



United States
Department of
Agriculture

Forest Service

Pacific Northwest
Research Station

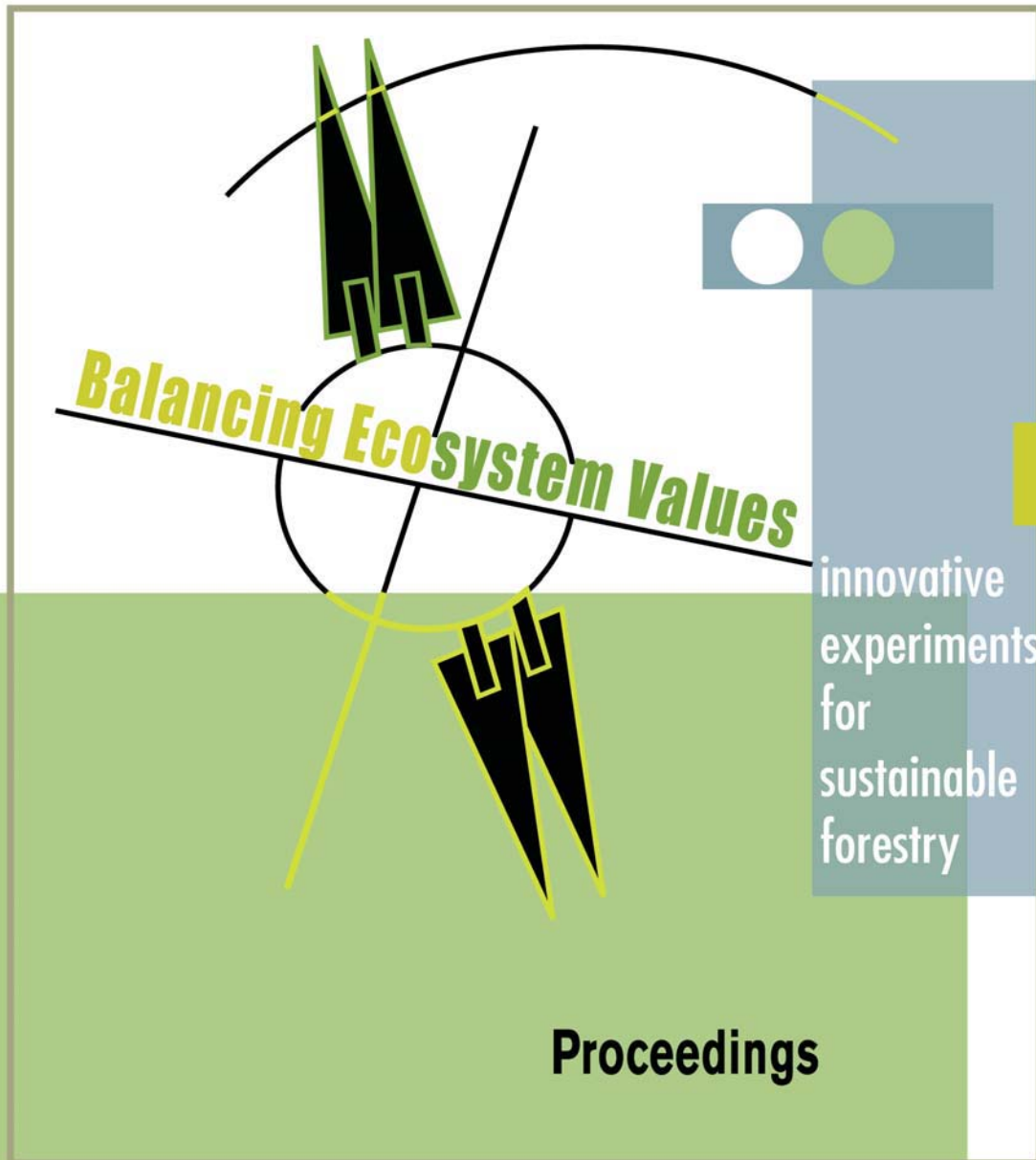
General Technical
Report
PNW-GTR-635
May 2005



Balancing Ecosystem Values: Innovative Experiments for Sustainable Forestry

Charles E. Peterson and Douglas A. Maguire, Editors

INTERNATIONAL WORKSHOP



Balancing Ecosystem Values

innovative
experiments
for
sustainable
forestry

Proceedings

EDITORS

Charles E. Peterson is program manager, Resource Management and Productivity Program, Pacific Northwest Research Station, Portland Forestry Sciences Laboratory, 620 SW Main St., Suite 400, Portland, OR 97205; Douglas A. Maguire is an associate professor, Department of Forest Science, Oregon State University, Corvallis, OR 97331.

Technical editor: Rhonda Mazza, Pacific Northwest Research Station, Portland Forestry Sciences Laboratory, 620 SW Main St., Suite 400, Portland, OR 97205

Scientific reviewer: Toni De Santo, Pacific Northwest Research Station, Juneau Forestry Sciences Laboratory, 2770 Sherwood Ln., Juneau, AK 99801

Graphic designer: Jenny Beranek, Beaverton, OR 97006

Cover graphic by Sandra Arbogast, College of Forestry, Oregon State University Corvallis, OR 97331

Papers were provided by the authors in camera-ready form for printing. Authors are responsible for the content and accuracy. Opinions expressed may not necessarily reflect the position of the U.S. Department of Agriculture.

The use of trade or firm names is for information only and does not imply endorsement by the U.S. Department of Agriculture of any product or service.



Balancing Ecosystem Values: Innovative Experiments for Sustainable Forestry

Charles E. Peterson
and Douglas A. Maguire, Editors

August 15-20, 2004
Portland, Oregon

U.S. Department of Agriculture
Forest Service
Pacific Northwest Research Station
Portland, Oregon
General Technical Report
PNW-GTR-635
May 2005

Rediscovering What Works: The Stoddard-Neel Approach as a Case Study of Conservation-Oriented Sustainable Forestry

Steven Jack¹ and Kevin McIntyre¹

Uneven-aged silvicultural approaches are often proposed as appropriate for many forest types in the United States to provide a sustainable balance of biodiversity and ecosystem “health” in addition to timber products. Several uneven-aged approaches have been well-documented and widely applied, but most are focused primarily on the production of wood products in regulated systems. In thinking about appropriate new approaches to sustainable forestry, it is wise to remind ourselves of approaches that have a long history of achieving the desired objectives. One such example is the Stoddard-Neel approach developed by Herbert Stoddard and Leon Neel over several decades in open pine-grassland ecosystems (with particular attention to longleaf pine) on the Southeastern Coastal Plain. The Stoddard-Neel approach is unique not for its uneven-aged focus or method for selecting trees for removal, but rather in its overall guiding philosophy of resource management and what is selected to remain on the site after each harvest entry. In the Stoddard-Neel approach, the production of timber and subsequent economic return are byproducts of a central focus on long-term stewardship. That is, rather than a primary focus on timber management with other resources and amenities as secondary or ancillary, the Stoddard-Neel approach seeks to preserve all characteristics of the ecosystem and then determine how much timber is available for harvest while maintaining a balance of ecological, economic, conservation and aesthetic values. We will describe the Stoddard-Neel approach to forest management, including key tenets and objectives, and provide an example using long-term records from one property.

¹ J.W. Jones Ecological Research Ctr, Rt 2 Box 2324, Newton, GA 39870, USA