SILVER CREEK FALLS
OREGON'S
PREMIER STATE PARK
by
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LOCATION:

Silver Creek Falls State Park is situated in the south central part of Marion County, where the Western Cascade Range, geologically distinguished from the High Cascade Range, slopes to the west above the storied Waldo Hills. The area is described as being in Sections 3, 10, 11, 12 and 14, in Township 8 South, Range 1 East and Section 18 in Township 8 South, Range 2 East, Willamette Meridian, a total of 1,744 purchased acres, more or less, as of December 31, 1942. To date there are no gift acres in this park area.

The active park center is nineteen miles east and four miles south of the Capitol Building in Salem. From this point, via Silverton, it is thirty one miles to the park entrance, which is sixteen miles from Silverton. From the same point in Salem it is twenty six miles over Oregon Highway No. 163, by the way of Shaw, or alternate routes. From Portland, thru Woodburn and Silverton the distance is seventy five miles. By the way of Oregon City and Mulino, it is only sixty miles.

The uppermost sources of Silver Creek are on the west slope of Wildcat Ridge, which is on the east line of Township 8 South, Range 2 East. Here the springs gather their waters and flow westward, down and across what was once a heavily forested area, now logged, and several times so severely burned as to have become an almost treeless waste, of nearly ten thousand acres. Thru this burned area the diminished stream sources course toward the Silver Creek canyons, where they combine to flow thru Silverton, join Pudding River and flow on to the Willamette River.

HISTORY:

The origin of the name Silver Creek seems to be lost, as written history has not authentically recorded its sponsor, nor the time nor place of its

christening. It is of record as far back as 1846, and that was an early date in Oregon. There have been vague rumors of silver bearing ore having been found on the upper reaches of the creek, and a few miles distant, on the Little North Santiam, both gold and silver bearing lodes have been found and prospected. However, these discoveries were long after the stream was named and did not, as many assume, have any bearing upon the original appellation. Whatever its origin, the name is a pleasing, suggestive one, that lends a romantic touch to this historic water-fall stream and the park it serves.

A settlement called Milford, located on Silver Creek, two miles above the present site of Silverton, "was the earliest center of population and industrial enterprise in the Silverton Country.*** There James Smith and John Barger erected a lumber mill about the year 1846*** No where in the records, nor in print, does the name of Milford appear, the people of that place invariably using the name of Silver Creek". (1) Silverton was probably named from Silver Creek, the locality, as already noted, having used the stream name from the earliest times.(2) From the information available, it can reasonably be assumed that the name Silver Creek was in vogue as early as the date given, perhaps earlier. Milford (Silver Creek) was abandoned during 1854-'55, when most of the buildings were moved to Silverton.

What is now the facilitated park area, in the vicinity of South Falls, seems to have been the site of the first land occupation in the upper Silver Creek basin. Patent was issued to William T. Eaton for his one hundred sixty acre homestead in the South half of the Northwest quarter and the East half of the Southwest quarter of Section fourteen, on April 20, 1833. James Fordyce homesteaded the North Half of the Northwest quarter of the same section, and patent was issued on April 15, 1884. The south line of the Fordyce claim crosses Silver

(1) Downs, A History of the Silverton Country - 223
(2) Ibid - 227

Creek approximately at the top of the South Falls and nearly all of the present park facilities are within its original boundaries. Fordyce sold his claim to A. J. Dawne and nine associates on May 9, 1887, for $800.00. On March 29, 1889, Eaton sold twenty acres adjoining the Fordyce claim to A. T. Gilbert, one of Dawne's associates, for $200.00. Later on Eaton died. Miles Lewis was appointed administrator of his estate and, under a court order, sold the remaining one hundred forty acres to T. C. Smith for $177, the highest figure bid for the property. On this tract Smith platted the townsite of Silver Falls City, which was recorded by L. M. Smith on March 16, 1888. It is alleged that ex-president Herbert Hoover was one of the chainmen who assisted in making the survey.

In its early days, the "City boasted a Congregational church, an eight room hotel, a store, a sawmill and a number of homes. The church was built in 1899, occupying the east half of Lot 16, Block 25, and Watson's store was on the west half of the same lot. Almost across Second Avenue, now the county road, was Arnold's hotel.

The water power sawmill located on the bank of Silver Creek, just south of the present county road crossing, was erected by S. T. Arnold and E. F. Watson in 1889. In 1891 the mill was purchased by J. E. Kimsey, John W. Rossell and William Neal, who operated it for a year, then converted it to steam power, because of the seasonal low water that seriously reduced production. The mill was operated on this site for five years, then moved to Winter Creek. Logging was done with oxen and most of the lumber went to Salem with horse teams. When the dirt roads were reasonably dry, a four horse team, with two wagons, would take to Salem, or nearby points, three thousand feet board measure, taking two days for the round trip.

When the hotel was opened the rooms were usually fully occupied, and on week ends or holidays over crowded, the overflow being accommodated in neighboring private homes, or they rested on bough beds beneath the sheltering firs.

Prior to the innovation of Arnold's hotel, there were many people went to the Silver Creek area during the summer and autumn months, when the roads were dry and passable. They went by team, on horseback and afoot, the mill teams taking their impedimenta when necessary. They were an aggregation of kindred spirits bent upon having a good time and they enjoyed themselves in the company of their like minded associates.

In his youthful years Oregon's senior senator, Charles L. McNary, was a frequent visitor and, later on, had a hunting lodge on the upper reaches of Silver Creek, where his Marion County contemporaries were often entertained. When the late Senator George E. Chamberlain was attorney general of Oregon, and also during his incumbency as governor, he made many enjoyable visits to the area. Too, in earlier days, Salem's genial, long term postmaster, Henry R. Crawford, regularly visited the locality and knew all of the best fishing holes. On query, almost any of the older citizens of the county can tell stories of their Silver Creek trips, long before the comfortable days of automobiles and paved roadways. It was then, as it is now, the most popular outing place in the Marion County area, a reputation and supremacy it has maintained for many years.

In those days trout of size were plentiful in the Silver Creek waters and there were always fishermen to try their luck. Game was abundant and others went to hunt. Rifles were always at hand and any stray deer was acceptable camp meat. Bears were quite numerous and, in acorn time, the hills echoed to the ringing chorus of pursuing dogs.

The hunting and fishing that attracted early day sportsmen and visitors to this bountiful game and fishing locality deteriorated rapidly when the upper reaches of the creek and its sources were logged and burned, destroying game food and cover, and greatly diminishing stream flow. Deer or bears are seldom seen now, even in the headwaters area and, despite abundant plantings, trout are scarce with few of good size.

Many families went to enjoy a camping trip, for days or even weeks, in this pleasing wilderness, meanwhile gathering wild blackberries and mountain blue berries, which are reported to have been plentiful on this watershed, even down into the present park area. None are to be found now. In those early days there was an open grassy plot near South Falls that was used as a baseball field. Indicative of the relative number of people who frequently assembled there on week ends, a tale is related that on the occasion of a stirring ball game, when two hundred or more people had assembled, an enterprising farm boy took to the park a washtub full of cherries, set it upon a stump, and in a very short time had sold them all at ten cents per small bag and, incidentally enjoyed the ball game.

A story is told of a youthful fisherman who had cut from a vigorous shrub a hazelrod, attached his line and invaded the pool at the foot of South Falls where two well equipped sportsmen were casting, with no success. With his crude tackle, he unwittingly made a cast into the falling water some eight or ten feet above the pool, hooking and successfully landing a trout of size that was apparently making a try at ascending the fall.

It is noted that after the platting of Silver Falls City, there were more than fifty years of recreational usage of this area, before the first deed to the State for land for Silver Falls State Park was signed by George E. and Anna Parkhurst, on April 3, 1931. In that year seven hundred ten acres were purchased from eight different owners. Since then the area has been increased to seventeen hundred forty four acres, a figure that stands at the end of 1942.

ECONOMIC FEATURES:

Altho portions of the park area were homesteaded in the early eighties, and all of the land was alienated years before being acquired by the state, there has never been any permanent or sustained agricultural development, and there were but six resident occupants on the land when bought for park purposes, none of whom made a living from the soil. Lumbering and wood cutting were the sources of

revenue for most of those who lived within the area.

Excepting in the canyons, almost the entire park had been logged years ago and the land was being held for its regrowing forest values rather than for agricultural purposes. Even in the canyons, down to stream levels, there are visible here and there the old stumps and remnants of what had once been large, tall and straight grained cedar trees. These had probably been cut by early settlers for shake or shingle bolts or fence posts, some of which may have been floated down the stream, as was once done with railway ties.

Along the highway leading from Silverton the land is of farm quality and adjacent to the highway in the vicinity of the park, some of the logged off land has been cleared and developed for a constantly increasing strawberry culture. The berries grown at this moderate altitude on the good, red volcanic earth of the Silver Creek Hills, have a reputation for size and excelling quality, and are always in demand.

GEOLOGY:

No complete, detailed study of the geology of the area has been made. In the language of scientists, the area is not old, the formations that are visibly apparent being Upper Miocene or later. However, the much er Oligocene beds are exposed in the depths of the Silver Creek canyon, below the park area.

Supplementing this report, there is attached a paper on the geology of the park area, by Donald K. McKay, National Park Service geologist, which is of informative interest.

PHYSICAL FEATURES:

The dominant and most attractive physical features of the park are its canyons and their waterfalls. These are the focal points of the entire area and all other natural features are subordinate to them.

The terrain bordering the canyons has a diversified surface and, for the most part, carries a heavy overburden of residual earth matter that supports a

vigorous forest growth. The surface elevations vary from a low of seven hundred feet (1) in the extreme northwest corner of the park, to a high of seventeen hundred ten feet (2) at the top of the eminence near the park entrance, a relief of ten hundred ten feet. The entrance road as it leaves the highway is thirteen hundred seventy five feet, the top of Winter Falls is about fourteen hundred feet, the highway bridge just above North Falls is close to the fifteen hundred foot line and the top of South Falls is on the thirteen hundred foot contour, which is also the head of the South Silver Creek Canyon. From this point to the crest of Wildcat Ridge, at the source of Silver Creek, the ground rises to thirty two hundred feet, a relief of nineteen hundred feet in a plane distance of six and one half miles. The north side of this upper stream basin is a considerable ridge, up which the Silver Falls Timber Company's logging railroad climbed, to bring out the timber cut on the uppermost Silver Creek and Abiqua watersheds.

The upper end of the South Silver Creek Canyon, at South Falls, has a depth of two hundred feet, with the west side ridge rising a hundred or more feet higher. This canyon depth increases to approximately four hundred feet where it joins the North Silver Creek Canyon, a long mile down stream, and maintains this approximate depth to the park limits, a down stream distance of four miles.

The canyons are narrow and V shaped, indicating that they are of comparatively recent origin, as measured by geologic time, and the now greatly diminished and decreasing water flow will bring but little appreciable change in the depth, or heading distance, of the canyons for many years to come.

FOREST COVER:

Typical of all the western slope of the northern Cascade Range, the Silver Creek watershed was at one time heavily forested with a splendid stand of

(1) Attached Geological Report by Donald K. McKay
(2) Topographic Survey by Walter Inch, Park Engineer

evergreens, consisting of the dominant Douglas fir, Grand (White) fir, Western hemlock, Western red cedar and scattering Western yew. Specimens of all these may be seen within the bounds of the park.

Altho logging and subsequent fires have reduced the primeval park forest to a negligible quantity, the area does support a vigorous, piling-size second growth of Douglas fir, with intervals of heavy saplings and thickets of younger growth, that give every promise of indefinitely sustaining the supremacy of this superior tree over the entire park. A splendid exhibit of this second growth may be seen along the entrance road between the highway and the park center, where the old growth saw timber was cut fifty odd years ago. Widely on either side the offending old logs, snags and undergrowth have been removed and the debris cleared from the forest floor. Pleasing groups of hazel and vine maple, trimmed to right proportions, have been left here and there, with enough of old mossy logs and stumps to add an esthetic touch to the serenity of a scene that is livened by the bright forest flowers of spring time, which lend so much of charm to this clean, enticing bit of woodland.

A short way in from the park entrance, a rough road leads to the right which passes near to the western foot of the chief eminence of the park, where there is a remnant of old growth forest that embraces a picturesque, moss carpeted, flower and fern strewn glen. Here, in the shadowed moonlight, with its backdrop of ancient fires, the dryads, oreads and limoniads, are supposed to have foregathered with the nymphs of the glen to do pantomine honor to Terpischore in this lovely, natural amphitheatre, where, some day, there will be a man-made setting for outdoor dramas and theatricals for park audiences.

Down in the creek canyons there are some groups of old Douglas firs, with an admixture of Grand firs, a few hemlocks, occasional cedars and yews, some of the latter being of good size. Along the streams Broadleaf maples are common. In the alder groves these, too, have grown tall and slender, while the old

specimens have thick, often unsound trunks and broad crowns. This variety of maple also finds a foothold on the hillsides where there is nourishing moisture, and around any wet, springy place on the higher ground. Except for an occasional cottonwood, this is the largest deciduous tree within the park.

Red alders are present wherever there is moisture. Quaking aspens are to be seen occasionally in minor groups, now and again a chinquapin appears and Madronas are infrequently seen. The chinquapins bear an edible and palatible nut, similar to beech nuts in form, which are inclosed in burs, quite as prickly as chestnut burs. The infrequent Madronas are noticeable by their often crooked or leaning, reddish-brown trunks, red branches and shiny leaves, that set them apart from any other tree.

It is indeed fortunate that the old growth Douglas fir has been so widely cut and removed before the land was acquired for park purposes. The splendid new growth that succeeded it now covers much of the area and is some fifty years old, with intervals of younger trees that make an ideal forest for park purposes. The older second growth trees are tall, well formed and entering a new cycle in their life, which coincides with the beginning of the developed park's history, and this vigorous, well established new forest will build up a resistance to the ever increasing and intensifying human use that will be imposed upon it. The trees will keep pace with the inevitable park expansion and future generations of visitors will find solace in their presence and enjoy the sheltering blessedness of their existence for many years before they must succumb to the inevitable.

From mid-April to mid-May is when the vernal flowers and early woods greenery are at their best and the floral features of the park most attractive.

CANYONS AND WATERFALLS

In a measure, as people like the ocean, they have a fondness for falling waters and, great or small, they are everywhere given recognition, holding a degree of interest corresponding to their accessibility, height and water volume.

Silver Creek Falls State Park possesses two beautiful canyons, with a series of nine wonderful water falls which are, of course, the leading physical attractions of the park. Beginning with North Falls at the head of the North Silver Creek Canyon, there are five falls on this stream and one each on the small tributaries Winter Creek and Hullt Creek. On South Silver Creek there are two falls, South Falls marking the head of this creek canyon. The five minor falls below the junction of the two main branches have not been observed.

Just south of the highway crossing of North Silver Creek is an ample, rock surfaced parking area. Across the highway from it begins a well made trail that touches the top of North Falls and from there marches down this stream to its junction with South Silver Creek; thence up the latter stream to South Falls, ending at the park center an approximate trail distance of five miles. A wonderful, leisurely five hour walk, full of pleasing interest from start to finish.

At the head of North Falls, where the trail begins the descent to the canyon stream side, it is of good width and well protected as it clings to the side of the basalt cliffs, with intervals of easy, chasm bridging steps, down to a reverse turn that doubles back along the cliff to pass thru an open cavern that lies behind the fall. The cavern is semi-circular, two hundred feet from side to side, its central, frontal opening twenty five or thirty feet above the trail level, ten feet high at the back, with a maximum depth of approximately one hundred twenty five feet from the pour of the water fall to the back of this vaulted opening.

This cave-like opening (see McKey's supplemental paper) is the result of a stratum of tuffaceous sandstone occurring between the upper and lower strata of Stayton lava, with the soft tuff having disintegrated and worn away under the influence of the elements. The tuff is firm, but still soft enough for unthinking persons to scratch meeningless initials and other lettering here, as they do on the bridge rails, guard rails and signs. In the basalt ceiling may be

seen a number of holes of various diameters, the origin of which are explained in Mr. McKay's paper. A dry, well made trail crosses the top of the cavern slope, which lies at an angle of repose and upon which flowers and vegetation have found a foothold, and even hemlock and yew trees are growing beneath the overhanging rock.

At the lip of the falls a block of basalt rests in the stream bed and so obstructed the channel that the flow of water is almost turned on edge before it pours thru the narrowed gap to plunge over the precipice and crash resoundingly upon the fallen lava blocks at its base, one hundred thirty six feet below. This, and all other water fall height figures, were determined by F. D. Thompson, State Parks Engineer, on April 14, 1943. This waterfall, because of its nearness to the highway and readily accessible location, is one of the two best known of the entire series and has always attracted the attention its height and beauty merit.

At the foot of this fall the North Silver Creek Canyon begins. In following down its course the visitor is brot in close contact with the result of the mighty forces that in a distant past had eroded away this deep channel thru the massive lava beds, aided by frosts and many, many multiples of the present water flow, in the thousands upon thousands of years that had relentlessly and unremittingly done their work, before the recent round of centuries had clothed the steep canyon sides and stream banks with the various trees, shrubs and beautiful flowers that are seen and admired today.

By mid-April the cool moist depths of the canyon present a beautiful and pleasing display of spring wild flowers, growing beneath the tall slender alders and leafy maples. In the flower display, the most conspicuous were the abundant, white Wood lillies (Trilliums), many of which attain to an unusual size, on tall stems when growing in the more fertile creek bottoms, and in lesser numbers and smaller sizes, they also decorate the wooded slopes on every hand. Wood violets of deep yellow are clustered amidst the many daintily flowered plants

of the esculent Wood sorrel that carpets the moist, rich soil with a vivid green. Mingled with these is the delicate blue of the Spring queens, the drooping Bleeding hearts, that delighted children call Dutchman's "britches", their blossoms vieing with the Fringe cups in lifting their heads above the more lowly plants and everywhere, even to the hillsides, there is a sprinkling of the exquisite Spring beauty, whose first blooms so excite the country childhood.

The brilliant, Red flowering currant frequently splashes the sombre forest shade, or highlights the stream borders, and the many pretty, magenta colored, bells of the omnipresent Salmon berry nod every where along the stream-side trails. A bed of Fawn lillies, or Adder's tongue, thickly covered a low hillside shelf and the "candle-lights" of the Skunk cabbage which, in fancy, were planted in the moonlight by the forest elves to adorn the beds of rich, black ooze where they grow so spritely. There are many other later blooming plants and shrubs which were awaiting their seasonal call to add to the colorful arrays that beautify these canyon walks and delight visitors. A list of the trees, shrubs and plants so far identified in the park area follow:

Douglas fir-Pseudotsuga taxifolia
Western hemlock-Tsuaga heterophylla
Grand (White) fir-Abies grandis
Western red cedar-Thuja plicata
Western yew-Taxus brevifolia

Black cottonwood-Populus trichocarpa
Quaking aspen-Populus tremuloides
Western Chinquapin-Castanopsis chrysolphlla
Madrona-Arbutus menziesii
Western dogwood-Cornus nutallii
Garry oak-Quercus garryana
Broadleaf maple-Acer macrophyllum
Vine maple-Acer circinatum
Dwarf maple-Acer glabrum
Red alder-Alnus oregona
Oregon crabapple-Pyrus rivularis
Cascara segrada (Chittim)-Rhamnus pushiana
Red elderberry-Sambucus callicarpa
Blue elderberry-Sambucus glauca

American white hellebore-Veratrum vidide
Skunk cabbage-Lysichiton kamtschatciense
Fawn lily (cream)-Erythronium giganteum
Angel slipper-Calypso bulbosa
Spring beauty-Dentaria tenella
Red flowering currant-Ribes sanguineum
Hardhack-Spirea douglasii
Syringa (Mock orange)-Philadelphus lewisii
Salmon berry-Rubus spectabilis
Wild blackberry-Rubus vitifolius
Wild cherry-Prunus emarginata
Wood sorrel-Oxalis oregana
Wood violet (yellow)
Salal-Gaultheria shallon
Red huckleberry-Vaccinium parvifolium
Giant hedge nettle-Stachys ciliata
Baby monkey flower-Mimulus guttatus
Snow berry-Symphoricarpos mollis
Spring queen-Synthris rotundifolia

Descending North Silver Creek, the second one is Twin Falls, nine-tenths of a mile from North Falls at the head of the canyon. It has a total drop of thirty one feet, starting narrowly over the rim, close to the right bank, drops a few feet, gathers itself together in a small basin, then spreads thinly over a dome-shaped rock base, resting in a beautiful pool of deep water that vividly reflects its rock walled surroundings. When the stream is full, it is an unusual and pleasing type of waterfall in a delightful setting.

Down stream three tenths of a mile further is a well built rustic bridge crossing the main stream to the Winter Creek trail, which leads to the foot of the fall of this name, a long quarter mile up the creek, then zigzags to the top of the cliff at highway level, where there is a small parking space between the top of the fall and the roadway. The height of this fall is one hundred thirty four feet and it makes an almost clean pour to the pool. Unfortunately, the flow of water is meager, except in the wet season. However, the setting compensates for the minor flow and, in the springtime, particularly, the short walk of a mile or so over a good trail from the head of Winter Falls, into the canyon and up to North Falls is full of interest and well worth while then, or at any other time.

From Twin Falls it is two tenths of a mile down stream to Middle North

Falls, which makes a glorious drop of one hundred six feet. When the stream is in a low stage, the water pours over the right side of the rim in narrowed volume for about half its descent, then splashes upon a hard protruding rock slope that rises from its base, and brokenly cascades into a long and deep rock-walled pool. A protective cable railing, its heavy pipe supports set and cemented into holes drilled deep in the hard basalt, permits a safe approach to the very edge of the falls and pool, where all its inviting features may be viewed with comfortable security.

In earlier days, when railroad ties were more of a factor in the lumbering industry, the Hostettler and Killian Mill Co. were sawing ties in this area, and when the streams were in flood floated them to Silverton, or perhaps down Pudding River to the railroad. On March 20, 1907, Levi Hostettler, a firm member, when loosening a tie jam at the top of the fall, was caught by the timbers and killed when carried over to the pool below.

Down stream another two tenths of a mile is Drake's Falls. This is a steep cascade rather than a fall, with a drop of approximately twenty seven feet, into a short, quiet pool from which the stream moves swiftly on its way two tenths of a mile, to a well built pole bridge that crosses Hullt Creek, just before it enters the main stream at the verge of Lower North Falls. This fall has a modest drop of thirty feet that sluices down a steep, rock incline, roughly sixty feet wide at top and bottom, reaching into a deep, quiet pool ninety feet wide and a hundred or more feet long, ending at an acute left turn of the stream which is skirted by the trail, lifted well above the foot of the pool where, from a comfortable resting bench, there is opened up a fine view of one of the most picturesque reflecting water scenes anywhere along this trail.

Some two hundred fifty feet from the bridge, up the minor flow of Hullt Creek, is the base of Double Falls with a combined height of one hundred seventy eight feet. From the lip of the upper fall there is an estimated drop of thirty five

feet into a small, rock bound pool, then a straight drop to the heavy blocks of basalt that have broken from the cliffs high above. This short narrow canyon has steep sides, forested where not too steep to accumulate supporting soil, with intervals of rock cliffs, or open slopes thinly earthed over, where early flowers respond to the warmth of spring.

Little more than a quarter mile down stream the trail crosses to the left bank over another rustic bridge, then parallels the course of the creek for nine tenths of a mile to the lowest park bridge, a few hundred feet above the junction of the north and south branches of the stream. From here the trail ascends South Silver Creek along its right bank, four tenths of a mile to Lower South Falls. This is a magnificent fall of ninety three feet, that precipitates from a level rim in a curtain of water that is fully sixty feet wide at the top, but slightly broken about half way in its descent to the beautiful pool at its base. This ample pool is surrounded with groups of scattered alders and maples, that make it a very pleasant and inviting spot from which to view the fall. The ascending trail continues up the right bank more than half the height of the fall, passes behind it along a shelved trail beneath the overhanging basalt rim, then begins a picturesque climb up one hundred eighty seven, easy, well constructed stone and wood steps that reach to the top of the ascent. A short distance beyond, the trail again touches the left bank of the stream. On its opposite side, is an interval of open, stream level woods, a table or two and a stove have been placed for the convenience of those who visit this locality. From here a long half mile reaches the foot of South Falls and the head of the South Silver Creek canyon, that in eons of time had slowly inched its way up stream thru the hard basalt to its present position and depth.

When standing beside the pool at its foot, there is no hesitancy in conceding that South Falls is the premier fall of the park series. The fall is higher than any other, with its waters pouring over the sharply lipped edge of the

hard lava floor as from a pitcher, and dropping cleanly one hundred seventy seven feet to the pool below, its semi-circular rock sides green with lichens, grasses and other water loving plants, that cling to the surface of the spray-wet walls, adding a touch of clor to an already bright picture. The pool itself is over fifty feet in diameter, of good depth, and there is ample space for freedom of movement amidst the scattering alders and maples to be found around a good part of its perimeter.

From the bridge over the stream, just below the pool, there is a choice of ways to the top of the fall. The right hand trail climbs easily to about a third of its height then, traversing a rather narrow shelf, it passes behind the pouring water and connects with the main trail that rises from the canyon picnic area. While those who walk the full length of the canyon trail must, perforce, pass behind two of the falls, there are many who never walk this trail circuit, but do make the easy descent from the park center for the novelty of passing behind the falling water of South Falls, where nature had provided another convenient way for this unusual experience.

All the water falls of this park, individually and collectively, have their charm and appeal, yet unquestionably South Falls has first place in the hearts and minds of the visiting public. For many pre-park years this fall was the center of attraction in the Silver Creek area, and still seems to be the most favored of the whole park series, the time honored traditions of this locale still being dominant, sustained by the fact that most of the park improvements are centralized where the people were wont to congregate so many years before.

The second tragedy occurring at a park waterfall was the death of Mrs. Myrtle P. Lynch of Salem who, thru some inadvertence, fell in the stream near the lip of South Falls and was swept over the edge on June 6, 1939.

PARK DEVELOPMENT

The development of Silver Creek Falls State Park, began in a modest

way June 1, 1931, with Charles Graves as caretaker. His quarters were a small log cabin situated near South Falls.

The first group of workmen engaged were some twenty members of the Emergency Conservation Work organization who began in the week ending December 15, 1934. This force was employed building trails and cleaning up the park area under the direction of the caretaker, working periodically until the First Conservation Corps Camp, State Park No. 9, was established in the Fifth Period, beginning April, 1935. This camp operated continuously, at almost full company strength of two hundred men, for fourteen six-month periods, or seven full years, terminating at the end of the Eighteenth Period, April, 1942. It was a youths camp from its beginning until the middle of the eleventh period, then changed to a veterans camp on July 1, 1938, which continued until the end of the Eighteenth Period.

All state park CCC Camps were subject to the approval of the Fourth Regional, National Park Service office in San Francisco which, for a time, maintained a branch office in Portland. In these offices an efficient and cooperative corps of technicians and inspectors was maintained to pass upon the selection of all proposed camp locations, all surface improvement working plans, and approve or correct all construction designs, as submitted by the State Parks Department. The camp superintendent, foremen and technicians, were selectees of the State Parks Superintendent, from state citizens, subject to the confirmation of a specified representative in Congress before appointments were made.

In the course of the seven years of operation there was a vast amount of physical labor performed, while several hundred youths were being trained to work and become better citizens thru the discipline and guidance the camp life afforded. No doubt, that today many of them are in the armed forces, better able to serve because of their CCC Camp training; a training that should have taken a more military form during their camp careers.

The visible, widespread ground improvements, such as roads, trails,

parking areas, rock walls, fire breaks and the scope of the forest clean up, are readily apparent. The extensive building construction is further evidence of the measure and character of this element of the park development that has been so creditably achieved.

The construction work included log and pole foot bridges, trail stairs, guard rails, power and telephone lines, fences and similar jobs. There are two combination buildings with triple stove units, two open structures sheltering triple stove units, a caretakers dwelling, five equipment shelters and garages. An equipped lodge, water system, an up-to-date sewage disposal system and many other unobtrusive or invisible improvements, and construction items which have made Silver Creek Falls State Park the most completely modern, public outing park in the state.

An entirely new feature in Oregon State Park operation, is a concession building. An innovation that is intended to supply an insistent public demand for the service such a place renders. Unfortunately, the inhibitions of the war effort delayed the installation of essential equipment so long that it was not deemed advisable to open it to the public until the war was ended.

The building is sixty five feet wide by one hundred twelve feet long and one and ahalf stories high, built of stone and logs, with two huge fireplaces, and is equipped with the most modern of electrical culinary appliances. Its crowning equipment feature is the handsome dining room furniture made from the beautiful California laurel wood (Umbellularia californica) commonly, and erroneously, called Oregon myrtle. The logs from which this furniture was made came from a grove of large trees growing beside the Chetco River in Curry County, Oregon. They were sawed in a small mountain mill, opersting in the vicinity. The lumber was transported to the Oregon State College, where it was scientifically kiln dried by the college forestry department. It was processed for seventy six consecutive days, during which time twelve thousand pounds of water was evaporated

from approximately eight thousand board feet of lumber, before it was pronounced thoroly seasoned. It was then reshipped to Portland to be made into the practical and artistic, decorative furniture, that was designed and manufactured by the Oregon Arts Project personnel, under the direction of the Works Progress Administration. Done in a beautiful simplicity of design this art furniture is in complete harmony with the interior of the building and gives a finishing touch of elegance to the rooms it graces.

This fine, widely porched building conspicuously faces the main park road from the foreground of a grove of young Douglas firs. A stone garage and utility building is close by, its construction patterned to harmonize with the main building and its surroundings. Between these buildings is a courtyard laid with Stayton flagstones and inclosed by a picket fence. In their forest setting the buildings are delightfully attractive with a pleasing, homey air of hospitality, that is intensified by the ever comforting odor of wood smoke, curling lazily from the great chimneys, inviting you to face the cheerful blazes on their open hearths.

Up to the present time the most used of the park facilities are the three hundred odd benched tables and their quota of outdoor stoves. Besides these are the two sets of stoves under shelter and the community kitchen, its tables, large fireplace, and three connecting cooking stoves. There are also two kitchen sinks with hot and cold water installations and another nearby building provides sheltered tables in a weather emergency.

The caretaker's artistic log house is situated on a rising slope that over looks the park road and the contiguous park area. This house is of neat exterior architecture and the interior is well arranged, has all conveniences and and ample fireplace that gives cheer to the comfortable living room.

The main parking area, situated between the highway and Silver Creek, and bisected by the county road, is designed to accommodate thirteen hundred and fifty cars. The space is distinctively patterned, well rocked, surfaced with

crushed stone, curbed with a light colored, tuffaceous material from a nearby quarry, and landscaped with indegenous shrubs and plants in keeping with its environment. Overlooking the parking area, is an uncompleted assembly building, designed as a meeting place and clearing house for organized groups. This will be finished and other new features added to make this park even more attractive than it is at present, whenever the exigencies of the present have passed, and circumstances will permit.

Fortunate indeed for the populace, was the choice of this Silver Creek location for a state park, so conveniently situated near one of the most prosperous and densely populated sections of the state. The scenic merit of its canyons and waterfalls in a setting of forest and floral beauty is outstanding, and these features are grouped in a comparatively small, readily accessible area which possesses a wealth of recreational tradition that has been handed down from an early but still living past.

These were the factors that induced S. H. Boardman, State Parks Superintendent, to select this area for a park site. The selection was promptly approved by the State Highway Commission, and its development was fully supported by the National Park Service which, thru its affiliated agency, the Civilian Conservation Corps, lent every possible aid, technically and financially, to further the development of the park, with a minimum of cost to the state, whose greatest and most appreciated contribution to its betterment was the surfacing of the highway that passes its entrance.

If attendance is a criterion by which to measure the value of a state park to the public, this site selection and the cost of its improvements, have been fully justified by the visitations of thousands of recreationists since facilities for their convenience and comfort were installed. In 1940 alone, over 200,000 visitors availed themselves of the conveniences and services, of the park providing an attendance record of value for future comparison.

The selection of this site of traditional and cherished memories, to be the most richly developed of the wide flung state park system, is a matter of great pride to the older citizens of Salem and surrounding communities of Marion County, in reflecting and emphasizing the traditions and recalling the pleasures of their yesteryears. These will be perpetuated and enriched as they are carried on into the distant future by many other thousands of enthusiastic citizens and visitors who will enjoy the same beautiful scenes in the same spirit, but under far more favorable circumstances and much greater personal comfort.

For this park there is predicted an ever increasing attendance, in a ratio that will be comparable to the inevitable growth of population in this salubrious, fertile section of the fair Willamette Valley it so admirably serves.

W. A. Langille

W. A. Langille
State Park Historian

WAL:ao
August 18, 1943

RECOMMENDATIONS

The following projects left by the CCC's should be completed as soon as labor and funds become available: The Community building; parking area; highway line change near the North Falls; the construction of a new bridge (wagon) across south Silver Creek a short distance upstream from the South Falls (these bridge plans have been drawn and are ready for construction); the filling in of recreational areas adjacent to the South Falls for landscaping purposes. These areas were left unfinished.

The following new projects should be considered at an early date: A 2-story building to supplement the Concession Building, the lower floor to be used for park picnic goods such as ice cream, hot dogs, etc. The sale of these goods should never clutter the Concession Building. This building should be left entirely for diners. The upper floor of the proposed new building is needed for the housing of the Concession Building help.

A swimming pool of large dimensions is a very worthy project for the park. It would give a great deal of pleasure to many patrons and would be self-sustaining.

A soft ball diamond and places for quoits and other games should be provided.

The completion of the unfinished picnic area to the east of the care-taker's house should be of first consideration.

New tables should be added to the present picnic units. Present facilities are sorely taxed in normal times on weekends and holidays.

A complete pumper fire engine should be secured for the park. Tractor or jeep with accompanying disc harrow should be secured for the spring cultivation of the fire guards which surround the park.

A trail should be constructed down the creek from the junction of North

and South Silver Creeks. A trail out of the canyon should supplement the creek trail, this trail terminating at a road point so that the hiker may not have to retrace his steps.

An iron railing for safety measures should be built at the Lower South Falls where the trail courses beneath the falls. A rock wall would be more in keeping with the natural terrain.

The following described units should be obtained in the rounding out of the park: the $S\frac{1}{2}SW\frac{1}{4}$ of Section 7, T. 8 S., R 2 E., this eighty taking in the Upper North Falls and should be acquired under all circumstances; the $S\frac{1}{2}NW\frac{1}{4}$ Section 13, T. 8 S., R. 1 E. This tract has been used for a riding academy and the horses have been used in the park creating a good deal of damage due to the lack of horse trails. A lot of unsightly buildings are spread over the terrain and in sight of the highway. The $NE\frac{1}{4}NE\frac{1}{4}$ Section 15, T. 8 S., R. 1 E. This forty projects down over the hillside towards the South Falls. If this timber is ever cut off, it will break up the timber view and general picturesque setting of the South Falls. Every visitor to the park visits the South Falls and a timber gash in this setting will be detrimental to all. The east half of the $SE\frac{1}{4}$, Section 10, T. 8 S., R. 1 E. should also be acquired. This eighty is needed to take in the complete canyon, present ownership only taking half way up the slope.

A woodland amphitheater to be located in a grove of natural old fir in the $SE\frac{1}{4}SW\frac{1}{4}$ of Section 11, T. 8 S., R. 1 E. is a most desirable project for the park. Plans have already been made and work may be started as soon as funds are available. It is a woodland setting unsurpassed in the state. It is nearby the South Falls recreational area, close by the proposed chateau. This theater should be constructed by some individual as a memorial in the perpetuation of his name.

Some time in the future the adjoining RDP containing some 4200 acres will be united with the state park. Competent National judges have stated that the above areas compose one of the finest state parks in the Union. A one or two day visit is

not sufficient to cover its recreational features. A week's visit is more in keeping with its qualifications. A Chateau should be provided for overnight guests; a scenic, picturesque site for this Chateau is located in the NW¼SE¼ of Section 11, T. 8 S., R. 1 E. A road has been completed two thirds of the way to the overlook, said road taking off from the South Falls road. This proposal should have the fullest consideration in tomorrow's development of the park.

A possible, as yet undeveloped, project should be given study. There is a possibility that caves underlie certain portions of the park. Between the South Falls and the Concession House a hard stamp on the ground will produce hollow rumblings. The writer noticed similar conditions in the SE¼NW¼ of Section 11, T. 8 S., R. 1 E. This is up on the top out of the canyon. A number of openings are found at the Winter Falls. If a fire is started in one opening, presently smoke will come out of another opening. Smaller such openings are seen at the South Falls. There is little doubt that caves of some kind underlay certain portions of the park. Only ground drilling will tell their type. It seems worth a try, especially if CCC labor again becomes available.

S. H. Boardman
State Parks Superintendent

SHB:ao
March 30, 1944

REPORT
ON
SILVER CREEK FALLS STATE PARK
and
ADJACENT RECREATIONAL AREA
near
SILVERTON, OREGON
by
D. K. McKay

INTRODUCTION

Silver Creek Falls State Park and adjacent Public Recreational tract comprise in all some 34 sections of land located in Marion County, Oregon. The area lies approximately 25 miles east and slightly south of Salem and 16 miles southeast of Silverton. Secondary State Highway 214 separates the park from the much larger Public Recreational tract which lies southeast of it.

Field work of the reconnaissance type was done during the first 3 weeks of June, 1937, in a period of almost continual rainfall. This and necessary office work (Minutes of The Annual Meeting of Geologists of the Service) interfered with the investigation in the field to some extent. In the time available not all details concerning the geology of the area were recorded, though the important features were ascertained. Hence, this should be regarded as a preliminary rather than final report on the area.

It should be noted that nothing has been published in geological literature regarding the Silver Creek Falls district, though a report, "Structure of the North Santiam River Section of the Cascade Mountains in Oregon", by T. P. Thayer, Jour. Geol., Vol. XLIV, No. 6, August - September, 1936, pertaining to a region further south has proved helpful.

PHYSICAL CONDITIONS:

The area contains a thick mantle of residual soil which supports a dense forest growth. Douglas Fir, hemlock, cedar and maples appear to be most abundant. Rock outcrops are confined largely to road cuts and stream channels. Except for

the vegetative cover, the topography of the area reminds one of portions of the Colorado plateau where gently dipping beds have been subject to considerable erosion and the streams are entrenching themselves in deep gorges.

Elevations in the area decrease from 3200 feet in the southeast to 700 feet in the northwest, a total relief of approximately 2500 feet. The drainage is north and west to Silver Creek which is a consequent stream flowing northwestward in the general direction of the dip. The valley of this stream in the northwest corner of the area is about 400 feet deep. It is narrow and V shaped. These characteristics together with the occurrence of numerous falls along the tributaries of Silver Creek, within the park, testify to the youthful stage of erosion of the valleys.

The falls are spectacular and constitute one of the chief attractions of the area. There are nine in all within the present boundaries of the park. They are enumerated below together with available data regarding height and elevation.

STREAM	FALLS	HEIGHT OF FALLS	ELEVATION ON TOP OF FALLS
North Silver Creek	North Falls	146'	1445'
" " "	Twin Falls	25'	
" " "	Middle North Falls	116'	1166'
" " "	Drake Falls	27'	
" " "	Lower North Falls		1010'
Hullt Creek	Double Falls	189'	
Winter Creek	Winter Falls	140'	1400' +-
South Silver Creek	South Falls	184'	1303'
" " "	Lower South Falls	100'	1073'

These falls will be described further under "Local Geologic Conditions". It should be mentioned that in addition to those listed above, there are several other falls along Silver Creek, ranging from 5 to 20 feet in height, which lie within the acreage to be added to the park on the northwest side.

GEOLOGIC CONDITIONS

(A) REGIONAL

As indicated in Fig. 1, the area under discussion is entirely within the

western Cascade Mountains, near the western edge of the range.

The Western Cascades are composed of a thick mass of lava flows and associated tuffs and agglomerates - largely Miocene in age - which rest upon an irregular floor of older rocks that are in part Oligocene.

In certain sections of the western Cascades middle Miocene lavas are intruded by diorite. The intrusions probably occurred simultaneously with orogenetic movement in the Cascades, near the end of the Miocene, which produced the broad gentle folds indicated in Fig. 1.

The western Cascades were raised in early or middle Pliocene by movement along the Cascade fault. It is believed that the region was elevated as a rigid block and possibly tilted towards the west. The present elevation of the western Cascades are thought to be largely due to this uplift.

The rocks of the region have been deeply weathered and covered with a thick mantle of residual soil.

(B). LOCAL

The positions of the axis of the Mehama anticline with respect to the area under consideration is shown in Fig. 1. This fold is a very broad and open one with closure in the lavas of about 1000 feet. It apparently plunges toward the northeast.

Dips are difficult to determine in Silver Creek State Park and the adjacent Recreational land, as it is almost impossible to trace contacts between flows or beds of tuff due to the heavy cover of soil and vegetation. However some dips were observed and it is evident that the lava and associated rocks comprising the area, dip from nearly horizontal to maximum of 2 or 3 degrees westward.

It was desirable to work from the irregular floor upon which the lavas were extruded upwards through the section. The nearest exposure of this floor was found in Silver Creek near the North line of Sec. 4, T. 8 S., R. 1 E., about one-half mile downstream below the acreage that is to be added to the northwest corner

of the park. There a basalt flow with slight northwest dip was found resting upon a tuffaceous sandstone carrying Oligocene pelecypods and gastropods. These beds also showed a flat dip apparently to the south though its direction could not be determined with certainty. Fossils were collected from this locality and submitted to Dr. E. L. Packard, Dean of Oregon State College, who stated that while they are not specifically determinable they include Spisula near albarea natica. Dr. Packard feels sure that the marine fauna represented is close to that of the Eugene Oligocene.

Walking downstream from the contact towards Silverton a considerable area of these Oligocene beds are traversed, then the basaltic lava is once more encountered in the creek bed, before the Oligocene sandstone again appears near Silverton. The occurrence of lava between the two Oligocene areas appears to be due entirely to the unevenness of the floor upon which the lava was extruded. In the north Santiam region Thayer found more striking examples of the irregularity of the Oligocene floor. Personal communication.

The series of lava flows immediately overlying the Oligocene are exposed in stream channels and road cuts in the park and Recreational tract. The series appears to be here about 400 feet thick. This estimate is somewhat speculative for the following reasons: First, the flows rest upon an irregular floor; and second, the dip of the lavas cannot be determined with precision since no individual flow can be followed across the area due to the thick mantle of soil and vegetation.

The lavas of this series are dark gray in color and range in composition from andesite to basalt. However most of the samples examined contained olivine and the series is therefore regarded as predominantly basaltic.

Only one bed of tuff was found within the series. It carries no fossils and lies beneath the uppermost flow, being well exposed to North Falls.

Lying conformably upon the basalt flows just described are tuffs and

conglomerates totalling approximately 1500 feet in thickness. They form a considerable part of the Recreational area and are exposed along State Highway 214 south and west of the park.

The formations briefly described above correspond generally in character, succession and thickness with those Thayer found along the North Santiam river. There Middle Oligocene beds are overlain unconformably by 200 feet of lava beds called the Stayton lavas, which are believed to be equivalent to the Columbia River basalts of middle or upper Miocene age. The Stayton lavas are in turn overlain by some 1500 feet of tuffs and conglomerates to which the name Fern Ridge Tuffs has been given and, since they overlie the Stayton lavas conformably, they are considered Miocene in age.

There are so many points of similarity between the geologic section of the Park and Recreational tract and the section Thayer describes along the North Santiam River, that the former may be safely correlated with the latter. Accordingly, the names of the formations of the Silver Creek area, their ages and thicknesses, may be summarized as follows:

Formation	Age	Thickness
Fern Ridge Tuffs	Upper Miocene	1500'
Stayton Lavas	Middle or upper Miocene	400'
	Unconformity	
Eugene Oligocene	Middle Oligocene	?

Although the rocks of the park were examined in considerable detail and various E. C. W. projects inspected, there was not sufficient opportunity at the time of this visit to complete the investigation of the Recreational tract. There accumulations of gravel and boulders were found which appear to be due to local glaciation and these deposits with other details pertaining to the geology of this tract must be carefully studied before a final report on the area can be submitted.

The difference in topography from the rolling land formed by the thick

formation of soft Fern Ridge tuffs to the deep canyons developed in the underlying Stayton lavas is readily observed. The falls lie entirely within this series of lava flows, the most spectacular being North and South falls both of which occur in the upper flow of this formation. Winter Falls is another high falls and others descend from lower flows of the series.

A brief description of the falls follows:

At the North Falls the 25 foot tuffaceous bed already referred to is exposed below the upper flow. The water drops from a protruding lip of baselt overlying the tuff, 146 feet into the pool below. In the tuffaceous bed there is a cave of striking proportions (Fig. 2). The reason for the development of this cave is easy to explain. The water curves inward as it falls and sucks air behind it which pulls sprays of water on the tuff cliff behind the falls, softening this rock so that particles break off. This process, of course, occurs when the underlying rock is less resistant to erosion than the rock at the top of the falls, but when hard rock is underlain by soft, as in this case, a relatively large cave develops. The excavation of this cavern is hastened during winter months by freezing which causes the water in the tuff to expand, producing fractures, and thawing causes pieces of tuff to drop away from the surface, thus enlarging the cave.

At South Falls (Fig. 3) the water also descends over a lip of lava which protrudes near the center of the upper flow, dropping 184 feet into a deep pool below. Here also the rock is softer beneath the upper flow, being scoriaceous in character and also it was weathered before being covered by the higher flow. Evidence of this former erosion surface may be seen on the contact of the upper flow with the lower, along which a cross section of a stream channel is exposed behind the falls. This depression probably contained water when invaded by the lava of the upper flow, as there are tubes and tunnels in the basalt resting on this channel which appear to have been produced by steam. The wall behind the

falls is gently concave and not greatly undermined.

Winter Falls with its drop of 140 feet also occurs in the upper part of the basalt series. The other falls of the area are developed in the lower flows which show, in places, minor variations in character - the rock being vesicular, massive, or columnarily jointed. Changes from much jointed basalt to the massive variety may sometimes be seen in the same flow, where the rate of cooling of the molten lava was more rapid at the top than at the bottom of the flow. The falls are, of course, very slowly receding upstream as the creek lengthens its headwaters. Although the falls appear large and spectacular at close range they are small for the large topographic features around them and it is likely that the streams of the area were once considerably larger than they are at present.

HISTORICAL GEOLOGY

Reference to geologic events which produced the present landscape has already been made under both regional and local geology. These events are summarized briefly below in order of their occurrence.

1. In middle or upper Miocene time when the Columbia River basalts were being formed, flows of basaltic lava spread over the irregular floor of Oligocene sandstone in the Silver Creek Park and Recreational Area.

2. These flows followed one another until they totalled about 400 feet in thickness in this area. Enough time elapsed, however, between the uppermost flow and the one immediately below it for partial erosion of the latter and deposition of tuff in places on its surface. The basaltic formation is called the Stayton lavas.

3. Following the invasion of the lavas volcanic ash and associated material were deposited conformably over the basalts until these tuffaceous beds attained a thickness of about 1500 ft. This formation is also Miocene in age and is called the Fern Ridge Tuffs. It is overlain by lava flows.

4. Near the close of the Miocene, orogenetic movement occurred which

threw the western Cascades into a series of anticlines and synclines trending northeast-southwest. Simultaneously there were intrusions of diorite in an area to the south (North Santiam River). The Park and Recreational tract lie on the gentle west dip of the Mehama anticline.

5. In Pliocene time the region west of the Cascade fault was raised as a more or less rigid block and tilted toward the west. Much of the elevation of this area is due to that uplift.

6. Erosion has since dissected the region to its present topography and a thick mantle of residual soil covers most of the rock of the area.

RECOMMENDATIONS

The trails passing behind the various falls are wet, slick, and somewhat narrow. It is possible that a visitor might slip off the ledge. Guard rails should be erected to prevent such an occurrence.

Any additional trails constructed in the Park or Recreational tract should have an 18 inch tread so as to preserve the area as far as possible in its natural state.

A tunnel seems necessary near lower South Falls to eliminate a high and unsightly series of steps. If this should be dug, care must be taken to put it as far as possible from the outer surface of the rocks which are much jointed and weathered in this locality.

The model of the area being constructed by the resident Landscape Architect should be painted various shades of green to indicate various types of vegetation. Basalt outcrops should be shown in dark gray and tuffaceous beds in buff. A collection should be made of the rocks and fossils of the area which should be properly identified and labeled for exhibit with the model.

Respectfully submitted

Donald E. McKay