

2,300 <<<
Admissions
to our hospital
so far this year,
plus about 3,500
hatchlings from
eggs retrieved
from these
admissions



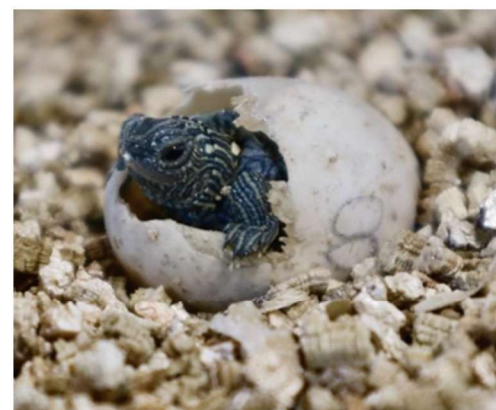
Back Home

**In 2024, OTCC
released 5,011
turtles back to
their home
wetlands.**



Left: Our new surgery has much more space, so we can expand as a teaching hospital. It now boasts two surgery tables, allowing for increased surgical capabilities. During the busy season, admissions can reach 60 in one day.

Right: This is one of thousands of babies we hatched from eggs retrieved from hospital admissions. All will be released back to their mother's wetland home.



Moving into our new home

Situated on 100 acres of woods, wetlands, and farmland, OTCC's new home was completed in 2024, with thanks to the generosity of Mary and Gerry Young, who gifted the land to OTCC, as well as the many participants in the Capital Campaign. Of course also vital, were those who donated their time and services to help make it happen. Volunteers were also instrumental in the actual move, bringing horse trailers, cattle trailers, trucks, and cars, to get us moved in at the end of August. We then started the work of completing the interior, and getting the facility ready for the public. However, we were also juggling this along with the busiest year yet in our hospital.

Spring came early in 2024, so our admissions were also early. The continual increase in public awareness about road injuries, means that every year we see more turtles admitted to our hospital. This isn't because more turtles are getting injured, but that more turtles are getting help. As of the beginning of December, 2300 turtles have been admitted to our hospital this year. That's more than ten times the number admitted only 10 years ago. This number does not include the thousands of babies that we hatch each year, from eggs retrieved from these injured turtles.

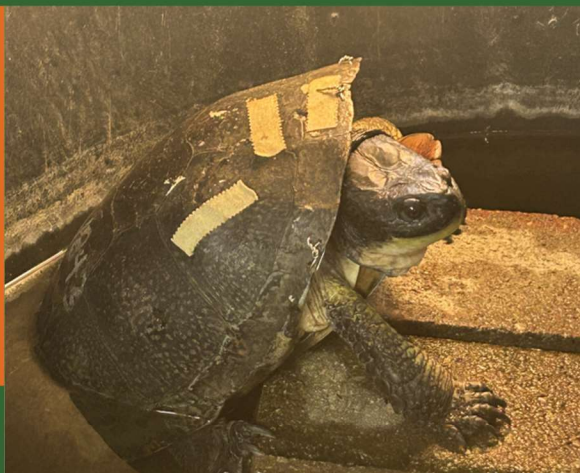
Our new facility opens up a lot of opportunities and will enable us to expand all our programs. It will allow a much greater public education potential, leading to a greater number of stewardship activities; the large central education centre will educate on conservation issues and solutions. The new facility will also allow marked expansion of our hospital as a teaching hospital for veterinarians, veterinary technicians, and wildlife rehabilitators. Of course, in addition, housed turtles will benefit with an increased scope for enclosures and setups, leading to greater ease for their care. Finally having a staff room to meet in, is a luxury everyone is looking forward to!

We incubated almost **9,000** eggs this season - these were retrieved from turtles admitted to the hospital.

Our hotline staff fielded over **10,000** calls this season, helping turtles get help, and answering the public's questions.

12,109 people took part in our education events in 2024, despite the challenges of moving.

We also engaged over **160,000** unique social media users each month.



Above: this adult Blanding's turtle was admitted with a severe fracture of the upper shell, or carapace. **On the left** you can still see the orthopedic wires that were placed surgically, as well as the initial tape that is used to secure the pieces until surgery is carried out. **On the right**, you can see the wires have been removed and you can barely see the fracture. He will be released in the spring.



Left: Part of our new education turtle facilities. Paddy is a snapping turtle who lives with us since he is unfortunately not releasable. He helps us spread the word about conservation. This is his new enclosure, featuring a large pond, with ladder to an extensive dry land area.

Below right: more of the thousands of hatchlings that we have overwintering with us.

Below left: the new surgery as well as the ICU and hatchling room have viewing windows, to allow public viewing of the turtles getting their treatments and surgery.





photo: Sue Carstairs

Just a few of the thousands of turtles admitted to our hospital in 2024

The adult snapping turtle shown at left, is one of our 2,300 admissions in 2024. As you can see, he had a fractured jaw; this is common in snapping turtles, from injuries due to cars. They cannot tuck their heads into their shells and so they often get head injuries. This fracture was repaired by first anesthetizing the turtle, and then using orthopedic wire to secure the pieces back into shape. The wire will be removed before release (this one is overwintering with us, as he came in later in the season). We have about 2,000 turtles overwintering this year.

Right: a painted turtle patient hangs out on her basking rock. OTCC spends approximately \$17,000 on UVB light bulbs each year! These bulbs keep turtles healthy by mimicking sunlight and allowing absorption of calcium - essential for hatchlings to grow solid healthy shells, and for healing adults to repair their shells (which are made of bone).

We replace each light every 6 months, as the emissions wane over time. These are among the many essential supplies needed to ensure turtles heal properly before release. Each tank also has a heat light, necessary since turtles are ectotherms - cold blooded animals that need heat from their environment to control body temperature. Providing the proper temperature range is essential - it is responsible for everything from proper appetites to proper immune function.



photo: Sue Carstairs



photo: Sue Carstairs

Left: this adult map turtle is spending the winter with us, recovering from a fractured carapace; the orthopedic wire can still be seen. The impact also left her with a fractured left front leg, but she is regaining use of it really well. She also suffered a damaged left eye, which is partially visual, but luckily she has full sight in her right eye. She is having no trouble eating, and has a healthy appetite! Each turtle that is big enough is microchipped before release. We have been doing this since 2018 and we see quite a few turtles annually that have been admitted before. This allows us to see how our hospital cases are doing. We always release them close to where they were found, so it also allows us to see how far they have traveled.

For 13 years, we have conducted fieldwork to establish the success of headstarted turtles compared to their wild-hatched counterparts, by tracking turtles from each group weekly during the summer. With a focus on Blanding's turtles, we have successfully learned that released headstarted turtles do as well as wild-hatched ones of comparable size. This is incredible, since the released turtles have had no prior acclimation, and have not had the years of selection pressure that the wild-hatched ones have had.

The questions we wanted to answer with this study were 1) whether they survive, 2) how best to carry out releases, and 3) do they reproduce normally in the wild? We have learned a lot about best practices for release strategy, which we transfer to all species we headstart. Since we know they survive comparably to wild-hatched turtles, this shows that our headstarting will help populations.

We will continue to study these turtles into their adulthood to confirm their reproductive ability. However, we are transitioning the study into a less intensive one - we will visit the site for shorter, more intense periods as the turtles age. In doing this, it will free up our field staff to take a greater part in on-the-ground road mortality mitigation, through our new initiative.



Ecopassages for turtles allow them safe passage UNDER roads, therefore preventing road mortality

OTCC is teaming up with Animex International and Eco-Kare International to help stop road mortality

Road mortality is obviously a huge problem for Ontario's turtles, since Southern Ontario has an extremely high density of roads, and they overlay exactly with our 8 native turtle species' home ranges.

Our work in the hospital as well as our headstarting program helps to mitigate these losses, and can actually have a population effect, slowing decline. We also want to PREVENT these losses however. Many projects are underway throughout the province to construct ecopassages, allowing safe passage under roads. Often, OTCC's data will inform where these should be placed.

We are excited to partner with Animex International and Eco-Kare International, to spearhead more road mortality mitigation in Ontario. Animex manufactures fencing that is used alongside ecopassages, to guide turtles to the culvert under the road. Eco-Kare are experts in implementing passages and other mitigation projects. OTCC data will help inform locations, and we will help with implementation and monitoring of the projects.

A large part of our new facility will focus on conservation education that will also show people how they can help. Many ecopassages have been implemented due to the public's work towards them. We aim to inspire more of this amazing work.



Parks Canada has partnered with OTCC to help spread awareness regarding turtle conservation. With their help, we formed the **Ontario Turtle Conservation Network**, to connect those carrying out conservation initiatives in Ontario. Parks Canada has also constructed a wonderful ecopassage educational display that is going to be a prominent feature in our education centre. The photo above shows this display, which hopefully will inspire more ecopassages to be spearheaded.

Our 1,500 Turtle Taxi volunteers continue to enable OTCC to admit turtles from across the province, taxiing the turtles to our 45 First Responders, and then to OTCC's hospital. They also assist in their release back to their home wetland.



Our **1,500** Turtle Taxi volunteers drove a total of **271,542 km** in 2024 to ensure that turtles received immediate care. That's equivalent to almost **seven times around the world!**

(Note that people combine turtle trips with their planned personal trips whenever possible.)



Education is an important part of our multi-pronged approach to conserve and protect Ontario's wetlands. We believe knowledge leads to action and stewardship, so we offer a variety of educational opportunities to the public both virtually and face-to-face. This programming includes our "Turtle Encounter" and behind-the-scenes tours as well as our new multi-generational "Wildlife Conservation Through the Ages" program. In 2024, our educational programming reached **12,109 individuals** through **224 events**. This included **61 school presentations** reaching **6,489 students**.

Our new facility offers huge potential for increasing our educational programming. With a focus on public engagement and interaction, the significant increase in space allows us to reach new heights for our programs. The education centre will offer educational displays, with a focus on how the public can engage in stewardship activities. We will showcase the field work we will be carrying out, starting with some mitigation work in our own area. We know this will inspire others to do the same in their areas.

In addition, the education centre provides a literal window into the hospital workings, so the public can actually see what goes on in the turtle surgery.

Once funding allows, we will develop our outdoor education centre as well, with an outdoor educational pavilion, guided nature walks to our own wetland, and many educational displays.

What our education program participants say...

Diane, Lindsay, Jaclyn, Private Tour - July 27th, 2024

"It was shocking to learn the number of turtles injured yearly, mainly through car mishaps. Also realizing there would be turtles injured and not rescued. It made us more aware of their wetland habitats, how important it is to preserve these areas for the turtles and of course other creatures. Alternately, how many turtles are returned to their habitats along with baby turtles."

Sabrina, School Teacher, Virtual Tour - March 19th, 2024

"One Grade 2 class was so inspired they did a week's worth of research! They were sooo excited to present it to the Grade 5s. The Grade 5s made turtle puppets with their Grade 1 learning buddies and then the Grade 1s were so inspired by your presentation they made their own turtle hospitals and played pretend. Thank You!"

Julie, School Teacher, Virtual Tour - March 21st, 2024

"This was a great intro into the science (habitat) unit I'm about to start with my grade 3 class. They are very invested in learning more about the wetlands and how to protect them. In Indigenous culture water is sacred and students made many connections between cultural teachings and the message the OTCC staff was giving."



New Roles at OTCC

With the savings gained from no longer paying a lease, we are working on adding a management level to our staffing structure. This will include a 'General Manager of non-Veterinary Programs' who will oversee the volunteer and education programming, and be instrumental in their growth. In 2024, we were fortunate to have 6,640 volunteer turtle care hours. Even though we have 116 active volunteers, and 150 on call, we are always looking for more, and the logistics related to this can be huge. This added role will take the day to day staff management off our Executive Director's plate, allowing her to focus more on the larger picture. Since Kate, our hotline coordinator, is stepping into the General Manager role, Selena (a past summer student) will now be with us full time, to focus on hotline and to help with turtle care and data management. In addition, Kelsey (another prior placement student) will now be helping Lisa to carry out the educational programming, funding permitting, since this will be expanding greatly. We are proud that all of our employees originated either as volunteers or students with us, and we feel it demonstrates how much they enjoyed the work and our team.

This is what it's all about - releasing turtles back home. All turtles are released to their home wetlands throughout the province. **We released 5,011 turtles back home in 2024.** This tangibly helps populations, and helps buy time to fix the problem of road mortality.

