

= Mount Hood =

Mount Hood , called Wy 'east by the Multnomah tribe , is a potentially active stratovolcano in the Cascade Volcanic Arc of northern Oregon . It was formed by a subduction zone on the Pacific coast and rests in the Pacific Northwest region of the United States . It is located about 50 miles ( 80 km ) east @-@ southeast of Portland , on the border between Clackamas and Hood River counties . In addition to being Oregon 's highest mountain , it is one of the loftiest mountains in the nation based on its prominence .

The height assigned to Mount Hood 's snow @-@ covered peak has varied over its history . Modern sources point to three different heights : 11 @,@ 249 feet ( 3 @,@ 429 m ) , a 1991 adjustment of a 1986 measurement by the U.S. National Geodetic Survey ( NGS ) , 11 @,@ 240 feet ( 3 @,@ 426 m ) based on a 1993 scientific expedition , and 11 @,@ 239 feet ( 3 @,@ 426 m ) of slightly older origin . The peak is home to 12 named glaciers and snowfields . It is the highest point in Oregon and the fourth highest in the Cascade Range . Mount Hood is considered the Oregon volcano most likely to erupt , though based on its history , an explosive eruption is unlikely . Still , the odds of an eruption in the next 30 years are estimated at between 3 and 7 percent , so the U.S. Geological Survey ( USGS ) characterizes it as " potentially active " , but the mountain is informally considered dormant .

= = Establishments = =

Timberline Lodge is a National Historic Landmark located on the southern flank of Mount Hood just below Palmer Glacier , with an elevation of about 6 @,@ 000 feet ( 1 @,@ 800 m ) .

The mountain has six ski areas : Timberline , Mount Hood Meadows , Ski Bowl , Cooper Spur , Snow Bunny , and Summit . They total over 4 @,@ 600 acres ( 7 @. 2 sq mi ; 19 km<sup>2</sup> ) of skiable terrain ; Timberline offers the only year @-@ round lift @-@ served skiing in North America .

Mount Hood is within the Mount Hood National Forest , which comprises 1 @,@ 067 @,@ 043 acres ( 1 @,@ 667 sq mi ; 4 @,@ 318 km<sup>2</sup> ) of land ? including four designated wilderness areas that total 314 @,@ 078 acres ( 491 sq mi ; 1 @,@ 271 km<sup>2</sup> ) ? and more than 1 @,@ 200 miles ( 1 @,@ 900 km ) of hiking trails .

The most northwestern pass around the mountain is called Lolo Pass . Native Americans crossed the pass while traveling between the Willamette Valley and Celilo Falls .

= = Name = =

The Multnomah name for Mount Hood was Wy 'east . In one version of the legend , the two sons of the Great Spirit Sahale fell in love with the beautiful maiden Loowit , who could not decide which to choose . The two braves , Wy 'east and Klickitat , burned forests and villages in their battle over her . Sahale became enraged and smote the three lovers . Seeing what he had done , he erected three mountain peaks to mark where each fell . He made beautiful Mount St. Helens for Loowit , proud and erect Mount Hood for Wy 'east , and the somber Mount Adams for the mourning Klickitat .

There are other versions of the legend . In another telling , Wy 'east ( Hood ) battles Pahto ( Adams ) for the fair La @-@ wa @-@ la @-@ clough ( St. Helens ) . Or again Wy 'east , the chief of the Multnomah tribe , competed with the chief of the Klickitat tribe . Their great anger led to their transformation into volcanoes . Their battle is said to have destroyed the Bridge of the Gods and thus created the great Cascades Rapids of the Columbia River .

The mountain was given its present name on October 29 , 1792 , by Lt. William Broughton , a member of Captain George Vancouver 's discovery expedition . Lt. Broughton observed its peak while at Belle Vue Point of what is now called Sauvie Island during his travels up the Columbia River , writing , " A very high , snowy mountain now appeared rising beautifully conspicuous in the midst of an extensive tract of low or moderately elevated land [ location of today 's Vancouver , Washington ] lying S 67 E . , and seemed to announce a termination to the river . " Lt. Broughton named the mountain after Lord ( Samuel ) Hood , a British Admiral at the Battle of the Chesapeake .

Lewis and Clark spotted the mountain on October 18 , 1805 . A few days later at what would become The Dalles , Clark wrote , " The pinnacle of the round topped mountain , which we saw a short distance below the banks of the river , is South 43 @-@ degrees West of us and about 37 miles ( 60 km ) . It is at this time topped with snow . We called this the Falls Mountain , or Timm Mountain . " Timm was the native name for Celilo Falls . Clark later noted that it was also Vancouver 's Mount Hood .

Two French explorers from the Hudson 's Bay Company may have traveled into the Dog River area east of Mount Hood in 1818 . They reported climbing to a glacier on " Montagne de Neige " ( Mountain of Snow ) , probably Eliot Glacier .

= = = Ships = = =

There have been two United States Navy ammunition ships named for Mount Hood , despite the mountain 's namesake having been an enemy commander . USS Mount Hood ( AE @-@ 11 ) was commissioned in July 1944 and was destroyed in November 1944 while at anchor in Manus Naval Base , Admiralty Islands . Her explosive cargo ignited , resulting in 45 confirmed dead , 327 missing and 371 injured . A second ammunition ship , AE @-@ 29 , was commissioned in May 1971 and decommissioned in August 1999 .

= = Volcanic activity = =

The glacially eroded summit area consists of several andesitic or dacitic lava domes ; Pleistocene collapses produced avalanches and lahars ( rapidly moving mudflows ) that traveled across the Columbia River to the north . The eroded volcano has had at least four major eruptive periods during the past 15 @,@ 000 years .

The last three eruptions at Mount Hood occurred within the past 1 @,@ 800 years from vents high on the southwest flank and produced deposits that were distributed primarily to the south and west along the Sandy and Zigzag rivers . The last eruptive period took place around 220 to 170 years ago , when dacitic lava domes , pyroclastic flows and mudflows were produced without major explosive eruptions . The prominent Crater Rock just below the summit is hypothesized to be the remains of one of these now @-@ eroded domes . This period includes the last major eruption of 1781 to 1782 with a slightly more recent episode ending shortly before the arrival of Lewis and Clark in 1805 . The latest minor eruptive event occurred in August 1907 .

The glaciers on the mountain 's upper slopes may be a source of potentially dangerous lahars when the mountain next erupts . There are vents near the summit that are known for emitting gases such as carbon dioxide and sulfur dioxide . Prior to the 1980 eruption of Mount St. Helens , the only known fatality related to volcanic activity in the Cascades occurred in 1934 , when a climber suffocated in oxygen @-@ poor air while exploring ice caves melted by fumaroles in Coalman Glacier .

Since 1950 , there have been several earthquake swarms each year at Mount Hood , most notably in July 1980 and June 2002 . Seismic activity is monitored by the USGS Cascades Volcano Observatory in Vancouver , Washington , which issues weekly updates ( and daily updates if significant eruptive activity is occurring at a Cascades volcano ) .

The most recent evidence of volcanic activity at Mount Hood consists of fumaroles near Crater Rock and hot springs on the flanks of the volcano .

= = Elevation = =

Mount Hood was first seen by European explorers in 1792 and is believed to have maintained a consistent summit elevation , varying by no more than a few feet due to mild seismic activity . Elevation changes since the 1950s are predominantly due to improved survey methods and model refinements of the shape of the Earth ( see vertical reference datum ) . Despite the physical consistency , the estimated elevation of Mount Hood has varied substantially over the years .

Early explorers on the Columbia River estimated the elevation to be 10 @, @ 000 to 12 @, @ 000 feet ( 3 @, @ 000 to 3 @, @ 700 m ) . Two people in Thomas J. Dryer 's 1854 expedition calculated the elevation to be 18 @, @ 361 feet ( 5 @, @ 596 m ) and that the tree line was at about 11 @, @ 250 feet ( 3 @, @ 430 m ) . Two months later , a Mr. Belden claimed to have climbed the mountain during a hunting trip and determined it to be 19 @, @ 400 feet ( 5 @, @ 900 m ) upon which " pores oozed blood , eyes bled , and blood rushed from their ears . " Sometime by 1866 , Reverend G. H. Atkinson determined it to be 17 @, @ 600 feet ( 5 @, @ 400 m ) . A Portland engineer used surveying methods from a Portland baseline and calculated a height of between 18 @, @ 000 and 19 @, @ 000 feet ( 5 @, @ 500 and 5 @, @ 800 m ) . Many maps distributed in the late 19th century cited 18 @, @ 361 feet ( 5 @, @ 596 m ) , though Mitchell 's School Atlas gave 14 @, @ 000 feet ( 4 @, @ 300 m ) as the correct value . For some time , many references assumed Mount Hood to be the highest point in North America .

Modern height surveys also vary , but not by the huge margins seen in the past . A 1993 survey by a scientific party that arrived at the peak 's summit with 16 pounds ( 7 @. @ 3 kg ) of electronic equipment reported a height of 11 @, @ 240 feet ( 3 @, @ 426 m ) , claimed to be accurate to within 1 @. @ 25 inches ( 32 mm ) . Many modern sources likewise list 11 @, @ 240 feet ( 3 @, @ 426 m ) as the height . However , numerous others place the peak 's height one foot lower , at 11 @, @ 239 feet ( 3 @, @ 426 m ) . Finally , a height of 11 @, @ 249 feet ( 3 @, @ 429 m ) has also been reported .

Mount Hood 's tree line is generally around 6 @, @ 000 feet ( 1 @, @ 800 m ) .

#### = = Glaciers = =

Mount Hood is host to 12 named glaciers or snow fields , the most visited of which is Palmer Glacier , partially within the Timberline Lodge ski area and on the most popular climbing route . The glaciers are almost exclusively above the 6 @, @ 000 @-@ foot ( 1 @, @ 800 m ) level , which also is about the average tree line elevation on Mount Hood . More than 80 percent of the glacial surface area is above 7 @, @ 000 feet ( 2 @, @ 100 m ) .

The glaciers and permanent snow fields have an area of 3 @, @ 331 acres ( 1 @, @ 348 ha ) and contain a volume of about 282 @, @ 000 acre feet ( 0 @. @ 348 km<sup>3</sup> ) . Eliot Glacier is the largest glacier by volume at 73 @, @ 000 acre feet ( 0 @. @ 09 km<sup>3</sup> ) , and has the thickest depth measured by ice radar at 361 feet ( 110 m ) . The largest glacier by surface area is the Coe @-@ Ladd Glacier system at 531 acres ( 215 ha ) .

Glaciers and snowfields cover about 80 percent of the mountain above the 6 @, @ 900 @-@ foot ( 2 @, @ 100 m ) level . The glaciers declined by an average of 34 percent from 1907 ? 2004 . Glaciers on Mount Hood retreated through the first half of the 20th century , advanced or at least slowed their retreat in the 1960s and 1970s , and have since returned to a pattern of retreat . The neo @-@ glacial maximum extents formed in the early 18th century .

During the last major glacial event between 29 @, @ 000 and 10 @, @ 000 years ago , glaciers reached down to the 2 @, @ 600 @-@ to @-@ 2 @, @ 300 @-@ foot ( 790 to 700 m ) level , a distance of 9 @. @ 3 miles ( 15 @. @ 0 km ) from the summit . The retreat released considerable outwash , some of which filled and flattened the upper Hood River Valley near Parkdale and formed Dee Flat .

Older glaciation produced moraines near Brightwood and distinctive cuts on the southeast side ; they may date to 140 @, @ 000 years ago .

#### = = Climbing = =

Mount Hood is Oregon 's highest point and a prominent landmark visible up to 100 miles ( 160 km ) away . It has convenient access and a minimum of technical climbing challenges . About 10 @, @ 000 people attempt to climb Mount Hood each year . There are no trails to the summit . Even the " easier " southside climbing route is a technical climb with crevasses , falling rocks , and often inclement weather . Ropes , ice axes , crampons and other technical mountaineering gear are

necessary . Peak climbing season is generally from April to mid @-@ June .

There are six main routes to approach the mountain with about 30 total variations for summiting . The climbs range in difficulty from class 2 to class 5 @.@ 9 + ( for Arachnophobia ) . The most popular route , dubbed the south route , begins at Timberline Lodge and proceeds up Palmer Glacier to Crater Rock , the large prominence at the head of the glacier . The route goes east around Crater Rock and crosses Coalman Glacier on the Hogsback , a ridge spanning from Crater Rock to the approach to the summit . The Hogsback terminates at a bergschrund where Coalman Glacier separates from the summit rock headwall , and then to Pearly Gates , a gap in the summit rock formation , then right onto the summit plateau and the summit proper .

Technical ice axes , fall protection , and experience are now recommended in order to attempt the left chute variation or Pearly Gates ice chute . The Forest Service is recommending several other route options due to these changes in conditions ( e.g. " Old Chute " , West Crater Rim , etc . ) .

= = = Climbing accidents = = =

As of May 2002 , more than 130 people had died in climbing @-@ related accidents since records have been kept on Mount Hood , the first in 1896 . Incidents in May 1986 , December 2006 , and December 2009 attracted intense national and international media interest . Though avalanches are a common hazard on other glaciated mountains , most Mount Hood climbing deaths are the result of falls and hypothermia . Despite a quadrupling of forest visitors since 1990 , fewer than 50 people require rescue per year . Only 3 @.@ 4 percent of search and rescue missions in 2006 were for mountain climbers .

= = Hiking = =

The Timberline Trail , which circumnavigates the entire mountain , was built in the 1930s by the Civilian Conservation Corps . Typically , the 40 @.@ 7 @-@ mile ( 65 @.@ 5 km ) hike is snow @-@ free from late July until the autumn snows begin . A portion of the Pacific Crest Trail is coincident with the Timberline Trail on the west side of Mount Hood .

The predecessor of the Pacific Crest Trail was the Oregon Skyline Trail , established in 1920 , which connected Mount Hood to Crater Lake .