Canada’s last defence for endangered species.

2021 IMPACT REPORT
A land where Canada’s wildlife is bountiful, diverse, and thriving, free from the threat of extinction.

Wildlife Preservation Canada is a conservation leader managing recovery programs for some of Canada’s most threatened species. We develop innovative techniques that can be used in Canada and around the world to save species at risk. We build this country’s conservation capacity by providing opportunities for young scientists to work with endangered species, both in Canada and abroad.

To maximize our impact, we choose species based on the urgency of their conservation needs, our unique expertise, and the potential to collaborate with other organizations and strategic partners. We work closely with local communities recognizing that they are critical to long-term conservation success.

Since 1985, Wildlife Preservation Canada has been saving the most imperiled and endangered species in Canada.
Last year, I wrote about how the animals under WPC’s care were busy breeding, thanks to WPC staff, despite pandemic shutdowns and working remotely. The resiliency of nature, including for animals in conservation breeding programs, has been a source of strength and hope for many of us.

Conservation breeding of a given species can take many years, or even decades, to figure out as each species has special needs when asked to do what should come naturally, but now in an unnatural setting. WPC is at the cutting edge of developing and refining these conservation breeding techniques for native bumble bees, butterflies, and frogs much like we did over a decade ago to establish best practice for conservation breeding and release of eastern loggerhead shrikes. The trick is to “discover the trick”, which takes much patience, trial and error, and a scientific approach.

In 2020, WPC proudly announced that it had released almost 2,000 captive-reared Oregon spotted froglets and tadpoles and 800 captive-reared Taylor’s checkerspot caterpillars in British Columbia. But little did we know what was to come!

Within only one year, WPC staff discovered a new method for mating Oregon spotted frogs which are on the brink of extinction globally. We increased our production of tadpoles 10-fold, allowing us to release over 20,000 tadpoles into their native habitat in the Fraser River Valley. WPC staff also discovered a new technique for mating Taylor’s checkerspot butterflies producing a remarkable 5,000 caterpillars that were overwintered and then released the next spring. Close attention to detail, experience, dedication, and innovation are essential to WPC’s successes.

This message is my last as President of WPC and I deeply thank all board and staff members, current and past, for their amazing teamwork which has guided WPC over the past decade from a relatively small and specialized conservation organization to its current role as a national leader in endangered species conservation.

WPC, very deservedly, is Canada’s last defence for endangered species.

Dr. Bridget Stutchbury
Professor of Biology, York University
President, Wildlife Preservation Canada
OREGON SPOTTED FROG
Rana pretiosa

Reduced to a handful of declining and fragmented populations in the wetlands of British Columbia, the Oregon spotted frog is Canada’s most imperiled amphibian. Conservation breeding and reintroduction are necessary to bring this species back from the brink.

WPC has pioneered breeding techniques that are now producing a record number of young for release each year.

Without the thousands of tadpoles and froglets that WPC has reintroduced back to the wild since 2010, this species would be that much closer to extinction in Canada.

WPC’s Oregon spotted frog conservation breeding program has operated successfully at facilities provided by the Greater Vancouver Zoo since 2010. However, we were not seeing the number of young frogs bred for release each year that is required to make a rapid impact on the wild population. The recovery team, made up of conservation organizations and government experts, recommend the establishment of 10 self-sustaining populations in BC which will require tens of thousands of frogs to be released over the next few years. Otherwise, the species will continue to decline.

Our teams are always encouraged to adapt and trial new techniques every year to develop cutting-edge methods for conservation breeding. One specific change in particular made by our lead biologist in 2021 led to a major turning point, not just for Oregon spotted frogs but for amphibian conservation. After modifying how we introduced males and females to each other in the early spring for mating, the number and fertility of eggs the females laid skyrocketed. As a result, a phenomenal 20,514 tadpoles were produced! This was more in a single year than all other years combined since the beginning of the program! We are excited to replicate this success over the next few years, and share the results and new methods with other conservation organizations working with endangered frogs.

“I always dreamed of working to save endangered amphibians, like the Oregon spotted frog. When I was 16 years old, I saw a documentary about the amphibian crisis and knew then that I was meant to work with an organization to save endangered amphibians. WPC has supported me in achieving my lifetime dream. Although this line of work has many challenges, I enjoy every second of it.”

- Pourya Sardari, BC Wetlands Research & Conservation Technician

Program Location
Fraser River Valley, British Columbia

WPC Conservation Toolkit
Conservation Breeding & Reintroduction

Program Partners & Supporters
Anonymous Foundation
B.C. Conservation Foundation
B.C. Ministry of Environment and Climate Change Strategy
B.C. Ministry of Forests, Lands, Natural Resources Operations and Rural Development
Calgary Zoo
Canadian Oregon Spotted Frog Recovery Team
Fraser Valley Conservancy
Greater Vancouver Zoo
Kwantlen First Nation
Lek'axist First Nation
Metro Vancouver Parks
Precious Frog
Seabird Island First Nation
Simon Fraser University
The Sitka Foundation
Toronto Zoo
University of Guelph
University of the Fraser Valley
Vancouver Aquarium

LOVE TUBS SHATTER PREVIOUS BREEDING RECORDS

Photo: P. Sardari
TAYLOR’S CHECKERSPOt
Euphydryas editha taylori

Down to just 15 wild butterflies remaining on Denman Island in 2005, the Taylor’s Checkerspot butterfly is beginning to make a tremendous comeback. Conservation breeding and reintroduction efforts are working to establish a new population on Hornby Island. From humble beginnings on a private property on Denman, the conservation breeding program has expanded under WPC leadership and is a permanent joint initiative at the Greater Vancouver Zoo.

To date, WPC has produced 3,364 Taylor’s checkerspot caterpillars and butterflies for release back into the wild. As active members of the Recovery Team, WPC also contributes to population surveys and land steward engagement.

KEEN OBSERVATION PRODUCES RECORD BREAKING RESULTS

For the second year in a row, WPC successfully bred and helped release Taylor’s checkerspot caterpillars on Hornby Island in British Columbia to re-establish the species at this historic site from which it had disappeared. The release site at Helliwell Provincial Park contains unique habitat required for checkerspot survival. With so many caterpillars raised in 2020, our teams carried out two separate releases in March 2021. The staggered release also ensures that we don’t “put all our eggs in one basket” and is considered best practice in conservation.

Later in the spring, survey teams spotted adult butterflies flying at the release site, confirming that caterpillars released earlier had survived in the wild and were able to pupate into adults. Time will tell if the adults are reproducing and producing another generation of caterpillars on Hornby.

2021 was the first year we hired a dedicated technician for the checkerspot program. All our teams carefully observe the animals they work with and Michelle Polley observed that adults were most active at certain times of the day and under certain environmental conditions. Placing adults together to mate during these periods led to a phenomenal record of more than 5,000 caterpillars produced in the breeding program, a 5-fold increase on any previous successful season. These caterpillars will be released in 2022. Being able to release many more individuals each year significantly speeds up the timeline for saving this butterfly.

“I was so thrilled when the innovative breeding and care techniques we developed in 2021 contributed to the most successful breeding year we have ever had. The learning WPC has facilitated in the Taylor’s checkerspot program is already changing the future for this species, and will go on to benefit others as well.”

- Michelle Polley, Endangered Species Technician

Program Location
Vancouver Island & Gulf Islands, British Columbia

WPC Conservation Toolkit
Conservation Breeding & Reintroduction
Land Steward Engagement
Population Monitoring

Program Partners & Supporters
B.C. Ministry of Environment and Climate Change Strategy
B.C. Ministry of Forests, Lands, Natural Resources Operations and Rural Development
B.C. Parks
Denman Conservancy Association
Denman Island landowners & community members
Garry Oak Ecosystems Recovery Team
Hornby Island Natural History Centre
Hornby Island landowners & community members
K’ómoks First Nation
Greater Vancouver Zoo
Oregon Zoo
Taylor’s Checkerspot Butterfly Recovery Implementation Group
Taylor’s Checkerspot Community Working Group
The Rogers Foundation
University of British Columbia
RACING FOR ANSWERS

The blue racer was found across southern Ontario until habitat loss on the mainland pushed the population down to the last remaining stronghold on Pelee Island. One of the largest and fastest of North American snakes, the blue racer has adapted to living in a mix of grasslands and shrub forest, a habitat that has been reduced across southern Ontario by unsustainable development. WPC works with a provincial team of conservation partners to determine the conservation status and needs of the blue racer in the single remaining Canadian population on Pelee Island.

There are many steps to species recovery. The first is to determine population size and trend, and factors that led to a species decline. The blue racer was last properly censused 20 years ago. During spring of 2021 the blue racer team carried out the second year of a 3-year survey to assess the population and habitat being used by blue racers on Pelee. Samples are also being collected from across the species North American range for a genomics study which will provide guidance on the best recovery approaches, which may include population augmentation and reintroduction efforts.

"The blue racer recovery project is a perfect example of conservation organizations bringing together their resources and skills for a common goal, to save the elegant snake from disappearing. I was fortunate to visit the team on Pelee Island to see this collaborative effort in action and thrilled to finally meet this most beautiful of Canada’s snakes.”

- Lance Woolaver Jr., Executive Director

SHARING KNOWLEDGE TO SAVE TURTLES

Almost all species of freshwater turtles in Canada are listed as at-risk federally. To address this crisis, in 2021 WPC played a lead role in the formation of the Working Group for the Conservation of Ontario Turtles, bringing together many of Ontario’s turtle conservation experts and organizations to standardize practices and increase the efficiency of turtle conservation programs across the province.

A priority task for this group has been compiling Beneficial Management Practices for nest protection, artificial incubation, and headstarting activities for Ontario turtles. A comprehensive guideline document was drafted and plans are underway to host a workshop to finalize a framework to help conservation practitioners decide what level of nest intervention is appropriate – from wild nest protection to headstarting. These guidelines will then be shared amongst turtle conservation groups across Ontario, Canada and globally and will be the first of many such best practice guidelines to come from this working group.

“It’s fantastic that more and more people are getting involved in turtle conservation! Knowing what actions have the most impact and finding best practices can sometimes be difficult. That’s where WPGOT comes in.”

- Hannah McCurdy-Adams, Reptile and Amphibian Program Development Coordinator
The tools to save the eastern loggerhead shrike are diverse, and require a full conservation toolkit including wild population monitoring, threat identification and mitigation, habitat stewardship, and conservation breeding and release to support the wild population. WPC coordinates these recovery actions, and most, all identified by the federal government’s recovery strategy.

The 2021 WPC field team monitored 24 wild pairs of loggerhead shrike in eastern Canada, and were pleased to find that three pairs went on to produce 78 young! This is one of the highest number of wild young recorded in the province in the last 10 years, and testament to the hard work and dedication of the shrike recovery team over the many years preceding this milestone.

We released 40 young shrikes from the conservation breeding program in 2021. Twelve were outfitted with a radio-tag as part of a monitoring program using the Motus Wildlife Tracking System to determine overwintering habitats in the U.S. Adding new birds to the wild population each year is a critical part of the recovery program. In any given year between 13-33% of the wild population are conservation-bred and released birds. Without WPC’s hands-on work, the eastern loggerhead shrike would most certainly have already disappeared from Canada.

“This was a year of surprises: from an Ontario bird showing up way down in South Carolina in February, to several single birds showing up across southwestern Ontario outside of the typical shrike hotspots, to a pleasantly high number of wild fledglings seen by our field teams. After a couple really strange years, 2021 turned out to be a good one!”

- Hazel Wheeler, Lead Biologist

**WPC’s longest running program, the recovery of the eastern loggerhead shrike demonstrates the time and effort required to save a species from extinction.**

Since 2003, WPC has been breeding and reintroducing loggerhead shrikes back to alvar grasslands in Ontario to bolster dwindling wild populations. Shrikes require short grassland habitat to hunt and raise their young, and this is unfortunately one of the most imperiled ecosystems in Canada, putting the shrike and other grassland birds in danger.

The efforts of WPC and its partners have resulted in 1,359 birds being released back into the wild in Ontario to date.

**Program Location**
Southern Ontario

**WPC Conservation Toolkit**
Conservation Breeding & Reintroduction
Conservation Research
Creating Conservation Partnerships
Habitat Restoration
Land Steward Engagement
Population Monitoring
Threat Mitigation

**Program Partners & Supporters**
African Lion Safari
BluEarth Renewables
Canadian Wildlife Health Cooperative
Carden Forum
Carolina Raptor Conservancy
Couchiching Conservancy
Environment & Climate Change Canada – Canadian Wildlife Service
HelenaMcRea Peacock Foundation at the Toronto Foundation
Hoppsin Family Foundation
Kingson Solar LP
K.M. Hunter Charitable Fund
Laurentian University
Napanee Plains Joint Initiative
Nashville Zoo at Grassmere
The National Aviary
The Nature Conservancy of Canada
The North American Loggerhead Shrike Working Group
Ontario Ministry of Environment, Conservation and Parks
Ontario Parks
Ontario Veterinary College
Queen’s University
Schulich Foundation
Smithsonian’s National Zoo & Conservation Biology Institute
Takla Foundation
Toronto Zoo
Trent University
Western University
York University

**HIGH WILD FLEDGLING COUNT COMES FROM LONG-TERM COMMITMENT**

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**Eastern Loggerhead Shrike**
*Lanius ludovicianus migrans*

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The western painted turtle can live to well over 50 years old—if they can survive their most defenseless first years.

Turtles face a number of threats, from habitat destruction to hungry predators. WPC’s headstarting and reintroduction program ensures that young turtles survive beyond their most vulnerable development stage.

Dating back to 2012, WPC’s headstarting program has released 880 turtles into protected habitat in the Fraser River Valley over the last decade. We are now seeing adults we first released becoming old enough to lay their own eggs and contribute to the recovery of their species in the wild.

Reversing the decline of the western painted turtle requires year-round care of turtle eggs and hatchlings by WPC staff at the Greater Vancouver Zoo. In a three-stage approach, WPC collects eggs from wild nests that are in danger, incubates the eggs, and overwinters the hatchlings until they are large enough for release in following years. If a nest is not in danger, our biologists use nest protection measures to allow the eggs to remain in place. Fifty such nests were protected by WPC in the wild in 2021.

In addition to these wild protected nests, 123 turtles from eggs collected in 2020 were large enough for release into the wild and were reintroduced into protected habitat in 2021.

Our field teams also saw something very special this year. For the first time we observed turtles raised and released by WPC nesting in the wild as adults. Female adult western painted turtles do not enter reproductive age until they are 6-10 years old. Finding our release animals nesting in the wild is an important milestone, as it demonstrates that our long-term efforts are beginning to impact population recovery for BC’s only native freshwater turtle species.

“Seeing results after many years of turtle releases with young we raised now returning to beaches and successfully nesting, is such a rewarding milestone. Continuing to monitor these reintroduced and historical populations is going to be critical for tracking success and ensuring the health of all coastal populations of western painted turtles.”

- Andrea Gielens, Lead Biologist
NEW BUMBLE BEE CONSERVATION LAB LEADS TO RECORD SUCCESS

The main goal of WPC’s Bumble Bee Recovery Program is to recover at-risk bumble bee species in Canada, including the yellow-banded bumble bee and the rusty-patched bumble bee. But first our biologists must pioneer conservation breeding techniques using more common bumble bees to confirm their success.

In 2021, WPC established a breeding lab for two common species, the brown-belted and common eastern bumble bees. The lab was highly successful in its first season, with 42% of queens producing workers and colonies. Some of the success can be attributed to trialing different pollen diets, and discovering that red maple pollen was most favorable for breeding success. This banner year follows several years of unsuccessful breeding and is a turning point in the program.

WPC continued monitoring wild bee populations through our community science program. We continued our volunteer training program at Pinery Provincial Park. These volunteers added another 700 bumble bee observations to the Bumble Bee Watch database. Field staff surveys at 23 sites in southern Ontario resulted in observations of fourteen different bumble bee species, some of which were rare and at-risk. This is the highest number of bumble bee species recorded by the survey team in southern Ontario and represents the tip of the iceberg of WPC’s contribution since 2019, with more than 16,000 bumble bee records submitted.

“...the exciting results of our pollen diet experiment. It was very interesting to see how an early blooming tree (red maple) might be crucial in providing bumble bee queens with the ideal diet for reproduction! I’m looking forward to further investigation of pollen diets with the yellow-banded bumble bee in 2022.”

- Sarah MacKell, Lead Biologist
TOADS ARE BACK TO BREEDING

Fowler’s toad is facing a severe risk of disappearing from Canada. Today, only a few hundred breeding individuals are known to remain in small, widely scattered populations on the northern shores of Lake Erie. A longstanding research program for the endangered Fowler’s toad has been led by Dr. David Green from McGill University at Long Point in Ontario. WPC has been involved with the project over the years and assisted with some of the research in 2021.

From May to July, WPC’s reptile and amphibian expert Hannah McCurdy-Adams helped students with the long-term Fowler’s toad monitoring program, while learning headstarting techniques and assessing the potential for future WPC involvement. In 2021, they observed that toads were successfully breeding in the wild after a few years of unsuccessful breeding attempts and the toadlets metamorphosed two weeks earlier than usual. These are both encouraging findings for the Fowler’s toad!

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- Hannah McCurdy-Adams, Reptile and Amphibian Program Development Coordinator

FOXSNAKE BENEFITS FROM OTHER SNAKE CONSERVATION ACTION

The eastern foxsnake has not been a focal species for WPC to date, however the road mortality surveys, and habitat restoration work carried out by the Ojibway Prairie Reptile Recovery team and the blue racer team on Pelee Island have proved to be equally beneficial actions for eastern foxsnakes.

Using similar survey and marking techniques to those we use for blue racers and massasauga rattlesnakes, foxsnakes are being monitored in Ontario’s Great Lakes region. Population assessments like this are an important first tool in understanding the reasons for population and distribution declines of an at-risk species. Once the extent of declines and threats are identified we can determine what conservation interventions are required to bring the species back. Plans are also underway to expand genetic sampling efforts for eastern foxsnakes across their range in Ontario to identify which populations require highest priority conservation action.

“Foxsnakes are the most frequently encountered at-risk reptile species found dead on roads around the Ojibway Prairie. WPC’s team has installed hundreds of meters of snake barrier fencing (and counting!) to help address this problem at its source.”

- Jonathan Choquette, Lead Biologist
Sadly, the massasauga rattlesnake has not been seen at the Ojibway prairie since 2019 despite intensive surveys, indicating a possible local extinction for this species. Other populations do exist in Ontario, and work began in 2020 to build up the captive population so that young conservation bred snakes can be reintroduced and bring the massasauga back to the prairie.

However, groundwork must be laid to ensure that newly introduced animals don’t face the same fate. The biggest threats to Ojibway massasaugas (and other reptiles) are habitat loss and being killed by cars. WPC is carrying out habitat restoration and setting up barrier fencing to tackle these issues in advance of any future reintroduction.

1st OVERWINTERING OF MASSASAUGAS IS MILESTONE IN REINTRODUCTION PLANS

When WPC began working with massasauga rattlesnakes in the Ojibway Prairie in southwestern Ontario, field teams were spotting them in the wild. However, not a single massasauga has been seen since 2019, suggesting they may have become locally extinct and now require reintroductions to bring them back - work which we are well prepared to begin.

Reintroductions of temperate snakes are very challenging due to high rates of post-release dispersal and mortality. Snakes in northern climates use animal burrows to overwinter in (hibernacula). In addition to identifying natural hibernacula, WPC has been experimenting with artificial designs. Pioneering with eastern gartersnakes in 2019, the team carried out the first successful overwintering of 12 massasaugas, all of which survived in good health and were returned to the conservation population in spring.

The team continues to mitigate the threats to the original population, through habitat enhancements in a combined area of over 10 hectares, involving garbage removal (1,500kg removed in 2021), controlling invasive plant species like Phragmites, and creating beneficial woody debris features that snakes require for cover. Creating safe habitat for massasaugas means a haven for other species. In 2021 we had 161 observations of at-risk reptiles, and almost 3,000 observations of other endangered plants, birds, and insects. Habitat restoration will benefit these species as well.

“2021 was an exciting year for Massasauga recovery at Ojibway Prairie. Most importantly, we “graduated” from eastern gartersnakes and completed a very successful over-winter test of our planned release sites using 12 massasaugas!”

- Jonathan Choquette, Lead Biologist
A growing celebrity in Ontario’s conservation community, the mottled duskywing is the first butterfly species to be reintroduced back into the wild in Ontario.

WPC is part of the Ontario Butterfly Recovery Implementation Group, a group of organizations working closely together to reintroduce the duskywing to Pinery Provincial Park that includes the Cambridge Butterfly Conservatory, University of Guelph, Natural Resource Solutions Inc. and Ontario Parks.

**MOTTLED DUSKYWING**

*Erynnis martialis*

DUSKYWING IS 1ST BUTTERFLY TO EVER BE REINTRODUCED IN ONTARIO

2021 was a groundbreaking year for butterfly conservation. For the very first time, a butterfly species was reintroduced to wild habitat in Ontario.

Nearly 700 conservation-bred duskywings were released at Pinery Provincial Park as caterpillars, pupae, and adult butterflies - covering all the bases. The program is set up as an experimental study to determine what release strategy is the most effective for reintroduction success.

WPC’s role began the moment the duskywings were ready for release. Along with partners, we placed individuals of the different life stages in different areas of the park. Our next task was to monitor their post-release survival. Our observations were very promising with released pupae transforming and emerging as butterflies, adult butterflies laying eggs on host plants in suitable habitat and caterpillars entering their overwintering diapause stage. These were all excellent indicators that mottled duskywing were reproducing and behaving normally post-release.

The releases will continue for at least two more field seasons but the results from this inaugural season have already provided hope that we can bring this butterfly back to Pinery Provincial Park and elsewhere in Ontario.

WPC is a proud partner in returning the mottled duskywing to its former habitat in Ontario. This is truly history in the making! I eagerly anticipate next spring, when our field crew can confirm that the caterpillars successfully overwintered, completing almost an entire life-cycle in the wild.

- Jessica Steiner, Conservation Programs Director
31st NEW NOAH READY TO GO

After waiting patiently for two years, Stephanie Winton, Canada’s 31st New Noah, will start her journey to Mauritius in early 2022. Stephanie’s first stop is the 3-month long Endangered Species Management course at the Durrell Conservation Academy in Jersey, UK before heading on to a 6-month placement with the Mauritian Wildlife Foundation on the island of Mauritius in the Indian Ocean.

As a New Noah, Stephanie will bring back skills to apply to her own conservation career, and knowledge to manage recovery programs for endangered species in Canada. There is no other program in the world that offers this type of experience for young Canadians dedicated to saving endangered species. WPC is grateful for the financial support that the Alan & Patricia Koval Foundation provides to the New Noah program.

While Stephanie was waiting for her opportunity of a lifetime, she contributed to important conservation planning developments in Canada as part of the Canadian Species Initiative.

“Hearing the enthusiasm from previous New Noahs and stories of their experiences, both during and after, encouraged me to throw my hat in the ring as the 31st New Noah. I am looking forward to learning more about different facets of conservation and working with people on the global forefront of endangered species recovery.”
- Stephanie Winton, Canada’s New Noah

CONSERVATION PLANNING WORKS

Science-based, inclusive, and participatory approaches to species conservation planning has been shown to lead to better outcomes for species at risk. Considering and integrating in situ (in the wild) and ex situ (in captivity) management as early as possible within the planning process - known as the One Plan Approach - is essential, and now considered the global standard for conservation planning. The Canadian Species Initiative (CSI) is bringing these globally recognized and proven processes to species recovery in Canada.

In March 2021, CSI conducted its first workshop to assess ex situ conservation options for all 39 taxa of Canadian snakes. A diverse group of experts including zoo staff, government and First Nations representatives, and species experts from across Canada, the United States, and Mexico came together to discuss the ex situ conservation options. Actions identified in the workshop will complement wild population conservation efforts and CSI is looking forward to continuing to work with the Canadian herpetological community to move these efforts forward. This workshop is the first in a series which will cover additional taxonomic groups over the next several years.

“WPC can play a key role in species conservation planning by providing knowledge and expertise linking direct, hands-on recovery actions with conservation needs of wild populations. In addition to implementing measures recommended during the planning process, we are growing our species conservation ‘toolkit’.”
- Jessica Steiner, Co-founder CSI
A NOTE FROM OUR TREASURER

Amidst uncertain times, 2021 was another strong financial year for WPC. Our organization was able to grow our revenues overall and across all our major categories. This growth in support from our individual donors, government and foundation partners enabled our organization to invest a record amount in conservation program activities and we have seen the results of this through the impact we had on the species we work with. We continue to do this while maintaining low administrative costs. We have a strong financial base that we will leverage to grow our conservation programs into the future and expanding our footprint in protecting Canada’s endangered species.

- Shripal Doshi, WPC Treasurer (2021)
We want to thank our corporate, foundation, and individual donors who believe in our work and are willing to invest in the future survival of Canada's wildlife. Your generosity is saving species from extinction.

Wildlife Guardians are a special group of dedicated individuals who support our work through recurring monthly donations. Wildlife Guardians make it possible for us to help endangered animals throughout the year by providing steady funding.

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Toronto Zoo
University of Guelph
Wilkins Pharmacy Inc.

Legacy Gifts
Estate of Gwen Norworthy
Estate of Jean Griessen

Wildlife Guardian $10,000 and above
Acee Garnett
Martha Rogers

Wildlife Preserver $1,000 - $9,999
Barbara Alderton
Bill and Judy Caufield-Browne
Elizabeth and George Churcher
Brian Dawson
Marko Dugan
Rutkanae Giasso
Denis and Valerie Giules
Dorothy Godl
John Grandy
Douglas Hart
Emily Hildebrand
Glen Holmwood
Lee Joyes
Martin Kuhn
Gail Luckhart
Eric Mak
Carole Marshall
Rod McFadden
Catherine Mclean
Alec and Joyce Monro
Nancy S. Nettin
Jonis Nitch
Neil and Amani Oakeley
Roberta Olencic
Richard and及the Richardson
Anders and Ana Saroli
Christian Schneider
Karae Somervelle
Bridge Sturchtly & Gene Morton
Rob Turck
Ken and Lynda Whiteford

Friends of Wildlife $500 - $999
Julie Amor
Brian Armstrong
Dori Arnold
Manda Soebrings
Phylla Burger
Sukdeep Chand
Cindy Clarkock
Simone Dealeys
Steve and Rosemary Digby
Bruce Dowling
Robert Gillespie
Ian and Suzanne Glen
Cliff Hall
Mara Hamill
Andrea Hanson
Fiona Hartz
Lauren Haywood
Lara Haywood
Amy Heida
Fred Heida
Joel Heida
Sarah Heida
Sandy Heida
Benjamin Heida
Alex Heida
Jordan Heida
William Heida
I hope you will have noticed in reading through this impact report that 2021 was a year of breakthroughs, leaps forward, and conservation firsts across all of our endangered species’ recovery programs. It was the type of year that conservation biologists and organizations dream of.

Of course, these milestones didn’t come out of nowhere. Each was the result of years of perseverance. Conservation success comes from careful observation by dedicated people that truly love the animals they work with, a stubbornness to not give up, and a willingness to adapt and develop new methods based on experience and sound conservation science.

Significant leaps in the production of Taylor’s checkerspot butterfly caterpillars (from 1,257 to 5,265) and Oregon spotted frog tadpoles (from 1,933 to 20,014!) in a single year, the 1st ever overwintering of massasauga rattlesnakes in artificially created hibernacula, our reintroduced western painted turtles nesting in the wild, and some of the highest number of wild fledgling eastern loggerhead shrikes on record are all examples of where WPC’s perseverance has paid off. The exciting part of these advancements in our core programs is twofold for us; that our programs are having a measurable impact on the recovery of the species we care for and that the methods we develop to reach these milestones can be shared with other conservation organizations in Canada and around the world.

Even WPC’s newest 2021 initiatives such as the monitoring of reintroduced mottled duskywings, a multi-partner program assessing the conservation needs of the last remaining Canadian population of blue racer, a cross-Canada workshop through the Canadian Species Initiative to identify the conservation needs of all of Canada’s snakes, and the development of a globally unique bumble bee conservation breeding lab all provided immediate achievements in terms of new conservation knowledge, program development, and encouraging results in their very first year.

On the horizon for 2022 is first and foremost to capitalize on the momentum of these achievements. By replicating our 2021 successes, we will speed up the recovery timeline for the endangered animals we work with to bring them back to self-sustainable levels in Canada. We’re excited to see wild populations continue to grow as we increase our reintroduction efforts for each species.

At the same time, we are identifying which additional animals to work with to increase the scope of our conservation impact. One such is Butler’s gartersnake. We began preliminary work with this species in 2019 but have now decided they require a more detailed 3-year study to identify conservation actions to reverse their decline in Canada. This research will start in 2022.

All the growth and advancements in our endangered species conservation programs are thanks to you, WPC’s supporters, staff, board of directors, and volunteers. Thank you for your dedication and for making 2021 such a resounding success, and for setting us up for even more conservation successes to come.

Dr. Lance Woolaver Jr.
Executive Director