

Tonawanda and Oak Orchard Wildlife Management Area (WMA) Updates Early Fall 2023

General Conditions

The 2023 growing season started off with a very dry spring, and by early June the area was already classified by the U.S. drought monitor as abnormally dry. By mid-June the area was in a moderate drought. Dry conditions lasted through much of July, but rainfall at the end of July and into August finally put an end to the official drought. Water levels dropped significantly in the impoundments early on, but the rain we received in August allowed impoundments to either stabilize or increase slightly. There were some marshes where we had planned to do partial drawdowns to encourage moist soil annual vegetation, but early dry conditions prompted us to suspend those efforts, and we made a concerted effort to hold on to as much water as we could. Although no spring drawdowns were done, dry conditions did result in some moist soil annuals growing at vegetation edges in some marshes scattered around the WMAs, and the seeds from these plants will provide a food source for waterfowl.

Compared to last year, which started wet, but then entered a drought for much of the late summer, most of the larger impoundments are in better shape with more water this year. Some marshes, especially those with lots of emergent vegetation, have fairly low water levels again. Multiple droughts in recent years have resulted in many marshes having thick emergent vegetation, and some marshes also have an abundance of floating vegetation. More rain over the next few weeks would be helpful to allow us to move water around between impoundments to bring the water levels up in certain marshes.

As always, scouting ahead of time is highly recommended because conditions in each marsh change from year to year. This year, access by boat may be difficult in some locations due to lower water and thick vegetation. That being said, most of the marshes look fairly good as far as water level and habitat for waterfowl, and we are starting to see quite a few ducks around!

2023 Projects

Dike Repair

Dike repair was done at a variety of problem spots on both Tonawanda and Oak Orchard WMAs, and more extensive repair was done on the Mud Creek Marsh Dike and the dike between East and West Wood Marshes on Tonawanda WMA.



Mud Creek Marsh dike after repairs

Fall drawdown to create mudflats

Mud Creek Paddy, which is a waterfowl refuge (no waterfowl hunting allowed), was drawn down starting in August to create mudflat and shallow water conditions to provide foraging habitat for migrating shorebirds, wading birds, and waterfowl.



Grassland Restoration

Grassland fields on the WMAs provide valuable breeding habitat for certain waterfowl species and multiple grassland songbird and raptor species. The fields also provide winter cover and foraging areas for a variety of wildlife species. Ring-necked pheasants are stocked in the grasslands on the WMAs during the hunting season. The plan over the next several years is to cycle certain fields through an agricultural rotation if they have become too shrubby and/or have issues with invasive plants or other non-desirable vegetation and then restore them back to quality grasslands. The agricultural crops planted while we transition back to grassland also provide valuable wildlife food and habitat as well as different hunting opportunities.

Over the past few years, we have completed the process and planted multiple fields back to grassland habitat. This spring, approximately 27 acres at Oak Orchard WMA were worked up and planted to dwarf sorghum or buckwheat. This includes the field between the old fire tower and Windmill Marsh and some field areas between Goose Pond and Oxbow Marsh. A portion of the field area to the north of West Ruddy Marsh on Tonawanda WMA that had a large patch of phragmites

was planted to triticale last summer and will be planted to another crop next spring. After two or three years these fields will be planted back to grassland habitat.



Dwarf Sorghum by Windmill Marsh tower

Invasive Species Control

Contractors will hopefully be starting phragmites control using herbicide in late September at both Oak Orchard and Tonawanda WMAs. The plan is to control approximately 25 acres of phragmites on each area. Mile-a-minute control work and research was also done at Oak Orchard WMA led by a team from SUNY Brockport (see identification information below, and please report any suspected mile-a-minute that you find!). In addition, flowering rush samples are being collected by DEC wildlife staff from West Ruddy Marsh each month of the growing season as part of a study in cooperation with the Army Corp of Engineers. The hope is that this research will lead to future control methods. Flowering rush can now be found in multiple marshes on Tonawanda WMA. Wildlife staff, partners, and volunteers were also at Braddock Bay WMA again this year pulling water chestnut. In addition to hand pulling, we used an aquatic weed harvester at a location on Salmon Creek. We hope to make more use of this tool next year, but unfortunately it only works in locations with boat launches. We are considering other methods, such as chemical control, for certain locations that have become impractical for hand pulling.



Aquatic Harvester on Salmon Creek near Braddock Bay WMA

In early June, DEC partnered with staff from the Western New York Partnership for Regional Invasive Species Management (WNY PRISM) to control invasive shrubs as part of a forest restoration project on Tonawanda WMA. Invasive shrubs and other invasive vegetation in five small fields totaling almost 14 acres were treated with herbicide to reduce competition and allow native trees and shrubs to establish. This was part of the WNY PRISM's Crew Assistance Program that works with partners on invasive species management projects. This restoration project is expected to establish a more diverse, healthy, and resilient forest that supports species associated with young forest habitat

INVASIVE SPECIES REMINDER – We are currently dealing with a lot of invasive species issues in our marshes and upland areas! To avoid creating more problems on these WMAs and in other areas, **please clean mud, plants, fish, or animals from boats, boots, waders, and hunting equipment before arriving at the WMAs and before travelling to other areas.** Also dry everything thoroughly before using boats or equipment in another waterbody. For more details, please see the following website: <https://www.dec.ny.gov/animals/48221.html>



BEFORE AND AFTER BOATING...

CLEAN

Clean and remove all visible plants, animals, fish and mud from your boat, trailer and other equipment and dispose of it in a suitable trash container or on dry land.

DRAIN

Drain water from bilge, live wells, ballast tanks and any other locations with water before leaving the launch. Disinfect when possible.

DRY

Dry your boat, trailer and all equipment completely. At least 5 days of drying time is recommended. Drying times vary depending on weather & material.

Mile-A-Minute Facts:

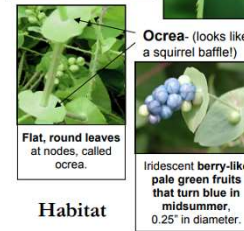
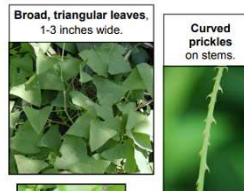
- Mile-a-minute vine (*Persicaria perfoliata*) is a highly aggressive, invasive plant from Asia.
- It is an annual vine that grows rapidly – up to 6 inches a day – and can reach over 25 feet long in one year!
- Prickly stems and leaves allow it to climb over surrounding vegetation and form dense, tangled mats that shade and choke underlying plants.
- The seeds remain viable for up to seven years.
- It is prevalent in downstate NY, but a new infestation found in Geneseo, Livingston County, is the first threat to the Finger Lakes.

Look-alikes

Some invasive plants look very similar to native ones. Mile-a-minute ALWAYS has broad, triangular shaped leaves, prickles, and ocrea (looks like a squirrel baffle). Use the chart and images below to help you identify this invasive.

Similar Native Plants	Leaf Shape	Prickles	Ocrea
Mile-a-minute		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Halbred-leaved tear-thumb		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Climbing false buckwheat		<input type="checkbox"/>	<input type="checkbox"/>
Hedge bindweed		<input type="checkbox"/>	<input type="checkbox"/>
Arrowleaf tearthumb		<input checked="" type="checkbox"/>	<input type="checkbox"/>

How to Identify Mile-a-Minute Vine



Habitat

Mile-a-minute is usually found in open or disturbed areas, including roadsides, wetlands, river banks, fields, forest edges, and construction sites.

See it, mark it, report it, Pull it!



Biocontrol

To help fight the spread of mile-a-minute, a biocontrol program was started in 2009. The biocontrol agent is a tiny weevil, *Rhyncomimus latipes*, that feeds solely on mile-a-minute. Thousands of weevils have been released at Stewart State Forest, NY and have had positive results.



The mile-a-minute biocontrol weevils are about the size of a pinhead. You can tell when a weevil has been feeding by the "shotgun hole" pattern on the leaves (see below). Japanese beetles, which also consume the plant, generally leave larger, more irregularly shaped and randomly spaced holes.



The mile-a-minute biocontrol program is supported by the USDA and the Philip Alampi Beneficial Insect Laboratory. For more information about the weevils, or about biocontrol, please visit:

<http://www.nj.gov/agriculture/divisions/pi/prog/beneficialinsect.html>

Lead Remediation and Removal of Target Mounds on Tonawanda WMA

Removal of the mounds and lead remediation on Owen-Bartel Road was started in early September. A contractor will be treating and removing the mounds over the next several weeks as well as removing contaminated earth from the laneways and surrounding area. Clean fill will be brought in, the areas will be planted to grass seed, and eventually the areas in the immediate vicinity of the mounds will be allowed to succeed to forest habitat. Target shooting at these mounds has been an issue at Tonawanda WMA for many years due to problems with trash, dangerous/illegal behavior, damage to downrange power lines, loss of safe use of a large area of habitat behind the mounds, and concerns about lead contamination. The mounds were closed to target shooting as of January 1st, 2022 when the new statewide Wildlife Management Area Regulations (NYCCR Part 51) went into effect. These regulations made target shooting on WMAs prohibited unless a site is posted as open to target shooting. The removal of the mounds at Tonawanda WMA will improve hunting conditions and safety in the areas around and behind the mounds as well as reducing noise disturbance.

Please don't enter these areas until the work is complete, and for the safety of the contractors, don't hunt in the immediate vicinity of the work areas.



Future Projects

Cleaning of the Main Ditch – The “main ditch” through Tonawanda WMA is a floodway that handles excess water from Tonawanda Wildlife Management Area as well as any extra water that Iroquois National Wildlife Refuge sends to the south onto the WMA. Over time, the portion of the ditch between the two double dikes has filled in with silt, and in some locations, there are large clumps of shrubs and trees growing. We are currently working on engineering designs and securing funding for a major project to restore the ditch to its original design depths and topography.

Replacement of the bridge over Oak Orchard Creek at Oak Orchard WMA – We will be replacing the old bridge with a new bridge sometime in the next year to improve access to the floodplain woods on the other side of the creek from Windmill Marsh.

More projects to open up dense emergent marsh habitat – We are hoping to work with Ducks Unlimited to acquire funding to do additional channel and pothole projects similar to the recent work in West Ruddy Marsh.

Windmill Marsh water lily – We are still struggling with the issue, but the next step might be herbicide control combined with a winter drawdown. This will be a challenge!

Photos of current conditions in impoundments - Tonawanda WMA



South Feeder (looking southeast) – late August 2023



North Feeder (looking north) - late August 2023



Cinnamon Marsh (looking northeast) - late August 2023



Cinnamon Marsh (looking northwest) – late August 2023



Klossen Marsh (looking southwest) – late August 2023



East Ruddy (looking northeast) – late August 2023



West Ruddy (looking northeast) – late August 2023



East Wood (looking southeast) – late August 2023



West Wood (looking southeast) – Late August 2023



Paddy 1 and partial of Paddy 2 (looking southwest) – Late August 2023



Paddy 1, 2023 – one year post drawdown with water kept low had lots of wildlife use



Paddy 3 (looking northwest) – Late August 2023



Paddy 4 (looking southwest) – Late August 2023



Paddy 5 (looking southwest) – Late August 2023



Spring Marsh (looking northeast) – Late August 2023



Hidden Marsh (looking northeast) – Late August 2023

Photos of current conditions for impoundments – Oak Orchard WMA



Goose Pond (looking southwest) – Late August 2023



Oxbow Marsh (looking northeast) – Late August 2023



Campbell Marsh (looking southeast) – Late August 2023



Guthries Paddy (looking southeast) – Late August 2023