

**Biodiversity Without Boundaries
2024 Conference
April 8-11, 2024
Seattle, Washington**

Draft Agenda

SUBJECT TO CHANGE

Registered attendees should access the agenda in the Whova app for the most up-to-date session information

Day	Time	Session/Event
Monday April 8, 2024	All Day	<p>Field Tours</p> <p>Billy Frank Jr. Nisqually National Wildlife Refuge Nisqually is a top birding spot with over 270 bird species reported. A major restoration effort started in 2009, focusing on dike removal and improving salt marsh and estuarine conditions for salmon and wildlife recovery. Diverse habitats attract birds year-round, with early April highlights like various waterfowl, migrating shorebirds, and landbirds. Expect to spot at least 50 bird species on this trip.</p> <p>Carbon River Rainforest (Mount Rainier National Park) The Carbon River is located in the northwest corner of Mount Rainier National Park—cool, mild temperatures and copious annual precipitation support an exemplary, old-growth temperate rainforest. This tour will talk about old-growth forest ecology and conservation and will seek out rare and old growth-dependent lichens.</p> <p>Bald Hill Natural Area Preserve Bald Hill Natural Area Preserve conserves remarkable examples of grassland balds, oak woodlands, and wetland plant communities, along with five rare plants, two rare lichens, and two rare butterflies. During your visit, you'll have the opportunity to observe most of these rare biodiversity features at the site and engage in discussions about the necessary management actions to preserve the viability and ecological integrity of these vital components of Washington's natural heritage.</p> <p>Deception Pass State Park Deception Pass State Park is Washington's most visited state park—for good reason! In addition to having incredible scenic beauty, the park contains an incredible diversity of habitats, such as</p>

		coastal dunes, rocky shorelines, mature coniferous forests, bogs, balds, rare plants and lichens, and a rare butterfly. This trip will explore many of those features as well as dive into the various management activities that park staff are implementing to address significant stressors and restoration of significant natural features.
	All Day	Attendee Arrival
	6:00pm	NatureServe Board Dinner

Day	Time	Session/Event
Tuesday April 9, 2024	8:00am-12:00pm	NatureServe Board Meeting (Board Members and Staff Only)
	8:00am-12:00pm	Optional Meetings <ul style="list-style-type: none"> • Ecological Integrity Assessment (EIA) Meeting: 9 am-12pm • Data Manager workshop: 10:30am-12:00 pm
	1:30-3:15pm	Opening Plenary <ul style="list-style-type: none"> • Welcome & Land Acknowledgement: Chairman Leonard Forsman, Suquamish Tribe • Welcome from NatureServe Leadership • Hilary Franz, Commissioner of Public Lands, WADNR (invited) • Joe Rocchio, Program Manager, Washington Natural Heritage Program, <i>Ecological and Cultural Overview of Washington State</i> • Keynote: Dr. Cristina Eisenberg, Associate Dean for Inclusive Excellence, Maybelle Clark Macdonald Director of Tribal Initiatives in Natural Resources, Oregon State University, <i>Engaging Tribal Partners in Biodiversity Conservation Science</i>
	3:15-3:30pm	Break
	3:30-5:15pm	<ul style="list-style-type: none"> • Notes from the Field/Program Highlights • Conservation Impacts Plenary: This session will explore examples of how network data informs regulatory decisions, land use policies, and proactive conservation acquisitions at the local level. <ul style="list-style-type: none"> ○ John Q. Burkhart, Heritage Botanist, West Virginia Division of Natural Resources, <i>The West Virginia Heritage Program's Role in Conservation Partnerships in the Mountain State</i> ○ Ryan O'Connor, Ecologist, Wisconsin DNR, <i>Collaborating with land trusts to identify and manage globally imperiled oak savannas in Wisconsin: a coarse-level metric approach derived from Ecological Integrity Assessments</i> ○ Danielle Marshall, Conservation Biologist, Oregon Department of Agriculture, Native Plant Conservation Program, <i>Collaboration for Conservation Impact:</i>

		<p><i>Updating Oregon's list of threatened and endangered plants for the first time in nearly 25 years</i></p> <ul style="list-style-type: none"> ○ Tyler Bassett, Botanist, Michigan Natural Features Inventory, <i>Cataloging the Keweenaw: Natural Heritage data as the backbone for public land-use decisions in Michigan's Upper Peninsula</i> <ul style="list-style-type: none"> ● Get to Know Explorer Pro! NatureServe Explorer Pro is the definitive source of information for over 100,000 rare and endangered species and ecosystems in North America. No other tool supports data exploration, analysis and visualization like Explorer Pro. In this session we will introduce the top features that make NatureServe Explorer Pro a valuable tool for biodiversity conservation. (30 min) <ul style="list-style-type: none"> ○ Lori Scott, CIO and Vice President for Technology and Partnerships, NatureServe
	6:00-8:00pm	Welcome Reception
Wednesday April 10, 2024	7:00-8:30am	Breakfast
	8:30-10:00am	<p>Concurrent Session 1: NatureServe and iNaturalist: Join NatureServe, the NatureServe Network and iNaturalist at BWB to learn about how the Network leverages iNaturalist to advance biodiversity conservation, how iNaturalist supports broader understanding of nature, and ways iNaturalist and NatureServe can work together to generate more high-quality, precise location data for science and conservation. This is the first of two concurrent sessions.</p> <ul style="list-style-type: none"> ● Bryce Maxell, and Kyle Kaskie, Program Coordinator and Biological Data Scientist, Montana Natural Heritage Program - Montana State Library, <i>iNaturalist Data Use in the NatureServe Network</i> ● Shelley Cooke, Project Manager, NatureServe, <i>Integration of iNaturalist Data in iMapInvasives</i> ● Allison Siemens-Worsley, National Data Support Biologist, and Randal Greene EBAR Technical Coordinator, NatureServe Canada, <i>iNaturalist Data in Canada - iNaturalist.ca Data Ingestion Tool</i> ● Matthew Schlesinger, Chief Zoologist, New York Natural Heritage Program, <i>Standardized Surveys and Unstructured Observations Are Complementary in Status Assessments for Pollinators</i> ● Diana Soteropoulos, Botanist, NatureServe, <i>All Plants Great and Small, Gotta Find 'Em All: Extracting Rare Plant Records from iNaturalist</i>

		<p>Concurrent Session 2: Get to Know Explorer Pro: Take a deeper dive into Explorer Pro and see all the ways this tool could help support your conservation goals.</p> <p>Concurrent Session 3: Vegetation Management for Biodiversity</p> <ul style="list-style-type: none"> • Danielle Horne, Graduate Student, School of Environmental and Forest Sciences, University of Washington, <i>Microsite Conditions of Wenatchee Mountains Checkermallow (Sidalcea oregana var. calva)</i> • Gabriel Campbell, Botany Program Manager and Seed Bank Director, Oregon Biodiversity Information Center and Berry Seed Bank, <i>Pacific Northwest Native Coastal Dune Plant Propagation</i> • Jesse Lincoln, Conservation Scientist , Michigan Natural Features Inventory, <i>Using GIS-Based Multicriteria Decision Analysis to Identify Recoverable, Fire-Dependent Systems in Michigan's Huron-Manistee National Forest</i> • Mitchell O'Neill, Invasive Species Biologist, New York Natural Heritage Program, <i>The intersection of rare and invasive species: combining datasets for element occurrences and invasive species to guide biodiversity conservation.</i> • William Forbes, Associate Professor, Stephen F. Austin State University, <i>We're Lumberjacks and We're Okay: Invasive Plant Removal by a University Timbersport Team</i>
	10:00-10:30am	Break
	10:30am-12:00pm	<p>Concurrent Session 4: NatureServe and iNaturalist: In the second part of this discussion we will discuss how NatureServe, the Network and iNaturalist can develop an on-going collaboration to advance biodiversity conservation in North America.</p> <p>Concurrent Session 5: Climate Change and Biodiversity</p> <ul style="list-style-type: none"> • Bruce E. Young , Interim Chief Scientist and Chief Zoologist, NatureServe, <i>A Revised, Online Climate Change Vulnerability Index for Species</i> • Bruce Hoagland, Coordinator, Oklahoma Natural Heritage Inventory, <i>Climate Vulnerability for 18 Ecosystems in the South Central U.S.</i> • Patrick McIntyre, Director of Ecology, NatureServe, <i>Updates on NatureServe's Climate Vulnerability Assessments for Ecosystems</i> <p>Concurrent Session 6: Collaborations that Support Diversity in Conservation</p> <ul style="list-style-type: none"> • Caroline Jezierski, Project Manager, NatureServe, <i>NatureServe's Action Plan</i>

		<ul style="list-style-type: none"> • Claire Singer, Wildlife Biologist (Biodiversity), Northwest Territories Conservation Data Centre, <i>Assessing Species at Risk Using Indigenous Knowledge and Scientific Knowledge</i> • David Anderson, Director, Colorado Natural Heritage Program, <i>Colorado Statewide Natural Heritage Survey- a New Ethos for our Work</i> • Joshua Cohen, Lead Ecologist, Michigan Natural Features Inventory, <i>Biodiversity conservation in the Beaver Island Archipelago - A collaborative partnership between the Little Traverse Bay Bands of Odawa Indians and Michigan Natural Features Inventory</i> • Joshua Cohen, Lead Ecologist, Michigan Natural Feature Inventory and Joe Rocchio, Program Manager, Washington Natural Heritage Program, <i>Natural Heritage Cross Training</i>
	12:00-2:00pm	Lunch on Own
	2:00-3:15pm	<p>Plenary Session</p> <ul style="list-style-type: none"> • Program Highlights • Scott Loarie, Executive Director, iNaturalist (confirmed) • AI for Nature: Artificial intelligence (AI) is changing how information is generated and accessed, including for biodiversity. Join NatureServe, the US Fish and Wildlife Service and others to explore how AI can be applied to scale up provision of meaningful information on extinction risk, taxonomy, species and ecosystem location and condition, as well as trends.
	3:15-3:45pm	Break
	3:45-5:15pm	<p>Concurrent Session 7: AI for Nature Continued: Take a deeper dive into how AI could support NatureServe and Network in providing high-quality data for conservation decision makers.</p> <p>Concurrent Session 8: Unifying the fields of in situ and ex situ conservation</p> <ul style="list-style-type: none"> • Wesley Knapp, Chief Botanist, NatureServe, <i>One is the loneliest number: identifying and prioritizing plants of one known occurrence for conservation action</i> • Katie Heineman, Vice President of Science and Conservation, Center for Plant Conservation, <i>Matching Conservation Seed Accessions to Occurrences: A Win-Win Partnership between Heritage Programs and the Botanical Garden Community</i> • Carrie Radcliffe, Director of Conservation Partnerships, Atlanta Botanical Garden Southeastern Center for Conservation, <i>Ex situ conservation of imperiled plant species in the Southeastern United States</i> • Jennifer Ramp Neale & Alex Seglias, Director of Research & Conservation, Denver Botanic Gardens, <i>Small Seeds Inform Continental Collaboration</i>

		<ul style="list-style-type: none"> • Jessamine Finch, Research Botanist, Native Plant Trust, <i>Thirty years of integrated plant conservation in New England</i> • Adam Black, Director of Horticulture and Plant Conservation, Bartlett Tree Research Laboratories and Arboretum Collaborative Ex-situ Conservation, <i>The Only Option for Saving Certain Relict Plants</i> <p>Concurrent Session 9: SWAPs: Upcoming revisions and what that means for the Network (followed by an optional working session on adding plants to SWAPs)</p> <ul style="list-style-type: none"> • Bruce Carlson, MN Biological Survey Program Manager, Minnesota Biological Survey - MN Dept of Natural Resources, <i>SWAPs Update - Midwest Region</i> • Joe Lemeris, GIS/Data Manager, South Carolina Department of Natural Resources, <i>SWAPs Update-Southeast Region</i> • Kathleen Walz, Ecologist, New Jersey Dept. of Environmental Protection, <i>SWAPs Update-Northeast Region</i> • TBD <i>SWAPs Update-West Region</i> • Jennifer Marrugo, Texas Parks and Wildlife Department, Ecologist, <i>Modeling Conservation Opportunity Areas for Species of Greatest Conservation Need and Priority Habitats in Texas</i> • Dan Bachen, Senior Zoologist, Montana Natural Heritage Program of the Montana State Library, <i>Supporting State Wildlife Action Plan Development by Databasing Conservation Status Rank Factors</i> • Nicolle Fuka, Natural Resources Specialist, North Dakota Parks & Recreation, <i>North Dakota State Wildlife Action Plan Update</i> <p>Plants and SWAPs (5:15 pm)</p> <ul style="list-style-type: none"> • Carrie Radcliffe, Director of Conservation Partnerships, Atlanta Botanical Garden, on behalf of the Southeastern Plant Conservation Alliance, <i>Southeastern Plants Regional Species of Greatest Conservation Need</i>
	5:30 pm	Optional Topical Offsite Chats: See Whova app Optional Meetup: Stoup Brewing - Capitol Hill
Thursday April 11, 2024	7:00-8:30am	Breakfast
	8:30-10:00am	Concurrent Session 10: Incorporating distribution and status information for fungi, lichens, and nonvascular plants

		<ul style="list-style-type: none"> • Gregory M. Mueller, Chair, IUCN Fungal Conservation Committee and Chief Scientist Emeritus, Chicago Botanic Garden, <i>New initiatives are significantly adding data on North American fungal diversity, their distributions, and their conservation status.</i> • Hannah Huber, Conservation Mycologist, Pennsylvania Natural Heritage Program, <i>Fungal Conservation Beginnings in Pennsylvania</i> • Jesse Miller, Lead State Botanist, Washington Natural Heritage Program, <i>Eyes on the little guys: Lessons from a collaborative effort to develop a state lichen list for Washington</i> • Jessica Allen, Associate Professor, Eastern Washington University, <i>Assembling complete and accurate conservation assessments for lichens: Lessons from global Red Listing</i> • Scott Schuette, Botany Program Manager, Pennsylvania Natural Heritage Program/Western Pennsylvania Conservancy, <i>Advancing Bryophyte Conservation using a Multi-tiered Approach to Building a North American Consensus Checklist of Mosses, Liverworts, and Hornworts</i> <p>Concurrent Session 11: Biodiversity Valuation : This session will explore the emerging field of biodiversity valuation, data needs of corporations as they address emerging nature-positive regulations, and how NatureServe and the Network can support the development and monitoring of relevant biodiversity metrics.</p> <ul style="list-style-type: none"> • Bruce E. Young , Interim Chief Scientist and Chief Zoologist, NatureServe, <i>Methods and Data to Support Corporate Biodiversity Valuation</i> • Mary Harkness, Project Manager, Ecologist, NatureServe, and Jay Hayek, Forest Nature & Conservation Manager, Drax Biomass, <i>Understanding Biodiversity Value and Change Detection in Wood Fiber Sourcing Areas</i> • Dan Rockefeller, Senior Project Scientist - Biodiversity & Ecosystems, Ramboll, <i>A biodiversity metric for the Americas</i> <p>Concurrent Session 12: Data Visualization for Conservation</p> <ul style="list-style-type: none"> • Mike Gill, Director, Biodiversity Indicators Program, NatureServe, <i>Biodiversity Indicators Program: Leveraging our Global Partnerships to Strengthen NatureServe's Mission</i> • D. Todd Jones-Farrand, At-Risk Species Science Coordinator, US Fish & Wildlife Service, <i>Biodiversity Business Intelligence: Case studies in the USFWS</i>
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	10:00-10:15am	Break
	10:15-11:45am	<p>Concurrent Session 13 : Supporting Sustainable Forest Management</p> <ul style="list-style-type: none"> • Allison Gratz, Director of Network Relations, NatureServe, <i>Overview of Certified Forest Companies use of NatureServe Tools and Network Data</i> • Chad Leatherwood, Senior Sustainability Transformation Manager, Weyerhaeuser Company, <i>Collaboration to improve data and tools to protect biodiversity in fiber sourcing</i> • Healy Hamilton, Chief Scientist, Sustainable Forestry Initiative, <i>Changing expectations of sustainable forestry in a Nature Positive economy</i> • Jenniffer Bakke, Manager, Environmental Services, Manulife Investment Management, <i>Case Study - Utilizing NatureServe data to inform management on private farms and forests</i> <p>Concurrent Session 14 : Identifying Rare and At-Risk Species : From pollinators to marine mammals, we will explore all the innovative ways conservationists are identifying at-risk species for conservation action.</p> <ul style="list-style-type: none"> • Tara Cornelisse, Invertebrate Zoologist, NatureServe, <i>Status of native insect pollinators of the U.S. and Canada</i> • Meghan Rickard, Senior Marine Zoologist, NY Natural Heritage Program , <i>Whale monitoring in the New York Bight</i> • Amie Enns, National Data Manager, NatureServe Canada, <i>General Status: Towards assessing all species in Canada</i> • Noah Greenwald, Endangered Species Director, Center for Biological Diversity, <i>Using NatureServe Data to Identify Species Needing Consideration for Protection Under the Endangered Species Act</i> • Sienna Wessel, State Botanist, Washington Natural Heritage Program, <i>Fantastic Washington Endemics and Where to Find Them: An Assessment of Hotspots and Conservation Gaps</i>

		<p>Concurrent Session 15 : Innovations in Working with Spatial Data</p> <ul style="list-style-type: none"> • Bryce Maxell, Program Coordinator and Braden Burkholder, Data Systems and Sciences Lead Montana Natural Heritage Program, <i>Modeling Predicted Biodiversity to Support Land Use Planning</i> • Max Tarjan, Ecological Modeling Program Manager, NatureServe, <i>NatureServe's Species Habitat Modeling Program: Current status and future directions</i> • Joseph Weber, Chief of Biodiversity Information and Conservation Tools, Virginia DCR Natural Heritage Program, <i>A Mussel Richness Map for the Virginia Chesapeake Bay Watershed</i> • Samantha Stefanoff and Katrina Gaibisels, EBAR Project Team, NatureServe Canada, <i>NatureServe Canada's Ecosystem-based Automated Range (EBAR) project</i> • Whitney Weber, DBA & Product Support Specialist, NatureServe, <i>Supporting Data Flow with the Network, BLM and beyond through the Observation Data Standard</i>
	12:00-2:00pm	<ul style="list-style-type: none"> • Lunch • Awards presentations • Closing Remarks
	2:00-5:00pm	<p>Optional Side Meetings</p> <ul style="list-style-type: none"> • EIA Field Tour 2-5 pm (Don)
	5:00pm	Conference Ends