

January 10, 2024

Submitted Via Electronically

Director, Ecosystem Management Coordination
U.S. Department of Agriculture – Forest Service
201 14th Street SW, Mailstop 1108
Washington, DC 20250

RE: U.S. Department of Agriculture – Forest Service, Land Management Plan Direction for Old-Growth Forest Conditions Across the National Forest System; Notice of intent to prepare an environmental impact statement; 88 Fed. Reg. 88042 (December 20, 2023)

Dear Director,

I am writing to provide my perspective on the USDA-Forest Service notice issued on December 20, 2023. The views expressed herein are solely my own and represent personal opinions shaped by my extensive experience as a professional environmental scientist/ecologist working in the southern and central Appalachian Mountains over the past 26 years. These opinions are further influenced by my upbringing and residence in the southern Appalachians, coupled with a lifelong passion for the outdoors and a deep connection to the Jefferson National Forest.

My primary focus in addressing this matter is the improvement of wildlife habitat to enhance hunting and wildlife viewing opportunities for my family, friends, fellow hunters, future generations, and myself. Actively managing mature and old-growth conditions will foster a mosaic of resilient habitats and wildlife populations capable of withstanding both human-induced and natural disruptions.

As an active recreational user of the Jefferson National Forest in Virginia, and occasionally other forests like the Cherokee National Forest in Tennessee and Daniel Boone National Forest in Kentucky, my activities include hunting, fishing, hiking, camping, and wildlife watching. Consequently, my comments are regionally focused, reflecting a vested interest in the management of the southern and central Appalachian temperate deciduous forests.

One significant concern I wish to address is the deficiency in forest management on our public lands. There is a compelling need for expanded landscape-scale forest management to enhance wildlife habitat conditions throughout the forest. These large-scale improvements would not only benefit game species like white-tailed deer, eastern wild turkey, and ruffed grouse but also positively impact numerous non-game wildlife species, including resident and migrant birds, bats, and small mammals.

It is essential to underscore that effective forest management and habitat enhancement contribute to broader ecosystem services, such as ensuring clean water, improving air quality, carbon sequestration, offering enhanced recreational opportunities, and supporting local communities and culture. Given the intricate connection between management decisions on mature and old-growth forests within National Forest lands and wildlife populations and diversity, the following specific comments are presented for your consideration.

Proposed Action

As discussed in the Federal Register Notice of December 19, 2023, the Forest Service, *“is proposing to amend all land management plans for units of the National Forest System to include consistent direction to conserve and steward existing and recruit future old growth forest conditions across planning areas of the National Forest System. The intent is to foster the long-term resilience of old-growth forest conditions and their contributions to ecological integrity across the National Forest System.”*

The ecological diversity of North America is significant including 967 Level IV ecoregions within the conterminous U.S. The Jefferson National Forest alone spans approximately 7 or 8 Level IV Ecoregions representing three distinct physiographic regions of Virginia. It is imperative that this Proposed Rule regarding mature and old-growth forests empower the National Forests to conduct management based on regional, local, or site-specific variables. Therefore, amendments to 128 National Forest Management Plans should be conducted by each respective unit, including consideration of local citizens and stakeholders.

In addition to the diversity of ecoregions in North America, there is also a vast diversity in people and cultures. Because of the vast diversity in ecology, culture, and socioeconomic issues across the Nation, especially in rural areas most affected by this proposal, the U.S. Forest Service should extend the current public notice period from February 2, 2024, until at least March 15, 2024.

Looking forward, the U.S. Forest Service should consider conducting on-line information webinars to inform the public on the progress of and potential alternatives being developed in the draft EIS. In addition to the 90-day public notice for the draft EIS, the U.S. Forest Service should hold a series of regional in-person meetings where the public is informed of the proposed alternatives and subsequently provided a limited opportunity to submit verbal or written comments regarding the EIS.

Virgin Old Growth Forests

Special protection should be considered for any remaining virgin old growth forests that may remain in the eastern National Forests, which are not currently protected under the Wilderness Act of 1964. Any remaining eastern virgin old growth forests should be protected for ecological, historical, and cultural values. The protection of these virgin old growth forests should exclude commercial timber harvest, unless necessary for the enhancement or protection of the forest ecosystem. I would support the use of other forest management practices within these areas including the use of low intensity prescribed fire, and insect and disease management as necessary to enhance and protect the ecosystem.

White-tailed Deer, Mature and Old-Growth Forests

White-tailed deer populations have declined in the George Washington and Jefferson National Forest in Virginia, as indicated by harvest data collected by the Virginia Department of Wildlife Resources, since the 1990's. Similarly, the number of hunters has also decreased over that period due to diminishing deer populations in the National Forest. The decrease in white-tailed deer populations in the National Forest appears to be directly related to a lack of habitat diversity, see Virginia Deer Management Plan 2015-2024.

There is an abundance of second growth even-aged stands in the National Forest that do not provide adequate habitat for the species. These homogenous forest stands were created by past even-aged forest management activities. While even-aged forest management can provide ample early successional habitat for white-tailed deer, and other wildlife species, a reduction in even-aged management practices over the past five decades has led to an overabundance of mid-successional forests that provide marginal to poor habitat for white-tailed deer and other early successional forest species.

It appears that management of mature and old-growth forests using techniques such as prescribed fire, and single and group tree harvest, may improve habitat conditions across the forests to include a complexity of habitat types, i.e., a mosaic of small open or early successional patches with a more complex understory that provides browse and cover for white-tailed deer. Implementing these management techniques may increase the rate at which an even-aged mid- to late successional forest progresses to a Shifting-Mosaic Steady State Forest ecosystem. The concern is that currently there are large areas of mid- to late successional even-aged forests that provide only marginal to poor habitat for the species. To improve white-tailed deer habitat within mature forest areas, significant management activities are needed to create the more complex habitat provided by true uneven-aged old-growth forests.

This diversity of habitat plays an important cultural role in that it provides for important wildlife species such as white-tailed deer, wild turkey, ruffed grouse, and elk, which have been reintroduced in the southern and central Appalachians. National Forests provide unique hunting opportunities in the southern and central Appalachian Mountains that are not available on private lands. While much of the surrounding private farmlands of the region provide ample game wildlife habitat, the back country experience of the National Forests is not typically available on private lands in Virginia. Additionally, there are increasing hunter access issues on private land that limit available hunting opportunities. Hunting is culturally important to the southern and central Appalachian Region. Maintaining game wildlife habitat on National Forest System lands is of utmost importance to maintaining the history and culture of the Appalachian region.

Many foresters advocate for even-aged management practices like clearcutting to maximize early successional wildlife habitat, particularly on some National Forest system lands to meet multiple use objectives efficiently. While this technique rapidly creates a maximum of early successional habitat, its application on public lands is considered controversial for several reasons such as aesthetics, watershed protection, and culture. However, it may be possible to manage mature and old-growth forests in a manner that addresses these concerns and still provides good habitat for game wildlife species. By adopting a strategy that introduces diversity within the system, including small openings with herbaceous species promoting tree species regeneration, mature and old-growth forests can be managed to exhibit a mosaic of habitats. Implementing this approach on a landscape scale is crucial to fostering habitat diversity within the forest community, while considering the concerns of many Americans.

Management Approach - Adaptive Strategy for Old-Growth Forest Conservation

It is imperative that comments from and perspectives of State Wildlife Agencies, and NGOs such as the National Wild Turkey Federation, Ruffed Grouse Society, Rocky Mountain Elk Foundation, State Deer Hunters Associations, as well as individual hunters and anglers be considered in the preparation of management plans concerning old growth. The U.S. Forest Service should make every effort, including efforts beyond the respective law, NEPA, NFMA, ESA, FWCA, etc. to solicit comments from this specific user group. Not to diminish the contributions of other user groups of our National Forests; however,

utilizing the North American model of wildlife conservation, hunters and anglers have significantly contributed to and funded wildlife management and habitat projects in the United States. Changes to the land management direction of the National Forests must include input from this important group.

Cooperative agreements with State Wildlife Agencies should be considered key to the conservation of mature and old-growth forests. Since the inception of the National Forest system and advent of State Wildlife Agencies there has been cooperative agreements where states have provided technical assistance, labor, and funding for wildlife habitat improvement projects on National Forests. This cooperative system should be considered as imperative to not only forest management but to monitoring and maintenance of desired forest conditions and wildlife populations. The U.S. Forest Service should work to enhance all State-Federal Cooperative Agreements to achieve good forest management and healthy wildlife populations on National Forest Lands and within mature and old-growth units.

The management of old growth will affect wildlife populations, potentially positively or negatively depending on the management strategy and direction. For example, a hands-off preservation approach to old-growth may allow current even-aged mature forests to achieve the structural characteristics of an old-growth forest more slowly. The temporal delay in natural development of Shifting-Mosaic Steady State conditions may be detrimental to some wildlife species until the desired old-growth habitat can be achieved. With hands-on management, even-aged second growth mature forests may more quickly provide a diversity of wildlife habitat across the forest by beginning to exhibit Shifting-Mosaic Steady State conditions, which structurally would contain a representation of most species, including some early successional species, on a continuing basis. I support the hands-on approach to managing and conserving mature and old-growth forest conditions that provide a diversity of habitat types across the landscape.

Desired Conditions

The Desired Conditions for mature and old growth must include providing wildlife habitat for both game and non-game wildlife species. In addition, the management of old growth at landscape scale must provide for multiple use and sustained yield of products and services, including recreation, range, timber, and fish in accordance with the Multiple Use Sustained Yield Act of 1960.

The U.S. Forest Service should evaluate forest conditions for mature and old-growth to make determinations concerning the appropriate amount of mature and old-growth forests. There may be some areas of the National Forests where mature or old-growth forests are not desirable for the purposes of implementing multiple use and providing timber products to assist local economies. Each National Forest should consider the economic effects, in addition to other issues, of managing different amounts of mature, old-growth and traditional even-aged management.

Management to Achieve Old Growth Forest Characteristics

Landscape scale management of the temperate hardwood forests of the southern and central Appalachian Mountains is needed to achieve old growth characteristics where appropriate. I do not support eliminating forest management practices and techniques, including commercial timber harvest from these ecosystems. Low impact management for existing mature and old-growth stands may include prescribed fire, single and group tree selective harvest, and use of low impact harvest systems that support local and small business economies and create a diversity of wildlife habitat.

Low impact timber harvest within mature second growth forests, if properly implemented, may aid in replicating the complex mosaic of old growth forests. In combination with prescribed fire these forest management practices could be effective in achieving old growth characteristics, while enhancing forest habitat conditions for game and non-game wildlife species.

The old growth forests of the southern and central Appalachians, prior to European colonization, were a more complex mosaic of uneven aged classes created by a variety of factors including natural and anthropogenic disturbance, fire, and large ungulates such as eastern wood bison and elk. Many of the ancient Appalachian forests may have included open understory with herbaceous patches and have even been described as savannah like in some areas. With European colonization the Appalachian forests were changed significantly including widespread clearcutting, clearing for agriculture, suppression of fire, and loss of bison and elk. These changes have resulted in a different forest today than that prior to European settlement. The southern and central Appalachian forests of today may be much more densely vegetated than historic ancient forests due to these changes.

Providing a variety of habitat types on central and southern Appalachian National Forest lands is important to the cultural character of the region. Old growth forests in a state of preservation may not achieve the best use of the land when considered through a multiple use management perspective. Often, mature second growth forests, which have not achieved climax or Shifting-Mosaic Steady State often lack the diversity of habitat types within the ecosystem. True old growth forests exhibit canopy gaps caused by fire, wind, disease, human activities, etc. Often these habitat types are not prevalent within the second growth forest, even at older or mature age classes. Therefore, it is imperative that management activities be implemented to create a mosaic of habitat types within the ecosystem.

Objective and Guideline

It is recognized that funding is always a consideration, but it appears that multiple landscapes within the Jefferson and George Washington National Forests may need to exhibit measurable improvements in old growth desired condition to reduce the current temporal loss of wildlife habitat diversity that is occurring on the forest due to an overabundance of mid-successional forest habitat. As stated previously, significant reductions in even-aged forest management activities have led to an overabundance of mid-successional forests. Applying uneven aged management to these mid-successional forests may more quickly provide a diversity of wildlife habitat across the forest by beginning to exhibit Shifting-Mosaic Steady State conditions, which structurally would contain a representation of most species, including some early successional species, on a continuing basis.

A well-managed forest supports not only environmental health but also local economies. By allowing for low impact timber harvesting, the U.S. Forest Service contributes to job creation and economic sustainability in surrounding communities, all while funding important wildlife habitat improvements. This approach fosters a harmonious balance between conservation and the socio-economic needs of the region.

Forest management in old growth timber stands is crucial for enhancing wildlife habitat, especially for species like white-tailed deer, eastern wild turkey, ruffed grouse, and neotropical songbirds. While old growth forests are valuable for their ecological integrity, strategic management practices can create a mosaic of habitats that cater to the diverse needs of these wildlife species.

In addition to implementing sound forest management practices to improve, enhance and recruit old growth forests, the use of prescribed fire as a management tool must continue and increase as resources allow. By using low impact harvest and prescribed fire and creating a mosaic of old mature trees, small herbaceous areas, and a complex understory, the Forest Service is emulating natural ecological processes. This not only enhances the resilience of the forest ecosystem but also promotes a healthier and more dynamic landscape.

The mosaic of forest conditions created through prescribed fire and low impact selective timber harvesting contributes to climate resilience. A diverse forest structure enhances the ability of the ecosystem to adapt to changing climatic conditions, making it more resilient to disturbances such as wildfires, pests, and disease.

A holistic approach to forest management, encompassing old growth conservation, sustainable low impact timber harvesting, and ecological restoration through prescribed fire, exemplifies a model of responsible stewardship that balances the needs of the environment, communities, and the economy. This approach ensures the health and vitality of our forests for current and future generations.

Fire was extensively used by Native Americans in the southern and central Appalachian Mountains prior to European settlement. Indigenous peoples in this region, including various tribes such as the Cherokee, Creek, and Shawnee, practiced cultural burning as a form of land management. These Native American communities used controlled burns intentionally and regularly to shape and maintain the landscape for various purposes.

Native Americans used fire to clear underbrush, promote the growth of specific plant species, attract game animals, and improve hunting conditions, control insects, reduce accumulation of dead vegetation and forest litter that lead to a reduction of catastrophic wildfires. By burning the understory, they created more open landscapes that made it easier to navigate and encouraged the growth of desirable plants.

Over time, plant and animal species in the region adapted to the presence of fire as a natural part of the ecosystem. Some plants developed fire-resistant traits, while others depended on periodic fires for germination or other life cycle processes. The high frequency of fire, often every few years, played a role in shaping the composition and structure of the vegetation. Therefore, reintroduction of frequent low intensity prescribed fire, on a landscape scale, into the ecosystem is imperative to the management of the National Forests.

Standards for Management Actions Within Old-Growth Forest Conditions

Standard 2(a) should incorporate provisions to allow for the commercial harvest of high-value wood products, artisanal forest products, firewood, and other forest crops to support local forest economies. Standard 3 should incorporate provisions to allow for the commercial harvest of high-value wood products, artisanal forest products, firewood, and other forest crops.

Vegetation management within mature and old-growth areas for economic purposes should not be restricted. In fact, high quality forest products generated from old-growth areas using sustainable and low impact methods that improve old-growth characteristics of the forest should be considered as part of the management strategy. High-value forest products generated from old-growth areas can support local economies and small businesses. Forest products produced from these areas should be marketed locally, to the extent practicable, to re-build and support local forest economies. There are well documented

environmental benefits, including reduced greenhouse gas emissions, from the development of locally grown agricultural and forest products.

Humans have played an integral part in shaping the ecosystems of North America for at least 10,000 years. Not all the practices implemented by humans have been destructive and many have been important to maintaining or restoring the complex forest ecosystem, whether on purpose or by accident. Even timber harvest, when used wisely, can maintain, and restore old growth forest complexity by shaping a forest landscape that includes a mosaic of uneven aged trees, small open patches and complex canopy and understory layers. Low impact selective timber harvest along with prescribed fire will promote habitat diversity, enhance food resources, and support a broader array of wildlife species. Additionally, they contribute to the long-term sustainability and resilience of the forested landscape.

I support the U.S. Forest Service's commitment to maintaining old growth while allowing for multiple uses, including sustainable timber harvesting. The concept of multiple use management reflects a balanced approach to forest management. Employing single tree or group tree selection methods, the agency ensures that timber harvest operations proceed with a light touch on the land, minimizing environmental impact and promoting the long-term health of forests.

The incorporation of low-impact logging systems in timber harvesting operations demonstrates a commitment to preserving biodiversity. These methods minimize soil disturbance and protect sensitive habitats, allowing for the coexistence of old growth trees with a diverse array of flora, fauna, and wildlife.

Emphasizing local and regional wood products encourages innovation and the creation of value-added goods. Small businesses can explore niche markets, such as specialty wood products or artisanal crafts, adding value to the raw materials harvested from the forest. This not only boosts economic returns but also highlights the unique qualities of the local ecosystem.

Local and regional wood products often carry cultural and historical significance. Supporting small businesses engaged in forestry activities helps preserve traditional craftsmanship and heritage industries that have been integral to the identity of many communities. This cultural preservation adds a layer of richness to the economic contributions of forestry.

Monitoring

Effective forest management on our National Forest lands necessitates thorough monitoring of wildlife populations and trends. State Wildlife agencies currently focus on large game species, such as white-tailed deer, wild turkey, and bear, using indicators like harvest trends and hunter success rates. It is imperative to include monitoring of non-game wildlife species as well. This can be achieved by identifying habitat indicator species within the various habitat types, (early successional patches, understory, canopy, snags, etc.) in managed mature or old-growth forests.

Existing Forest Plans typically incorporate indicator species monitoring, which should continue, particularly within mature and old-growth units. Monitoring should evaluate the response of indicator species to management prescriptions. A diversity of healthy wildlife populations should be a primary goal of mature and old growth management. Additionally, vegetation management activities, including commercial timber sales, must undergo evaluation. This assessment should include economic and ecological benefits to mature and old-growth forests.

In conclusion, effective forest management on our National Forest lands demands hands-on and active approaches at a landscape scale. These efforts should align with the scientific principles of ecology, forestry, wildlife and fisheries management, and socioeconomics. It is imperative to adopt policies that empower U.S. Forest Service professionals to implement science-based, hands-on forest stewardship projects. Striking a balance, these policies must protect the forest while not impeding the execution of stewardship projects, even when they involve commercial timber harvest. Recognizing our integral role within the ecosystem, we should strive not only to utilize it but also to enhance it in every instance. Thank you for the opportunity to contribute these comments.

Sincerely,

Lance M. DeBord
Bristol, VA