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Title:

Comments: I am in full support of community members who have already submitted comments outlining their concerns about flooding, landslides, spraying of herbicides, and clearcuts. There are many well-informed residents in Whitley and McCreary counties, and I implore the Forest Service to carefully listen to them, as is required by law via the National Environmental Policy Act (NEPA).

I am also in full support of the ecological concerns that will be outlined in detail by Kentucky Heartwood's organizational comments.

My comments below are shaped by my experience as a lifelong Kentuckian who has been recreating in the Daniel Boone National Forest for over 30 years. Like many other folks, the ability to enjoy the forest in its intact and natural state provides significant mental and physical health benefits to me and my family. As the Red River Gorge (the most concentrated area of hiking trails in the DBNF) becomes increasingly overcrowded alongside a general increase in National Forest use, preserving other areas of the Daniel Boone (and providing recreational opportunities in those locations) will only become more important. My comments are also shaped by my experience as a professional herbalist. Preserving and encouraging sustainable use of the rich medicinal plants in the Daniel Boone National Forest is both a professional as well as a cultural priority.

1. Herbicide use

While rambling around on the backcountry forest service roads in the Redbird district over the summer, I encountered a white Forest Service pickup truck driving down one of the gravel roads with a wand hanging out the window, spraying herbicide indiscriminately over all the plants on the side of the road. In addition to this being a known health hazard for the person applying the herbicide, there is real and significant risk to other creatures in the ecosystem, especially when aerially sprayed like this. In particular, I am concerned about pollinating insects, both native butterflies and bees as well as the honeybees that area residents keep as part of their livelihoods. A new study was just released demonstrating that glyphosate (roundup) impairs bees' ability to discriminate between colors, and their color discrimination ability is vital to the health of the bee colonies. <https://www.sciencedirect.com/science/article/pii/S0048969722063975?via%3Dihub#s0070> One of the conclusions of the study was that "GBHs [roundup] may pose a greater threat to bumblebee colony survival than previously thought."

In another area of the Daniel Boone National Forest, near Morehead, I had found a lovely population of native plants that was subsequently wiped out by herbicide spray later in the year. Again, on the edges of a gravel forest service road. It does not appear that the Forest Service has a great track record of responsible herbicide use. Nor have they been able to manage the existing invasive species (Tree of Heaven) in the Jellico area.

In addition to the health risks to human and animal populations, herbicides are also expensive and require employee time to apply. The easiest way to lower the Forest Service's use of herbicides is to leave the forest intact, thus limiting the invitations for invasive species to colonize.

Herbicide use also damages a significant cultural use of the Forest - the use of plants and mushrooms for food and medicine.

2. Invasive plants

Logging opens the canopy, disrupts the soil, and is like handing invasive species an invitation on a silver platter. Autumn olive shrubs are all over areas in the Redbird district that have been logged. Tree of Heaven is infested in areas of Jellico that were previously logged. As these sites demonstrate, the Forest Service does not have the

resources to adequately manage invasive species after logging. Not only does this impact native species, but it also impacts the ability of oaks to regenerate, which is a commonly used justification for logging. There is no evidence to suggest that the Forest Service would manage the forest any differently for this new Jellico project than they have in the past. The best way to prevent invasives and prioritize oaks, is to not clearcut the forest in the first place.

3. Medicinal plants

As one of a handful of people in the state with a Master's degree in medicinal plants, I am qualified to speak on the cultural and economic value of the herbaceous resources sitting in our mountains. Other than the ginseng trade, Kentucky has not been pillaged for the herbal marketplace compared to other states like North Carolina, where forest medicinal plants are suffering more significantly from overharvesting. We need to do everything we can to preserve the forest medicinals that are still found in our mountains and increase their populations. Plants like black and blue cohosh, ginseng, goldenseal, bloodroot, and trillium typically need between 50-75% shade cover. Clearcuts and logging roads on north-facing slopes will damage these populations and reduce the potential for Kentuckians to preserve this important traditional cultural use and sustainably harvest the mountains for medicine.

4. Recreation potential

The Jellico's are one of the most accessible areas of the Forest from I-75. When you look at the Recreation map on the Forest Service's website, there are no recreation opportunities listed for the Jellico area.

<https://www.fs.usda.gov/recarea/dbnf/recarea/?recid=39716>

There is no information to be found about recreating in the Jellicos, despite the existence of lovely campsites along the creek and ridge tops, waterfalls, boulders, big trees, rare flora, and gravel roads for mountain biking. Why are there no recreation opportunities advertised here? Outdoor tourism is more economically attractive and sustainable than logging. At a time when federal grants are being provided to private campgrounds and other outdoor recreation businesses in the area (see link below), it doesn't make sense that federal land wouldn't be aligned with this recreational use as well. (I realize that the FS folks in Kentucky reading this comment may have no control over how federal money is appropriated, but as a collective citizenry, we must appeal to our legislators to fix this issue so that either the Forest Service has more money allocated to recreation, or we put this land into the Department of the Interior instead of the USDA).

<https://www.lanereport.com/160193/2022/10/24-4-million-in-funding-for-economic-development/>

5. Endangered species

According to U.S. Fish and Wildlife data, the Jellico Mountain area is home to at least 17 endangered species and 12 migratory bird species of concern. One of these endangered species, the Cumberland Darter (*Etheostoma susanae*) is only found in isolated populations in the upper Cumberland River system of Kentucky and Tennessee, and does not exist anywhere else in the world. In Kentucky, 13 streams in McCreary and Whitley counties, are considered "critical habitat" for this fish, and much of this habitat is in the Jellico project area.

With the project's focus on biodiversity, it seems clear that the needs of these species need to be prioritized. Clearcut logging will destabilize slopes, leading to landslides that may impact these critical habitat waters.

<https://ipac.ecosphere.fws.gov/location/TIXVMYCVT5C7VEMWWMVEYDPXUYE/resources?fbclid=IwAR0iqJZGzMXrYquxDzGvxVEDlhkhI0pOsrFhq5IX-2osebFc-KH3LpSjYPo#migratory-birds>

<https://www.govinfo.gov/link/fr/77/63603?link-type=pdf>

<https://www.fws.gov/sites/default/files/documents/critical-habitat-fact-sheet.pdf>

6. Climate benefits

The federal government acknowledges that mature and old growth forests are a critical climate-mitigation solution. Logging on federal forests is a known and scientifically documented source of carbon emissions. Why is the Forest Service ignoring these facts? We are way past the time to seriously focus on climate change. The science is clear. We need to start doing things differently.

<https://www.whitehouse.gov/briefing-room/presidential-actions/2022/04/22/executive-order-on-strengthening-the-nations-forests-communities-and-local-economies/>
<https://www.sciencebase.gov/catalog/item/5a96ba37e4b06990606c2b92?community=USGS+Data+Release+Products>