

California's Demonstration State Forests

Forest Science Research and Outreach

Tim Robards

California State Forests

- ▶ Setting
- ▶ Research
- ▶ Outreach
- ▶ Future



Demonstration State Forests?

- ▶ Second Growth
- ▶ Preservation / Conservation
- ▶ Separate from School Lands
- ▶ 71,000 Acres



State Forests

- ▶ Boggs Mountain
- ▶ Jackson
- ▶ LaTour
- ▶ Mountain Home
- ▶ Soquel



Forestry in California

- ▶ 62% Public Ownership, 20% Industrial
- ▶ Imports 80% of Wood Products
- ▶ Harvests 25% of Growth
- ▶ State of Denial series in Sacramento Bee (2003)
 - Wood
 - Oil
 - Fisheries

Research/Outreach Colleagues

- ▶ USDA Forest Service Pacific Southwest Research Station
 - Redwood Sciences Lab
 - Silviculture Lab
- ▶ Universities
 - U.C. Berkeley
 - Humboldt State University
 - Cal Poly – San Luis Obispo
- ▶ U.C. Extension

Setting Drives Research

- ▶ Mandates
- ▶ Physical, Geographical and Fiscal Constraints
- ▶ Social and Economic Context
- ▶ Other Forestry Research Organizations
- ▶ Customer Needs

State Forests Research

► Silviculture

- Long-Term Levels-of-Growing Stock Studies
- Giant Sequoia
- Coast Redwood
- New Approaches: Cluster Selection, Variable Retention, Two-Aged

State of California
The Resources Agency
Department of Forestry & Fire Protection



GROWTH & YIELD REPORT FOR THE WHISKEY
SPRINGS REDWOOD COMMERCIAL THINNING STUDY
A TWENTY-NINE YEAR STATUS REPORT (1970-1999)

California Forestry
Report No. 3
February 2004

JAMES L. LINDQUIST



25% Retention



50% Retention



75% Retention



Uncut Control

State Forests Research



► Watershed

- Caspar Creek Paired Watersheds
- Spin-off Research
- Road Abandonment
- Road Reconstruction
- Historic Sediment Stream Mapping

Caspar Weir - Jackson

State Forests Research



► Wildlife

- NCASI NSO Research
- Furbearers
- Raptors
- Habitat Elements
 - Legacy Trees
 - Snag Creation and Use
- Monitoring
- Wildlife-Habitat Relationships

State Forests Research

► Other

- **Coast Redwood Genetics**
- **Carbon Sequestration Demonstration**
- **State-wide Site Models**
- **Entire Watershed Wood Analysis**
- **NASA JPL Radar Testing**
- **Sustained Yield Planning Demonstration**

Group Selection - Boggs Mountain

Outreach

- ▶ To Whom?
 - To Landowners
 - To Foresters
 - To Researchers
 - To Students
 - To Public



Wood Study - Jackson

Outreach

▶ Current Mechanisms

- Tours
- Meetings
- Publications
 - ▶ California Forestry Notes
 - ▶ California Forestry Reports
 - ▶ Newsletters
- Training
- Web



Future

- ▶ What Can I Learn From Others About Forestry Research?
 - Richard Haynes and Robert Monserud (2002)
 - ▶ Treatment Unit Sizes
 - ▶ Sound Experimental Design
 - ▶ Silviculture on Wildlife and Biodiversity
 - ▶ Aquatics and Wood Production Tradeoffs
 - ▶ Visual Quality and Social Acceptance
 - ▶ Economic Analysis of Alternatives

Future

- ▶ What Can I Learn From Others About Forestry Research? (cont.)
 - The National Research Council: *National Capacity in Forestry Research*
 - ▶ Cooperation Among Agencies
 - ▶ *The U.S. Department of Agriculture, together with universities, should develop means to more effectively communicate existing and new knowledge to users, managers, and planners in forestry.*

Future

- ▶ What Can I Learn From Others About Forestry Research? (cont.)
 - Sharon Freidman, Chair of the Society of American Foresters' Forest Science and Technology Board
 - ▶ *Good scientific research is research that is adopted by users and contributes to sustainable development, environmental protection, and community welfare.*
 - ▶ Ways to accomplish this are to employ business strategies such as market research and focus groups.

Future

- ▶ What Can I Learn From Others About Forestry Research? (cont.)
 - The Pacific Northwest Research Station Strategic Plan (2002)
 - ▶ Develop a fundamental understanding of ecological, social, and economic systems and their interactions.
 - ▶ Assess the status and trends of ecosystems and natural resources and their uses.
 - ▶ Develop science-based options that enhance management.
 - ▶ Communicate science findings and enhance their application.

Future

- ▶ What Can I Learn From Others About Forestry Research Outreach?
 - This Conference!
- ▶ Where are We Going?
 - Keep What Works
 - Adapt New Technologies



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