# Invasive Species Management Plan (ISMP): Eradication of Wineberry at 4-Mile Point Preserve

# A Framework for Control

#### Purpose:

The Invasive Species Management Plan (ISMP) template is a working document to help guide invasive species treatments after early identification and surveys have been conducted. The guide includes steps for post treatment monitoring and restoration over a five-year period. The ISMP template is designed to treat a specific infestation at a given location. Multiple ISMP can be deployed over a larger geography. In such a case a more comprehensive plan should be considered when prioritizing multiple treatments in a park or preserve like setting.

The framework built into this template helps to identify all the variables that are more likely to result in more successful treatments with lasting effects into the future. All management strategies should consider an <a href="Integrated Pest Management (IPM)">Integrated Pest Management (IPM)</a> approach and a Framework of Response. Invasive species management plans should be independently reviewed by a project manager or a Capital Region PRISM Coordinator.

#### Section 1: Project Summary

The project summary provides an overview of the site with a description including contact information, location, current land use, species present, and other related parcel characteristics. The project description identifies the treatment target. Survey maps and reports are included in this segment, potential land managers/owners are identified with approval. Map(s) outlining the project site and infestation area are clearly marked. Elements from preexisting survey reports can be used to supplement this segment. All permits are secured and completed before commencement of treatment. State Environmental Quality Review (SEQR) checklist should be completed at this stage. SEQR requires the sponsoring or approving governmental body to identify and mitigate the significant environmental impacts of the activity it is proposing or permitting.

The project summary includes a step to determine if the proposed work is feasible and justifiable by completing an <a href="Invasive Plant Management Decision Analysis Tool">Invasive Plant Management Decision Analysis Tool</a> (IPMDAT) simulation, when applicable. The Capital Region PRISM recommends using the tool to help determine if an invasive plant control project is likely to be successful and if it warrants an investment of their agency's resources. To justify spending resources on an invasive plant control project: The invasive species must cause serious environmental or economic harm or harm to human health.

In addition, work in a specific geography can be assessed to see if it falls into an area relevant for protection on the New York Invasive Species Prioritization Models. These models were created to highlight areas of the state that have high ecological significance, a high risk of spread of invasive(s) into the area and a high value according to their protected status. The models can be used to help guide and justify invasive species efforts. The map can be accessed on the <u>Capital Region PRISM Prioritization</u> page.

Finally, it is strongly encouraged to determine if conservation priority species or habitat are located in or near the geographic area where the proposed work will occur. The Capital Region PRISM suggests the use of the New York State Department of Environmental Conservation (NYSDEC) "Environmental Resource Mapper" to identify significant natural communities, and rare plants or animals. The NYSDEC has also developed a list of threatened and endangered



<u>species</u> of New York State and a list of species with the <u>greatest conservation need</u> that should be referenced before starting treatment to ensure management will not cause any harm to these species.

#### Section 2: Implementation Summary

The implementation summary will provide guidance on treatment methods with best management practices, monitoring, and restoration strategies. After a 3-5-year period, a new assessment using the ISMP template may need to be conducted based on changing site conditions and parcel priorities.

#### Section 3: Project Implementation

The implementation segment contains treatment timelines and post season summaries. Always consider the phenology of the invasive target when deploying a treatment to be effective. A post season summary will be completed to document successes, failures, and needed adjustments to the management approach. Future treatment timelines will reflect such reassessment needs.

## **Saving Plans**

Please submit your Invasive Species Management Plan to the Capital Region PRISM for review. ISMP will be saved in an online repository for historical purposes and future considerations. All survey and treatment data associated with the project should be reported in the <a href="New York iMap Invasives">New York iMap Invasives</a> online data base. Please contact the PRISM for survey report forms.

#### Section 1: Project Summary

Project Name	Wineberry Eradication at Four Mile Point Preserve
Location	Four Mile Point Preserve; 169 4 Mile Point Rd, Coxsackie, NY 12051
Latitude / Longitude	42.31707°, -73.78657°
Project Manager / Title	Sam Schultz, Terrestrial Invasive Species Coordinator
Project Manager Contact	ss986@cornell.edu
Owner Name / Title	Scenic Hudson; Daniel Smith
Owner Contact	dsmith@scenichudson.org

<u>Site Description</u>: Provide existing conditions of the site, including species present, ecologic condition, current land use, stakeholders and or historical uses.

Four Mile Point Preserve is a 7.6-acre riverfront preserve with trail to an observation platform meant to provide recreation opportunities.

<u>Project Description</u>: Provide a clear and concise of the work to be conducted, conservation targets and desired future conditions.

Plants are being pulled by hand using grubber tools to eradicate the wineberry from the preserve to protect biodiversity at this site.

Overall Project Size:	SEQR Form Complete? [Add as an Appendix]
0.25 acres	N/A



Does the work proposed fall into a well-defined area of ecologic significance and risk as indicated on the NY Invasive Species Prioritization Models?

Yes, PCA [Optional Step/Include in Map Section]

Invasive Plant Management Decision Analysis Tool (IPMDAT) Recommendations. [Optional Step/Include in Map Section]

N/A

Pesticide Use Proposed?

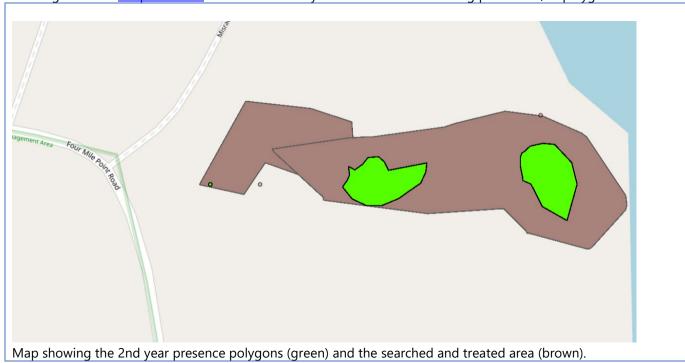
No

Aquatic Pesticide Permits: <a href="https://www.dec.ny.gov/chemical/8530.html">https://www.dec.ny.gov/chemical/8530.html</a> Pesticide Laws and Regulations: <a href="https://www.dec.ny.gov/chemical/112881.html">https://www.dec.ny.gov/chemical/112881.html</a>

List Associated Master Plan if relevant to a larger project: [link file URL or attach as an Appendices]

N/A

<u>Map:</u> Develop a map of the project area showing the geography and extent of infestation. Partners are strongly encouraged to use <u>iMap Invasives</u> or to define survey and treatment areas using points and/or polygons.



# **Section 2: Implementation Summary**

This section provides descriptions of any treatment methods, restoration, and monitoring efforts occurring over the course of the plan.

<u>Treatment:</u> Describe in detail treatment methods selected for the site and why they were chosen along with any alternatives considered. [Best management practice(s) should be outlined and sourced] State the estimate the number or abundance of species to be treated/removed and method of disposal. Describe the level of anticipated site disturbance and mitigation. If using a pesticide, provide the chemical name and application method.



eserve to protect

Plants are being pulled by hand using grubber tools to eradicate the wineberry from the preserve to protect biodiversity at this site.

native plants to be separate restoratio	ly explain the revegetat used, seed mixes, and a on plan was developed, nimal disturbance).	any preferred nurseries	s. Describe when nativ	e seeds will be collect	ed on site. If a			
N/A								
Post-Monitoring:	Explain the monitoring	procedure, when it wi	ill occur and why, and v	who will complete it.				
_	g occurs each year by th of June before fruit			•	•			
	Treatment (Monitoring are anticip	-						
date range with an	initial. Year 1	Year 2	Year 3	Year 4	Year 5			
Early Spring								
Late Spring								
Summer	☐ 6/6/19 Grubbing to remove roots and hand pulling	☐ <b>7/15/20</b> Grubbing to remove roots and hand pulling	☐ <b>6/17/21</b> Grubbing to remove roots and hand pulling	Grubbing to remove roots and hand pulling	☐ <b>7/11/23</b> Grubbing to remove roots and hand pulling			
Early Autumn								
Late Autumn								
Notes: Make notes as necessary and keep the documentation simple. Base work off of plant phenology for treatments and revegetation. Document why things did not work with recommended adjustments in the post season report.								

# Section 3: Project Implementation - Year 1: 2019

<u>Treatment Schedule</u>: Plan out when and how treatments will occur. Attach and reference separate spreadsheet if more space is needed for additional species. Include the <u>tier level</u> and <u>threat ranking</u> of each species.

Target Species Tier and Rank	Area Infested (acres)*	Species Abundance (%)	Target Goal (%)	Treatment Window (MM/DD/YY)	Treatment Method	Disposal Method
Wineberry (Rubus phoenicolasius) Tier 3, Very High	0.21	N/A	100	06/06/19	Grubbing, hand pulling	Solarize and trash

High											
*If infestation is linear, use	*If infestation is linear, use miles to measure "area infested"										
Post Season Report											
End-of-Year Summa Explain any successes, fails N/A		justments. Including rest	toration, missed tr	eatments, not monitorinį	g, etc.						
Adjustments Needed:  Explain any changes to be made for future years and update treatment restoration and calendars.  Reminder: if the project changes drastically (i.e., switch from manual control to chemical control) it may require a new SEQR review.											
N/A											
Year 1 Notes:											
N/A											



# Section 3: Project Implementation - Year 2: 2020

<u>Treatment Schedule</u>: Plan out when and how treatments will occur. Attach and reference separate spreadsheet if more space is needed for additional species. Include the <u>tier level</u> and <u>threat ranking</u> of each species.

Target Species Tier and Rank	Area Infested (acres)*	Species Abundance (%)	Target Goal (%)	Treatment Window (MM/DD/YY)	Treatment Method	Disposal Method
Wineberry (Rubus phoenicolasius) Tier 3, Very High	0.21	N/A, Dense	100	07/15/20	Grubbing, hand pulling	Left on site

<sup>\*</sup>If infestation is linear, use miles to measure "area infested"

## **Post Season Report**

#### End-of-Year Summary:

Explain any successes, failures, or needed adjustments. Including restoration, missed treatments, not monitoring, etc.

Used a hand grubber tool to free the roots and hand pulled all plants seen in the areas where the removal occurred last year. We walked a perimeter around the previous infestation to ensure all plants regenerating from the leftover seed bank we found and pulled. Mature plants were bagged and taken to solarize.

There was a notable difference in regeneration following last year's removal. Areas that contained mature overgrown patches of wineberry in 2019 only contained seedlings that were <3" tall and sparsely scattered. Area near the rock cliff is seeing very little wineberry regrowth and instead is full of native *Rubus spp.*, black swallow-wort, and some native meadow plants.

# Adjustments Needed:

Explain any changes to be made for future years and update treatment restoration and calendars.

Reminder: if the project changes drastically (i.e., switch from manual control to chemical control) it may require a new SEQR review.

Continue management

# Year 2 Notes:

Amount removed (# bags, # plants, # mature, # seedlings): 7 mature, 90 seedlings, 1 bag

Time spent on removal: 1 hour

Treatments were uploaded to iMapInvasives

# Section 3: Project Implementation - Year 3:2021

<u>Treatment Schedule</u>: Plan out when and how treatments will occur. Attach and reference separate spreadsheet if more space is needed for additional species. Include the <u>tier level</u> and <u>threat ranking</u> of each species.

Target Species Tier and Rank	Area Infested (acres)*	Species Abundance (%)	Target Goal (%)	Treatment Window (MM/DD/YY)	Treatment Method	Disposal Method
Wineberry (Rubus phoenicolasius) Tier 3, Very High	0.25	5%-25%	100	06/17/21	Grubbing, hand pulling	Solarize and trash

<sup>\*</sup>If infestation is linear, use miles to measure "area infested"

# **Post Season Report**

#### End-of-Year Summary:

Explain any successes, failures, or needed adjustments. Including restoration, missed treatments, not monitoring, etc.

Used a hand grubber tool to free the roots and hand pulled all plants seen in the areas where the removal occurred last year. We walked a perimeter around the previous infestation to ensure all plants regenerating from the leftover seed bank we found and pulled.

There was a notable difference in regeneration following the second year's removal. The first two wineberry locations were set back and becoming overgrown. There were more bags of wineberry removed this year due to in 2020 leaving plants on site, however, there were less total pulled. Area near the rock cliff is seeing very little wineberry regrowth and instead is full of native Rubus spp., black swallow-wort, and some native meadow plants. A small additional patch was found behind the shed along the trail.

#### Adjustments Needed:

Explain any changes to be made for future years and update treatment restoration and calendars.

Reminder: if the project changes drastically (i.e., switch from manual control to chemical control) it may require a new SEQR review.

Continue monitoring and management.

#### Year 3 Notes:

Amount removed (# bags, # plants, # mature, # seedlings): 2 bags

Time spent on removal: 2 hours

Is follow-up needed? Yes

Were treatments uploaded to iMapInvasives? Yes



# Section 3: Project Implementation - Year 4: 2022

<u>Treatment Schedule</u>: Plan out when and how treatments will occur. Attach and reference separate spreadsheet if more space is needed for additional species. Include the <u>tier level</u> and <u>threat ranking</u> of each species.

Target Species Tier and Rank	Area Infested (acres)*	Species Abundance (%)	Target Goal (%)	Treatment Window (MM/DD/YY)	Treatment Method	Disposal Method
Wineberry (Rubus phoenicolasius) Tier 3, Very High	0.0873	5%-25%	100%	06/14/22	Grubbing, hand pulling	Solarize and trash

<sup>\*</sup>If infestation is linear, use miles to measure "area infested"

## **Post Season Report**

#### End-of-Year Summary:

Explain any successes, failures, or needed adjustments. Including restoration, missed treatments, not monitoring, etc.

Used a hand grubber tool to free the roots and hand pulled all plants seen in the areas where the removal occurred last year. We walked a perimeter around the previous infestation to ensure all plants regenerating from the leftover seed bank we found and pulled.

Considerably less plants compared to previous years. Post-treatment data entered via the Post-treatment survey application in Survey123.

# Adjustments Needed:

Explain any changes to be made for future years and update treatment restoration and calendars.

Reminder: if the project changes drastically (i.e., switch from manual control to chemical control) it may require a new SEQR review.

Continue monitoring and management

# Year 4 Notes:

Amount removed (# bags, # plants, # mature, # seedlings): 2 bags

Time spent on removal: 2 hours

Is follow-up needed? Yes

Were treatments uploaded to iMapInvasives? Yes



# Section 3: Project Implementation - Year 5: 2023

<u>Treatment Schedule</u>: Plan out when and how treatments will occur. Attach and reference separate spreadsheet if more space is needed for additional species. Include the tier level and threat ranking of each species.

Target Species Tier and Rank	Area Infested (acres)*	Species Abundance (%)	Target Goal (%)	Treatment Window (MM/DD/YY)	Treatment Method	Disposal Method
Wineberry (Rubus phoenicolasius) Tier 3, Very High	0.0805	25% - 49%	100%	7/11/2023	Grubbing and handpulling	Larger plants left to airdry on site, smaller plants trashed

<sup>\*</sup>If infestation is linear, use miles to measure "area infested"

# **Post Season Report**

#### **End-of-Year Summary**:

Explain any successes, failures, or needed adjustments. Including restoration, missed treatments, not monitoring, etc.

A new patch of the Wineberry was detected outside of the previous treatment area, closer to the parking lot of the preserve. The plants were very established, and the patch was dense and tangled within a large cluster of oriental bittersweet. Plants were mature and fruiting.

Grubbing is producing great results and a reduction in regrowth of plants. Areas of previous treatment had few stems with about 15-20 per patch.

#### Adjustments Needed:

Explain any changes to be made for future years and update treatment restoration and calendars.

Reminder: if the project changes drastically (i.e., switch from manual control to chemical control) it may require a new SEQR review.

Continue to monitor and manage on an annual basis, prior to fruit set if possible.

## Year 5 Notes:

Amount Removed: 3 bags plus about 100 stems left onsite.

Time spent on removal: 2 hours, 5 people

Is follow up needed?: Yes, annual follow-up treatment recommended.

Were treatments uploaded to iMapInvasives? Yes

