



United States Department of Agriculture

1915–2015

100 Years of Forest Service Research & Development



**R. Keith Arnold**  
Deputy Chief,  
Research & Development  
1969–1973



Pictured:  
Forest  
Service  
R&D  
at work.

1915 1925 1935 1945 1955 1965 1975 1985 1995 2005 2015



Forest Service  
May 2016

Caring for the land and serving people

## Arnold • 1969–1973

### Research & Development MILESTONES



- The 1970s was known as the “environmental decade.” Arnold’s goal was “to move forestry research to the cutting edge of environmental policy.”
- Forest Service Research and Development was studying most American ecosystems and was the largest single employer of ecologists.
- By the 1970s, recreation carrying capacity research came to the fore. This social science research concept was based on earlier applications of carrying capacity research, such as sustained yield carrying capacity. Carrying capacity is the upper limit of the number of people, other living organisms, or crops that an area can sustain. In the 1970s, other carrying capacity concepts emerged in Forest Service research, such as environmental, wilderness, aesthetic, and ecological carrying capacity.
- University collaboration was supported in the 1970s, and political trends began pulling Forest Service Research toward meeting the needs of Forest Service managers.
- After more than a decade of Forest Service research, the National Fire Danger Rating System became operational in 1972. This system standardized the assessment of and response decisions to wildland fire across Federal and State agencies.

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