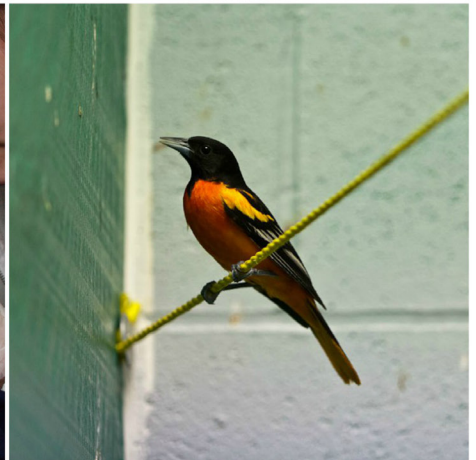
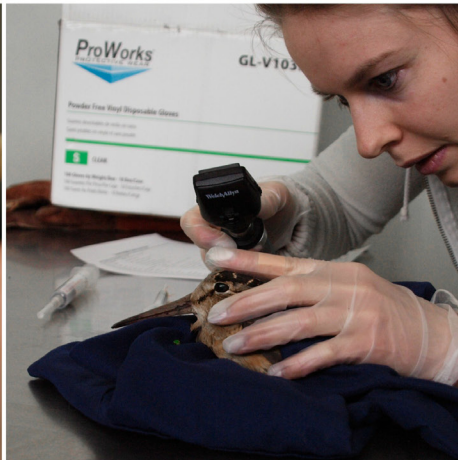


Toronto Wildlife Centre Final Report for Ontario Wildlife Foundation

November 1st, 2017

**Saving migratory birds through medical
care, rehabilitation and public education**

September 1, 2016 to August 31, 2017



The generous support of the Ontario Wildlife Foundation (OWF) was vital in achieving the project objectives during the granting period.



Objective #1: To provide rehabilitation and medical treatment to injured migratory songbirds found in the GTA and beyond and release them back to the wild once healthy

With your help, Toronto Wildlife Centre (TWC) was able to admit **647 injured migratory birds from 74 different species** during the grant period. The vast majority of them were brought to our hospital as a result of a window strike during their migratory journey.

Upon arrival at TWC, each bird was given an initial exam by a senior staff member highly trained in assessing the types of injuries that are typical for small songbirds. The most common types of injuries include fractured coracoids/collarbones, head trauma, eye ulcers, and cracked beaks.

TWC’s veterinary team created treatment plans and protocols for each of our avian patients including medications, follow-up exams, and any required surgery. Our rehabilitation team carried out these plans every day by feeding (sometimes by hand) a species-specific diet that takes into account any injuries that may cause the bird difficulty eating, daily weighing and cleaning of wounds/injuries, test flying for exercise and monitoring improvement, and many other tasks that gave these birds the chance to heal.

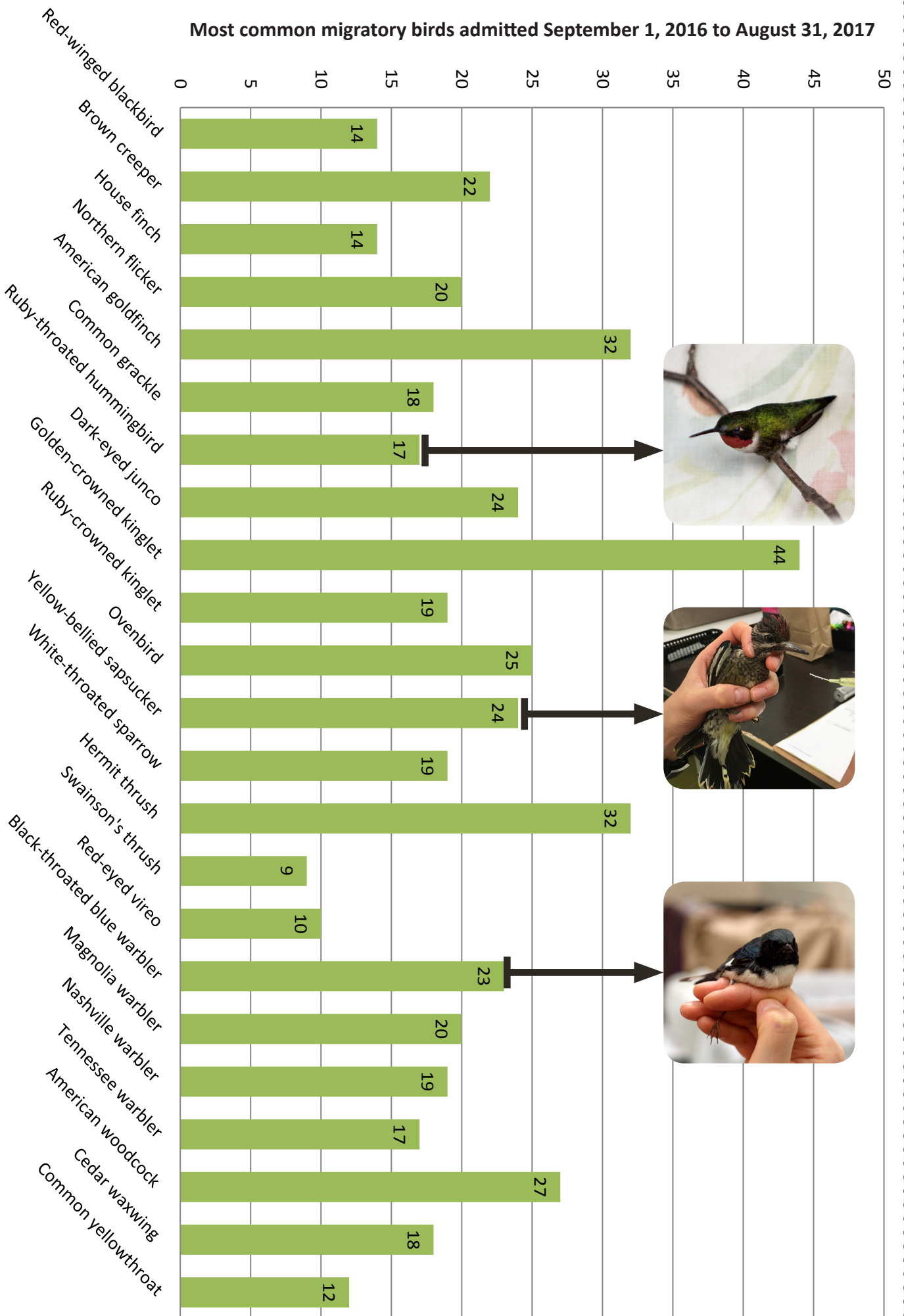
Some birds required care for only a day or two while others needed ongoing medical attention for several days or even weeks before they were ready to be released back to the wild. **The grant provided by OWF ensured we were able to continue admitting migratory songbirds during our most busy times.** Because of you, TWC had resources available to help every member of the public that called our wildlife hotline about an injured migratory songbird - **thanks to you, no adult songbird was turned away.**

The graph featured on the right shows the most common migratory birds admitted to TWC over the one-year period that OWF supported this program. Other species also admitted include:

- | | | |
|-----------------------------|---|-------------------------------------|
| * rose-breasted grosbeak | * indigo bunting | * gray catbird |
| * black-billed cuckoo | * yellow-billed cuckoo | * least flycatcher |
| * yellow-bellied flycatcher | * red-breasted nuthatch | * white-breasted nuthatch |
| * Baltimore oriole | * Northern parula | * Virginia rail |
| * American redstart | * common snipe | * sora |
| * American tree sparrow | * chipping sparrow | * fox sparrow |
| * Lincoln’s sparrow | * Savannah sparrow | * song sparrow |
| * swamp sparrow | * white-crowned sparrow | * barn swallow (threatened species) |
| * cliff swallow | * tree swallow | * chimney swift |
| * scarlet tanager | * brown thrasher | * gray-cheeked thrush |
| * wood thrush | * veery | * blue-headed vireo |
| * Philadelphia vireo | * bay-breasted warbler | * black-and-white warbler |
| * Blackburnian warbler | * blackpoll warbler | * black-throated green warbler |
| * Cape May warbler | * mourning warbler | * pine warbler |
| * Wilson’s warbler | * yellow warbler | * yellow-rumped warbler |
| * Northern waterthrush | * whip-poor-will | * house wren |
| * winter wren | * Canada warbler (species of special concern) | |

With 647 birds admitted come 647 stories of how OWF helped - each one of them unique and worthy of telling. This report will highlight the lives of 3 migratory birds that are flying free in the wild once again, because of OWF.

Most common migratory birds admitted September 1, 2016 to August 31, 2017





Feature Patient: Ruby-Throated Hummingbird

Veterinary technician Stephanie called TWC after a visitor at the Toronto Zoo came to her with an injured ruby-throated hummingbird that they had found on a pathway, not moving. While the zoo works with a vast array of wild species, they are not trained or licensed to rehabilitate sick and injured animals living in the wild.

Since the hummingbird was breathing heavily and not flying away, Stephanie knew that this bird must be injured and brought it TWC for help.

Upon examination at our centre, medical staff noted that the bird could grip with its feet and flap its wings well, but it veered to the left during flight. The bird's head and left eye was also swollen. Pain medications and anti-inflammatories were prescribed to help the bird recover and cope with its injuries.



Because rehabilitation staff were unsure if the bird was able to eat on its own due to the head trauma, they immediately began hand-feeding. Hummingbirds use up energy very quickly and cannot go long periods of time without food. Due to their small size, a specially formulated nectar is put into a syringe; staff gently place the beak of the bird into the syringe through which it can lap up the mixture. After some time in care, it was noted that the bird was able to eat on its own; several syringes were anchored around the enclosure. Small insects such as fruit flies were also provided making up a small portion of their diet.

Over the course of the next few days, rehabilitation staff noticed that the hummingbird could flap well but could not maintain height while flying. The bird was also holding the right wing out slightly suggesting a possible injury. It can be very difficult diagnosing issues in such small birds, and daily monitoring is essential to ensure the patient is making progress, altering the treatment plan as needed. Cage rest was recommended to ensure that the bird had limited mobility to restrict energy use and avoid worsening its injuries during excessive flight.

After several days in care, our team became concerned about the bird's left eye. It continued to droop and only open half way; TWC veterinary staff examined the eye and found it to be clear with no evidence of bleeding or ulcers. As each day passed, the eye appeared to be improving and the bird's flight was once again back to normal. The rehabilitation team tested the bird's flying capabilities and noted it was fast and easily able to avoid capture – very good signs that this patient was once again able to survive in the wild. Not long after, the bird was released in High Park in Toronto, an ideal location for finding other hummingbirds ready for migration. Thank you OWF for giving a little bird a big happy ending.

Photo top right: TWC staff paint the tip of the syringe red to attract hummingbird patients to the food inside.

Photo bottom right: Hummingbirds are housed in laundry baskets with soft mesh covering openings to protect feathers until they are released!





Feature Patient: Yellow-Bellied Sapsucker



This young yellow-bellied sapsucker was admitted to TWC at the end of the summer. A woman named Katie found the bird clinging to the bottom of a tree all alone at a school near Bloor Street and Spadina Avenue – a very busy area in downtown Toronto. Katie watched it for a while just hopping around and trying to fly. She thought the bird might have a wing problem so she called TWC's wildlife emergency hotline for help.

On arrival at TWC, the sapsucker was given a medical assessment; our team found that he was unable to hold his body upright but had good grip with both feet which ruled out any significant spinal trauma. Even though the bird was immature, he was at a stage where he should be flying; since there was no indication of a broken wing, it was likely that this bird was suffering from head trauma – the result of an impact, likely with a car or window.

Our medical team created a treatment plan that included subcutaneous fluids for rehydration, anti-inflammatories to bring down the swelling in his head, as well as painkillers to alleviate his discomfort.

After a few days in care, the bird was once again able to hold his body upright and extend both wings symmetrically. However, he was still reluctant to flap and a large faint ulcer was found in his left eye. An ulcer is typically a result of trauma (such as an impact); to optimize healing, antibiotics were given. Infection can often set in and create an even more complicated situation, or even worse - blindness.

Luckily, the ulcer healed well and the sapsucker's body condition continued to improve. He was eating well and steadily gaining weight which was important as he was a young bird and still growing. He was also beginning to fly well and was moved to an aviary to build up his muscles, get exercise and socialize with other birds.

Once fully healed, the bird was moved to our outdoor songbird aviary for monitoring in a larger enclosure and to give him the opportunity to re-acclimatize to the outdoors – the last step before being returned to the wild. Our rehabilitation team noted that he was flying and maneuvering handily, as well as clinging and hopping normally along the walls – a skill that is vital for his survival in the wild.

After almost 3 weeks in care, the sapsucker - now fully grown and healthy - was released back to the wild to continue on his migratory journey. Thanks to Katie, and the support of OWF, this bird is flying free again.



Photo top left: This sapsucker was reluctant to leave this tree, even when Katie approached; a definite sign that the bird needed help.

Photo bottom left: The patient is given medication through a syringe by a senior wildlife rehabilitator.



Feature Patient: Black-Throated Blue Warbler



This black-throated blue warbler was brought to TWC by a FLAP (Fatal Light Awareness Program) volunteer. They search city streets for lifeless birds that have become injured as a result of a window strike, typically with a high rise building, as they migrate through the city.

Because TWC is the only wildlife rehabilitation centre in Toronto, organizations like FLAP rely on TWC to help migratory birds that are facing life-threatening injuries and have nowhere else to go for care. Each year, the lives of hundreds of birds are saved when they are found and then treated at TWC. Supporters like the Ontario Wildlife Foundation create the capacity to make this possible.

When the warbler arrived at our hospital, he was quiet and not moving – common behaviour for a victim of a window strike. Our medical team determined that he was suffering from subcutaneous emphysema (SQE) around the neck which means that this patient's air sacs had been ruptured upon impact. Our staff also found an ulcer in the left eye; another common injury for birds that hit windows.

Anti-inflammatories and pain medication were provided to bring down swelling as well as antibiotics to prevent any infection from setting in, especially in the areas where the air sacs were affected. In some cases, SQE can cause the skin to become engorged with air which can require lancing to alleviate the pressure. In this case, that wasn't necessary as the SQE was healing nicely on its own.

In order to recover, the bird was given several days of cage rest in a small soft-sided enclosure to limit movement and flying which could further exacerbate his injuries. During this time, his condition improved dramatically – the ulcer disappeared and while some SQE remained, it was no longer affecting his ability to fly. Also, he was eating well and his weight was steadily increasing.

TWC's wildlife rehabilitation team opted to move him to our outdoor songbird aviary to give him room to exercise and build up important flight muscles. After 2 ½ weeks in care, this bird was strong and healthy and ready to continue on his journey. He was released at Samuel Smith Park in Toronto – an area right on Lake Ontario where he could continue his journey south without once again having to navigate the busy downtown core. This success story, and hundreds of others, are made possible because of your support.

Photos: Treating small birds like warblers can be difficult as they are fragile and must be handled with care. When giving medications and other treatments, the bird must be held in a specific way to avoid causing damage while at the same time, limiting their ability to escape. These photos show this warbler being checked for ruptured air sacs (top left) and being given antibiotic eye ointment to treat an ulcer.



Objective #2: To use patient stories to educate the public on the threats to migratory songbirds through TWC's social media channels, e-newsletter and blog

The interim report TWC provided to OWF in April 2017 highlighted the many ways we shared stories and educated members of the public on issues affecting migratory birds in the first half of the grant period. This section of the report will highlight our efforts since April 1, 2017.

Stories shared through TWC's social media platforms and website featuring migratory songbird patients:

August 4, 2017

This chimney swift (a threatened species) was admitted on Tuesday with an injured leg. TWC's medical staff provided a splint, pain medication and antibiotics and the little bird has been looking better every day. Happy Friday! #fridayfeeling

<https://www.facebook.com/torontowildlifecentre/posts/10155645505358656>

July 5, 2017 (Blog recognizing generous support of OWF)

Read about some of the migratory songbirds that were admitted to TWC this year!

<https://www.torontowildlifecentre.com/songbird-sojourn-helping-migratory-birds-twc/>

May 12, 2017

Happy #WorldMigratoryBirdDay! (Recognizing generous support of OWF)

<https://www.facebook.com/torontowildlifecentre/videos/101553594226986556/>

Additional Songbird Social Media Posts:

July 19, 2017

Loblaw, Home Hardware pull wasp trap after online photos show it caught birds | Toronto Star

July 2, 2017

Charity says cats should stay inside to protect wildlife - BBC News
An animal hospital says cat owners should keep them indoors to stop an "ecological disaster".

May 13, 2017

Bird Watch - Mini Blogs - National Geographic Society

May 12, 2017

Weather extremes can exhaust the behavioral flexibility of migratory birds - BMC Series blog

April 9, 2017

Go Wild! How to Certify Your Backyard as Wildlife Habitat EARTH911



*Toronto Wildlife Centre
would like to express our
sincere gratitude to
Ontario Wildlife Foundation for
your generous grant that helped
hundreds of injured migratory
songbirds in 2016/17.*

*As we watch the last of the mi-
gratory birds fly south this fall,
we remember that without the
support of donors like OWF, many
of them would not be there.*

*Thank you for helping them
back to the sky.*

