



Sustainability Report

Our mission is to guide the ski area's sustainability efforts and look after the natural environment in which we operate.

2020



WHERE WE BEGIN: LAND CONSERVATION

It All Starts with a Seed

The Alta Environmental Center's (AEC) land conservation program focuses on taking care of the land we operate on using resources from within the ski area. Our full circle process starts with gathering seed in the late summer/fall from plants and trees within our natural environment. The gathered seed is used to grow plant and tree seedlings over the winter. Annually, our partner, Dryland Horticulture, grows 3,000 to 5,000 plant seedlings over the winter, and our partner, Sun Mountain Growers, grows 1,000 to 1,500 tree seedlings over the winter for planting within Alta the following summer. Seed for plants is gathered based on revegetation and restoration needs due to ski area disturbance projects, and for general ongoing restoration efforts in the base area and elsewhere; the elevation, aspect, and habitat where replanting will occur is considered when gathering plant seed.

For tree seed, the AEC focuses on gathering seed that will promote successful reforestation and regeneration; for example, subalpine fir (*Abies lasiocarpa*) is a less resilient tree species because it is highly affected by beetles and other pests, which have caused a significant amount of tree mortality within the ski area and throughout the greater Wasatch. However, Engelmann spruce (*Picea engelmannii*), Douglas fir (*Pseudotsuga menziesii*), and limber pine (*Pinus flexilis*) appear to be less affected by the beetles and pests. Based on this, the AEC focuses on planting more resilient species and diversifying the existing tree species and tree age within the ski area. Using plants and trees grown from natural seed promotes more successful revegetation and restoration.

Giving Vegetation a Chance

In addition to growing plants from seed, the AEC salvages healthy vegetation, as available, ahead of land disturbance. Targeted vegetation to be salvaged is generally bigger, healthier plants because these plants have a higher chance of survival. The ski area's summer construction crew will sometimes salvage entire swaths of vegetation, place the vegetation on pallets, wrap the vegetation in felt, and replant the entire swath of vegetation following land disturbance in an area. Another part of our annual efforts include tree sapling harvest from groomed runs. These tree saplings would otherwise be groomed over and would not survive. The saplings are harvested and kept in the ski area's on site nursery for planting at a later date. TreeUtah is a crucial partner in sapling harvest and replanting, and tree nursery management.





Weeding Those Pesky Invasive Species

Another major component of our land conservation program includes noxious and invasive plant species management which is a partnership effort between the AEC, Friends of Alta, and Cottonwood Canyons Foundation. Surveying for and pulling noxious and invasive species helps keep the plant community within Alta healthy. Invasive plants thrive in disturbed soils and are often found along roadsides and in the base area where foot and vehicle traffic is greater. These species often out-compete native vegetation due to their rapid growth and may over-shade native vegetation, reducing competition and plant diversity. The spread of invasive plant species threatens the larger ecological balance of Alta's delicate alpine environment and can also reduce soil stability, which may impact the protected watershed. Every summer, the AEC and its partners survey over 100 acres within the ski area and the Town of Alta to document and remove invasive plant species for a healthier environment and ecosystem.

A QUICK LOOK AT OUR HANDS-ON EFFORTS THIS SUMMER



1,300 TREES PLANTED



26 SPECIES OF SEED COLLECTED



101 ACRES TREATED FOR INVASIVE SPECIES



3,754 PLANTS PLANTED

Supreme Wetland Mitigation

The new Supreme lift was installed during the summer of 2017. Installation of the new lift resulted in the permanent displacement of 60 square feet (sf) of wetland and temporary disturbance of 1,244 square feet of wetland areas during the lift construction process. Restoration of the temporarily disturbed wetland areas is ongoing and nearly complete. To mitigate the impact of the permanent wetland displacement, address temporary wetland impacts due to construction, and improve wetlands within the ski area, Alta has reclaimed or established over **3,400 sq ft of wetland** as part of Supreme wetland mitigation efforts. This was accomplished by (1) reclaiming 520 sq ft of wetland through the removal of three old Cecret lift towers; (2) establishing 944 sq ft of new wetland swale at the top of the excavated area at the Supreme bottom terminal; and (3) establishing 2,000 sq ft of new wetland in the Supreme bottom terminal's excavated area. Restoration and establishment work within these wetland areas during the summer of 2020 included:



- **2,000 PLANTS** - Planting native riparian and wetland species, from the base to the top of the Supreme lift. In total, 1,498 plants were planted within the Supreme riparian area at the base of the lift, and a total of 502 plants grown from native seed were planted in the upland areas at the Supreme base and top terminal areas.
- **100 SQ FT OF NATIVE PLANTS** - Transplanted approximately 100 sf of native plants into wetland areas at the base of the Supreme lift.



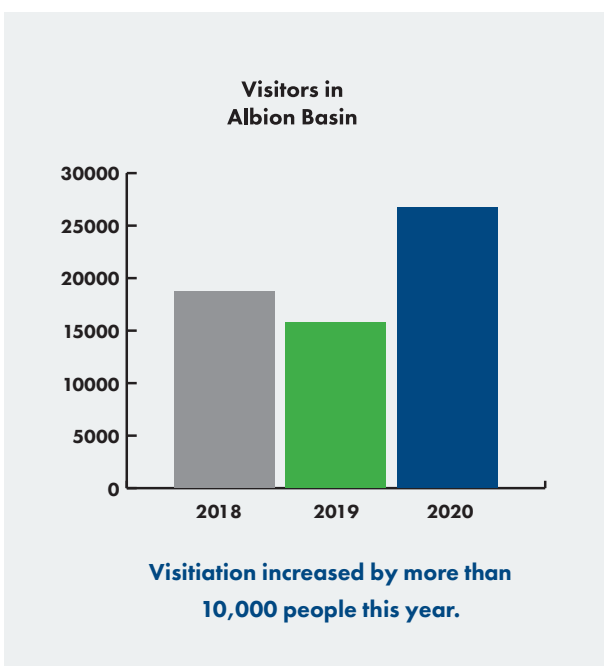
Alta Ski Area oversaw the summer program again this summer. Each summer presents its own opportunities, changes, and challenges, including the partial closure of the Albion Base parking lot and a trail detour around Alf's Restaurant this summer. Overall, it was another enjoyable summer in Alta. Here is a rundown of the results:

Summer Road

- Visitor management operations began on June 27th 2020. This was the first day the summer road was open to the public.
- The fee booth was staffed for a total of 90 days for the 2020 summer.
- The self-pay program, also known as the iron ranger, operated a total of 114 days, from June 27 to October 27.

Visitor Management

- A vehicle count was collected in the Town of Alta. 91,732 vehicles were counted between the hours of 7am-8pm during the summer operating season.



- Of the 91,732 vehicles through the town of Alta, 29% continued up the summer road into the Albion Basin.
- In partnership with the Salt Lake Ranger District, Town of Alta, Salt Lake City Public Utilities, and Friends of Alta, a Forest Service Interpretive Ranger was designated to Alta this summer collecting 33 days of engagement data and providing 2,456 visitor engagements.
- 65% of Forest Ranger engagements were regarding the topics of trails and watershed.

Albion Basin Campground

- This was Alta's second season operating the campground. It operated 76 days for the 2020 Season. Of the 76 operating days, 65 were open to reservations.
- The campground had an occupancy rate of 86% through the summer of 2020.

Other

- Alta added a campground store at the base of Cecret Lake trail head for summer.
- No operations were conducted at the Wildcat Base this summer.

Trail Work

Alta Ski Area manages the trail system within the ski area in partnership with the U.S. Forest Service (USFS) and Cottonwood Canyons Foundation (CCF). With increasing summer visitation year after year resulting in more impact to sensitive plant communities and habitats, the AEC is working to create a more sustainable and connected trail system. This will help to disperse recreation users, and to provide a safe and enjoyable experience. Annual help from CCF is key to completing well-built, sustainable trails, and managing and maintaining existing trails. Trail-related work this summer consisted of:



- **Catherine's Parking Lot Stairs** - In June 2020, AEC staff, in partnership with the USFS, installed stone stairs from the Catherine's Parking lot connecting to the switchbacks that were installed in Summer 2019 in the Albion Basin. The addition of these stairs provides an easier descent from the parking lot to the trail system while blending in with the natural environment, and protects the natural resources in the area by providing a designated route from the parking lot to the Albion Meadows Trail.
- **A Safer Loop for Albion Basin** - A trail was installed on the south side of the Summer Road from the Catherine's Parking lot to the Secret Lake trailhead which provides a safe route off of the Summer Road for users traveling between the two areas. This also creates a loop option for recreational users to hike and enjoy within the Albion Basin.

We would like to thank our partners for their essential help in maintaining our natural mountain environment during the summer months.





WINTER EDUCATION

We were thrilled to see many returning participants, and many new faces, attend our winter events during the 2019-2020 ski season. Our intent with winter events is to create a fun-filled experience while teaching the community about the beauty and importance of Alta's natural mountain environment. Education and stewardship opportunities in every season are vital to protecting and conserving the environment at Alta, and wouldn't be possible without the support of our many partners.

Educating our community about the importance of the natural resources in our canyon is essential for protecting this land for years to come.

Birding on Skis

Our small canyon is home to over 100 different species of birds, an astounding number for such a small area. Bryant Olsen from Tracy Aviary, one of Alta Environmental Center's (AEC) many partners, hosts this monthly event which consists of skiing around the mountain and observing bird behavior thanks to Bryant's extensive knowledge. Seeing a golden eagle soar over Devil's Castle is definitely one of the memorable moments during the 2019-2020 ski season. We hosted almost 100 bird-enthusiasts this winter.

Snowshoe with a Naturalist

Snowshoeing gives Alta visitors another avenue to explore, learn and have some fun in the canyon without skis. Our partners at CCF are the true heroes of this event; trained and educated naturalists come up to lead the tour, and give some great insight into the ecosystem of Little Cottonwood Canyon. We also had the privilege of hosting Wasatch Adaptive Sports members and their families on more than one occasion. We feel like we are making the biggest impact when we are able to connect with the members of our community. Conserving the integrity of Little Cottonwood will only be possible with the help and awareness of each and every member of this community.

Ski with a Ranger

CCF volunteer naturalists lead free "Ski with a Ranger" tours at Alta Ski Area, and at the other Cottonwood Canyon Resorts, on the weekends to bring adventure and learning together. CCF's knowledge sheds light on the unique ecosystem that lives and breathes here at the top of Little Cottonwood Canyon.

Rosy Finch Study Update

The Utah Black Rosy-finch Study is conducted through the Utah Black Rosy-finch Study Partnership, led by the Department of Defense, Tracy Aviary, U.S. Forest Service, Utah Division of Wildlife Resources, Utah State University, and Wild Utah Project. The AEC is one of the many partners that supports this study by offering a location for one of the study sites. This study was developed to fill data gaps around the most basic life history and demography information for this species. The lack of this type of data limits effective conservation actions which are imperative to ensure a sustainable population. This study was piloted in Little Cottonwood Canyon in 2019 (Phase I) to establish the feasibility of the study's methods and Phase II of the study occurred from 2019 to 2020 throughout northern Utah.



This study utilized 12 custom-built radio frequency identification (RFID) enabled bird feeders that have been placed at ski areas, nature centers, and private residences in Northern Utah. In the Town of Alta, there were three RFID feeders - one located at Alta Ski Area at the top of the Collins lift, outside the Town of Alta town office, and one at a private residence on the Bypass Road. Individual birds were banded with RFID bands and RFID feeders were used to record visitation by the banded birds to the feeders. In addition to the RFID feeder data, the study includes community science-based feeder counts wherein volunteers watch feeders and the surrounding area for Black and Gray-crowned Rosy-finches, and chickadees for a total of 20 minutes from a single vantage point. Additional opportunistic counts (i.e., counts of birds outside of the designated count time frame) were also collected.

Over the course of the study, there were 11,384 feeder visits by 91 tagged rosy-finches (i.e., including both Gray-crown and Black Rosy-finches) recorded by the 12 RFID feeders. Of the tagged birds, 10 tagged Black Rosy-finches were recorded at the feeders, including three returning birds from the 2019 pilot (out of the 11 banded during the 2019 pilot). General findings indicated that this new method to study birds is effective, there appears to be two populations of rosy-finches using the region, and using volunteer counts can be effective in estimating the population and distribution.

If you'd like to participate in the 2020-2021 season, please sign up here:

www.wildutahproject.org/rosy-finch

Winter Sustainability Events

Birding on Skis: Second Friday of the month. Join Tracy Aviary on skis the 2nd Friday of each month to meet some feathered locals.

Snowshoe with a Naturalist: Take a short break from skiing and join Cottonwood Canyons Foundation on a walk through the woods.

Visit www.alta.com/events for more information.

ALTA'S ENVIRONMENTAL SNAPSHOT

LAND CONSERVATION

3,400 FT²
RESTORED WETLANDS



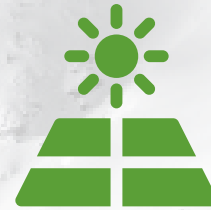
40,624 TREES
73,328 PLANTS

SPECIES PLANTED
SINCE 1991



101 ACRES SURVEYED FOR INVASIVE PLANTS AND NOXIOUS WEEDS ANNUALLY. 100% OF SURVEYED AREAS WERE TREATED IN SUMMER 2020.

CARBON FOOTPRINT



98 SOLAR PANELS



105.47 TONS OF CARBON
OFFSET THROUGH OCTOBER
2020, THE EQUIVALENT OF
PLANTING 2,711 TREES



LEED
CERTIFIED BUILDING



ELECTRIC VEHICLE
CHARGING STATIONS

The Alta Environmental Center was created in 2008 to guide the ski area's sustainability efforts and look after the natural environment in which we operate by identifying strategies for reducing Alta's carbon footprint and implementing land conservation efforts. We are thankful to our employees, partners, volunteers, and the community for contributing to the overall conservation and sustainability of Alta. Visit the link to watch an Alta episode of Steeped in Tradition on the Environmental Center's year-long efforts.

www.bit.ly/EnvironmentalCenter