

COUNTY OF MILWAUKEE
Inter-Office Communication

Date: December 30, 2022

To: Marcelia Nicholson, Chairwoman, Milwaukee County Board of Supervisors

From: Guy Smith, Executive Director, Milwaukee County Parks

Subject: Update on the Use of Goats for Landscaping in Milwaukee County Parks

File Type: Informational Report

REQUEST

In response to File 21-873, the Parks Department has documented a summary report on the use of goats for land management of Milwaukee County Parks property in 2022.

POLICY

None

Wisconsin State Statutes:	
Milwaukee County Code of General Ordinances:	
Specific Adopted Budget:	
Specific Adopted Budget Amendment:	
Specific Adopted Capital Project:	

BACKGROUND

In 2021, Milwaukee County Parks was directed to conduct a pilot program to determine the effectiveness of using goats for land management in Milwaukee County.

The Natural Areas team at Milwaukee County Parks manages over 9,000 acres of sensitive natural areas throughout the county. Reducing the impact of invasive species is a large part of these management efforts. A significant portion of Milwaukee County Parks has been negatively impacted by the historic introduction and spread of invasive species. Urban areas such as Milwaukee County are prone to invasive species because many of these invasives were planted as part of landscaping projects on private property adjacent to parks, the presence of an international commerce (ports and airports) that can introduce plants and wildlife from around the world (ex. Emerald ash borer), and inter-state highway systems act as invasive species dispersal corridors. While Parks Natural Areas staff, volunteers, and partner organizations have made great strides removing over 40 different invasive species from the park system's natural areas, challenges still persist. This has resulted in areas of degraded habitat for wildlife as well as impacts to natural resources (for example, the loss of native forest with impacts on flood control and clean air) that Milwaukee County residents rely on. The

goat project at Dretzka Park was an opportunity to assess the effectiveness of a potentially new management technique as it relates to invasive species control.

Milwaukee County Parks hired Kettle Moraine Grazing, LLC to assist with control of invasive brush at Dretzka Golf Course. Prior to goat application, park team members mowed the target vegetation to ground level to bring it within goat browsing height. Portable electric net fencing was used to confine the goats to an approximately 1.5-acre area. The goats were moved off site once they defoliated greater than 90 percent of target vegetation. A rest period between the first and second graze allowed for vegetation to regrow, and for plant energy reserves to be further depleted. Goats were then released for a second browsing event later in the season.

Timeline

- August 2 and 9, 2022 – Park staff mowed lanes for fences
- August 15 – Goats arrived for first browsing event
- August 29 – First browse complete; goats moved off site
- September – Rest period
- October 21 – Second browsing event begins
- October 30 – Second browse complete; goats moved off site

During the first browsing event, a herd of 30 goats took 14 days to defoliate the project area of brush/woody invasive species. During the second browsing event, a herd of 30 goats took 7 days to defoliate the same area. The decrease in browsing days indicates the plants were stressed and weakened from the initial browsing event.

No major issues were encountered during the project. The goats did strip bark from a birch tree during the initial browsing event. The contractor protected additional desirable trees within the browsing area during the second event.

The project cost came to \$4,730 in payments to Kettle Moraine Grazing for the two grazing events.

Moving forward, Parks recommends that in the future, seasonal staff time be used for buckthorn removal vs allocating future funding towards additional goat grazing activities. Using seasonals would allow for more invasive species removal to occur than with the use of goats. Parks estimates that a similar amount funding could allow experienced Natural Areas seasonals to:

- Remove approximately two acres of a mature stand of buckthorn through chainsaw work; or
- Remove approximately four acres of second growth buckthorn (as the goats were doing at Dretzka Golf Course); or
- Remove approximately six acres of foliar spraying for long-term buckthorn removal

In the future, using Parks seasonals will provide a more efficient approach to

maintaining natural areas of Milwaukee County Parks.

Related File No's:	21-873, 22-382
Associated File No's (Including Transfer Packets):	
Previous Action Date(s):	October 26, 2021, December 15, 2021, March 15, 2022

ALIGNMENT TO STRATEGIC PLAN

None

FISCAL EFFECT

This item has no fiscal effect.

TERMS

None

VIRTUAL MEETING INVITES

Guy Smith, Executive Director
Jim Tarantino, Deputy Director
Dave Ingish, Operations Manager – Land Resource Division
Brian Russart, Natural Areas Supervisor

PREPARED BY:

Peter Bratt, Director of Operations and Skilled Trades

APPROVED BY:

Guy Smith, Executive Director Milwaukee County Parks *Guy Smith*

ATTACHMENTS:

2022 Goats Presentation

CC: David Crowley, County Executive
Mary Jo Meyers, Chief of Staff, County Executive's Office
Sheldon Wasserman, Supervisor District 3, PEEC Chair
Steven Shea, Supervisor District 8, PEEC Vice Chair
Felicia Martin, Supervisor District 7, PEEC Member
Juan Miguel Martinez, Supervisor District 12, PEEC Member
Steve Taylor, Supervisor District 17, PEEC Member
Kelly Bablitch, Chief of Staff, Milwaukee County Board of Supervisors
Janelle M. Jensen, Legislative Services Division Mgr, Office of the County Clerk
Aaron Hertzberg, Director, Department of Administrative Services
Joseph Lamers, Fiscal & Budget Director, DAS
Vince Masterson, Fiscal & Strategic Asset Coordinator, DAS
Pamela Bryant, Capital Finance Manager, Comptroller's Office
Justin Rodriguez, Capital Finance Analyst, Comptroller's Office
Kelsey Evans, Committee Coordinator, Office of the County Clerk

Ciara Miller, Research & Policy Analyst, Office of the Comptroller
Anthony Rux, Budget & Management Analyst, DAS-PSB