

DCNR Bureau of Forestry

Review of the White Township Stewardship Plan

December 18, 2025

The Bureau of Forestry (BOF) respectfully submits the following comments and recommendations on the “Preservation & Conservation of White’s Woods Nature Center: A Stewardship Plan for Whites Woods” provided by White Township. This review is based on a technical review of the provided documents along with a field visit conducted on June 25, 2025 by a DCNR Service Forester.

The Bureau of Forestry commends White Township for its continued work planning for the long-term care of and taking an active approach to managing its community forests and trees. The trails seemed well used and enjoyed by the community and the volunteer efforts to remove invasive species is admirable.

General Comments:

Forest Resource Inventory:

The stewardship plan does not meet the standards of plans entered into the ForestTo help support development of specific management activities, the BOF recommends developing a forest resource inventory of the properties to help identify site-specific opportunities, areas of need, anticipate outcomes of management activities, and identify areas of ecological significance that might require additional attention. While we acknowledge the Stewardship Plan contains components or pieces of an inventory, we recommend a consistent approach across the entire property. Before investing in a statistically-sound, comprehensive inventory, the township could develop a management unit or zoning approach to help articulate the pros and cons of various types of inventories. There are guides to forest inventory including “Prescribing Regeneration Treatments for Mixed-Oak Forests in the Mid-Atlantic Region”

https://www.nrs.fs.usda.gov/pubs/gtr/gtr_nrs33.pdf. This guide and the inventory procedure defined within are used by many foresters to estimate many metrics of the overstory, midstory, and understory of forest stands. This inventory process, when entered into free USDA Forest Service software, SILVAH 8, also gives stand narratives and insight on what is limiting tree seedling and shrub growth, as well as invasive species prevalence and forest health indicators. Forest stands should be delineated, mapped, and a separate

inventory should be conducted in each stand. The BOF could provide additional details on developing an inventory.

Comments on sections of the Summary of Recommendations:

1. Protect the Canopy

Species and age diversity are key components of forest health and resiliency. Without a full forest inventory, it is difficult to estimate the predominance and distribution of canopy species, and therefore it is difficult to estimate the potential impact of emerging insect pests and diseases. If in the future many trees are declining or even die in a given area, there could be an opportunity for a salvage harvest, as long as there would be limited environmental impact to the area, this type of sale of these dead/dying trees should be considered. If there is resulting revenue, it could be placed into a fund for future stewardship work. Salvage harvesting can also reduce the risk that many dead and decaying trees pose to trails and other targets.

2. Remove Invasive Plants

Heretofore the work to reduce the impact of invasive species, especially *Berberis thunbergii* (Japanese barberry), has been impressive. Continued removal and monitoring is recommended. If acceptable to the property managers, some herbicide work could greatly improve the efficiency and effectiveness of these efforts. There are several methods of herbicide use that use much less product than traditional foliar treatments that could be considered. DCNR – Bureau of Forestry is a resource that can help make recommendations of these methods.

3. Address deer browse

Deer browse may limit the growth of most seedlings that are able to germinate in the shade or in the sunnier canopy gaps. Most of the area is under a full tree canopy in which the most shade tolerant woody plants may survive but not thrive. Installing and expanding deer enclosure fencing will add little benefit to woody plants due to the lack of sunlight reaching the forest floor, while being expensive to install and creating an additional maintenance consideration. Short-term fencing could be used around canopy gaps. In these fenced gaps existing or planted species of intermediate or higher shade tolerance could be protected from deer browse. Fencing could also be used to protect populations of perennial herbaceous plants that are experiencing herbivory from deer and other herbivores.

Although difficult to quantify on forest tracts this size the harvesting of antlerless deer is the most cost-effective way to address deer browse.

4. Monitor native and non-native species

There are several resources to help develop a deer impact inventory protocol. Penn State has been studying deer effect on plants: <https://www.deer.psu.edu/>. Cornell has also studied this and has produced a manual that includes methods for establishing plots to monitor deer impact on vegetation: <https://aviddeer.com/about>. The local DCNR - Bureau of Forestry, Service Forester may be available for an annual perimeter walk to identify new invasive species or the spread of known ones and look for forest health issues.

5. Protect Ecosystem Services

Maintaining a healthy diverse forest canopy should in turn protect the ecosystem services of the forest. Trail sustainability should be considered if trail beds are washing out during rain events.

6. Establish a Nature Center Stewards Committee

7. Consult with ecologists and subject matter experts to improve WWNC

8. Collaborate with volunteers to maintain WWNC

9. Use a variety of methods to communicate with stakeholders

Entering the trails, volunteer invasive species removals, other projects and all types of pictures into an ESRI story map or similar product can increase understanding and interest in stewarding and recreating within WWNC.

10. Promote passive recreation and education opportunities

The trail map on the township's website is not geo referenced. Adding a georeferenced PDF that users can use on smart phones can increase the confidence of new users of WWNC.

11. Join the old growth forest network

Although the forest within WWNC does not yet exhibit the characteristics of an old growth forest, letting it grow into one will provide unique recreation opportunities and habitat within the township and county.

12. Seek opportunities to purchase additional adjacent forest land

It appears there are a few adjacent forested parcels with private owners. If those owners are interested in selling, there are many potential ways to fund the acquisition with many recent examples of other PA municipalities adding to their open space. There are several non-profit Conservancy's and Land Trusts that regularly partner on land acquisitions for conservation purposes. A larger contiguous forest can increase management opportunities and amplify the impacts of good stewardship.