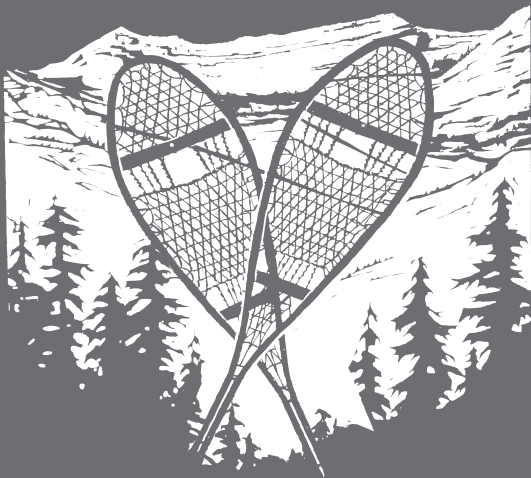
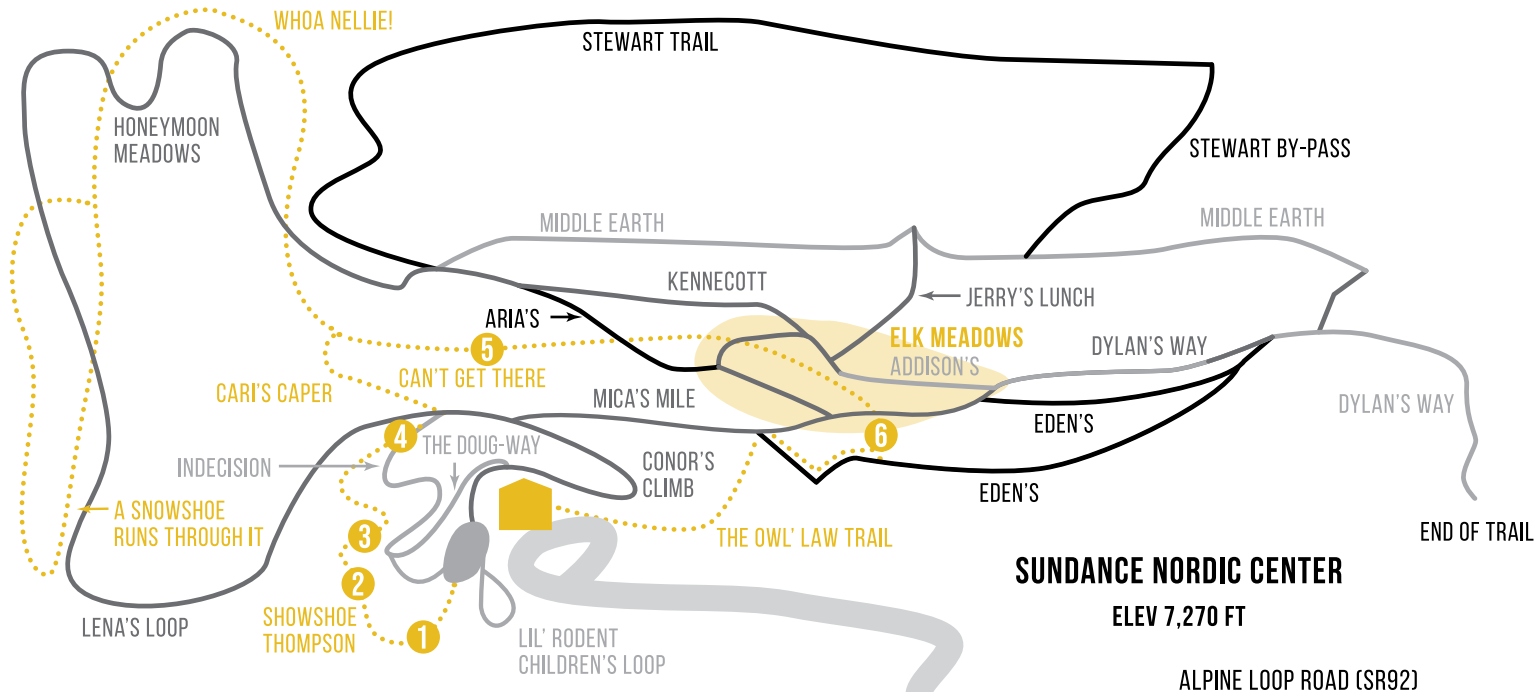


Sundance Nordic Center
Snowshoe Trail Guide
at Redford Family
Elk Meadows Preserve



Sundance
Nature Alliance



NORDIC SKI TRAILS

EASIEST

MODERATE

DIFFICULT

SNOWSHOE TRAILS



Sundance
Nature Alliance

To preserve land and inspire people to
connect to nature

1

Who came before us?
Cultural History

The story of this valley begins with its earliest inhabitants, the Nooche Ute, and specifically the Toompahnawach (Mouth of the Headwaters) band of the Ute Indian Tribe. We recognize and respect the enduring relationship that exists between many indigenous peoples and their traditional homelands.

At the turn of the 20th century (1899), Scottish immigrant Andrew Jackson Stewart and his two sons, Scott and John, surveyed the North Fork of the Provo River. The family subsequently homesteaded about 2,200 acres of this valley, and in 1944 developed a small ski resort here called Timp Haven.

In 1969, Robert Redford began to acquire the land now known as Sundance Mountain Resort and envisioned the careful growth of a community that balanced art, nature, and recreation.

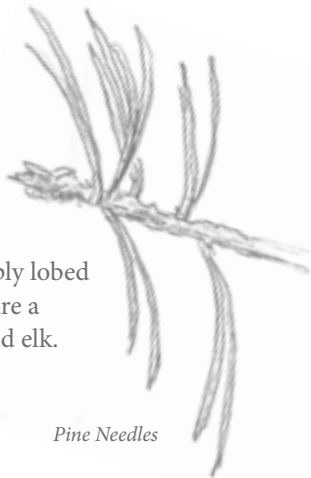
Today, the new owners of Sundance Mountain Resort continue to uphold a commitment to conservation by providing experiences where art and nature inspire visitors to develop a connection to the land.

You are hiking on Sundance Mountain Resort's 316-acre Redford Family Elk Meadows Preserve. This land is permanently protected by a conservation easement donated to Utah Open Lands. We hope this trail guide will spark curiosity and generate insights as you make your way through this winter landscape.

The Montane Forest

Although it may seem difficult to identify trees in the winter, with a few pointers, you will soon learn to distinguish between the main types of trees that grow at this elevation in the forest.

Deciduous trees lose their leaves in the fall. Aspens have distinctive cream-colored bark and grow in large stands. A single colony is typically derived from a single seedling and spread by root suckers. Each aspen tree lives 40-150 years above ground but the root system is long lived and in some cases can be thousands of years old. Rocky Mountain Maple/Smooth Maple are smaller and more scraggly in appearance than the aspens, and prefer areas with moist soil. Gambel Oak grows as a dense shrub about 5-20 feet tall with deeply lobed leaves, and its branches and twigs are a favorite winter browse of moose and elk.



Pine Needles

Conifers are evergreen trees that keep their needles all year long. There are two predominant types of conifers along this trail. White Fir has flat, bluish-green needles that curve upward. The cones grow in an upright position and the needles have a distinct fragrance. Douglas Fir has cones that point downward, and if you look closely at a cone, you will find it has a distinctive three-tipped bract that protrudes from between the seeds of the cone (illustration). Unlike deciduous trees, conifers have the ability to photosynthesize whenever the temperatures are above freezing, an adaptation that allows them to tolerate shadier conditions than their deciduous counterparts.



Spruce Needles



Fir Needles

Where are we? Climate and Watershed

Sundance Mountain Resort is located in the Wasatch Mountain Range, which is part of the Rocky Mountain Montane Forest (elevations between 6000-9,500 ft/ 1828-2895 m). The elevation at the trailhead is about 6,600 feet (2,011m). The local climate is defined by snowy winters and hot dry summers. Snowmelt in the mountain ranges of northern Utah provides for the vast majority of drinking & agricultural water to communities downstream. The snowpack in this mountain ranges serves as an important reservoir, slowly melting through the growing season and providing year-round freshwater to Stewart and Aspen Grove streams which flow into the North Fork of Provo River, then into Utah Lake, and eventually finds its terminus via the Jordan River into the Great Salt Lake..

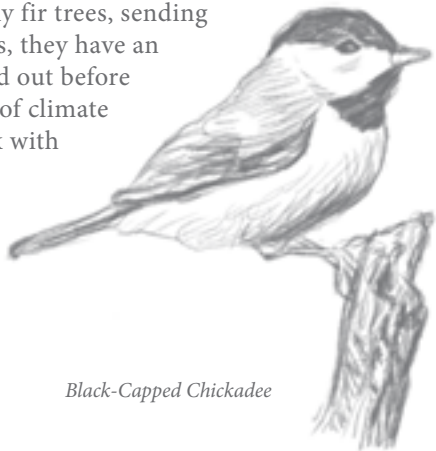


Douglas Fir Cone

4

Forest Health and
Climate Change

On dead trees where the bark has peeled off, you may notice many small holes and intricate patterns in the wood created by bark beetles. For centuries, naturally occurring wildfire and bark beetles lived in harmony with their fir tree partners. Beetles performed the important task of thinning out older and weaker trees, while wildfires kept fir tree populations in check, allowing for aspens, oak and smaller shrubs to thrive. Today, centuries of wildfire suppression and prolonged drought have resulted in too many fir trees, sending a message to beetles, they have an abundant buffet laid out before them. The impacts of climate change are complex with no easy solutions.



Black-Capped Chickadee

Who lives here? Wildlife

At first all you may hear is the crunch of your snowshoes, but if you stop and listen for a moment you may notice a few bird calls. The black-capped chickadee is one of the few year-round resident songbirds of the Wasatch mountains. In the winter, when it is not foraging, it can enter into a state of torpor, dropping its body temperature dramatically to conserve energy. The chickadee has a black cap and bib; gray back, wings, and tail; and whitish underside, and its most common call is chick-a-dee-dee-dee. Other common winter residents are the Wild Turkey, Steller's Jay, Downy and Hairy Woodpeckers, Northern Flickers, Great Horned Owl and Dusky Grouse.

You might also notice various animal tracks in the snow. Most common are those left by the Snowshoe Hare. In the winter their coat turns from brown to white, and their large furry feet help them stay warm and on top of the snow. During winter months they survive on a diet of Douglas-fir, willows, snowberry, maples, and serviceberry. And where there is a healthy population of hare, their predators are not far behind. Bobcats, mountain lion, weasels, minks, coyotes, Great Horned

Owls and even Red Tailed Hawks are common predators. Moose and elk also frequent the winter forest. Their hollow fur insulates them in the cold - look for deep tracks and telltale round scat.

The snow also acts as an insulating layer for smaller mammals; although chipmunks and squirrels are hibernating, voles, gophers and weasels remain active all winter but usually out of sight under the snow.



Snowshoe Hare Tracks



Moose - Elk - Mule Deer Tracks

6

What formed our
mountains? Geology

The Sundance area lies at the ancient terminus of three converging glaciers, forming the two drainages that form the North Fork of the Provo River. Mount Timpanogos dominates the landscape to the west, presenting a magnificent example of a glacier-sculpted bowl, or cirque. At 11,752 ft. (3,582 meters) above sea level, ‘Timp’ is the second highest peak of the Wasatch range. Composed of largely sedimentary rocks formed 300 million years ago when most of central North America was submerged under a shallow sea, the Wasatch has been dramatically sculpted by uplift on a fault line formed between the Basin and Range to the West, and the Middle Rocky Mountains to the East.



Dusky Grouse



Sundance Nature Alliance

Sundance Nature Alliance is an environmental nonprofit working to protect, care for and connect people to wildlands located at the base of Mount Timpanogos within the Wasatch Mountain Range.

We want to thank and acknowledge our partners: Sundance Mountain Resort, Utah Open Lands and Wasatch Mountain Institute for their support and partnership in our shared mission to protect land and connect people to nature.

sundance
MOUNTAIN RESORT



UTAH OPEN LANDS
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Written and illustrated by Lara Chho – Wasatch Mountain Institute.