



Grand Haven, Michigan

January 17

7:00 P.M.

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How do birds do it?

Reproduction in birds is different from that in mammals in interesting ways. Dr. Michael P. Lombardo, Professor of Biology at Grand Valley State University, will discuss some of the fascinating ways that birds mate and produce and lay eggs.

Dr. Lombardo earned his B. S. in Zoology from The Ohio State University and his M. S. and Ph.D. in Ecology from Rutgers University and has been teaching at GVSU since 1991. He has published over 45 papers on the behavior and microbiology of birds including European Starlings, Eastern and Mountain Bluebirds, House Sparrows, and Tree Swallows, served as the Secretary of the Association of Field Ornithologists from 2011-2016, and is a Fellow of the American Ornithologists Union.



Dr. Michael Lombardo

Photo: Dr. Michael Lombardo

ALSO

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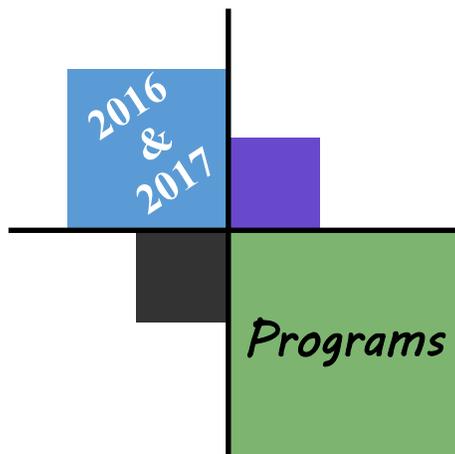
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Pam K will give a brief talk and introduction to the Hemlock Woolly Adelgid that is currently moving through the Muskegon and Ottawa counties affecting Hemlock trees exclusively. Winter is the most critical season to spot them.

ST. JOHN'S EPISCOPAL CHURCH
524 Washington
Grand Haven

Visit the OIAS homepage at
<http://www.oias.org>

*We welcome
 everyone to OIAS's
 free programs.*



February 21: **Birds and Wine of Chile & Argentina and the Moai of Easter Island**

- Carl & Judi Manning, OIAS Members

March 21: **Vernal Pools: Coral Reefs of Michigan's Forests?**

- Yu Man Lee, Michigan Natural Features Inventory

April 18: **A Life List for Fishes of the Grand River**

- Daniel M. O'Keefe, Michigan Sea Grant/MSU Extension

May 16: 6:00: **Potluck, Annual Meeting, and Member Photo Festival**

The 20th annual GBBC:

February 17, through Monday, February 20, 2017

The 2016 GBBC was epic. An estimated 163,763 bird watchers from more than 130 countries joined in. Participants submitted 162,052 bird checklists reporting 5,689 species—more than half the known bird species in the world and 599 more species than last year!

<http://www.audubon.org/content/about-great-backyard-bird-count>

Count birds for as little as 15 minutes (or as long as they wish) on one or more days of the four-day event and report your sightings online at birdcount.org. Beginning bird watchers to experts can participate from your backyard, or anywhere in the world.

Each checklist submitted during the GBBC helps researchers at the [Cornell Lab of Ornithology](http://www.cornell.edu/labofornithology) and the [National Audubon Society](http://www.audubon.org) learn more about how birds are doing, and how to protect them and the environment we share.

Bird populations are always shifting and changing. For example, 2014 GBBC data highlighted a large irruption of Snowy Owls across the northeastern, mid-Atlantic and Great Lakes areas of the United States. The data also showed the effects that warm weather patterns have had on bird movement around the country. For more on the results of the 2016 GBBC, take a look at the [GBBC Summary](#).

On the [program website](#) participants can explore real-time maps and charts that show what others are reporting during and after the count. Be sure to check out the [Explore a Region](#) tool to get an idea of what you can expect to see in your area during the next GBBC.

Thanksgiving Day:

At Windows on the Waterfront, we thought it was a leaf blowing by in front of the car. Carl's immediate instinct was to hit the brakes as his brain registered 'frog'. I escorted this large Leopard Frog into the water.



Three of the 15 yard turkeys decided they would test the strength of our feeder pole as they partook of their Thanksgiving Dinner on the next feeder.



Unusual Beehive

Judi Manning



We found this interesting beehive recently so I thought I would write about its occupants – the honeybee *Apis mellifera*. This is an indication of an instinct gone wrong. Scout bees usually find a hollow in a tree.

Honeybees are very social insects. They usually live in hives within a very structured social order and contain between 20,000 and 80,000 bees.

“Bees first appear in the fossil record dating 40 million years ago. The honeybee has remained physically and socially unchanged for 30 million years. Probably originating in tropical Africa, they were brought to the New World with the first Spanish and English colonists, quickly escaping to the wild and eventually populating the entire western hemisphere. American Indians called the honeybee ‘white man's flies.’”

<http://www.statesymbolsusa.org/symbol-official-item/louisiana/state-insect/honeybee>

There is one Queen bee that produces all the eggs - over 1,500 per day - and regulates the hive’s activities by producing chemicals that guide the behavior of the other bees. The purpose of several hundred drones (males) is to mate with the queen. They live in the hive in spring and summer and are expelled in winter. All winter bees live on stored honey and pollen and cluster into a ball to conserve warmth. Queens live 2 to 5 years, drones only about 8 weeks, and worker about 6 weeks.

Female sterile worker bees are the ones we see. The workers construct the hive and maintain the comb, care for the eggs and larvae, tend the queen and drones, regulate temperature, and defend the hive. Worker bees have an extra stomach and special pollen baskets on their hind legs to transport the booty. Evidence suggests that the honeybee "dances" to communicate the location of a nectar discovery to other honeybees. Worker bees have a barbed stinger that rips out of their abdomen upon use, which kills them. The queen's stinger is not barbed, therefore she does not die when she stings a rival.

The honeybee is the official state insect of 17 states because of their important role in agricultural.

All bees are in decline.

We had a very interesting program on bees in October by Anne Marie Fauvel from GVOS.

References: <http://animals.nationalgeographic.com/animals/bugs/honeybee/>; Goddard Space Flight Center, <https://honeybeenet.gsfc.nasa.gov/Honeybees.htm>; <http://www.statesymbolsusa.org/symbol-official-item/louisiana/state-insect/honeybee>

Highlights of the 2016 Hudsonville Christmas Bird Count:

Carl Manning

37 counters in 16 parties braved 20 degree temperatures and cloudy skies to tally 70 species (9 more than 2015) and 15,738 individual birds (12,000 last year). The counters logged 601 miles by car and 11 on foot, for a total of 93 hours in the field.

Highlights were a Winter Wren (Robert Vanderkamp - second in count circle history), and the third occurrence of Yellow-rumped Warbler (Liz Notman). New records were set for high count of Dark-eyed Junco and Wild Turkey. An owling team spent 3 hours in the wee hours of the morning and found three species of owls. The high individual species count was 3,030 European Starlings, far surpassing any other species.

A big THANK YOU to all participants - this count could not happen without you.

* **SNOW POLICY:** No meeting if Grand Haven Schools are
* closed.

The newsletter is printed on recycled paper.

Cell Phone Tower / Michigan Research

Excerpts/Synopsis/Verbatim: Detroit Free Press, Jennifer Dixon, Birds get a Boost from Michigan findings on cell phone tower hazards, Jan. 2017

In December 2015, the Federal Aviation Administration changed its lighting standards to eliminate the steady lights for new communication towers while the Fish and Wildlife Service recently began working to persuade owners and operators of existing towers across Michigan to update their lighting by turning off the burning lights or switch to flashing lights.

It all started in 1998, when the Fish and Wildlife Service learned Michigan had plans to build a telecommunications network of 179 towers. The agency asked the state for access to the base of the towers so researchers could measure the number of dead birds as they migrated between Michigan and the southern U.S., Central America and South America in the fall and spring. Michigan also provided more than \$100,000 in funding for the research.

The East Lansing field office of the U.S. Fish and Wildlife Service coordinated three federal agencies and hundreds of researchers over a decade ago that fanned out across Michigan to count the number of injured and dead songbirds at the base of 24 communications towers during the peak of the birds' spring and fall migrations. They found towers that had flashing and non-flashing lights were significantly more dangerous than those with only flashing lights.

Led by Joelle Gehring, who was working on a post-doctorate at Central Michigan University at the time, researchers did their pilot work at six towers in fall 2003. In the fall and spring of 2004 and 2005, for three weeks at a time, they counted dead birds at 24 towers from southwest Michigan to the Upper Peninsula. [Joelle was a speaker at one of our programs and talked about her cell tower research].

They concluded the towers with steady, burning lights were more deadly to the birds than towers with flashing lights - and that by simply turning off the steady lights they could reduce deadly bird-tower collisions by 70%. An estimated 7 million birds are killed annually in tower collisions in the U.S. - and most are songbirds that migrate at night.

Protecting these migrating songbirds is important because "birds are a harbinger of the health of your ecosystem. They are some of the most diverse species on earth, occur in every region of the planet and a good, healthy bird population means you have a good, healthy natural environment," Dingledine, deputy field supervisor at the wildlife service's East Lansing field office, said.

Caleb Putnam, Michigan bird conservation coordinator for Audubon Great Lakes and the Michigan Department of Natural Resources, said the Michigan research and one of the researchers is "one of the most important bird-mortality-reducing research done in recent memory." Saving those birds from tower collisions is part of the effort to "prevent future extinctions," Putnam said. "The challenge is that most of our songbird populations are in decline. Many of these species are lacking habitat in breeding areas, and as they get into the tropics, there is deforestation, coffee plantations, climate issues, all these other pressures on them. To not allow these species to migrate successfully twice a year, especially with this level of mortality, it starts to become a population-changing pressure."

Reference: <http://www.freep.com/story/news/local/michigan/2017/01/02/birds-get-boost-michigan-findings-cell-phone-tower-hazards/95713486>

American Kestrel*Falco sparverius*

Judi Manning

The American Kestrel is North America's littlest falcon and the most colorful of all raptors. 12.2 inches long; 24 inch wingspan, 5.8 oz.

Found in many habitats, American Kestrels are most often on wires or poles along roads in open country with short vegetation and few trees. They hover over a field, rapidly beating their wings, searching for insects and other small prey. They snatch food from the ground or on the wing. When perched on a wire, they pump their tails trying to balance.

Males have blue-gray wings and crown. His nape and back are bright rufous with black barring on lower back and buffy-white underparts with reddish streaks. He has a row of white dots on the trailing edges of the underwings. Females have a similar head pattern but reddish-brown wings and crown and the back is completely streaked with heavy streaking on the breast. Both have black spots on both sides of the head with dark moustaches on white checks.



Pairs usually bond for life and return to the same nesting site each year. They are cavity nesters but lack the ability to excavate their own nest. They rely on old woodpecker holes, natural tree hollows, rock crevices, and nooks in buildings and other human-built structures.

In summer, they eat insects and other invertebrates (grasshoppers, crickets, butterflies, moths and beetles). In winter, they hunt small prey (mice, voles, shrews, and small birds). They use ultraviolet light to see and follow the urine trails of voles. They hide extra food in grass clumps, tree roots, bushes, fence posts, tree limbs and cavities to eat later. They are useful for farmers because they eat pest species. Many blueberry farmers in the area are putting up nest boxes to encourage them to nest on their property.

Two subspecies occur in North America up to Alaska: *sparverius* is the migratory form and the smaller *paulus* subspecies resides from South Carolina to Florida and is essentially nonmigratory.

Predators include Great-horned Owls, Red-tailed Hawks, American Crows, Sharp-shinned and Cooper's Hawks, skunks, and raccoons.

They are the most common and widespread falcon but their numbers declined by 66% between 1966 and 2014 according to the North American Breeding Bird Survey.

This decline is from continued clearing of land and felling standing dead trees they depend on for nest sites. They are also losing prey because of "clean" farming practices that remove hedgerows, trees, and brush. Pesticides and pollutants are an additional threat that reduces clutch sizes and hatching success. In North America, the largest problem is pesticides that destroy the insects, spiders, and other prey they eat.

The northeastern (New England) and West Coast (California and Oregon) populations are in decline due to the loss of open habitat: human development and agricultural abandonment leading to reforestation causing an increase in Cooper's Hawk predation. Increases in the central United States are offsetting the decline so the overall numbers are stable.

Putting up a nest box will help. They do not use nesting materials, however, the female will hollow out a shallow depression of loose material. Place the nest box well before breeding season and attach a guard to stop predators from getting the eggs and young. They are attracted to habitats modified by humans and are found in towns and cities.

Similar species are:



Kestrel—female



Sharp-shinned Hawk



Merlin



Mourning Dove

References: https://www.allaboutbirds.org/guide/American_Kestrel/id; <http://www.audubon.org/field-guide/bird/american-kestrel>; From the National Geographic book [Complete Birds of North America](http://animals.nationalgeographic.com/animals/birding/american-kestrel/), 2006 at <http://animals.nationalgeographic.com/animals/birding/american-kestrel/>; Townes, S. 2014. "Falco sparverius" (On-line), Animal Diversity Web. Accessed July 23, 2016 at http://www.biokids.umich.edu/accounts/Falco_sparverius/ BioKIDS is sponsored in part by the Interagency Education Research Initiative.

Merlin App - UPDATED <http://merlin.allaboutbirds.org/> - Verbatim

There are now two methods to ID birds with the Merlin App:

Bird ID Wizard—Step-by-step

Answer five simple questions about a bird you are trying to identify and Merlin will come up with a list of possible matches. Merlin offers quick identification help for beginning and intermediate bird watchers to learn about North America's most common birds!

Or Use a Photo

Snap a photo of a bird, or pull one in from your camera roll, and Merlin Photo ID will offer a short list of possible matches. Photo ID works completely offline, so you can even identify birds in the photos you take when you are far from cell service.

Results based on millions of eBird sightings

Merlin draws upon more than 370 million observations from the eBird citizen-science project.

It customizes your list to the species you are most likely to have seen at your location and time of year.

Browse more than 2,000 stunning images taken by top photographers. Merlin also includes more than 1,000 audio recordings from the Macaulay Library, identification tips from experts, and range maps from the Birds of North America Online.

Black Friday Field Trip Report

Three of us had an enjoyable time as we hiked Upper Macatawa Natural Area on November 25th.

We had 23 species. The highlights were four raptors: Cooper's Hawk, Red-tailed Hawk, American Kestrel, Merlin. The Merlin was a pleasant surprise as the morning was on the foggy side. We also enjoyed watching and listening to the 26 American Tree Sparrows as they interacted with each other and the Juncos and Chickadees while foraging for food and zipping back and forth across the trail.



We were driving around the farm field in Allegan County in December at 3:00 PM looking for the Snowy Owl that was reported on eBird. It was hiding somewhere and we did not find it. As we continued to drive we saw this dark 'spot' in the field. I said, it is a cat.. I took my 'portable scope' a/k/a camera and took a picture. I said, "look, there is its tail".



Carl, skeptical of my ID, hopped out of the car and looked at it with the scope. Well my ID with my portable scope was incorrect. Do you know what this mystery 'spot' is?



Guess the face is not a cat face nor does it have a cat tail.

Birds with bigger beaks get colder noses

Excerpts/Synopsis: Popular Science, Birds with bigger beaks get colder noses, Sarah Fecht, 1/5/17
<http://www.popsoci.com/birds-with-bigger-beaks-get-colder-noses>

“Research published Thursday in *Functional Ecology* found that birds with larger beaks spend more time (adorably) tucking those honkers under their wings to keep warm.

Although scientists had supposed birds were tucking their beaks to stay warm, just as we humans cover our noses with scarves in the winter time, this study is the first to actually test the hypothesis on birds in the wild. Ecologists from Deakin University in Australia monitored 9 species of shorebird for six months—from winter to summer—to see how temperature and beak size influenced the beak-tucking behavior.

“We found that they were indeed using [beak-tucking] to try to keep warm, because they do it more when it gets colder,” said co-author Matt Symonds in a press release. “But the surprising thing we discovered was that the birds with bigger bills used this behavior more, and over noticeably longer periods.”

Symond's team found that a bird's beak acts like a [heat leak](#), helping the animal keep cool. That's all well and good in hot climates, but in colder regions, heat loss through an unfeathered bill could be a liability.”

They plan to do more research to see why larger-billed species continue to tuck their beaks even at very high temperatures. Symond’s also hopes to explore how common the beak-tucking behavior is across all bird species. If not, why some do and some do not tuck their beak.



2017-2018 OIAS Membership Application Date _____



Grand Haven, Michigan

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1/17

FAR FLOWING WATER

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Far Flowing Water is published eight times per year. If you would like to contribute a complete article for the next issue, please have your articles to me by February 1st

Mission Statement

Owashtanong Islands Audubon Society

a 501(c)(3) Nonprofit Corporation

Provide stewardship of local Grand River island wildlife sanctuaries owned by the Michigan Audubon Society;
Achieve through education, public recognition of the value and need for protecting and preserving wildlife, plants, soil, water and other natural resources as well as an understanding of their interdependence;
Promote an interest in our native birds and as well as native flora and fauna, and their habitats because of their great economic, cultural and recreational value; and
Aid the Michigan Audubon Society in its study, conservation and research efforts.

We like to get out and visit Holland State Park or walk one of the awesome parks we have in Ottawa County. Never know what we might see. Here are a couple of things we have observed.



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PLEASE FORWARD
ADDRESS CORRECTION REQUESTED

JANUARY 17, 2017

7:00

HOW DO BIRDS DO IT?

DR. MICHAEL LOMBARDO