

## **New Hope Bird Alliance 2024 Land Protection and Restoration Grant Report Eno River Association**

With the funding we received from the New Hope Bird Alliance, we were able to begin restoration of Piedmont prairie and fire-maintained forest ecosystems at the Confluence Natural Area with a prescribed burn. This funding was used for Eno River Association (ERA) staff time, safety equipment for prescribed burning, contacting neighbors, and hiring a contractor to oversee the prescribed burn.

The prescribed burn was conducted in March of 2024, with continued monitoring throughout the growing season and into the early winter to assess the impacts on the areas which were burned. The burn was broadly successful, and most of the 9 acres in the burn unit burned at low intensity, as prescribed. This helped to set back woody species in the area which was previously an agricultural field, and appeared to help in the regeneration of milkweed (*Asclepias* sp.) and other native herbaceous species following the burn. In the abandoned agricultural field which has been overtaken by sweetgum (*Liquidambar styraciflua*), the burn was patchy due to wet conditions in low areas, but it successfully top-killed some sweetgum in the areas which burned, helping to thin the canopy. One of the most successful impacts of the prescribed burn was in managing invasive species, particularly multiflora rose (*Rosa multiflora*) and Japanese honeysuckle (*Lonicera japonica*). In all of the areas that burned, these plants were almost entirely top-killed, and in some areas were completely eliminated, with no noticeable re-sprouting occurring throughout the growing season following the burn. Native species in the herbaceous layer emerged very rapidly following the burn, including various ferns, crane fly orchid (*Tipularia discolor*), and Atamasco lily (*Zephyranthes atamasco*). With leaves having fallen and vegetation died back in the prairie restoration area, it appears that fuels will be sufficient for another prescribed burn within the next 1-2 years.

Additional management will be necessary to eliminate invasive Johnson grass (*Sorghum halapense*) from the prairie restoration area, which will take the form of continued prescribed burning and spot treatment with herbicide to ensure this invasive species does not interfere with the success of native prairie species. Additional burning, combined with mechanical treatment, will also help to prevent encroachment of woody species into the prairie restoration area. In the abandoned field dominated by sweetgum, continued selective thinning of the canopy will be necessary, combined with additional prescribed burns to select for oak (*Quercus* spp.), hickory (*Carya* spp.), and other fire-adapted tree species. We plan to begin work on restoring prairie in the larger meadow at the Confluence soon, which will add to the total habitat area available for species which rely on prairie and edge habitats. As a part of this restoration, we will seed to supplement existing native prairie species in the area burned this year.

In addition to funding the completion of this prescribed burn, the grant from NHBA, by covering the purchase of prescribed fire supplies, has increased ERA's capacity for prescribed burning throughout our service area, expanding our ability to restore prairie, open woodland, and other fire-dependent ecosystems which have become increasingly rare in the Piedmont.