

10 Water means life ... its availability determines the extent and variety of plant and animal growth. Plant growth is thick here ... mountain alder, mountain maple, cow parsnip, thimbleberry, ferns and fireweed. The tiny brook crossing the trail accounts for the extra moisture and plants here. It usually dries up in August.

Plants also add moisture to the atmosphere. After a plant has drawn water from the ground through its roots, the plant transpires the water out through its leaves as vapor.

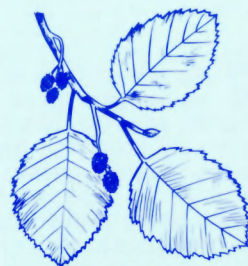
This thicket is a favorite habitat of birds — thrushes, warblers and kinglets. Listen for their movements and songs.



**COW
PARSNIP**



FERN



**MOUNTAIN
ALDER**

Trail Junction: The trail to your left continues a short distance to Baring Falls and the completion of the nature trail. A right turn here takes you to the Sunrift Gorge parking area. You have come about .6 miles (1 km) from the Sun Point parking area.

11 Baring Falls is an abrupt plunge of Baring Creek over a high rock cliff! This rapid, forceful, ice-cold watercourse is fed from snowfields on Going-to-the-Sun Mountain and Sexton Glacier about 2.8 miles (4.8 km) from here and 2,522 feet (769 m) higher.

Baring Creek is a conveyor of rock sediments from high in the mountains to St. Mary Lake. As the rock fragments are carried downstream they act as a gouging tool abrading the streambed. As the impact of the flowing water loosens weak rock and quarries out fragments, it uncovers certain layers of rock that are softer than others and these are worn away more rapidly. Here, a hard rock ledge formed the edge of a vertical cliff over which the water fell resulting in Baring Falls.

Erosion is constantly wearing the falls back. During floods, the stream is a rampaging torrent carrying large boulders strewn here. Notice, also, the many abandoned stream beds as the creek changed course. Baring Creek becomes an awesome force, one of those still carving Glacier's landscape.

In the early part of the summer, the water ouzel nests on the cliffs within the spray of the falls. The water ouzel, sometimes call a dipper, because he makes a bobbing, dipping motion, is a chunky slate grey bird found along streams and waterfalls. He may be spotted flying out from his nest and diving into the water in search of insects living on the stream bottom.

If you wish to wander further, St. Mary Falls is just 1.6 miles (2.6 km) ahead on a continued level path. Beyond that is an easy series of switchbacks which enables you to climb to Virginia Falls another .7 mile (1.1 km.)



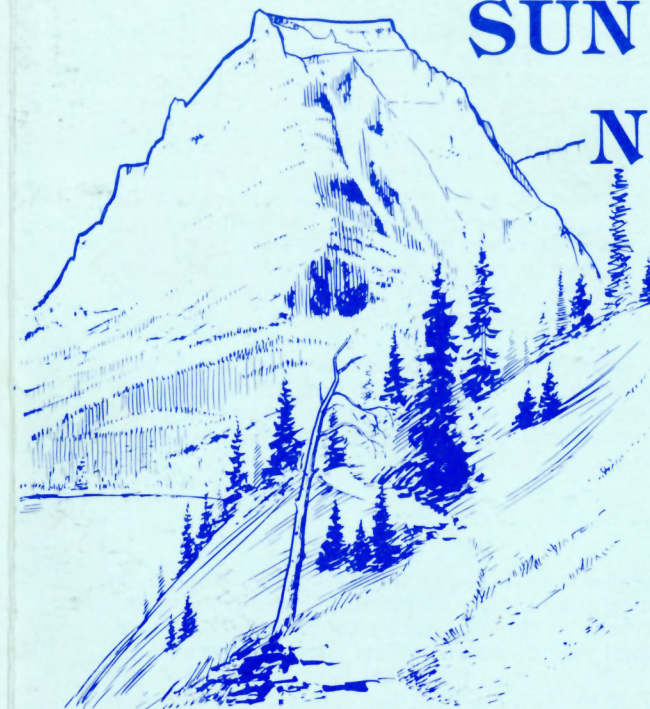
WATER OUZEL

Water, an essential life-sustaining element, has tremendous erosive potential. Within the outlines of these shapely mountains imagine the glaciers as they crept down from the peaks. And then, look again at this crystal-clear mountain stream which plunges violently over the rock cliff and is churned by its own swift flow. These landscapes will always be slowly, subtly changing as the water is used over and over again, never to be used up!

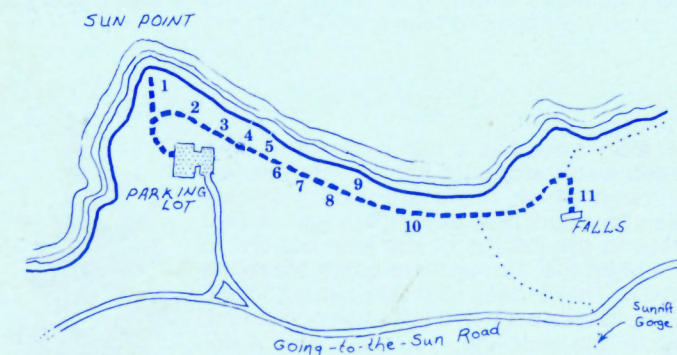


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SUN POINT NATURE TRAIL



This gently sloping trail leads immediately to a conspicuous promontory jutting out into St. Mary Lake providing a splendid view of this ice-sculptured valley. Following along the St. Mary lakeshore, the trail passes through a Douglas-fir forest to Baring Falls. Here, the fast flowing water still chisels away at the earth.



This .7 mile (1.2 km) walk to Baring Falls takes about an hour round trip. The numbers along this trail correspond to the text in this leaflet, calling attention to features of interest along the trail. The first stop is on the top of the rocky point directly in front of you.

1 Orient yourself with the aid of the “peak finder.” During the Ice Age which began about 3 million years ago, an ice slab about one-half mile (1 km) thick filled the length and breadth of this valley, flowing imperceptibly, abrading and gouging, eroding and shaping this valley. More glaciers, these moving masses of ice, eroded the canyons between these mountains and perpendicularly joined this main valley glacier.

Then 10,000 years ago, the glaciers receded. Streams from melting glaciers carried rock and sand debris to form an alluvial dam across the mouth of the valley near the community of St. Mary. The dam caused a natural reservoir, St. Mary Lake, 9.6 miles long, 1/4 mile wide and nearly 298 feet deep (16 km long, .4 km wide, and 91 meters deep). The Blackfeet Indians called it the “Inside Lake,” because it is surrounded by mountains. The glaciers that are visible today were formed about 4,000 years ago.

Wind is a very common element in Glacier particularly on the east side of the Continental Divide where you are now. On this promontory the force of the wind as it comes down the valley can be quite overwhelming!

To continue along the nature trail, please return to the trail box, turn left, and continue along to Baring Falls.

2 The Great Northern Railway built the Going-to-the-Sun Chalets on this site in 1913. The railroad, under the direction of its president, James J. Hill, was instrumental in making Glacier accessible to visitors. Train travellers from the East would disembark at East Glacier Park walking across the street to spend the night at the Great Northern’s hotel, the East Glacier Park Lodge. Saddling up the next day, riders could continue their exploration of Glacier on horseback staying at the various chalets, cabins and lodges located a convenient day’s horseback ride apart. To get to this Chalet, visitors would board a small steamship at St. Mary Lodge at the foot of the lake for their journey. Since roads did not exist at this time, early travel in Glacier was designed for the hardy adventurer!

Although a popular resort for many years, during World War II the Chalet fell into disrepair and was later dismantled. This site then began the slow process of returning to nature ... a piece of glass, a nail, a broken tile ... the only remains of man’s work here.

3 St. Mary Lake has a narrow band of light green water along its shore. This shallow area through which rocks are visible quickly plunges into a dark blue abyss. Sunlight cannot penetrate to the depths of the lake bottom to produce plant life. Nor is there much shoreline vegetation. These deep glacially-carved lakes, as a result, cannot support a large fish population.

Early in the morning, you may see water vapor rising from the lake as the sun’s heat sucks up the water. This is one part of the continuing water cycle in which water is evaporated by the sun primarily over oceans and then falls back to earth as rain or, more typically in these mountains, snow.



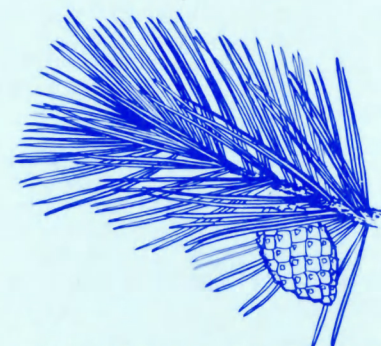
The windswept trees by the lakeshore appear flag-shaped! The trees have limbs growing only on one side of their trunks because of the 48 miles/hour (80 km/hr) blizzard winds with gusts to over 96 miles/hour (160 km/hr) that sweep down from the head of the valley. Watch along the trail for gnarled and stunted trees more evidence of the unrelenting harsh climate. The temperature can drop from 32° F to – 30° F (0°C to – 112°C) within a matter of hours. Periodic chinook winds causing rapid warming also have an effect on plants and animals.

4 Lodgepole pine trees, frequent along the trail up to here, are usually a tall, straight tree once used by Indians in the construction of their lodges and teepees. Lodgepole pines grow best in sunny, barren, exposed areas such as this promontory. These trees can also become victims of the adverse weather conditions. This gnarled lodgepole in front of you has a multitude of cones! Lodgepole cones do not all open upon maturity.

Instead, some remain closed and build up numerous seeds over the years, until the heat of a forest fire causes the cones to burst open and release their abundant seeds on the burnt forest floor. In this way, they are often the first trees to germinate upon a firestricken barren ground.

Right behind you, close to the ground, is a juniper shrub. This tree-like plant is reduced to shrub size because of the harsh northern climate.

In August, watch for chipmunks eating the serviceberries from bushes along the trail!



LODGEPOLE PINE BRANCH



JUNIPER SHRUB

5 A small snowfield, once a glacier, nestles in the bowl-like valley across the lake between Little Chief Mountain (on the right) and Mahototopa Mountain. The upper part of this valley is known as a cirque, the head of the glacier.

This tributary glacier did not cut down as deeply as the main valley glacier so when the ice melted, this tributary valley was left hanging high above the main valley floor, hence the term, “hanging valley.”



6 Going-to-the-Sun Mountain, elevation 9,642 feet (2939 m) was named by James Willard Schultz, an early explorer, for what he claimed was an old Indian legend—Napi, the Old Man, came down from his home in the sun to help his people, the Blackfeet, out of their difficulties. When his work was done, he returned to his home in the sun up the slopes of the mountain.



7 As the climate warmed and the glaciers receded, lichens, pioneer plants (the green, grey and black colored splotches on the rocks) started growing. The plants produce a mild acid that helps convert rock into soil, preparing the way for the growth of other plants. Lichens are succeeded by mosses, then grasses, shrubs and finally trees. Succession of this type is a fundamental ecological process. Look around for rocks being broken apart by plant roots — this is another basic soil-forming process.

8 The orange lichens on the cliff above are beginning the stages of plant succession on this seemingly inhospitable hillside! These rock fragments have broken off the cliff as a result of weathering, speeded by freezing and thawing. Water seeps into the cracks on the wall, freezes and subsequently expands, and in the process, breaks off particles of rock which fall to create this talus slope. Grey, green and red rocks are jumbled together. Iron particles caused rust — thus the red rock color; the green rock color is another form of iron oxidation. Mountain cliffs throughout Glacier are subject to these slow erosive processes and are all being broken down into more rounded slopes.

This slope is rough and unstable; it can be a hazard to walk on. Please stay on the trail.

9 In nature, variety and change go hand in hand. Plant growth is becoming increasingly diverse along this trail. Succession has progressed from lichen stage to forest stage and in the process has converted this talus slope to a soil capable of sustaining this Douglas fir forest.

Large, warty growths called burls occur on some trees. Burls are often the result of damage to the trees, such as an avalan- ching rock glancing off the trunk. This results in abnormal cell growth, somewhat comparable to cancer.



DOUGLAS FIR