

VOLCANO REVIEW



Mount St. Helens National Volcanic Monument Newspaper • Winter/Spring 1990

WELCOME!

In the winter at Mount St. Helens National Volcanic Monument you can look through frosted windows and reflect on the past and ponder the future of fire beneath the ice. Please travel safely and be prepared for winter conditions to ensure an enjoyable visit.
Bradley Powell, Monument Manager

Discover the Wonder of Winter

The volcano sparkles with a glaze of snow. Frosted trees rise from once molten rivers of lava. The beauty of Mount St. Helens in winter can be discovered again. Since the May 18, 1980, eruption, a variety of cross-country ski and snowmobile trails have been established for you.

With common sense and courtesy to others you will have a memorable adventure! To ensure a safe, enjoyable visit for all, please yield the right of way, obey posted speed limits and respect nature.

MARBLE MOUNTAIN SNO-PARK

Pine Marten Ski Trail 1.8 miles

Swift, June Lake and Sasquatch ski trails can now be reached on the Pine Marten Ski Trail, which parallels the motorized 83 trail. The Pine Marten trailhead is located at the north end of the Sno-Park parking lot.

Swift Ski Trail 2.2 miles

A strenuous uphill ski is rewarded by beautiful views of Mount St. Helens. Ski back down one of the Swift Trail loops, or across frozen lava flows on the Pika Trail to June Lake. The Swift Ski Trail is located at the north end of the Sno-Park.

June Lake Ski Trail 1.6 miles

Snow-covered lava flows, a cascading waterfall, and a towering white volcano await you beside the beauty of June Lake. The trail gently rises through a young fir forest to the lake, a perfect place for a picnic. Ski back down the June Lake Trail or continue up the Pika Trail to the Swift Trail system, which provides an exciting descent to Sno-Park. The June Lake trailhead is located one mile from Sno-Park via the Pine Marten Trail.

Sasquatch Ski Trails longest loop 4.8 miles

Two separate ski loops on this trail system offer something for everyone. The system is perfect for large groups and families with a wide range of skiing abilities, and these ski loops provide wonderful views of the glistening white volcano. Sasquatch trailhead is located 1 1/2 miles from Sno-Park via the Pine Marten Trail.

8312 Trail 4.5 miles

This groomed snowmobile route leads to the summit of a dormant volcano, Marble Mountain. You will be treated to views of the snowcapped peaks of Mount Hood, Mount Adams, Mount Rainier, and Mount St. Helens. Both snowmobilers and cross-country skiers may use this trail. The trailhead is located at the south end of the Sno-Park parking lot.

83 Trail 4.5 miles

Breathtaking scenes of winter's splendor reward all who travel along this gateway to the south side of Mount St. Helens. Snowmobile or ski 4 1/2 miles along Road 83 to the Lahar Viewpoint where a mudflow scoured the land on May 18, 1980. Snowmobilers and skiers share Trail 83; please use caution and courtesy.

COUGAR SNO-PARK

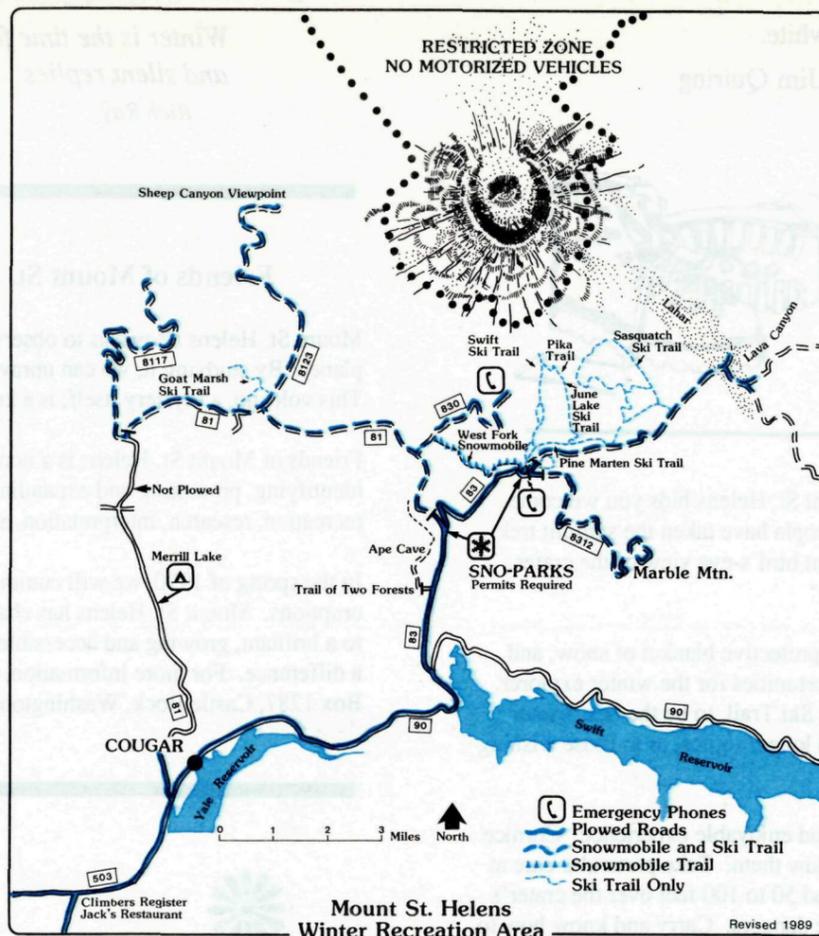
81 Trail 6 miles

This groomed trail meanders through snow-cloaked lava flows, majestic green forests, and ghostly gray forests lost to mudflows on May 18, 1980. You will discover beautiful views of the frozen crater rim of Mount St. Helens as you snowmobile or ski along this trail.

8123 Trail 5 miles

A stark landscape was created on May 18, 1980, when tremendous mudflows scoured through Sheep Canyon and the South Fork of the Toutle River. You can experience the soft beauty of this rugged winter landscape by following Trail 81 to Trail 8123. Sheep Canyon is 10 miles from Sno-Park.

West Fork Snowmobile Trail 3.5 miles
Snowmobilers can conveniently access both the Marble Mountain and Cougar Sno-Parks by using this groomed trail. Enjoy this opportunity to explore twice as much of Mount St. Helens in a single day!



- Easiest cross-country ski trails are designed for beginning skiers.
- More Difficult cross-country ski trails are designed for intermediate skiers.
- Most Difficult cross-country ski trails are designed for experienced skiers.

As you enter the winter landscape at Mount St. Helens please remember: to stay to the right on trails; that pets belong at home; to pack your litter out; and courtesy to others ensures an enjoyable visit.

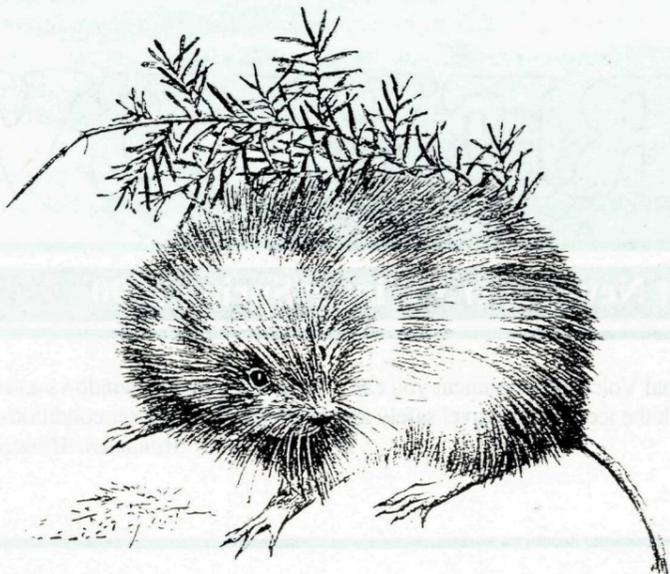
SNO-PARKS

Sno-Park permits are required for vehicles using the sno-parks. The \$10.00 fee pays for plowing the parking areas. Permits can be purchased at the Cougar Store, Jack's Restaurant and Store, and Eagle Cliff Store. Wheeled vehicles are prohibited on groomed trails. For more information call or write: Washington State Parks, Office of Winter Recreation, 7150 Cleanwater Lane, Olympia, Washington 98504 (206) 586-1253

Frosted Reflections

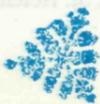
Through frosted windows the frozen giant sparkles in the distance. Steam rising from the crater is the only apparent sign of life. Deer and elk have moved to lower elevations and most of the birds have migrated, but there is life beneath the snow.

Small animals live beneath the snow and cope with winter in one of two ways. Some avoid winter by burrowing underground and going into sluggish resting states. Other animals, such as mouse-like creatures called voles, use snow as insulation and simply go about their business. Voles scurry along the soil surface, tunneling through the snow in search of small evergreen trees, green plants and caches of food harvested during the summer. They often climb up the trunks of small evergreen trees buried beneath the snow and nibble on the bark.



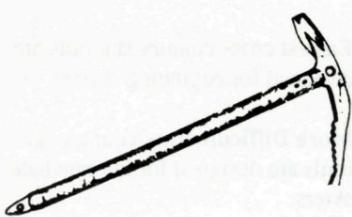
When Mount St. Helens erupted on May 18, 1980, much of the area around the volcano was covered with snow. Many small plants and animals survived the eruption because they were protected beneath the snow and soil. Voles and evergreen trees are just two examples of a wide variety of plants and animals that survived the eruption.

As you reflect upon the tremendous power unleashed during the eruption, try to imagine what the blast area would look like today without the protective snowpack of 1980.



Storm clouds hide white mountain,
crashing waters plunge out of sight.
I pause on the trail and listen
to our forest dripping in filtered white.

Jim Quiring



The Winter Summit

Having donned its elegant coat of winter snow, Mount St. Helens bids you welcome. No wonder, faced with such beauty, nearly 50,000 people have taken the summit trek since 1987, to discover for themselves the magnificent bird's-eye view of the crater, dome, and Spirit Lake basin.

From November 1 through early May of each year a protective blanket of snow, and lower visitor use, provide solitude and extended opportunities for the winter explorer. Most find the Worm Flows, accessed by Swift Creek Ski Trail, to be the best winter summit approach. A high camp may prove useful on longer routes, or to those wishing to extend their visit.

Careful planning and preparation are keys to a safe and enjoyable experience. Cornice buildups can be hazardous. Avoid standing on or below them. Take particular care at the rim. Unstable cornices of ice and snow can extend 50 to 100 feet over the crater's edge. Be aware of impending weather and avalanche dangers. Carry and know how to use an ice axe and rope, with a safe anchor and belay. Remember to register before, and sign out after, all excursions above timberline. The Climbers' Register is located at Jack's Restaurant and Store, 23 miles east of Woodland, Washington, on State Highway 503.

Between May 15 and October 31, to minimize human impact on this unique natural resource and to preserve a quality climbing experience, the daily number of hikers on the slopes of Mount St. Helens is governed by a quota permit system. Demand is high, so plan ahead for late spring and summer climbs. For permit, registration, and additional climbing information, write to the Mount St. Helens National Volcanic Monument Headquarters, or call our Climbing Hotline at 206-247-5800. For current avalanche conditions, contact the Pacific Northwest Avalanche Center at (206) 526-6677.

In the Shadow of the Dome

The steaming lava dome provides hints of the fiery lava trapped below, but behind the dome lies a secret born in the sky. Encircling the lava dome, blanketing the crater floor lies a permanent ice field; crystallized, frozen snow sandwiching layers of rock that tumble from the crater walls.

There were glaciers on Mount St. Helens before 1980, their icy fingers extending down from the summit. A few were lost completely in the eruption of 1980. Others were beheaded and later covered by a layer of ash and pumice, leaving behind stagnant ice.

Between November and April, eight to ten feet of snow blanket the exposed slopes of Mount St. Helens. Much of this melts off by mid-August. But shadowed by the 2000-foot walls, and the 920-foot dome, the snow inside the crater persists. As layer upon layer accumulates, the snow compresses into a crystalline structure, forming a permanent ice field. The ice mixes with tons of rock that continually cascades off the unstable walls of the crater. Undisturbed, this ice field may someday form a glacier and extend out onto the northern flanks of the mountain.



Photo by Todd Cullings

*Winter is the time for quiet questions
and silent replies.*

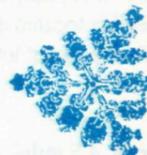
Rich Ray

Friends of Mount St. Helens

Mount St. Helens allows us to observe firsthand the forces which have shaped the planet. By studying it, we can unravel the history of similar areas around the world. This volcano, a mystery itself, is a key to solving numerous natural puzzles.

Friends of Mount St. Helens is a non-profit international organization committed to identifying, promoting and expanding upon the potential of Mount St. Helens for recreation, research, interpretation, and education.

In the spring of 1990, we will commemorate the ten-year anniversary of the 1980 eruptions. Mount St. Helens has changed from a vast, gray, inaccessible environment to a brilliant, growing and accessible National Volcanic Monument. Join us and make a difference. For more information, please contact: Friends of Mount St. Helens, P.O. Box 1287, Castle Rock, Washington 98611



*No matter how wet and cold you are,
you're always warm and dry on the inside.*

Woodsman Adage



The Treasures of Winter

Each winter thousands of visitors traveled the Spirit Lake Highway to the foot of Mount St. Helens. Plowed roads, quick access, and immeasurable opportunities made the north side of the mountain a choice spot for winter fun, exploration and adventure. From Timberline parking lot, snowmobilers quickly buzzed away to explore remote frozen landscapes. For a few hearty cross-country skiers, gliding across the vast frozen waters of Spirit Lake offered an eerie experience not soon forgotten.

Today only remnants of Timberline parking lot remain and the highway lies buried beneath tons of rock. Wind whips the snow across the barren landscape. Winter explorers are now lured to the south side of the mountain to discover the slopes of an active volcano. Snowmobilers buzz across vast open plains scoured by mudflows from the 1980 eruption, while cross-country skiers glide over ancient lava flows and through forested slopes. Soon winter visitors will be returning to the north side on the new Spirit Lake Highway 504. The Forest Service is developing a year-round recreation facility located six miles northwest of the mountain on Johnston Ridge. This site will provide awe-inspiring views into the crater of Mount St. Helens, along with a myriad of interpretive experiences. Because of low snow cover in this area since the eruption, conditions for snowmobiling and cross-country skiing remain uncertain. Regardless of where visitors go or what they do, all who come to Mount St. Helens enjoy the beauty and stillness of winter.

*There is really but one season
in our hearts.*

Thoreau

Through Loowit's Eyes

In the months prior to the eruption, few could have imagined the events that would happen. To be confronted with the unimaginable was an overwhelming experience to many people. As we look to the past, eruptions have been seen through the eyes of many people, providing us with vision into the future.

Native Americans such as the Cowlitz and Klickitat people had seen the mountain erupt many times before. Their names for the volcano reflect its explosive past: Loowit ("Lady of Fire"), Tah-one-lat-clah ("Fire Mountain") and La-we-lat-klah ("Person From Whom Smoke Comes"). Their legends and stories tell of great mountains hurling hot rocks and causing the earth to tremble. Generations of storytellers passed on these legends to their people. The Native Americans learned to live with changes to the land and respected the mountain's spirit.

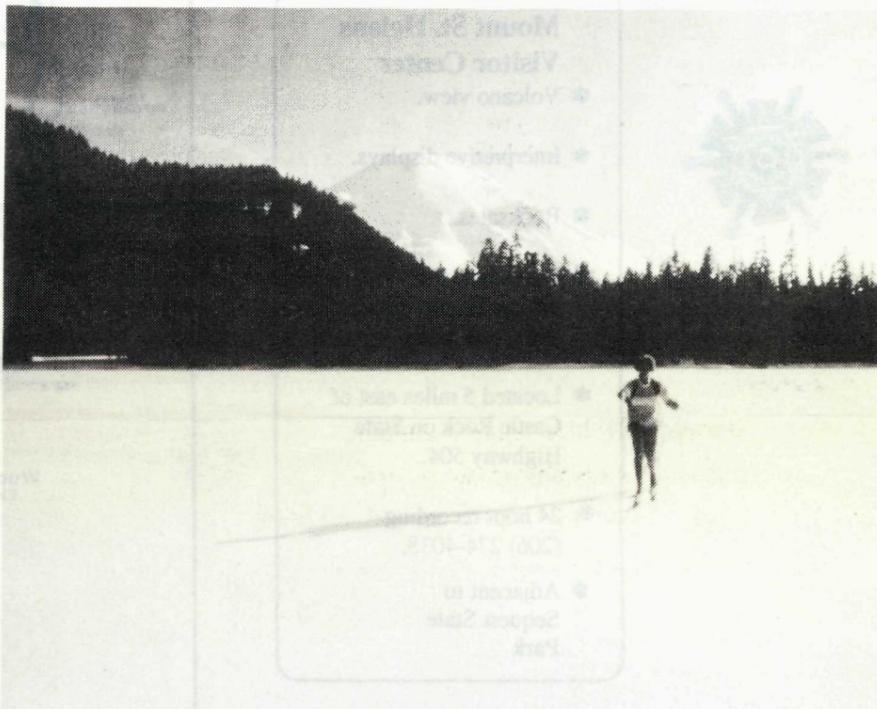
Other people came to the volcano and witnessed several eruptions during the 1840s and 1850s. These eruptions were recorded in a few journals and newspapers, but as time passed the eruptions faded from memory. Like the Native Americans, two geologists were intrigued by the volcano's explosive past. Donal Mullineaux and Dwight Crandell of the United States Geological Survey thoroughly studied Mount St. Helens. They discovered that the mountain had been very active; most of the volcano's visible cone was constructed by repeated eruptions during the past 2,500 years! Many eruptive periods began with explosive eruptions of ash and pumice, followed by the formation of a lava dome. In 1978 the geologists predicted that Mount St. Helens would erupt within the next hundred years, perhaps before the end of the century. On May 18, 1980, their vision came true.

Since 1980 an immense dome of lava has begun to fill the crater. Striving to be able to accurately forecast future eruptions, geologists closely monitor the pulse of the volcano for earthquake activity, changes in the shape of the lava dome and crater floor, as well as gas emissions. Since May of 1980, geologists have successfully forecast every eruption within days or weeks, but there was no way to predict their size or duration. Based on the volcano's past and present behavior, it will likely remain intermittently active for years, possibly decades. We look to the future, pondering what the volcano will do next. Will we see continued dome growth, small explosive eruptions or even lava flows? Continued monitoring of the volcano may one day provide answers to these questions.

Geologists and Native Americans have provided us with vision into Loowit. They have shown us that we must learn to live with this changing landscape and respect the spirit that lives within Loowit.

*Come forth
into the light of things.
Let Nature be
your teacher.*

William Wordsworth



Cross-country skier on Spirit Lake, 1979.

Photo Jim Nieland

Clouds in the Forest

Look up to the tops of the trees soaring 200 feet into the mists of the gathering clouds. Down floats the snow, millions of wafer-thin crystals, unique structures frozen around a single speck of dust.

As the snowflakes filter through the dense multi-layered canopy, they encounter a community in the sky. Lichen draped over high branches grasp sunlight and nitrogen, eventually fall and enrich the forest floor. Spiders spin intricate webs, trapping unwary insects. In the still silvery moonlight, the shadowy forms of the northern flying squirrel dance in the air, gliding from tree to tree in search of seeds and bark, wary of hungry owls. Trapped by the intricate net of needles, the tumbling snowflakes accumulate into cottony clouds perched precariously on limber branches.

As spring begins to warm the snow-covered world, the sheltering trees slow the melt, a timed release of the sustaining water. Trapped by the spongy soil, water keeps the cathedral forest cool throughout the scorching summer.

As you travel into this winter landscape, look and listen for the subtle sounds of life above, rustling within the white blanket of winter.



