

2015
Final Report
Pound Ridge Hardy Kiwi Control Project

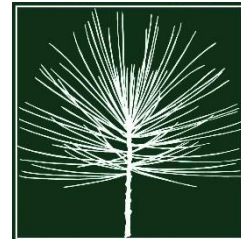
Prepared for
The Lower Hudson Partnership for Regional Invasive Species Management

Prepared by
Trillium Invasive Species Management, INC

This document summarizes the deliverables completed towards the 2015 project to follow-up with control of a patch of *Actinidia arguta* in the Town of Pound Ridge, NY. Conception and execution of the project was made possible through a partnership between; The Invasives Project-Pound Ridge, The Pound Ridge Land Conservancy and Trillium Invasive Species Management, INC.



Trillium
invasive species management, inc.



This project was contracted by the Lower Hudson Partnership for Regional Invasive Species Management (PRISM) using funds from the Environmental Protection Fund as administered by the New York State Department of Environmental Conservation



Project Introduction:

This project continues efforts to eliminate a patch of Hardy Kiwi in Pound Ridge, NY. Control efforts in 2014 were successful in that growing season by removing existing biomass and initiating herbicide treatment with cut-stem and foliar applications of glyphosate. The goal for 2015 was patch eradication through a continuation of herbicide treatment.

Project Narrative:**A. Justification of project and its importance -**

Hardy Kiwi (*Actinidia arguta*) is an ED/RR species for the Lower Hudson PRISM (see attached commentary by Steve Young). It is a perennial vine native to Japan, Korea, Northern China, and Russian Siberia. It produces a small fruit resembling the commercial kiwifruit. To the best of our knowledge, the ideal outcome of this project is that one municipality would be free of Hardy Kiwi.

B. Breadth of application/ Regional implications -

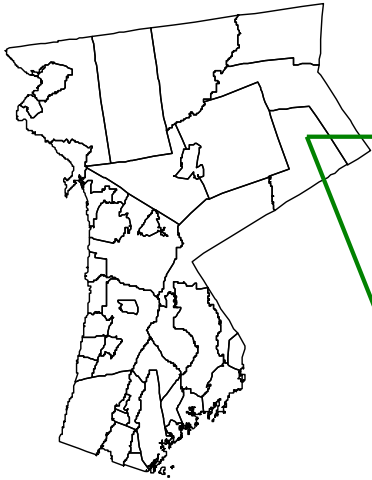
This patch of Hardy Kiwi was identified in 2013. The localized mature infestation is on private property and reproducing vegetatively. One immediate intention of the project is to protect a nearby conservation preserve (Isaacson Preserve).

As an older stand, the infestation had the potential to begin reproducing with fruit (see Steve Young's comments about the unusual reproductive potential of this plant). Large animals favor the kiwi fruit, carrying it and dispersing it further. The preventative applications of this project are therefore extensive.

From a broader perspective, this project has served to provide education and outreach to the neighboring community of Bedford on the existence of hardy kiwi and its control methods. Several significant stands, some of which are reproducing with fruit, have been identified in Bedford. This local initiative will serve as an introduction to the services available through the LHPRISM, and as a model for the town of Bedford, should they choose to initiate their own Hardy Kiwi management strategy. Channels of communication about invasive species (especially vines) have been established between the conservation boards of Pound Ridge, its initiative 'The Invasives Project', and Bedford. The Bedford Conservation Board has been apprised of the work being done in Pound Ridge, how the problem was identified and can be addressed. The Bedford Conservation board is encouraged to address the Hardy Kiwi infestations in their community.

Hardy Kiwi (*Actinidia arguta*) Infestation 229 Trinity Pass Road, Pound Ridge NY

Westchester County, Town of Pound Ridge
2600 square foot Hardy Kiwi patch
April 2014



Bank of Stream: 400 feet from project
Wetland Boundary delineated 4/21/14: 225 feet from project
Property Lines
Perimeter of Kiwi Patch: 2600 sqft

30 0 30 60 Feet



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C. Detailed scope of work –

Trillium ISM was responsible for monitoring and treatment of the Pound Ridge Hardy Kiwi patch for the 2015 season and for the development of a Best Management Practices (BMP) sheet. Monitoring and treatment activities are outlined below and the BMP sheet is appended at the end of this document.

Early June - During a monitoring visit Trillium found approximately 12 stems growing. Based on pin flags left from 2014 treatments it is apparent that these stems are growing from locations that did not have re-growth following the 2014 treatments.

Mid-June – Approximately 0.5 ounces of Rodeo (EPA Reg No 62719-324) were used in a 2% concentration to treat the growth with a foliar application. All treated stems were marked with pin flags.



Post application photo from June 18, 2015

September – A monitoring visit found the stems treated in June had died, however growth in new locations was found.

October - Approximately 0.5 ounces of Rodeo (EPA Reg No 62719-324) were used in a 2% concentration to treat the new growth with a foliar application.



Post application photo from October 5th, 2015

Project Summary

The propensity for Hardy Kiwi to root at nodes with ground contact is evident in this population. This patch is a network of mature stems that over time have laid on the ground and rooted. Evidenced by pin flags placed at application points re-growth has not been occurring along stems post-treatment, but on each visit has been found at new points along the root systems.

This ability to root at stem nodes seems limited to rooted plant material. Monitoring of cut material that was piled in 2014 exhibits no re-growth.

Herbicide applications for 2015 occurred on approximately 24 stems. Monitoring after applications found that glyphosate applied at 2% provided complete control of all treated above ground stems and re-growth. Monitoring will be required in 2016 to ensure that the herbicide has impacted the root systems sufficiently to eradicate the patch.

Stems were observed growing in June and treated. A monitoring visit in September found the treated stems had succumbed to the herbicide, however in the interim period new stems had emerged at different locations. Given the observed staggered timing of stem emergence, monitoring, treatment and any potential follow-up treatments for 2016 should be scheduled for late summer. The Pound Ridge Land Conservancy is scheduled to monitor the site in 2016, however it is likely that one more season of herbicide application will be required. Therefore it is suggested that Trillium continue monitoring for another season in order to provide any necessary treatment.

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