

Overview

In 2024, the Open Space team dedicated significant efforts to restoring and enhancing our open spaces in the Snyderville Basin, with a focus on promoting ecosystem resilience and habitat health. Key priorities included controlling noxious weeds, planting and cultivating native species, and monitoring both open space properties and wildlife movement. We collaborated with the public and various partners on volunteer projects and educational initiatives from spring through fall.

Construction of the Knoop Pollinator Garden was completed, the greenhouse initiative had a successful first year, and a variety of ecosystem restoration projects supported and increased biodiversity in habitats throughout the basin.

2024 By the Numbers

- 2500 Acres of Open Space
 - 600 Seed Balls Made with Volunteers
 - 42 Miles Monitored on Foot for Annual Property Reports
- 1400 Pounds of Noxious Weeds Pulled
- 350+ Hours Contributed by Our Volunteers
 - **3+** Acres Reseeded with Native Seed Mix

Volunteer & Community Events

5 Run-a-Muk Cleanups



2 Volunteer Planting Days



3 Volunteer Weed Pulls



2 Seed Collection Hikes



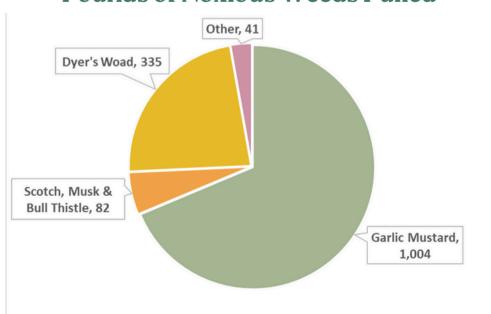
BDA Repair Day



3 Naturalist Hikes



Pounds of Noxious Weeds Pulled



Projects



Knoop Pollinator Garden

Construction of the Knoop pollinator garden was started in 2023 with funding from the Utah Pollinator Habitat Grant. This garden will serve as a gathering space for members of the community and will have educational information about native plants and pollinator species. In 2024, a split-rail fence was installed, and a gravel path was added to improve access to the garden. In October, approximately 200 native plants from the Trailside greenhouse were planted in the garden. The pollinator garden will officially open to the public in spring of 2025.

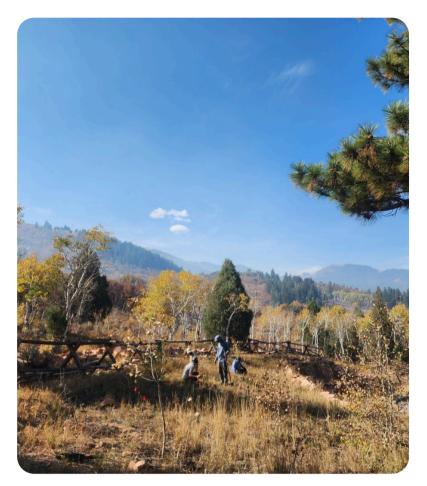
Trailside Greenhouse

Approximately 700 native plant seedlings were grown in the greenhouse and distributed across pollinator gardens and restoration sites in 2024. The market value of the plants grown in house totals about \$10,500. The seeds for these plants were sustainably collected throughout Basin Recreation open spaces. Using seeds gathered from our local area provides an assortment of drought-tolerant species specialized for this environment at a dramatically lower cost than purchasing similar plants from nurseries.

The greenhouse is fitted with a timed watering system and a temperature-controlled solar powered fan. It offers plants protection from pests, damaging weather events, and extreme temperatures. A wide varitey of seeds from native plant species were gathered during the 2024 season and are being primed to plant in our pollinator gardens and used for restoration projects next fall. Eventually, the greenhouse may be opened to the public for volunteer and educational opportunities.



Top Left: Open Space team planting at Knoop **Bottom Right:** Native flowers in the greenhouse



Restoration Plantings

The Open Space team utilized over 900 native plants for restoration projects throughout the basin. We were awarded the Utah Pollinator Habitat grant again in 2024, which supplied 270 native plant seedlings, including grasses and wildflowers. With help from the Trails team, these seedlings were planted around the Discovery trailhead to beautify the area, add biodiversity, and aid in erosion control on the steep slopes surrounding the trailhead. Additional plantings from our greenhouse were distributed to the Trailside open space, degraded areas of Run-A-Muk, and the Run-A-Muk pollinator garden.

Noxious Weed Mitigation

Noxious weed management is the most time-consuming operation for the Open Space team. This year, our team hand-pulled over 1,400 pounds of noxious weeds with the help of volunteers and our Trails team. Our contractors spent countless hours aiding our efforts by spot-spraying noxious weeds throughout our open spaces.

Forest Health

In 2024, 10 acres of unhealthy forest were treated in Toll Canyon with funds from the Watershed Restoration Initiative. Alpine Forestry and Summitt Forestry worked to reduce fuel loads that could exacerbate a catastrophic wildfire in the Wildland-Urban Interface (WUI) by felling some standing dead trees, removing ladder fuels, and burning slash piles. Prior to starting this project, we collaborated with Hawkwatch International to identify sensitive raptor nesting habitat to avoid while felling.



Photos: Maddie Nelson

Top Left: Trails and Open Space teams planting at Discovery Trailhead

Bottom Right: Forest health project site in Toll Canyon

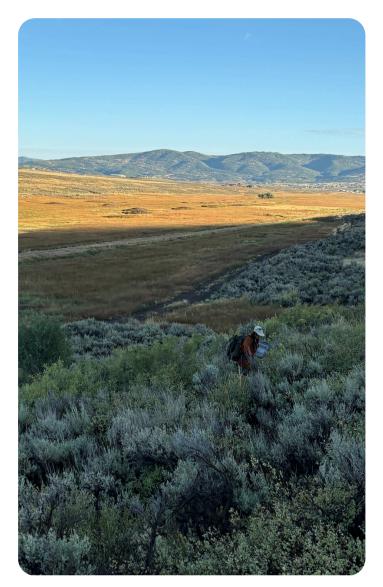


Photo: Aleya Stotesbery

Top Left: Conducting vegetation transects on Williams Property. **Bottom Right:** Doing inventory of plants in the Trailside greenhouse to be planted.

Vegetation Transects

Vegetation transects were conducted on the Discovery property in 2023 and the Williams property in 2024. Data including ground cover, canopy cover, and aspect are analyzed to provide insights into vegetation communities. Biodiversity and the concentration of noxious weeds are examined in order to determine relative health and resilience of each property. These studies are used to establish management plans and inform future practices for each of our unique open space properties.

Stream Restoration

Stream monitoring and restoration took place with collaboration from Sageland Collaborative. BDAs were repaired in Toll Canyon with the help from volunteers and our Trails crew. At the Jeremy Ranch wetland site, BDAs were repaired and one-rock dams were built to slow high velocity water flows in Toll Creek. A portion of the Willow Creek stream bank that was disturbed by dredging of the stream during the '23 flooding event was restored with organic coconut erosion control matting and native plants.

Wildlife Monitoring

Wildlife cameras were used to help identify species in our open spaces and to better understand their movements and behavior. In a 2023-24 USU study, research on the sudden aspen decline (SAD) in the RTS open space led to management recommendations including the limitation of herbivore browsing on sensitive aspen. To continue the efforts of this study, we are using camera trap data to identify high levels of browsing by elk and deer for insights on potential temporary ungulate exclusion fencing locations.

Photo: Emma Booth



Community Engagement



Overview

The Open Space Team collaborated with multiple organizations and volunteers on our projects this year. We hosted a total of 16 events in 2024. We partnered with Swaner Preserve and Ecocenter on education events, including a seed ball making day with a Conservation Crew class and a noxious weed bike tour with community members and Summit Community Gardens. With the help of our partners at Sageland Collaborative, we brought a group of 12 volunteers to Toll Canyon to help repair BDAs in Toll Creek. We hosted 5 Run-A-Muk cleanups, 3 volunteer weed pulls, and several naturalist hikes.

Partnerships

- Alpine Forestry
- Ecology Bridge
- Hawkwatch International
- High Mountain Nursery
- Recycle Utah
- Sageland Collaborative
- Swaner Preserve and Ecocenter
- Summit Community Gardens/EATs
- Summit County Weed Division
- Summit CWMA
- Utah Fire, Forestry, and State Lands
- Utah Open Lands
- Utah State University
- Utah Water Watch
- Western Aspen Alliance

Highlights

Run-A-Muk Cleanups

Spring Cleanups

• 178.5 Volunteer Hours

Fall Cleanups

• 31 Volunteer Hours

Pulling for Native Plants

Garlic Mustard Weed Pulls

- Willow Creek 40 Volunteer Hours
- RTS 10 Volunteer Hours

Dver's Woad Weed Pull

• Willow Creek - 26 Volunteer Hours

Native Seed Collection Hike

Discovery Seed Collection

• 57 Volunteer Hours

Property Updates

11-Acre

 Excellent progress on dyer's woad treatment documented

Discovery

- Revegetation fencing installed to mitigate damage and social trail use
- Planted 270 pollinator plants supplied by the Utah Pollinator Habitat Program

Gillmor & Triangle

- Monitored and found significant stream damage from dredging of the channel
- · Mechanical treatment of musk thistle

Knoop

- Pollinator garden construction was finished and over 200 plants were added
- Mechanical removal of dyer's woad along Miss BIllie's trail

Rasmussen

 Over 100 lbs of dyer's woad hand pulled and hauled out by the Open Space team

RTS

- Continuation of USU Aspen Study
- Wildlife camera project started to monitor ungulate browsing of aspen

Run-A-Muk

- New trailhead and trail built
- 1,000 feet of fencing along Olympic Parkway replaced, new access gate added to Up Dog

Silver Creek Village

- Team conducted Bioblitz (identified and documented as many species as possible)
- Managed encroachments from neighboring development

Summit Park

Noxious weed populations monitored and treated

Toll Canyon

- 10 acres treated for Forest Health and Fuels Reduction project
- 30 BDAs repaired

Trailside

- Dyer's woad population encroaching from neighboring private property
- Revegetation plantings around the parks and openspace

Williams

- Vegetation transects conducted
- Stream damage noted.
- Mechanical treatment of noxious weed populations. Chemical treatment recommended for 2025

Willow Creek

- Noxious weed populations were reduced in size and density compared to previous years. Mitigation efforts were continued
- Stream bank restoration and erosion mitigation project completed



Looking Forward

The Open Space team has many plans for the upcoming years including continuation of restoration and research projects, planned volunteer events, and more educational opportunities for the community. Here are some of our goals for 2025:



Additions to Knoop pollinator garden including a water garden, benches, and educational signage



Continuation of monitoring at RTS in accordance with the USU aspen study recommendations and implementation of restoration projects. These include stream channel restoration, adding a water retention pond and temporary fencing, soil testing, and monitoring with wildlife cameras



Work with Sageland Collaborative and volunteers for major repairs to East Canyon Creek BDAs



Volunteer events including weeds pulls, native wildflower plantings in open spaces, social trail restoration at Run-A-Muk and Discovery, and more



Put out Kestrel boxes in order to supply safe breeding and nesting sites for American Kestrels which face declining habitat across North America



Continue the Forest Health and Fuels reduction project in Toll Canyon by treating another 25 acres with WRI funding



Partner with Swaner or Sageland for Utah Pollinator Pursuit Bioblitz Education.