestry
Oregon State University, Corvallis, Oreg.

The H.J. Andrews Experimental Forest was established on the Willamette National Forest in 1948. It embraces 6400 ha of mountainous forested watersheds in west-central Oregon. The history and uses of this experimental forest illustrate many of the points of my earlier remarks concerning experimental forests of the U.S. Forest Service (pp. 15–26).

The H.J. Andrews has evolved through several phases including:

- 1950s: systems of roading, harvesting, and regeneration of old-growth forest, all in anticipation of commercial logging on midslopes of the Cascade Mountains.
- 1960s: effects of logging and roading on water quality and yield, much of this research in response to unusually heavy flood damage early in this decade.
- 1970s: basic studies of forest and stream ecosystems, in response to U.S. participation in the International Biological Program, and the need to undertake more fundamental and integrative ecological studies.
- 1980s: continuation of ecological studies with emphasis on application to silviculture, wildlife, and landscape ecology.

The impact of the H.J. Andrews Experimental Forest has been substantial :

- It has been the subject of some 1400 publications and more than 100 graduate theses.
- Several hundred visitors per year, including opinion leaders and policy-makers, come to the forest. Research here has been a model of co-operation and interaction among researchers and users, including those from the host Willamette National Forest.
- Work on the forest has had substantial technical impact on such forestry practices as roading and harvesting design, water yield and quality in relation to timber harvesting, riparian zone management for fish habitat, and forestry practices to maintain biological diversity.

The H.J. Andrews Experimental Forest has multiple classifications, including one of the 13 long-term Ecological Reserves funded by the National Science Foundation. It is also a Biosphere Reserve, part of a global network recognized by the United Nations Educational Scientific and Cultural Organization. It has had strong leadership during its several evolutionary stages. It also enjoys strong collaborative research participation among several groups, including Oregon State University, University of Washington, National Science Foundation, U.S. Geological Service, and others. Indeed, leadership for various activities is more often vested in non–Forest Service scientists than from the Forest Service (the nominal administrative leader) itself.