

A Network Connecting Science with Conservation Un Réseau pour la Science et la Conservation

ANNUAL REPORT 2016/17







OUR MISSION To be the authoritative, primary source of accessible, current, and reliable information on the distribution and abundance of Canada's natural diversity—especially species and ecosystems of conservation concern.

Table of Contents

- **2** From the Chair and Executive Director
- 3 News
- 4 Connecting Science with Conservation
- 5 Who We Are/What We Do
- 6 Benefits to Conservation
 NatureServe Canada Network in Action
- 7 Bioblitzing A New Nature Reserve in Ontario
- 8 Tracking a Rare Salamander in Manitoba
- 9 Rediscovering Historical Species in Yukon
- 10 Discovering New Species for Atlantic Canada
- 11 Tracking Ord's Kangaroo Rat in Saskatchewan
- **12** Releasing a New Natureserve Canada Report
- 13 Staging Biodiversity Without Boundaries 2017
- 14 Summary Financial Data
- 15 Contributing to Conservation Science
- 16 In Gratitude to Our Members

Front cover photos: left—© Benoît Tremblay; top right—Seabamirum; bottom right—US NPS/Jim Pfeiffenberger

NatureServe Canada | ANNUAL REPORT 2016/17

From the Chair and Executive Director

NOTHER busy and very successful year for NatureServe Canada (NSC) and its membership! We were pleased to welcome Fisheries and Oceans Canada as a new Associate Member. Our membership now includes all three responsible federal departments under Canada's Species at Risk Act. This is a significant step forward in our efforts to improve communications and foster collaboration between organizations mandated to develop knowledge and achieve conservation outcomes for Canada's rare and threatened species.

This past year NSC developed and released our latest report *On Guard For Them: Species of Global Conservation Concern in Canada*. Working with our membership and partners, NSC assessed the global ranks of over 7000 species, subspecies and plant varieties. Released at an evening gala at the international NatureServe Biodiversity Without Boundaries conference in April 2017, the report garnered a wave of media attention including features by the Globe and Mail, CBC radio and television, Huffington Post, and Yahoo. Our message regarding the status of Canada's biodiversity and the scientific knowledge developed and distributed by the NSC Network greatly increased its reach, informing a broad audience in Canada and beyond.

Did we just mention the international conference we hosted in Ottawa this past fiscal? You can find details in this report and on our website (natureserve.ca)!

A big thank you to our members and supporters for their ongoing efforts and contributions that permit the NSC Network to be greater than the sum of its parts. Please reach out to let us know how we can work together to enhance biodiversity knowledge in Canada and to distribute this information effectively in order to inform science-based conservation decision-making.





Patrick Henry, Executive Director

News

Fisheries and Oceans Canada Joins NatureServe Canada

Canada is blessed with nearly 900,000 square kilometres of freshwater, about 202,000 kilometres of coastline, and almost six million square kilometres of territorial seas. These extensive waters are home to a rich array of aquatic and marine species. In places including along each of Canada's Pacific, Arctic, and Atlantic coasts, biodiversity of global significance is found.

Tracking the status of species is essential for understanding changes in ecosystem health and for prioritizing species for conservation. This is all the more necessary considering the various threats to Canada's aquatic and marine heritage, notably habitat destruction, climate change, pollution, and invasive species.

In this context, NatureServe Canada is pleased to welcome Fisheries and Oceans Canada (DFO) as its newest organizational member. Alongside Environment and Climate Change Canada and the Parks Canada Agency, DFO becomes the third federal department or agency with Associate membership status. The department's principal responsibilities include contributing "to a clean and healthy environment and sustainable aquatic ecosystems through habitat protection, oceans management, and ecosystems research." Pursuant to the federal Species at Risk Act, DFO is involved in assessing the conservation status of aquatic and marine species, and in formulating recovery plans for at-risk species. The department's engagement with NatureServe Canada and the NatureServe Canada Network will support enhanced data and information sharing concerning aquatic and marine species and their associated ecosystems.





Connecting Science with Conservation

ANADA is home to an estimated 140,000 species, only about half of which have been scientifically identified. These plants, animals, lichens, and fungi belong to a vast organic tapestry—the diversity of life at genetic, species, and ecosystem levels. This biodiversity is vital for environmental, economic, and social health. Extinction is part of nature. However, in the past 200 years the rate of extinction worldwide has greatly accelerated. Species are now being lost at 1000 to 10,000 times the natural background rate. Ninety-nine percent of species at risk are in trouble because of human activity and by the middle of the 21st century some 30% to 50% of all species could disappear. At least 381 species and 188 subspecies or varieties which occur in Canada are at notable risk of extinction, including 128 species and 85 subspecies and varieties found only in Canada.

For biodiversity to endure it is imperative that sound knowledge about it be maintained and made widely available. At NatureServe Canada, our vision is a future where the natural heritage of Canada is documented, where that information is readily available, and where the conservation of biodiversity and resource decision-making in Canada are guided by high quality scientific data and information. Our mission: to be the authoritative, primary source of accessible, current, and reliable information on the distribution and abundance of Canada's natural diversity—especially species and ecosystems of conservation concern.







Left: Spotted Owl (Strix occidentalis)—globally Vulnerable (G3). Photo: US Bureau of Land Management Centre: Cain's Screw Moss (Syntrichia cainii)—globally Critically Imperilled (G1). Photo: Jennifer Doub Right: Maritime Copper (Lycaena dospassosi)—globally Vulnerable (G3). Photo: Denis Doucet

Who We Are

A registered Canadian charity, NatureServe Canada and its network of Canadian Conservation Data Centres (CDCs) work together and with other government and non-government organizations to develop, manage, and distribute authoritative knowledge regarding Canada's plants, animals, and ecosystems. NatureServe Canada and the Canadian CDCs are members of the international NatureServe Network, spanning over 80 CDCs in the Americas. NatureServe Canada is the Canadian affiliate of NatureServe, based in Arlington, Virginia and that provides scientific and technical support to the international network.

A CDC is an organization with responsibility for biodiversity knowledge for the jurisdiction(s) it serves. Conservation Data Centres are located in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Québec, Atlantic Canada, Yukon, Northwest Territories, and Nunavut. Each CDC adheres to NatureServe's rigorous scientific methods and standards developed since the 1970s. This is known as NatureServe's "core natural heritage methodology."

NatureServe Canada is based in Ottawa, Ontario and is governed by a Board of Directors comprised of representatives of the Canadian CDCs that are its Constituent members. A comprehensive list of our membership is provided on the last page of this report.

What We Do

NatureServe Canada and the Canadian CDCs strive to answer four key questions:

- 1 What species and ecosystems exist in each province or territory?
- 2 What is the condition and conservation status of their populations?
- Which species or ecosystems are at risk of extinction (global) or extirpation (from Canada or a province or territory)?
- 4 Where precisely are species at risk and rare ecosystems found?

To answer these questions, we use NatureServe's core natural heritage methodology to:

- List the species and ecosystems (biodiversity elements) present in given jurisdictions
- Determine the rarity of and threats to these elements
- Gather information from available sources on occurrences of elements of conservation concern
- Conduct fieldwork to improve the occurrence and status information
- Process, map, and manage the collected data
- Assess the geographic distribution of species and ecosystems, at multiple geographic scales
- Distribute knowledge in aid of decision-making concerning land use development, natural resources management, biodiversity conservation, education, and research

We currently maintain information on over 38,000 species and 2200 ecosystems. The Network steadily adds new knowledge about biodiversity—including about species newly documented for Canada or

species newly described to science, and where they are found and their conservation status. The Network also helps document the most important places for biodiversity in Canada, to aid in management decisions concerning them.



Biologist Carla Church of the Manitoba Conservation Data Centre holds an Eastern Tiger Salamander while collecting critical data on this provincially Imperilled (S2) species. Photo: Carla Church, Manitoba Conservation Data Centre



Sean Blaney, expert botanist, Senior Scientist and Executive Director of the Atlantic Canada Conservation Data Centre, in the field in Nova Scotia. Photo: Sean Basquill

Benefits to Conservation

OVERNMENT, corporate, and conservation organizations, and consultants, researchers, and private citizens all use knowledge provided by NatureServe Canada and the Canadian CDCs. In 2016/17 NatureServe Canada and the network of CDCs managed hundreds of custom information requests. Tens of thousands of non-sensitive information requests were also fielded via online services.

Examples of knowledge application and areas of expertise include:

- The Committee on the Status of Endangered Wildlife in Canada requires its report authors to consult CDC data for writing the documents by which species' status is determined under the federal Species at Risk Act.
- Species status assessment information and expertise from the CDCs informs the work of the National General Status Working Group and its Wild Species report, issued every five years by the Canadian Endangered Species Conservation Council.
- Parks Canada uses NatureServe's core natural heritage methodology to assess and monitor rare species in national parks and other lands managed by the agency.
- Nature Conservancy of Canada works with Canadian CDCs to develop species and habitat information that helps the Conservancy determine which properties are priorities for conservation investments.











Top centre: Johnson's Hairstreak (*Callophrys johnsoni*)—globally Vulnerable (G₃). Photo: Tanya Harvey

Top right: Wood Turtle (Glyptemys insculpta)—globally Vulnerable (G₃). Photo: Sam Brinker

Lower left: Eastern Massasauga (Sistrurus catenatus catenatus)—globally Vulnerable (G4T3Q) Photo: Mike Redmer, USFWS

Lower right: Cliff Paintbrush (Castilleja rupicola)—globally Vulnerable (G3) Photo: Iza Goroff and North American Rock Garden Society





Bioblitzing a New Nature Reserve in Ontario



BIOBLITZ involves intensive effort by biologists (often joined by citizen scientists) to find, identify, and record as many species as possible in a given area within a given time period. Observations can be tracked in real time through iNaturalist.ca, a platform representing a growing online community of people ready to help each other identify what they have observed in nature, meet other nature enthusiasts, and learn about wildlife.

With sponsorship support from Heritage Canada and the Canadian Wildlife Federation, and with logistical support of the Ontario Ministry of Natural Resources and Forestry (MNRF) and Nature Conservancy of Canada, nine field biologists and taxonomic specialists with MNRF's Ontario Natural Heritage Information Centre (NHIC) and the Royal Ontario Museum (ROM) recently joined forces to undertake a one-week bioblitz of the NCC's newly established Big Trout Bay Nature Reserve. Located southwest of Thunder Bay, in Neebing Township, this spectacular, rugged, and relatively remote property constitutes 21 kilometres of pristine Lake Superior shoreline and 1018 hectares of relatively undisturbed boreal forest that is home to bald eagles, nesting peregrine falcons, and rare Arctic and alpine plants.

Over 1300 species observations have been recorded from the bioblitz and 572 species observed, from the common to the rare and at-risk. With support via the iNaturalist platform, 102 people (citizen scientists) have also assisted with species identification. Data and information obtained from the bioblitz aids the further understanding of the ecological significance of the Big Trout Bay Nature Reserve and will be used to inform the property management plan.

Tracking a Rare Salamander in Manitoba

HE Eastern Tiger Salamander (*Ambystoma tigrinum*) is among the largest land-dwelling salamanders in North America, averaging 18 to 21 centimetres in length. Mostly active at night, it voraciously feeds upon worms, insects, frogs, and any other small animals that it can swallow. In turn, it is also preyed upon by some bird species and, apparently, snakes. With its broad head and blunt, rounded snout, it can burrow underground (e.g., for hibernation) and likely also seeks shelter under moist logs and leaves.

A habitat generalist, the Eastern Tiger Salamander occurs throughout much of eastern North America, from eastern Texas to northern Florida and northward to extreme south-central Canada, and is considered to be Secure in the context of its global range (G₅). However, it is extirpated from Pennsylvania and in roughly half of the other 30+ American states where it has been known to occur, it is considered Critically Imperilled to Vulnerable. In Canada, this salamander occurs only in southeastern Manitoba where it is considered Rare at the provincial level (S₂). In Ontario, only one record for this species exists and that is an historical record from Point Pelee: the salamander is considered to be Extirpated from that province.

Little is known about the population of the Eastern Tiger Salamander in Manitoba. As part of its effort to study the four species of salamander found in the province, the Manitoba Conservation Data Centre has been surveying this species since 2012. Its population was thought to be limited to an area around the town of Stuartburn but is now believed to likely extend to other areas of eastern Manitoba that contain



Eastern Tiger Salamanders (*Ambystoma tigrinum*) under study by the Manitoba Conservation Data Centre (MBCDC). Photo: Carla Church, MBCDC



soils conducive to the salamander's burrowing needs. Further study of this species will help inform its potential assessment by the Manitoba Endangered Species and Ecosystems Advisory Committee and its possible listing as Endangered under the federal Species at Risk Act. Given the range and severity of threats to virtually all salamanders, including habitat loss and modifications, pollution of breeding sites, droughts associated with climate change, and roadkill during migration, greater knowledge of the population and distribution of the Eastern Tiger Salamander in Manitoba can help ensure that this species endures as part of Canada's natural heritage.

Measuring Eastern Tiger Salamander larva.
Photo: Carla Church, Manitoba Conservation Data Centre

Rediscovering Historical Species in Yukon

N northern Canada, there are often long periods of time between biological inventories. In Yukon, for example, currently 12-13% of all species element occurrences are considered historical, with no confirmation of the species present at a site since 1977 (>40 years).

It is commonly believed that in the absence of human disturbance, populations of plants and animals will persist, particularly in remote areas such as found in Yukon. In an effort to investigate this assumption and to more clearly delineate occurrences, inventories targeting historical species and sites were recently initiated by the Yukon Conservation Data Centre (YTCDC). Some of the results have been promising, such as confirmation of healthy colonies of Collared Pika (*Ochotona collaris*), a small mammal known from alpine areas in Yukon, Northwest Territories, B.C., and Alaska, and of stands of



Zoologist and species-at-risk specialist Syd Cannings searching for the Dune Tachinid Fly (*Germaria angustata*), a rare insect known only from dune habitats in southwestern Yukon. Photo: Carmen Wong, Parks Canada Agency

Porsild's Candy-tuft (*Smelowskia porsildii*), a plant of the mustard family which was rediscovered in Yukon after over 50 years since last observance.

A vascular plant, the Kamchatka Chocolate Lily (Fritillaria camshatcensis) which is Imperilled (S2S3) in Yukon where it had not been reported in 41 years, and a liverwort, Asterella saccata, not seen in over 115 years in Yukon, were both also rediscovered. However, at several sites, plant species which are Imperilled in Yukon (S2), such as Elk Thistle (Cirsium foliosum) and Yukon Aster (Symphyotricum yukonense), have been apparently extirpated through habitat shift or the dramatic change in the flow of the Kaskawulsh River. Final results from the YTCDC's recent fieldwork will help clarify the vulnerability of some species to the effects of climate change even in remote, sparsely populated areas.



Collared Pika (Ochotona collaris)—this cold-adapted alpine mammal is ranked as Vulnerable (S3) in B.C., Yukon, and Northwest Territories with concern for how climate change may diminish its persistence over time. Photo: National Parks Service Jacob W. Frank

Discovering New Species for Atlantic Canada

HILE searching for the nationally rare Scarlet Bluet damselfly (Enallagma pictum), which had been discovered as a new species for Canada in southwestern New Brunswick last year, Atlantic Canada Conservation Data Centre (ACCDC) Zoologist John Klymko and Zoology Technician Miranda Wiegensberg discovered another new damselfly for New Brunswick—the Lilypad Forktail (Ischnura kellicottii). This species is also nationally rare and was previously known in Canada from only two sites in extreme southern Ontario. With their fieldwork supported by the New Brunswick Wildlife Trust Fund, the ACCDC zoologists have since discovered the species at several other sites in southwestern New Brunswick. This is especially significant for Canada because the New Brunswick sites, unlike those in southernmost Ontario, are mostly in relatively intact landscapes with low levels of threat. It is unclear if the Lilypad Forktail has recently increased its range northward to include New Brunswick, or if it might have been present but overlooked all along. The species' similarity to more common damselfly species and its habit of remaining on vegetation over relatively deep water could have prevented its detection until the efforts of the ACCDC staff.

With fieldwork support from Nova Scotia's Department of Natural Resources, ACCDC botanists Sean Blaney, David Mazerolle and Alain Belliveau also recently completed a four-day, 45 km trek searching for rare plants in the remote Pollets Cove—Aspy Fault Wilderness Area in northernmost Cape Breton, Nova Scotia. Among the hundreds of rare plant occurrences documented were a confirmation of the location of Nova Scotia's only known occurrence of Nodding Saxifrage (Saxifraga cernua), the discovery of the first Cape Breton occurrence of Moss Campion (Silene acaulis), documentation of the second Nova Scotia records of Small-flowered Anemone (Anemone parviflora), and the third Nova Scotia locations for Bearberry Willow (Salix uva-ursi), Alpine Timothy (Phleum alpinum), and Purple Saxifraga oppositifolia). These plants are remnant Arctic-associated species that have likely been hanging on in exposed or otherwise cold microclimates since just after the last glacial retreat. Some of them occurred together on the rocky shores and spray zone of an extensive series of waterfalls on the Blair River—a place that has now become one of the most significant botanical sites in Nova Scotia. Some other even rarer records may eventually be revealed upon careful examination of specimens collected from the ACCDC botanical fieldwork.





Far Left: Lilypad Forktail (Ischnura kellicottii) Photo: John Klymko

Left: Purple Saxifrage (Saxifraga oppositifolia): globally Secure (G5) but in Nova Scotia Critically Imperilled (S1).

Photo: Joan Simon

Tracking the Ord's Kangaroo Rat in Saskatchewan

RD'S Kangaroo Rat (*Dipodomys ordii*) is a nocturnal and primarily solitary rodent. A habitat specialist, it requires sandy soils for burrowing and prefers to dwell in sand dune habitats. Occurring in 16 U.S. states and in Canada in Alberta and Saskatchewan, Ord's Kangaroo Rat is considered to be a Secure species at its global level (G5). However, in Canada it is a much rarer and highly range-restricted species occurring in just approximately 53 square kilometres between the Great Sandhills in Saskatchewan and Canadian Forces Base Suffield in Alberta. Within that range only about 1000 individuals are alive at the end of most winters. Accordingly, Ord's Kangaroo Rat is ranked as Imperilled (S2) in Alberta and Saskatchewan and has been listed since 2007 as Endangered under the federal Species at Risk Act. Importantly, the Canadian population is separated by some 270 kilometres from the nearest population of the species in the U.S.

Data on the status of the Saskatchewan population of this species was recently identified by the Committee on the Status of Endangered Wildlife in Canada as an important knowledge gap. To help address that, the Saskatchewan Conservation Data Centre (SKCDC) and the Saskatchewan Ministry of the Environment recently teamed to survey potential habitat and gain greater knowledge of this species' provincial distribution. Surveys were conducted not only in the Great Sandhills but also additional sandhills located in southwestern Saskatchewan (e.g., Burstall, Seward, Westerham sandhills). Daytime habitat surveys helped to detect signs (e.g., burrows and tracks) of the presence of Ord's Kangaroo Rat and nighttime surveys were used to detect actual presence. Through this work SKCDC staff were able to confirm the presence of the species throughout all of the active dune complexes surveyed, except for those in the Piapot and Antelope sandhills.





Ord's Kangaroo Rat (*Dipodomys ordii*) is a nationally Imperilled (N2) species also listed as Endangered under Canada's Species at Risk Act. Photo: Saskatchewan Conservation Data Centre

Releasing a New NatureServe Canada Report



VER 2016-17 NatureServe Canada produced a major new report on species, subspecies, and plant varieties in Canada most at risk of extinction. The report—On Guard for Them: Species of Global Conservation in Canada—was released in early April 2017 at the NatureServe Biodiversity Without Boundaries international conference in Ottawa.

On Guard for Them updates NatureServe Canada's 2005 report, Our Home and Native Land: Canadian Species of Global Conservation Concern. Like the 2005 report (the first overview of the status of Canadian wild species in a global context), On Guard for Them presents findings on the global conservation status of over 5400 species within 13 species groups, from mammals to flowering plants. Unlike the 2005 report, On Guard for Them also (1) reviews the global status of 1751 subspecies and varieties from among the 13 groups; and (2) highlights other species and subspecies that are endemic to Canada and globally at risk but which do not belong to any of the 13 groups. On Guard for Them thus reflects expanding biodiversity knowledge within the NatureServe Canada Network—a process that is updated as data about animals, plants, lichens, fungi, and ecosystems continues to be gathered.

Key findings of *On Guard for Them* include that 381 species and 188 subspecies and varieties in Canada are globally at risk. On Guard for Them

determines that Canada has sole responsibility for protecting and conserving 128 of these species and 85 of the subspecies and varieties—those that are endemic to Canada. As well, the report finds that Canada and the United States have a shared responsibility for protecting and conserving the 226 species and 92 subspecies and varieties which are at risk and that occur in both nations. Further, the report identifies 27 species and 10 subspecies and varieties which are of global concern and that span three or more nations, thus requiring multilateral conservation cooperation.

As we look to the future, the availability and application of science for effective decision-making has never been more urgent or timely. On Guard For Them is powered by science and a critically important call to action to protect at-risk species and natural heritage in Canada that are fundamental for human society as well as the foundation for a diverse and resilient natural world.

GREGORY MILLER, PHD, PRESIDENT AND CEO, NATURESERVE



Staging Biodiversity Without Boundaries 2017

The international NatureServe Network's Biodiversity Without Boundaries (BWB) conference convenes biologists, ecologists, information managers, public policy specialists, and others to highlight important breakthroughs in conservation science, celebrate successes, collaborate on new initiatives, and share innovations in support of a more sustainable future. Filling a niche between academic meetings and policy-centric conferences concerning biology, ecology, and conservation, BWB offers interactive workshops, symposiums, and panels that tackle pressing topics facing conservation science today—as well as those approaching fast on the horizon.

NatureServe Canada was pleased to help host BWB17, held April 9-13 in Ottawa. Themed Managing Natural Resources and Biodiversity in a Rapidly Changing World, BWB17 served to highlight the uses and pressures on natural resources as well as leading efforts to protect and conserve them. The 210 people who attended, representing NatureServe Network members, partners, and clients, explored critical challenges of biodiversity conservation and options for solving such challenges through conservation action design and implementation.



During BWB17, NatureServe Canada and Environment and Climate Change Canada—Canadian Wildlife Service were co-honoured to receive NatureServe's 2017 Scientific and Technological Achievement Award. This award recognized our joint work to see NatureServe's methodologies employed for the national species status assessments



Dr. Rémi Hebert, Environment and Climate Change Canada – Canadian Wildlife Service, left, and Patrick Henry, NatureServe Canada, centre, accept NatureServe's 2017 Scientific and Technological Achievement Award from Dr. Gregory Miller, NatureServe.

reflected in the recently released Wild Species 2015 report. Also recognized with awards at BWB17 were two of NatureServe Canada's Constituent members. Ontario's Natural Heritage Information Centre (NHIC) won the Conservation Impact Award for its innovations in furthering NatureServe's mission of providing the scientific basis for effective conservation. The British Columbia Conservation Data Centre won the Network Collaboration and Mentoring Award for its collaboration with the Manitoba Conservation Data Centre and NatureServe Canada in assisting (through in-person and remote training) the Northwest Territories Conservation Data Centre on NatureServe methodology and software.

In Canada, important scientific information on the status of species and ecosystems is gathered by many different agencies and organizations. NatureServe Canada acts as an essential repository and interpreter of this information, thus immeasurably improving its value to conservation—especially for imperilled species.

GEORGE FINNEY, PHD, PRESIDENT EMERITUS, BIRD STUDIES CANADA

Summary Financial Data

The summary financial data on this page is drawn from NatureServe Canada's audited financial statements for 2016/17. To access the full statements, please visit www.natureserve.ca

STATEMENT OF FINANCIAL POSITION Year ending March 31		
	2017	2016
ASSETS		
CURRENT ASSETS		
Cash	240,953	\$184,752
Accounts receivable	185,964	277,574
Prepaid expense	3,761	1,489
	430,678	463,815
Capital assets	763	1,525
TOTAL ASSETS	431,441	465,340
LIABILITIES AND NET ASSETS		
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	296,366	331,753
	42,125	_
NET ASSETS	92,950	133,587
TOTAL LIABILITIES AND NET ASSETS	431,441	465,340

STATEMENT OF OPERATIONS Year ending March 31		
	2017	2016
REVENUE		
Government funding	952,124	853,440
Charitable organization/foundation funding	45,000	72,300
Dues	13,500	13,500
Other	5,242	2,938
TOTAL REVENUE	1,015,866	942,178
EXPENDITURES		
Contracts	996,353	904,117
Travel, annual meeting, workshops	14,843	19,516
Office costs	12,875	17,716
Professional fees	15,969	16,026
Sponsorship	13,000	13,061
Other	3,463	5,792
TOTAL EXPENDITURES	1,056,503	976,228
EXCESS (DEFICIENCY) REVENUE OVER EXPENDITURES	-40,637	-34,050



Pronghorn (Antilocapra americana) is Secure (G₅) in its global (North American) range but in Canada is Vulnerable (S₃) in Alberta and Saskatchewan, and Extirpated (SX) from Manitoba. Photo: Saskatchewan Conservation Data Centre

An Invitation to Contribute to Conservation Science

HE strength of conservation science—the focus and specialty of NatureServe Canada and our network of Canadian Conservation Data Centres—depends on a sufficient number of highly qualified biologists, ecologists, and information managers having the resources they need for their work. A financial investment in conservation science is an investment in knowledge about nature, upon which depends the health of the environment, the economy, and our society.

Government funding is limited, yet the need for thorough, excellent conservation science continues to grow. Funding from foundations, corporations, other non-government organizations, and individuals complements that of government—and helps meet public and private sector interests for the best available knowledge and expertise for conservation decision-making. (Hospitals, schools, and libraries are examples of other publicly valuable services that benefit from both public and private sector funding.)

NatureServe Canada is a registered Canadian charity (#862330529RR0001). We welcome financial gifts in support of our business—conservation science. As well, Associate membership in NatureServe Canada is available to organizations that support our mission, which manage data of conservation value, and/or are active in promoting science-based conservation action nationally or sub-nationally.

To learn more, to donate in support of our work, or to inquire about Associate membership, please contact us:

NatureServe Canada 39 McArthur Ave, Level 1-1, Ottawa, ON K1L 8L7 Canada

www.natureserve.ca

Patrick Henry, Executive Director (613) 986-1535 | phenry@natureserve.ca



Surveying for freshwater mussels along the Antler River, Manitoba. Photo: Carla Church, Manitoba Conservation Data Centre

Long-term, standardized, spatially complete, and readily accessible monitoring information, complemented by ecosystem research, provides the most useful findings for policy-relevant assessments of status and trends....

Biodiversity monitoring is important because it provides a basis for evaluating the integrity of ecosystems, their responses to disturbances, and the success of actions taken to conserve or recover biodiversity.

CANADIAN COUNCILS OF RESOURCE MINISTERS, 2010

In Gratitude to Our Members in 2016–17

NatureServe Canada is deeply grateful for the contribution and collaboration of our Constituent and Associate members—Thank You!

CONSTITUENT MEMBERS

Alberta Conservation Information Management System Atlantic Canada Conservation Data Centre British Columbia Conservation Data Centre Manitoba Conservation Data Centre Northwest Territories Conservation Data Centre Nunavut Conservation Data Centre Ontario Natural Heritage Information Centre Saskatchewan Conservation Data Centre Yukon Conservation Data Centre

ASSOCIATE MEMBERS

Environment and Climate Change Canada – Canadian Wildlife Service Fisheries and Oceans Canada Nature Conservancy of Canada NatureServe Parks Canada Agency





































