Remnant Prairie Ecological Management Schedule

Site Description

The Remnant Prairie is a 7 acre parcel of land in Wheeling that is owned by Com Ed, with a lease agreement with the Prospect Heights Park District. The lease agreement was amended in 2015 to allow for ecological restoration of the site. Historically, the land was prairie and wet prairie based on the original pre-settlement land survey maps. It was converted to agricultural use in the late 1800's and later became ComEd right of way sometime between 1938 to 1960 when the high tension power lines were installed. For some reason, a community of native prairie plants survived, likely due to the railroad and right of way that was installed prior to agricultural conversion. This site is severely degraded and contains a very thick invasion of invasive plants, notably teasel and crown vetch. This site has however become a very important area for the PHNRC to collect locally genetic seed from an assemblage of over 50 native prairie plants. The PHNRC has spent very little time managing the site, mostly by removing teasel. Even with limited management, the plant community has responded very positively and several new species have been found since management started. PHNRC will continue to manage the site on a limited basis and collect seed.

Status:
In the second year of limited management by PHNRC.
Area has never been mowed.
Contains many different species of prairie plants and is an important seed source.
Heavily infested with invasive species.
Limited management has improved quality and number of species of plants
Grade C prairie by INHS standards.

Work Done:
Limited invasive plant removal, mainly teasel and crown vetch
Almost a hundred pounds of seed has been collected by volunteers.

Future Work:
Increase invasive management to bring the area up to a grade B prairie, at which point it will be burned by Com Ed.
Continue seed collection
FQI analysis (monitoring). To date, several new species have been identified even with limited management.

Location	Activity	Timeline	Crew	Notes

Remove invasive woody plants Cut and herbicide or herbicide invasive woody species such as buckthorn (*Rhamnus* spp.), multiflora rose (*Rosa multiflora*), Asian honeysuckle (*Lonicera* spp.), smooth arrow-wood (*Viburnum recognitum*), Japanese barberry (*Berberis thunbergii*), honey locust (*Gleditsia triacanthos*), black locust (*Robinia pseudocacia*), white poplar (*Populus alba*), white mulberry (*Morus alba*), gray dogwood (*Cornus racemosa*), and winged euonymus (*Euonymus alatus*). Thin native trees including cottonwood (*Populus deltoides*), black cherry (*Prunus serotina*), ash (*Fraxinus* spp.), basswood (*Tilia americana*), hawthorn (*Crataegus* spp.), and elm (*Ulmus* spp.) Several herbicide treatments are appropriate depending on conditions: Cut stump: apply 20-30% triclopyr (Garlon 4, Element 4) in carrier oil to cut surface when temperature is < 80°F (ester formulation can volatilize and damage non-target species) 1. 2. Cut stump: apply 50-100% triclopyr (Garlon 3A, Element 3A, Tahoe 3A) to cut surface when temperature is above freezing 3. Cut stump: apply 50-100% glyphosate (Roundup, Rodeo, AquaNeat) to cut surface immediately after cutting when temperature is above freezing Basal bark: apply 20-30% triclopyr in carrier oil to the base of stems under 6" diameter in a thick band (do not apply in spring during sapflow) use this method for smaller white poplar and black locust	**Fa, Wi** Dormant season is preferred; The ground should be dry or frozen and care should be taken to avoid negatively impacting native vegetation, herptiles, nesting birds, and disturbing soil (avoid brush cutting especially in April, May & June). Multiflora rose and Japanese barberry may be cut year round	**Volunteers, Interns**	**Create brush piles, cut safely** Accumulate piles, cut stumps as low to the ground as possible; stack brush away from native ground layer vegetation. Notify Com Ed after each workday, send a map of brush pile locations to the Senior Environmental Specialist who will inform the Crew to take away the brush piles.
4. **Remove invasive woody seedlings and re-sprouts** Apply herbicide to leaves of small invasive woody seedlings and re-sprouts; spraying is preferable to cutting for white poplar. Two treatments are appropriate: 1. Apply 5-10% triclopyr (Garlon 3A, etc.) plus surfactant to leaves Apply 5-10% glyphosate (Roundup, etc.) plus surfactant to leaves; use this treatment option for honeysuckle	**Sp, Su, Fa** In spring when resprouts have reached at least 6 in. Use care to prevent harming non target species. Fall maybe ideal when native plants are dormant	**Volunteers, Interns**	**Carefully apply herbicide** Avoid overspray and off-target damage

	2. **Remove sweet clover** Pull white and yellow sweet clover (*Melilotus* spp., annuals or biennials) by hand before flowering (typically beginning May-June); cut, bag, and remove flowering plants to prevent seed set. Pull first year plants any time ground not frozen; compost debris on site	**Sp, Su, Fa**	**Volunteers, Interns**	
	1. **Remove wild parsnip** Remove wild parsnip (*Pastinaca sativa*, a monocarpic perennial); several treatments are appropriate: 1. Pull plants by (gloved) hand 2. Cut, bag, and remove mature flower and seed heads June-October 3. Apply 2-5% glyphosate (Roundup, etc.) plus surfactant to basal rosettes in spring	**Sp, Su, Fa**	**Volunteers, Interns**	**Avoid skin contact** Direct handling of this plant can cause rash and blistering
	2. **Remove teasel** Cut stalks of bolting teasel plants (*Dipsacus spp.*, a biennial or monocarpic perennial) just before flowering (typically beginning July); cut, bag, and dispose of flower heads in bloom to prevent seed set. Where appropriate, apply herbicide to first year rosettes of teasel; several treatments are appropriate: 1. Apply 0.25-0.5% clopyralid (Transline) plus surfactant 2. Apply 2.5-5% triclopyr (Garlon 3A, etc.) plus surfactant 3. Apply 0.25% aminopyralid (Milestone) plus surfactant Apply 2-4% glyphosate (Roundup) plus surfactant	**Sp, Su, Fa**	**Volunteers, Interns**	
Entire site primarily PR01	**Remove garlic mustard** Pull garlic mustard (*Alliaria petiolata*, a biennial) by hand before seed set (typically late May-July); pull first year plants any time ground not frozen, compost piled waste in low-quality areas	**Sp, Su, Fa**	**Volunteers, Interns**	**Avoid trampling** Give good instruction to volunteers and spread out groups

Collect and hand broadcast extant native seed Collect and distribute seeds of native plants near and within the site to improve colonization of cleared areas and bolster native populations; seed dispersal may be immediate, after a fall prescribed burn, or during the dormant season	**Su, Fa**	**Volunteers**	**Seed source** Try collecting in the nearby collections familiar to the comission
Conduct prescribed burn The entire site should be burned frequently with one or few growing seasons in between fires. The prairie will be burned after it accomplishes a certain quality and good coverage of grasses that will carry a fire. Currently, there is not enough grass cover to carry a fire. Adjacent pockets of tall grasses will be seeded into those that are devoid of them. Tentative plan for prescribed burn is 2018, dependent on ComEd contractors assessing the site prior to this.	**Late Fa, early Sp**	**ComEd Contractors**	**Volunteer assistance** Trained volunteers are welcome to help

Note: All ecological management schedule activities are subject to monitoring and supervision by the Prospect Heights Natural Areas Commission. Timing of treatments may change slightly depending on weather and phenology. All ecological management activities should follow best management practices and be acknowledged and approved by PHNRC