

**Title:**

High-Level IPM at Cooperstown's Doubleday Field

**Project Leader(s):**

**Quinton Hasak** – Doubleday Field Groundskeeper

**Joellen Lampman** – NYSIPM Program

**Cooperator(s):**

**Bruce Maxson** – Doubleday Field Committee Chairman

**Frank Rossi, Ph.D.** – Department of Horticulture, Cornell University

**Abstract:**

Doubleday Field is a much loved, historic ballfield owned by the Village of Cooperstown, which has set a policy to try and eliminate pesticide use on Village property. The facility is subjected to intense traffic, hosting over 300 games this year, rain or shine, as well as community events. With the support of the NYS IPM Program, Doubleday Field was managed during the 2012 season using high-level IPM. Many of these practices continued under new management in 2013. While largely successful, weeds continue to be an issue and weed management needed to be revisited.



Play ball!

In 2014, high-level IPM with the support and recommendations of the project team was continued, with an eye towards the compelling case study and educational opportunities to help garner support from players and educate the public about IPM.

2014 proved to be an undemanding year for turfgrass management, and strict adherence to the core cultural practices of mowing, fertilizing, irrigation, and overseeding provided a relatively pest free playing field. It was determined that no alternative pesticides were necessary to control weeds or insects in the field. Weeds in the warning track and under the bleachers continued to cause some issues, but the addition of warning track material and diligent manual raking and flaming kept these issues under threshold levels.

**5. Background and justification:**

Residents of the Village of Cooperstown are very concerned about the use of pesticides and their possible impact on nearby Otsego Lake. In 2012, the Village passed a policy to try and eliminate the use of synthetic pesticides on Village property. With the support of the New York State IPM Program and the local community, the historic Doubleday Field was managed during the 2012 season using advanced, high-level IPM.

In 2013, Quinton Hasak took over as the new groundskeeper. Having no pesticide applicator license and believing that one works hard for good results, he emphasized cultivation practices, such as increasing mowing heights, proper irrigation, manual weed removal, and fertilization to

maintain healthy turfgrass. No pesticides or alternatives were applied. While playability and aesthetics remained high, persistent weeds continued to be an issue.

In 2014, the Village remains committed to a pesticide free approach and looked to renew and strengthen its collaboration with the NYS IPM program and Cornell University to further its adoption of high level IPM. In addition, education of the public, especially players and visitors, is a vital aspect of IPM and different strategies for communication was implemented.

## 6. Objectives:

1. Continue and expand upon the alternative management approaches started with the Cooperstown project, funded by the NYSIPM Program in 2012
2. Mitigate potential risks associated with conventional, synthetic pesticides and weed pressure by testing and implementing alternative management strategies
3. Maintain field quality that meets or exceeds the expectations of stakeholders
4. Protect human health by reducing pigeon droppings within the grandstand
5. Project evaluation
6. Document and publicize results through an improved website, signage on the property, a field day, and educational giveaways



Maintaining field quality that prevents divots such as this one taken in early May is a goal of the project.

## 7. Procedures:

1. Strict adherence to the core cultural practices of pest monitoring, fertilizing, aerating, overseeding, topdressing, mowing, etc., was emphasized as the first line of defense against turfgrass pests. Mowing heights had already been increased in 2013. Fertilization was conducted three times over the season at a rate of 3.5 lbs N/1000 ft<sup>2</sup> in the spring and 2 lbs N/1000 ft<sup>2</sup> in the summer. Overseeding was conducted in the spring and late fall at a rate of 4lbs/1000 ft<sup>2</sup>. Irrigation times were increased by 50%, but the number of applications decreased, with the goal of deeper roots.
2. Weeds within the field never reached a threshold level that warranted the application of an alternative product.
3. Warning track material was added to increase its depth to better suppress weeds.
4. The cost of installing bird netting to exclude pigeons from nesting and congregating on the grandstand beams proved to be too costly (estimates came in at ~\$19,000). There was also concern from one contractor that the netting would be accessible from the upper bleachers and would risk damage from spectators trying to hang from the netting. To protect human health from pigeon droppings, the grandstand seats were cleaned regularly.
5. The project team, including Quinton Hasak, Joellen Lampman, Frank Rossi, Grant Thompson, Jordan Grey, and Jennifer Grant met throughout the summer to assess



Quinton Hasak and Frank Rossi discuss the use of thick cut sod to fix high traffic areas.

field conditions and progress, conduct on site consultations, investigate alternative management solutions, and document site visits with photos throughout the growing season.

6. Hasak and Lampman met monthly to assess field conditions and progress, and documented site visits with photos throughout the growing season.
7. Mowing guides have been printed and are available to the public through brochure holders installed within the grandstand entry.
8. A Facebook page for Doubleday Field has been created.
9. Draft signs have been developed and await feedback from the Doubleday Field Committee before design begins.
10. A page on the Village of Cooperstown website, dedicated to the IPM efforts, will be created and details of this project will be publicized. Signage will be developed that provides basic IPM information and points to the webpage for further details.



Mowing guides are available to help visitors learn about proper mowing practices.

## 8. Results and discussion:

While 2014 proved to be a great year for growing turfgrass, there were a number of challenges including:

- A tractor that had been budgeted for was not made available during 2014, preventing planned aerification and increasing the difficulty of grooming the clay and warning track.
- Despite pre-planning meetings with Hasak, during the installation of the tents for the Hall of Fame Induction Ceremony, a tent pole punctured an irrigation line, taking irrigation offline for two weeks at the end of July.
- Hasak does not have a certified pesticide applicators license, with the result that any application of an alternative product would need to be applied by a contractor.



Installation the tent and stage for the Hall of Fame Induction Ceremony resulted in a punctured irrigation line.

In addition to the raised mowing heights, fertilization, irrigation, and overseeding practices were adjusted. While the field had significant clover infestations in the beginning of the season, the turf management program has led to an overall decrease in this and other weeds, including dandelions, ground ivy, and veronica.

During the temporary loss of irrigation, an outbreak of dollar spot and white grubs caused some concerns.

Once irrigation was re-established, the grass



Dollar spot became an issue during drought stress brought on by the temporary loss of the irrigation system.



recovered quickly from the damage. Follow-up scouting revealed that grub numbers were well below threshold levels. (Kyle Wickings, Turfgrass Entomologist at Cornell, suggested that the infestation might have been controlled by vertebrates – birds, mammals, or both).

A page on the Village of Cooperstown website has not yet been created, but Quinton Hasak did start a [Doubleday Field Facebook page](#). Draft signs have been developed and await feedback from the Doubleday Field Committee before design begins. Mowing guides, describing the importance of sharp mower blades and proper mowing height, have been printed and brochure holders have been installed within the grandstand entry. A Field Day was scheduled for October 16<sup>th</sup>, but significant rain likely contributed to the low attendance.

Hasak has also incorporated an introduction to the field for players and coaches prior to every game. He explains that the field is being maintained without the use of pesticides and some of the practices that has been put into place. Ensuring that players understand how their actions (*i.e.*, scuffling their feet) affects turf quality and encouraging their cooperation in maintaining a healthy field rounds out the introduction.

Reactions to the fields maintenance practices leads to two common statements:

“I am impressed that the municipality is doing that.”

“Wow! You manage this field without pesticides? It looks amazing.”

It is clear that, especially during a year conducive to turfgrass growth, acceptable playing conditions can be achieved without the use of pesticides; however, there is a greater need for basic cultural practices. The lack of the tractor prevented plans to increase aerification in turfgrass areas. Increased raking in the warning track would have decreased weed issues. In addition, plans to sod worn areas in the infield were not able to take place because an order for sod would have been too small to have it delivered and Hasak was not able to access a truck to pick it up himself. A commitment to pesticide free maintenance must be coupled with a commitment to the equipment that will make all tasks easier. Unfortunately, pest issues at Doubleday Field pale in comparison to large infrastructure issues that must be addressed by the Doubleday Field Groundskeeper, Committee, and Town.



Proper equipment would allow for easier raking and grooming, reducing weed encroachment into the warning track.

## **9. Project location(s):**

Otsego County, NY

## **10. Samples of resources developed:**

- Photographs of field
- Photo of mowing guide
- Draft signage