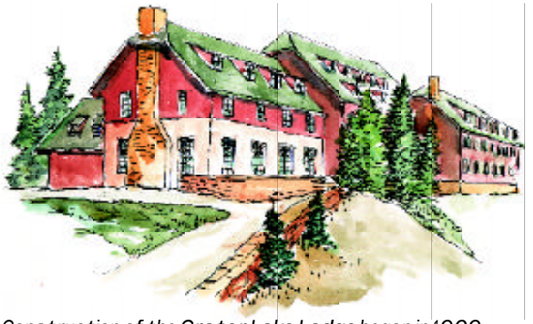
Garfield Peak Trail

Welcome to Crater Lake National Park. The trail to the summit of Garfield Peak begins at the end of the paved Rim walkway just east of Crater Lake Lodge. Any effort made to explore the natural wonders along this trail will insure a lasting personal experience of your visit to Crater Lake.



Construction of the Crater Lake Lodge began in 1909 but was never completed as planned. In late 1989 it was closed for reconstruction and reopened in 1995.

The trail to Garfield Peak is 1.7 miles or 2.55 kilometers in length and gains almost 1000 feet (>300 meters) in elevation. The slopes traversed by the trail are those of an ancient composite volcano, sometimes referred to as a stratovolcano. The volcano formed over the past 400,000 years through hundreds, if not thousands, of complex eruptions that emanated from numerous vents, fissures and craters that appeared and disappeared on the slopes and summit area of the mountain. Most eruptions produced flows of molten lava that cooled and hardened into thick rock layers; others were violent explosions of ash, pumice, fragmented blocks and volcanic bombs. With each successive eruption, the mountain changed in size and appearance, gaining both elevation and girth, eventually reaching an estimated heigth of about 12,000 ft (3,660 m) above sea level.

Mount Mazama - This image is an interpretation of Mt. Mazama in eruption. Recent field work suggests that the summit may have consisted of several peaks rather than one as shown. (courtisy of National Park Service)

About 7,700 years ago a series of extremely violent climactic eruptions devastated this area. Searing hot gases swept down the mountain carrying ash, pumice and older rock fragments forming avalanches of glowing debris that completely filled lower canyons and carried out onto the flats beyond.

Fine ash injected high into the stratosphere was transported around the globe affecting climate and turning sunsets deep red. Ash and pumice deposits from this final great eruption have been found as far north as Alberta, Canada. These powerful climactic eruptions emptied a large magma chamber beneath the mountain weakening support for the upper slopes. In a matter of hours or days some 20 cubic miles (50 km^3) of the volcano collapsed inward forming a gigantic bowl-like depression, 4,000 ft (1,200 m) deep and nearly 6 miles (10 km) in diameter. Volcanic depressions formed in this way are known geologically as a caldera. With winter's precipitation, mostly in the form of snow, the caldera filled to its present level, a process that required centuries to perhaps more than a thousand years. Filling now appears to be complete as precipitation equals annual losses from evaporation and subsurface seepage.

Today, Crater Lake, with a maximum depth of nearly 1,950 feet (594 m), is the deepest lake in the USA, the second deepest in North America, and seventh in the world.

Shortly before Crater Lake became a National Park in 1902, the ancient volcano was christened "Mount Mazama" by a prestigious mountaineering club of Portland of the same name. The name "Mazama" is an Aztec Indian word for "mountain goat." Garfield Peak, one of the highest points along the caldera rim, was originally named Castle Mountain. It was re-named in 1907 in honor of a visit to the park by U.S. Secretary of the Interior, James B. Garfield. He was the son of President Garfield who was assassinated in 1881.

The Mazamas' logo depicts a mountain goat, or "mazama," atop a triangle with a dot in the center - the common surveying symbol for a mountain.

Pre-hike preparations

The trail affords magnificent views of the lake, the Phantom Ship, wildlife, the Klamath Basin, and the high peaks of the Cascade Range. To enjoy the hike wear sturdy shoes or boots with a vibram sole as the rock is loose in many places. Bring water, sunscreen, and a long-sleaved shirt or wind breaker for comfort near the summit. In June through early July, it is likely that the upper portions of the trail may be closed due to snow.

***Do not venture onto snowbanks, even if others have. Snowbanks covering steep slopes can be extremely hazardous. PLEASE STAY ON THE TRAIL.*

Hiking the Trail - Section 1: Crater Lake Lodge to the top of the stone reservoir
(0.5 mi - 0.55 km)

The first section of the trail descends into a moist section of the upper reaches of Munson Valley and then abruptly ascends to the top of a stone covered reservoir (the water supply for Rim Village).

Looking down into the caldera just before leaving the asphalt trail, one can observe a narrow canyon that extends to the shore of the lake. This is the slope where the Cleetwood boat was launched in July of 1886. Using cables anchored to trees, men slid it and themselves down snowbanks that reached to the water's edge. The Cleetwood was used to take the first soundings of the lake as part of the first scientific exploration of Crater Lake.

The Cleetwood making depth measurements on Crater Lake during August 1886. *(courtesy of National Park Service)*

The trees here are Mountain hemlock (*Tusga mertensiana*), and sub-alpine fir (*Abies lasiocarpa*), and the prostrate Crater Lake currant (*Ribes erythrocarpum*) covers the ground. Staghorn lichen (*Letharia vulpina*), the bright yellow filamentous growth on the barks of trees is a symbiotic growth between fungus and alga. The absence of this lichen on the lower trunk is an indication of winter snow level.

Staghorn Lichen
Letharia vulpina
Bright chartreuse or sulphur-yellow tufts of hairlike lichen hangs from trees, looking much like pieces of dyed bear fur.

Soon you will enter a large open grassy pumice field that in early summer is filled with an ever changing display of wildflowers; lupines (*Lupinus sp.*), Newberry's knotweed (*Polygonum Newberryi*), spreading phlox (*Phlox diffusa*), and rabbit brush (*Chrysothamnus nauseosus*). This pumice field accumulates deep snow reducing the encroachment of conifer seedlings; the tree borders favor wildlife.

Subalpine Fir
Abies lasiocarpa
A high-elevation tree of exposed locations, often dwarfed by wind and weather. In sheltered locations it grows with a tall spirelike crown. Grayish bark is smooth with resin blisters; blue-green needles radiate brom branchlets.

Crater Lake Currant
Ribes erythrocarpum
A creeping shrub found only in and around Crater Lake National Park, this currant's copper-colored flowers hang in clusters. This localized Ribes is observed beneath whitebark pines and serves as an alternate host for exotic blister rust.

Lupine
Lupinus species
There are many types of lupines. All have typical pealike flowers arranged in dense clusters and palmately compound leaves that diverge like fingers.

Newberry's Knotweed
Polygonum newberryi
Also known as "fleeceflower" because of the fine fuzz covering most of the plant. Deep red shoots appear in spring; leaves turn reddish in late summer; stems detach and blow across pumice fields.

The first wooden bench - and railing is a good place to inspect the inner slopes of the caldera's south rim. Notice the complex rock buttresses above the trail - this serrated ridge of volcanic rock is known as Castle Crest. Much of this material was so hot when it erupted that it partially fused together. These rocks formed long before the climactic event which formed the caldera. The trail offers spectacular views of Wizard Island along with the west and north portions of the caldera rim, which included the Watchman, Hillman Peak, Devils' Backbone and Llao Rock.

Wizard Island - This classic cinder cone - the result of airborne material falling back to earth in a symmetrical pattern - is one of the most recent volcanic activities in the park. The Watchman (left) and Hillman Peak along the caldera rim are among the highest points, and the Devil's Backbone rises to the rim just behind the island.

Spreading Phlox
Phlox diffusa
Showy mats of pink, lavender or white flowers grow on woody stems. Phlox is a common 'belly plant' painting color across subapline landscapes.

Rabbitbrush
Chrysothamnus nauseosus
Common throughout the West. Several main stems have many feltlike gray or greenish branches. When in bloom, numerous small flowers make the plant appear golden yellow.

As the trail progresses across the upper slopes of Munson Valley ground vegetation is composed of the holly-like creeping ceanothus (*Ceanothus prostratus*) interspersed with shrub-like ocean spray (*Holodiscus dumosus*). There are abundant examples of pearly everlasting (*Anaphalis margaritacea*), umbellate pussy paws (*Calyptridium umbellatum*), and sulfur eriogonum (*Eriogonum umbellatum*). Near the base of the stone facade of the Garfield Reservoir is the waxy shrub known as sticky current (*Ribes viscosissimum*). Rub a leaf and enjoy the aroma.

Creeping Ceanothus
Ceanothus prostratus
Also known as squaw carpet, this evergreen ground cover often becomes thick mats on slopes under ponderosa pines from 4000' to 8000' elevation.

Ocean Spray
Holodiscus discolor
The white to crean small flowers hang in dense clusters and turn brown with age on this shrub. Also called ironwood to reflect the wood's hardness.

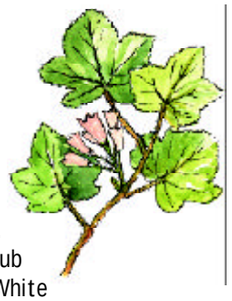
Pearly Everlasting
Anaphalis margaritacea
Small yellowish flower heads are surrounded by dry, pearly white bracts that give this plant its name. A weedy native species found on rocky slopes and in dry meadows at many elevations.

Umbellate Pussy Paws
Calyptridium umbellatum
A long taproot allows pussy paws to live in dry, gravely pumice fields where few other plants exist. Prone red stems support pussy pawlike flower clusters.

The second wooden bench - Much of Castle Crest rock which forms the caldera rim at this location is composed of a conglomerate-looking material. Ash and fragmented older blocks of Mazama were cemented together from extreme heat during explosive eruptions that occurred as the mountain was growing. Notice the differences in the texture of these rocks. This rock, known as volcanic breccia, appears to be more resistant to weathering and erosion than the lava flows found above and below.

Volcanic Breccia - This exposure near the first bench illustrates pyroclastic fragments cemented together from an earlier explosive eruption at Mt. Mazama.

Sulphur Eriogonum
Eriogonum umbellatum
As with many subalpine plants, this "buckwheat' has deep taproots that reach elusive moisture. It lives on dry gravelly ridges where few other plants can dwell.



Sticky Currant
Ribes viscosissimum
Greenish-white to pinkish bell-shaped flowers become blue-black sticky berries (not edible). Sticky currant is a straggly shrub covered with soft sticky hairs. White pine blister rust, an introduced fungus that kills many pines, needs *Ribes* (this species and others) for part of its lifecycle as an alternate host.

The top of the stone reservoir - This is an excellent observation platform to view the south facing slope of Mt. Mazama and Munson Valley below. Look to the southwest at Union Peak, one of the most prominent points in the park. At 7,700 ft (2,350 m) it is the remnant core of an ancient shield volcano formed almost entirely from successive basaltic lava flows. Glaciers have eroded its summit and exposed a hard inner volcanic plug that now forms the summit spire.

Further south, the perfect pyramid of Mount McLoughlin, a strato-volcano, dominates the horizon. Mount McLoughlin formed from alternate eruptions of lava and pyroclastics, much like Mount Mazama and other high Cascade volcanoes.

View Southwest - Union Peak is the sharp peak to the far right and the large volcano is Mt. McLoughlin. Note the many smaller 'bumps' in the middle, a few of the 400+ cinder cones found along the Oregon Cascade Range.

Clark's Nutcracker
Nucifraga columbiana
Crow-shaped with a light gray body, nutcrackers often beg for food at turnouts or campsites. A special cheek pouch allows for the temporary storage of pine nuts. "Kaar" call is well-known by subalpine hikers. First identified by Lewis & Clark expedition; named for Capt. Clark.

Steller's Jay
Cyanocitta stelleri
Raucous habits, jays are bold and unafraid, known for their camp robbing abilities. A beautiful bird of vibrant deep blue coloration.

Violet-green Swallow
Tachycineta thalassina
Small summer migrant with a graceful soaring flight, these swallows nest in dead trees. Note the white rump patches. Also here is the tree swallow *T. bicolor*, similar but without the white on rump.

Mountain Bluebird
Sialia currucoides
Unmistakable sky-blue male is often seen scouting for insects from a high perch or hovering over prey in subalpine meadows. Female has less blue coloration.

Peregrine Falcon
Falco peregrinus
A rare crow-sized falcon that hunts birds by striking them in flight at very high speeds. Note the wide black sideburns and long pointed wings. Sometimes seen along the caldera rim.

Red-tailed Hawk
Buteo jamaicensis
Our most common soaring hawk, color is variable but the broad relatively short wings are characteristic. Steller's jays mimic this hawk's screech as an alarm call.

Bald Eagle
Haliaeetus leucocephalus
Unmistakable large dark bird with white head and tail, bald eagles frequent Crater Lake to fish. Many bald eagles nest and winter in the Klamath Basin.

Birds on the Garfield Peak Trail

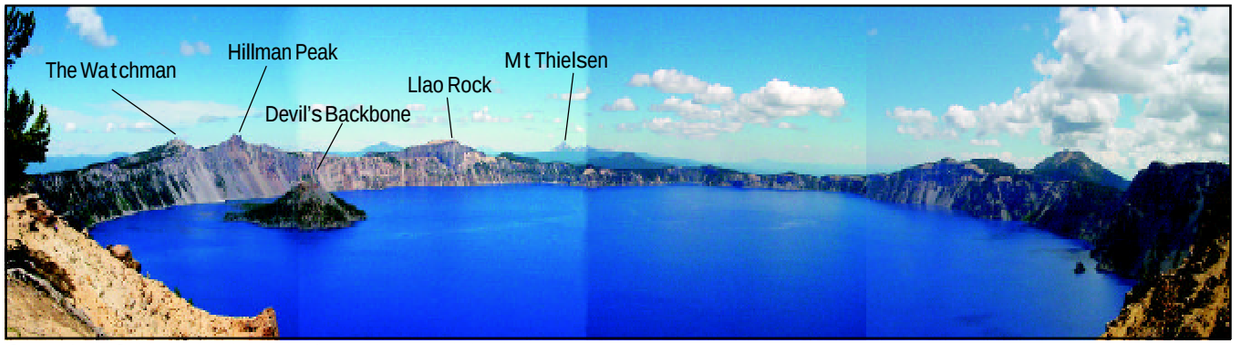
Common Raven
Corvus corax
A large black bird with a shaggy throat and wedge-shaped tail, the raven is North America's largest songbird. Croaking or 'tok' sounds are distinctive.

Gray Jay
Perisoreus canadensis
A rather un-jay acting jay, soft in habits and voice, grays will still play the camp robber if food is left unattended in campgrounds. Feeding wild animals or birds will ultimately hurt them. Don't do it!

Dark-eyed Junco
Junco hyemalis
Juncos are small ground feeders and nesters of grassy areas. White outer tail feathers flash in flight. Wintering juncos often frequent feeders in towns.

Horned Lark
Eremophia alpestris
A summer bird of open grassland or meadow, notice the two small 'horns' above the black sideburns. Walks, does not hop like most birds.

American Robin
Turdus migratorius
A familiar bird of lowland backyards, robins migrate upslope in summer to "worm' meadows. Listen to the robin's melodic song often heard at dusk or dawn.



Crater Lake Caldera showing major features around the rim.

Section 2: The Southwestern Slope of Castle Crest
(distance, approximately 0.6 mi or 1.0 km)

This portion of the Garfield Peak Trail is dry, rugged and the longest stretch without a switchback. It is also a good area to observe or listen for rock pika, a high elevation relative of the rabbit and hare. There are excellent views of Munson Valley - the rounded U-shape of the valley is evidence of a glacier that once flowed down the slopes of Mount Mazama thousands of years before its collapse.

During the climactic final eruptions of the mountain, the lower portion of this valley was filled to a depth of several hundred feet by glowing avalanches composed of ash, pumice, and hot gases. Spectacularly deep canyons were later formed when streams eroded through this material, such as the Annie Creek Canyon. Its rim can be seen along the cut of the southeast entrance road (highway 62). At the base of the slope below are the buildings of Park Headquarters.

Stonecrop
Sedum species
A sprawling plant with fat little succulent leaves and five-petaled yellow flowers, stonecrop is found on rocky outcrops and open dry slopes where few other plants grow.

This is an excellent place to observe a wide variety of plant life. The succulent thick leafed plant growing in crevasses of rocks and exposed to the sun is sedum. Sedum (*Sedum sp.*) has a niche at this elevation very similar to ice plant in the sand dunes of the Pacific Coast.

Along the trail are some examples of hybrid Shasta red fir (*Abies magnifica shastensis*) and noble fir (*Abies procera*) and young high elevation variants of ponderosa pine (*Pinus ponderosa*). The ponderosa pine can be identified by three long needles in a bundle compared to five short needles on whitebark pine (Pinus albicaulis).

Shasta Red Fir
Abies magnifica shastensis
A hybrid of California Red Fir, Abies magnifica and Noble Fir and easily defined by the needles with hockey-stick shaped bases.

Ponderosa Pine
Pinus ponderosa
Tall stately trees with flaking puzzle-piece bark. Can be identified by long needles that grow in bundles of two and three.

Whitebark Pine
Pinus albicaulis
Often twisted or crooked on windblown sites, whitebarks have egg-shaped, closed cones and needles in bundles of five. Many old-growth trees are dead or dying from the exotic whitepine blister rust.

Crevasses in the rock allow for the accumulation of moisture as evidenced by an abundance of mountain hemlock and vascular plants such as corn lily, arnica, and asters.

During mid-season, one will often see the western pasque flower (*Anenome occidentalis*). Look for a low growth form of pinemat manzanita (*Arctostaphylos navadensis*). In season, the southwest slope offers many examples of spreading phlox.

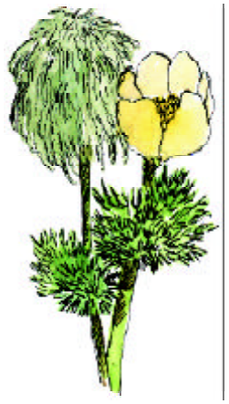
Approaching the rim, new views are obtained of the inner caldera walls and of Wizard Island. Beyond the north rim of the caldera is the sharp profile of Mount Thielsen and the lesser, more forested summit of Timber Crater, a cinder cone capping a shield cone in the northeastern section of the park.

On the northeastern rim of the caldera, whitebark pines outline the dome of Cloud Cap. Below Cloud Cap is the massive dacite formation known as Red Cloud Cliff. Just beyond the rim, is Mount Scott, the highest peak in the park at 8,929 ft (2,750 m). Mount Scott is a volcano that likely formed from the same magma chamber that fed Mount Mazama and may represent one of several summit vents.

Green Corn Lily
Veratrum viride
A tall cornlike stalk with large leaves, green corn lilies prefer wet meadows or boggy seeps. Pale green flowers form dense terminal clusters.

Heartleaf Arnica
Arnica cordifolia
With large yellow flowers above heart-shaped leaves, this sunflower is found beneath whitebark pines in subalpine areas of the park.

At the third wooden bench you are approximately half-way to the summit of Garfield Peak. Take a few minutes to rest here and enjoy the shadows of the dense mountain hemlock forest before continuing on to four rewarding viewpoints of the Phantom Ship that give distinctly different views - each more spectacular than the one before.



Western Pasque Flower
Anemone occidentalis
A plant associated with subalpine slopes and meadows, cream to yellow-green bowl-shaped flowers develop into a "mop" of seeds, an obvious heat-trapping adaptation in this cold landscape.

Pinemat Manzanita
Arctostaphylos nevadensis
The pinkish white urn-shaped flowers later turn to brownish-red berries. This mat-forming plant hugs dry rocky slopes at upper elevations.

Mountain Hemlock
Tsuga mertensiana
These upper elevation trees have single (not in bundles) short blue-green needles that are soft to the touch. Hemlocks commonly have droopy tops, an easy identifier. Some ancient timberline trees are very gnarled and twisted.

Section 3: Four overlooks of the Phantom Ship
(distance, approximately 0.4 mi. or 0.6 km)

The trail proceeds to the edge of Castle Crest where there are new views of the lake with vistas beyond the northern rim of the caldera.

It is a short walk from the fourth wooden bench to the first overlook of the Phantom Ship.

Dutton Cliff and Phantom Ship - This view of the southeastern caldera wall shows part of the Phantom Cone, the lower portion of Dutton Cliff. Mount Scott is just beyond the caldera.

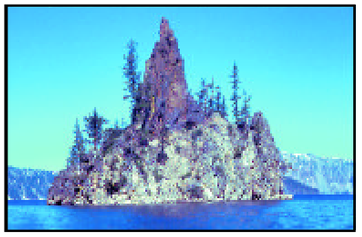
Snowshoe Hare
Lepus americanus
Dark brown in summer, white in winter, their large "snowshoe" hind feet have well furred soles for life in deep snow.

Coyote
Canis latrans
Often seen 'mousing' in meadows or crossing highways, the wild dog of the West is actually very common. Unlike most domestic dogs, coyotes run with tail held down.

The sails of the Phantom Ship are a remnant of a ridge (dike) of 400,000 year old lava that pre-dated Mount Mazama. This vent, called the Phantom Cone, is visible in cross section about half-way up Dutton Cliff near the Phantom Ship. It was eventually buried by the alternate eruptions of lava flows and explosive ash layers from a growing Mt. Mazama. These lava and ash layers are observed today as colorful rock strata in the upper sections of Dutton Cliff and other sections of the caldera wall.

At this elevation, there is a direct view into the crater on the summit of Wizard Island, a cinder cone of basaltic andesite which was formed soon after the collapse of Mt. Mazama. Much of its base cooled below water, indicating that the lake began to form almost immediately in the years following the formation of the caldera. The summit crater of Wizard Island is 300 ft (90 m) in diameter and 90 ft (27 m) deep.

Other volcanic activity continued after Mt. Mazama collapsed. Below the lake's surface near the northern portion of the caldera wall is a second cinder cone (Merriam Cone). There is also a dacite dome and a central platform of andesite lava extending off the eastern shore of Wizard Island. Recent exploration of the caldera floor in a deep diving submergible has identified thermal springs, indicating that volcanic action is dormant, but not extinct - residual heat still exists!



Phantom Ship 'sails,' as seen from lake level, are part of a Phantom Cone dike .

The second Phantom Ship overlook is in a cluster of whitebark pine and mountain hemlock approximately two hundred yards distant from the first overlook. Just a few paces beyond and we come to the third Phantom Ship overlook. Here are two shaded rock benches, ideal for rest and contemplation amongst perhaps the best views of the east rim of the caldera. At this elevation, the growth along the caldera rim edge is dominated by whitebark pine, which are especially adapted for life on the edge at higher elevations.

Chaski Slide

Another 200 paces brings us to the fourth Phantom Ship overlook which provides a full view of the caldera's inner walls and an excellent perspective of Chaski Slide, a geological feature that formed when a large section of the caldera wall separated from the rim and slid into the caldera during or soon after the final collapse of Mazama. Observe, where the lower edge of Chaski Slide disappears into the water below, the bright green of the shallow shelf which turns into the deep blue of greater depths.

Recent mapping of the floor of Crater Lake shows that debris from Chaski Slide extends well out onto the caldera floor below the lake surface. Note that the rock strata color at the bottom of the slide is identical to that at a much higher position on the caldera wall beneath Applegate Peak, the next high point on the rim east of Garfield Peak. To the east of Applegate Peak is Sun Notch, a cross section of a pre-collapse glacial valley on the southeastern slopes of Mt. Mazama.

Some Animals of Crater Lake

Mule Deer
Odocoileus hemionus
Most often seen at dawn or dusk, watch for mule deer at meadow's edge. Named for their large 'mule' ears.

Cascade Red Fox
Vulpes vulpes
The red phase of the Cascade Red Fox is smaller than a coyote and appears dark rusty-red. Long bushy tail is tipped with white. Often seen in early morning hunting near the lodge.

Yellow-bellied Marmot
Marmota flaviventris
A high-elevation meadow dweller, marmots hibernate most of their lives away beneath rock piles, then quickly rebuild body fat in summer, eating lush subalpine herbs and grasses. Listen for their alarm 'whistle.'

Golden-mantled Ground Squirrel
Spermophilus lateralis
A common ground squirrel often seen along the south rim. Larger than a chipmunk with coppery head and shoulders. No facial stripes.

Townsend's Chipmunk
Tamias townsendii
A large dark brown chipmunk with facial stripes. Often seen with ground squirrels.

Summers are short here in the High Country and these wild animals need to quickly build fat for the next long winter ahead. Feeding them alters their metabolism, often causing premature death.

Section 4: The final approach to the summit

(distance, about 0.2 miles or 0.32 km)

This section of the trail leaves the edge of the caldera rim and rounds the south side of Garfield Peak. The rock exposed below the upper summit is a highly fragmented and jointed andesite lava. There is a dramatic panorama looking southeast including Crater Peak and the graben (a depression between two facing faults) of the upper Klamath basin. Both the upper and lower Klamath lakes can be seen south of the headwater springs of the Wood River.

The closest settlement viewed far below is historic Ft. Klamath, settled in 1863, some ten years after Crater Lake was first seen by Europeans. Ft. Klamath's 4000' (1275 m) elevation is approximately the same as the bottom of Crater Lake. The upper Klamath basin was home to the Klamath Indians and was a great marsh that supported abundant wildlife and waterfowl. A major section of the Klamath Lake serves as a waterfowl refuge.

Klamath Basin - Looking south from the summit of Garfield Peak provides a grand view of the Klamath graben. The wetlands, Agency Lake and Klamath Lake lie between two facing faults with the center area dropped down (a graben). The bright white mountain top on the horizon is Mount Shasta.

Whitebark Pine - These pines are in peril due to exotic whitepine blister rust disease.

To the southeast of Garfield Peak is a long sloping series of pumice flats formed from the final climactic eruption of Mt. Mazama. Within these desolate areas are tree islands of the pioneer, whitebark pine, slowly encroaching towards the rim. Beyond, near the horizon, is the southern end of Klamath Marsh.

You are now just a few steps from the summit, be prepared for high winds, cooler temperatures, and a need for extra clothing. The summit of Garfield Peak is 8,060 ft (2,460 m) feet above sea level. You have climbed nearly 1,000 feet (300 m) in elevation above Rim Village to obtain panoramic views to all sectors of the compass.

More than a hundred air miles (160 km) south lies the snow covered slopes of Mount Shasta in California. Mt. Shasta is a 14,161 ft (4,317 m) strato-volcano similar to Mount Mazama, but much larger. Ninety miles (145 km) north, just barely visible over the north horizon is the top of another high strato-volcano, the South Sister (10,358 ft or 3,157 m) situated just west of Bend, Oregon.

Pika
Ochotona princeps
Shaped like a guinea pig, the pika's 'enk' warning whistle is often heard on these steep subalpine rocky hillsides. Pikas cut plants and stack them to dry. These dried haystacks then become winter stores, for pikas don't hibernate.

Some Other Interesting Crater Lake Creatures

Rufous Hummingbird
Selasphorus rufus
A very small flash of color! One of the smallest birds in North America, this hummingbird winters as far south as south-central Mexico, making the long migratory trip through mountains at high altitudes. Avidly defending its territory from other hummers, it builds a tiny nest of lichens and spider down. Look for these birds taking nectar from flowers.

Pine Marten
Martes americana
Brownish with darker legs, look for a small pointed nose and long bushy tail as this solitary creature darts away into the forest. Inquisitive, martens can often be coaxed from a tree cavity by squeaking like a mouse. While these animals are mostly nocturnal, one may occasionally be seen at dawk or dusk.

Black Bear
Ursus americanus
Most common and smallest of our North American bears, black bears here hibernate the long winters away in secure rock or earthen hideaways, hungrily emerging in springtime. Lacking any other food, they will strip lower trunks of trees to eat the inner cambium layers of bark. Look for these "bear signs" as evidence of the Park's mostly nocturnal bear population. Black bears are not always black, but come in varieties of cinnamon or brown.

The Cascade Range has its origin in the shifting of a small ocean plate and the North American continent. Made up almost entirely of volcanoes, this range has its southernmost peak in northern California (Lassen Peak) and at the extreme northern end is Mount Garibaldi in British Columbia, Canada. Other peaks include the Three Sisters, Mount Jefferson and Hood in Oregon, and Mounts St. Helens, Adams, Rainier and Baker in Washington. The highest volcano of the Cascades is Mt. Rainier at 14, 410 ft (4,392 m).

Look up. If we were standing at this location some 8,000 years ago, another 4,000 feet (1200m) of elevation would be required in order to reach the summit of Mt. Mazama.

Descending to Rim Village

Take your time returning to the Rim Village area. The return trip will often provide new views not noticed as you ascended. Please stay on the trail at all times, walk slowly, and contemplate what this region may have looked like before 7,700 years ago just prior to the collapse of Mount Mazama. Keep this booklet as a souvenir for having met the challenge of reaching the summit of Garfield Peak. Don't hesitate to follow-up on your climb by contacting a park ranger or volunteer who will gladly answer any questions.

Who Left THIS?

Scat, droppings, poop - or whatever YOU call it, are sure records of recent wildlife "passing" by. Since many of Crater Lake's animals are nocturnal, seeing what they left is almost as good as actually seeing the creature itself. Look carefully - do you see what food it might have recently eaten? Is there hair, indicating this creature captured another? What berries or seeds does it contain?

Mule Deer
1 - 3 inches of great variation. In summer they are soft, indicating a diet of rich fresh greens. At other times it is much smaller and harder.

Black Bear
Can be large to 3" in diameter. Doesn't taper at ends. In berry season it may be runny purple piles.

Coyote
Usually tapers at ends. Can be over 4" long and filled with hair from ground squirrels or chipmunks. Similar red fox scat is smaller, usually 2" or less.

Yellow-bellied Marmot
Large (some over 2" long) and chunky and often broken in several pieces, tapered at ends, it represents a summer life of eating rich meadow grasses.

Chipmunks and Ground Squirrels
Tapered little ovals, often not more than a 1/4" long for chipmunks, 1" long for ground squirrels.

Snowshoe Hare
Little pellets less than 1" in diameter may accumulate in scattered piles. Pika scat is similar but much smaller and usually found only on subalpine rocky slopes.