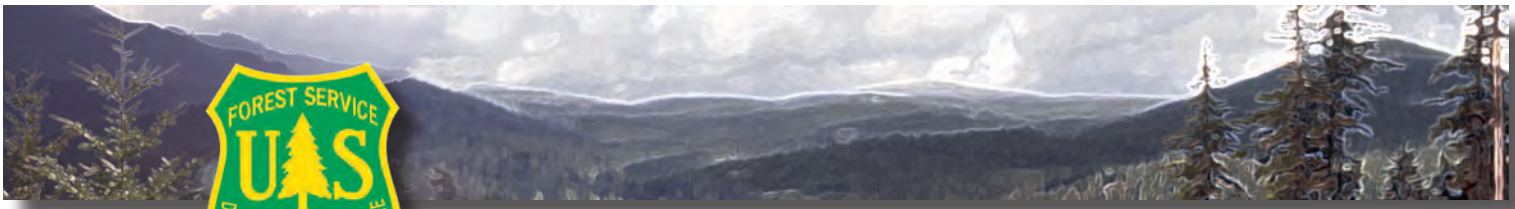

Recent Work from The Sustainable Wood Production Initiative

Older Forest Structure and Forest Certification

Claire Montgomery and Gwen Busby

Managing for Older Forest Structure on Private Lands

The standard model for conserving old-growth forest is to first identify it, then quarter it off, and finally exempt it from active management. Although this traditional model of forest protection may be a necessary component of conserving old growth, there are likely to be complementary ways of managing across forest landscapes for the kinds of goods and services that old growth offers—all while providing the economic benefits of timber harvest to landowners and communities.

Claire Montgomery is an associate professor at Oregon State University, and she is exploring economic tradeoffs associated with alternative ways of restoring and protecting forests with old-growth characteristics on private land. Basically, "alternative" in this sense means ways of achieving the amenities of older forests through active management, including timber harvest. By actively managing for the structural characteristics of old growth forests (termed "older forest structure"), it may be feasible for landowners to manage a forest that will provide market benefits as well as benefits for other values such as fish and wildlife habitat, ecosystem services such as clean water and carbon cycling, and aesthetic values. Montgomery targets private land in her studies in part because site productivity, both for timber and older forest structure, is generally higher than on public lands.

Montgomery's research considers these alternative approaches by modeling the opportunity costs for achieving older forest structure, and comparing these results with those of old-growth forests that develop naturally. Montgomery reports in a forthcoming journal article that the cost to western Oregon landowners and wood processors for achieving older forest structure on 20 percent of private lands within the next 95 years would be $254 million, or a one-time payment of $96 per adult Oregonian (Montgomery et al., in press). By knowing the costs, tradeoffs, and economic viability of different management strategies, policymakers can make informed decisions about meeting societal goals, such as managing the landscape for a mix of forest preserves and actively-managed forests. Montgomery acknowledges that older forest structure does not necessarily equate to the complex array of processes and values associated with natural old growth. But in order to provide ecosystems and human communities with strategies that are sustainable in the full sense of the word, including economically sustainable, having more knowledge of the options can only help decisionmakers in their task of achieving sustainable forestry.

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Photo—Courtesy of John Tappeiner

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Opportunity Costs for Forest Certification

Landowners and forest managers are becoming more interested in managing not just for market values, but also for the social, ecological, cultural, and spiritual values of forests. Forest certification standards provide a voluntary means for meeting these standards, and can potentially provide an edge in a marketplace where consumers are becoming increasingly interested in spending their dollars on environmentally and socially responsible products. But because meeting certification standards often includes exceeding standard operating costs, the question remains: how economically viable is forest certification?

Gwen Busby, a graduate student of Montgomery's, is investigating this question by modeling the opportunity costs, or the difference in profit margin, associated with meeting certification standards. Basing certification rules on Forest Stewardship Council standards (FSC 2005) and integrating these rules into a market model, Busby is determining the market costs of certification to landowners. This is a valuable piece of information when considering whether landowners will opt for certification, how price premiums affect that decision, or how much to allot to potential subsidies.

Although Busby is at the early stages of her research, she knows two things for sure: First, certification imposes costs on the producer, and therefore price premiums and amount of subsidy will affect their choice of whether to certify. Bigger incentives mean more landowners will choose to certify and more of the landscape will be managed according to certification standards. Second, economies of scale are important. If rules are applied at the plot level where each ownership complies individually, costs are higher. This may dissuade individual landowners from the certification process. If the spatial scale of certification is increased, distributing standards across ownerships, responsibilities could be parsed out to landowners and costs reduced. The connection to sustainable forestry is direct: to figure out how to manage forests for the long term for social and ecological values, research is needed on the kinds of fiscal incentives that will make forest certification economically viable.

References

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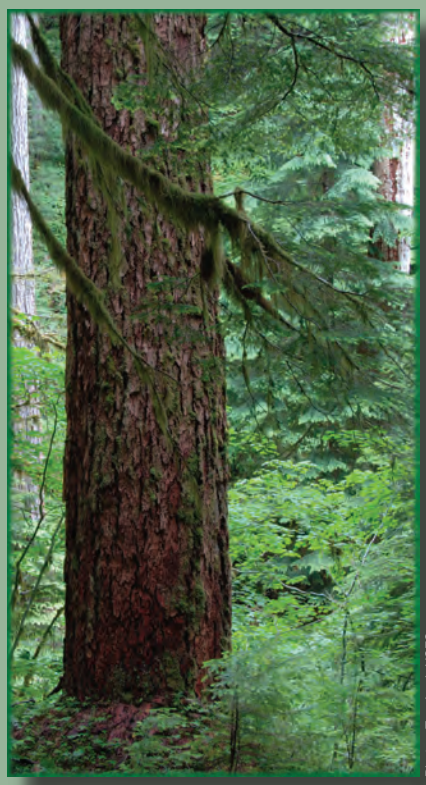

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