

# Discover Nature

News and Programs  
from the ODC Network



Summer  
2020



The **ODC Network** is a collection of ten business divisions with the mission to advance outdoor education and conservation in West Michigan.



**FREE ADMISSION—Two Locations!**

**4214 56th Street • Holland, MI • 49423**

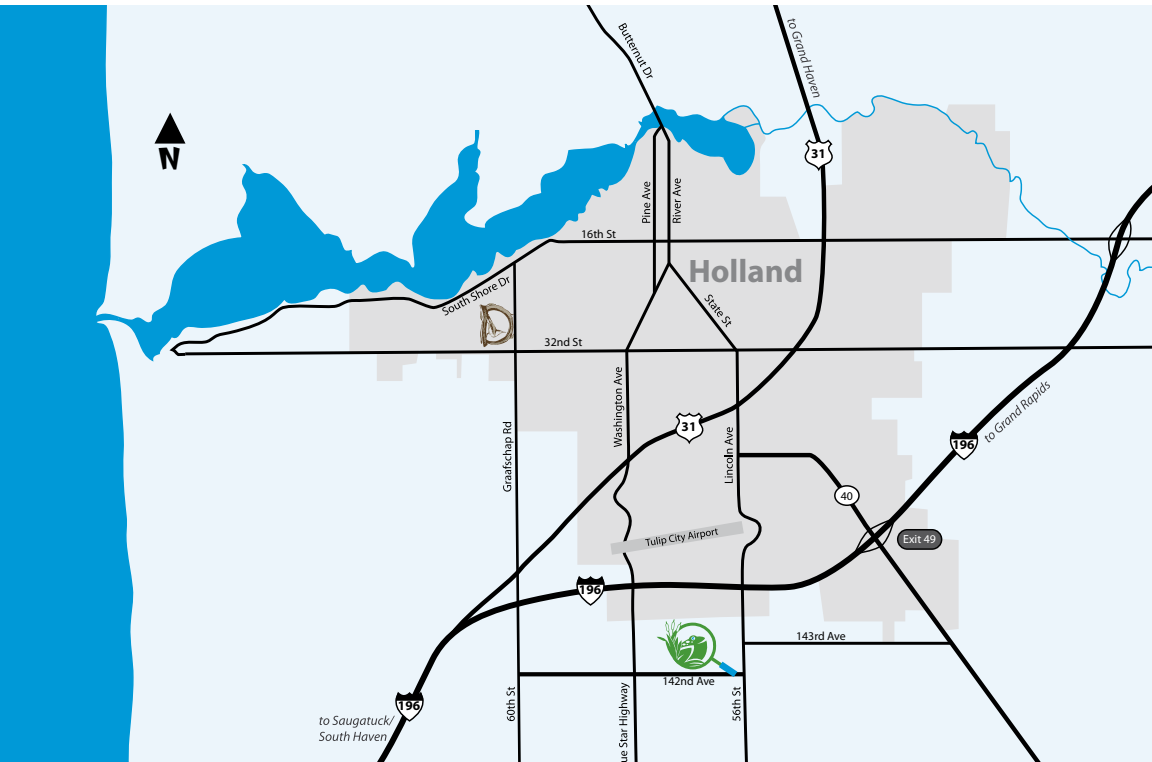


The Outdoor Discovery Center is 155 acres with about 3 miles of trails, located on the south side of Holland, just south of West Michigan Regional Airport. Admission is free!

**600 Graafschap Road • Holland, MI • 49423**



DeGraaf Nature Center is 18 acres of forest and wetlands located within the City of Holland, just south of Lake Macatawa. Admission is free!



## Join us for a Program!

We are excited to start up regular programming again when we can! We have plenty of fun summer programs planned for you, including kayaking, painting, stories, and of course, lots of live animals. However, as all of us are abiding by the safe distance protocols and experiencing postponed public programming, we are unable to provide dates currently. We are hopeful that we will be able to offer our regular programs in the coming weeks and ask that you check for updates on our website, Facebook, and Instagram posts.

Check **outdoordiscovery.org** for updates and program details

Follow us on Facebook  
or Instagram for  
outdoor activity ideas!



Turn your next virtual meeting into a party with  
**WILDLIFE CRASHERS**



Choose your party animal! Customizable experiences!

Email Joy at [joy@outdoordiscovery.org](mailto:joy@outdoordiscovery.org) to learn more



## Making Outdoor Learning Virtual

When presented with the challenge of delivering hands-on learning without being face-to-face, our team rose to the occasion. Even though we were not able to host school field trips or even our own preschool classes, we pooled our resources and have created some great opportunities for people over the last few months.

Our team of educators in the Education Network quickly assembled resources for families to use as they navigated schooling at home. Background information, lessons, and extension activities were compiled to create a *Backyard Learning Series* that challenged students and families to explore their backyard while performing age-specific activities with themes such as "Beneath my feet" and "Backyard how to". Our first week had 1,300 families exploring the content and providing great feedback!

How do you teach nature-based preschool without being in-person? Easy, you create simple activities, crafts, recipes, and record stories read by teachers and share them with families. Though our Little Hawks teachers knew they couldn't be with their students, they still

found ways to engage with them virtually. They challenged students to explore around their houses like our Little Hawks are used to exploring at the ODC. We received many thanks from families eager to continue their outdoor learning and it sounds like the kids didn't skip a beat in their curiosity!

To provide school programs, our naturalists developed virtual content to share with students that were anticipating field trips this

spring. The virtual field trips correlate to state standards for subject matter and vocabulary. They include questions prompting students to investigate ideas further or to make observations off-line. The experiences are broken up into sessions so teachers can work through studies of habitats, live birds of prey, adaptations, Michigan cultural history and more at their preferred pace.

Lastly, our team has been hard at work providing readings of children's books, suggesting family backyard activities, and hosting live videos across our social media platforms to continue to spark curiosity about the natural world in our community. By no means do we expect or want these virtual experiences to replace the real thing and we will continue to promote exploring outside. We know that when we can get back to a more normal day-to-day life that these virtual resources will only supplement the adventures led by our staff. We look forward to sharing another outdoor adventure with you!

### View Our Online Resources

Point your smartphone's camera at the QR codes below or type in the address shown

Backyard Learning Series



[bit.ly/odcbackyardcrusade](http://bit.ly/odcbackyardcrusade)

ODC Network YouTube Channel



[youtube.com/user/ODCMG](https://youtube.com/user/ODCMG)



Little Hawks had a drive-through year-end celebration featuring all their teachers and an owl!

# Prairie Restoration

Michigan is well-known for its forests, but our southern border was historically covered by a type of prairie habitat called Oak Savanna or Oak Openings. Characterized by mostly tall grasses and wildflowers, with some interspersed oak and hickory trees, Oak Savanna ecosystems act as a transition between our forests and the vast prairies of the Midwest.

European pioneers replaced these fertile ecosystems with farm fields and city

development. In remaining wild spaces, the natural, periodic disturbances (fire, grazing, and drought) that allowed prairies to persist were suppressed, allowing invasion by forest species.



## Steps to Restore Forest-encroached Prairie Environments

1. Removal of larger trees and shrubs using a chainsaw or loppers and application of an herbicide immediately after.
2. Prescribed burn, which requires permits, experienced technicians, and communication with local fire authorities. Fire limits other types of plants from becoming established, increases prairie plant growth and reproduction, as well as returns important nutrients to the soil.
3. Introduction of a diverse array of prairie plants, which benefit animals that previously adapted alongside them. Mix resilient “warm” summer grasses with wildflowers and “cool” spring/fall grasses with legumes. This will attract insects, form perches for birds, and provide seasonal cover, nesting habitat, and food for a myriad of animals.

Throughout each step in the restoration process, patience is of utmost importance. Minimal but regular maintenance will prevent a repeated invasion by forest species. Though it may be hard work initially, this important ecosystem is essential for the survival of certain wildlife, and is a unique and beautiful piece of Michigan’s natural history.

ODC has worked on the restoration of oak savannah ecosystems at our Rabbit River Preserve property. Areas of fallow agricultural land were seeded with a prairie seed mix and filled in with bare root tree stock. These areas

will be allowed to develop naturally—the only input from ODC staff will be dealing with highly aggressive invasive species.

You can visit Rabbit River Preserve and see prairie restoration in progress at 4401 135th Avenue, Hamilton, MI 49419.



# Finding Frogs & Toads

Listen for frogs near ponds, marshes, and swamps. Frogs may sit and wait for their prey around the edges of the water.

Toads are mostly active at night. During the day they sometimes burrow into the ground to stay moist. Look for them in your yard with a flashlight after dark.

usually smooth, slimy skin

## Frog



long legs for leaping

more often found near water

## Toad



usually dry, bumpy skin

more often found on land

shorter legs, moves by hopping

Toads can soak up water through their skin and sometimes when they are startled they expel that water quickly to try to scare you away. They are safe to handle, but always wash your hands afterwards. If you hold a toad by its armpits and it chirps, then you have a boy toad—girl toads don't make any noise.



### Toad Observations

If you find a toad in your yard, record your observations here!

Location: .....

Date: ..... Time of day: .....

What is it doing?  
.....

Describe how it captured and ate prey:  
.....

Find a worm or insect and place it in front of the toad.  
.....

Did it eat with its eyes open or closed?  
.....

When toads swallow, part of their eyes push down into the upper part of the mouth to help push prey down their throat.  
.....



Toads have bumps and spots to help them blend in. The bumps are called warts, but you can't get warts from handling toads. Can you find the toads in these pictures?

## Community Pizza at Hops in June

Enjoy a Thai Chicken Pizza featuring spicy peanut sauce, chicken, broccoli, carrot, Hops' cheese blend, and cilantro. For the entire month of June, Hops will donate \$5 from each Community Pizza purchased to the ODC.

### Month of June

Location: 84 E 8th Street, Holland, MI 49423



## Special Feature at Tripelroot

For the whole month of July, Tripelroot will donate \$1 to the ODC Network from each purchase of a special featured menu item. Order from Tripelroot anytime in July to show your support!

Month of July • Location: Tripelroot, 146 E Main Ave, Zeeland, MI 49464

## Community Tap at New Holland Brewing

For the month of August, NHBC will donate \$1 from all 16 & 20oz drafts on the Community Tap handle to the ODC Network. This is New Holland Brewing Company's way of giving back to the community, one beer at a time!

Month of August • Location: New Holland Brewing Pub on 8th, 66 East 8th Street, Holland, MI 49423

## Up Close and Wild at Modales Winery

On August 8th, head to Modales Winery to see our Live Birds of Prey! A percent of the proceeds will be donated to the ODC Network.

Saturday, August 8 • 1-3 PM

Location: Modales Winery, 2128 62nd Street, Fennville, MI 49408



### Looking for more events?

Check out Facebook and our website, [outdoordiscovery.org](http://outdoordiscovery.org), for the latest information on programs and events!

## Bird Bingo

Look for these birds and bird habitat features in your yard or on a walk.

Collect 5 in a row: horizontally, vertically, or diagonally.



# New Screech Owl at De Witt Birds of Prey Center



We'd like you to help us welcome our newest resident Bird of Prey, our red morph Eastern Screech Owl. This owl comes to us from a wildlife rehab center in Indiana and has suffered a permanent eye injury likely due to a car strike that prevents it from surviving in the wild.

You might notice that this owl looks different than the other screech owls we have. Eastern Screech Owls come in two color morphs: either a gray color or a rusty-red or rufous color. Here in Michigan, it is hard to find a red morph screech owl. Only about 30% of all Eastern Screech Owls are the red morph. These colors and patterns help these small owls camouflage against trees to stay safe during the day while they sleep.

Their average lifespan out in the wild is around 4-5 years. In captivity, they can live much

longer than that, up to 20 years. Like most of the birds of prey we have, we do not know how old this Eastern Screech Owl is. It came to us as an adult, and we do not know how long it lived in the wild before it's injury.

The Eastern Screech Owl is the second smallest owl and one of the most common of the 11 owl species that call Michigan home. You can easily hear their calls at night in your neighborhood, as they are not picky with what habitat they live in. They will gladly move into any habitat that has adequate food and tree cavities or nest boxes to nest in. They like to eat small mammals, birds, insects, or even prey larger than they are like blue jays. They also don't care about living too close to other screech owls as long as there is enough food to survive. There are records of an average of 6 Eastern Screech Owls living within a 1 square mile area in suburban Connecticut. Listen in your backyard for their trill or whinny to see if you have Eastern Screech Owls living near you.

## Attributes of Owls

Owls are a type of *raptor*, or bird that uses its feet to catch food. They are primarily nocturnal, or active at night. Owls can be identified by their large, forward-facing eyes, as well as by other unique features seen on this illustration of a barred owl.

Soft body feathers and fringed edges on their primary wing feathers help owls muffle sound while they fly.



The ears of owls are surrounded by feathers to help focus the sound.

Owl's eyes are fixed in their sockets. In order to see the world around them, they must turn their heads. Their heads can turn 270° (not all the way around).



**Did you know?**

Owls can rotate their heads farther than we can rotate ours because owls have more neck vertebrae than humans.

Great Horned Owl Skeleton



Frogs singing.

Birds soaring.

The familiar sound of branches in the breeze.



Now more than ever, our natural world has become a place for families, neighbors, and co-workers to connect to one another and a place for renewed appreciation for our community's beautiful backyard.

The ODC Network has provided free and accessible natural and protected acres as a refuge during our home stays and hard news. Our trails have given families opportunities to experience the wonder and excitement of exploring together. Our nature play areas continue to spark children's imaginations whose routines have been disrupted. Our staff have continued educating through virtual nature programs. All while our wildlife and their habitats have given us hope through the sounds, aromas, and sights that sunnier days are ahead.

Without the support from residents like you, we would not be able to protect these unique spaces or educate and promote a healthy lifestyle to our community. In these unprecedented times, we especially need your help to support our efforts.

Please make a gift today!

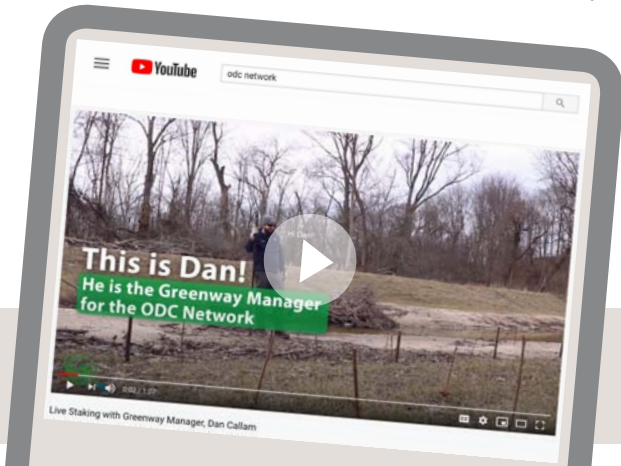


*Gratefully,*  
The ODC Network  
Team

# Streambank Stabilized with Live Stakes

Did you know that parts of some plants can grow into entirely new plants? Using a technique called live staking, part of a plant can create entirely new shrubs from a cutting of an existing shrub. Live stakes are a cheap way to create new plants in a relatively short amount of time for restoration projects. They are especially useful on stream restoration

projects, where a streambank might be very unstable and need plant growth to help hold the soil in place. We recently used live stakes to help stabilize a streambank restoration project along Peters Creek in Zeeland. Willows, dogwoods, and spicebush stakes were placed in the side of the restored banks while they were still dormant for the winter. Even if only a portion of these plantings survive, the new shrubs and their root systems will be enough to hold the banks in place during future rain events.



PROJECTclarity

Watch a video about this restoration process:

search YouTube for

*Live Staking with Greenway Manager, Dan Callam*

Before



Live Stakes Installed



After 9 Weeks





## Explore Alaska in 2021

The ODC Network is happy to announce a new partnership with Hope College and their Global Travel Program. Hope and the ODC have a long tradition of partnering on a variety of education programs and research projects. The entities have further expanded their relationship by forming a partnership around global travel. The first joint adventure offered by the two organizations will be in August of 2021. Travis Williams, CEO of the ODC Network and Hope College graduate (class '98) has led numerous private small group tours in Alaska and will be leading this adventure.

We will travel via a small cruising ship, immersing ourselves in the pristine wilderness of Glacier Bay and the inside passage of Alaska. We will see the barren mountain faces, glaciers, and fjords of Glacier Bay and then venture into the moss-laden and rainforest-cloaked shores of the Icy Strait. Hundreds of miles of glacial fjords are there, waiting to be explored.

On our exploration you may see Sitka deer or brown, black or glacier bears and we will keep our eyes peeled for wolves, moose, humpback whales, porpoises, sea otters and countless other land and marine mammals. We will learn about botany, geology, marine and terrestrial wildlife and

also better understand the past and current climate science regarding the wilderness, its known effects and possible outcomes.

Each day you will kayak and hike in Glacier Bay National Park or the Tongass National Forest, two of Alaska's wilderness gems. Not an experienced kayaker or hiker? Don't worry! The crew and your guides are experienced at offering this trip to people of all abilities. Expect to hike in a temperate rainforest, explore beaches, kayak in coastal waters and experience native and local culture.

For more information on the trip, you can contact Travis at [travis@outdoordiscovery.org](mailto:travis@outdoordiscovery.org)

or check out Hope College's Global Travel program site: [hope.edu/alumni/resources-services/global-travel/alaska-2020.html](http://hope.edu/alumni/resources-services/global-travel/alaska-2020.html)

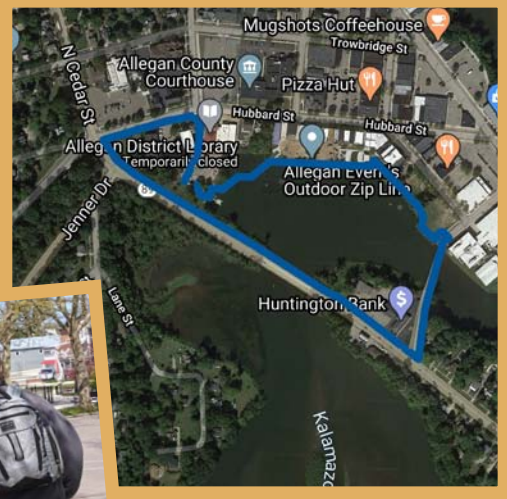


# One Car Hikes and Rides

Who hasn't been getting a little stir crazy these past few months? Many of us have been doing laps around our neighborhoods trying to adsorb as much sunshine and fresh air as we can, but you might be getting bored of staring at your neighbor's same kissing figurines in Dutch costumes or drowning out that dog

that barks every time you pass by. Take a break from your neighborhood and go on a walk along one of our community's greenways. These loops will make it easy for you to park one car and return to the same spot to keep practicing safe social distancing.

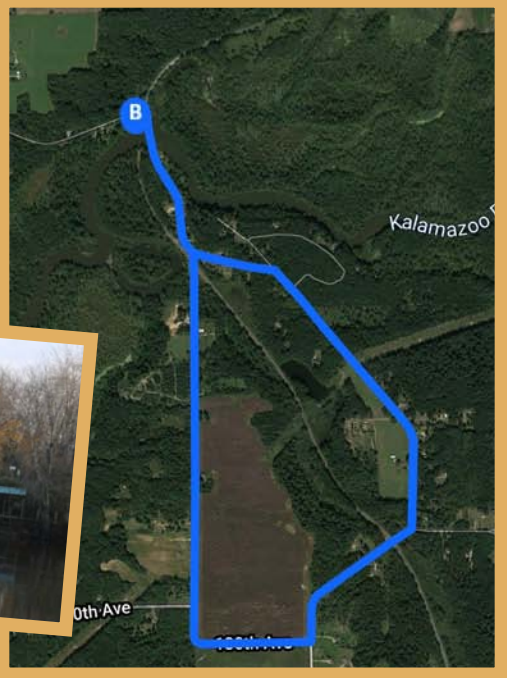
**Downtown Allegan Riverwalk (1 mile)**—walk around the Kalamazoo River in downtown Allegan before river restoration work takes place in the coming years. Park at Hanson Park behind the library, then take the circular loop along the riverfront. The walk through Mahan Park and the boardwalk will take you over the historic 2nd Street bridge and Marshall Street before returning to your car along Hubbard Street.



**Windmill Island Loop (3/4 mile)**—parking at Windmill Island will give you an opportunity to view not only tulip beds but the expansive wetlands of the Macatawa Marsh. This loop around the island offers several wild scenes, with the chance for viewing water friendly birds like sandhill cranes and osprey. Admission may be required for non-Holland residents. For a longer walk, park downtown and walk down the newly renovated Windmill Island Parkway.

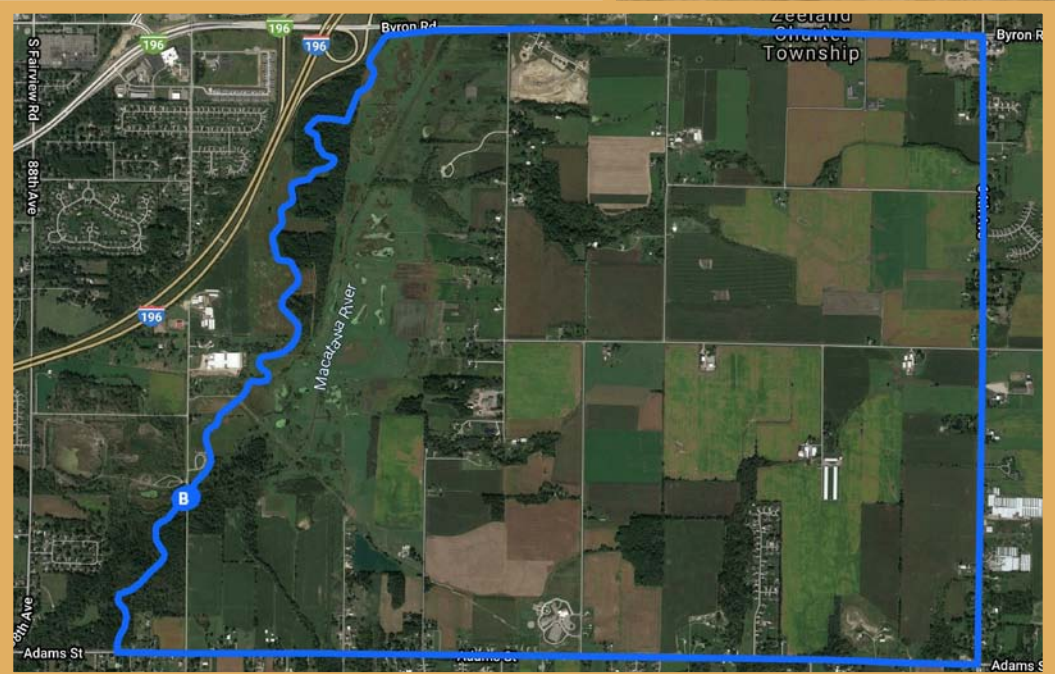
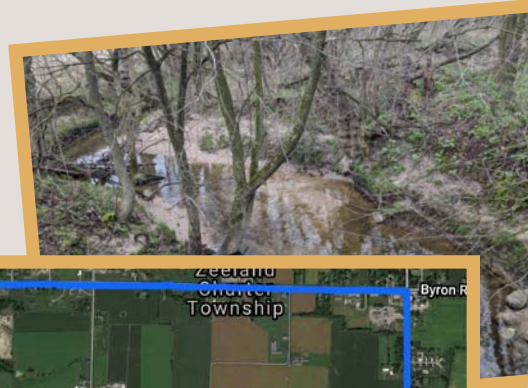


**New Richmond Bridge Loop (3.5 miles)**—between Holland and Fennville is a quiet park along the Kalamazoo River just downstream of its junction with the Rabbit River. You can use the old bridge to walk or bike over to reach Manlius Township Hall. From there, head south on 57th, following 130th to the east and taking Old Allegan Road back up to New Richmond.



**Upper Macatawa Natural Area and Zeeland Township path (9 miles)**—park at the Upper Macatawa Natural Area's south entrance and follow the paved path south along the Macatawa River. Then take the bike path along Adams Street east to Drenthe. Follow the Greenway signs north to Vriesland, then head west along Byron Road and back through the hills of the Upper Mac to the parking lot. If you're feeling

even more ambitious, try parking at Adams Street Landing or another point further west!



# Looking for Turtles

Go for a walk near a pond, Lake Macatawa, or the Macatawa River. You can observe wild aquatic turtles easily when they're basking on logs or on the shoreline. Turtles dive into the water when disturbed, so approach them carefully or view them with binoculars. Most turtles are tolerant of handling, and you can try to catch them if you are sure to handle them

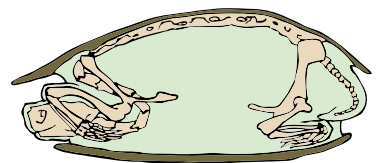
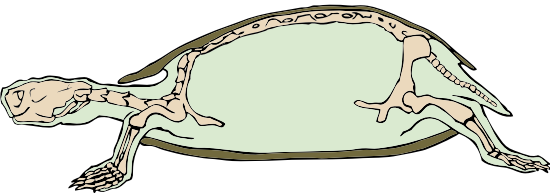
carefully (and wash your hands afterwards). Once you have identified and observed a wild turtle, put it back where you found it. Turtle populations have been harmed by people removing them from the wild and keeping them as pets or by releasing non-native pet species into the wild.

Turtles in Michigan — Circle the turtles you see outside!



Turtles have very flexible neck muscles covered by loose skin. This allows the turtle to pull its whole head inside its shell if threatened.

Most turtles (including all the species found in North America) curve their necks in an "S" shape to tuck inside.



# A Turtle's Shell is Part of its Skeleton

A turtle's shell develops with the rest of its body inside the egg before it hatches. Then its shell grows with it its whole life, just like your bones grow with you. Turtles cannot 'take off' their shells any more than you can 'take off' your skeleton.

Turtle shells have many purposes. Shells are colored to blend in with the turtle's surroundings. Dark-colored carapaces can also absorb and retain heat from the sun, helping turtles maintain their body temperature. Because shells are made of bone, they store lots of calcium. Extra calcium helps turtles survive winter hibernation.

Painted Turtle Hatchlings



The top part of the shell is called the **carapace**, and the bottom part is the **plastron**.

Carapace



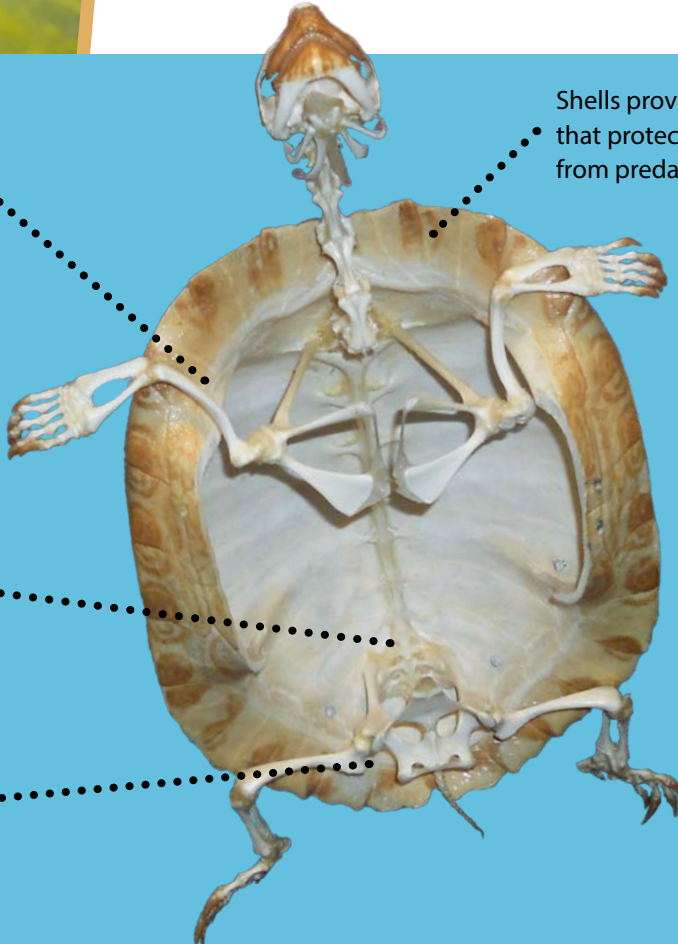
Plastron

The plastron on this turtle skeleton has been removed so you can see inside.

Shells provide armor that protects the turtle from predators.

Turtle carapaces are modified vertebrae (backbones) and ribs.

Turtles are the only animal with their shoulder and hip bones inside their ribcage.





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