

1920

## The Vegetation of Cape Blanco

Morton E. Peck  
*Willamette University*

Copyright ©1920 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

---

### Recommended Citation

Peck, Morton E. (1920) "The Vegetation of Cape Blanco," *Proceedings of the Iowa Academy of Science*, 27(1), 85-89.

Available at: <https://scholarworks.uni.edu/pias/vol27/iss1/11>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

## THE VEGETATION OF CAPE BLANCO

MORTON E. PECK

To most of us the name of Cape Blanco has a familiar sound, bringing back as it does recollections of the geography lessons of our early school days, when we learned that it was the most westerly point of the United States south of Alaska. We may possibly have learned also that it is one of the most dangerous points for vessels on our western coast. Beyond these two brief facts the knowledge of very few of us extends.

On June 26 and 27, 1919, the writer visited this most interesting locality and made a brief survey of the flora. The results of his observations are recorded in the present paper. The area, limited as it is, merits a much more detailed study than it has received, but the facts here set down may have a certain interest for those who have little personal acquaintance with the plant life of the Pacific coast.

Cape Blanco is on the coast of Curry county, Oregon, about ten miles south of the Coos-Curry county line, and nearly sixty miles north of the Oregon-California line. It is twenty miles further west than the point where the latter touches the coast, and to the north of the cape the shore line falls away to the eastward about as many miles in an equal distance. It thus forms a prominent geographical feature on the western coast,—the most conspicuous, in fact, between Puget Sound and San Francisco Bay.

Topographically it is peculiar, consisting, except at the extreme point, of an almost dead level promontory barely a mile in length and less than half that distance in width at its eastern end or base. Its seaward extremity curves sharply to the northward, has a more irregular surface, and ends in precipitous cliffs. In line with the extreme point are two or three high rocky islets of the same character as the shore cliffs and cut from them by wave erosion. The descent to the sea is nearly everywhere more or less precipitous, and the distance is somewhat less than two hundred feet.

Cape Blanco is certainly the windiest point in Oregon. It is fully exposed to the violent storms of winter, which are of very frequent occurrence, and during summer strong gales are blowing from the northwest almost continually. High winds, rendered

much more effective by the level character of the surface, have, more than any other one factor, given the vegetation its peculiar aspect.

As we approach the cape from the eastward, a little over a mile from its outermost extremity we find the forest beginning to leave off rather gradually. For some distance there is a scattered growth of Spruce (*Picea sitchensis*) and Pine (*Pinus contorta*) which are more and more dwarfed as we advance, and finally disappear altogether.

Near where the forest ends there is a large swamp tract covered with a remarkably dense growth of a strongly marked variety of *Juncus effusus* (var. *exiguus* Fern. & Wieg.?) with very slender, drooping, wiry stems. Bordering the *Juncus* area is a large field of Lupines (*Lupinus columbianus*) making a brilliant display of intensely blue color.

On leaving the forest we come out into a section more fully exposed to the force of the wind, and the effect of this exposure is very striking. Tall vegetation of every kind wholly disappears. The all-dominating species is the Coast or Shot Huckleberry (*Vaccinium ovatum*). The rounded clumps, very uniform in size and shape, sloping gently to the northward, more abruptly to the south, remind us strongly, as we look across the wide, level stretches, of low, even swells on a large body of water. Every bush is a densely matted mound of vegetation, the rigid, interlacing twigs scarcely covered by the small leaves. Not a twig stands out beyond the general surface; all are as closely cropped by the wind as the most carefully trimmed hedge. Here and there in a slight depression there is a dwarfed growth of sphagnum moss, and accompanying it are several sphagnum bog plants, the most noticeable being a handsome Lily (*Lilium kelleyanum*). Elsewhere a slender and stately species, here it is not permitted to grow an inch taller than the mounded Huckleberry bushes that shelter it.

As we advance the dwarfed bushes are yet more dwarfed, dwindling down until they are only a few inches in height, and finally thinning out and disappearing altogether. The area now before us looks at a distance like a close-cropped pasture, save that in a pasture there are usually some plants that grazing animals find unfit for food and permit to grow more or less undisturbed. Here all are treated alike by the wind. Everything hugs the earth with a desperate tenacity. A fine large Iris (*Iris douglasiana*) has stems but four or five inches long growing in

horizontally radiating tufts. *Hordeum nodosum* assumes the same form. *Achillea millefolium*, or one of its numerous forms, though erect, attains a height of but a few inches. Here and there may be seen a stout Thistle, of a species not determined, sprawling flat along the ground. A remarkable *Helenium* (*Helenium bolanderi*) has its stem shortened to one-fourth the normal length. The Lupine previously mentioned, *Lupinus columbianus*, usually three or four feet tall, has prostrate stems only a foot or so in length. *Castilleia miniata*, *Coneoselinum gemelini*, *Sanicula arctopoides* and many others assume no less remarkable forms.

The extreme dwarfing of vegetative structures does not extend in the slightest degree to the inflorescence, so that in many cases the flowers and flower clusters appear disproportionately large. This is especially true of *Iris douglasiana*, *Castilleia miniata*, *Helenium bolanderi*, and *Lupinus columbianus*. The last named species has its whole aspect so altered that the observer in the field could recognize its identity only by taking note of the series of intergrades that occur between this and the usual form as he passes into the more and more exposed areas.

This level, wind-swept section presents a brilliant floral display. In addition to the species above mentioned, most of which occur in profusion, there is an abundance of *Lupinus littoralis*, a large-flowered form of *Cerastium arvense*, *Bellis perennis*, *Erigeron glaucus*, *Baeria macrantha*, and many others, each contributing to the varied color effect.

As previously stated, the extreme point of the cape curves sharply to the northward. The Cape Blanco lighthouse is located a little way back from the western edge of the promontory just where the bend is made. The contour of the land is such that about the lighthouse and for some distance to the north of it, in fact, nearly to the extreme point, there is partial protection from the wind, permitting a grove of low Spruce trees to maintain a footing. In this small sheltered area the vegetation is strikingly different from that in the section just described. Many of the same species occur, but growing to normal size. In addition there is an abundance of *Calamagrostis aleutica*, *Coelopleurum lucidum*, *Heracleum lanatum*, *Lathyrus sulphureus*, *Vicia gigantea*, *Medicago indica*, *Eriophyllum staechadifolium* (?), and others. In places there are dense thickets, made up mostly of *Rubus spectabilis*, *Gaultheria shallon*, *Vaccinium ovatum*, and *Myrica californica*. All this is very similar to the usual coast vegetation of Oregon.

Coming to the extreme point, which runs out into a very narrow ridge, with precipitous sides, we find ourselves again in a situation fully exposed to the winds, and also to clouds of fine spray driven up from the waves breaking on the rocks below, and again everything is excessively dwarfed. *Achillea millefolium* is a hand-breadth in height, while the dense growth of *Festuca rubra* is scarcely taller. *Castilleja miniata*, *Statice armeria*, *Epilobium franciscanum*, *Erigeron glaucus*, *Senecio bolanderi*, and many others partake of the same character.

The faces of the isolated crags, too steep, hard and exposed for the accumulation of sufficient soil to support ordinary vegetation, bear patches here and there of *Sedum spathulifolium*, and elsewhere are thickly starred with another and very remarkable Stonecrop, *Dudleya farinosa*. Many of the plants, especially those growing under the hardest conditions, appear quite destitute of the dense glaucous bloom to which the species owes its specific name.

Along the south side of the promontory the conditions are somewhat less severe. On the extreme margin, almost overhanging the precipitous descent to the sea, is a fine flourishing colony of *Mesembryanthemum aquilaterale*, a strange plant, with fleshy leaves that are triangular in cross section, and handsome rose-colored flowers. Here too is an abundance of Crowberry (*Empetrum nigrum*) with long, prostrate, heath-like branches creeping over and almost smothering the low huckleberry bushes. Alpine Timothy (*Phleum alpinum*) and a small Mariposa Lily, *Calochortus maweanus* are not uncommon.

Following the coast line a little farther to the east and south, we find the land sloping down a little, giving sufficient protection from the north wind to permit small Spruce and Pine trees to maintain themselves. As we recede from the coast line they grow taller and pass into the ordinary coast forest. The vegetation accompanying them also assumes the usual character.

While ecologically there is no more interesting place on the Oregon coast than Cape Blanco, it is scarcely less interesting from the standpoint of plant distribution. Thus *Baeria macrantha*, here found in remarkable abundance, is not known to occur elsewhere in the state. *Lilium kelleyanum* is extremely rare. *Sanicula arctopoides* is known from but one or two other Oregon localities. *Mesembryanthemum aquilaterale* is a waif from the southward, not hitherto known from far north of San Francisco Bay. A *Cirsium* and an *Agoseris*, not yet determined specifically, are

likely to prove new to the state. Further search probably would reveal other rarities, but this list is sufficiently remarkable for so restricted an area. To the field botanist the southern Oregon coast as a whole offers unusual attractions, and in this respect no point surpasses Cape Blanco.

WILLAMETTE UNIVERSITY  
SALEM, OREGON