



## THE WILDLIFE SOCIETY

5410 Grosvenor Lane • Bethesda, MD 20814-2144

Tel: (301) 897-9770 • Fax: (301) 530-2471

E-mail: [tws@wildlife.org](mailto:tws@wildlife.org)

### Revised Position Statement

In accordance with TWS policy, The Wildlife Society Council seeks member review and comment on the following draft position statement, Recognition of Wildlife Needs in Forest Management in the U.S., prior to revising and finalizing it. **Comments must be received by 1 April 2011** to be considered in a final position statement.

Please send comments to: Laura Bies, Director of Government Affairs, at the address above or via email to [laura@wildlife.org](mailto:laura@wildlife.org).

### Recognition of Wildlife Needs in Forest Management in the U.S.

Forests are dynamic ecosystems that undergo periodic renewal by natural and human-caused disturbance agents such as fire, wind, insects, diseases, timber harvest, snow, avalanches, and drought. Effects may include rapid changes in the structure and composition of plant communities and more gradual change through processes of succession. Whether induced by natural events or human actions, such changes have immediate and long-term effects on wildlife habitat. Managing forests for wildlife requires understanding of habitat relationships and applying sustainable forest management prescriptions that create favorable habitat conditions. Wildlife in North America are public trust resources valued by people for a broad suite of cultural, social, economic, and spiritual benefits, and managing forests for wildlife habitat objectives is important to society. Forests also represent an important economic resource to both the landowner and society as a whole. Balancing the need for wood and fiber with the need for wildlife is a critical component of long-term sustainability of forests and the wildlife these forests support.

For any species the positive effects of management may be emphasized and the negative effects minimized by integrating wildlife needs and habitat relationships into forest management plans, management prescriptions, and implementation and monitoring of those plans and prescriptions on the ground. Specifying desired habitat conditions such as tree species composition, age class, stand density and structure, size and density of snags, size and amount of coarse woody debris, and the size, shape, and juxtaposition of stands is essential for creating immediate and long-term forest conditions to sustain populations and communities of wildlife. Both silvicultural and wildlife habitat objectives are most effectively achieved through the close cooperation of forestry and wildlife professionals.

Across the United States, several trends have implications for the current and future supply of wildlife habitat on forestlands:

*Forestland conversion.* As human populations, land values, and inheritance and property taxes rise, many private forests across the U.S. are sold and converted to other land uses. According to

the USDA Forest Service, forest land across the nation decreased by 3 percent between 1953 and 1987 and then increased by 4 percent during 1987-2007, resulting in an overall gain of 5 million acres or about 1 percent. In the East, reversion and afforestation were dominant factors for the increase, with reclassification of marginal wooded lands the dominant cause for increases in the West. Urban land in the conterminous U.S. increased from 2.5 percent of total land area in 1990 to 3.1 percent in 2000; 33.4 percent of the urban expansion during this period occurred in forested land. Conversion of forestland to commercial and residential development results in the long-term loss of those areas for forest wildlife. Additional cumulative impacts follow as adjacent parcels are sold and developed. As these changes proceed, active forest management becomes less viable and extensive areas of forests become fragmented and degraded, with diminished capacity to support wildlife and biological diversity.

*Loss of domestic wood markets and increased importation of wood products.* The continued loss of markets for wood products grown in the United States represents a significant risk to the future management of forest ecosystems. The timber industry provides the infrastructure (loggers, mills) and incentive to landowners (profit from timber sale) to support the long-term sustainability and diversity of forest ecosystems and the wildlife they support. Without the infrastructure it becomes economically and operationally difficult to actively manage forests at the landscape scale. In addition, without the incentive to landowners, there is the potential for increasing trends of forest conversion as landowners seek other, more economically beneficial methods to gain returns on their investments. Increased importation of wood products displaces environmental effects of harvesting such products to other countries, which may have less protective natural resource policies.

*Increased use of OHVs.* Off Highway Vehicle use on public forest lands is increasing at alarming rates across the western U.S. Illegal use of OHVs in roadless areas, travel management areas, and big game winter ranges, as well as unregulated motorized cross country travel diminish security areas for species such as elk and mule deer.

*Fire-related threats and losses.* Decades of management under fire-suppression policies have produced significant change in the condition of public and private forestlands in the U.S. In 2002 a Rocky Mountain Research Station Technical Report showed that, across all forest types, only 33 percent of National Forest System lands are within their historic range of vegetation composition, structure, and fuels accumulation. Forests “moderately altered from their historic range” prevail on 41 percent of national forest lands, with remaining forestlands (26 percent) identified as being “significantly altered from the normal range.” This situation has significant implications for wildlife and their habitats and may be further exacerbated by climate change. The national forests play a vital role in providing wildlife habitat, including refugia for 26 percent of all imperiled U.S. species.

Five fire-related concerns are prominent: (1) the impaired ecological condition of forest ecosystems in which composition, structure, and processes are outside their historic range of variation; (2) the risk of difficult to control and uncharacteristic wildfires that have potential to degrade desirable forest conditions over large areas, and may also threaten the existence of wildlife populations at risk; (3) the implications to wildlife habitats and populations from efforts to aggressively manage fuels in forests; (4) the short-term and long-term effects to wildlife from

burned-area restoration programs; and (5) the occurrence of wildfires increases public perception that all fire is “bad” and puts the long-term acceptance of fire as a management tool at risk.

*Successional stage representation.* Late-successional forests are characterized by structural conditions, ecological processes, and micro-environments that may require very long periods to develop. Their importance in wildlife conservation and management derives from the diverse and specialized habitat conditions provided, the dependence of some wildlife species on these forests, and the fact that late-successional forests are depleted in many regions because of past conversion, timber harvest, insect and disease outbreaks, and loss from wildfires. Today, most late-successional forests on public lands in the contiguous 48 states are recognized for their unique ecological values. Recently, the Forest Service articulated a policy to focus management of national forests on an all-lands approach to ecological restoration. Such direction, and better information obtained through research and inventories, have improved the management outlook for wildlife that requires late-successional habitat conditions. Agencies have implemented restoration programs such as “thinning from below” in old growth ponderosa pine habitat to reduce the threat of uncharacteristic wildfire and accelerate the development of stands with late-successional habitat characteristics; however, many decades or centuries will be required to restore desired forest characteristics in many areas.

Conversely, reductions in timber harvest over the past 10-15 years have decreased the representation of early-successional stages in some forest types to below-historical levels. In southern and eastern forests, the shift has reduced the availability and condition of habitats for early-successional wildlife such as woodcock, ruffed grouse, and many species of neotropical migratory songbirds. Additionally, lack of forest management on many public and private lands has led to long-term changes in forest structure and tree species composition due to dominance of shade-tolerant tree species (e.g., elm, ash) and reduction in less shade-tolerant species (e.g., oak, hickory); this has contributed greatly to a shift from historical forest composition. According to Forest Inventory and Analysis data (FIA), many eastern forests are shifting from an oak-dominated system to a species composition where oak is not a major component. In western forests, forage areas for Roosevelt elk and black-tailed deer have diminished as regenerating even-aged forests and altered fire regimes result in conditions that shade out palatable forage species. Conifer encroachment into native meadow areas is also an issue on these forests. In these situations, a well-balanced program of appropriate management activities, including both even-aged and uneven-aged management, is required to maintain the mix of successional stages and vegetation conditions that provides for the full diversity of forest habitat and species.

*Forest Certification.* Many forest landowners, both corporate and non-industrial landowners and some public forests managers, have elected to enroll in programs that certify sustainably managed forests. Such programs include standards for environmental protection and conservation of biological values such as species diversity and wildlife habitat, while maintaining positive economic value of forests. Compliance with standards is determined through third-party verification by independent, accredited auditors. Currently, about 10 percent of the world’s forests are certified and 40 percent of certified lands are in North America. In 2009 there were approximately 199 million ha enrolled in the largest programs in North America, including the Sustainable Forestry Initiative®, Forest Stewardship Council, Canadian Standards Association, and American Tree Farm System.

*Non-native and Invasive Species:* Harmful non-native and invasive species (primarily plants and insects) have the potential to reduce habitat quality for many wildlife species within forested systems. In many cases natural checks and balances for these species do not exist, and the potential for such species to negatively impact forest wildlife is high. While not all non-native species damage forest health and wildlife diversity, forests are currently at risk due to many deleterious invasive plants and pathogens.

*Climate Change and Biomass Energy:* Climate (temperature, drought, wind, etc) is a critical factor with implications for forests that vary among forest ecosystems and with human activities. Quantifying and predicting climate change impacts on forests can be challenging because of the complexity of forest ecosystems, potential interactions among climate factors, the multiple pathways that forests may respond, and the inability of current climate models to accurately predict local and regional changes. Although forests may be affected by climate, they also offer opportunities to mitigate increasing levels of greenhouse gasses in the atmosphere. The Fourth Assessment Report of the International Panel on Climate Change (Working Group III: Mitigation of Climate Change) noted that “in the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre, or energy from the forest, will generate the largest sustained mitigation benefit.” Thus, forests will increasingly be managed to achieve objectives for adaptation, carbon sequestration, and production of bioenergy feedstocks, and wildlife biologists will be increasingly challenged to integrate these objectives with those for wildlife.

The policy of The Wildlife Society, regarding wildlife needs in forest management, is to:

1. Encourage state and federal agencies, as well as NGOs, to create and support incentives to limit the conversion of forestlands to developed and agricultural land. In addition, TWS will help identify current policies (state and federal) and incentives that encourage forestland conversion and identify methods to modify these policies/incentives.
2. Encourage state and federal agencies, NGOs, and private landowners to consider fully wildlife objectives and habitat relationships in forest planning and management and in strategies and programs for fuels management and burned-area restoration.
3. Acknowledge the importance of native forests and discourage the conversion of diverse native forests to monocultures or to exotic species.
4. Advocate research on the disturbance ecology and natural range of variation of forest ecosystems, and advocate application of that knowledge adaptively in forest planning and management.
5. Encourage state and federal agencies, as well as NGOs, to protect and restore late-successional forests across the forested landscape to improve the quality of wildlife habitat for species dependent on late-successional forest conditions.
6. Advocate research on control or elimination of deleterious invasive forest species and

encourage programs and activities that discourage importation of harmful non-native and invasive species and pathogens.

7. Advocate well-balanced and appropriate programs of vegetation-management activities to maintain seral stages and vegetation conditions across landscapes that provide for the full diversity of wildlife species.
8. Encourage the close cooperation of forestry, ecology, and fish and wildlife professionals.
9. Encourage the use of Certified Wildlife Biologists in forest planning, management, and certification.
10. Encourage universities to include forest management courses into wildlife and natural resources curricula, and wildlife courses into forestry curricula.
11. Advocate the enrollment of lands in certification programs for sustainable forest management subject to third party audit.
12. Encourage government wildlife agencies and wildlife educational institutions to educate wildlife students, biologists, managers, foresters, and the general public on natural disturbance ecology, the value of late-successional and early successional habitats, and well-balanced management strategies.
13. Advocate for science-based approaches to obtaining forest biomass for fuel that also provide opportunities for wildlife conservation and benefit forest landowners via diversified income.