

# SAGELAND COLLABORATIVE IMPACT REPORT 2021

25 years of science-based wildlife conservation

# Looking to the next 25 years of conservation



Executive Director Josh Wood wraps trees near a restoration site to manage beaver activity. As we celebrate 25 years of science in service of wildlife and lands, we toast to the impact you have made possible.

This year, our volunteers documented the rare western bumblebee in sites across Utah, supporting conservation planning for the struggling species. We also released beavers to heal degraded western streams, developed a working group dedicated to North America's most under-researched bird, and designed a new project to answer big questions about overlooked amphibians and reptiles.

To do this and more, we teamed with universities, nonprofits, tribes, agencies, landowners, and community members. Why approach conservation this way? We are committed to collaboration. We have seen firsthand what happens when diverse groups join forces in pursuit of a grand, unapologetic vision: the healing of landscapes. Sustainable change for our home and future is not an unattainable dream, but something we are privileged to witness often in our work. The critical challenges facing the wildlife and lands we love can seem daunting. But when we work together, our impact becomes greater than any of us alone.

As we respond to uncertain times by deepening our strategies for wildlife and habitats, our scope is expanding. That's why, this year, we both celebrate our past as Wild Utah Project and look to our future as Sageland Collaborative. While our mission remains the same, our work has swelled beyond Utah's borders to impact the entire West. We're building on our successes to create a more resilient region that can weather the challenges of the next quarter century.

On behalf of our team at Sageland Collaborative, I want to thank you for being the backbone of conservation in the West. Here's to the next 25 years!

Joshua Wood Executive Director

# **OUR MISSION**

## Sageland Collaborative provides sciencebased strategies for wildlife and land conservation.

Conservation requires more data and planning than any one entity can gather or conduct alone. To get the information needed to answer big questions about our wildlife and lands, we recruit hundreds of community scientists and collaborate with many partners.

Our scientists, partners, and regional practitioners carefully analyze the valuable data provided by volunteers, resulting in recommendations that address conservation barriers. This gives decisionmakers in the West a clear understanding of the state of our home, ensuring that conservation efforts are directed to the right areas.

# CREATING RESILIENT COMMUNITIES TO WEATHER CHALLENGES

#### How can the West address the issues we are facing?

This summer, Westerners lived inside thick wildfire smoke and lost our homes to flames. With more wildfires as just one part of a web of threats we're facing, many of us face 2022 with knots in our stomachs and questions about mounting pressures on our communities.

#### Our strategies are rooted in the value of interconnectedness between land, wildlife, and human well-being. We believe that restorative work in one system has a ripple effect.

For example, as our volunteers sling shovels to restore streams and heal wildlife habitat, they also strengthen firebreaks across dry sage landscapes and create wetlands that store water and carbon in the face of drought and climate change. Our pollinator work not only informs conservation to benefit monarchs and bumblebees, but it also rebuilds the systems our food depends on. Yes, diverse partnerships make our work more sustainable, but they also span crucial divides, sparking unique solutions.

#### We build strong networks for a flourishing future.

Our vision of the future is bright. In our 25 years, we've witnessed progress that once seemed impossible. With more people uniting to strengthen our conservation work, we are confident that the challenges of the next quarter century will be met with an even deeper resilience.





# Our approach

We take a three-pronged approach to our mission:

- 1. Applying objective conservation science
- 2. Establishing strategic partnerships
- 3. Facilitating community engagement

A monarch butterfly image is captured with a phone as part of our Utah Pollinator Pursuit



# Making our vision a reality

## Promoting habitat connectivity

Connected landscapes are crucial for healthy wildlife populations. Whether through on-the-ground work like healing riparian corridors or big-picture projects like mapping migration routes, our programming is designed to support the re-linking of key habitats.

### Protecting species in conservation need

Many charismatic species in the West need support, from the dazzling monarch butterfly to the shimmering Bonneville cutthroat trout. When it comes to some species—like the black rosy-finch—scientists simply don't have enough information to effectively plan for their conservation. Our dedicated team of trained community scientists collects large amounts of information about these species over short periods of time, which our scientists and partners can analyze to create targeted conservation strategies.

## **Restoring vital habitat**

The West has faced our fair share of habitat degradation. From development to beaver removal, there is no short supply of actions that have left habitats wanting. Our team both heals unhealthy landscapes and provides much-needed data for decision-makers to avoid future harmful actions and consider conservation in development, government funding allocations, and other actions.

# 2021 AT A GLANCE

### With your support, we...

**Restored** miles of degraded stream habitat

**Developed** two new projects: herpetofauna and shorebird conservation

**Launched** a rosy-finch conservation working group

*Surveyed* for boreal toads, pollinators, and other wildlife

Re-introduced wildlife to historic habitats

**Expanded** our capacity by adding a stream ecologist to our team

**Collaborated** with partners to increase the longevity and scope of our work

**Published** peer-reviewed papers to share our findings

**Engaged** more communities in local conservation

**Strengthened** connections with relevant work in the West





Community scientists at work. Photos: Stream resotration (top), a monarch caterpillar and its lunch (bottom left), and a boreal toad survey (bottom right).















# OUR WORK

**Rosy-Finch Project (page 9)** Racing to understand the mysterious rosy-finch Stream & Riparian Restoration (page 11) Healing degraded stream corridors Wasatch Wildlife Watch (page 13) Discovering patterns of wildlife movement Utah Pollinator Pursuit (page 15) Answering questions about monarchs and bumble bees Boreal Toad Project (page 17) Uncovering potential habitat and toad distribution Wetlands and Waterbirds (page 19) Developing community projects to protect bird habitats

# **Rosy-Finch Project**

### Goal

Document an increase in rosy-finch populations, ensure all species persist, and conserve western alpine habitat

### Strategy

To learn more about these difficult-toaccess birds, we rely on methods including community science-led bird surveys. As we race against a changing climate, we coordinate with scientists across the country to collectively prioritize research and conservation actions.

### 2021 Impact

In 2021, we completed multi-year datasets that are allowing us to understand rosyfinch survival and distribution (peer-reviewed publications are pending in 2022). This year, we were proud to create a community of over 180 rosy-finch aficionados that are now advocates for the conservation of rare, climate-threatened species. We are also leading a structured research prioritization process which allows researchers to collaboratively respond to the impact of climate change on rosy-finches.





## **KEY STATS**

#### 700

rosy-finches marked and tracked as part of the project

#### 60+

conservationists connected through our working group

#### 180+

community scientists recorded thousands of finches

## PARTNERS

With over 40 partner organizations, this project boasts our most expansive partnership list. Our collaborators include state and federal wildlife agencies, academic institutions, any many conservation organizations, including the Tracy Aviary.





# **Stream & Riparian Restoration**

## Goal

Restore 100 miles of degraded streams across the West in 10 years

### Strategy

We restore streams using low-tech methods that promote a return to the natural, self-sustaining processes of healthy riverscapes. With the help of hundreds of volunteers and diverse partnerships, we build human-made beaver dams, plant native riparian vegetation, and conduct research on outcomes of our work.

### 2021 Impact

In another successful restoration season, we built humanmade beaver dam structures in seven streams, planted dozens of willow trees, and sowed thousands of milkweed seeds at our restoration sites. The year's conservation outcomes include beaver and Bonneville cutthroat trout re-introduction, documented boreal toad and milkweed presence, and natural beaver dispersal at restoration sites. We hosted a training workshop on permitting these projects. Our outreach video, "Miller Time," was released, which highlighted our low-tech restoration partnerships on private lands and contributed to increased demand for restoration by agricultural producers. At our restoration sites, field data collection was completed on ecosystem ecology and carbon sequestration.





## **KEY STATS**

20%

of stream project sites saw re-establishment of beavers

#### 200+

volunteers contributed 1,800 hours restoring streams

#### 278

beaver dam analogue restoration structures built

## PARTNERS

Utah Division of Wildlife Resources Swaner Preserve and EcoCenter Trout Unlimited Snyderville Basin Special Recreation District Utah Army National Guard Salt Lake City Public Lands Department Utah Department of Agriculture and Food Private landowners ...and of course, beavers!



# Wasatch Wildlife Watch

### Goal

Facilitate or improve wildlife movement across mountainous and urban habitats across the Central Wasatch

### Strategy

We engage, recruit, cultivate, and train a dedicated group of community scientists to manage wildlife trail cameras and analyze photo data. Their work generates rich databases that project scientists analyze. This answers questions about wildlife habitat use across the urban-wild interface of the Central Wasatch.

### 2021 Impact

Community-gathered information has led to several publications and manuscripts in review that give scientists and wildlife managers a better picture of the well-being of our local wildlife. This information has addressed crucial questions this year, such as, "How does human activity overlap with and affect wildlife activity in urban spaces?" Land managers can use this information in conservation planning, especially facing oncoming challenges.





## **KEY STATS**

#### 242

wildlife camera stations managed in the study area

#### 8,000+

hours donated by volunteers for camera and data work

### 100+

volunteer community scientists trained

## PARTNERS

Biodiversity and Conservation Ecology Lab, University of Utah Natural History Museum of Utah Salt Lake City Open Space and Public Lands U.S. Forest Service Utah Division of Wildlife Resources Utah's Hogle Zoo





# Utah Pollinator Pursuit

### Goal

Increase populations of Utah's monarch butterfly, western bumble bee, other native pollinators, and the plant communities they rely on

## Strategy

Five of Utah's native pollinating insect species—the Western monarch, Nokomis silver spot butterfly, and three bumble bee species—are being considered for protection under the Endangered Species Act. Utah Pollinator Pursuit provides extensive, statewide data collection through community science and agency partnerships.

## 2021 Impact

This year, the Endangered Species Act listing decision for the western bumble bee was under review. Due to this project, data analysis and reporting are underway, which will inform the species listing decision. Our volunteers documented the presence of the rare western bumble bee, *Bombus occidentalis*, in four new locations. We continued to fill vital data gaps in knowledge about pollinator species and habitats. This allows scientists and wildlife managers to better understand pollinator species distributions, determine priority habitat areas for restoration projects, and improve efforts to bolster the resilience of pollinator habitat and native species.



## **KEY STATS**

#### 960+

volunteer observations on the project to date

#### 760

recorded bumble bee sightings to date

#### 200+

monarch butterfly sightings and 160+ habitat visits to date

## PARTNERS

Utah State University College of Natural Resources Utah Division of Wildlife Resources University of Utah Utah Monarch Enthusiasts Group U.S. Forest Service U.S. Fish and Wildlife Service Natural Resources Conservation Service



# **Boreal Toad Project**



### Goal

Monitor habitat conditions and populations of boreal toads and other amphibian species in alpine aquatic areas of Utah

### Strategy

Along with our community scientists, we document boreal toad presence, population demographics, and breeding habitat condition data throughout Utah's current and historic breeding locations. This information is essential for amphibian and aquatic habitat managers tasked with prioritizing how and where to focus their conservation and restoration efforts.

## 2021 Impact

Community science and expert data are being used to inform site prioritization for repopulation and habitat restoration efforts. Sageland Collaborative staff are also among the authors of the Boreal Toad Conservation Agreement and Strategy update, which will be implemented by government managers to sustain and increase toad populations.





## **KEY STATS**

25

active boreal toad breeding habitats documented

#### 40+

volunteers gathered data about boreal toads

#### 150

site visits made to boreal toad habitat

## PARTNERS

Utah's Hogle Zoo University of Utah Utah State University Utah Division of Wildlife Resources Utah Geological Survey U.S. Forest Service U.S. Fish and Wildlife Service



# Wetlands and Waterbirds



### Goal

Sustain and restore wetland habitat for waterbirds on 300,000 acres of Great Salt Lake wetlands

## Strategy

Our approach for this new project focuses on collaborations with skilled wetland managers and building volunteer communities from birding and waterfowl hunting groups based on their shared value for waterbird habitat.

## 2021 Impact

We began implementing recommendations from our 2020 Needs Assessment for Great Salt Lake wetlands, including securing funding for water needs research on Great Salt Lake wetlands. We also facilitated opportunities for wetland managers to share lessons learned and develop new project partnerships that benefited waterbird habitat. Lastly, we began working to incorporate the Intermountain West into shorebird management across the entire Pacific Flyway.



## **KEY PROGRESS**

**In-person field trips** held for Great Salt Lake managers

**Shorebird surveys** across Utah and the Flyway to begin in 2022

## Funding secured

for much-needed water research on Great Salt Lake

## **PARTNERS & PARTICIPANTS**

Utah Division of Wildlife Resources Great Salt Lake Ecosystems Program National Audubon Point Blue Conservation Science



# ECOLOGICAL SERVICES

#### Utilizing professional skills to support our work

Sageland Collaborative staff are expert in their respective fields and continue to provide professional services to our community. Our feebased work remains rooted in conservation and science and furthers our mission.

Some of the services we provide includes:

- Landscape-level planning
- Ecological monitoring
- Conservation writing & documentary
- Collaborative project management

Our role in this work creates better outcomes for landscapes and wildlife and supports our other work and objectives.



## In a nutshell: Our approach to conservation



**1.** Assess – Identify conservation opportunities, needs, threats, and stakeholders and define goals.

2. Develop – Identify data gaps, define specific objectives and key progress indicators, and locate funding.

**3. Implement** – Engage diverse collaborators, including academics, agency partners, and community scientists, to collect and analyze data.

4. Create Strategy – Develop strategies, solutions, and adaptive management methods from data.

5. Share – Deliver solutions to decisionmakers for implementation.

# WORKING GROUPS WE PARTICIPATE IN

### Wildlife Action Plan

We work with a diverse group of stakeholders to implement Utah's Wildlife Action Plan. The purpose of the Plan is to maintain Utah's wildlife and improve habitat health. This is especially important before wildlife population numbers become so dire that they warrant listing under the Endangered Species Act. We inspire our partners to implement strategies that fill data gaps and alleviate threats that are impacting our Species of Greatest Conservation Need.

### Wildlife Connectivity Working Group

Wildlife in the West need healthy, connected habitats so they can safely migrate and complete their life cycles. This group coordinates efforts related to wildlife connectivity, learns collaboratively, and strategically plans to increase wildlife connectivity throughout the region. The Group includes diverse stakeholders, such as the Utah Department of Transportation.

#### **Rosy-finch Working Group**

We lead this group with the purpose of facilitating the conservation, management, and research of rosy-finches. Through this group of nearly 40 different entities, we use a structured decision making process to prioritize research and conservation needs. This allows us to work quickly as climate change continues to threaten rosy-finch populations and other alpine species.

#### **Utah Bat Conservation Cooperative**

Our team is committed to the conservation of bats in the West. The goal of this cooperative is to conserve bat populations, communities, and habitats in Utah. We will integrate bat conservation into our existing projects by gathering acoustic monitoring data and improving habitat.



### **Great Salt Lake Advisory Council**

We are committed to conserving the Great Salt Lake and the vital wetland habitat surrounding it. We attend and participate in these meetings where the sustainable use, protection, and development of the Great Salt Lake are addressed.

#### Watershed Restoration Initiative

Janice Gardner served as the Chair of the Central Region Committee of Utah Partners for Conservation and Development in 2021 and moderated the Watershed Restoration Initiative, the state's major funding program to improve watersheds. These projects allow us to align our program objectives with landscape efforts.

### **East Canyon Watershed Committee**

Our restoration work on the East Canyon watershed is an important part of our program. Many of our individual projects are rooted in this committee. We identify solutions to problems like fish kills and beaver nuisance issues and develop collaborative projects to address them. The Committee brings together groups from regulators to policy makers to recreation managers.

#### **Riverscape Restoration Network**

Our experts are leaders in stream and riparian restoration in the West. This network connects restoration practitioners across the West and is a venue for sharing research and project outcomes and creating collaborations. We readily share resources and lessons learned, allowing like-minded groups to improve their restoration work.

## **Our conservation team**

## 2021 STAFF

Joshua Wood, M.A.

**Executive Director** 

#### Mary Pendergast, Ph.D.

Conservation Ecologist

#### Janice Gardner, M.S., CWB®

Conservation Ecologist

## Sarah Woodbury

Communications and Outreach Director

### Rose Smith, Ph.D.

Stream Ecologist

# 2021 BOARD OF DIRECTORS

**Jaimi Butler** *President* Wellsville, UT

**Eric McCulley, MS** Secretary/Treasurer Salt Lake City, UT

Christine Cline, MS Salt Lake City, UT

Joe Donaldson, MLS Ashland, OR

### **Jennifer Gardner, LL.M.** Park City, UT

Nalini Nadkarni, Ph.D. Salt Lake City, UT Paul Parker, MLA Salt Lake City, UT

#### Steve Slater, Ph.D. Salt Lake City, UT

### Laura Welp, M.S. McCleary, WA

Jim Ack, DVM Salt Lake City, UT

## **2021 INTERNS**

Eva Quintus-Bosz Alex Altherr Anna Jackson Regi Johnson Amaia LeBaron Alhondra Lopez Saya Zeleznik Ian Griffith Hailey Brookins



# **2021** Financials

Income

\$15.9K \$58.3K \$81K \$26.4K Fundraising Ecological Other income Administrative services \$34.9K Investment income \$104.5K Individual donations \$464.8K \$629.5K \$189.8K **Project-specific** grants \$161K \$422.5K **General operating** Programs grants

\*Full 990 is posted at www.sagelandcollaborative.org/accountability

**Expenses** 

# Thank you to our 2021 Funding Partners:

**Charles Schwab Community Foundation of Utah David Kelby Johnson Memorial Foundation** The Domain Companies **Dominion Energy Charitable Foundation** Lawrence T. Dee and Janet T. Dee Foundation **Little City** Maki Foundation **Park City Community Foundation R Harold Burton Foundation Richard K. and Shirley S. Hemingway Foundation** SSIR Cares, Inc. State of Utah **Steiner Foundation. Inc Terracon Foundation Community Grants** The Biophilia Foundation The Fanwood Foundation The Nature Conservancy Tracy Aviary **Utah State University Utah Zoological Society** Wilburforce Foundation Wildlands Network Smith & Wilcox Blue Skies Foundation **ESRI** Conservation George S. and Dolores Doré Eccles Foundation **Jones Family Charitable Foundation** Kody Wallace and Gary Donaldson **Trout Unlimited Xmission Snyderville Basic Special Recreation District** ...And all our generous individual donors!



If you are able to give, **please consider donating** to ensure that this work continues. Visit sagelandcollab.org to make a tax-deductible donation today. Sageland Collaborative EIN 83-0468561 Photo by Rob Tolley



# We are proud to celebrate 25 years of science-based conservation for the places and wildlife we love.

With you and the rest of this vibrant community making our conservation work possible, we dive into our next quarter-century with a clear picture of the sparkling waters, diverse landscapes, and thriving communities we will give to future generations. Thank you for joining us!

