

White's Woods Nature Center: Current Value & Future Care January, 2023 Update Friends of White's Woods

INTRODUCTION

Friends of White's Woods (FWW) has been working to protect the White's Woods Nature Center for over 27 years. Part of FWW's mission is to educate ourselves and our community about the value of nature centers, in general, and about the value of the White's Woods Nature Center (WWNC), in particular. Since its inception, FWW has been committed to allowing our second-growth forest to mature, via natural succession.

After a year and a half of hosting speakers, attending webinars, and working with forest consultants, in December, 2021, FWW prepared the document to sum the information that we had gathered, along with information that FWW members had assembled in the previous 25 years. FWW has worked hard over decades to learn how to protect White's Woods.

In January, 2022, FWW presented the completed document, *White's Woods Nature Center: Current Value & Future Care*, to the White Township Stewardship Committee. Since that time, FWW has hosted nine additional speakers addressing a range of topics, including the impact of climate change on Pennsylvania forests, ecological forestry, "passive" forest management, fungi and the mycelium network, the economic and ecosystem value of older forests, along with community attitudes about White's Woods. Speakers were from a variety of organizations, including DCNR, the Old Growth Forest Network, The Nature Conservancy, Georgia Forest Watch, Indiana University of Pennsylvania, and the Penn State Extension (Retired). Also in this past year, FWW engaged a forest consultant to assess tree diversity.

WHAT WORKED: White's Woods Nature Center: Current Value & Future Care

The FWW document presented the committee with 34 management goals, along with a number of additional sub-goals, for the WWNC. Thirty-three of these management goals are still clearly on target. (See copies of the list of January 2022 goals below.)

All 2022 consultants, as well as the sample public land stewardship plans reviewed by the Stewardship Committee (all subsequent to the completion of the FWW document), reaffirmed the importance of the goals presented in *White's Woods Nature Center: Current Value & Future Care:* Protect the tight canopy to preserve forest health, set up systems to mitigate spread of invasive plants, gather information about the various forest ecosystems, take steps to mitigate climate change impact, listen to the public, and support the human use of the WWNC for passive forest recreation and education.

Only a very few of the recommendations in this now year-old report were realized; most centered on drawing people into the woods: There was a 2022 Garlic Mustard Festival, along with numerous plant and bird education events that drew in the general public. Indiana Walk Works sponsored a Scavenger Hunt in the woods.

WHAT FELL SHORT: White's Woods Nature Center: Current Value & Future Care

Although climate change was prominently featured in this FWW document, speakers in the past year have made clear that it was not featured prominently enough: Climate change is already here and, so far, our state (along with others) has done almost nothing to insulate future generations from its likely devastating impact. Forests, including the various species that reside in them, are already changing. Our efforts to control carbon emissions are next to nil. One speaker after another emphasized that we have to keep the forests that we have - and plant more. Changed precipitation and temperature patterns are here to stay and will likely become more extreme. Knowledge of ongoing species migration patterns, including ongoing tree species migration, is important.

The document also fell short by failing to emphasize the importance of the mycelium network, both to forest health and to any management considerations.

Although Alyson Fearon re-emphasized the WWNC's eligibility for certain types of carbon contracts, she (The Allegheny Land Trust) is not able to serve as a broker for a sequestration project for White's Woods. (This was the one goal identified in the FWW document that is no longer viable.)

WHAT CAN BE AND SHOULD BE DONE RIGHT NOW?

- 1. Commit to vigilant protection of the canopy in White's Woods.
- 2. Set up a preventative invasive plant program.
- 3. Organize volunteers so that the insidious invasive plants not yet well-established (e.g. Tree of Heaven, Buckthorn) are not allowed to become established.
- 4. Commit to confining any facility construction to the area in White's Woods that has already been developed: The area now called the Fourth Ward Park.
- 5. Join the Old Growth Forest Network to facilitate the increasing carbon sequestration potential of older forests and enjoy the added benefit of a regional economic boost from recreational tourism.

FWW has been disconcerted by the Stewardship Committee's tepid interest in working with FWW, or with the information that we have provided. We hope that this coming year will reflect a positive change in the committee's recognition of the value and expertise of FWW work.

Specific Objectives: Outdoor Recreation for All

- a. Preserve the community forest park that we have!
- b. Preserve maximum canopy coverage so that the woods remain accessible in hotter weather.
 - The March 23, 2021 DCNR Bureau of Forestry review of the rejected White Township draft stewardship plan noted that "The proposed harvest on White's Woods could significantly alter recreation values, noticeably reducing overhead shade provided by a closed canopy and overall aesthetics." (p.3)
 - Temperature difference between shaded and non-shaded ground can be as much as 36 degrees Fahrenheit, based on some studies (Lenart, 2019). Heating differences occur as a result of a hot sun on the surface of the skin as well as the atmospheric temperature.
- c. Schedule multiple, seasonal recreation and education activities to bring citizens of the Indiana region into the WWNC:
 - Develop a "big tree" tree-identification (type, size, age) loop walk.
 - Develop a native plant species loop walk (by season).
 - Host an annual Garlic Mustard Festival (which will help to get people in the woods and invasive plants out).
 - Host semi-annual educational medicinal plant and plant identification walks.
 - Host artist events in the woods: photography, painting (See FWW website).
 - Host annual nature-identification scavenger hunts for kids.
 - Encourage winter events by scheduling hiking and cross-county ski events to identify winter animal & avian species in the WWNC.
 - Develop a "history loop" to celebrate notable environmentalists, including Indiana, PA native Edward Abbey and former Native American stewards.
 - Develop a network of bike trails to the WWNC 12th Street Entrance, providing access from each direction (including IUP) to help serve a broader population.
 - Provide bicycle parking at the 12th Street entrance parking lot.
 - Provide educational signage regarding at-risk and vulnerable species.
 - Host environmental education sessions (for children and adults).
 - Encourage reporting of plant, animal, and bird species through ebird and inaturalist.
 - Update WWNC trail maps.
 - Support the creation of an Indiana-region greenways plan.

Specific Objectives: Support for DCNR Climate Mitigation and Adaptation Plan in the WWNC

- a. Keep the 250-acre WWNC forest intact to maximize stormwater management and minimize flooding from increasingly heavy storms due to climate change.
- b. Keep the 250-acre WWNC forest intact to maximize temperature mitigation for surrounding communities in the context of increasing average and extreme temperatures that result from climate change.
- c. Keep the 250-acre WWNC forest intact to maximize carbon sequestration to help mitigate the deleterious effects of climate change.
 - The White's Woods *i-Tree* analysis indicates that White's Woods currently stores 27,688 tons of carbon that will be lost to the atmosphere if trees are timbered. The WWNC trees also absorb over 1,100 tons of carbon per year. (See Appendix)
- d. Monitor endangered, threatened, and "species of special concern" mammals, birds, and plants--in the WWNC.
- e. Document arrival of migratory birds.
- f. Improve pedestrian, mass transit, and bicycle access to the WWNC.
- g. Work with DCNR on climate mitigation projects.

(See next page, also.)

Specific Objectives: Preserving the WWNC for Future Generations

- a. Listen to the public. Do not interfere with the recreational or aesthetic value of the WWNC. Seek public input at every stage of the management process.
- b. Rely on the best science, along with publicly-funded experts (DCNR and university-related) to preserve the WWNC community forest "largely in its natural state."
- c. Seek a DCNR Bureau of Recreation and Conservation Community Partnership Grant to support development of a vetted, long-term, holistic WWNC management plan.
- d. Complete an inventory and map of native plants in the WWNC. (Keubbing & Holmes)
- e. Complete an inventory and map of invasive plants (Keubbing & Holmes, 2021).
- f. Complete an inventory (on-the-ground count) and map of the species type, age, size, and location of trees in the WWNC.
- g. Collect data regarding the diversity of people who use the WWNC.
- h. Collect data to determine the presence WWNC of avian, amphibian, and reptilian species that are now listed as "Species of Greatest Concern" by DCNR.
- i. Document date of arrival of migratory bird species.
- j. Document animal species in the WWNC.
- k. Investigate conservation measures suggested by the U.S. Fish and Wildlife Service that will help the stability and recovery of both the Federally-endangered Indiana bat and Federally-threatened Northern long-eared bat.
- I. Inventory and map ecologically sensitive or unique areas in the WWNC.
- m. Locate and implement plans to preserve the three vulnerable plant species located in the WWNC, as identified in the Natural Heritage Program inventory.
- n. Implement a long-term, volunteer-based, least-intrusive plan to control invasive species, including garlic mustard, multiflora rose, Japanese barberry and Autumn Olive.
- o. Implement this invasive plant removal plan by focusing on one section of the WWNC at a time.
- p. Implement a bi-annual <u>preventative</u> invasive plant plan: survey entry points to WWNC for new invasive plant species.
- q. Implement a long-term plan to promote native plant growth.
- r. Conduct an assessment of the size of the WWNC deer population.
- s. Rely on natural succession and take advantage of "blow down" to plant seedlings to maintain WWNC regeneration status.
- t. Consider the use of goats to control especially dense invasive growth, to promote ecologically sound plant removal and to draw visitors into the woods.
- u. Seek partner funding to conduct a deer fencing or deer contraception pilot program.
- v. Preserve forest songbird habitat by protecting the existing White's Woods forest and maintaining, or expanding, available food sources.
- w. Support the DCNR Bureau of Forestry's goal of increasing the percentage of Pennsylvania older-growth forests (80+ years old) by leaving the 80-year-old WWNC intact. Protect big trees.