

= Mount Elbert =

Mount Elbert is the highest summit of the Rocky Mountains of North America and the highest point in the U.S. state of Colorado and the entire Mississippi River drainage basin . The ultra @-@ prominent 14 @,@ 440 @-@ foot ( 4401 @.@ 2 m ) fourteener is the highest peak in the Sawatch Range and the second @-@ highest summit in the contiguous United States after Mount Whitney . Mount Elbert is located in San Isabel National Forest , 12 @.@ 1 miles ( 19 @.@ 4 km ) southwest ( bearing 223 ° ) of the City of Leadville in Lake County , Colorado .

The mountain was named in honor of Colorado statesman Samuel Hitt Elbert , who was active in the formative period of the state and Governor of the Territory of Colorado from 1873 to 1874 . Henry W. Stuckle of the Hayden Survey was the first to record an ascent of the peak , in 1874 . The easiest and most popular climbing routes are categorized as Class 1 to 2 or A + in mountaineering parlance . Mount Elbert is therefore often referred to as the " gentle giant " that tops all others in the Rocky Mountains .

= = Geography = =

Mount Elbert is visible to the southwest of Leadville , often snow @-@ capped even in the summer . Many other fourteeners surround Elbert in all directions , and it is very close to central Colorado 's Collegiate Peaks . The neighboring Mount Massive , to the north , is the second @-@ highest peak in the Rocky Mountains and the third @-@ highest in the contiguous United States , and La Plata Peak , to the south , is the fifth @-@ highest in the Rockies . The community of Twin Lakes lies at the base of Mount Elbert , Denver is about 130 miles ( 209 km ) to the east , Vail is 50 miles ( 80 km ) to the north , and Aspen is 40 miles ( 64 km ) to the west . Leadville , about 16 miles ( 26 km ) to the northeast , is the nearest large town . Elbert 's parent peak is Mount Whitney in California . Including Alaska and Hawaii , Mount Elbert is the fourteenth @-@ highest mountain in the United States .

Weather conditions often change rapidly , and afternoon thunderstorms are common in the summertime ; hailstorms and snow are possible year @-@ round . An electrical storm on the mountain 's summit was considered remarkable enough to be reported in the July 1894 issue of Science .

= = Geology = =

Mount Elbert is part of the Sawatch Range , an uplift of the Laramide Orogeny which separated from the Mosquito Range to the east around 28 million years ago . The tops of this range were heavily glaciated , leaving behind characteristic summit features and other such clues . For example , the base of Elbert on the eastern side exhibits large igneous and metamorphic rocks deposited when the glaciers receded , which lie on a lateral moraine . Further up the eastern side there is a large cirque with a small tarn . There are also lakes to both the north and south , Turquoise and Twin Lakes respectively ; the Twin Lakes are a result of the natural dam of end moraines , and Turquoise Lake was created by the manmade Sugar Loaf Dam .

Mount Elbert is composed largely of quartzite . However , the summit ridge consists of metamorphic basement rock , which is Pre @-@ Cambrian in origin and about 1 @.@ 7 billion years old . There are various igneous intrusions including pegmatite , as well as " bands " of gneiss and schist . Unlike mountains of similar altitude elsewhere , Elbert lacks both a permanent snowpack and a prominent north @-@ facing cirque , which can be attributed to its position amongst other mountains of similar height , causing it to receive relatively small quantities of precipitation .

= = History = =

Mount Elbert was named by miners in honor of Samuel Hitt Elbert , the governor of the then @-@ Territory of Colorado , because he brokered a treaty in September 1873 with the Ute tribe that

opened up more than 3 @, @ 000 @, @ 000 acres ( 12 @, @ 000 km<sup>2</sup> ) of reservation land to mining and railroad activity . The first recorded ascent of the peak was by H.W. Stuckle in 1874 , who was surveying the mountain as part of the Hayden Survey .

Originally measured as 14 @, @ 433 feet ( 4 @, @ 399 m ) in height , Mount Elbert 's elevation was later adjusted to 14 @, @ 440 feet ( 4 @, @ 400 m ) following a re @-@ evaluation of mapped elevations , which sparked protests . The actual change was made in 1988 as a result of the North American Vertical Datum of 1988 ; it seems the original measurement resulted from the Sea Level Datum of 1929 . A matter of some contention arose after the Great Depression over the heights of Elbert and its neighbor , Mount Massive , which differ in elevation by only 12 feet ( 3 @. @ 7 m ) . This led to an ongoing dispute that came to a head with the Mount Massive supporters building large piles of stones on the summit to boost its height , only to have the Mount Elbert proponents demolish them . The effort was ultimately unsuccessful and Mount Elbert has remained the highest peak in Colorado . The first motorized ascent of Elbert occurred in 1949 , when a Jeep was driven to the summit , apparently to judge suitability for skiing development .

= = Flora and fauna = =

The summit of Mount Elbert is an alpine environment , featuring plants such as *Phacelia sericea* ( sky @-@ pilot ) , *Hymenoxys grandiflora* ( old @-@ man @-@ of @-@ the @-@ mountain ) , and *Geum rossii* ( alpine avens ) . Also noted are *Carex atrata* var. *pullata* , *Salix desertorum* , *Platanthera hyperborea* , *Thalictrum fendleri* , *Aquilegia canadensis* , *Chenopodium album* , *Gentiana detonsa* var. *hallii* , and *Bigelovia parryi* . Below treeline the mountain is heavily forested , with the lower slopes covered with a mixture of lodgepole pine , spruce , aspen and fir .

Some of the fauna reported on the climb to the summit include black bears , marmots , mule deer , pikas , and pocket gophers ; there are also many species of avifauna . Elk , grouse , turkey and bighorn sheep are present in the area during the summer .

= = Climbing = =

There are three main routes which ascend the mountain , all of which gain over 4 @, @ 100 feet ( 1 @, @ 200 m ) of elevation . The standard route ascends the peak from the east , starting from the Colorado Trail just north of Twin Lakes . The 4 @. @ 6 miles ( 7 @. @ 4 km ) long North ( Main ) Elbert Trail begins close to the Elbert Creek Campground , and gains about 4 @, @ 500 feet ( 1 @, @ 400 m ) . The trail is open to equestrians , mountain bikers and hunters during season . An easier , but longer route , the South Elbert Trail , is 5 @. @ 5 miles ( 8 @. @ 9 km ) long , climbing 4 @, @ 600 feet ( 1 @, @ 400 m ) at a less @-@ punishing gradient than the North Elbert Trail , approaching from the south and then climbing the eastern ridge .

The most difficult of the main routes is the Black Cloud Trail , a Class 2 climb that takes ten to fourteen hours depending on pace , gains 5 @, @ 300 feet ( 1 @, @ 600 m ) in elevation , and also involves an ascent of the sub @-@ peak , South Elbert , at 14 @, @ 134 feet ( 4 @, @ 308 m ) . Even healthy and experienced climbers report great difficulty on this route , and despite the fact that there is a trail , the route is extremely steep , unstable , and rocky in places . The elevation gain is not evenly distributed over the 5 @. @ 5 @-@ mile ascent . There are also routes approaching from the western face , and southwestern ridge , from South Halfmoon Creek Trailhead and Echo Canyon Trailhead respectively .

Although strenuous and requiring physical fitness , none of the conventional routes require specialist mountaineering skills or technical rock climbing . The main dangers of the mountain are those common to all high mountains , particularly altitude sickness . This can affect anyone , even those who are acclimatized . In serious cases , it can lead to high @-@ altitude pulmonary edema and cerebral edema , which can lead to difficulties with breathing , paralysis , and death . Climbers are advised to begin their ascent at or before 6 a.m. and to summit and descend before early afternoon to minimize exposure to possible afternoon thunderstorms while at high altitudes . Although the most conventional form of ascent is by hiking , Anna Elizabeth Dickinson , the orator ,

ascended the mountain on a mule borrowed from the U.S. government .