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**July 17, 2024**

**Dave Casey, District Ranger**  
**Attn: Lickstone Project**  
1600 Pisgah Highway  
Pisgah Forest, NC 28768

**Re: Comments on the Draft Environmental Assessment (EA) for the Lickstone Project**

To Dave Casey:

On behalf of the Ruffed Grouse Society & American Woodcock Society (RGS & AWS) and our members, I thank you for the opportunity to comment to the *Draft Environmental Assessment (EA) for the Lickstone Project*.

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 (Eastern Grouse Working Group, 2020). The report identified that, "Loss of young forests across the landscape is the primary driver of this decline" (Eastern Grouse Working Group, 2020). The species is identified as a Species of Greatest Conservation Need in North Carolina's State Wildlife Action Plan (North Carolina Wildlife Resources Commission, 2015).

Ruffed grouse are a reliable indicator for healthy, diverse forest ecosystems (Norman et al., 2004). 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 (Bakermans et al., 2011; Golden-Winged Warbler Working Group, 2013; Jacobs & Warburton, 2016; Kelley et al., 2008; Lambert et al., 2017; Wood et al., 2013).

**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 western North Carolina before it is too late.**

The best available science suggests that maintaining 8-14% early successional habitat across the Nantahala and

Pisgah National Forests would optimize for bird diversity, including “young forest obligates” and “mature forest obligates” (Jacobs & Warburton, 2016). We recognize that these forests are not managed solely for bird diversity and that many other interests must be considered in a multiple use forest. However, to ensure viable wildlife populations are maintained long-term; it is essential that vegetation management projects work to create a pathway to maintain early successional habitat conditions somewhere within the 8-14% range across the Nantahala and Pisgah National Forests.

The natural range of variation (NRV) model that was included in the Nantahala and Pisgah National Forest’s Land Management Plan (Forest Plan) and the final Environmental Impact Statement (EIS) established desired conditions for each ecological zone to maintain ecological integrity across the Nantahala and Pisgah National Forests (see Figure 1).

*Figure 1: Natural Range of Variation Model from the final LMP and EIS (USDA Forest Service, 2023b, 2023a).*

Seral Class	Spruce Fir	Northern Hardwood	High Elevation Red Oak	Acidic Cove	Rich Cove	Mesic Oak	Dry Mesic Oak	Dry Oak	Pine Oak Heath	Shortleaf Pine Oak Heath	Alluvial Forest and Floodplain
Young	14-17%	5-7%	14-18%	4-5%	4-5%	4-6%	5-7%	9-22%	11-19%	8-13%	6-8%
Mid-closed	10-11%	17-23%	16-21%	27-32%	27-32%	12-15%	7-9%	2-7%	1-5%	1-4%	30-36%
Mid-open	2-4%	2-3%	11-14%	4-6%	4-6%	12-16%	13-17%	12-19%	34-42%	34-42%	9-14%
Late-closed	9-11%	11-14%	11-13%	9-11%	9-11%	8-10%	7-8%	1-3%	1-5%	1-4%	8-9%
Late-open	5-8%	2-3%	11-13%	1-2%	1-2%	5-7%	7-9%	6-9%	20-27%	22-26%	3-4%
Old growth-closed	36-45%	40-50%	6-10%	46-54%	46-54%	27-34%	22-28%	5-16%	1-3%	1-4%	22-30%
Old growth-open	12-16%	11-14%	18-26%	NA	NA	20-25%	28-33%	40-57%	11-26%	16-29%	9-13%

We are supportive of the intent of the Lickstone Project and feel that it will help move the North Slope Geographic Area (GA) closer to desired forest conditions and move ecozones closer to NRV conditions. However, there are a few sections of the EA that we feel require further clarification to ensure that enough young and open forest conditions are being created to align with desired conditions from the Forest Plan and restore NRV by ecozone.

Table 12 (page 50) in the Lickstone EA is intended to summarize seral stage departure for ecozones within the North Slope GA after proposed activities are implemented through the Lickstone Project. The Lickstone EA states that cells filled with green show a surplus, red show a deficit, and yellow cells are within NRV for that ecozone. Each structural condition has two columns, 1) desired range (which appears to be the modeled NRV for that ecozone from the Forest Plan/EIS), and 2) the amount that will be created within the North Slope GA after proposed actions. Conceptually, this type of proportional analysis makes a lot of sense. However, the numbers don't appear to line up with the color coding. The EA states that, "The table shows early forest conditions in surplus...". However, the table does not adequately show whether enough young forest conditions will be created to move ecozones within the project area and North Slope Geographic Area towards NRV conditions.

For example, the table shows that the Early Forest Desired Range for Rich Cove is 4-5% and the Early Forest in North Slope GA (after proposed actions) is 6.2%. This would suggest that there's a surplus of Early Forest being created compared to the NRV model. However, the color coding shows those cells as "red", which suggests that there's a deficit being created compared to the NRV model. Is this suggesting that there's actually a deficit of 6.2%?

RGS & AWS supports the young forest creation that is currently planned and recognizes that this will contribute towards moving the landscape towards more desired conditions. However, we need to make sure that enough young forests are being created to meet the desired conditions for young forest established in the NRV model for ecological zones present within the project area. We are concerned that the project might not go far enough to create and maintain the ecological integrity of the forest and might not create enough young forest habitat to have a biologically significant positive impact on wildlife species that require young forest habitat.

RGS & AWS commends the Forest Service's efforts to increase the pace and scale of active forest management to benefit healthy forests and abundant wildlife. There's a lot about the Lickstone Project that we support. However, the ecological departure analysis and proportional analysis of structural conditions created by ecozone and NRV is unclear in the draft EA. We are concerned that the current project's goals for young forest creation fall short of making a meaningful contribution towards young forest desired conditions outlined in the NRV model of the Forest Plan and EIS to maintain ecological integrity on the Nantahala and Pisgah National Forests. We acknowledge that there are limitations to what the Forest Service can achieve on its own with its current capacity. The Forest Plan established Tier 2 objectives based on what the Forest Service could achieve with the help of added capacity from partners. To achieve higher levels of young forest creation within this project, we encourage the Forest Service to collaborate with partners to plan and implement more active forest management work through shared stewardship.

We appreciate the opportunity to comment.

Sincerely,



Nick Biemiller, Forest Conservation Director

Southern Appalachian Region

Ruffed Grouse Society & American Woodcock Society

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