THE
UMPQUA LIGHTHOUSE STATE PARK

A
Sand Dune Exquisite

LOCATION:

The Umpqua Lighthouse State Park is a magnificent sand dune area of unusual beauty and impressiveness, facing the wide, wide Pacific Ocean, across which we look so wonderingly in these troublesome days of war. For the most part, the park lies between the Coast Highway and the ocean, extending unbrokenly from the Lighthouse property to the Douglas-Coos County line, a distance of over four miles, with its north end six miles south of Reedsport.

The area includes all or portions of Sections 12, 13, 14, 23, 24, 25, 26, 35 and 36, in Township 22 South of Range 13 West, W.M., in Douglas County, containing 2,636 acres, of which 1,244 acres were a gift from Douglas County and 1,392 acres were purchased. A portion of Section 13 aggregating 110 acres, was originally part of the Umpqua Lighthouse Reservation, which was acquired from the United States. Except for the lighthouse and its attendant living quarters the entire area was, and is now, uninhabited and there is no evidence of earlier, permanent occupancy.

GEOLOGY:

Geologists describe the underlying rock formation of the park as being Tyee Sandstone of the Tertiary or Post-Tertiary period. The surface is entirely of old or new sand dune formation, and no rock outcroppings were noted anywhere within its bounds.

TOPOGRAPHY:

The Coast Highway enters the park approximately two miles south of Winchester Bay, in an area of cutover land, opposite the north end of Clear Lake, at an elevation of about four hundred feet, then descends two hundred feet to

follow the west shore of the lake a half mile or so where it has indented the park area. The highway leaves the park a half mile beyond to follow the course of Clear Creek southward. The lake has a surface elevation of 220 feet and is the source of Reedsport's municipal water supply. Trespassing is prohibited. Logging is now active on its easterly shores.

To the west of the lake, ancient dunes rise to a maximum elevation of five hundred forty-five feet (U.S.G.S.), with the general elevation of the high ground somewhat less for most of the park length, lowest at the south end, where it borders on a section of the Siuslaw National Forest. This high land which makes up the east half of the park is an old dune area that is now forested. The west half borders the ocean and is, geologically speaking, an entirely new dune area of ever shifting sand that extends from the shore to the general elevation of the dominating ridge.

Near the north end of the park, and close to the lighthouse, is Lake Marie. This small lake is a gem in its own right, a scant two-tenths of a mile wide and less than a half mile long, of the irregular shape that characterizes all of the lakes that have been formed in the ancient dune depressions. Its brushy, forested sides are rather steep, but it has a good approach at the outlet end, where the lighthouse road crosses, making this charming bit of quiet, secluded water readily accessible for bathing or boating, in a most unique and picturesque setting, where tall, luxuriant rhododendron shrubs abound and blossom profusely in season. The small stream that flows from it discharges into a narrow, shore line pond near the south bank of the Umpqua River, a long half mile beyond the road, and out of the park area.

HISTORY:

Of the park area itself there is little of historical interest, other than the fact that the fronting beach was used as a mail route and for horseback

travel to and from the Coos Bay country, in the early fifties and up to 1868. However deficient the park may be in historic incidents, the area at the mouth of the Umpqua, with its surroundings as far as the head of tidewater at Scottsburg, and even to the upper reaches of the river, are rich in pioneering lore that begins in 1828, with legendary accounts that go back to the eighteenth century or even earlier.

Permanent settlement began early in 1850 when the schooner Samuel Roberts sailed into the river and Umpqua City was established on its north bank. On October 1, 1850, the Bostonian was wrecked on entering and the salvaged goods were moved upstream and the present town of Gardiner was started and named after the wrecked vessel's owner. The brig Kate Heath, chartered by the owners of the Samuel Roberts, left San Francisco on September 26, 1850, with a hundred persons aboard and anchored in the river a day or two after the Bostonian was wrecked. She was later loaded with piling and spars and took back to San Francisco the first cargo of any kind to leave the Umpqua River. Scottsburg, once the metropolis of Southern Oregon, was founded by Levi Scott, who came down the river in 1850.

In Scott's History of the Oregon Country, we read that early citizens of Scottsburg "relate that they have known times when pack trains numbering in the aggregate a thousand animals have been waiting for vessels to arrive to give them loads for the interior."

In the brief, but thriving, early days of Umpqua City there were docks, stores, a post office, a military post, custom house, a lighthouse and, near the beach, a resort hotel, where the opulent of the entire Umpqua Valley came to enjoy its hospitality and the early pleasures of the seashore.

"The original Umpqua Lighthouse was placed in commission on October 10, 1857, on the south side of the entrance to the Umpqua River, a short distance away from the bluff and on the beach, which was of shifting sand. On February 8, 1861, during a heavy freshet in the river, the base of the tower was undermined and the structure fell.

"The present lighthouse was completed and placed in operation on December 31, 1894, the only change since then was that the illuminant of the light was changed from incandescent oil vapor to electric and increase in the candle power".[1]

By 1868 only one lone man lived at the mouth of the river. This individual kept a few horses for hire to those who wished to ride to the Coos Bay Country.

Gone was Umpqua City, the old light house, the custom house, the resort hotel and the military post, the latter moved to Gardiner. With these, vanished the once optimistic, pioneer dreams of the area at the mouth of the Umpqua River being the principal port and metropolis of Oregon.

IMPROVEMENTS:

The minor improvements so far made in this park were by crews detailed from the Woahink Lake CCC Camp, located in the Jessie M. Honeyman Memorial State Park, during the Fourth Period, October, 1934 to April, 1935.

The work accomplished, included lineal and topographic surveying; some landscaping; later on two tables and a stove were placed in the Lake Marie picnic area, a shelter shed was erected beside the lighthouse road and a water system installed that serves both of these improvements; a trail was made ascending the steep, brushy ridge west of Lake Marie, to reach a high point that has since been occupied by the Coast Guard patrol as a defense lookout post. This point offers a wide sweeping view of the dunes, the mouth of the Umpqua River and its jetties, with mile upon mile of shore line visible in either a north or south direction. A good fire break skirts the limits of the cut-over land and touches Lake Marie. The fire break has been exceptionally well maintained up to this time.

1. This information courteously furnished by direction of the Commandant of the United States Coast Guard, Washington, D.C. under date of October 11, 1943.

A planting of Holland grass and native pine was made by CCC members in 1935 to stabilize a loose sand area above the highway, about midway of the Clear Lake shore. Generally the grass has grown thriftily and the rows of pine trees, some now ten feet high are bearing seed cones, and plainly visible from the highway in its south bound descent toward the lake.

As intended, the planting has stabilized the area of loose sand it covers. However, a tongue of the new dunes that have swept up from the seashore to an elevation of nearly five hundred feet, has crept thru the invaded gap for at least two thirds of the distance across the ridge, quite to the edge of the planted area, which it will slowly but steadily submerge in its advance toward the highway. An east and west row of stakes, placed in line along the top of this sand drift, show that since they were placed by CCC members in 1935, the sand gradually increased in depth along its advanced course to a maximum of five feet near its extreme face, which is now thirty feet deep.

FOREST COVER:

Approximately all of the east half of the park is, or has been, forested with the indigenous varieties of conifers commonly found along this part of the Oregon coast, made up of Douglas fir, Sitka spruce, Western red cedar, Western hemlock and the common, so called, coast pine, but still the same old wide spread Lodge pole pine, Pinus contorta, that reaches from the coast to and beyond the Rocky Mountains, and northward into Alaska.

The latter is of the least commercial value, but of particular ecological importance in the sand dune areas, as being the first conifer to establish itself in the sandy wastes, and is equally at home in the swampy places. Once established on the dune sands it becomes a nurse crop for the more valuable varieties, which sooner or later displace it where conditions are favorable for their growth. Near the north

end, bordering both sides of the highway, a considerable area has been logged off to the shores of Clear Lake. In portions of this area a scattering, 1943 planting of Port Orford cedar is making an excellent showing.

Adjoining this cut-over land to the south and west there is considerable merchantable timber which contains some groupings of good sized, old growth spruce of fair quality, that is coveted by "gypo" loggers, because of its accessibility and nearness to the highway. All such requests have been considered on their merits, and all have been denied in this, as well as in other state parks, on the grounds that their future sylvan values outweigh even the present necessities of the war emergency, as long as there are extensive areas of uncut private holdings that can be logged in the near vicinities of state owned park and highway lands. These requests only add emphasis to the need of resisting them and preserving intact every acre of state owned primeval forest that has been so carefully selected for its future sylvan value.

The forest of this dune park is of particular importance and should be kept undisturbed as much as possible, especially along its western edge, that it may retard the invasion of the drifting dunes, or the erosion of the old ones. At best the forest will only delay, not stop, the inevitable advance of the drifting sands.

The jungle density of the undergrowth is a feature of much of the forested area. This is made up of a thick, vigorous growth of the entangling, ever present salal, mixed with salmon berry, wax myrtle, rhododendron and evergreen huckleberry as the principal shrubs, the latter often ten or twelve feet high and, in season, abundantly fruited with either the black or blue berries, all growing so entangled as to be, in places, almost impenatrable. On the southerly exposures of the more open pine clad slopes, the stiff, resistant manzenita often combines with other shrubs to further impede progress. In these open places kinni-ki-nick is frequently

seen creeping over the sand at the edges of the shrubbery, in dense, soil holding mats that help to stabilize the loose sand until the more pretentious shrubs obtain a foothold. Its shiny leaves were dried and smoked by the aborigines, and used as a tobacco stretcher by the early pioneers. Its conspicuous, bright-scarlet berries are a favorite food of the native grouse and pheasants.

At the south end of the park there is an area of partially open land, that in season, is richly colorful with the lovely, ever pleasing, deep pink blooms of the profuse, native rhododendron shrubs which flaunt their glory far and wide on every hand. These fire dwarfed shrubs do not compare in size with the unusually large, tall ones of the shaded Lake Marie area, but the sun-lit flowers of the open are of a deeper, far richer coloring than the shadowed blooms, despite the magnificence of their superlative size.

On the north side of the lighthouse road, midway between the highway and the light tower, is a forest feature that is most unusual. Apparently a century or two ago, a violent wind had uprooted a considerable area of exceptionally large trees, presumably Sitka spruce, which had escaped being burned, both before and after being prostrated. For some unknown reason, they did not dissolve into mold, as fallen trees usually do, but their huge trunks had retained the bulky shapes of their living forms. These fallen monarchs, as judged by their great diameters, must have lived to be several hundred years old before being destroyed. Growing over and astride of them, and now rising proudly above them, are new spruces that appear to be nearly two hundred years old, making a remarkable exhibit of fallen and living trees that represent in two generations of trees, a visible forest cycle of five or six hundred years, possibly more.

Individual trees growing over occasional fallen ones are not uncommon in the rain forests of Northern California, Oregon, Washington, British Columbia and

Southeast Alaska, but heretofore no similar area has been observed or come to the attention of the writer in this wide range of like forest, where practically all of a considerable area of large trees have survived utter dissolution, over such a long period of time as is represented by the living trees that are here seen growing over the prostrate forms of such large specimens of their predecessors in kind. The circumstance is most unusual and worthy of note.

Within the area of the new dunes, grasses and shrubs are gaining a foothold in some of the basined depressions where moisture is apparent, but it is a far cry to the establishment of a new forest that will replace the trees whose scattered remnants indicate that they once grew and had perished where these willows and associate shrubs have now so boldly entrenched themselves, subject to the vagaries of the whimsical winds and moving sands which may so easily smother and destroy them again and again, before they become the nucleus of a new forest.

THE DUNES:

The sand dunes of the Umpqua Lighthouse State Park are reputed to be the finest display of this type of natural scenery to be found anywhere in the United States. This outstanding merit once attracted the attention of the National Park Service and plans were being made to have the area created a national monument. This plan was not consummated and, thanks to the energetic efforts of S. H. Boardman, State Parks Superintendent, the State now owns this incomparable dune area, to be held in perpetuity as another of Oregon's surpassing scenic attractions.

As mentioned, geologists have told us that here the continental shelf is a sandstone formation that is slowly rising. The pounding seas disintegrate this sandstone and, supplemented by the detritus worn from the also sandstone beds of the Umpqua River and its tributaries, it is continually being cast upon the beaches only to be swept up by the winds and form the intricately patterned dunes that make this area famous.

The smooth, straightaway tidal beach that fronts the park extends along its full length, is of good width and without either salient or debouching stream. It is backed by a surf line that is piled deep with logs and the always interesting flotsam and jetsam of the mighty Pacific. Inside of this drift line is a strip that is splashed by the high waves and spindrift of storm periods, marked by patches and tufts of coarse, bright-green sedge grass. This was being grazed by a small group of straying, white-faced cattle that the Coast Guard patrol frequently see, in their long distance ranging up and down this narrow strip of grassed sa nd. Just beyond this grassy strip begins the rise of the shifting dunes and the drifting sands start piling up the serried ridges that rise ever higher in their onward march to the wooded crests of the park highlands.

Thru out the wide dune area, there is an abundant evidence that beneath the sand drifts is a buried forest that existed for many years before the rising seashore had again set in motion the sands which have almost obliterated the trees that once covered this seaward park slope. In support of this is the presence of several "tree islands", ranging north and south along the slopes, and numerous dead trees, some standing, some down, that have been smothered beneath the sands, which by some trick, or fanciful shift of the whimsical winds, have been exhumed in the wind swept hollows and are now a mute evidence of the forest that once clothed these slopes.

In the south half of these dunes is a trio of the most prominent of these wooded "islands" which, sentinel like, stand midway from the shore to the crest of the sea of sand. The most southerly of these is the least in area, being now but a wind-spent cone with only a tuft of trees on its top to signal its presence. Its shape suggested calling it "Cone Island". The larger ones stand a half mile to the north, one an acre or more, the other, two or three hundred feet beyond, is quite twice as large. Isolated in this drift of sand, the winds are gradually, but

persistently, cutting away their ancient sand bases, the trees falling one by one, only to be buried and their existence obliterated by the relentless drift of the new sands of today.

At the base of the seaward side of the southerly island is a crescent shaped pond, forty or fifty feet in its greatest width, all of three times as long, several feet deep and of crystal clearness, over a shiny sand bottom that reflected the bright sunlight. Approaching the islands from the ocean side, a considerable flock of vociferous, vagrant crows were observed darting down from the trees and noisily flying back again, as crows are wont to do when a feast of carrion is at hand, but nothing of the kind was seen. On closer view, they seemed only to be swooping down over the small pond as if they were pleased and elated at the reflection of their flying antics in the bright, clear water. Their presence only on this oasis of trees prompted the name "Crow Island". The larger neighboring wooded island had no especial or distinguishing feature and it was called "Tree Island". Farther to the north of these were seen one or two other tree groups that have not been submerged, but these were not visited. The trees and shrubbery on the closely observed "islands" is the same as on the other forested sections of the park and vicinity, a further indication that this dune invasion is, geologically, of very recent origin.

Midway between Tree Island and the top of the dunes, two isolated, green spruce tree tops, a hundred feet or less apart, protrude from the sand for perhaps a third of their height which, judging from the exposed portions, were trees probably one hundred or more feet high, and no doubt between a hundred fifty and two hundred years old. The exposed tops were in a sand hollow, open on the uphill side, backed by a sand ridge that rose above them. To the south and east of Crow Island there are a few depressions, surrounded by dune ridges, rising an estimated one hundred

feet above their depths, where grasses and shrubs are growing. In some, the plots of green are only marshy places, others surround small, sedgy pools. Only one was seen with enough water to be called a real pool, and around it had grown up a small extent of grass and considerable shrubbery. Down one hollow a rivulet of water flowed for a short distance, then disappeared beneath a high sand bank. Along its short course, here and there were the scattered down trunks and occasional stubs of the destroyed pre-dune forest that had been uncovered, either by a flow of water or a shift of the wind currents. Similar forest relics were noted in other wind swept depressions, where the grasses and shrubs had newly established themselves. One of the most thrifty shrubs was a willow, believed to be the comparatively little known, Broadleaf willow, Salix amplifolia.

Here, in a modern setting, is exhibited one of nature's methods of land building, whereby this bit of the earth's surface is quietly, but unmistakably, undergoing a marked change. The violence of vulcanism, with its upheavals of the earth's crust, eruptive lava flows and attendant spectacular features is absent. Nevertheless, the conclusions of geologists that this section of Oregon's continental base is really rising, and an actual geological change is taking place in the intimate presence of our daily lives, seems to be confirmed by the existence of these beautiful and exceedingly interesting dunes that have so irrepressibly invaded and submerged a forested slope that lifts to five hundred feet, carrying trees of size that were mere saplings when Gray sailed the Columbia into the mighty river that bears his vessel's name, indicating that much of this sand invasion has taken place within the written history of the Oregon Country, almost without notice or comment by its citizens.

When and where this invasion of sand will cease, only time will tell. Altho the dunes have reached the top of the ridge facing the ocean, their steady advance is not checked. They are still moving forward, creeping into the highland

forest and gradually filling the low places, with its most forward advance in the south half of the park.

To stand upon any of the dune heights and look over the wide expanse of ever drifting, never static, gray sand and view it in the brightness of a clear day, when the westering sun has highlighted the wind-rythmed pattern of the insweeping dunes is more than a privilege, it is an inspirational opportunity. Here is taking place the silent drama of a radical change in this bit of the earth's surface, where there is being displayed the unusual spectacle of an ancient sand dune area that had become stabilized, clothed with a forest, centuries before, now in the process of being overwhelmed and obliterated by a new invasion of drifting snad that is strikingly beautiful, even in its inexorable aggressiveness.

In a broad overlook of the dune area there is, of course, a general sameness. In traversing their surface, sameness has vanished. Each ridge, each vantage point, opens up a new prospect and an impelling curiosity is always newly aroused to view in intimate detail what is hidden beyond, and there ever recurs the intriguing q uery of where and when these sands that so continually rise from the sea will stop.

To the uninitiated, walking over the dunes will be found somewhat tiresome, but they present no difficulties with good footwear. The ridges that slope smoothly to the northwest are generally quite firm and the walking is good. The steeper slopes, where the sands roll over the edges, are loose and yielding underfoot, but these are usually short pitches that are soon overcome.

If sand skiing is, or should become, a popular sport, the long slopes of these high dunes will present unexcelled opportunities for enjoying this pastime.

CONCLUSIONS

This dune park with its extensive sweep of sand from ocean shore to highland, is an exhibit of a new mass movement of sand that ranges for some distance both north and south of the park area, but nowhere else is it so spectacular or intriguing, nor has it elsewhere reached to such heights, nor so great a distance from the coast line and smothered so extensive a forest area in its advance as within this park. In these particulars this park is now, and will remain, outstanding. However, apparent as these conditions and circumstances are, few who view the dunes and their surroundings give serious thot to the realities of the picture before them or the future implications that are presented when contemplating the transformation that has and is now taking place in the park landscape, as the sands sift into and destroy the living forest they are so inevitably invading.

As mentioned, the most easterly point attained by the advancing new sand has reached the near edge of the grass and tree planting that is so prominent from the highway. This planting was deemed necessary by reason of the winds having channeled an open sand gully thru the old dunes, clear across the ridge, from the seaward side to the Clear Lake side, and the old sand was beginning to drift over the brow of the ridge toward the highway. As pointed out, the Holland grass and tree planting has stabilized the old loose sand, but in a comparatively few years the influx of new sand will surely overwhelm, first the grass, then the trees and, in the not too distant future, will roll down the slope to the highwa y, unless some means are devised to stem its advance.

Where the trail reaches up from Lake Marie to the top of the ridge, the drifting sands have pushed into the forest along its outer edge as far south as the crest of the park highlands and is spilling into the low places. This is now taking place quite near the head of the depression down which flows the accumulating

trickle of water that feeds Lake Marie, and, before long, the sand will be in the deep woods and reach the small stream. However, a steady, minor flow of water, supplemented by winter floods, will carry away and hold in check a large mass of drifting sand and there is little likelihood that the lake basin will ever be overwhelmed beyond the stream bed, as when the lake itself is filled the sand will flow on and, in the distant future, return to the sea thru the present outlet. Southward from this highland water source, the ridge narrows, and the live dunes widen as they continue their encroachment upon the forest, where there is no flowing stream to check or divert the sand drift. Here the personal opinion is ventured, that a few generations hence will see the sands of these Umpqua dunes threatening the present line of the highway, with much of the now living forest lying between them and the highway smothered, unless the unlikely happens and the movement of the sand ceases.

This park of wide acres, which holds the finest and most spectacular sand dunes of the entire nation, as well as a most unusual, ancient forest feature, has but few visitors in these days of war effort and long distance travel restrictions, as it is located in the neighborhood of well facilitated and popular lakeside resorts where there are many more attractions for the average, gregariously inclined recreationist than the state park can now offer.

However, when the park has been developed, conveniences provided for the comfort of visitors, and its outstanding features publicized, these dunes will attract many nature lovers. They will find fascinating beauty in viewing or tramping the gray aeolian sands that reach from the wooded highlands to the smooth, straight-line beach, in an alluring series of ridges and hollows that hold an impelling touch of scientific interest in the causes and future import of the long range, geologic and physiographic changes that have, and are now, slowly but surely taking place in the forced transformation of this portion of the Coastal Province,

from a living forest to a sand dune exquisite under the implacable influence of the slowly rising continental shelf.

W. A. Langille
State Park Historian

RECOMMENDATIONS FOR FUTURE DEVELOPMENT
OF UMPQUA STATE PARK

(1) ACQUISITION

Acquisition of cutover areas in Section 13, Township 22 South, Range 13 West, W.M. Small private holding on west side of highway at south end of Clear Lake. An investigation of the property holdings bordering Clear Lake on the east side should be made. As Clear Lake is the domestic water supply source for Reedsport, the city should take steps to acquire these cutover areas for the protection of the watershed of Clear Lake. If the city does not take action in acquiring these areas, then the State should do so. Acquisition of the balance of Section 36, preferably by the Right of Way Department when they secure right of way for highway line change.

(2) REFORESTATION AND GRASS PLANTING

Reforestation of the cutover areas to be acquired should be made at an early date. A study of sand encroachment on the bordering forest should be made for necessary Holland grass planting. The dunes proper should never be planted.

(3) DEVELOPMENT

A. ROADS

The road leading to the lighthouse and park proper should be widened and straightened wherever possible and a new entrance from the highway to this road should be made. With the lighthouse and coast guard service located within the borders of the park, park development will accelerate the public's contact with these two services. A survey and estimate should be made of a road extending from the coast guard's headquarters on north, then paralleling the Bay to a point where it intersects the Oregon Coast highway just south of the highway Winchester Bay Bridge.

A road directly west of the highway to the high point of the park should be constructed, with overlook parking places along the highway.

B. TRAILS

A trail around Lake Marie should be constructed and from this trail, a trail leading down to the beach. Trails should be constructed leading from the Lake Marie picnic area to the high points of the largest sand dunes. A north and south trail located along the western edge of the forest with feeder trails to the high points might be the solution. This being a sand dune park, every means of emphasizing these dunes to the visitor should be used. Further, a trail should be made to the south terminating at the high point of the park which gives an overall picture of the entire park area.

C. PICNIC AND PARKING AREAS

A picnic area on the east side of Lake Marie should be developed. A parking area adjacent to the lead road going in to the lighthouse is necessary for the convenience of patrons of the picnic area.

D. FISHING

An area of the park bordering on Winchester Bay should be developed for fishing opportunities for visitors so inclined.

E. SCIENTIFIC INTEREST

The establishment of a series of markers indicating the most advanced line, and where advisable, the depth of the sand at the time of setting the markers, and an annual recording of the advance of the sand and/or depth, as of October 15, each year thereafter.

The placing and marking of a properly referenced stone monument on the beach line, on the north and south center of the park, and recording thereon the exact longitude and distance from the then mean highwater mark.

S. H. Boardman

12-9-43