

## SELECT HIKING TRAILS

Trail	Number	Mileage	Map Locat
Bluegrass Ridge	647	5.7	B5
Burnt Lake	772	8.0	B3
Cast Creek	773	5.6	B3
Cast Lake	796	0.8	B3
Castle Canyon	765	0.9	C3
Cooper Spur	600B	1.9	B5
Devil's Tie	767	0.5	B3
Eden Park Loop	600H	1.8	B4
Elk Cove	631	5.0	A5, B4
Elk Meadows	645	9.3	B5
Gnarl Ridge	652	10.0	B5, C5
Hidden Lake Horseshoe Ridge Lamberson Spur	779	5.0	C4
	774	4.9	B3
	644	2.6	B5
McGee Creek	627	1.3	B4
Mountaineer	798	2.6	C4
Newton Creek	646	1.8	B5, C5
Paradise Park	778	5.5	C3-C4
Paradise Park Loop	757	2.6	B4
Pinnacle Ridge	630	3.4	A4, B4
Polallie Ridge	643A	2.7	B5
Ramona Falls	797	1.7	B3-B4
Sahalie Falls	667C	1.7	C5
Shellrock Lake	700	3.1	В3
Tilly Jane	600A	2.5	B5
Timberline Trail	600	38.8	B4-B5, C4-6
Trillium Lake	761	2.0	C4
Twin Lakes	495	2.9	D4
Umbrella Falls	667	4.1	C5
Vista Ridge	626	2.6	A4, B4
West Zigzag Mountain	789	2.4	C3
Yocum Ridge	771	4.7	B4
Zigzag Mountain	775	14.4	B2-B4

Secondary Highway

Pacific Crest National Scenic Trail

Improved Road

Timberline Trail ----- Snowmobile Trail Watershed Boundary

(26) U.S. Highway

44 Forest Service Road

642 Trail Number

+<sup>4565</sup> Elevation (feet)

Projection: HARN Lambert Conformal Conic Datum: NAD 1983

Lidar imagery of Mount Hood's north face

Lidar imagery of Mount Hood's south face

Oregon State Highway

• 30 Mile Marker (Timberline Trail)

Elevations except Mount Hood summit from U.S. Geological Survey 7.5' topographic maps

OREGON

Approximate Scale 1:91,000

=== = Unpaved Road

Ranger Station

Universal Access

Restrooms

Fishing Area

Picnic Area

▲ Campground

Sno-Park

Alpine Ski Area

Horse Camp

Trail	Number	Mileage	Map Locati
Bonanza	786	4.7	C2
Boulder Ridge	783A	3.9	B2, C2
Cool Creek	794	3.6	C3
Douglas	781	6.4	C1
Eagle Creek	501	5.8	C1
Eagle Creek Cutoff	504	2.0	C1, D1
Green Canyon Way	793A	3.5	C2
Hunchback	793	10.0	C2-C3
Kinzel Lake	665	2.3	D3
McIntyre Ridge	782	4.5	B1, C1
Old Baldy	502	5.3	D1-D2
Plaza	783	9.1	C2, D2
Plaza Lake	788	1.0	D2
Salmon Butte	791	4.5	C2, D2
Salmon Mountain	787	1.8	C2
Salmon River	742	14.0	C2, D3

Badger Creek Wilderness				
Trail	Number			
Badger Creek	479			
Badger Creek Cutoff	477			

0	Iraii	Number	willeage	iviap Locati
°22'30"	Badger Creek	479	12.7	C6-C7
	Badger Creek Cutoff	477	3.4	C6
	Divide	458	7.8	C6
	Gordon Butte	470	3.6	C6-C7
	Gumjuwac	480	4.7	C5-C6
	Gunsight	685	5.1	C5-C6
	High Prairie	493	1.5	B6, C6
	Jean Lake	680	0.5	C5
45°21'00"	Little Badger	469	7.3	C6-C7
	Pine Creek	465	2.0	C6
	Post Camp	467	2.5	C6
	School Canyon	468	4.8	C7
	Three Mile	466	3.2	C6
	Tygh Creek	460	6.4	C6-C7

Mount Hood National Forest					
Trail	Number	Mileage	Map Locati		
Blue Box	483	3.7	D4		
Dog River	675	5.5	A6, B6		
East Fork / Tamanawas	650	7.5	B5		
Fanton	505	4.4	D1		
Flag Mountain	766	2.1	C3		
Huckleberry Mountain	617	2.5	A3		
Lakeshore	656	3.2	A3		
Lost Lake Butte	616	2.0	A3		
Mirror Lake	664	1.5	C3		
Still Creek	780	1.6	C3		
Surveyor's Ridge	688	12.8	A6, B6		

\*For additional information or to check trail conditions, visit the Mount Hood National Forest website at http://www.fs.usda.gov/mthood

# MOUNT HOOD WILDERNESS from wilderne

Mount Hood, which is located approximately 50 miles east-southeast of Portland, is a dormant composite volcano and Oregon's highest peak at 11,244 feet (DOGAMI).

Possessing or using a motor vehicle, motorboat, or motorized equipment is prohibited. This includes snowmobiles. The mountain, called Wy'east by the Multnomah tribe, is home to 11 active glaciers and lies at the heart of the Mount Hood Wilderness, a protected area within the Mount Hood National Forest. The wilderness area was established in 1964 and now includes 63,177 acres. Alpine meadows are present at higher elevations and the lower slopes are heavily forested with Douglas firs. The forest's understory is

means of aircraft, including helicopter is prohibited.

Permits are required to enter any Wilderness on the composed of numerous plant species including Oregon grape, salals, rhododen-

Timberline Lodge is a National Historic Landmark located on Mount Hood's south flank. Built in the 1930s, this lodge sits at an elevation of 5,960 feet and is a popular

attraction drawing more than one million visitors annually. The very popular Timberline Trail encircles the mountain for 38 miles, crossing alpine meadows and glacial creeks that flow from the mountain's flanks. At least 21 trails within the wilderness area join the Timberline Trail.

More than 10,000 climbers come each year attempting to summit Oregon's highest peak. The south side climbing route is "easiest" but still a technical climb with crevasses to cross, falling rock, and frequent inclement weather. Climbing season is generally from April to mid-June; fatalities on the mountain average at least one

Most visitors to the Mount Hood Wilderness are day hikers who visit on the weekends. You may not be in an area posted as being closed for restoration, wilderness restora-Hikers visiting mid-week or camping overnight generally see few other visitors. tion, or rehabilitation.



WINTER RECREATION



**LAKES AND RIVERS** 



WILDERNESS REGULATIONS from USFS

Landing of aircraft, or dropping or picking up of any material, supplies, or person by

Permits are required to enter any Wilderness on the Mount Hood National Forest.

The group size limit is 12, composed of any combination of people and pack or

Livestock feed must be weed-free certified hay or processed feed. Help keep weeds

You may cache or store equipment, personal property, or supplies for 48 hours or

Possessing or using a hang glider or bicycle is prohibited.

These permits are free and may be self-issued at trailheads.

Shortcutting trail switchbacks is prohibited.

out of the wilderness.

round trip trek to Mirror Lake.

Possessing or using a wagon, cart, or other vehicle is prohibited.

Camping within 100 feet of lakes or the Pacific Crest Trail is prohibited. Grazing, hitching, or tethering of stock within 200 feet of lakes is prohibited.

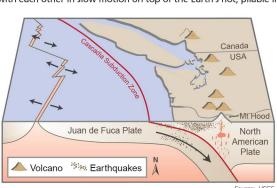
The Mount Hood National Forest is home to Winter activites around Mount Hood Beautiful high elevation lakes, small Mount Hood is home to more than 300 over 1,000 miles of hiking trails, many of include downhill and cross-country skiing, ponds, streams, and rivers provide many species of fish and wildlife, including deer, which circle Mount Hood. The Pacific Crest tubing, sledding, snowboarding, snowmoopportunities to relax, fish, or just enjoy elk, and black bear. Bass, trout, and National Scenic Trail, which runs from Mexico biling, and snowshoeing. The Timberline the magnificent scenery. One of the most salmon can be found within the rivers and to Canada, crosses the wilderness area, ski area offers the only year-round popular hikes in the area is the three mile lakes and many species of hawks and owls build their nests in the surrounding forest.

# **GEOLOGY**

At 11,244 feet (DOGAMI) above sea level, Mount Hood is the tallest point in Oregon and the state's only volcano to have erupted in historic time. Known as Wy'east by the Multnomah people, the mountain received its present name during a British expedition led by Captain George Vancouver in 1792. Vancouver's first lieutenant, William Broughton, named the mountain for Samuel Hood, an admiral in the British Royal Navy. Located approximately 50 miles from Portland, Oregon's most populous city, and close to many rapidly growing communities and recreation areas, Mount Hood is not only a regional and historic icon but also Oregon's greatest volcanic threat. Dominating the eastern skyline of Portland, many locals simply refer to Mount Hood as "the mountain" and it has become a magnet for hiking, climbing, and winter sports. Historically Mount Hood marked the last major obstacle on the Oregon Trail prior to reaching the fertile Willamette Valley. Settlers traveling this far had to decide whether to take the steep mountain path across Barlow Pass or to travel down the Columbia River across the treacherous Cascades of the Columbia, the rapids from which the Cascade Range is named.

## Cascade Volcanoes

Mount Hood is one of seven historically active volcanoes in the Cascades, a north-south trending mountain range extending from southern British Columbia to Northern California. The Cascades are unique among mountains in the contiguous United States, having high glacially covered volcanic peaks that often stand a mile or more above the surrounding mountains. Additionally, these volcanoes are often isolated from each other allowing individual peaks to dominate the landscape for 50 to 100 miles in every direction. This unique Cascade landscape is the result of plate tectonic interactions. According to the theory of plate tectonics, the Earth's surface is made up of a patchwork of a dozen plates moving in relation to each other at speeds of one to four inches a year. These plates are spreading apart, sliding past each other, or colliding with each other in slow motion on top of the Earth's hot, pliable interior.



Volcanism in the Cascades is the result of two plates, the Juan de Fuca plate and the North American plate, colliding in a process known as subduction. The subducting plate causes melting as it moves deeper into the Earth's subsurface producing magma, which then rises through weak zones (i.e. fractures and faults) toward the Earth's surface. If the magma reaches the surface before it cools and solidifies, it will erupt as lava. A volcano is created as molten rock solidifies around an opening or vent in the Earth's surface. The Cascade volcanoes have formed along a line parallel to the offshore subduction zone.

The type of volcano produced by an eruption is largely controlled by the silica content of the lava it erupts. Silica or silicon dioxide, the same chemical compound that occurs naturally as quartz, can form temporary bonds with other ions in molten rock making it more viscous. Lava with low silica content is relatively fluid and can spread out over large distances producing a very broad volcanic cone, whereas lavas vith intermediate and higher silica content are more viscous and tend to accumulate around the volcanic vent producing a steep volcanic cone. The tall volcanic peaks in the Cascades are predominantly composed of lavas with an intermediate composition called andesite and dacite. In addition to being more viscous, lavas of is type have a tendency to trap gas. This trapped gas can produce violent explosions as the molten rock nears the surface and confining pressures decrease. The released gas propels lava and preexisting rock into the air producing pyroclastic (literally "fire fragments") material. Because volcanoes of intermediate silica composition can produce both lava flows and explosive eruptions, they are typically composed of alternating layers, or strata, of these materials. Volcanoes built by these eruptions are called composite volcanoes

## Volcanic Deposits and Hazards

LAVA FLOWS and DOMES Lava is molten rock that flows onto the Earth's surface. Lava flows move

PYROCLASTIC FLOWS Pyroclastic flows are high speed avalanches of hot rock, gas, and up to 100 miles per hour and have temperatures to 1,500 °F. They are lethal, burning, burying,

**TEPHRA** Explosive eruptions blast lava fragments (tephra) and gas into the air. Tephra can also be carried aloft in billowing volcanic ash clouds above pyroclastic flows. Large fragments fall to the ground close to the volcano, but smaller fragments (volcanic ash) can travel hundreds

DEBRIS AVALANCHES and LAHARS Debris avalanches are rapidly moving landslides of rock, soil, overlying vegetation, snow, or ice. They can bury or smash objects in their path. All or some portion of debris avalanches can transform into lahars. Lahars are fast-moving slurries of rock, mud, and form when pyroclastic flows melt snow or ice, or by the transformation of debris Source: USGS

nto solid ice. Once the ice mass develops enough depth and weight, it begins to deep fissures or cracks in the ice, begin to form.

eroding agents, removing tons of material each year from the mountain. While the effects of the hazard. modern glaciers terminate at around 6,900 feet, glaciers from the Pleistocene period (11,000 to 1.6 million years ago) spread approximately ten miles from the summit area, extending into adjacent valleys and reaching elevations near 2,300 feet. Evidence of this older glaciation can be seen in several areas around Mount Hood, including near the town of Brightwood where a terminal moraine, or ridge of



AD 1900 – 2006 Numerous small lahars and debris avalanches Steam explosions, minor tephra falls non River valleys; lahars in White River valley; tephra fal

about 1,000 yrs ago Small lahars in upper Sandy River valley

Parkdale lava flow erupted in Middle Fork Hood River valley Tephra fall from eruption of Mount Mazama (Crater Lake)

Multiple episodes of lava domes and lava flows, pyroclastic flows, tephra about 30,000 to falls, and lahars immediately following, during, and just before last ice age; drainages on all flanks affected

of frequent eruptions separated by quiet periods lasting as long as 10,000 years. Mount Hood's early history, between 500,000 and 30,000 years ago, was primarily characterized by repeated eruptions that built up the volcano. This build-up was counteracted by catastrophic debris avalanches and glacial erosion. The glaciers not only eroded the mountain but also affected the distribution of lava flows. Between glaciations large lava flows filled trenches that had been carved by the moving ice. iome trenches were filled by several hundred feet of lava while other lava flows traveled between glaciers on top of rocky divides, creating many of the ridges and spurs that run down Mount Hood's flanks today.

Approximately 100,000 years ago, both Mount Hood's north side and summit collapsed, sending a large debris avalanche and lahar into the Hood River valley. The volume and energy of this mass were so great that the debris traveled across the Columbia River and into Washington. Subsequent episodes of eruptive activity have since filled in any depression created from this collapse, leaving no visible evidence of this catastrophic event.

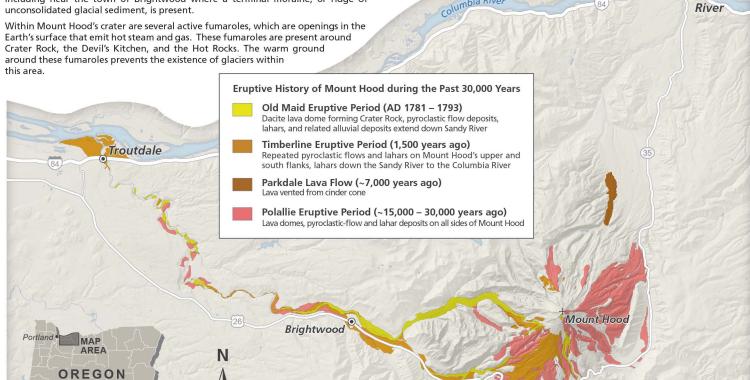
30,000 years, which include the Polallie, Timberline, and Old Maid eruptive periods have been dominated by dome growth and collapse. A lava dome forms when lava is too viscous to flow very far and therefore accumulates near the volcanic vent. When a dome collapses, it can generate a pyroclastic flow, or extremely hot, ast-moving avalanche of rock, gas and volcanic ash. The extreme heat from the pyroclastic flow in turn melts snow and ice producing devastating lahars, slurries of ock, mud, and water, that often traveled far beyond the flanks of the volcano. The Polallie eruptive period, which was between 30,000 and 15,000 years ago, coincided

with the last major ice age and affected all sides of Mount Hood. The distribution of Polallie deposits were largely controlled by the position of the ice cover at the time of deposition. One of the most recognizable features formed during the Polallie eruptive period is Cooper Spur, a large triangular deposit on Mount Hood's northeast flank. This feature, like many on Mount Hood, was formed by pyroclastic flow deposits that resulted from collapses of growing lava domes.

altered Mount Hood's southern flank. The smooth southern slope that is visible today is the result of a large landslide, followed by recurring lahars triggered by collapses of a growing lava dome. The initial landslide, which occurred near the peginning of the Timberline eruptive period, triggered a massive lahar that aveled the full length of the Sandy River valley and deposited sediment in the Columbia River, forcing the river's course further north. Later during this period he collapsing lava dome sent hot avalanches of angular boulders mixed with snow and ice down the mountain's southern flank. Over the course of several decades, numerous waves of debris traveled downslope creating a broad, smooth fan on Mount Hood's south face. As the eruptions gradually began to cease, erosional processes took over and cut canyons into the fan of debris.

The Old Maid eruptive period is the most recent, occurring between about 1781 and 1793. Eruptions during this period resulted in devastating lahars, burying the Sandy, Zigzag, and White Rivers under many feet of debris. Much of the debris, cluding remnants of forest destroyed by the flows, are visible today along the Ramona Falls Trail, on Lost Creek, within the White River Canyon, and west of Mount Hood Meadows. These lahars were the result of another collapsing lava dome on Mount Hood's south face, almost mirroring what had happened a thousand years before during the Timberline eruptive period. Crater Rock, which today is a prominent lava dome on Mount Hood's south flank, was formed during this time and partially collapsed, resulting in yet another pyroclastic flow. Layers of gray and pink ash on Mount Hood's lower slopes are evidence of both Old Maid and

Although Mount Hood has remained relatively quiet over the past two centuries, it is still considered an active volcano and can be very dangerous. Unlike Mount St Helens, Mount Hood does not have a history of violent explosive eruptions. When the mountain decides to erupt again, it will most likely act as it has in the past, not with a huge explosion but instead with a collapse near Crater Rock that will send evastating lahars and pyroclastic flows down the mountain's flanks, clogging the Mount Hood is one of several mountains in Oregon decorated year round by snow White, Salmon, Zigzag, and Sandy River valleys. Two hundred years ago, during and glacial ice. Glaciers are large masses of compacted snow that have recrystallized Mount Hood's last major eruptive period, the area was scarcely populated, however, today this area is filled with thousands of people living in nearby commudeform, becoming like plastic. This tremendous weight also causes it to spread and nities, along with the many tourists and visitors who come to enjoy the recreational move downslope. As a glacier moves over uneven surfaces, crevasses, which are opportunities on and around Mount Hood. Both the USGS Cascade Volcano Observatory and the Oregon Department of Geology and Mineral Industries study Currently Mount Hood is home to eleven active glaciers that serve as powerful the risks, assess the vulnerabilities of a volcanic eruption, and work to mitigate the



Lava dome near Crater Rock; pyroclastic flows and lahars in Sandy, Zigzac about 500 yrs ago Small lahar in the Zigzag River valley

> Lava dome near Crater Rock; pyroclastic flows and lahars in Sandy, Zigzag, and Salmon River valleys; lahars in White River valley; tephra falls Debris avalanche from upper south flank; lahars in Zigzag and lower Sand Rivers; small debris avalanches and lahars in valleys on north and east flank

## Eruptive History of Mount Hood

Mount Hood is more than 500,000 years old and has experienced decades to centuries

he nature of Mount Hood's eruptions began to change approximately 30,000 years ago. In contrast to the andesite lava flows of Mount Hood's earlier history, the past

The Timberline eruptive period, which occurred 1,500 years ago, dramatically

imberline eruptions.



**Mount Hood's South Flank** 



Crater Rock, a prominent feature or Mount Hood's south flank, is a lava dome that formed during the 1780s and 1790s. A lava dome forms when highly viscous magma piles up close to a volcanic vent. As domes collapse, they send waves of debris downslope. This type of activity played a large role in shaping Mount Hood and the nearby landscape.



## Cooper Spur Cooper Spur, which formed over 15,000 years ago, is made up of pyroclastic and lahar material resulting from a collapsed lava dome. Today it is a prominent ridge and hiking area on

Mount Hood's northeast flank.



Pyroclastic-Flow Deposits The large boulder pictured above, along

with the finer volcanic ash, is part of an old pyroclastic-flow deposit on Cooper Spur. The boulder cooled and fractured after



Eliot Glacier, located just north of Cooper Spur, contains numerous crevasses, which formed when this large mass of snow and ice moved over uneven surfaces. Over the past century this and other glaciers on Mount Hood have shrunk considerably.



## Eruptions from a vent near Crater Rock sent devastating lahars down the Sandy River valley. Debris, including entire forests killed by the flows, are visible along the Ramona Falls Trail and other



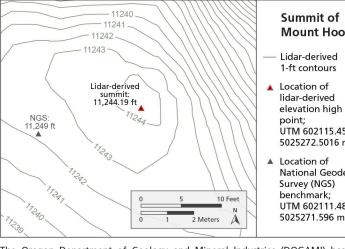
1 Kilometer

Mount Hood's smooth southern slope is the result of recurring lahars triggered by a rising lava dome 1,500 years ago. A large debris avalanche created the U-shaped scar that surrounds Crater Rock near the present-day summit



## The maps contained within this recreation guide include terrain imagery created using lidar data. The lidar data were collected from a light aircraft carrying a highly accurate laser scanner. The scanner makes over 100,000 measurements each second to build up a three-dimensional "point cloud" model of the surface of the earth and the vegetation and structures on it. A computer sorts the points, separating those that measure the ground from those that measure trees and buildings. Images derived from these sets of points can then be merged with aerial photography and other forms of digital map data to create imagery.

These lidar data generally have a vertical absolute accuracy of  $\pm 4$  inches for flat and horizontal surfaces. Slopes have greater vertical inaccuracies. The lidar point data and derivative digital elevation grid models support 1-foot contours and therefore are very accurate. The image below shows lidar-derived contours for the Mount Hood summit area and two elevation locations. Note that the location coordinates for the NGS benchmark, which has a surveyed elevation of 11,249 feet and is currently the official "highest point in Oregon," place that marker at a location near the summit where lidar data indicate an elevation of about 11.242 feet. As more lidar data are collected. changes in official elevations and locations can be expected. The lidar-derived value of 11,244 feet is used as the summit elevation in this guide. Non-summit elevation values in this guide are from U.S. Geological Survey 7.5-minute topographic maps.



## Mount Hood Lidar-derived 1-ft contours Location of

elevation high UTM 602115.4581, 5025272.5016 m Location of National Geodeti Survey (NGS) benchmark;

The Oregon Department of Geology and Mineral Industries (DOGAMI) has been ollecting lidar data in Oregon since 2008. The goal is to cover the entire state as funding for data collection becomes available. Funding comes through the Oregon Lidar Consortium, which is a wide-ranging partnership of government agencies that pool funds through DOGAMI. You can learn more about lidar and view lidar images of other parts of Oregon at http://www.OregonGeology.org.

# WEATHER

Government Camp, Oregon Elevation 3,888 ft					
Month	High	Low	Precip. (in.)	Snowfall (in.)	Snow Depth (in.)
January	35°	24°	13.20	58.5	38
February	38°	25°	9.62	41.3	44
March	40°	26°	9.08	47.3	45
April	45°	29°	7.29	25.6	28
May	52°	34°	5.36	6.7	6
June	59°	40°	3.91	0.6	0
July	68°	46°	1.06	0.0	0
August	68°	46°	1.60	0.0	0
September	63°	42°	3.49	0.2	0
October	53°	36°	7.03	5.6	1
November	41°	29°	12.10	33.4	8
December	36°	25°	13.80	51.5	23

Weather data collected from the Western Regional Climate Center. The period of record was 7/18/1951 to

# CLIMBING MOUNT HOOD from US

31/2010. The values above are averages.

Mount Hood, whose summit is 11,244 feet (DOGAMI) above sea level, is a technical climb. There are six principal climbing routes to the summit: South Side, West Crater Rim, Leuthold Couloir, Wy'East, Cooper Spur, and Sunshine. Approximately 90 percent of climbers use the South Side route, which follows the Timberline ski area and the Palmer Chair lift for half the distance and elevation. There are no hiking trails to the

Background Information Each year, approximately 95 percent of climbers scale the slopes of Mount Hood between the months of April and July. The southern slope of Mount Hood is the most popular climb, while the northern face

is more technically challenging. Climbers are encouraged to register at the climber's registration site located at Timberline Wy'East Day Lodge.

Climbers are urged to carry a mountain locator unit, similar to a "wildlife collar" tracking device which emits a signal when activated. Searchers can home in on the signal thereby expediting search and rescue efforts. Rental of this important piece of equipment is available through several local vendors. The Portland Mountain Rescue (http://www.pmru.org), Hood River Crag Rats

(http://www.cragrats.org), and the Mazamas (http://www.mazamas.org) websites all post educational messages related to safety and climbing. The Forest Service encourages climbers to check short-term and extended weather forecasts as well as the avalanche danger forecast. The Northwest Weather and

## Wilderness permits are required on the approaches from Timberline Lodge year round and on all other approaches from May 15 to October 15. These permits are free and

Avalanche Center website is http://www.nwac.us.

from May 15 to October 15 Get a permit if you are planning to enter the Mount Hood Wilderness even if you do not plan on summiting. Do not get a permit if you are not entering the Mount Hood Wilderness, only climbing to the top of the Palmer Snowfield, for example.

self-issued. At Timberline Lodge, permits are available 24/7 in the Wy'East Day Lodge.

For other approaches, permits are stocked in stations located on these wilderness trail

Late spring and early summer are the most popular time of year to climb most routes. While hazards exist every month of the year, conditions during this window are typically better. During late summer and fall, rockfall is significant and nearly impossible to mitigate and the crevasses are more exposed. Winter months can have

some outstanding climbing conditions, but storms are more common.

## Time of Day

Most climbers time their climb to reach the summit at sunrise. This affords a summit sunrise and helps mitigate rockfall that increases as the day warms. To achieve this climbers need to evaluate their climbing ability and speed to determine the time of night to start. Some climbers do their climb in one day starting between Midnight and 2:00 am. Others start the day before and make camp around 8,500 feet to 9,700 feet to shorten their summit day climb. The key is to be away from rock fall areas before the heat of the day warms them.

## Risks in Wilderness

characteristic of Mount Hood appealing to many.

Dangers and risk are inherent in the activity of mountain climbing. Weather conditions can deteriorate rapidly on Mount Hood. Mount Hood is a congressionally designated wilderness and is managed to preserve its primitive and natural character. Associated with wilderness is challenge and risk, a

One of the objectives of the Wilderness Act is to provide for unconfined recreation opportunities. The Forest Service works to allow for public access while providing for

## TRAIL & ROAD CONDITIONS

Mount Hood National Forest Hood River Ranger Station Zigzag Ranger Station 16400 Champion Way Sandy, OR 97055 Phone: 503-668-1700

6780 Highway 35 Parkdale, OR 97041 Phone: 541-352-6002 Zigzag, OR 97049 Phone: 503-622-3191





RECREATION MAP **GEOLOGIC GUIDE an JOOH THOOP** 

# OUNT HOOD GEOLOGIC GUIDE AND RECREATION MAP



Mount Hood area. The maps shown in the



Publication cartography and design: Tracy Pollock, DOGAMI Photographs: Dan Coe, Tracy Pollock, DOGAMI 3D lidar images: Tracy Pollock, DOGAMI Map of eruptive history of Mount Hood: DOGAMI

Plate tectonics and volcanic deposits and hazards diagrams: modified from U.S. Geological Survey fact sheet 060-00, Mount Hood—History and Hazards of Oregon's Most Recently Active Volcano, http://pubs.usgs.gov/fs/2000/fs060-00/

Key geologic events in the Mount Hood region during the past 30,000 years: modified from U.S. Geological Survey Open-File Report 97-89, Volcano Hazards in the Mount Hood Region, Oregon, http://pubs.usgs.gov/of/1997/0089/report.pdf

Additional geology: Fire Mountains of the West: The Cascade and Mono Lake Volcanoes, 2005, 3rd ed., by Stephen L. Harris,

Wilderness regulations, Climbing Mount Hood: U.S. Forest Service, http://www.fs.fed.us/

A special thanks to William E. Scott, USGS Cascades Volcano Observatory.

This map was electronically constructed by DOGAMI from digital GIS layers. DOGAMI cannot assure the reliability or suitability of this information for a specific purpose. Data elements were oiled from various sources. Administrative boundaries are approximate. Many of the roads shown on this map are not maintained for passenger car use and roads may be seasonally or permanently closed at any time.

