Capital Region PRISM
Partnership for Regional
Invasive Species Management
www.capitalregionprism.org

Cornell Cooperative Extension Saratoga County
50 West High St.
Ballston Spa, NY 12020

Capital Region Partnership for Regional Invasive Species Management Response Report

Section 1: Response Project Summary

General Information	
Date Response Action Conducted: 7/2-3/24, 7/29-30/24	**Property Owner Name, Title, and Contact:** Anne Rhoads, Executive Director, Huyck Preserve anne@huyckpreserve.org Garrett Chisholm, Stewardship Coordinator, Huyck Preserve garrett@huyckpreserve.org
Site Name: Edmund Niles Huyck Preserve and Biological Research Station	
Site Address (if different): 5052 Delaware Turnpike Rensselaerville, NY 12147	**Project Leader Name, Title, and Contact:** Garrett Chisholm, Stewardship Coordinator Huyck Preserve garrett@huyckpreserve.org
Latitude/Longitude: 42.52662, -74.15891	**County:** Albany
Total Parcel Size (acres): 2,000+ acres	**Team Member Name(s) and Title(s):** CR-PRISM Invasive Species Technicians • Stephen Root • Chris Benincasa • Joe Simonds • Riley Willard Huyck Preserve Technicians • Alice Cole • Sophie Wigington
Worksite Size (acres): 1.59 acres	**Permit(s)/Permission(s) Acquired?** Yes, Crew Assistance Request
Report Author: Stephen Root	**Data Recorder & iMapInvasives ID:** Garrett Chisholm- 1250

*****Remember to obtain proper permissions before completing any response project. Please attach any permits/permissions completed for this project as an appendix.**

Conservation Goal:

☐ Delineate & assess a conservation value ☐ To prevent and protect a conservation value
☒ Local Eradication ☐ Post-Treatment Monitoring ☒ Containment
☐ Suppression ☐ Exclusion ☐ Restoration

Response Type:

☐ Initial Response ☒ Follow-up Monitoring ☒ Crew Assistance Program Project
☐ Research Action ☐ Restoration ☐ Volunteer Engagement

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Site Description: Provide existing conditions of the site, current land use, landscape elements, historical uses, etc. This section should include information such as habitat composition, dominance of native species, list any known native species on site, any protected properties or larger landscape features that include site, etc.

The Edmund Niles Huyck Preserve and Biological Research Station, located in the beautiful hill country southwest of Albany, N.Y., is a mecca for researchers, educators, and people seeking peace and serenity away from the pressures of modern life. The Preserve, founded in 1931, began with a 500-acre gift from the Huyck family. An additional 1500 acres have been added within the watershed since 1967. Among the natural treasures found on the Preserve are hardwood and conifer stands more than 200 years old, Lake Myosotis, Lincoln Pond, and the dramatic Rensselaerville Falls. These different ecological communities provide a haven for a rich array of flora and fauna. The Preserve, one of the oldest independent biological research stations in the United States, has supported research continuously since 1938. Since then, more than 200 scientists have carried out research projects at the Preserve. Among the distinguished scientists who have worked at the Preserve are Dr. Eugene Odum, regarded by many as the father of ecosystem ecology, and Dr. Donald Griffin, whose discovery that bats use echo-location to navigate led the military to the use of sonar.

The Huyck Preserve has 12 miles of trails open to the public daily dawn to dusk. Trails snake along the Rensselaerville falls, meander through peaceful old-growth forests, circumvent both Lake Myosotis and Lincoln Pond, and wind through several 80+ year old pine and spruce plantations. From the trails you can explore and experience the forests, lakes, and streams of the Huyck Preserve and view a variety of wildlife. The main trailhead begins at the Visitors' Center located on Main Street in the town of Rensselaerville but there is access to trails from the Eldridge Research Center and Lake Myosotis beach area, both off Pond Hill Road. Trails are marked with red and yellow Huyck Preserve Trail Markers and colored paint blazes.

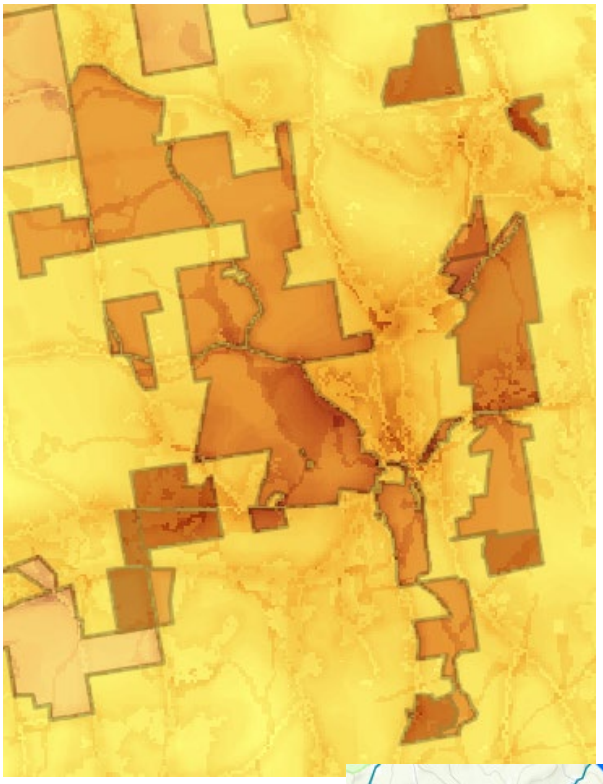
Preserve flora and fauna have been documented since 1938 and numerous long-term studies in ecology, animal behavior, systematics, biological diversity, evolutionary biology, and climate change have been conducted in the years following. A species list is available here.

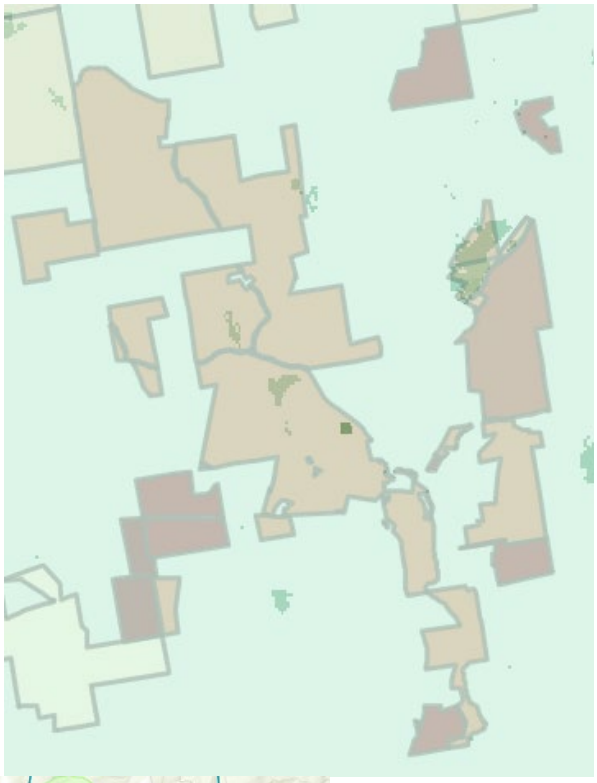
Project Significance: Some recommended resources to identify high priority sites include: the CR-PRISM Framework of Response, the NYNHP Prioritization Model, the NYS DEC Environmental Resource Mapper? Please provide screenshots of any maps and/or models used to determine the site is a priority and describe why they show the site is a priority. What other reason is present for conducting the response action (protecting rare, threatened, endangered species, crew assistance project, significant habitat present, high/very high threat species/Tier 2 species present etc.)?

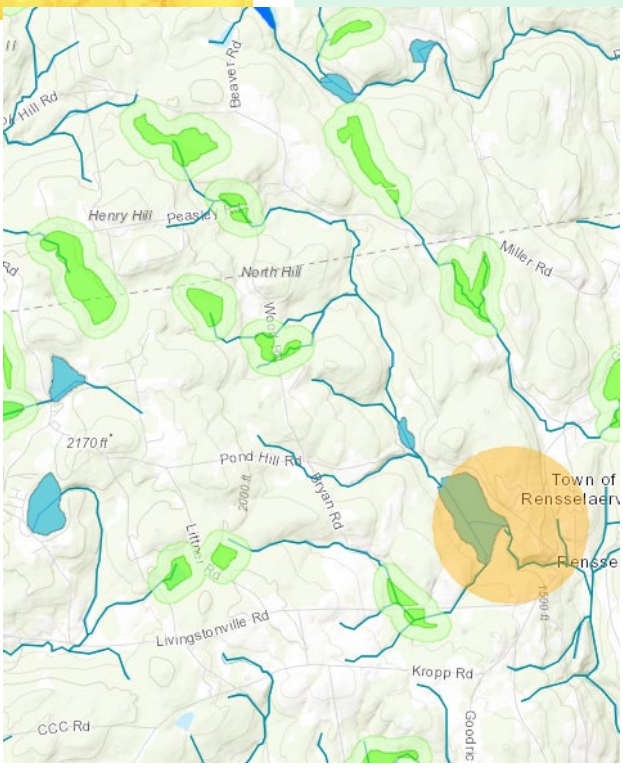
This project was selected as part of the Capital Region PRISM's Crew Assistance Program. The Huyck Preserve is not only a Principal Partner of the PRISM, but also protects over 2,000 acres of land that is part of a larger complex of protected lands. In addition, the Huyck Preserve scores high for the comprehensive score and low- moderate for ecological significance.

The Edmund Niles Huyck Preserve (ENHP) includes 71 ecological communities or variants, almost all representing NYNHP communities, and 15 of which are rare or imperiled at a global and/or state level. Invasive species threaten these communities. Lake Myosotis serves as the drinking water supply for the hamlet of Rensselaerville and is impacted by aquatic invasive plants as well as invasive forest pests and plants threatening to degrade the surrounding forest. ENHP impacts neighboring protected lands including Partridge Run and Rensselaerville State Forest, both of which receive a high comprehensive score in NYNHP Prioritization Model. Parts of the Preserve, especially along Ten-Mile Creek, Lincoln Pond, Lake Myosotis, Hagaman Marsh, and Hennicke Marsh, fall within the map models for "Ecological Significance." The majority of the Preserve is categorized by high "Risk of Spread". ENHP is home to 41 species of NYS-listed plants, most of which are classified as exploitably vulnerable and one of which is considered endangered. The Preserve also has one species of reptile that is classified as a species of special concern. Other state listed species that may be present include one reptile, one amphibian, and twenty-three birds. The ENHP also falls within the vicinity of Yellow-banded Bumblebee, not listed in New York State (Environmental Resource Mapper) and is considered to have a declining range (Xerces

Society). Research at ENHP revealed the likely occurrence of the federally endangered Indiana bat and the definite presence of the little brown bat, a relatively rare species (J. Townsend, 2022 unpublished report).







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Taken from Huyck Preserve Invasive Species Management Plan

Sensitive Communities on the Huyck Preserve

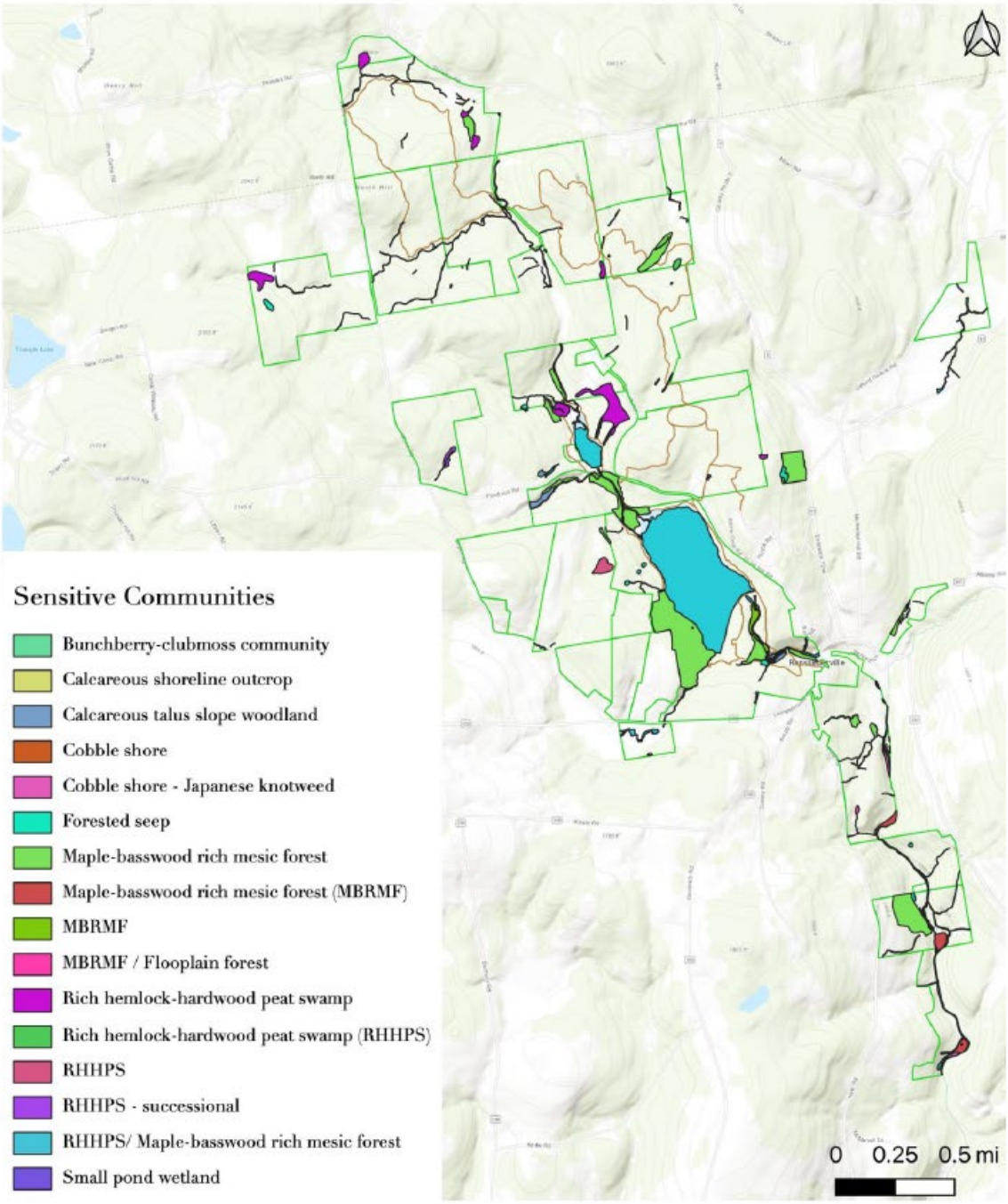

Figure 6. Sensitive communities at the Huyck Preserve as identified by the 2018 Biological Survey

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Section 2: Response Results Summary

Is this the first year of treatment? If not, consider creating an invasive species management plan for your project.

- Japanese Primrose (*Primula japonica*)- no, management began in 2023.
- Yellow Archangel (*Lamiastrum galeobdolon*)- no, management began in 2019.
- Japanese knotweed (*Fallopia japonica*)- no, management began in 2019.
- Goutweed (*Aegopodium podagraria*)- no, management began in 2019.
- False Spiraea (*Sorbaria sorbifolia*)- no, management began in 2019.
- Common Reed (*Phragmites australis*)- no, management began in 2019.

Total # of Participants: 7 people, 4 PRISM Technicians & 3 Huyck Preserve Staff (Stewardship Coordinator and 2 Technicians)

Is follow-up needed? What time of year and how often during the season? Yes, follow-up should occur. Huyck Preserve staff will determine annual monitoring schedule based on their staff availability.

Species Common & Scientific Name	Tier Ranking	Threat Ranking	Response Method	Percent Cover (%)	Distribution/ Abundance	Size of Infestation (Acres/ Miles if linear)	Area Treated (Acres/ Miles if linear)
Japanese primrose (*Primula japonica*)	2	High	Dig & Grub	**Patch 1:** 20% **Patch 2:** 3% **Patch 3:** 1%	**Patch 1:** Sparse (6 plants, 4 in seed) **Patch 2:** Sparse (5 plants) **Patch 3:** Sparse (2 plants)	**Patch 1:** 0.018 acres **Patch 2:** 0.0039 acres **Patch 3:** 0.0064 acres **Total:** 0.0283 acres	**Patch 1:** 0.018 acres **Patch 2:** 0.0039 acres **Patch 3:** 0.0064 acres **Total:** 0.0283 acres
Yellow Archangel (*Lamiastrum galeobdolon*)	2	Moderate	Dig & Grub	**Patch 1:** 80% **Patch 2:** 10%	**Patch 1:** Dense plants/ clumps **Patch 2:** Sparse (10 plants)	**Patch 1:** 0.022 acres **Patch 2:** 0.025 acres **Total:** 0.047 acres	**Patch 1:** 0.022 acres **Patch 2:** 0.025 acres **Total:** 0.047 acres
Beech leaf disease (*Litylenchus crenatae mccannii*)	2	Not Assessed	NA	NA	NA	0.02 acres	NA
Japanese knotweed (*Fallopia japonica*)	4	Very High	Handpull	**Northern patch:** 70% **Southern patch:** 30%	**Northern patch:** Dense plants/ clumps **Southern patch:** Dense plants/ clumps	**Northern patch:** 0.099 acres **Southern patch:** 0.55 acres **Total:** 0.619 acres	**Northern patch:** 0.099 acres **Southern patch:** 0.55 acres **Total:** 0.619 acres

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Goutweed (*Aegopodium podagraria*)	4	Moderate	Dig & Grub	10%	Trace	0.0052 acres	0.0052 acres
False Spiraea (*Sorbaria sorbifolia*)	Untiered	Moderate	Dig & Grub	75%	Dense plants/ clumps	0.73 acres	0.73 acres
Common Reed (*Phragmites australis*)	4	Very High	Broken at base and left on site	99%	Monoculture	0.16 acres	0.16 acres

Integrated Pest Management Methods Deployed:

- **Manual**- the use of physical means to eliminate or reduce pest populations
  Cut, Girdle/Frill, Mow, Dig, Plow, Pull, Smother/Cover, Stump cut, Other (Describe)
- **Mechanical**- the use of mechanical means to eliminate or reduce pest populations
  Cut, Girdle/Frill, Mow, Dig, Plow, Pull, Excavate, Brush hog, Controlled burn, Weed torch, Other (Describe)
- **Chemical***- the use of pesticides to eradicate or limit the prevalence of unwanted pests.
  *Please include Chemical name(s) below
  Foliar spray, Stem injection, Cut-stump treatment, Wiper application, Basal bark application, Frill, Tree injection method, Soil Drench, Other (Describe)
- **Cultural****- the practice of modifying the growing environment to reduce the prevalence of unwanted pests.
  Mulching, Solarization, Thermal weed control, Prescribed burning, Water manipulation, Rotational grazing, Prevention programming, Reseeding/cover crop
- **Biological control*****- the use of a natural enemy or predator to control a pest.
  ***If biological control is released, please see additional information to collect below

Percent Cover:
iMapInvasives Percent Cover Ranges: <5%, 5%-25%, 26%-50%, 51%-75%, 76%-100% or use a specific percentage

Distribution/Abundance:
Trace (single plant/clump), Sparse (scattered plants/clumps), Dense plants/clumps, Monoculture, Linearly scattered

Disposal method(s): Was removed biomass left on site to air dry, bagged and put in a landfill, piled, etc.?

- Japanese Primrose (*Primula japonica*)- bagged and put in Huyck Preserve solarizing station
- Yellow Archangel (*Lamiastrum galeobdolon*)- bagged and put in Huyck Preserve solarizing station
- Japanese knotweed (*Fallopia japonica*)- bagged and put in Huyck Preserve solarizing station
- Goutweed (*Aegopodium podagraria*)- bagged and put in Huyck Preserve solarizing station
- False Spiraea (*Sorbaria sorbifolia*)- bagged and put in Huyck Preserve solarizing station
- Common Reed (*Phragmites australis*)- broken at base and left on site to airdry

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Map:

Develop a map of the response area that has the searched area, any iMapInvasives points, polygons and/or lines for presence or non-detection. Multiple maps may be added for multiple species or locations. If available, include a property map for a comprehensive view of the property. All response actions should be uploaded to the CR-PRISM SharePoint Tracker and iMapInvasives.

Figures 1-3 below are screenshots of Japanese primrose (*Primula japonica*), yellow archangel (*Lamiastrum galeobdolon*), and goutweed (*Aegopodium podagraria*) that were monitored and managed along Ten Mile Creek.

Figure 1:
Polygon 11451- Japanese primrose
Polygon 11452- Goutweed
Polygon 11447- Yellow arch-angel

Figure 2
Polygon 11448- Yellow arch-angel
Polygon 11453- Japanese primrose

Figure 3
Polygon 11449- Yellow arch-angel
Polygon 11454- Japanese primrose

Figure 4 is a screenshot of Japanese knotweed (*Fallopia japonica*) that was monitored and managed at the intersection of Pond Hill Rd and Bryan Rd.

Figure 4
Polygon 11471 & 11470- Japanese knotweed

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Figure 5
Polygon 11895- False Spiraea

Figure 6
Polygon 11896- Common Reed

Figure 5 is a screenshot of false spiraea (*Sorbaria sorbifolia*) that was monitored and managed in the forest between Wood Rd and Peasley Rd.

Figure 6 is a screenshot of common reed (*Phragmites australis*) that was monitored and managed along the Delaware Turnpike

Taken from Huyck Preserve Invasive Species Management Plan

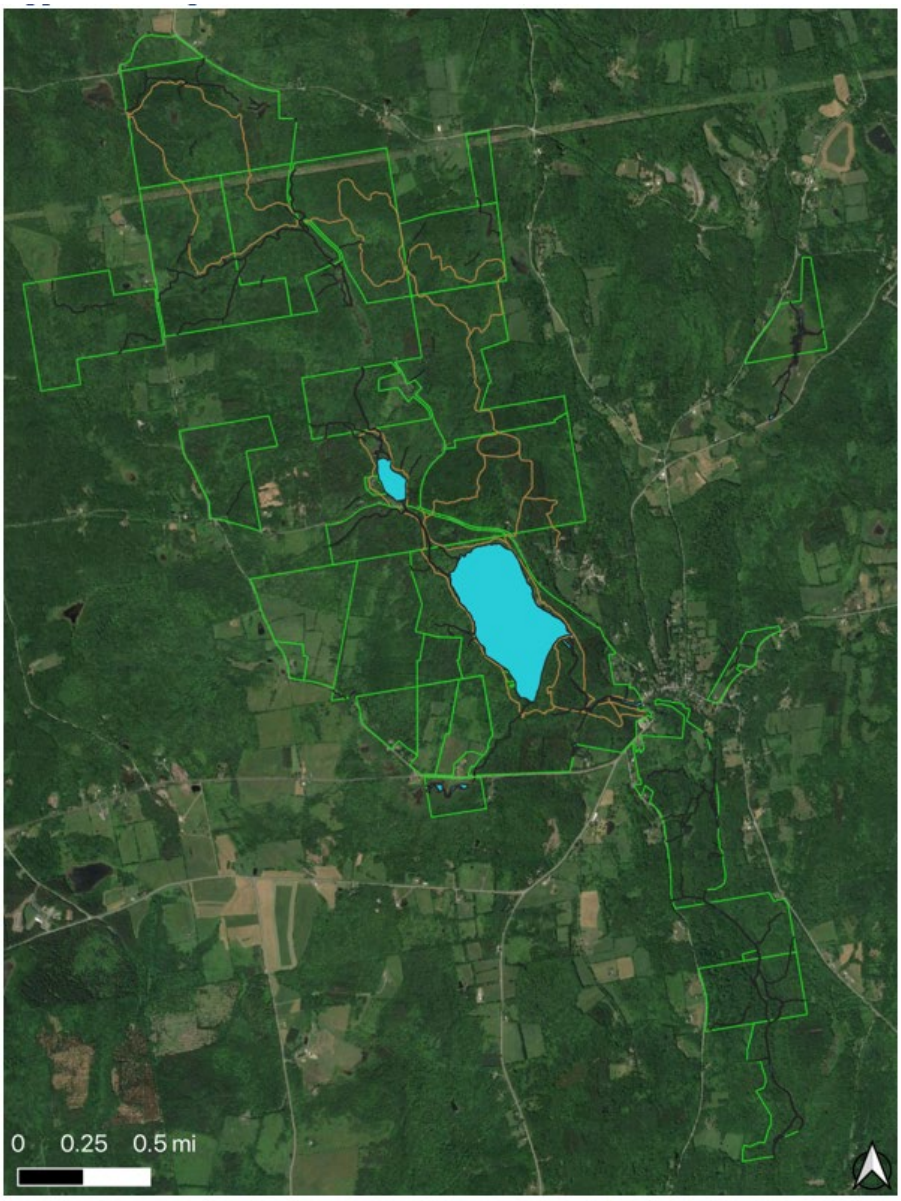

Figure 1. Satellite map showing the Huyck Preserve, trails, and waterways

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Section 3: Summary of Recommendations

This section provides recommendations of any response methods, monitoring methods, and restoration efforts based on the survey.

Additional Notes: Provide any additional information that is not included above regarding species managed for or about the response project itself. Were there any barriers or issues that arose before or during the response action? Provide any advice that could limit barriers or issues in the future.

Muck boots are recommended for future work actions along 10-mile creek.

Treatment: Briefly describe any recommendations for future response methods, why they are recommended, and any alternatives to consider. Please use abundance and site-specific factors in your recommendation. Optional: Attach or reference BMP guidance document. Consider state and local permitting requirements.

Huyck Preserve staff should continue to use adaptive management practices on monitored populations within the Huyck Preserve based on their priorities outlined in their management plan. PRISM staff may be available to assist, depending on staff availability.

Post-Survey Monitoring: Briefly describe the monitoring procedure, when it will occur, and who will complete it. Consider the phenology of species when suggesting timelines. If this project continues, the CR-PRISM strongly suggests creation of a management plan. If a plan is needed, please contact the CR-PRISM office for a template of our Invasive Species Management Plan.

Huyck Preserve staff will continue to monitor and respond to invasive species threats on the Huyck Preserve based on their management plan and adaptive management actions. PRISM staff may be available to assist depending on staff availability.

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