



Rouge  
National  
Urban Park

**2020 EDITION**

# Year in Review

## TAKE A LOOK BACK

on 2020's conservation projects,  
new trails and other improvements  
in Rouge National Urban Park

## GET AN INSIDE LOOK

at the work being done to establish,  
protect and preserve this special place  
for present and future generations



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# 2020 Recap



*Photo: Overview of a new section of trail off Reesor Road*

**2**020 was a year like no other. The COVID-19 pandemic drastically altered how parks were visited and gave us ample time to reflect on our relationships with others and the natural world. Despite the cancellation of in-person events in Rouge National Urban Park (RNUP) in response to public health advisories and restrictions, Parks Canada continued its efforts in the establishment of the first national urban park in the country.

## **In this issue:**

- Wildlife (Turtles, Bats, Barn swallows, Snakes)
- Restoration, Conservation and Protection (Species at risk, Making roads safer for wildlife, Invasive species)
- Promoting a Vibrant Farming Community
- Indigenous Partnerships
- Ecological Restoration
- Law Enforcement

## Highlights

- On February 19, 2020 a landmark Terms of Reference was signed by Parks Canada and the Rouge National Urban Park First Nations Advisory Circle – an advisory body comprising 10 First Nations with a historical interest or connection to the park. The signing was a culmination of eight years of dedication, hard work and invaluable partnership.
- 5 kilometres of new trail segments were added to Rouge National Urban Park's (RNUP) trail network and detailed designs on 10 kilometres of trail in the Pickering and Uxbridge areas were completed. Planning continued on improvements to day use areas and connections among existing trails to help complete the park's "spine" trail connecting Lake Ontario to the Oak Ridges Moraine.
- Archaeological work occurred on a number of projects including restoration and trail development. Major archaeological work and planning for future utility line, facility and campsite improvements at the Glen Rouge campground was completed.
- The engagement phase of the Rouge Beach Improvements Project began, focusing on gathering feedback from local communities, the public and key stakeholders on proposed area restoration work, upgrades and an accessible connection to the Mast trailhead.
- Conceptual planning began for the park's flagship visitor, learning and community centre, to be located east of the Toronto Zoo.

*Photo: Overview of a lookout point on the Northeast Trail*

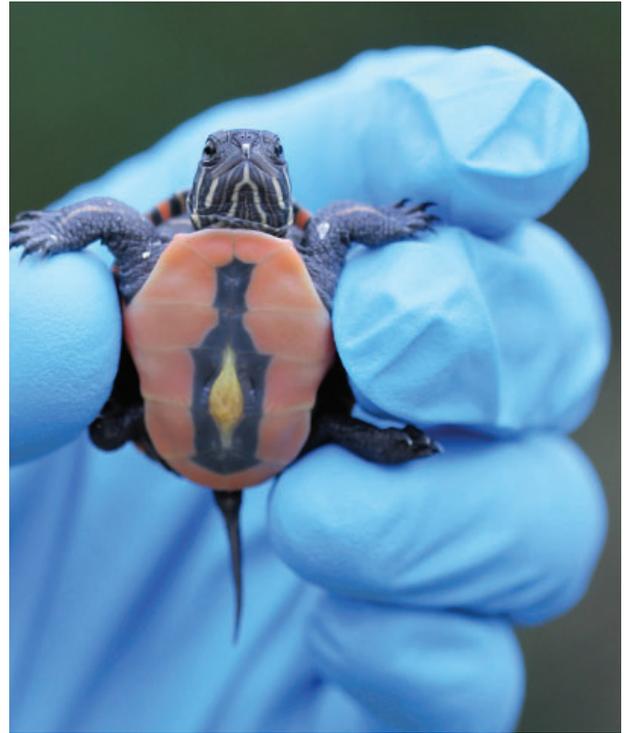


# Turtles

In June 2020, 57 baby Blanding's turtles were released into the park as part of a collaborative program led by Parks Canada and the Toronto Zoo, in partnership with the Toronto and Region Conservation Authority (TRCA), the Ontario Ministry of the Environment, Conservation and Parks; the Ontario Ministry of Natural Resources and Forestry and the Rouge National Urban Park First Nations Advisory Circle. This was the seventh year that Blanding's turtles – federally-listed as endangered and provincially-listed as a threatened species – were reintroduced into the park. Thanks to this initiative, almost 400 turtles have been restored to the Rouge.

The 2020 Blanding's turtle release took place on National Indigenous Peoples Day on June 21. Referred to as “the turtle with the sun under its chin,” the Blanding's turtle is significant to First Nations. Turtles appear in many traditional Indigenous Peoples' teachings and the turtle also plays an essential role in creation stories. Elder Garry Sault of the Mississaugas of the Credit First Nation offered a virtual blessing of the Blanding's turtles before they were released to send them off on their journey.

*“The Toronto Zoo and Parks Canada work together to identify future release habitats in the Rouge, and work closely with the [TRCA] to restore those habitats, if needed, so they are ideal for Blanding's turtles and other wetland creatures.” -Paul Yannuzzi, Resource Management Officer, Parks Canada*



# Bats



Parks Canada, in collaboration with the Toronto Zoo, continued work to preserve the diversity of bats found throughout the park.

Three bat species found in the park – little brown myotis, northern myotis and tri-coloured bat – are endangered because of white nose syndrome. They are protected under the federal Species at Risk Act and Ontario Endangered Species Act along with the eastern small-footed myotis.

In 2020 bat research helped to:

- locate actual and potential habitats and food sources for bats in the park;
- track bat populations using acoustic monitoring, sightings, nets and radio telemetry; and
- help with planning future land and asset management projects.

*“Rouge National Urban Park is an amazing place for bats. It has seven of Ontario's eight species present within its boundaries.” -Toby Thorne, Toronto Zoo Bat Researcher*

# Barn Swallows

In winter 2020, Parks Canada created replacement habitat for barn swallows, a species listed as threatened in Canada. The population has declined across the country by over 80 percent since the 1970s.

Wood from a barn set to be decommissioned for safety reasons, and a home for park swallows, was repurposed to compensate for potential habitat loss resulting from the barn's removal. Parks Canada commissioned a local carpenter to construct and install three large structures (40-120 square feet in size) made with wood from the failing barn, each with a slightly different design.

Over the summer, park ecologists monitored the structures to assess how the swallows responded to them. Parks Canada staff noted which birdhouse designs worked best for the swallows. Two barn

swallow nests were noted in two of the new nesting structures. Each nest yielded eggs that hatched successfully.



# Snakes

Park ecologists observed a decline in snake populations in the Rouge and took action, repurposing a park building to create animal habitat.

Around 30 snakes were collected near a farmhouse due to be decommissioned and placed in artificial hibernacula (habitat) over the winter. The snakes were released back into their habitat in the spring.

In the fall, the foundation of the decommissioned house was crushed and backfilled to create spaces for snakes to inhabit.

Snakes will use the hibernacula from October to May.

When old houses and other buildings in the park reach the end of their life and are unsalvageable, there are opportunities to repurpose the structures to provide habitat for species, including those considered at-risk. Surveys completed before and after restoration can confirm if the habitat has been improved.



# Species at Risk

**R**ouge National Urban Park is home to nearly 2,000 species of plants and animals and Parks Canada has identified over 45 that are at-risk. Threats to species at risk (SAR) are very complex because the park is part of an urban environment. “*We deal with factors such as visitation, invasive species, and roads and rail lines that intersect the park*” - Julia Skuza, Resource Management Officer.

The park’s restoration program ensures that activities and operations in the park contribute to the conservation and recovery of species at risk. Parks Canada continued to work with local farm tenants and key partners to identify potential restoration sites and oversee restoration work. Restoration sites can help improve farming conditions and also create wetlands, meadows and forests.



In 2020, Parks Canada collaborated with Indigenous partners and external stakeholders to develop its first ever *Multi-species Action Plan*, outlining actions to identify threats and monitor, conserve and recover at-risk species in the park.

# Making Roads Safer for Wildlife

**P**arks Canada’s eco-passage road culverts in Rouge National Urban Park proved effective in helping animals to cross busy park roads and reducing wildlife mortality.

Research conducted by Courtney Leermakers (MSc. Ecology and Evolutionary Biology, U of T) and reported in the paper *Mitigating Mortality of Wildlife in Rouge National Urban Park* (2020) showed a significant reduction of wildlife mortality around the section of road where the park’s second eco-passage project was completed in 2019.

The project retrofitted 500 metres of specialized wildlife fencing to an existing 20-metre culvert, installed in partnership with Toronto Zoo, TRCA, Animex, the City of Toronto and the City of Pickering, to allow threatened

turtles, snakes, salamanders, and other animals like beavers and otters, to funnel under the road rather than across it. Parks Canada will continue to work with municipal partners to install an additional 500 metres of fencing and an additional culvert for wildlife passage in the same area to further reduce road mortality.

Road ecology science is advancing and offering exciting opportunities to reduce wildlife mortality by providing underpasses and fences that not only safely guide wildlife, but also help increase the connectivity of the natural areas of Rouge National Urban Park.



# Invasive Species

**T**he spread of invasive species into urban natural areas threatens native species and is a major issue of concern. Invasive species out-compete native species, reproduce and spread aggressively and have no natural predators to keep their populations in check. Parks Canada works with a number of partners to sustain ecological integrity throughout Rouge National Urban Park (RNUP), which features a level of native biodiversity not found anywhere else in Toronto.

## Dog-strangling vine

The Dog-strangling vine invasive plant was first introduced into Toronto in the late 1800s and dominates some areas of the park today. Dog-strangling Vine:

- reduces native plant diversity by about 50% where it becomes abundant;
- kills other plants by releasing chemicals into the soil and by forming dense foliage that shades other species; and
- has no natural predators – it's not eaten by any native herbivores and soil microbes are unable to break down its chemicals.

Researchers from the University of Toronto Scarborough worked with RNUP and other partners to apply multiple management tools, including biocontrol, to help restore biodiversity in the park, including native plants and species such as pollinators.



*Photo: Phragmites removal at Rouge Beach Marsh*

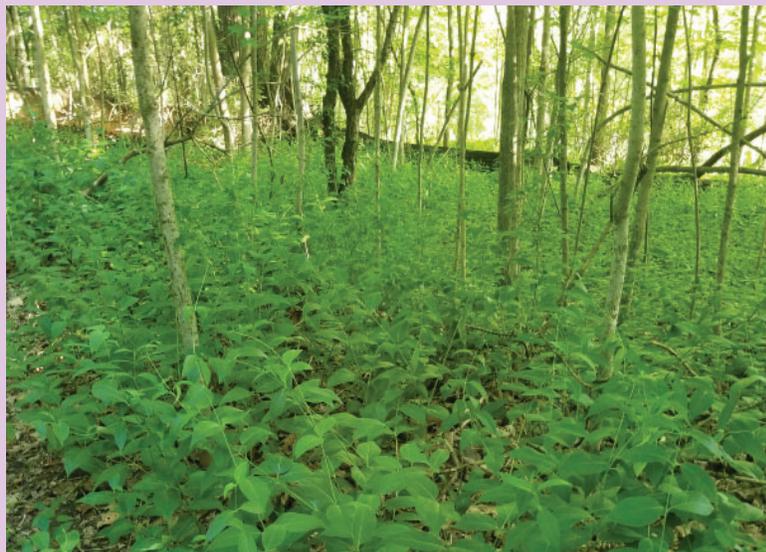
## Phragmites

The Invasive Phragmites Control Centre along with Parks Canada staff and Indigenous partners removed dense stands of European Common Reed (*Phragmites australis*) from the marsh wetlands near Rouge Beach in late 2020. Nearly 1 hectare of invasive Phragmites stands was removed from the marsh by an amphibious cutting machine and on land by Parks Canada biologists with handheld cutting devices.

The tall perennial grass, native to Eurasia and now found throughout much of Ontario grows aggressively, crowds out

native vegetation and leaves less open water and food for wildlife. It is considered by many to be Canada's worst invasive plant.

Parks Canada regularly informs the public on how to address invasive species, and park staff receive specialized training in order to assist with removal efforts. Volunteer projects to eliminate invasive species also occur in the Rouge, and park residents are vital sources of information on park ecology.



*Photo: Dog-strangling vine*

# Promoting a Vibrant Farming Community

**P**arks Canada continued to work closely with the park's farming community on farmland enhancement, ecological restoration and trail-building projects, highlighting farming and its contributions to the overall health of the park and to promoting biosecurity and local sources of food for the Greater Toronto Area. The park's Class 1 farmland is the richest, rarest and most fertile in the country and its protection is enshrined in the park's legislation and management plan.

Parks Canada renewed its partnership agreement for another year with the York Soil and Crop Improvements Association and made approximately 50 acres of farmland available to the association to grow and harvest soybean crops for the benefit of the Canadian Foodgrains Bank charity, which strives to end global hunger by working with locally-based organizations in developing countries to meet emergency food needs and achieve long-term solutions to hunger.

**P**artnerships with First Nations continue to inform Parks Canada and shape the protection and stewardship of Rouge National Urban Park (RNUP).

- Parks Canada and the Rouge National Urban Park First Nations Advisory Circle (FNAC) signed a Terms of Reference in February, outlining scope, objectives, activities and responsibilities that will strengthen partnerships with the Circle and park programming in the years to come.
- First Nations liaisons representing 4 nations from the FNAC participated in 10 weeks (1,000+ hours) of archaeological fieldwork.

Parks Canada's invasive species management program targeted wild parsnip and other invasive species that impact agricultural crops and livestock by mapping hot spots and through specialized training for park staff.

With the support from the park farming community, a new community garden is set to open in the Rouge in the Bob Hunter Memorial area in May 2021. Plots will be filled with park soil. A big thank you to park farmers for assisting Parks Canada with this initiative.

## Healthy Birds, Healthy Farm

*"One of the pleasures of being a farmer is having the opportunity to be in the outdoors... a lot. While outside, we have an opportunity to observe the wildlife right here on the farm. Particularly interesting are all of the species of birds that we see including cardinals, blue jays, tree swallows, Baltimore orioles, red-tailed hawks, turkey vultures, starlings, mallard ducks, blue herons, gold finches, flickers, mourning doves, crows, Canada*

*geese and more! I like to see all of the birds thriving as it gives me the feeling that we are doing a good job of caring for the environment here on the farm. If the birds and other wild animals are thriving on the farm, we must be doing something right."* – Jay Reesor, park farmer

The Reesor family has lived in, farmed and cared for the Rouge Valley for many generations, dating back to 1804, growing and providing food for the region while caring for the land. In addition to running his farm in the Rouge since 1985, Jay Reesor and his family also operate a U-pick and market in the park at the corner of Elgin Mills and Ninth Line, the Markham area of the park.

## Indigenous Partnerships

- Representatives from Curve Lake First Nation worked with Parks Canada staff to remove close to 1 hectare of the invasive plant *Phragmites australis* from the Rouge Marsh.
- FNAC members worked collaboratively with Parks Canada and other partners for the seventh year on the Blanding's turtle head-start and recovery program.
- RNUP hosted the Earth Run in the Rouge virtually via social media channels to continue to raise awareness and celebrate Indigenous athletes and achievements.
- FNAC, Parks Canada staff and key stakeholders developed the Common Look and Feel (CLF) report for Rouge National Urban Park (RNUP). The CLF provides design direction to ensure a consistent, cohesive appearance in the park's built assets so that they are recognizable as Parks Canada and RNUP elements and respectfully recognize and celebrate Indigenous history and culture.
- Parks Canada collaborated with First Nations partners to prepare the *Multi-species Action Plan for Rouge National Urban Park of Canada*.

# Law Enforcement

**P**ark wardens spent more than 2,580 hours patrolling Rouge National Urban Park (RNUP) and responded to more than 890 incidents, primarily during the COVID-19 pandemic.

In 2020, Parks Canada wardens:

- addressed increasing trends in dumping and fishing offences and negative social behaviours;
- increased patrols and surveillance and created a public awareness and media campaign in response to park-wide dumping;
- engaged in thousands of hours of enforcement efforts related to natural resources (monitoring critical habitat for species at risk, conducting natural resource compliance inspections) and visitor experience legislation, resulting in improved compliance;
- piloted the RNUP Crayfish Mitigation Program, which involved sign installation, media releases, multilingual content development and targeted education programming;
- supported content development and targeted education programming;
- supported and implemented the seasonal closure of Amos Pond Complex to protect species at risk; and
- provided 1,550 meals to families in need through the annual RNUP Park Warden Holiday Food Drive

Park visitors can report non-urgent incidents and tips to **pc.rnup-wardens.pc@canada.ca**. Please report illegal dumping in the park by calling **416-282-1019**. Information can be left anonymously.



## Ecological Restoration

**P**arks Canada continued tree planting and restoration work in 2020 in alignment with restoration and conservation targets outlined in the park's management plan. Planting areas included wetland and meadow, upland forest and riparian areas. Since 2015, Parks Canada, in collaboration with its partners, has restored more than 26 hectares of forest habitat and over 70 hectares of wetland habitat, including planting more than 113,000 native trees, perennials, shrubs and aquatic plants.

In October, Metrolinx announced funding for the planting of approximately 4,800 trees and 7,500 shrubs at Rouge National Urban Park by Parks Canada and the Toronto and Region Conservation Authority in the months ahead. The planting is part of an extensive ecological compensation effort to offset trees removed from rail corridors due to infrastructure expansion. In 2021, Parks Canada is aiming to plant up to 45,000 trees and shrubs in the park to help further restore park ecosystems and mitigate climate change.



