# **Invasive Species Management Plan (ISMP):**

# 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 Capital Region PRISM Prioritization 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 species of New York State and a list of species with the greatest conservation need 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	Japanese Stiltgrass Eradication at Wilton Wildlife Preserve, Neilmann Parcel
Location	Wilton Wildlife Preserve, Neilmann Parcel; 248 Ruggles Rd, Saratoga Springs, NY 12866
Latitude / Longitude	43.133652013285335, -73.68202344439258
Project Manager / Title	Sam Schultz, Terrestrial Invasive Species Coordinator
Project Manager Contact	<u>ss986@cornell.edu</u> , 518-885-8995
Owner Name / Title	Town of Wilton, Victoria Spadaro- Public Program Coordinator, Environmental Educator
Owner Contact	(518) 450-0321

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

The Wilton Wildlife Preserve & Park is dedicated to conservation, environmental education, and outdoor recreation. The protected land base, which encompasses ecologically significant habitats, rare plant communities, endangered and threatened wildlife, and public trails, is at the heart of all three.

The 145-acre parcel is primarily wooded with wetlands and vernal pools. The woods reveal old logging roads and stumps that are clues to the land's history. The western portion of this property encompasses part of Miller Swamp, the largest wetland in the Town of Wilton. The parcel is open to the public and features trails along forested and wetland habitat. It is designated as a Priority Conservation Area (PCA) for the PRISM.

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

The goal of this project is to eradicate Japanese Stiltgrass in this parcel to prevent it from spreading in this park which is largely uninvaded.



Overali Project Size:	SEQR F	-orm Complete	! [Add as an Appendi	IX]	
1 acre	<u></u>	N/A			
Does the work propo Species Prioritization	sed fall into a well-defined Models?	area of ecolog	ic significance and	d risk as indicate	d on the NY Invasive
Yes	[Optional Step/Include in Map	Section]			
Invasive Plant Manag N/A Pesticide Use Propos					ude in Map Section]
No	Aquatic Pesticide Perm Pesticide Laws and Reg				
List Associated Maste	er Plan if relevant to a large	er project: [link t	file URL or attach	as an Appendice	es]
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.

This area has been primarily treated by hand pulling. If treated early enough in the season, mechanical treatment could be completed with a weedwhacker.

<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 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).

There is no active restoration being completed at this site but local seed sources will be used for restoration.

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

Annually, PRISM staff and Wilton Wildlife Preserve Educator will monitor the site around late August to early September.

<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	Year 2	Year 3	Year 4	Year 5
Early Spring					Post treatment monitoring and restoration continues
Late Spring					
Summer					☐ 8/14/2023 Hand- pulling of plants in smaller parcel
Early Autumn	□ 08/16/2019 Hand-pulling of plants	□ 09/16/2020 Hand-pulling of plants; weed whacking of plants	□ 10/18/2021 Hand-pulling of plants	□ 09/16/2022 Hand-pulling of plants	
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.

Treatments for stiltgrass has been late every year following initial treatment. Much of this is due to turnover, treatments need to occur in mid-late August.

## 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
Japanese Stiltgrass (Microstegium vimineum)	4.83 acres	Unknown	100%	08/16/2019	Hand pull	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.

Japanese Stiltgrass was removed at two main sites, to get to the first patch on the yellow loop the team headed left at the fork by the trail head sign. This patch was on the left side of the trail. The Second patch was at the beginning of the orange loop. The patch began to get dense closest to a patch of ferns. The Stiltgrass infestation was on both sides of the trail. The infestation continued down the trail where it was to the right of the fork. All Stiltgrass in these areas was removed. Stiltgrass is an annual and should be removed before going to seed by manual, mechanical or fire.

## 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.

Future surveying and monitoring of the site for new growth of infestation. If future removal is needed, when removing, double bag the trash bags if heavy. Bring wheel barrel, gorilla cart, and/or wagon to carry out heavy trash bags. Signs should be made for the beginning at the trail head at the individual infestation sites. These signs should warn the public of the issue at hand and suggest brushing off bottoms of boots and fur on pets as to not spread seeds to any other parcels in the Saratoga County. Treatment year 2 of 7 based on seed viability.

## Year 1 Notes:



# 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
Japanese Stiltgrass (Microstegium vimineum)	6.5 acres	Unknown	100%	9/16/2020	Hand pull	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.

Manual removal of stiltgrass, pulling the plants up especially in areas where native plants are dominant to avoid non-target species removal. Weed whacking of dense stiltgrass patches along road to suppress infestation for potential hand-pulling next year.

Adjustments Needed:
Explain any changes to be made for future years and update treatment restoration and calendars.
<b>Reminder:</b> if the project changes drastically (i.e., switch from manual control to chemical control) it may require a new SEQR review.
Year 2 Notes:

# 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
Japanese Stiltgrass (Microstegium vimineum)	4.42 acres	5-25%	100%	10/18/2021	Hand pull	Trash

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

# **Post Season Report**

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

Very late treatment this year, treatment needs to be done in mid-late August.

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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>Y</u>	'ear 3 Notes:				

# 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
Japanese Stiltgrass (Microstegium vimineum)	0.69 acres	5-25%	100%	09/16/2022	Hand pull	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.

There was a group of four staff (PRISM TIS Coordinator, 2 WWP interns, and the WWP Stewardship Coordinator) hand-pulled plants all along the trail. Other topics including forest pests and ecological responses to invasive species damage.

### 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 needs to occur in mid-late August before plants go to seed.

#### Year 4 Notes:

Erin McCabe is no longer the Stewardship Coordinator for WWP. Lily Esposito has taken over the position and is very motivated about this project.

# 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 <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
Japanese Stiltgrass (Microstegium vimineum) Tier 3, Very high threat Prohibited	0.69 acres	5-25%	100%	08/14/2023	Hand pull	Left on site
Japanese Stiltgrass (Microstegium vimineum) Tier 3, Very high threat Prohibited	0.69 acres	5-25%	100%	9/14/2023	Hand Pull	Bagged and Solarized

<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.

8/14/23: Smaller patch was hand-pulled. Larger patch was unable to be treated at this time due to large yellow jacket nest in nearby tree. Weed whackers were unable to be used.

9/14/2023: CR-PRISM team went back to site with two Wilton wildlife employees and a volunteer to hand pull all Stiltgrass and avoid bees.

#### 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.

8/14/23: Yellow jacket nest must be removed before response work can continue.

9/14/2023: Mowing should be completed prior to Japanese stiltgrass going to seed. Provide them with Invasive Species Prevention Toolkit materials or invite them to one of the trainings to avoid spreading it around further.

#### Year 5 Notes:

8/14/23: Plants have not gone to seed at this time. An additional visit should be made to eradicate the main patch once yellow jackets are removed.

9/14/23: Stiltgrass is sparse compared to previous years.

# Section 3: Project Implementation - Year 6

<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.

Tier and Rank	Infested (acres)*	Abundance (%)	(%)	Window (MM/DD/YY)	Method	Method
*If infestation is linear, use miles to	measure "area ir	ifested"				
Post Season Report						
End-of-Year Summary: Explain any successes, failures, or n	eeded adjustmen	ts. Including restoration	, missed treatment	s, not monitoring, etc.		
		J		<u> </u>		
Adjustments Needed:						
Explain any changes to be made for						
Reminder: if the project changes d	rastically (i.e., swi	tch from manual control	to chemical contro	ol) it may require a new	SEQR review.	
Year 5 Notes:						
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