



BAY MILLS INDIAN COMMUNITY

BIOLOGICAL SERVICES NEWSLETTER

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Artwork courtesy of
Jaime John

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For questions about fishing/hunting licenses, current regulations, or to report poaching, please contact Conservation Officers at 906-248-8640.

In The News: NEW STEWARDSHIP GUIDE FOR LIVING WITH MANOOMIN

The Michigan Wild Rice Initiative is a collaboration between the twelve federally recognized Anishinaabe nations that share geography with the state of Michigan and several Michigan state agencies. Together with some federal, NGO and academic partners, they are working together to restore and revitalize Manoomin, wild rice. They are also spreading awareness and education about Manoomin. They hope to encourage people of all communities to connect with Manoomin in a good way and seek ways to sustain and protect them. As part of this work, they released *We all live together in a good way with Manoomin: Stewardship Guide* in 2025. This is a living document. It will change with later editions as Manoomin shares more knowledge with MWRI and MWRI learns to better work together in a good way.

We All Live Together in a Good Way with Manoomin: Stewardship Guide tells the story of Manoomin through an Anishinaabe perspective. The document uses language and phrasing that centers relationship and care between relatives. It presents an overview of Manoomin, their preferences for living places, and their relationality with other non-human relatives. The guide also explores the socio-ecological context of Manoomin restoration and revitalization.

Frank Zomer, Bay Mills Indian Community Biologist and MWRI Co-chair says, "This guide is a huge step towards the much needed recognition and protections for Manoomin in Michigan. It provides the background needed for anyone wanting to begin learning about Manoomin and what makes Manoomin so special."

The full version of *We All Live Together in a Good Way with Manoomin: Stewardship Guide* can be found at bit.ly/manoominislife

SCAN ME



RAIN GARDENS: INSTALLED AT BAY MILLS

WHAT ARE RAIN GARDENS?

Rain gardens are a type of green infrastructure that are often located near parking lots, sidewalks, and roofs to catch storm water that has run off of surfaces. These surfaces are often polluted with oils or pesticides that would be damaging to the watershed. Rain gardens filter and absorb the runoff water and release clean water back into the environment. Installing a rain garden can play a major role in protecting our waterways from pollution.

NEW GARDENS PLANTED AT ELDERS HOUSING AND HEALTH CENTER

In autumn 2024, multiple garden basins were planted at two locations at Bay Mills. A large garden basin was planted between the new Elders' Housing and Spectacle Lake. Located at the end of the road, east of Spectacle Lake, the new garden is designed to intercept, treat, and infiltrate stormwater at the source, before it reaches the lake or nearby streams. Similarly, five garden basins were installed at low-laying spots around the new Health Center building and parking lot.

All the gardens will include perennial plants that are native to the county and retain contaminants from roads and sidewalks. Rain gardens are beautiful, low-maintenance, and inexpensive gardens.

Look for the plant identification signs this summer to learn the Anishinaabemowin name for each of these medicinal beings as well as other facts!



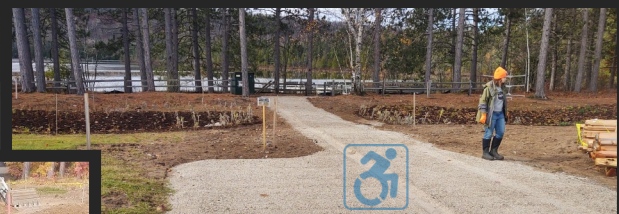
Photos by Biological Services

Garden basins installed 2024 to capture and slow rain water from roof and parking lot. Five basins were planted at the Health Center and one long basin at Elders Housing.



Photo by Laura Berman
Greenfusephotos.com





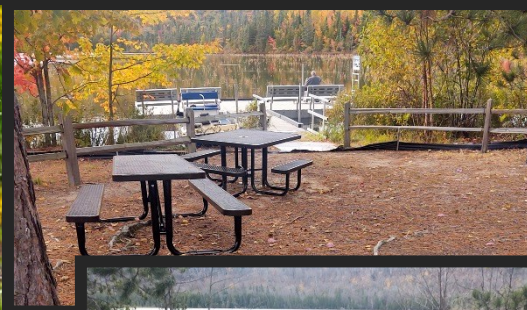
MEDICINAL PLANT RELATIVES IN NEW RAIN GARDENS

Boneset
Fireweed
Fox Sedge
Yarrow
Sweet flag
Sweet gale
Sweetgrass
White Sage

Swamp Rose
Blue Flag Iris
Blue Vervain
Cotton grass
Labrador Tea
Mountain Mint
Joe Pye Weed
Swamp Milkweed

Wild Bergamot
Wild Strawberry
Black Eyed Susan
Blue-eyed Grass
Big Bluestem Grass
Black Chokeberry
Great Blue Lobelia
Pearly Everlasting

Purple Coneflower
Large-Leaved Aster
New England Aster
Nodding Wild Onion
Bluebell/ Harebell
Blazing Star (marsh)
Grass-leaved Goldenrod
Common Evening Primrose



TIMBER HARVESTING ON MISSION HILL & LITTLE PLAINS

The Hiawatha National Forest has plans effecting Mission Hill and neighboring areas.

Bay Mills provided input and site-specific suggestions to the Forest Service during the development of the overall project. Now, year after completing environmental assessments, the Forest Service is moving forward with on-the-ground implementation. On Mission Hill and Plantation Hill USFS forests, locals may see trees marked with blue paint as well as prescribed fires.

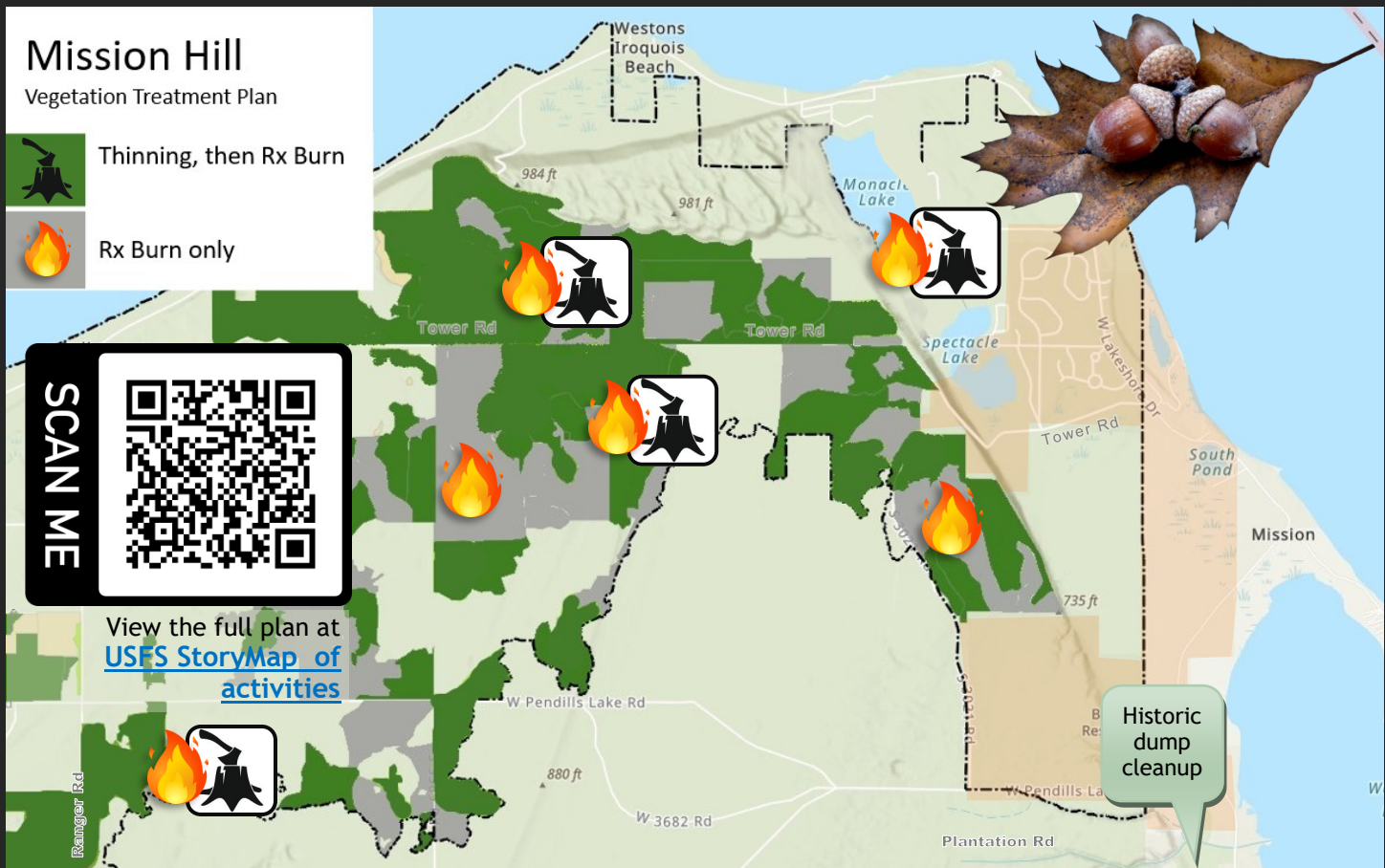


Photo to left by USFS: A burn conducted on the Hiawatha National Forest in an oak stand to reduce the red maple and increase blueberry production.

Burning for Oak on Mission Hill

The Mission Hill ridge line is unique in the tri-county for it's lasting red oak. Different strategies of harvesting will favor the existing oaks and thin out competition. A series of well-timed prescribed burns can help prepare a seed bed for oak establishment and release oak from competition.

The first burns are used to prepare the site for oak seedling establishment following a future acorn crop. This can also reduce the amount of slash after a harvest, making it easier to mechanically prepare for planting if necessary. These are low intensity burns that are conducted in the spring or fall.

Questions or concerns, contact:

Hiawatha National Forest
Attn: McNearney Project
W-1900 West US-2
St. Ignace, MI 49781



Little Plains Blueberry and Fire Restoration

Since time immemorial, the Anishinaabeg have subsisted off the earth and [stewarded the land] around them and used ishkode, prescribed fire to give back to the land. Although some people have forgotten, fire-scarred trees remember at the Little Plains, near Pendills Lake. The area is currently dense red pine, the USFS will thin the trees, following up with prescribed burn(s). The treatments will benefit blueberry plants and increase berry production in subsequent years.

Maps of Recent Burns for Berry Picking is maintained by USFS <https://www.fs.usda.gov/detail/hiawatha/news-events/?cid=FSEPRD642041>

BMIC Fireside Conversation ~ Ishkode Listening Session: spring 2025

Bay Mills Indian Community will be holding a series of listening sessions as well as workshops to open dialog about ishkode (fire), responsibility to the land, and the community's desires for reconnecting to ishkode.




This conversation began with blueberry harvesters this past summer, who shared their experiences and hopes at a picnic in Little Plains project area. The conversation will continue at an event this spring with meal and field trip. From there, we will hold field trips, feasts, and followup meetings for three years under the support of a GLRI grant.

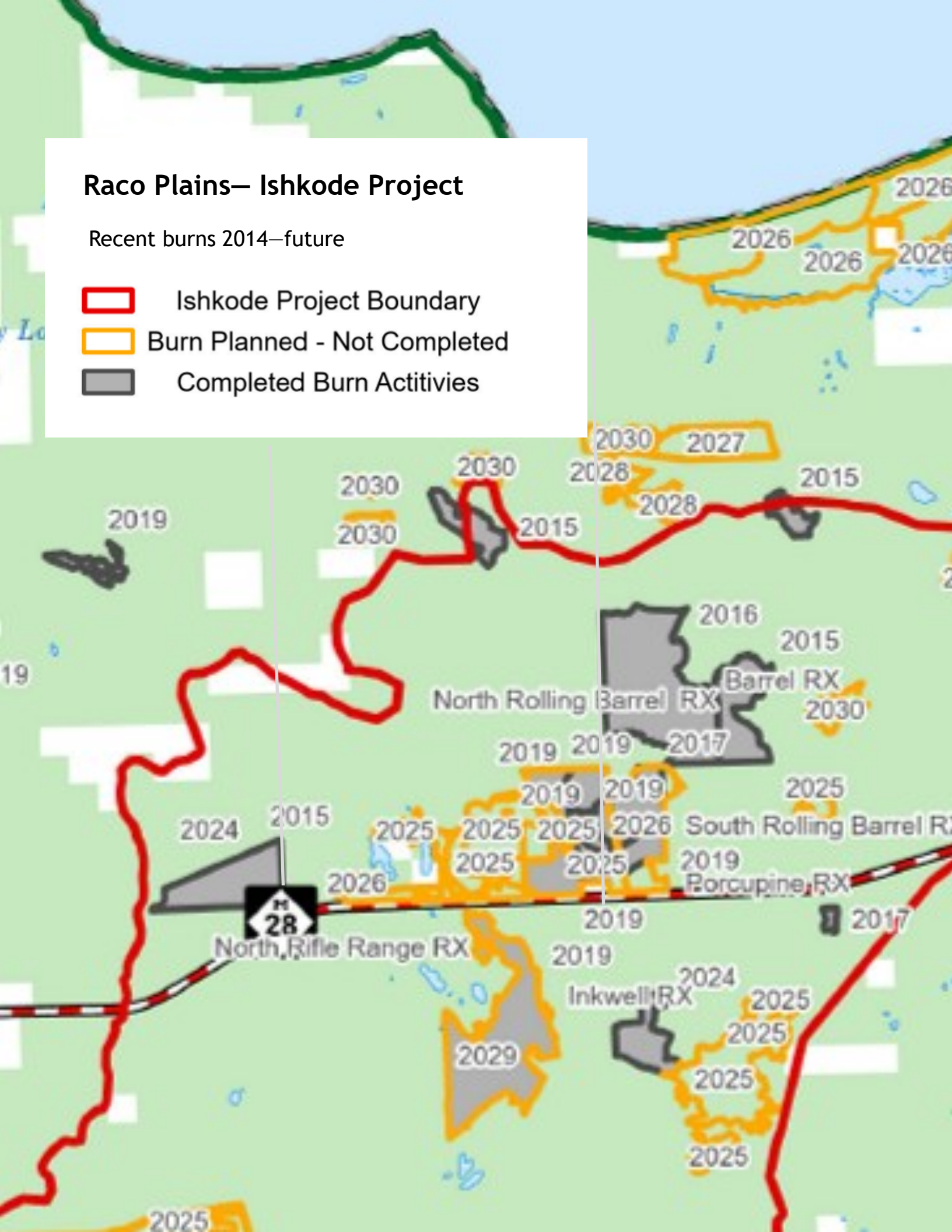


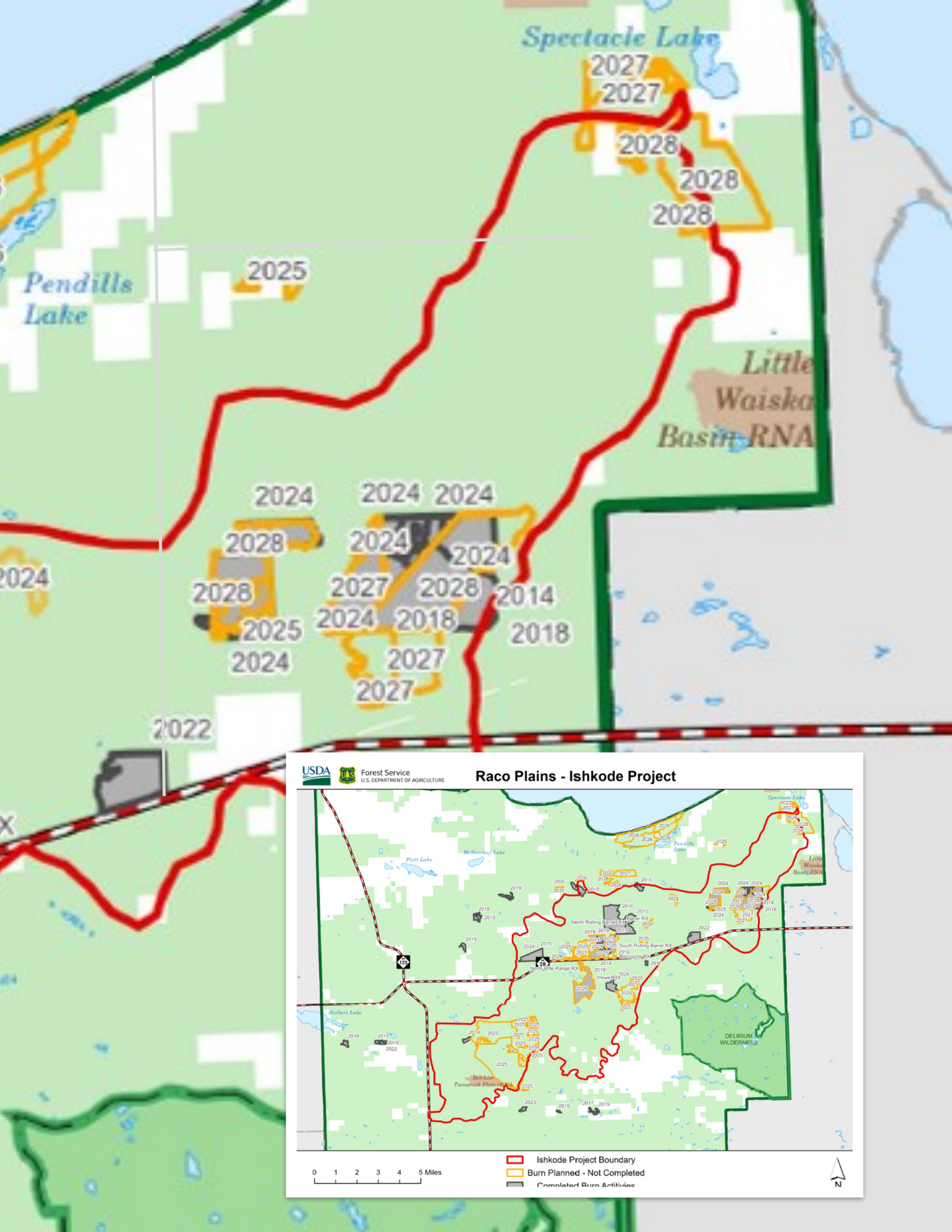
"Last one out of the berry patch, touch it off..." ~ BMIC Elders

Raco Plains— Ishkode Project

Recent burns 2014—future

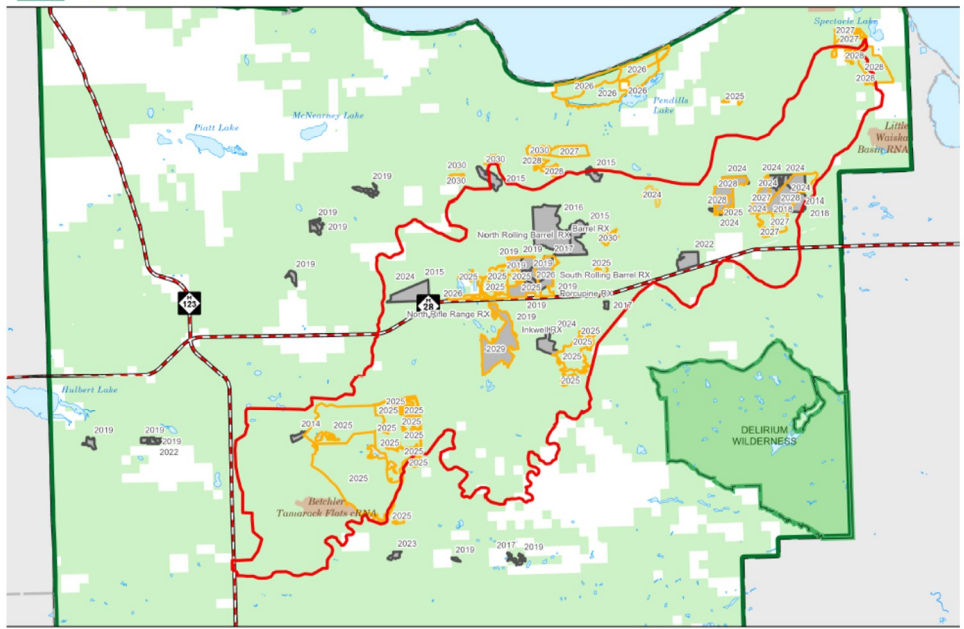
-  Ishkode Project Boundary
-  Burn Planned - Not Completed
-  Completed Burn Activities





USDA Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Raco Plains - Ishkode Project



0 1 2 3 4 5 Miles

- Ishkode Project Boundary
- Burn Planned - Not Completed
- Completed Burn Activities



BROWNFIELDS PROGRAM

UPDATE ON CLEANUP OF OLD SUPERIOR TOWNSHIP DUMP



Deep Dive into the Former Superior Township Dump

The former Superior Township Dump operated from the 1930's until the 1970's. It is located on US Forest Service land less than a quarter mile from BMIC's Reservation land. The site is located on Plantation Road (Dump Road), uphill from Bay Mills Conservation/ Biology building. A stream flows through the dump site. Old cars, mattress springs, tires, appliances and barrels are exposed along the stream bank and in the stream.

Many BMIC members remember when the dump was actively used and shared stories of finding treasures such as old radios and bikes which they repaired and used. Another called the dump site their family's "convenience store" and found clothing and other useful household items which they altered or repaired for use. Several fond memories were shared of backing vehicles up along the edge of the dump on a Saturday evening to watch the bears and hang out with friends and family. But for all these fond memories, BMIC members also expressed concern over how the dump has contaminated the land and harmed the plant and animal relatives in, around and downstream from it.

BMIC and Hiawatha National Forest (HNF) began working together to learn more about the dump site in 2023 through the Tribal Forest Protection Act (TFPA). The TFPA provides a way for the Forest Service to work with Tribes to protect trust resources from threats coming from Forest Service land.

Past monitoring showed metals and other contaminants were present at the site in the 1990's and in 2001. These contaminants were at levels high enough to designate this as a Part 201 site. This means it is a site with environmental contamination according to the Michigan Department of Environment, Great Lakes and Energy.

Over the past year and a half, HNF and BMIC's Biology Department have worked with an environmental contractor to study the site in further detail. These studies include determining the depth and extent of the dump materials and sampling the soil and groundwater. Results show many contaminants are still present at the site.

There is one point of good news at this time. The contamination appears to be confined within the dump materials. Sampling of surface water in the stream is not showing concerning levels of contaminants nor in the groundwater that is feeding the stream at this time.

The dump site their family's "convenience store" and found clothing and other useful household items which they altered or repaired for use. But BMIC members also expressed concern over how the dump has contaminated the land and harmed the plant and animal relatives in, around and downstream from it.

With the information that has been collected over the past year and a half, the environmental contractor has been able to create a clean up plan with several options including costs for each option. Both BMIC and HNF are seeking funding to begin cleaning up this site. If funding is awarded, the site will be cleaned up in stages and as funding allows.

To report any sites of concern, please contact BMIC's Environmental Coordinator: Jennifer Satchell, jmsatchell@baymills.org, (906) 248-8655.



Photos by Biological Services

LAKE SUPERIOR PARTNERSHIP (LAMP)

LAKE SUPERIOR HABITAT AND WILDLIFE COMMITTEE RELEASES UPDATED IMPORTANT HABITAT MAP

Basin-wide, lake-stewarding partners, including many tribes and First Nations, are pleased to share the newest version of the Lake Superior Important Habitat Map. The map includes old growth forests, rare biological communities, coastal wetlands, large natural ecosystems, migration habitats, spawning, nesting, and nursery habitats, and more! These places are refuges for beings increasingly pressured by human development. View the [StoryMap](#) are learn more about these special places.



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[View the StoryMap of Important Habitats here](#)

INVASIVE SPECIES PROGRAM UPDATE

The BMIC Invasive Species Program is currently engaging in Early Detection, Rapid Response efforts in a proactive response to infestations of the Hemlock Woolly Adelgid that is spreading across the Lower Peninsula. Over the last couple years, the invasive species program has been surveying forested stands for hemlock tree locations across the reservation. A data set of hemlock tree locations is critically important for future survey efforts and to streamline management efforts. The downstate infestations are relatively new and there's not much information available for the best course of management. However, the invasive species program stays very active with local, federal and state partners to have the most up to date information available direct from the front lines. The first infestation is believed to have been caused by an infested holiday wreath that was imported to the area. It is very important to not move untreated plant/wood materials and always source those items locally whether it be holiday wreaths, firewood, etc. For more information visit <https://savemihemlocks.org/>

Photo by J.M. Randall



Above: a hemlock branch with woolly adelgid eggs surrounded by white cotton-like material. These may be seen in winter

Inset: Immature adelgid larvae suck stored starches from the tree.

Photo by K. Otén

WILDLIFE: Bird Flu in Michigan Continues

Highly Pathogenic Avian Influenza (HPAI)

Avian influenza (AI, bird flu) is caused by an influenza type A virus which can infect poultry (chickens, turkeys, pheasants, quail, ducks and geese) and wild birds (especially waterfowl). Bird flu can spread through direct contact with nasal or respiratory secretions, contamination of food or water, direct contact with infected bird feces, or contact with contaminated equipment. Symptoms in birds include sudden death, coughing or sneezing, swelling around the head or neck, decrease in egg production, misshapen eggs, or purple discoloration in legs, comb or wattle. Bird flu has even caused illness in wildlife such as red foxes, skunks, and raccoons.

Recently, a breakout of AI has been detected in wild birds in several counties throughout MI such as Canada Geese, trumpeter swans and scavenging birds' (Jewell-Hammie 2024). While the risk of AI spreading to humans is low, it is not unheard of. It is recommended to wash hands after caring for animals, avoid touching eyes, nose and mouth when handling wild birds, conduct proper sanitation of equipment when processing birds, and cook all meat to an internal temperature to 165 degrees F (Jewell-Hammie 2004).

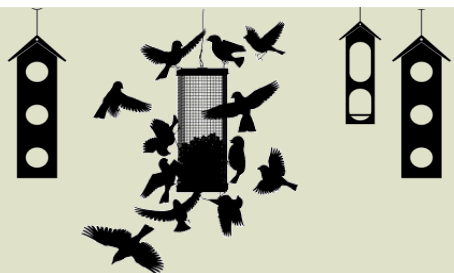
To report unusual mortality of wild birds contact, BMIC Wildlife Biologist at 906-248-8651 or contact local DNR Field Office.

Symptoms of Sick Birds

- Loss of appetite and coordination
- Swelling around the eyelids
- Purple discoloration on various body parts
- Sudden death

Reference: Jewell-Hammie, S. 2024. DNR warns Michigan residents, pet owners to protect themselves from bird flu. MLive, Grand Rapids, MI. <https://www.mlive.com/news/grand-rapids/2025/01/dnr-warns-michigan-residents-pet-owners-to-protect-themselves-from-bird-flu.html>

What can you do to prevent bird flu?



Bird Feeder Hygiene

- ◇ Wash bird feeders weekly with hot soapy water or bleach solution.
- ◇ Rinse thoroughly and let dry.
- ◇ Clean ground below feeders including

Wild Bird Safety

- ◇ If you see unusual mortality of wild birds, call BMIC Wildlife Biologist at 906-248-8651 or contact local DNR Field Office.
- ◇ Wash hands before and after handling wild birds and avoid touching your eyes, nose, and mouth. Wearing rubber gloves is recommended.
- ◇ Keep captive birds and other domestic pets away from wild birds and their droppings.

Be Bay Mills Air Aware: Best Practices

PROTECT YOUR FAMILY FROM CARBON MONOXIDE POISONING AND FROM BEING EXPOSED TO OTHER INDOOR POLLUTANTS

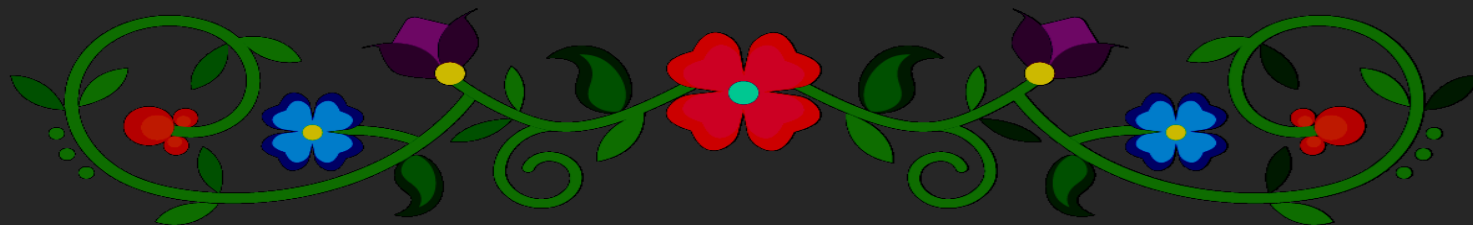
Install a carbon monoxide detector

- Test smoke and carbon monoxide alarms monthly and replace batteries in alarms at least once each year, unless the alarms have sealed 10-year batteries. Replace the smoke or carbon monoxide alarm if it is more than 10 years old.



Clear Snow and Ice

- Clear outside furnace, stove, fireplace, radon and dryer vents of snow and ice to allow air circulation and prevent the build up of indoor pollutants such as carbon monoxide.
- Never warm up your car in the garage.
- Never operate any gas burner, heater or other appliance to warm a room or in a room where you are sleeping or that is poorly-vented.



Join our summer staff!

Every year Biological Services brings on entry-level assistants to help with summer projects and field work. Perfect for youth, teachers, and some elders. High school diploma and driver's license are preferred. Contact Bay Mills Human Resources for more information about joining our team.



Bay Mills Indian Community
Biological Services Department
www.baymills.org 906-248-3241
12140 Lakeshore Dr Brimley, MI 49715

Newsletter contact: Aubrey Maccoux-LeDuc,
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