

# STRATEGIC PLAN 2012-2016

**EXECUTIVE SUMMARY** 

Providing the scientific basis for effective conservation action

NatureServe envisions a world where decision-makers recognize the value of biodiversity, fully understand the importance of science in the protection of biodiversity, and invest in science as the basis for their decisions that affect biodiversity.

## THE PLAN

To guide our work for the next five years, we have assessed the status of our network, the context in which we operate, and the driving forces that will shape how we achieve mission impact. This executive summary provides an overview of NatureServe's 2012-2016 Strategic Plan. To read or download the complete plan, visit www.natureserve.org/strategic\_plan.

## A NETWORK CONNECTING SCIENCE WITH CONSERVATION

More than 1,000 professionals constitute the NatureServe network. These dedicated staff collect and manage the Western Hemisphere's most comprehensive source of biodiversity data. This resource contains nearly 1,000,000 mapped locations of at-risk species and ecosystems, providing extensive information on more than 66,400 species and 6,700 ecosystems.

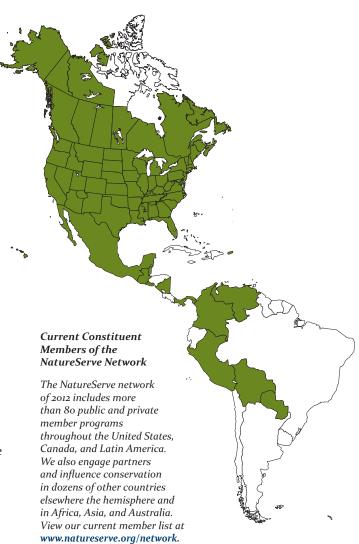
Each member of the NatureServe network uses consistent methods adapted to local conservation biodiversity-information needs and challenges, creating a resilient, distributed system for connecting on-the-ground science to local, national, and global policy- and decision-making.

### **GUIDING CONSERVATION IMPACT**

NatureServe is most effective when decisionmakers use our knowledge and services to focus scarce resources on the highest priority conservation activities; to manage working lands on behalf of biodiversity; to improve the environmental quality of infrastructure development; and to support other societal needs in ways that preserve biological diversity.

We can further increase and direct our conservation impact by proactively developing key data analyses and syntheses that incorporate other authoritative non-biodiversity data. Our pursuit of these outcomes will reduce threats to biodiversity, yielding positive results in the form of reduced species extinction risk, fewer imperiled ecosystems, and more robust ecosystem function across landscapes.

By providing the scientific basis for actions that conserve the rare and imperiled species and threatened ecosystems of the Western Hemisphere — and indeed, the world — we will extend what eminent biologist and 2011 NatureServe Conservation Award winner Dr. E. O. Wilson calls "the vital, the necessary, and the increasingly impressive enterprise that is NatureServe."





**Pictured above:** Ecologist Erin Lunsford Jones conducts field work at Natchez Trace Parkway. (Photo © Carl Nordman)

## CREATING NEW VALUE FROM CORE STRENGTHS

NatureServe exists to create knowledge about biodiversity and apply it to serve conservation and resource management. Over the next five years, we intend to leverage our core strengths — our comprehensive database on at-risk species and ecosystems and our network of local, national, and international biodiversity experts — to increase our impact in emerging areas like:

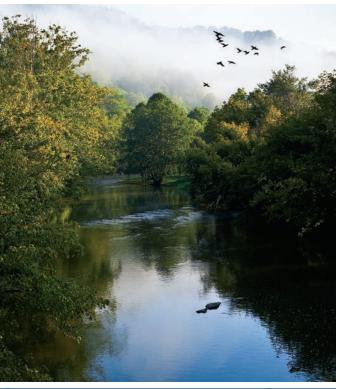
- Improving scientific understanding and measurement of landscape integrity
- · Conserving aquatic biodiversity
- Increasing the efficiency of systems for monitoring trends in biodiversity
- Enhancing knowledge transfer within our network
- Expanding network capacity
- Illuminating the value of biodiversity across policies and disciplines

Pictured right: The Dakota skipper (Hesperia dacotae) is a globally imperiled (G2) species whose native prairies of the upper Great Plains have lost 99.9% of their historic range. The Manitoba Conservation Data Centre earned our 2011 Conservation Impact Award for their efforts to help stakeholders manage habitat for the skipper and other at-risk species. (Photo © Bryan E. Reynolds | www.botwf.org)

These emerging focal areas represent our continuing evolution as an organization and respond to input from partners, stakeholders, and clients. We believe that these new emphases will support our continued growth as a leader and provider of knowledge essential to the conservation and natural resource communities while expanding our influence beyond them.



Pictured below: The Clinch River near Cleveland Barrens Natural Area Preserve, whose biological riches were identified and protected by the Virginia Natural Heritage Program. (Photo © Jack Looney)





### **OUTCOMES FOR 2012 THROUGH 2016**

## RESULT 1 BIODIVERSITY CONSERVATION IS GUIDED BY INCREASINGLY HIGH-QUALITY AND UP-TO-DATE SCIENTIFIC KNOWLEDGE



The actions supporting this result nourish the scientific foundation of our work (methods, data, and expertise).

- The taxonomy of at-risk species is kept current to ensure consistent treatment of species wherever they occur
- 2. Knowledge of vulnerability and extinction risk for species and ecosystems has increased
- 3. Trends in distribution and condition for species and ecosystems across the Americas are better communicated
- 4. Unified terrestrial ecological classifications, mapping standards, and habitat characterizations are implemented across the Americas

Pictured right: Discovered independently by botanists from the Virginia and North Carolina Natural Heritage Programs in the 1990s, the Piedmont fame-flower (Phemeranthus piedmontanus) was officially recognized as a new species in 2011 and exists on sites preserved by both programs. (Photo © Gary Fleming | Virginia DCR)

- NatureServe guides network-wide development of knowledge for strategic freshwater biodiversity conservation
- 6. NatureServe adds value to marine biodiversity conservation through a network-wide strategy that complements existing efforts
- 7. A web-enabled, sustainable, and adaptable data-management system supports knowledge management and data integration



Scientific Knowledge

**Network Capacity** 

Impact Decisions

**Reduced Threat** 

**Biodiversity Conservation** 











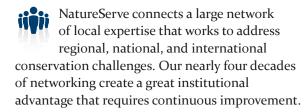








### **RESULT 2 NETWORK EFFECTIVENESS FOR BUILDING BIODIVERSITY KNOWLEDGE IS ENHANCED**



- 1. Network constituent members meet and exceed standards of institutional and technological effectiveness
- 2. Intra-network connections are stronger and more effective
- 3. The NatureServe network is engaged in a broader set of partnerships with institutions responsible for collecting and disseminating biodiversity data
- 4. Like-minded organizations outside the Western Hemisphere are engaged with NatureServe to share information and expertise

## NATURESERVE ANALYSES AND SYNTHESES INFORM KEY SOCIETAL CHALLENGES

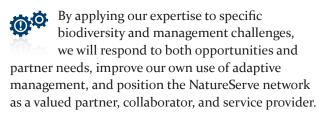


We will inform decision-making while firmly establishing ourselves as a thought leader with proactive analyses and

syntheses that bring our knowledge to bear on cross-cutting societal challenges. The need to integrate our information with other types of data implies the development of new, strategic partnerships.

- 1. Visualizations and syntheses of NatureServe data illuminate large-scale challenges to biodiversity
- 2. NatureServe data are integrated with other key information to shape environmental, scientific, economic, and social policy questions and solutions
- 3. NatureServe is recognized as a thought leader in the conservation of biodiversity

### **RESULT 4** CLIENTS USE NATURESERVE DATA, TOOLS, AND EXPERTISE TO ADDRESS THEIR SPECIFIC NEEDS

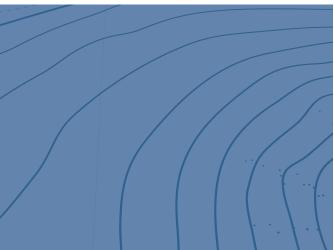


- 1. Resource development is guided to sustain biodiversity through the use of NatureServe's data, tools, and expertise
- 2. Collaborative partnerships provide more multidisciplinary and results-oriented solutions to environmental challenges
- 3. All components of the NatureServe network have capacity to respond quickly to emerging issues of concern



Pictured below: NatureServe network member Pronatura Veracruz enhances public understanding of species and ecosystem science by focusing attention on an annual phenomenon known as the "River of Raptors" — the world's largest hawk migration. (Photo © Jesús Eduardo Martínez Leyva)





## A NATURAL HERITAGE OF ACCOMPLISHMENT

### NOTABLE ACHIEVEMENTS FROM THE PAST FIVE YEARS

- Providing data and expertise to millions of users by fulfilling 30,000,000 individual information requests over five years — a rate of 6,000,000 queries each year, or one request every five seconds
- Documenting more than 300,000 new locations for at-risk species, publishing updated information via NatureServe Explorer while raising the total number of mapped locations to nearly 1,000,000
- Producing the first standardized maps of ecosystems in the Americas
- Providing data-system services that make biodiversity conservation more efficient from federal agencies to local communities in the U.S., Canada, and Central and South America
- Putting critical information in the hands of resource managers and decision-makers with tools like NatureServe Vista and NatureServe Surveyor
- Developing sound methodologies for ecological assessments, including the likely impacts of climate change on species, ecosystems, and places like wildlife refuges and parks

- Working with local partners from Paraguay to Alaska to engage stakeholders and train practitioners in place-based conservation planning
- Advancing the protection of biodiversity hotspots from rapid infrastructure development in support of sustainable and functioning ecosystems
- Organizing biodiversity information to answer key management questions related to recreation, energy, and forestry development
- Establishing our annual Biodiversity Without Boundaries conference as a marquee event for our member network, natural resource practitioners, and scientific colleagues
- Collaborating on the publication of a standard Coastal Marine Ecosystem Classification System (CMECS) for describing coastal and offshore marine habitats
- Creating LandScope America in collaboration with the National Geographic Society to guide U.S. practitioners, policy-makers, and citizens towards shared conservation priorities and strategic partnerships





