RGS AWS
RUFFED GROUSE SOCIETY | AMERICAN WOODCOCK SOCIETY

Nick Biemiller
Ruffed Grouse Society & American Woodcock Society
Southern Appalachian Forest Conservation Director
Asheville, NC

December 5, 2022

Timothy Reed
District Ranger
Daniel Boone National Forest
Stearns Ranger District
3320 Highway 27 N
Whitley City, KY 42653

Re: Jellico Vegetation Management Project

To District Ranger Timothy Reed,

On behalf of the Ruffed Grouse Society & American Woodcock Society (RGS & AWS) and our members, I thank you for the opportunity to comment on the *Jellico Vegetation Management Project* ("the Project") on the Stearns Ranger District of the Daniel Boone National Forest ("the Forest").

Established in 1961, the Ruffed Grouse Society (RGS) is North America's foremost conservation organization dedicated to creating healthy forests, abundant wildlife, and promoting a conservation ethic. Together with the American Woodcock Society (AWS), established in 2014, RGS & AWS work with landowners and government agencies to develop critical wildlife habitat utilizing scientific management practices.

According to the Association of Fish and Wildlife Agencies' Eastern Grouse Working Group report in December 2020, ruffed grouse populations have declined 71% since 1989 in the Southern Appalachians. The report identified that, "Loss of young forests across the landscape is the primary driver of this decline." The species is identified as a Species of Greatest Conservation Need in Kentucky's State Wildlife Action Plan.

Ruffed grouse are a reliable indicator for healthy, diverse forest ecosystems. The lack of forest age-class and structural diversity is a driver of decline for multiple at-risk wildlife species in the region, including species traditionally thought of as "disturbance-dependent" and "mature forest obligates" that both benefit from a biologically significant mix of young, open, and late-successional forest conditions across the landscape.

Urgent action is needed at the landscape scale, above and beyond localized habitat improvement efforts, to halt the decline in ruffed grouse and other forest wildlife in eastern Kentucky before it is too late.

The best available science suggests that 8-14% young forest habitat (0-20 years old) is optimal for bird diversity in Southern Appalachian forests. For ruffed grouse in particular, the Kentucky Ruffed Grouse and Young Forest Strategic Plan recommends the creation of 15-25% in young forest cover in focal areas. On a landscape scale, achieving a biologically significant interspersion of young forest habitat in balance with middle-aged, open woodland, mature, and late-successional forest conditions, is critical to the survival of all forest wildlife.

RGS AWS
RUFFED GROUSE SOCIETY | AMERICAN WOODCOCK SOCIETY

Nowhere is this conservaiton need greater than the Daniel Boone National Forest. According to the Forest's 2021 Biennial Monitoring and Evaluation Report, there's currently only 0.34% young forest conditions across the Forest. However, the Forest Plan iteself has objectives of 5-6% young forest in 1.K Habitat Diversity Emphasis Prescription Areas and 8% young forest in Ruffed Grouse Emphasis Prescription Areas. Maintaining a biologically significant amount of young forest on the Daniel Boone National Forest will not only decide the survival of ruffed grouse and many at-risk forest wildlife in the region, but also the sustained opportunity for the public to experience these species and maintain a conservaiton ethic.

According to the Project's scoping letter, there's currently only 3.3% young forest habitat (554 acres) in the 0-30 age-class across the 16,909-acre project area. Over 40 years, the project will create 22.2% young forest habitat (3,755 acres) across the project area. These efforts in the project area will move the Forest closer to desired forest conditions established as objectives in the Forest Plan (Objective 1.K-1.A) and benefit all forest wildlife.

RGS & AWS support the intent of this project to increase the proportion of young forest habitat in the Jellico project area. We also recognize the need to carefully choose the prescriptions and locations for this work in order to maximize benefits and minimize risk. At the public comment meeting on November 17, 2022, citizens expressed concerns regarding the extent of clearcut-style harvesting and the location of these harvests relative to their homes, streams, and scenic vistas. We believe that careful choices of prescriptions and locations could help address these concerns and result in a win-win-win for the Forest, the public, and the forest ecosystems and wildlife. To that end, we make the following recommendations:

As a starting point, the following active forest management practices should be considered in the project's proposed project actions as appropriate for the site:

- **Removing uncharacteristic tree species** to restore tree species that are more characteristic of that ecological zone. For example, clearcutting offsite eastern white pine stands or monocultures of tulip poplar and planting northern red oak or managing for natural hardwood regeneration.

- **Midstory removal treatments** implemented noncommercially with herbicide as the first phase of a shelterwood sequence to establish advance oak regeneration in a subcanopy. This is especially useful in mesic oak stands where undesirable trees are more competitive (e.g., red maple and poplar) and frequent fire is less appropriate.

- **Establishment cutting as part of a shelterwood-burn technique** to establish and recruit oak. This includes commercial timber harvesting as a partial overstory removal and subsequent prescribed fire implementation. This could be implemented irregularly as an expanding gap shelterwood approach (femelschlag). This is especially useful in drier oak stands where oak is more competitive and frequent fire is more appropriate. This would improve oak regeneration, reduce erosion, and reduce impacts to scenery.

- **Overstory removal treatment through a commercial timber harvest (one-cut shelterwood)** where there's currently advance oak regeneration established. This is a less common occurrence across the landscape but could be in locations with previous thinning or fire activity or on drier sites where oak is inherently more competitive and subcanopies are more open (dry ridges). There could also be places that previously received an establishment cut of a shelterwood or heavy thinning.

- **Crop tree release** in stands that have reached the stem exclusion phase of stand development as a means to favor desired tree species (i.e., oak and other mast producers). Consider implementing crop tree release treatments with variable density, wherein 0.5- to 5-acre groups or patches are created throughout the stand in locations that don't have favorable crop trees to increase stand heterogeneity and prolong the young forest cover.

- **In mesic forests (i.e., coves), implement variable retention harvests** with variably sized clearcuts or two-aged cuts ranging from 2- to 40-acres in size to emulate natural gap phase dynamics, provide a mix of diverse habitat for forest wildlife, including ruffed grouse, and reduce impacts to scenery.

The Forest Plan's Objective 1.K-1.C strives to, "maintain 30 percent of each 5th level watershed in a relatively closed canopy forest at least 70 years old with midstory and shrub/sapling layers. One-fourth of the 30 percent should be maintained in blocks of at least 620 acres for interior habitat. Each block can include up to 200 acres from adjacent cliff and riparian areas; up to one third of each block may be thinned to no less than 60 basal area". We appreciate that most of the Daniel Boone National Forest, and the Appalachian region more broadly, consists of forests that are 80-120 years old and closed canopy. There is an underrepresentation of young forests, open forests, and late-successional forests.

In addition to increasing the amount of young and open forests, to ensure that an adequate amount of late-successional forest maintained or enhanced we recommended maintaining interior forest blocks on upper slopes and, where possible, making these areas contiguous with a variety of forest habitat conditions, including open forests created by thinning and young forests created by clearcuts or two-aged cuts. Upper slopes are critical refugia and movement corridors for many forest wildlife species, including ruffed grouse. Additionally, the maintenance of a reasonable amount of interior forest in these habitats will have positive benefits for hydrology and scenery.

RGS & AWS commends the Forest Service on their efforts to restore young forest habitat at biologically significant scales. We are excited about seeing the project move forward and thank you again for the opportunity to comment.

Sincerely,

Nick Biemiller, Forest Conservation Director
Southern Appalachian Region

For more information visit the RGS & AWS website at RuffedGrouseSociety.org. Follow us on Facebook and Instagram @RuffedGrouseSociety.