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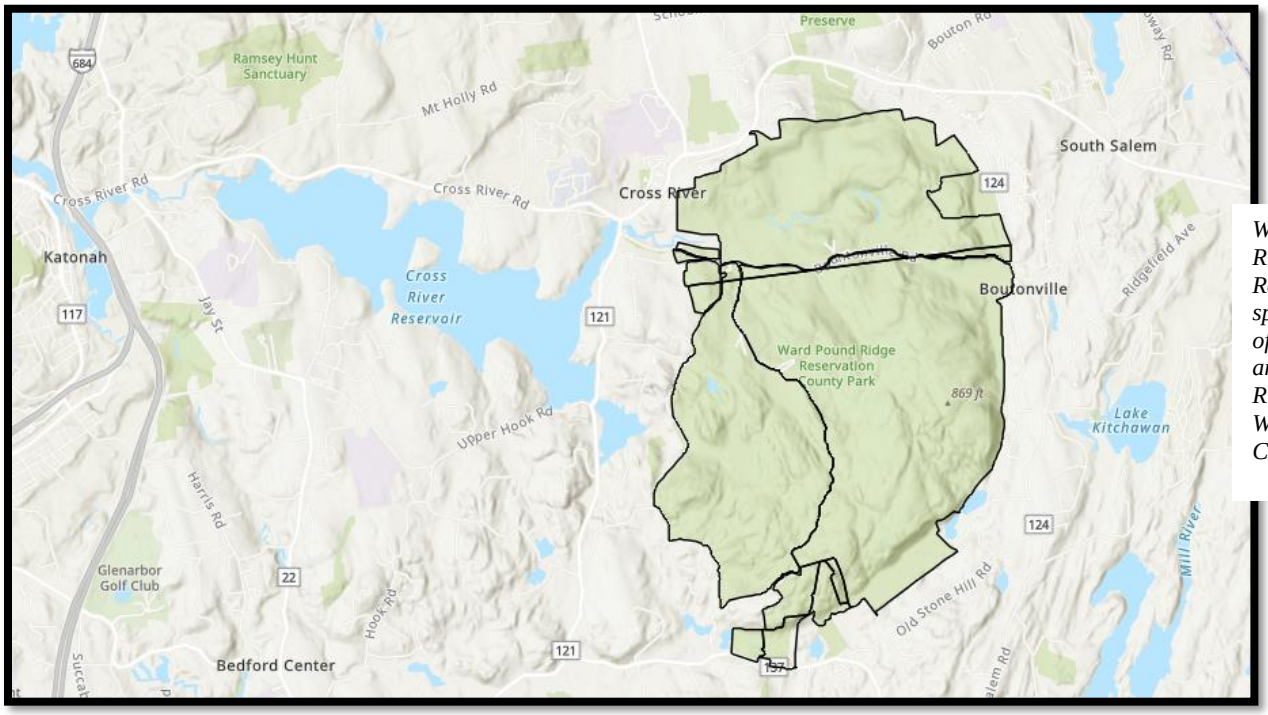
January 9, 2026

LHPRISM Contract # 25-003 Final Report

Prescribed Burn at Ward Pound Ridge Reservation

After two years of preparation, a prescribed burn at Ward Pound Ridge Reservation, the largest park in Westchester County at 4,315 acres, took place on November 14, 2025. The project was contracted by the Lower Hudson Partnership for Regional Invasive Species Management (LHPRISM) using funds from the Environmental Protection Fund as administered by the New York State Department of Environmental Conservation. The project was coordinated by the Westchester County Parks' Conservation Division and Departments of Emergency Services. The Friends of Trailside Nature Museum and Ward Pound Ridge Reservation provided supplementary funding. The Pound Ridge Fire Department and South Salem Fire Department provided ground support. The on-site burn boss and ignition team was Star Tree Prescribed Fire LLC (formerly Star Tree Wildfire Protection Services LLC).



Ward Pound Ridge Reservation spans the towns of Lewisboro and Pound Ridge in Westchester County.

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The goals of the prescribed burn were to address invasive woody saplings and vines; reduce wildfire threats by removing fuel loads (thatch); provide an educational event for first responders, land managers, and the public; increase desirable plant seed production; improve habitat for locally rare wildflowers; and draw attention to historic indigenous land management techniques.

Background

Information gathering began in 2023 with internal conversations about potential benefits to Ward Pound Ridge Reservation, a 4,315 passive use park that is home to many locally rare plant and animal species. Our Curator of Native Plants and a wildlife technician had previous experience with burn ecology from time spent at Sam's Point and Hempstead Plains, NY. A follow up conversation with Rob Longiaru, one of the land managers for Hempstead Plains was arranged and plans were made to observe a burn they had scheduled for April 2024. That burn was not held, unfortunately, but useful information was gathered in the discussion prior.

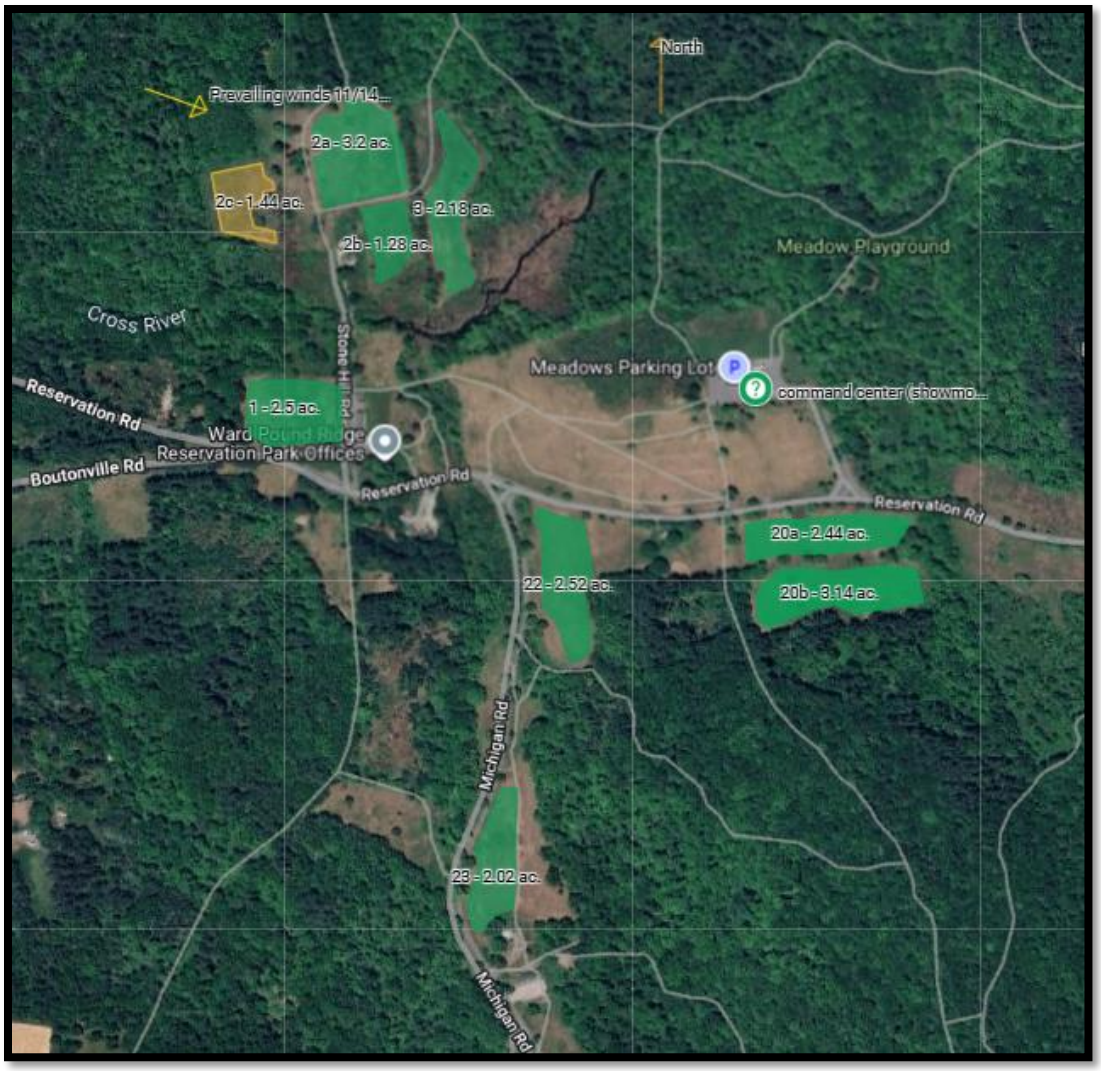
Following a Meadow Management Symposium at Stone Barns in November 2024, a site visit was arranged with one of the speakers: Ted Kendziora of USFWS. Mr. Kendziora confirmed that prescribed burning would meet some of our stated goals and that the fields identified would be suitable candidates. He was also able to provide the contact information for a company that had executed burns in our area. Following up on this, an initial site consultation by Star Tree Prescribed Fire was arranged for December 2024 and was paid for by the Friends of Trailside. The outcome was a roadmap of actions to take, identification of candidate burn units, and price quotes for writing a burn plan (NYS DEC approval required) and for one-day's implementation.

Funding for the project was secured from LHPRISM/DEC ($15,000 towards the one-day burn implementation) and Friends of the Trailside Nature Museum and Ward Pound Ridge Reservation ($10,000 balance of burn implementation plus an additional $5500 for the commissioned burn plan).

Burn implementation

The date of the burn was determined primarily by weather, with staffing logistics and contractual factors playing a part. In the end, the burn was held on November 14, 2025. After a briefing for operational personnel at 10:15 a.m., the first test ignition at management unit #1 was started at 10:45. Each 2-3 acre parcel took between 20-30 minutes to burn with another 10 minutes to re-position in between. Star Tree left crew members at each burned parcel to monitor and extinguish any re-ignition before they proceeded to the next.

A total of eight management units and 20 acres were burned before the burn window – daylight and moisture content of vegetation – closed. Management units and their sizes are in the table below.



Meadows burned on November 14, 2025 are marked in green.

Mgmt unit	Acreage	Initial assessment
1	2.5	First unit of the day. Patchy – goldenrod/mugwort did not burn completely (expected) and moisture content of vegetation higher due to overnight dampness. Woody invasives likely unharmed by lower intensity fire..
2a	3.2	Some remaining woody stems of at southern end that will likely survive
2b	1.3	Efficient despite wet ground on east flank.
2c	1.4	Not started. Field was damp, burn window closed
3	2.2	Big bluestem dominant resulted in likely the hottest burn. Mature callery pear in field charred at base along with seedlings. Mortality to be determined.
20 a&b	5.6	Last attempted burn of day but humidity window was closing and fire was not self-sustaining. Patchy.
22	2.5	Little bluestem dominated with sprawling *Rubus hispidus* and *Vitis labrusca* vines. Slope at eastern edge resulted in apparently hotter temps going uphill.
23	2	Efficient burn. Impact on mile-a-minute on southeast flank and Morrow's honeysuckle and privet on northwest to be determined.

Total: 20 acres completed burns

Pre-burn data collection

- To assess impact of soil disturbance in meadows and to see if invasive species were dominant in the seedbank, two $10m^2$ plots were established randomly from among the management units considered for burns. After a winter mow, a plot was established in management unit #1 and another in #23. Two quadrats in each plot had vegetation raked and soil lightly disturbed (scalped) with a string trimmer. One quadrat had vegetation cut low (buzz cut) but without soil disturbance, and the control quadrat was left unaltered (crew cut). If regeneration indicated dominant invasive species in disturbed quadrats, those management units would have be reconsidered for prescribed burn treatment.

  Both test plots were re-visited between September and October 2025. There were some differences in regeneration between the quadrats but with the exception of a few stems of mile-a-minute in one of the test treatments, invasive species did not benefit from the disturbance. Data viewable here: https://arcg.is/1Sv5CH.

- Public bioblitz on October 4, 2025 had 11 observers record 419 observations and 124 species. (https://www.inaturalist.org/observations?nelat=41.26521342301666&nelng=-73.5744618181534&on=2025-10-04&subview=map&swlat=41.25634188428208&swlng=-73.61696946662141). Observers were accompanied by PRC staff and given tips on taking photos for upload, on recognizing woody invasive species in our meadows, and information about the upcoming prescribed burn and the importance of fire as a management tool.

- The Flora of Ward Pound Ridge Reservation project (https://www.inaturalist.org/projects/flora-of-ward-pound-ridge) began in fall 2022 when botanists Daniel Atha (formerly of NY Botanic Garden) and Patricia Butter (The Native Plant Center (Valhalla, NY)) were commissioned by the Friends of Trailside Nature Museum to a 3-year study of the vascular plants of the Reservation. Since the project's start, they have documented 1,105 species within the Reservation and have vouchered and submitted specimens to the New York State Museum, New York Botanic Garden, and the Trailside Museum herbarium. Mr. Atha and Ms. Butter attended the site consultation with Star Tree Prescribed Fire in 2023 and provided their expert findings on locations of rare plant species that would benefit from prescribed burns, including purple milkweed (*Asclepias purpurascens*) and pale green orchid (*Platanthea flava var. herbiola*), as well as the locations of invasive species such as European swallowwort (*Vincetoxicum rossicum*).

Purple milkweed (Asclepias purpurascens) *is a NYS S2/S3 species that is expected to benefit from the prescribed fire.*

- A soil sampling initiative was conducted in Fall 2025 and will be repeated in 2026 to compare pre- and post-burn soil chemistry. A total of 6 samples were collected from Ward Pound Ridge Reservation, 3 from fields that were scheduled for burning in 2025 and 3 from fields that were not. Samples were sent to the Cornell University Soils Lab where they were tested for a combination of physical, biological, and chemical variables. Notable variables include aggregate stability, organic matter, total nitrogen, respiration, active carbon, pH, and phosphorus. Visualization of pre-burn sample data revealed modest differences in these variables between the meadows suggesting possible variance in their response to burning. However, burn impacts on soils in this region are not well understood and impacts may be dissipated relatively quickly. Parks staff plan to continue monitoring soil conditions in

and around sites managed with prescribed fire and will analyze results once post-burn samples are collected.

Outreach and Media

- Forty-eight hours prior to the burn, after conditions were deemed favorable to proceed, Westchester County Parks issued a press release and posted it to social media pages to inform residents. Pound Ridge Fire Department did the same. Star Tree Prescribed Fire phoned local emergency service, fire departments, hospitals and schools to notify them. Westchester County Department of Emergency Services positioned an electronic billboard along Rt. 35 to inform drivers of the possibility of smoke.
- On the day of the burn, 41 observers from 15 different organizations (including ten LHPRISM-partner organizations) attended. Observers represented New York Botanic Garden, New York City Parks, Trillium Invasive Species Management, Teatown Lake Reservation, The Native Plant Center, Jay Heritage Center, Hudson Highlands Land Trust, North Salem Open Land Foundation, Pound Ridge Land Conservancy, NYS DEC, and more. PRC staff gave conservation background information in the formal morning briefing and informally throughout the day.
- Invitations to media were not sent for this burn: in conversations with fire professionals involved, there was concern about photographers getting too close to flames. However, one of the observers in attendance did write a piece for a local newspaper, The Recorder (see attached).
- Instagram/Facebook (https://www.facebook.com/reel/1338665800970833 and https://www.instagram.com/p/DRH_1OrjkEo)
    - 455 likes
    - 38 comments
    - 8 reposts
    - 42 shares
    - 31,152 video views

Management unit 22 alight (right and below) and in mop-up phase (below right).

Lessons and Questions

There are some immediate lessons to be learned and many more that will become evident in the next growing season.

- Wind speed, fuel species and land contours affected burn temperatures, ground speed and, likely, the impact on invasive woody species. For example, a callery pear seedling in a mixed patch of little blue stem, goldenrod, and mugwort (mgmt. unit 1) may be unharmed, but multiflora rose and other species in field dominated by big bluestem (unit 3) burned hotter and showed damage to stems (see pics).
- Woody species that may survive the burn have lost their ability to remain undetected amongst tall grasses in between mows. Mechanical removal in spring when soils are soft and new growth has not begun will be much easier. Or, if mechanical removal is not possible, foliar spraying of herbicide will be easier as surrounding vegetation will be lower and less likely to be impacted.
- Timing of burn for maximum efficiency should consider day length and aspect of fields.
    - Morning dew requires time to evaporate that should be taken into consideration: choosing a field with eastern exposure for the first burn of the morning may yield best results, similarly choose a field with western exposure for late afternoon.
    - To minimize potential impact on terrestrial turtles, insects and birds, we used a burn window ‘opening’ date of October 15. On 10/15 there are eleven hours of daylight in Cross River, NY. On November 14, there are 9 hours and 45 minutes of daylight. The delaying of a burn by one month resulted in over an hour of lost burn time translating to up to five acres in our case.
- Re-surveying of fields to assess impact on invasive species and recovery of desired native species (Culver’s Root, Purple Milkweed, Pale Green Orchid, and others) to be done in 2026 and beyond. Data collection in test plots to continue.

Chinese mantis egg case on branch about 2.5’ from ground and apparently unharmed. Mgmt. unit 22, dominated by little bluestem.

Blistered and peeling stems of toringo crabapple in field dominated by big bluestem (mgmt. unit 3).

Seemingly unharmed invasive toringo crabapple in field of mixed vegetation (mgmt. unit 1).