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

(518) 885-8995

Invasive Species Management Plan (ISMP): False Spirea at Lake Bonita at Moreau Lake State Park

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 Integrated Pest Management (IPM) approach. 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 Environmental Assessment Forms The project summary includes a step to determine if the proposed work is feasible and justifiable by completing an <u>Invasive Plant</u> Management Decision Analysis Tool (IPMDAT) simulation. 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 at the <u>Capital Region PRISM Prioritization</u> page.

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 in a calendar 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 on line repository for historical purposes and future considerations. All survey and treatment data associated with the project should be reported in the New York iMap Invasives online data base. Please contact the PRISM for survey report forms.

Section 1: Project Summary

Project Name	False Spirea
Location	Moreau Lake State Park/ Bonita Lake 201 Wilton Rd, Corinth, NY 12822
Latitude Longitude	43°20'71.0"N 73°77'31.0"W
Project Manager /	Sam Schultz, Terrestrial Invasive Species Coordinator
Title	
Address	201 Wilton Rd, Corinth, NY 12822
Phone	518.321.0189
Email	Ss986@cornell.edu

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

Lake Bonita (Moreau Lake State Park)

This beautiful lake, recently acquired by the park after the closure of Mt. McGregor Correctional Facility, offers pristine Adirondack beauty. The lake contains bog matts and is part of a bird wildlife management area in the Moreau Lake State Park ISPZ. The Bonita Lake access road, left side coming in, is the site of the infestation. There are populations growing on either side of the clearing on the left side of the road, after you take the turn from the main road. One satellite location is present before the clearing, closer to the main road, the second location is past the clearing surrounding the pit on the hill above the clearing(caution), the third location is just past the pit further up the road.

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

Treatment Method: A roughly 0.225 acre area of newly identified infestation of False Spirea was manually removed in relatively pristine habitat. A shoveling removal method was used by a team of 6 to dissect the earthen material and extract the roots of the false spirea. Vegetative material above and below the surface removed was carefully piled up and left behind to rot. The site will need multiple retreatments to eradicate the plant locally using this lesser management practice. The site is socially valuable and ecologically significant.

Overall Project Size:

SEQR Form Complete? [Add as an Appendix]

0.12 acre N/A



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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 ISPZ

[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?

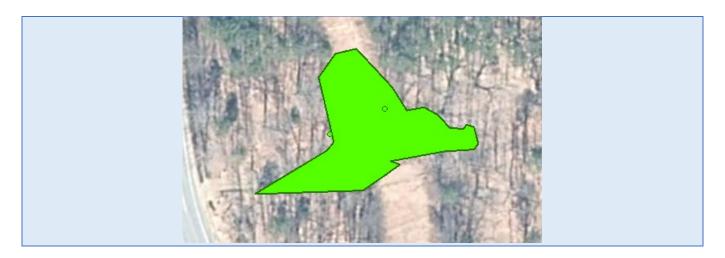
No

Aquatic Pesticide Permits: https://www.dec.ny.gov/chemical/8530.html
Pesticide Laws and Regulations: https://www.dec.ny.gov/chemical/8530.html

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.



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Section 2: Implementation Summary

This page 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.

Manual: Removal with Spades using Rhizomatous Dissections

Vegetative material above and below surface was removed and left out to solarize and rot away. The site will likely need multiple retreatments to eradicate the plant locally using this lesser management practice. The site is socially valuable and ecologically significant (protected by ISPZ)

<u>Restoration:</u> Briefly explain the revegetation efforts that will occur. If doing active restoration, make sure to attach a list of native plants to be used, seed mixes, and any preferred nurseries. Describe if when native seeds will be collected on site. If a separate restoration plan was developed, reference it here. If not actively restoring, explain why. (ex. Allelopathy, native seed source in place, minimal disturbance).

On site seed sources are being utilized to restore this area as Spiraea is removed.	

Post-Monitoring: Explain the monitoring procedure, when it will occur and why, and who will complete it.

PRISM and Parks will collaborate moving forward with this project. PRISM staff will re-visit the site 3-4 times next spring and summer. Site will be checked periodically with planned removals to work at reducing the root network on site.



<u>Treatment, Post-Treatment (Monitoring), and Restoration Calendar</u>: Briefly outline when treatment, restoration efforts, and post treatment monitoring are anticipated to occur with a date range. When completed check the box next to the targeted date range with an initial.

	Year 1-2021	Year 2-2022	Year 3-2023	Year 4	Year 5
Early Spring					
Late Spring	June 9 th Plants were cut or pulled from the root to ensure they won't sprout there again.	June 2 nd grubbing tools were used to dig up roots; top growth was cut back on some plants	June 2 nd grubbing tools were used to dig up roots along roadside and edge of field towards fence		
Summer	August 5 th Plants were cut or pulled from the root to ensure they won't sprout there again.	August 11 th grubbing tools were used to dig up roots; top growth was cut back on some plants	June 30 th grubbing tools were used to dig up roots and remove stems; any remaining growth was cut down.		
Early Autumn	After August 5 th Power/utility company mowed down plants and removed trimmings.	After August 11 th and before October 4 th Power/utility company mowed down plants and removed trimmings.	August 25 th grubbing tools were used to dig up roots and remove stems; biomass that was removed was piled in center of site to prevent resprouting		
Late Autumn					

Notes: Plants were removed and left to solarize/rot. After treatment in the summer, the utility company mowed down plants in the sunny area and removed the trimmings.

Section 3: Project Implementation - Year 1 (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 and threat ranking</u> of each species.

Target Species Tier and Rank	Area Infested	Specie Abundance%	Target Goal % Cover	Treatment Window	Treatment Method	Disposal Method
False Spirea Untiered and Unknown rank	0.2256 acres	51-75%	0	Early Summer	Root cut/pull	Solarize and leave on site
False Spirea	0.2256 acres	51-75%	0	Late Summer	Root cut/pull	Solarize and leave on site
False Spirea	0. 2256 acres	51-75%	0	Early Fall	Mow	Unknown- moved off-site

<u>Post Season Report</u>

End-of-Year Summary:

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

Limited regrowth from roots of plants that were dug up earlier in the summer and lack of regrowth on plants that were topped and flowers removed. No more plants flowered since last visit.

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 cut and pull plants

Year 1 Notes:

Possible pulling of plants or weed whacking in order to slow growth and diminish populations.

Section 3: Project Implementation - Year 2 (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 and threat ranking</u> of each species.

Target Species Tier and Rank	Area Infested	Specie Abundance%	Target Goal % Cover	Treatment Window	Treatment Method	Disposal Method
False Spiraea Untiered and Unknown rank	0.2256 acres	51-75%	0%	Spring- Early Summer	Grubbing and cutting	Solarize and leave on site
False Spiraea	0.2256 acres	51-75%	0%	Summer	Grubbing and cutting	Solarize and leave on site
False Spiraea	0.2256 acres	50%-60%	0%	Early fall	Mowing, some grubbing on edges	Unknown moved off- site

Post Season Report

End-of-Year Summary:

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

There was a lot of success where multiple people were grubbing and roots were effectively removed. Native vegetation is beginning to re-establish in the area where the False Spiraea was effectively managed, however, this is a very intensive effort. A very small patch of pale swallowwort was discovered within the treatment area and reported in iMapInvasives. The logs limiting access to the areas surrounding the wells were cut and removed to allow for better access in the future.

<u>Adjustments Needed:</u>

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.

Treatment will continue multiple times throughout the field season. The well and foundation have been sectioned off for safety concerns. Focus for grubbing efforts should be on the periphery of the infestation with a brush-hog being used for the main infestation. Use volunteer base at Moreau (Friends of Moreau) to obtain native seeds to restore the exposed areas. Currently Mullein is overtaking the area with exposed soil next to the well. Ensure that plants are not piled up, they will re-root and re-sprout.

Year 2 Notes:

This treatment area requires a large group for effective management of this infestation. Collaborate with Parks staff for effective treatment. Although there is some native regrowth, another invasive plant, sweet pea *Lathyrus odoratus*, is rapidly taking over the disturbed area.





Section 3: Project Implementation - Year 3 (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 <u>tier level and threat ranking</u> of each species.

Target Species Tier and Rank	Area Infested	Specie Abundance %	Target Goal % Cover	Treatment Window	Treatment Method	Disposal Method
False spiraea (moderate threat, Untiered)	0.3 acres	51-75%	0%	Early Summer June 2 nd	Grubbing	Left on site
False spiraea (moderate threat, Untiered)	0.3 acres	50-60%	0%	Summer June 30 th	Grubbing / Brushcutting	Left on site
False spiraea (moderate threat, Untiered)	0.22 acres	51-75%	0%	Early autumn August 25 th	Grubbing	Left piled on site
Japanese Stiltgrass (Very High threat, Tier 4)	0.00013 acres	5%	0%	Early autumn August 25 th	Handpull	Trash

Post Season Report

End-of-Year Summary:

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

Over half of the spiraea population was pulled out and the rest was cut using brush cutters prior to the spiraea going to seed. There will likely be regrowth next year and the pulling method will be most effective in reducing and eventually eradicating it.

Upon the 3rd visit to the site, it was discovered plants were resprouting from roots just set on top of the leaf litter. Therefore, removed biomass was piled into small piles in the middle of already dense patches of false spiraea.

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.

Treatment will continue multiple times throughout the field season. The well and foundation are safety concerns on site. Best success is being seen with grubbing, if needed brush hog should be used to ensure no plants go to flower.

Year 3 Notes:

New detection of false spiraea down by Lake Bonita, grubbed and bagged up to be disposed off-site. Upon the second and third site visits, more stems were found and removed. Pale swallowwort detected in the middle of false spiraea site in flower. Plant was dug up and removed. Four stems. Native plants have begun returning to the area such as wild basil and milkweed.



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Section 3: Project Implementation - Year 4

<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	Specie Abundance%	Target Goal % Cover	Treatment Window	Treatment Method	Disposal Method

<u>Post Season Report</u>
End-of-Year Summary:
Explain any successes, failures, or needed adjustments. Including restoration, missed treatments, not monitoring, 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.
<u>Year 4 Notes:</u>

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Section 3: Project Implementation - Year 5

<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	Specie Abundance%	Target Goal % Cover	Treatment Window	Treatment Method	Disposal Method

<u>Post Season Report</u>
End-of-Year Summary:
Explain any successes, failures, or needed adjustments. Including restoration, missed treatments, not monitoring, 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.
<u>Year 5 Notes:</u>