



2024 Environmental Resources Advisory Council Annual Report

2024 Initiatives and Topics of Interest

- Construction Project Updates
- Management Plan Updates
- Griffy Lake Nature Preserve Deer Browse Study
- Griffy Lake Nature Preserve Deer Management
- Griffy Insect Inventory Project
- Storm Resiliency and Cleanup
- Education & Outreach
- City Designations

Construction Project Updates (Bicentennial Gateway, Griffy Loop Trail Project, Hopewell, Building Trades, and Powerline Trail)

In 2024, ERAC members received updates and were asked to provide feedback on several construction projects. The advisory council continued discussions on the Bicentennial Gateway and Griffy Loop Trail Project that were a main focus in 2023. As the Rogers Family Park project wrapped up last year, the council was able to switch their attention to Hopewell, Building Trades, and the Powerline Trail.

The Bicentennial Gateway Project completed the installation of a new gateway element at the north end of Miller-Showers Park in the triangle of land between College Avenue, Walnut Street, and the Old State Road 37 crossover. The design incorporates stacked blocks of locally-sourced limestone approximately 10' high with the word "Bloomington" in backlit letters mounted to the limestone. ERAC was able to discuss the impact a lighted sign may have on birds. In the final project, the letters have a soft glow from behind them without much light proceeding outward and upward from the stone wall. It is believed there will be little to no negative impact on the bird community. This project also removed Callery pear trees, added benches, and improved irrigation to water plantings during droughts. The Bloomington Arts Commission will solicit design proposals for a public art installation with \$125,000 in funding.

The Griffy Loop Trail Project was first presented to ERAC members in 2020. The first phase of the plan was completed in 2022 with the construction of an accessible pedestrian walkway along N. Headley Road with five fishing access points that connected the northern and southern trails around the lake. A 0.5-mile hiking trail was added along the south shore to connect to the IU Research and Teaching Preserve. In 2023, an official trail was constructed across the top of the Griffy Lake Dam as well as a new set of stairs to improve access from the dam parking lot as part of Phase 2. In 2024, the Griffy Loop Trail Project entered into Phase 3. A new 4.5-mile hiking trail was completed along the south shore of Griffy Lake, connecting the south end of the dam to the new causeway trail. To improve fish habitat and increase fishing opportunities from the accessible pedestrian walkway, now referred to as the Causeway Trail, BPRD was awarded \$2,000 in grant funding to install 18 Mossback Fish Habitats. New Griffy Lake trail map pocket guides were printed and available for the public to pick up from the Boathouse or the Parks and Recreation office at City Hall. Parks staff noted that additional accessibility improvements are needed near the Griffy Lake Boathouse. Suggestions include making the restrooms more accessible, adding additional accessible parking, and adding wheelchair guardrails at the fishing access points on the pedestrian walkway. A more long-range goal includes construction of an accessible wetland trail.

Large advancements were made in the Hopewell project ending the year with a soft activation of the park with an official grand opening slated for spring 2025. This 1-acre park was planted with 120 new trees,

has new walking paths, seating under a pergola, lounging swings, a small stage with umbrella cover, and a natural playscape with balancing logs and limestone stepping blocks. A main component of this project is the green stormwater infrastructure. Permeable pavers will help reduce stormwater runoff and a 35,000 underground cistern will help collect rainwater and control flooding. A dry creek bed will slow and filter water before entering the stormwater system. All vegetation added to the property are native or native cultivars. Staff will provide a tour of the property for ERAC members in early spring.

Building Trades Master Plan was completed and will be implemented in phases. Phase 1 will focus on improving accessibility. The plan includes fixing and building accessible walkways, parking, and restrooms utilizing funding from the American Rescue Plan. A drinking fountain and bottle filler will also be added. ERAC members will look over additional plans for Building Trades and provide feedback.

The Power Line Trail will help connect the City's parks and trail system. The plan is to connect Switchyard Park, RCA Park, Wapehani, the Mill Trail, and the Clear Creek Trail. BPRD will maintain a 10-foot buffer along the trail and remove fallen trees to keep the trail clear. The trailhead will have a bike rack, signage with a map, and benches, but no amenities will be along the trail.

Management Plan Updates

Throughout the year, ERAC members were asked to review and provide feedback on several Management Plans for properties including Miller-Showers Park and Griffy Lake Nature Preserve. Miller-Showers improved wildlife habitat as turf grass was removed and replaced with prairie plantings. Urban Forestry removed 6 Callery pear trees from Miller-Showers which were the last six of these trees planted in the Park system. City of Bloomington Utilities dredged the Miller-Showers ponds in 2024 to remove thick algae mats. The council was presented with information on the effectiveness of the various ways the City has tried to control algae in the ponds in the past. One ERAC member noted that aluminum sulfate has not been tried and might be something to look into for the future if used properly to avoid aluminum toxicity. ERAC members recommend monitoring the algae growth in 6 months to determine a maintenance schedule.

Indiana Department of Natural Resources stocks Griffy Lake with bluegill, red-ear sunfish, channel catfish, and black crappie and regularly surveys the health of the lake. Over the past 10 years, fish biologists have noticed the lake has created a "trout zone" maintaining the proper temperatures and oxygen levels for trout. With the reservoir being a manmade and nonnative fish species already being present in the lake, IDNR proposed to ERAC stocking nonnative brown trout in Griffy Lake to increase and diversify fishing opportunities. ERAC members were actively engaged in the decision-making process by asking questions, completing additional research, and seeking advice from experts outside of Indiana. Ultimately, the Council advised against the stocking of brown trout due to concerns over ecological impacts and the increased demand on parking.

ERAC members also weighed in on invasive plant control measures used throughout the Park system. Urban Greenspace regularly updated the Council on the many monitoring and management programs in which they utilize a lot of volunteer help. Volunteers donated approximately 5,000 hours in 2024 during Adopt-a Greenspace, Weed Wrangles, and at tree seedling plots. Stiltgrass control efforts saw some improvement in 2024 compared to 2023 with less labor and herbicide needed to control this invasive plant at Rogers Family Park and Griffy Lake. Parks also experienced some success in controlling Japanese knotweed with a new cut and treat method. ERAC members requested information about chemical choices and alternative control methods. The Parks Department carefully chooses chemicals to avoid as much non-target damage as possible. Additional control techniques include cut-stump treatment, basal bark treatment, and mowing.

Griffy Lake Nature Preserve Deer Browse Study

EcoLogic presented the results of the 2023 Griffy Lake Nature Preserve Deer Browse Study at the February 2024 meeting. The 2023 data indicate that plant heights have stagnated for the past two seasons. There was increased growth between 2019-2021, but since then heights have remained relatively unchanged. Woody sapling growth had increased from 2018-2020, but since then has been relatively unchanged, with a slight decline. Browse has moderated since the Preserve started using deer hunts as an environmental management tool, but browse remains locally heavy in certain areas, especially those with a dense shrub area.

The Griffy Creek valley was mentioned for its dense concentration of invasive species and native shrubs that attract a lot of deer browse. The deer like to browse invasive privet in the winter and native species such as greenbrier and mapleleaf viburnum are heavily favored. Deer are benefiting from invasive shrubs in the Griffy Creek valley and are contributing to the spread of invasive plants such as Japanese stiltgrass. EcoLogic created a map depicting the range of invasive species in Griffy from little to none, medium, and high. The Griffy Creek valley upstream of the reservoir and some areas in the southwestern section of the park have higher rates of invasive species. The Griffy Creek Valley is a big wintering habitat for deer and many deer have been seen in the southwestern section as well. In the northwestern section, greenbrier and mapleleaf viburnum are present and show a lot of browse.

Griffy Lake Nature Preserve Deer Management

To continue with habitat management goals and protect the sensitive forest understory, BPRD partnered with White Buffalo to conduct 4 days of deer hunts in November 2024. Under the supervision of White Buffalo, 24 participants were required to pass a proficiency test and be properly licensed to hunt deer with firearms on the property. Some hunters participating for only one day while others participated on all four days. A total of 19 deer were removed from the property which was historically the lowest number. White Buffalo has been coordinating management hunts for Griffy Lake Since 2019. That first year was previously the lowest with 26 deer removed and 2021 was the highest with 47 deer. BPRD staff aim to reduce browse pressure on young oak and hickory saplings so that they can mature enough to support wildlife in the park and promote a diverse ecosystem. These native tree species are also desirable because they are more resilient to the pressures of climate change, such as droughts and high winds. ERAC members support long-term deer management at Griffy Lake Nature Preserve and will continue to annually review the vegetation monitoring results.

Griffy Insect Inventory Project

Staff conducted an Insect Inventory Study from July-September. An insect inventory had never been completed on the property before and this information will be added to the Griffy Lake Master Plan to help inform future habitat and ecosystem management decisions. The Parks Department hired two temporary laborers to assist this project under the supervision of a natural resource specialist who is also employed by the City. The smartphone app, iNaturalist, was invaluable in recruiting citizen scientists to help with the study. Visitors to the park could upload photos with timestamps and locations for staff to inventory and check for accuracy of identification. Staff received 758 sightings from citizen scientists and were able to identify 478 unique species of insects including the American bumblebee listed on the IUCN vulnerable species list. A report is being compiled that will include maps of insect sightings overlaid on maps of the park's plant inventory with the goal of presenting the report to ERAC at the February 2025 meeting.

Storm Resiliency and Cleanup

Bloomington experienced a major storm on June 25 that affected the trees in Winslow Woods, Wapehani Mountain Bike Park, and RCA Park and throughout the City. As a result of the extensive damage, Bloomington was designated a disaster area. In a joint effort between Parks and the Street Department, over 200 tons of tree waste and debris were collected and turned into wood chips to be used on park properties. Though some cleanup efforts were more labor intensive and time consuming, all major roads were cleared within 24 hours and all accessible trails, sidewalks, and paths were cleared within 48 hours. ERAC members were able to review the Storm Resiliency Plan.

Education & Outreach

At every meeting, ERAC members were updated on BPRD's education and outreach activities, such as Nature Days, Roving Naturalist Programs, Adopt-A-Stream/Greenspace/Trail Volunteers, and After-School Nature Club programs. Large community events, such as Bug Fest and Get Outdoors Day, welcomed hundreds of people and provided free opportunities to learn more about local outdoor recreational opportunities and the environment. Bloomington welcomed visitors for the solar eclipse providing them with programming, greenspace to observe the eclipse, and BPRD sold branded eclipse glasses.

ERAC voted on interpretive sign topics to be placed along the Nature Trail at Griffy Lake. The chosen topics were 1) Griffy Lake size, activities, and wildlife, 2) history and water supply, 3) native tree species, 4) wetland functions, animals, and plants, and 5) habitat management. Sign text and designs are being created and will be presented to ERAC for feedback and editing.

BPRD partnered with Economic and Sustainable development to host the annual Bike to Earth Day Event and monthly free virtual climate action talks. Climate Action topics included tree species selection for climate resilience, battery-powered tools, residential stormwater grants, and tax incentives for energy-efficient purchases for landowners.

City Designations

Bloomington was the first city in Indiana to be designated a Tree City by the Arbor Day Foundation and has held the accolade for 40 years. In 2012, Bloomington and Monroe County earned the designation of Bird Town, but the designation has never been renewed. With the support from ERAC, city staff are hoping to renew the Bird Town designation and also complete the certification process for Bee City. Bird Town Indiana is a project of the Indiana Audubon Society and Bee City is a project of the Xerces Society. Both designations will show the community that Bloomington is committed to protecting wildlife habitat, promoting native plants, and reducing pesticide and herbicide use. Bee City will be a joint effort between Parks and the Environmental Commission. Some ERAC members helping to support Bird Town efforts are part of the Sycamore Audubon Society. One ERAC member serves on both ERAC and the Environmental Commission making them an integral part of the Bee City application process.

Moving forward in 2025, ERAC members will continue to provide feedback and recommendations on matters pertaining to the operations of natural areas, programs, and facilities.