



New Hampshire Fish and Game Department

ATTACHMENT A

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Scott R. Mason
Executive Director

March 20, 2024

Patrick Hackley, State Forester
NH Department of Natural and Cultural Resources
172 Pembroke Road
Concord, New Hampshire 03301

Dear Mr. Hackely,

The NH Fish & Game Department appreciates the opportunity to comment on the “Forest and Land Management Plan” for the 145,872-acre CT Lakes Headwaters Forest (the Forest). The Forest is an extremely important resource for the state’s wildlife and the public because it represents the largest unbroken tract of privately owned forestland in the state that comprises nearly three percent of the total area of the state. It also supports diverse habitats and wildlife that depend on them, and tremendous outdoor recreational opportunities including hunting, fishing, trapping, and wildlife watching.

Fish & Game biologists found the plan to be generally well written and comprehensive. It addressed all of the resource values that we would expect for a property conserved with public funds. The amount of wildlife information surpassed that in most plans that staff have reviewed over the course of their careers. The important mast areas, wildlife travel corridors, and wildlife and legacy trees sections were particularly well done. We agree with the need and approach to upgrade existing undersized stream crossings to restore aquatic habitat, aquatic animal passage and build a more resilient road network for the public. We also appreciate that the landowner is going to abide by the terms of the high-elevation MOU. Even so, there are concerns about some of the information provided.

The plan outlines the following forest structure goals: Seedling/Sapling - 20%; Pole-timber – 25%; Sawtimber – 55%. Although NHFG believes this to be a balanced goal for a North Country property, the size of the Forest, and would likely support the full breadth of wildlife species native to the region. It is clear that the landowner intends to focus solely on moving the excess of pole-timber to the sawtimber class with no focus on working towards the seedling/sapling goal.

Figure 9 shows the distribution of forested acres by size class. Based on this graph, it appears there is currently about 10,000 acres in the seedling/sapling class. Given 134,000 acres available for forest management, the percentage of seedling/sapling forest is 7.5%, well below goal. To meet goal, approximately 26,800 acres would have to be in the seedling/sapling size class. Figure 9 also shows that sawtimber is at ~15%, which is also below goal, so the objective should be to increase the percentage of both size classes, but that does not appear to be the case. We recommend that the plan include a graph that reflects current acres and percentages with a comparison to the desired structure targets. Such a graph would be useful to update periodically so that managers can track their progress towards meeting structure goals.

It is clear from the plan that regeneration harvests that would help to meet the seedling/sapling goal will be few, if any are implemented at all. Instead, the focus will be on singletree selection, group selection, improvement thinning, and 1st and 2nd stage shelterwoods. Likewise, the 10 year harvest plan on page 133 outlines that only an estimated 500 and 2,500 acres will be treated annually. The seedling/sapling goal could only be realized if the high end of this range was harvested and focused solely on regeneration harvests, which will not be the case. Thus, it is clear that there will be little work towards the seedling/sapling goal.

This will certainly have implications for area wildlife. Many of the wildlife species profiles starting on page 94 often contain the language “balanced age class distribution...will benefit the species,” or “the mosaic of age classes resulting from structural goals will benefit the species.” Likewise, on page 97 it states, “The current proportion of moose habitat in young forest producing moose forage is within the range considered ideal.” These statements may be the case currently, however, to maintain ideal habitat for all area wildlife, the landowner would have to strive to meet the seedling/sapling goal in addition to the sawtimber goal. Given that is not the case, the landowner’s intentions will certainly result in fewer numbers of some of the species listed in these sections over time with grouse, woodcock, moose, and perhaps even Canada warbler among them.

The landowner’s intent to “slow the pace of overstory removals, shelterwood harvesting prescriptions and clearcuts” causes concern about the aspen/birch component of the Forest in particular. Although aspen and birch are some of the most widely distributed forest types in North America, they are relatively uncommon in New Hampshire, covering approximately 2 percent of the state's forest area. They provide unique food, cover, and shelter that is increasingly becoming rare, but is extremely important to North Country wildlife. Aspen and birch stands are the preferred habitat for ruffed grouse, woodcock, Nashville warbler, beaver and other wildlife. Once birch and aspen are gone, they are very difficult to get back. Few or no clearcuts on the property during the life of this plan will substantially reduce the availability of this habitat, as there are stands that are currently on the brink of aging out. Previous iterations of these plans outlined the intention of not only maintaining, however, increasing the presence of aspen and birch, which would be preferable from a wildlife standpoint.

Lastly, the simplified means of calculating wildlife population estimates (based largely on home range sizes and density estimates in the literature) will likely result in very inaccurate results. There are many factors other than habitat availability that affect population size, such as parasites, weather patterns, development patterns, and habitat quality and connectivity, among others. As such, NHFG does not believe these estimates are particularly informative or relevant to the conversation.

Following are additional edit suggestions and recommendations for the plan:

- Page 7, Figure 1: Labeled “CT Lakes WMA North” on the map just west of the CT Lakes Nature Preserve.
- Page 20, Paragraph 4: In addition to beech bark disease, the plan should also mention beech leaf disease is on the horizon and address the potential it has to impact beech on the property.
- Page 21, Paragraph 3: There is quite a bit of information provided for Asian long-horned beetle as a potential insect risk to the Forest. Given that, it would be important to describe where the closest population is. The population that existed in central MA is considered eradicated. Is there any other population in New England? Giving some of this background will put the risk of this species into better perspective.

- Page 32, Figure 5: NHFG staff would like to discuss the proposed road on the west side of Indian Stream, by Terril Pond that heads north. Based solely on the course scale of the map, it appears to travel through an important lowland softwood corridor along Indian stream.
- Page 46, first paragraph under Compartment 3 – recommended edit: the plan can refer to the “Connecticut Lakes WMA North” ‘Northern Natural Area West’ as the “NH Fish & Game managed Connecticut Lakes WMA North.”
- Page 49, first paragraph under Compartment 4: The plan can refer to “Connecticut Lakes Natural Area” “Northern Natural Area East” as the “NH Fish & Game managed CT Lakes Natural Area - Nature Preserve.”
- Page 51, first paragraph under Compartment 5: The plan can refer to “Connecticut Lakes Natural Area Northern Natural Area East” as the “NH Fish & Game managed CT Lakes Natural Area - Nature Preserve.”
- Page 55, Water Resources section: Other Water Resources sections were not bulleted.
- Page 56, first paragraph under Compartment 7: South Bay Bog should be referred to as the “NH Fish & Game managed Connecticut Lakes WMA - South Bay Bog.”
- Page 63, High Conservation Value Forests section: It is unclear who designates a high conservation value forest area or what the ramifications are of being so designated.
- Page 66, Figure 7: Are the Natural Heritage Areas (green-hashed areas) on the map captured in Table 5? Are these no harvest areas or harvest-restricted areas?
- Page 70, Table 6: It is unclear which riparian management zone widths are used to make the SMA maps and that will influence harvest prescriptions. Are these recommendations from Good Forestry in the Granite State requirements in this management plan or only recommendations?
- Page 71, last paragraph: What guidelines does the landowner use to guide harvesting near vernal pools? Is it Good Forestry in the Granite State or some other guideline?
- Page 72, suggested rewrite of the first sentence under Deer Wintering Areas: “Deer Wintering Area SMA's are often positioned within areas of low elevation softwood stands that provide critical wintering habitat for white-tailed deer during severe winter conditions.” Also, after the second sentence add, “DWA's are also used as areas of thermal refuge during severe cold temperatures and allow trail networks to be formed between cover and food sources to lower energy costs for deer when obtaining forage.”
- Page 73, last paragraph under Deer Wintering Areas: Please refer to the NH Fish & Game Department rather than the Department of Fish and Game.
- Page 74, last paragraph under Important Mast Areas: include “bear nests” to claw marked trees as another indicator of important mast areas.
- Page 79, last sentence of first paragraph under the Red spruce-Sugar maple-Beech #31 section: Clarify what type of honeysuckle is being referenced given that there are some invasive exotic options.

- Page 91, last paragraph: Wind energy is highlighted as a possible non-timber resource. What are the landowner's intentions in this regard? Wind energy development certainly has consequences for wildlife. Would wind development even be allowed by the easement?
- Page 97, last sentence of third paragraph: the statement regarding this year being a light tick year based on research published in 2020 is outdated and should be updated.
- Page 98, white-tailed deer section: The spelling for Pittsburg, NH should be corrected.
- Page 99, black bear section: Add bear nest trees in the last sentence to go along with bear-clawed trees.
- Page 103, last paragraph of the Threatened and Endangered Species: NHFG does not understand the relevancy of the sentence, "When RTE wildlife species are present or assumed to be present, New Hampshire Fish & Game regulations are anticipated to provide control of hunting, fishing, trapping, and collecting as an adequate means of protecting species and/or plant communities." RTE species are not hunted, fished, or trapped. Regulating these activities will not be adequate to protect these species. Modifications to harvest plans may be required as stated in paragraphs prior.
- Page 107, Figure 13. What is the date of this table listing threatened, endangered, and special concern species? Please make sure this is up to date.
- Page 110, Mammalian Species Richness section: This section refers to Canada Lynx being a possible, but not documented, resident. Figure 12 on page 106 seems to refute this. Text should be updated.
- Page 116, Best Management Practices section: This section, which describes "Good Forestry in the Granite State," should be updated. The 3rd revision is underway (<https://extension.unh.edu/good-forestry-granite-state-3rd-edition-revision>).
- Page 141, Streamside Management Zones section: This section contains a general narrative of the topic, however, no details of the size of these zones or what is recommended or required. Additionally, it is not clear how these differ, if at all, from "riparian zones". Neither references the other. In addition, it is also not clear if the recommendations for riparian zones in Good Forestry in the Granite State are going to be "required" or just "recommended" on the property. Also referenced are the FSC guidelines, and it is not clear if those are guidelines or requirements or exactly what the details of them are. Strongly recommend those details be included in this section.

Again, thank you for the opportunity to provide comment. If you have any questions, please feel free to contact me at (603) 406-1476.

Sincerely,



Scott R. Mason, Executive Director
NH Fish & Game Department