*We write as former chiefs of the US Forest Service with combined experience of more than a half-century dealing with national forest issues. For three decades, an increasingly acrimonious debate over old-growth forests has raged. It is time to declare old growth off-limits to logging and move on.*

—*M. Dombeck and J.W. Thomas*
*Guest Editorial,* Seattle Post Intelligencer, *August 24, 2003*

Dave Powell, USDA Forest Service, www.forestryimages.org

from the guest editor

# Revisiting the Old-Growth Question

**John C. Gordon**

Last summer, two widely respected former chiefs of the USDA Forest Service published an op-ed piece that contained the statement above. Many will agree, and many will disagree, but the existence of the editorial clearly indicates that old-growth forests continue to be in the public eye and to be an object of controversy. In this issue of the *Journal of Forestry,* we examine some of the many aspects of the old-growth question, from definition to restoration. It is our hope that the information presented here will form the base for a renewed dialogue on old forests and their preservation and use. For example, if old-growth were to be declared "off limits" to harvest, as suggested by the former chiefs, we would have to be able to say clearly what it is and where it is. As I write this, national legislation is being drafted that, if passed, will affect old forests on public land. This too would demand an explicit definition of old-growth and its relation to forest development and health. Over the decades of controversy, many definitions of old-growth have been offered, and estimates of its extent, particularly in the Douglas-fir region of the Pacific Northwest, have been made. But I am aware of no consensus definition or geographic delineation. Information is even scarcer for other forest types and regions. We hope this issue of the *Journal* will stimulate further synthesis and application of information about old forests.

The difficulty of finding an ade-

quate scientific response to such a value-laden concept has been noted and discussed. Although much of the controversy about old-growth in the Pacific Northwest has been framed in terms of habitat values, most famously for the northern spotted owl, intrinsic human affection for large old trees has been evident as well. Old forests have become the latest symbol of the "paradise almost lost" view of the country and the region, and there is widespread sentiment that what is left ought to be saved, whatever old-growth is, and whatever *saved* means.

It is not yet clear that old-growth can be recreated through silviculture or by merely ignoring forests long enough. Forests that exist over centuries are subject to long-term climatic influences that may not recur during the life cycle of old-growth. Such forests persist for long times by definition, but those that exist now will probably not be renewed by catastrophic fire in the future to the degree they have been in the past. Outside the Pacific Northwest and northern California, it is even less certain how old-growth might be recreated or, indeed, even how it should be defined. But it is probably a sure bet that many people, if asked, would say they would like to have more of it, or at least keep what we have.

Old-growth thus remains a major issue and deserves attention from our professional community.

Twenty years ago, the Society of American Foresters published *Scheduling the Harvest of Old Growth.* This report directly addressed the then-current controversy about how much old-growth should be retained, if any, on the public lands of the Pacific Northwest. Now, as we present an issue dedicated to old-growth, I think it is worthwhile to revisit the four conclusions and recommendations of that report:

1. Lack of clarity in defining old-growth prevents rational discussion and decisions about its harvest. Research has produced a useful ecological definition. This definition implies that true old-growth is a small subset of all timber older than culmination of mean annual increment.

*Recommendation:* Adopt and refine the ecological definition.

2. Current inventory information is inadequate to accurately define the quantity and distribution of old-growth, whether on lands open to harvest or those already reserved. An adequate inventory would include data on stand structure, composition, and geographic distribution and configuration.

*Recommendation:* Modify inventory practices to identify old-growth on public and private forestlands, including those currently excluded from harvest.

3. Ecologically defined, old-growth embodies wildlife habitat, along with scientific and aesthetic values that merit study and preservation. Although the potential benefits of old-growth are poorly defined and understood, a rational preservation policy that keeps an array of future options open is needed.

*Recommendation:* Develop a rational old-growth preservation policy that explicitly recognizes ecological values and future options and allows the harvest of nonreserved old-growth to be rationally scheduled.

4. Benefits of adhering to a strict harvesting policy of nondeclining yield are poorly documented and do not justify the policy as a single-base concept for scheduling old-growth harvest.

*Recommendation:* Adopt a more flexible policy for scheduling timber harvests, including harvest of old-growth not reserved as part of a rational policy.

Those conclusions and recommendations are in some ways dated but remain, on the whole, valid today. This should give us—the primary locus of forest expertise in this country—pause. We still don't have a broadly agreed-on definition of old-growth, even for the Douglas-fir region. We still don't have a defined national policy on old-growth reservation and harvest. Many still espouse nondeclining even flow, even in the absence of any appreciable timber harvest on some public lands.

In 2003, the National Commission on Science and Sustainable Forestry developed a request for proposals that contained this statement:

> Protection and perpetuation of old-growth and late-successional forests [are] an essential but controversial aspect of sustainable forestry. Ecological functions, definitions, characteristics, and strategies for conservation have both scientific and value foundations. Differentiating between the science and values is needed for well-informed conservation policies. Recent legislation, the Healthy Forest Restoration Act of 2003, to accelerate management treatments to restore forest resiliency to uncharacteristic drought stress, insects and fires has called for the protection of old-growth forests and the refinement of definitions and conservation strategies in some cases. It is not scientifically clear how to best do this in dynamic ecosystems subject to uncharacteristic stresses and invasive, non-native species.

Clearly, the National Commission on Science and Sustainable Forestry, a group comprising industry, environmental, and academic people concerned with forests and science, believes that old-growth forests deserve continued and increased attention.

It is our hope that, with this issue, we will provide a base for further study and debate and precipitate leadership and action on old-growth policy by the Society of American Foresters.

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