



NATURESERVE

ANNUAL REPORT

2020



A burrowing crayfish
Cambarus fetzneri
NatureServe Global Status: Vulnerable (G3)
Photo by Chris Lukhaup

Unfold to Reveal Our
Species at Risk Wall Map

A Message from NatureServe's President

Pandemic. Zoonosis. Shutdown. Social distancing. Who knew?

In January of 2020, most of us were blissfully ignorant of these words and what they meant for the world. Between the loss of human lives, the physical and mental health challenges, and the devastating economic impacts of the pandemic, those of us who survived 2020 will never forget it.

At the same time, powerful social justice progress was achieved. Recognition of Black Lives Matter and the attention to justice, equity, diversity, and inclusion resulted in important, positive, and ongoing changes to society.

In the natural world, we had similar challenges and hopeful signs. Over the past couple of years, we learned that we have lost 3 billion birds since 1970 and that a million species are in danger of going extinct. We also developed a heightened understanding that biodiversity and our relationship to nature are linked to novel diseases in humans. This realization has helped shift the conversation and will ultimately help us protect the natural world.

At NatureServe, we had to adapt our operations to the new environment and were able to not

only survive but thrive in 2020. We hunkered down and did what we do best: we innovated, programmed, and cranked out some serious science for the benefit of biodiversity.

As you will see in this annual report, we made great strides toward our mission while working from home. We know there is more work to be done. Next year we look forward to updating you on additional progress and a new strategic direction that will allow us to be even more effective at conserving biodiversity.

On behalf of everyone at NatureServe, I want to thank you for supporting our work and for safeguarding the future of our planet.

Onward and Upward,



Sean O'Brien, Ph.D.
President & CEO



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**New Board Member (2020)
***New Board Member (2021)

Remembering our Founder

This year, we mourned the loss of Robert E. Jenkins. Bob's inspired idea and tireless dedication created a unique and indispensable network that helps conserve biodiversity across the planet. All of us, and future generations, owe Bob a debt of gratitude for allowing us to know what species are out there, where they are, and how they are doing, so we can work to protect them. His legacy lives on at NatureServe and through the NatureServe Network.

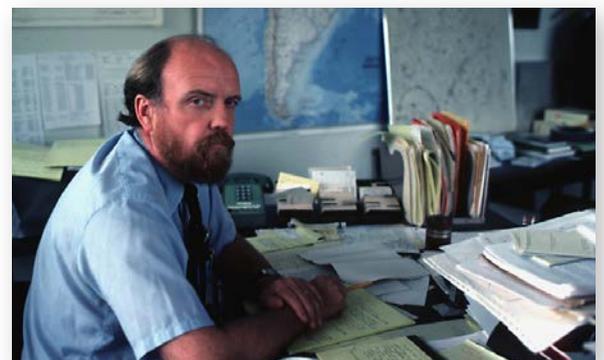


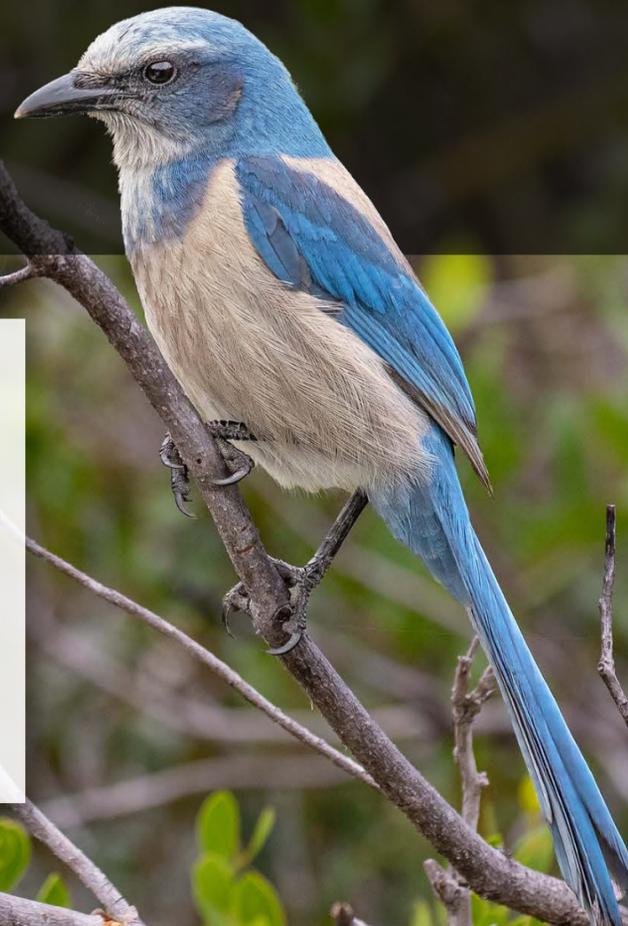
Photo by Jack Lynn

2020 Victories

Identifying Conservation Opportunities

Through a landmark collaboration, NatureServe has released a portfolio of maps that identify areas critical to sustaining our nation's rich biodiversity. Called the Map of Biodiversity Importance, this work highlights concentrated areas of imperiled species that fall outside of existing protected areas. Maps for four different taxonomic groups, along with predictor layers for factors such as climate, are available on Esri's Living Atlas of the World. NatureServe and the NatureServe Network are developing state-level views of the Map of Biodiversity Importance to highlight the local expertise of our conservation partners.

Florida Scrub-jay (*Aphelocoma coerulescens*)
NatureServe Global Status: Imperiled (G2)
Photo by Mike Carlo, U.S. Fish & Wildlife Service



NatureServe Leads Global Reptile Assessment

After a 15-year effort that began with a workshop sponsored by NatureServe in Mexico in 2005, the Global Reptile Assessment is now complete. In a massive undertaking, NatureServe, led by Chief Zoologist Bruce Young, the International Union for Conservation of Nature (IUCN), and Conservation International worked together to coordinate IUCN Red List conservation status assessments of 10,196 snake, lizard, crocodile, and turtle species. This project compiled expert knowledge from 961 herpetologists representing over 80 countries from around the world. The results highlight the many threats to reptiles and where conservation action is most needed to protect their rich diversity.

Bushveld Lizard (*Heliobolus lugubris*)
Photo by Bruce Young



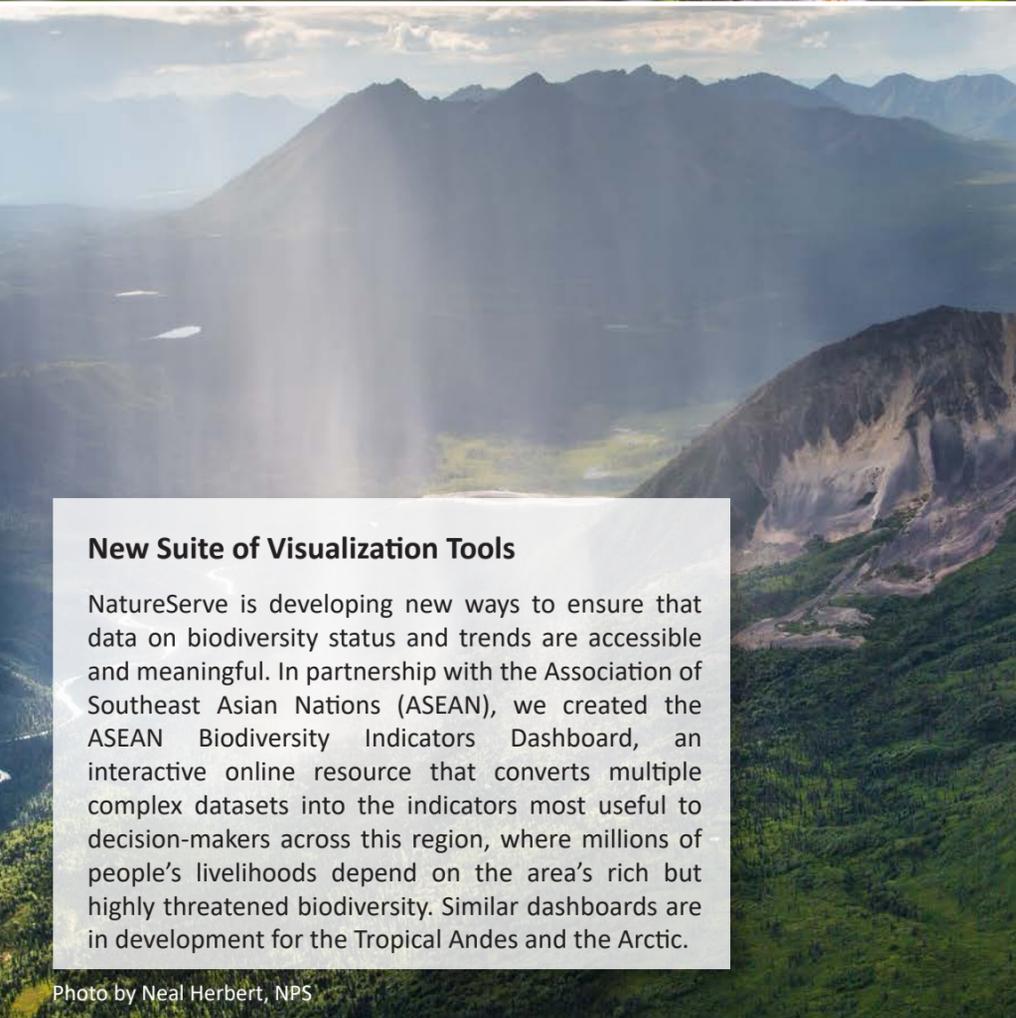
Conservation Conversations Podcast Launch

NatureServe has launched its first podcast series, Conservation Conversations with Sean O'Brien. Geared towards conservation professionals and casual listeners alike, this educational and entertaining podcast discusses how emerging technologies can benefit conservation, regional and global trends in biodiversity, and the future for life on Earth. Listen wherever you get your podcasts, and be sure to subscribe and leave us a review!

New Suite of Visualization Tools

NatureServe is developing new ways to ensure that data on biodiversity status and trends are accessible and meaningful. In partnership with the Association of Southeast Asian Nations (ASEAN), we created the ASEAN Biodiversity Indicators Dashboard, an interactive online resource that converts multiple complex datasets into the indicators most useful to decision-makers across this region, where millions of people's livelihoods depend on the area's rich but highly threatened biodiversity. Similar dashboards are in development for the Tropical Andes and the Arctic.

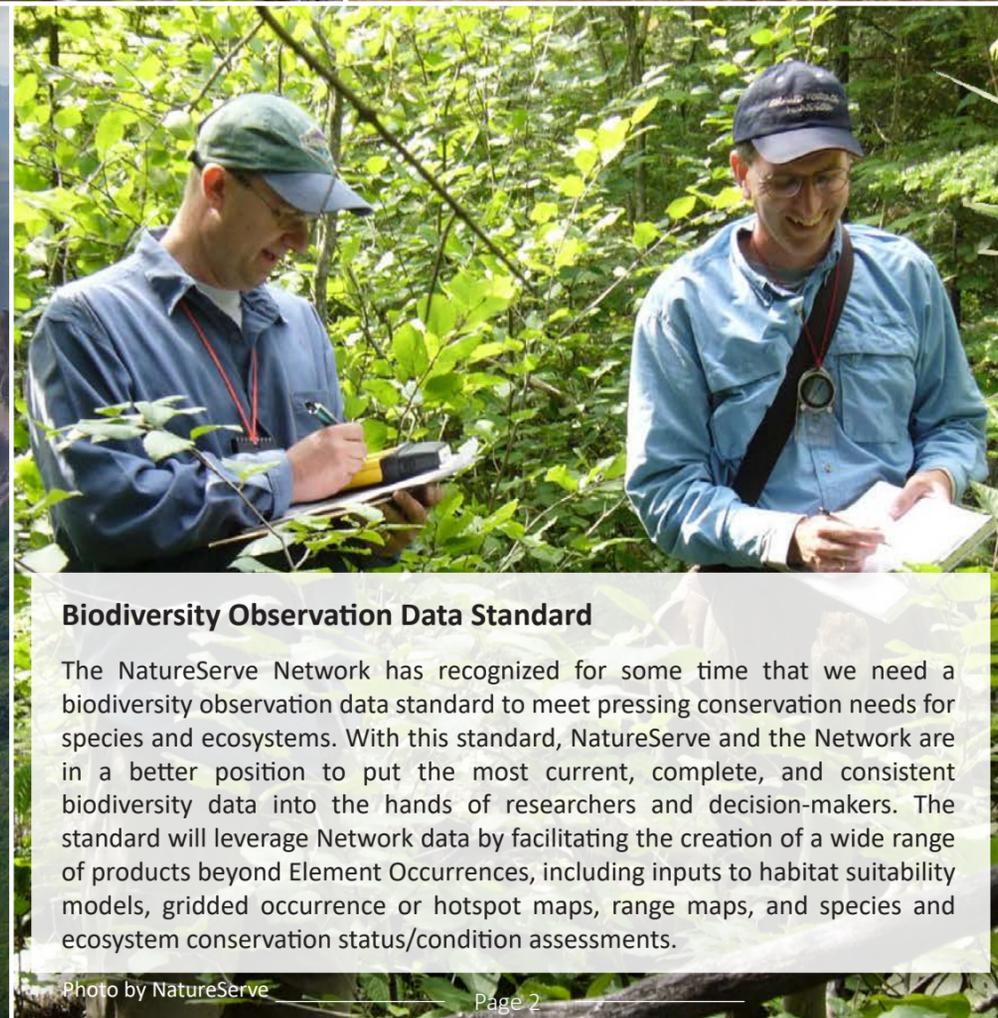
Photo by Neal Herbert, NPS



Biodiversity Observation Data Standard

The NatureServe Network has recognized for some time that we need a biodiversity observation data standard to meet pressing conservation needs for species and ecosystems. With this standard, NatureServe and the Network are in a better position to put the most current, complete, and consistent biodiversity data into the hands of researchers and decision-makers. The standard will leverage Network data by facilitating the creation of a wide range of products beyond Element Occurrences, including inputs to habitat suitability models, gridded occurrence or hotspot maps, range maps, and species and ecosystem conservation status/condition assessments.

Photo by NatureServe



Neglected Sunflower (*Helianthus neglectus*)
NatureServe Conservation Status: Imperiled (G2)
Photo by Katarzyna Stepien



Publications by NatureServe Scientists

During 2020, despite the ongoing pandemic, NatureServe scientists published 20 scientific journal articles and reports. Their work covered topics such as invasive species abundance modeling, ecological vulnerability to climate change, vegetation classification, and remote sensing applications for tracking biodiversity. One NatureServe publication, which focused on vascular plant extinction in the continental United States and Canada, was even highlighted by The New York Times!

Innovations from the Field

This year has been challenging in many ways, but we want to find the silver lining. We asked the NatureServe Network to tell us how the pandemic has served as a catalyst for positive change to their program. Read on to hear about species discoveries and scientific innovations, a growing respect for nature within communities, and victories that happened because of—or in spite of—the pandemic.



How has your team found inspiration and hope during this time?



Our botanist has spent most of the pandemic in the field (he loves it!) and has discovered species that are new to the state and one that was thought to be extirpated.

Teresa Clark, Indiana Natural Heritage Data Center



We remain connected virtually to our colleagues around the world.

Bruce Bennett, Yukon Conservation Data Centre



Photo by Irvine Wilson



How has the pandemic taught you to think differently?



Staff have become more resilient as a result of having to solve problems when the normal workflow was disrupted and access to resources became limited. It's been a little like team building through shared adversity.

Greg Podniesinski, Pennsylvania Natural Heritage Program



Have you noticed a new appreciation for nature in your community?



More people are in the parks and on bike/walk trails. More volunteers for citizen science projects and more attendees at our annual Natural Legacy conference.

Caroline Jezierski, Nebraska Natural Heritage Program



People are more engaged with wildlife and nature because they are stuck at home. They have increased their inquiries about species identification etc., so it has given us a chance to serve a citizenry we may not have worked with as much in the past.

Jonathan McKnight, Maryland Natural Heritage Program



As people realize that the outdoors could be a place of solitude and healing, there seemed to be a new appreciation for nature.

Anna Smith, South Carolina Department of Natural Resources



Name one win for nature that happened in your area because of—or in spite of—the pandemic.



Despite having to work apart we were able to successfully submit a proposal for a USFWS Recovery Challenge Grant. We recently received the news that we have been awarded the funding for the three-year project. Once implemented, this project will produce on-the-ground positive benefits to cedar glades and barrens communities and two federally-listed rare plant species.

David Lincicome, Tennessee Division of Natural Areas



Despite the pandemic, Illinois agency directors from Agriculture, Environmental Protection, Natural Resources and Transportation signed into action the state's Monarch Butterfly Action Plan.

Tara Kieninger, Illinois Natural Heritage Program



The 527-acre former Hidalgo property became Vermont's 100th Wildlife Management Area. The acquisition is significant because the property falls within an area mapped as a highest ecological priority and one that is critical for maintaining wildlife connectivity with adjacent state and federally conserved land.

Everett Marshall, Vermont Natural Heritage Inventory



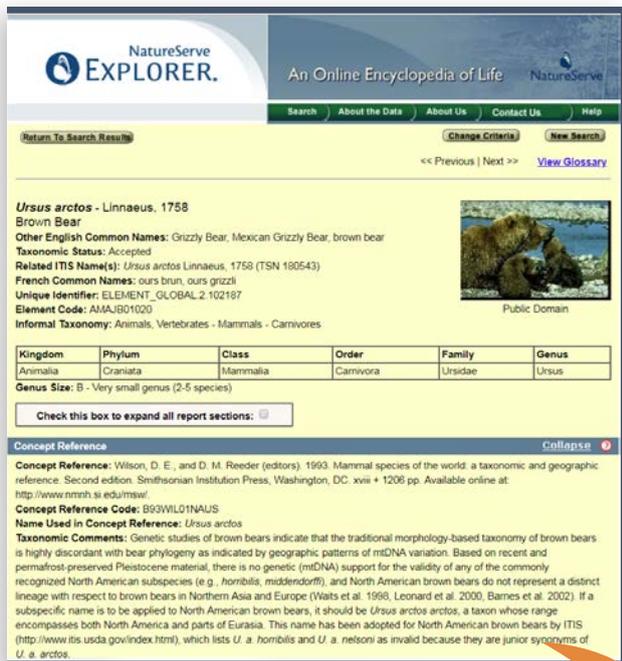
We are on track to complete our new online reporting system (the Heritage Hub) due to be released in January 2021. A switch to virtual project management and shifting workspaces has been a challenge but we've stayed on track and are looking forward to launching this great product.

Sarah Maier, MassWildlife Natural Heritage & Endangered Species Program

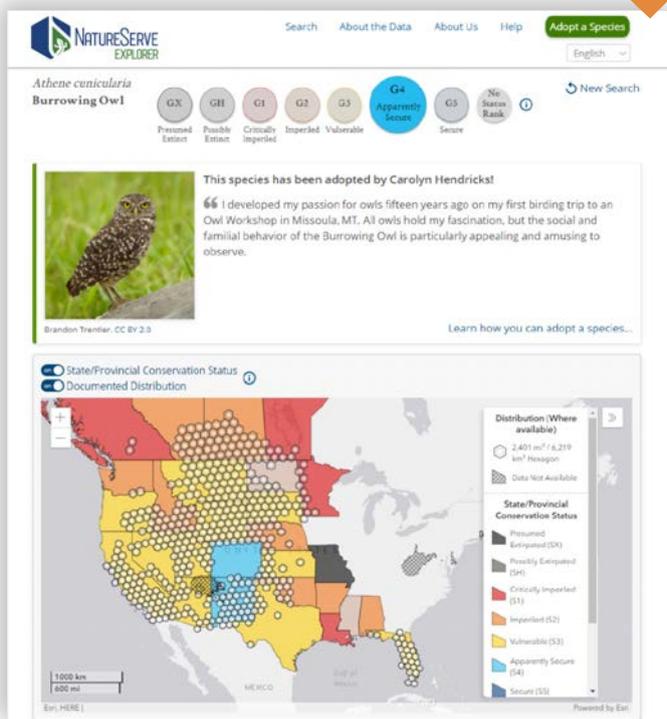
NatureServe Explorer 2.0

Imagine a database of 100,000 plants, animals, and ecosystems, constantly being reviewed and updated by a network of more than 1,000 natural heritage experts. Now imagine having that information available at your fingertips! NatureServe Explorer is your guide to the diversity of life on Earth—a free, online tool that syncs directly from NatureServe’s unparalleled database of biodiversity information for the Americas.

For two decades now, NatureServe Explorer has been a trusted resource for conservation professionals, nonprofits, academics, and nature enthusiasts. In 2020, we launched a new NatureServe Explorer with increased functionality and streamlined user interface, and now, for the first time ever, you can view documented distribution maps for plants and animals tracked by the NatureServe Network. Start exploring today!



The original NatureServe Explorer



The new NatureServe Explorer

Search to find common names, conservation statuses, and distribution maps for 100,000 species and ecosystems in the Americas

Easily customize searches by region, taxonomic group, conservation status, and more

Access the most up-to-date information synced directly from the NatureServe Network database

Subscribe to Explorer Pro to access high-resolution datasets and maps

Adopt a species and be recognized on your chosen species' page in NatureServe Explorer

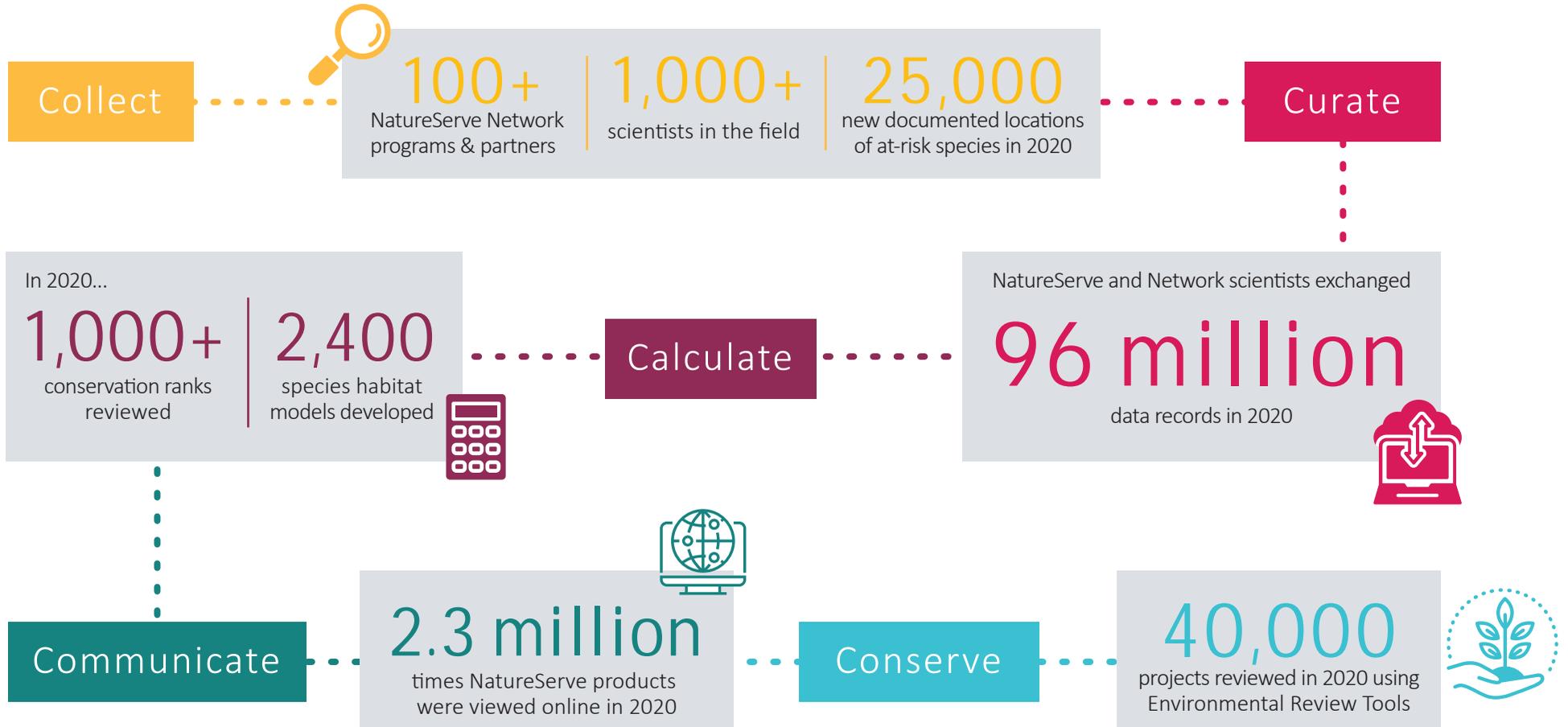
6X Increase in users since launching the new site!

"LOVE the new NatureServe Explorer format! Beautiful! Thanks for all you do for conservation."
— Linda Chafin
State Botanical Garden of GA

"NatureServe Explorer looks amazing. I love the way the Global Rank is displayed and the map looks very sharp."
— Katie Heineman, Ph.D.
Center for Plant Conservation

NatureServe by the Numbers

When it comes to protecting our natural heritage, knowing is half the battle. This is why the NatureServe Network is driven to answer three major questions: What is it? Where is it? How is it doing? NatureServe Explorer, our online guide to species and ecosystems, contains nearly 50 years of biodiversity information, making us uniquely qualified to answer these critical questions.



Financials

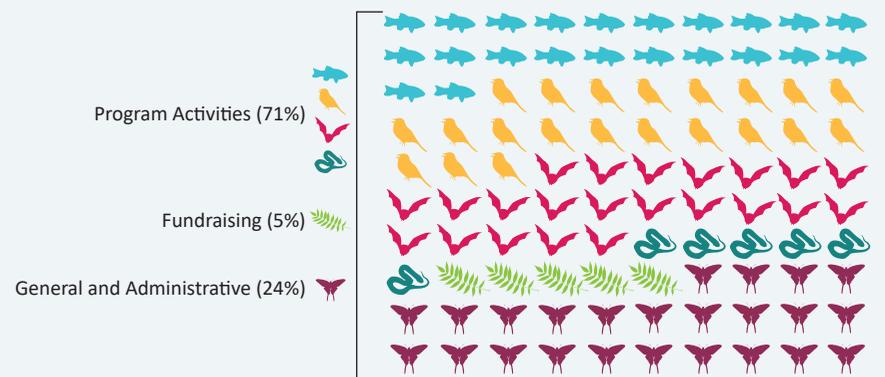
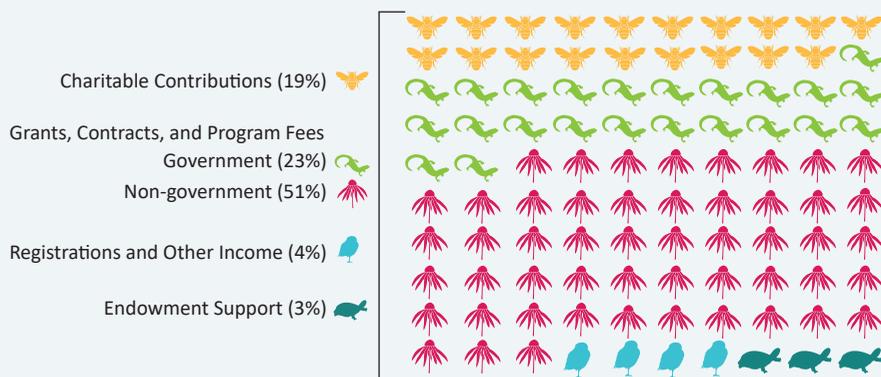
July 1, 2019–June 30, 2020

Revenue

Charitable Contributions*	19%	\$1,743,800	
Grants, Contracts, and Program Fees			
Government	23%	\$2,131,300	
Non-government	51%	\$4,619,000	
Registrations and Other Income**	4%	\$324,800	
Endowment Support	3%	\$293,700	
Total Operating Revenue		\$9,112,600	

Expenses

Program Activities			
Scientific Data and Methods	22%	\$1,930,300	
Technology Research and Development	21%	\$1,895,300	
Conservation Products and Services	22%	\$1,917,700	
Network Capacity Building & Program Development	6%	\$564,400	
Fundraising	5%	\$409,200	
General and Administrative	24%	\$2,163,000	
Total Expenses		\$8,879,900	



*Charitable contributions include individual donors, corporate sponsors, and grants from foundations

**Other income includes membership dues, rental income, investment income, and royalties

Ways to Give

Sustaining Gifts

By making an automatic gift each month, our sustaining donors ensure that NatureServe is consistently growing its far-reaching efforts to preserve biodiversity—every day of the year.

"As a botanist, I know firsthand how critical NatureServe's biodiversity network is to informing conservation and management decisions. Their (inter)national centralized, user-friendly data repository with flexible tools and search functions are vital to understanding and addressing the needs of our iconic species. My recurring gift is a meaningful way to show my commitment to NatureServe's mission and to support the core functions that make their work possible."

—Patricia S. De Angelis, Ph.D.



Adopt-a-Species

Now you can become a biodiversity champion and adopt a native plant or animal. In addition to being recognized on your chosen species' page on NatureServe Explorer, you will be supporting the expert staff at NatureServe who ensure that critical data on the taxonomy, distribution, and conservation status of species and ecosystems are accurate and available to conservation decision-makers.

"My partner and I chose to adopt a species in memory of her mom, Michele. She was an avid gardener who loved all flowers and the wildlife they attracted. We could think of no better way to honor her memory than to support an organization committed to conserving the biodiversity of the plants and animals Michele so enjoyed."

—Shak Khavarian



Heritage Circle

When you include NatureServe in your estate plans, you play a key role in ensuring that the plants, animals, and places you care about will be enjoyed by future generations. As part of our Heritage Society, your investment in NatureServe is an investment in the future of biodiversity.

"The most consequential legacy one can leave for future generations is helping to protect our planet's imperiled species and ecosystems. By including NatureServe in my estate, I'm helping to ensure the delivery of the best scientific information to protect biodiversity and the futures of my grandchildren and their descendants."

—Larry Master



Thank You

NatureServe Supporters July 1, 2019 – Dec 31, 2020

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Brico Fund
Colorado Natural Heritage Program
EarthShare
Gulf of Mexico Alliance
Helen Clay Frick Foundation
Langar Foundation
Microsoft AI for Earth
Minnesota Natural Heritage
Mt. Cuba Center
NatureServe Canada
Network for Good
Schwarz Family Gift Fund
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Sustainable Forestry Initiative
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The Regina Bauer Frankenberg Foundation
The Warrington Foundation
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Wildlife Conservation Society Canada
World Conservation Monitoring Centre
The Pennsylvania Natural Heritage Program
The Virginia Natural Heritage Program
Virginia United Land Trusts
The Virginia Native Plant Society

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City of Boulder Open Space and Mountain Parks
Environment and Climate Change Canada
The National Park Service
New Hampshire Department of Natural & Cultural Resources
Parks Canada Agency
U.S. Bureau of Land Management
U.S. Department of Agriculture
U.S. Forest Service
Virginia Department of Conservation and Recreation

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