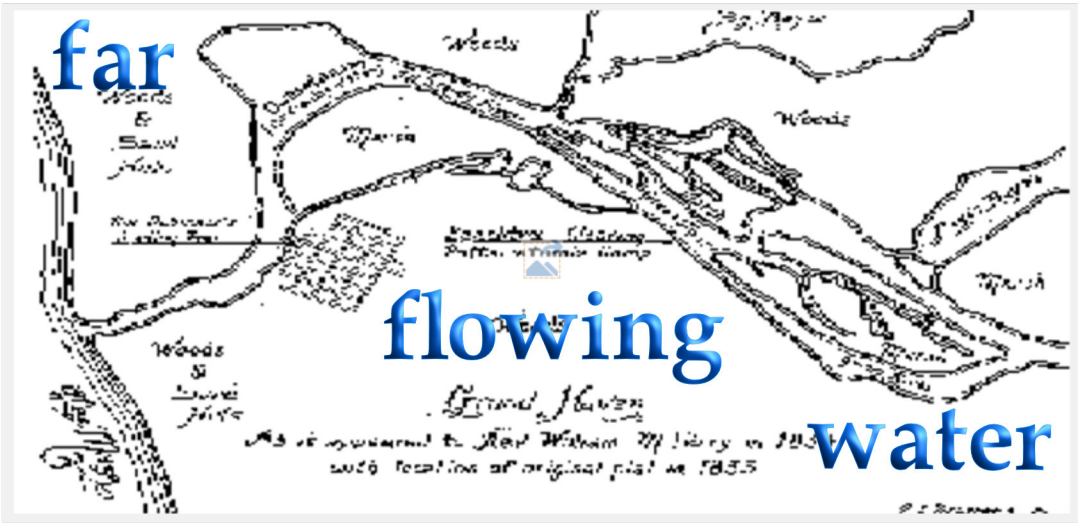
Grand Haven, Michigan



6:15 P.M. September 15

Crossbills in the Great Lakes Region

Presented by: Dr. Cody Porter, Hope College

Red crossbills (*Loxia curvirostra*) are one of North America's most enigmatic songbirds. Within this single species, there are several different populations called "call types" that differ in vocalizations, genetics, morphology, and diet. From a scientific perspective, these call types provide us with an excellent opportunity to answer major questions in evolutionary biology, such as how new species form. I will cover the natural history of the red crossbill complex in North America and where crossbills in the Great Lakes and Northeast fit into this fascinating evolutionary puzzle.

Bio: I grew up in Jackson, MI and became obsessed with crossbills after seeing my first white-winged crossbills during a large irruption in 2009. I received my Bachelor's in Zoology from Michigan State University and did my PhD on the evolution and ecology of red crossbills at the University of Wyoming. Later, I was a post-doctoral researcher at Iowa State University where I studied the thermal physiology of several songbirds, mainly tree swallows. Now I am an Assistant Professor in the Biology Department at Hope College, where my students and I study a broad range of questions at the interface of ecology and evolution.

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Everyone is welcome to OIAS's programs

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From the President's Desk - September 2026

I hope that you and your family and friends had a great summer. Leslie and I are happy to be back in Grand Haven after spending most of the last 16 months in Ann Arbor helping our daughter's family while our grandson Felix was being treated for high-risk neuroblastoma at C. S. Mott Children's Hospital at the University of Michigan. Felix traveled a rough and scary road, but we are happy to report that he is a very happy and active little boy and started "young fives" at school at the end of August. I am extremely thankful to the OIAS Board of Directors for fulfilling my responsibilities since April 2025. The Board kept OIAS moving forward helping birds and providing valuable services to the citizens of the Tri-Cities.

The OIAS Board of Directors has put together an excellent set of programs for our 2026-2027 program year. The list of programs can be found in this issue of *Far Flowing Water* and on the OIAS website (www.oias.org). The topics that will be covered are varied and while most will focus on birds, they will also cover the wildlife diseases, and technology for birding. Topics will range the world from here in Ottawa County to Chile in the Southern Hemisphere. Our first program "Crossbills in the Great Lakes Region" by Dr. Cody Porter from Hope College. Crossbills are fascinating birds with bills especially adapted for extracting seeds from pine cones. Muskegon Birding Connection and the Owashtanong Islands Audubon Society (Grand Haven's chapter) have combined their resources for programs. See the schedule on the OIAS website. OIAS will continue to provide stewardship of the Michigan Audubon Society's bird sanctuary islands in the Grand River and work to get youth involved in becoming active learners of natural history.

Please visit our website http://www.oias.org,, and like, our Facebook page at www.facebook.com/oias.org. We will post birding information and information about OIAS and upcoming events there.

I am looking forward to another active year by OIAS as we provide educational programs for citizens of the Tri-Cities, provide advice to local communities about how to preserve and restore important bird habitats, and getting more youth interested and involved in natural history studies.

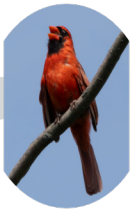
Good birding,
Michael P. Lombardo

Congratulations to Prof. Cody Porter for spotting and identifying the **Wandering Tattler** at Holland State Park on August 23,2026. A big thank you for immediately getting the word out so hundreds of birders could see it. It was last seen late in the afternoon of August 24th..

Thank you to everyone who contributed to the *far flowing water* newsletter.

Editor

2026-2027 Programs



October 20:	Birding Chile - Steve Hamberg, President, Holland Audubon Society
November 17:	The Splendor Next Door: Finding Birds Close to Home - Steve Jessmore, Photographer, Photojournalist
January 19:	Wildlife Diseases - Alynn Martin, GVSU, Biology Department
February 16:	Dr. Kelly Ronald from Hope College, Bird Behaviors: How the Sensory World Shapes Behavioral Decisions
March 16:	Attracting Bluebirds to Your Yard - Bernie Place, Michigan Bluebird Society, Muskegon County Coordinator
April 20:	Technology for Birding & Annual Business Meeting - OIAS Board Members

Upcoming Events

Beth Miller

"Happy Hour with the Birds"

Friday, September 25, 5:30-6:30

Muskegon Lake Nature Preserve

Meet at the pavilion. Non alcoholic Elderberry spritzers served. BYOB as well.

Hosted by Muskegon Lake Nature Preserve

Here's a trip led by Muskegon birder Tori Martel:

Summer 2026

We had two Red-headed Woodpeckers for a couple of days. We then saw one that had some brownish head feathers for a few weeks. Then a completely red Red-headed Woodpecker arrived. After a week or so, it came it with a youngster. The second adult is still dropping in every day or so multiple times. It was eating suet and sometimes grabbing a grape and flying off with it.

Our online grocery shopper also feeds birds. She said their bird bath is near where Eastern Bluebirds are nesting. When a Blue Jay stops in to partake of the water, the bluebirds confront it and chases them away. I have not seen a clash between these two species.

Exploring Calendar-Year System for Ageing Birds

Malcolm Oosting-Sineath

Over the past few years, I have tried to better understand the relationship between how a bird looks and its age and sex, revealing new layers of complexity at every turn. When I began birding, the terminology I heard most corresponded with the life-year system: “There’s an Eared Grebe at Holland State Park in breeding plumage!” As discussed in my last article, there are all sorts of inconsistencies with this system. For example, the infamous Willow Flycatcher replaces its feathers in early spring into the plumage it breeds in, but I never heard this referred to as its “breeding plumage.” And don’t get me started on ducks!

Is there a better way? Well, over the last year, while banding birds, I’ve learned more about the calendar-year system. In this system, a bird is given its age based on the calendar year in which it hatched, and this age is reported to the federal government’s Bird Banding Lab. For example, the juvenile birds you may see or hear in the summer are designated as “hatching year” (HY). Makes sense so far. Those birds become “second year” (SY) on January 1st. On each subsequent New Year’s Eve ball drop, the bird is classified as one year older–from second year (SY) to third year (TY), and so forth.

Is there a problem here? Well, we caught and banded a Black-capped Chickadee at the end of December, and that bird was hatching year. We caught that same bird a few days later in early January, and we had to change the age designation to second year. The bird didn’t go through a significant biological change over those few days, yet the age designation did change. This example got me thinking about the root problem of the calendar-year system. It is based on a concept created for humans to better understand time: the calendar. But birds do not care about calendars. Our local Rock Pigeons can breed year-round, so a brood of Rock Pigeons at the end of December starts to get confusing. One Rock Pigeon that becomes capable of sustained flight on December 31st is in its hatching year…until the next day when it becomes a second year bird. In contrast, one of its siblings might not leave the nest until January 1st, and that bird would be in its hatching year for 365 days. The birds are one day apart developmentally, but are assigned different age classes, which they hold throughout the year. Okay, well what if we stick with the calendar system and use hatch dates, sort of like birthdays for humans? Sadly, it isn’t practical. We caught a Red-eyed Vireo yesterday, and it didn’t tell us when it hatched, the little bugger. And yet even if both of these problems were to be rectified within the system, a second year Indigo Bunting on January 1st would still be a second year bird 11 months later in December, even though it had worn three plumages in that timespan, and would be considerably older biologically. A calendar year is simply too long of a yardstick for birds.

In short, the calendar-year system implicitly anthropomorphises birds, and thus can misrepresent their biological reality. So what if an age classification system was developed with bird biology at the forefront? I’ll explore this further next time.

Far Flowing Water
is published seven times per year.

If you would like to contribute a complete article for the next issue, please have your article to me ***by October 1st.***

far flowing water

is a publication of the Owashtanong Islands Audubon Society, Grand Haven, MI.

2026-2027 OIAS Membership Application/Renewal *Date*_____

Send by Email_____ Email _____

Name_____

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Phone_____ How did you hear about OIAS_____

Membership Type ___$20 Family _____$30 Contributing ___$100 Individual Life

My contribution to speaker fees and activism projects $_____

Make checks payable to: *Owashtanong Islands Audubon Society*
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Thank you for your support! *(9/26)*

Online membership renewal is now available! You can now mail a check, pay in person at a meeting, or pay online using Cheddar Up.

Cheddar Up is a popular group payment and fundraising platform that scores high marks (around 4.9/5 on review sites like Capterra)

Just Follow the link below or scan the QR code:

https://nonprofit-membership-dues-8344.cheddarup.com

Semipalmated Plover

Charadrius semipalmatus

Judi Manning

Why is it named Semipalmated Plover? It has partial webbing between the toes.

This small, plump shorebird looks like a miniature Killdeer except it has only one band across the breast, a short stubby orange bill, a round head, and large eyes lined with a distinctive yellow-orange ring. Their brown back helps them to be almost camouflaged as they run across mudflats or dark plowed fields.

Adult

Seen in Ottawa County during migration, it forages with other shorebird species as they make their way north or south to or from their remote Arctic breeding range.

They can be found anywhere from sea level to 5,000 feet above sea level. They can run 13 to 26 feet per minute and can fly 32 mph in strong winds.

Using their vision, they search for prey by taking a few steps, pausing, and listening, then lunging at prey. They eat a large variety of small invertebrates. They can swim short distances and stir muddy water with their feet to locate prey. Their large eyes help them forage during moonlight nights. During the severe U.S. locust grasshopper outbreak between 1873 and 1876 these plovers-lived entirely on a diet of these insects and played a significant role in keeping the population under control.

They do not choose the tundra habitat like most shorebirds. Instead, the nest is on dry gravel, pebbles, or sand on gravel bars along rivers and ponds. Like a Killdeer, also in the plover family, they fake an injury if a predator gets too close to the nest.

Their breeding flight display is called “butterfly flight.” The male is usually over 150 feet in the air constantly making a *chu-weep* call. The male guards the female by physically attacking her, presumably meant to discourage her from cheating with other males to assure the paternity y of his offspring. It usually takes 12 hours for a bird to hatch but can take up to four days. She leaves after the last egg hatches, and the male raises the young. The chicks are precocial and can walk and feed within hours after hatching.

Females have brown feathers on the face and breast band and are drabber than the male. Hard to see but the female is slightly heavier and has longer wings than the male. The male has longer
toes and bill. Juveniles look like the non-breeding adults except they have entirely black bills.

Juvenile

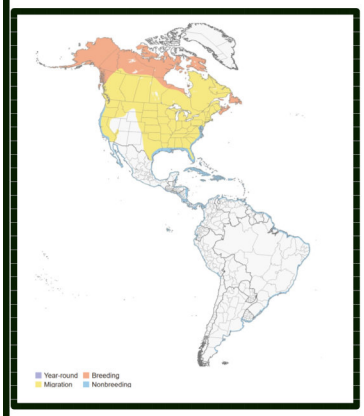
During the breeding season between March and August there is a black band that circles the neck, upper body is brown and underparts are white. During the non-breeding season September to February the black banded plumage on the breast and head is replaced by gray and brown and the white stripe goes past their eyes and the bill becomes duller.

The population is currently stable, and they are the most common migrating small plover. However, there are causes of concern: hundreds or thousands are killed by hunters in South America every year. Oil spills and other forms of pollution pose risks such as poisoning or fouling of plumage. The arctic breeding habitat is impacted by climate change and as the sea level rises.

Cont'd Pg. 7

Semipalmated Plovers have the most internal parasites of five shorebird species studied with 99.2% of the examined Semi's being infected. Eggs, chicks, and adults are the victim of predators.

References: https://www.allaboutbirds.org/guide/Semipalmated_Plover/id, https://www.audubon.org/field-guide/bird/semipalmated-plover, *Smithsonian's National Zoo and Conservation Biology Institute. (n.d.). Semipalmated plover. Retrieved June 30, 2026, from https://nationalzoo.si.edu/animals/semipalmated-plover*, https://nationalzoo.si.edu/animals/semipalmated-plover, Semipalmated Plover, by Elaine Chang, https://animaldiversity.org/accounts/Charadrius_semipalmatus/



Semipalmated Plover

Killdeer

Similar plovers found around the world.

- Common Ringed Plover: European
- Wilson's Plover: Central America
- Collared Plover: central Mexico south to Chile including some southern Caribbean islands and Trinidad and Tobago.

- Snowy Plover: Western U.S.

Seen at New Buffalo Harbor, Berrien Co., 4/22/14

Earth's Magnetic Field & Birds

Judi Manning

For at least 50 years scientists knew animals could sense the Earth's magnetic field but how they did it was a mystery. Before current research studies showed homing pigeons, chickens and several species of migratory birds used iron-rich cells in their beaks that work with the brain as a magnetic compass. Animals and especially birds' ability to orient themselves by detecting magnetic fields is called magnetoreception.

Magnetoreception helps:

- long-distance migration success
- find feeding and nesting sites
- reduces energy spent on wrong routes
- increases chances of survival and reproduction

The mystery of how birds navigate might have been solved by two independent researchers who discovered there is a special protein clustered in a region of the retina that gets a lot of light called cryptochrome 4 (CRY4). It is a part of a class of proteins called cryptochromes – blue light receptors found in both plants and animals. One theory is the CRY4 applies a filter so birds can see a constant magnetic field of the Earth during migration enabling them to stay on course even with clouds or over oceans.

One researcher is from Lund Univ. in Sweden who studied zebra finches and the other researcher is from the Carl von Ossietzky Univ. Oldenburg in Germany who studied European robins. [To read about the interesting research, go to Reference 3].

Other species that detect magnetic fields in their migration:
Fish and marine animals (Salmon, seat turtles, and sharks)
Insects and mammals sense the magnetic field different than birds. They have light-sensitive molecules that react to magnetic fields.

Animal Group	Magnetic Sense Mechanism	Purpose
Birds	Light-sensitive molecules and magnetic particles	Navigation during flight
Insects	Light-sensitive molecules (cryptochromes)	Orientation and migration
Mammals	Magnetic particles in tissues	Navigation and homing
Fish and Marine Species	Magnetic particles and electroreceptors	Migration and hunting

https://birdopedia.com/how-do-birds-sense-magnetic-fields/

Magnetic navigation dates back to ancient Chinese navigators who used lodestones (naturally magnetized rocks) for maritime navigation as early as the Han Dynasty. By the 11th century, magnetic compasses revolutionized global trade and exploration. Birds used the magnetic field for migration for millions of years.

Cont'd. Pg. 9

There are many unanswered questions if more artificial magnetic sensors become widespread. One important unanswered question is will this cause more electromagnetic interference that harms the animals that use magnetic fields The research is strong but not definitive and is still being studied by scientists. There is more discussion in Reference 3 about how this research can benefit humans and a way to preserve migration routes from interferences from human generated electromagnetic noise. There are ecological impacts of electromagnetic pollution, unintended consequences, and other substantial hurdles.

References: (1) *Birds Can See Earth's Magnetic Fields, And Now We Know How That's Possible,* Michelle Starr, 9/1/18, https://www.sciencealert.com/birds-see-magnetic-fields-cryptochrome-cry4-photoreceptor-2018, (2) *How Do Birds Sense Magnetic Fields: Unraveling Nature's Hidden Compass*, John James Audubon, https://birdopedia.com/how-do-birds-sense-magnetic-fields/, (3) *Birds See Earth's Magnetic Field Using Quantum Physics*, Nature 9/1/2025, https://nature.sciencearray.com/how-birds-see-magnetic-fields-quantum-navigation

Strawberries

Judi Manning

Strawberries are not technically berries. They are labeled as false fruits or pseudocarps. Their botanical name is *Fragaria ananassa* and strawberries are a type of "aggregate accessory fruit" belonging to the Rosaceae family. Aggregate fruits trace back to the Greeks and Romans.

The red fleshy part is known as a receptacle to hold the ovaries of the flower. The ovaries are the tiny yellow-brown to white specks on the outside of the strawberry and each ovary holds a single seed. Aggregate fruit means a collection of small fruits (fruitlets) on the same receptacle that are derived from a single flower. The seeds are the fruit!

It is thought the name strawberry is a corruption of the words "strewn berry" describing the fact the plants are strewn across the ground via runners. Commercial strawberries are descendants of the five to six wild strawberry species naturally growing in temperate regions of North America, South America, Europe, and Asia. There are over 600 varieties of strawberries worldwide.

In ancient civilizations such as the Romans strawberries were used to reduce symptoms associated with inflammation, melancholy, fevers, infections, and culinary use in small quantities. The leaves and dried fruits were also used in teas in Asia to detox the body. In the 13th century France, they were thought to soothe upset stomachs and were used topically for skin rashes, blemishes, and complexion. Madame Theresa Tallien, a prominent member of Napoleon's court, was famous for bathing in about twenty-two pounds of fresh strawberries. There is a lot of history of the strawberry in the first reference below.

"Countries Ranked by Strawberry Production in 2023

Source: FAOSTAT, Last Updated 23 Jan 2025

Rank	Country	Production (tonnes)	Acreage (Hectare)	Yield
1	China	4,209,270	155,750	27,026
2	United States	1,250,100	22,986	54,385
3	Egypt	731,145	21,033	34,761" [1]

References: https://specialtyproduce.com/produce/Strawberries_101.php, [1]https://divercitytimes.com/agriculture/crops-and-livestock/strawberry#what-is-strawberry

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.

Owashtanong Islands Audubon Society
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