Haehnle Sanctuary News

Phyllis Haehnle Memorial Sanctuary

Owned By Michigan Audubon

Maintained and Operated by The Jackson Audubon Society

Preserving and Protecting our Natural World

Spring 2022

Bat Conservation at Haehnle

Bats are very beneficial animals in our ecosystem so it is important that we encourage their proliferation. The Michigan Department of Natural Resources reports that there are nine species of insectivorous bats in our state and one animal can devour hundreds of mosquitoes in a night of feeding!

These amazing mammals pollinate the flowers that produce bananas, avocados and mangos and numerous other plants. Insectivorous bats are estimated to save farmers billions of dollars every year by eating corn borers and other crop pests. Scientists are studying their saliva to produce medications for heart patients. They are also researching how these mammals can remain healthy while carrying various viruses: maybe this immunity can be developed in humans.

What can we do? Build and install a bat house! These structures can replace roosting sites lost to development and deforestation, so new colonies can be initiated, increasing these threatened populations.

Tom Hodgson, a Haehnle Sanctuary Committee member, editor of this newsletter, and a retired naturalist suggested that a bat house be installed at Haehnle.

Two years ago Tom built a bat house on the south side of his home. The first summer it attracted a small colony of bats. The next year the colony grew to thirty big brown bats.

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Haehnle Bat House (cont.)

Mark Snyder with his power augered tractor did all the digging and heavy lifting.

Every evening about 15 minutes after sunset the bats began their exodus. Just prior to their departure they make scratching and scuffling noises inside their house. "They would fly just a few feet over our heads, which the grandkids really liked!"

The Haehnle Committee members agreed with Tom's suggestion and purchased a kit from Bat Conservation and Management with donated funds.

Early April is the best time for installation, since bats are ending winter hibernation and searching for roosting sites. So on April 9th at the Haehnle Spring Work Bee Tom, Gary Siegrist, Mark Snyder, Lathe Claflin and Ross Green assembled the kits and mounted two bat houses, back-to-back, on a 20-foot post.

With help from the tractor the post was raised, set in a forty-two inch deep whole and secured with cement. These houses are easily viewed from the Wing Observation Hill, in the prairie to the left of the nature trail that heads north to Eagle Lake.

Prior to raising the post, the entrances of the bat houses were smeared with a slurry of bat guano to make them smell more like home.

Because bats are so valuable, we need to remove threats to their existence. Deforestation removes the hollow trees they use for roosting.

By Helena Robinovitz

Another man-made threat is land development because it breaks up and removes the large, continuous landscape they prefer.

White-nosed Bat Syndrome (WNBS), a fungus that causes bats to awaken during hibernation and fly in winter weather from their roosts and waste the energy needed to complete their hibernation. Because of these threats bat populations have decreased significantly and some US species are now listed as endangered. The population of the big brown bat, common in the entire U.S., has declined by 35% in affected colonies. (source: North American Bat Monitoring Program).

The Great Frog Survey

Every spring, hardy volunteers venture out after dark to go "frogging." This is the time of year when frogs and toads head to the lakes and ponds where the males woo the ladies with their singing.

Michigan's Department of Natural Resources decided 26 years ago that it would be a good idea to monitor the abundance of these amphibians to determine whether they were declining. Volunteers were asked to develop routes containing ten observation sites and visit these sites three times every spring to listen for frogs. As of 2020, there were 761 individual sites surveyed around the state.

Northern Chorus Frog

The next one is in May when the toads and tree frogs are calling. The last one is done in June to listen for the green frogs and bullfrogs. There are minimum temperatures and other weather conditions to consider, so determining the timing of these surveys can be challenging.

This year the DNR plans to do a thorough program assessment of the Frog and Toad Survey. The goals and data collection methods will be reviewed and updated where needed. Because of this, they are not adding any new survey sites at this time.

However, it would be useful to consider starting a new survey route that includes Haehnle Sanctuary in future years, as no one is currently doing this.

Gray Tree Frog

Spring Peeper

A 25-year analysis done by the DNR in 2020 found that while there were very slight declines in some species, overall most appeared to be relatively stable. In southern Michigan there is concern over one species, the Blanchard's cricket frog, which is listed as Threatened under Michigan's Endangered Species Act.

To monitor frog and toad abundance, volunteers rank the calls they hear at a level of 1, 2, or 3, depending on whether there are only a few individuals calling, several individuals with some overlapping calls, or a full chorus. The first survey in southern Michigan is usually in April when the chorus frogs, spring peepers, wood frogs, and leopard frogs make their appearance.

Wood Frog

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The Great Frog Survey Continued

Haehnle has an abundance of Northern leopard frogs, and it would be nice to have a record of their numbers.

You don't have to be a member of a survey team to go frogging. Almost every pond and lake in our area has frogs and toads singing in the spring. There are only eight species commonly heard in our area, and the internet makes it easy to learn their unique calls. Most species can be heard in the daytime as well as the evening, so head over to Haehnle or to a pond near you to hear these remarkable sounds.

By Kathy Claflin


Northern Leopard Frog


American Toad


Green Frog


Bull Frog

Haehnle Prairies Are For Birds, Bees and Butterflies

When you first arrive at Haehnle Sanctuary and take in the view from the kiosk, you see a vast marsh in the distance and a native prairie grassland in front of you. This is one of three such grasslands at the Sanctuary. There is a second, larger one on Wooster Road and a third, north of Eagle Lake which is the subject of this article.

The original objective of these grasslands was to provide habitat for many grassland bird species that are in serious decline, such as Henslow's sparrow, bobolink, Northern bobwhite, vesper sparrow, and eastern meadowlark. This goal has not been realized, largely because a single large grassland about the size of all three grasslands is needed for these species to thrive. Nevertheless, each grassland has its own unique features that contribute to the high-quality wildlife habitat at Haehnle Sanctuary.

To find the third grassland you need to take the nature trail down the middle of the first grassland and through the oak woods along the north side of Eagle Lake until you come to an open area. This is a native grassland about 10 acres in size with the trail bisecting it roughly east and west. There is an entrance on the east side to a recently-restored fen. The area was farmed until about 1960, but was cleared of upland scrub and converted to a prairie grassland in 2001.

The Haehnle Sanctuary Committee with grant money from the DNR planted a mixture of native grasses and forbs typical of a tall grass prairie of the upper Midwest. The native plants south of the nature trail did not fare well, however, so we reseeded this area in 2017 with a mixture high in native forbs and lesser amounts of short prairie grasses.

This project was supported in large part by a pollinator grant from the Environmental Quality Incentives Program funded by the USDA. One of the goals of this program was to provide flowers for native bees, which are in serious decline, and for honey bees. We have a stand of honey bees hives about a half-mile away from the grassland.

Fortunately, the second planting seems to have gone well and we can already see a diversity of short grasses and native flowers blooming throughout the three growing seasons. Examples include black-eyed susan, goldenrod and aster species, partridge pea, milkweed species, and hoary vervain.

Honey bees and other bee species are now common, fulfilling a major goal of the pollinator project. Periodic, controlled burns will be conducted to control woody plant invasion, and spot spraying will target fire-resistant woody plants like autumn olive, honeysuckle, and multiflora rose.

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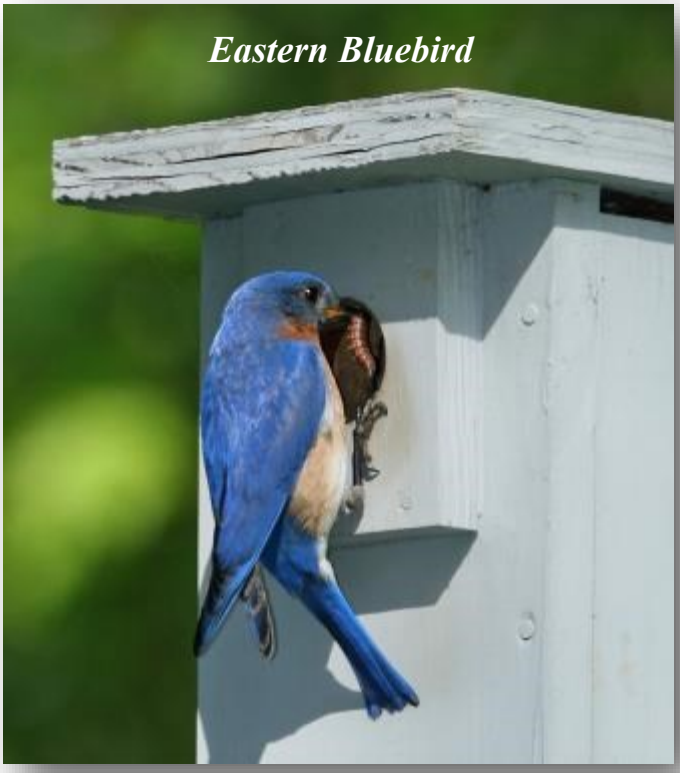
Haehnle Prairies (Continued)

As you walk through this grassland or sit at the bench on the trail, enjoy the quiet peacefulness of the scene. Note the beauty of the wildflowers and variety of insects that feed on them. During its fall migration look for the monarch butterfly which frequents our Sanctuary.

Try to catch a glimpse of Eastern bluebirds and tree swallows that nest in the our nest boxes.

Listen to sandhill cranes in the distance; occasionally they fly low overhead as they enter or leave the marsh. And sometime while you are there walk over to view the fen; this is one of the most accessible places to see it.



Eastern Bluebird

Bumble Bee on Burdock

Tree Swallows

Ruby-throated Hummingbird on Thistle

Any time is a good time to visit Haehnle's native prairies, but summer is really special! This is when the prairie wildflowers are at their best, bees are buzzing, hummingbirds are humming and butterflies abound!

By Lathe Claflin

Snipe are Whooping It Up at Haehnle!

Seeing these elusive birds is a challenge, even at Haehnle, but they are here and busy with their spring courtship flights. If you listen carefully may hear the "whoop, whoop, whoop" as they fly over the marsh

From high above Mud Lake Marsh they swoop and dive, spreading their tail feathers to produce that distinctive "whoop, whoop" sound.

The female creates a scrape on the ground near the edge of the marsh where she builds a nest of grasses. Their powerful breast muscles makes them excellent fliers reaching speeds of 60 mph.

Although they are hunted, their zig zag flight makes them very difficult to hit. Only the best sharp shooters are successful "snipers."

We wish to thank the many people who have generously supported The Phyllis Haehnle Memorial Sanctuary in recent months.

General Donations:

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Helena Robinovitz

Bogus Lake Fen Project

Tom Eitnear ISFWS and Dennis Marshall of Dragline Works

Bogus Lake Fen at Haehnle Sanctuary is a rare, 60-acre jewel. Fens are uncommon and important ecosystems. The Bogus Lake Fen provides clean water for the Portage River, stores and slowly releases stormwater, serves as a habitat for a diverse plants and animals – some of whom are rare or threatened. They absorb carbon dioxide and release oxygen through photosynthesis.

Over time human activity had disrupted the important role of the Bogus Lake Fen by diverting the flow of the Portage River for farming, and by curbing fire outbreaks. Consequently, Glossy Buckthorn, a non-native deciduous shrub, invaded the fen's acreage and suppressed the growth of the native plants that provide the necessary habitat for some of the native wildlife.

In 2014 Tom Eitniear, a biologist for the US Fish and Wildlife Service, offered to assist Michigan Audubon with the removal of the buckthorn and the restoration of Bogus Lake Fen, through their funding program, Partners for Fish and Wildlife.

Over the years Tom has continued to shepherd the completion of this project by persistently securing financial support from his employer, USFWS, and even obtained additional funding from the Michigan Department of Natural Resources, Ducks Unlimited and a North American Wetland Conservation Act Grant. Michigan Audubon Society and Jackson Society have also provided funds. Dennis Marshall and his company, Dragline Works, did all the grinding of the buckthorn. Dennis donated some of his time for this project.

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Bogus Lake Fen Project Continued

As demonstrated by the above images, the removal of the buckthorn resulted in a marked improvement.

The image on the left is an example of a wooded zone that was dominated by buckthorn. The one on right, taken four years later, shows it has changed to a wet meadow. Some of the plants that have returned to wetter areas are wool grass, swamp milkweed, duck potato, and buttonbush. Dominant in other areas are climbing false buckwheat, reed canary grass, and arrow-leaved tear-thumb. Phragmites is dominant in smaller areas.

The return of native plants has increased the Haehnle habitat for some native birds that have not been seen prior to treatment.

Virginia rails, swamp sparrows, red-winged and rusty blackbirds can all be heard announcing their spring arrivals. Sandhill cranes have begun roosting on the treated parcels in the fall.

This project would not have been possible without the efforts of Tom Eitniear of the USFWS, to procure funds from USFWS and various conservation organizations.

Your donations to Michigan and Jackson Audubon Societies were also important. Together we have made a difference, one step at a time. A natural ecosystem has been restored, returning a needed habitat for many plants and animals, and providing another opportunity for all to enjoy the natural beauty of Haehnle Sanctuary.

By Helena Robinovitz

Haehnle Honey Bee Report

Dr. Meghan Milbrath, MSU Assistant Professor and Coordinator of Michigan Pollinator Initiative

Dr Milbrath introduced 6 of her honeybee hives at Haehnle Sanctuary in 2015. They have been supported by the prairie restoration projects at the sanctuary. Last year she took a sabbatical and studied in Sweden. During her absence the honey bees at Haehnle had another great year, thanks to the watchful care and experience of local beekeeper and candle maker Pam Mackinder of MX6 Ranch (www.mx6ranch.com).

At the end of March, 2022, all the hives were still alive, and it is hoped that with warmer weather and early blooms, the bees can start bringing in pollen and nectar and start raising more young for spring.

Generally the colonies are split in early May as a measure of swarm control. Depending on the size of colonies, there should be a dozen hives this summer at Haehnle, happily making honey off of the lovely prairie flowers and button bush shrubs.

Varroa Mites on a Bee Larva

The biggest issues that honey bees continue to face at Haehnle are pests, pathogens, and poor nutrition.

The hives at Haehnle have only been tested once for pesticides, and they came up very clean. The large buffer of clean land does a lot to protect them from harmful agrichemicals. However, they are not totally safe there.

By Helena Robinovitz

Because there are a large numbers of bees and beekeepers in the area, it requires a lot of vigilant work to manage the varroa mite, an invasive pest that is deadly to honey bee colonies.

Dr Milbrath maintains a watchful eye to ensure these bees are healthy, and do not contribute to the spread of pests and disease to area beekeepers, or to the native bees at the sanctuary.

Varroa mites are tiny red-brown external parasites of honey bees. Although varroa mites can feed and live on adult honey bees, they mainly feed and reproduce on larvae and pupae in the developing brood, causing malformation and weakening of honey bees as well as transmitting numerous viruses.

Honey production at the sanctuary is lower than some hives in other locations. Honey bees and other pollinators require many blooming flowers. Their nectar provides carbohydrates, and pollen provides fat and protein. While there are numerous prairie plants and beautiful prairie grasses, sometimes the portion of blooming forbs is inadequate. With the addition of the newly established prairie north of Eagle Lake, the bees will have access to additional blooms.

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