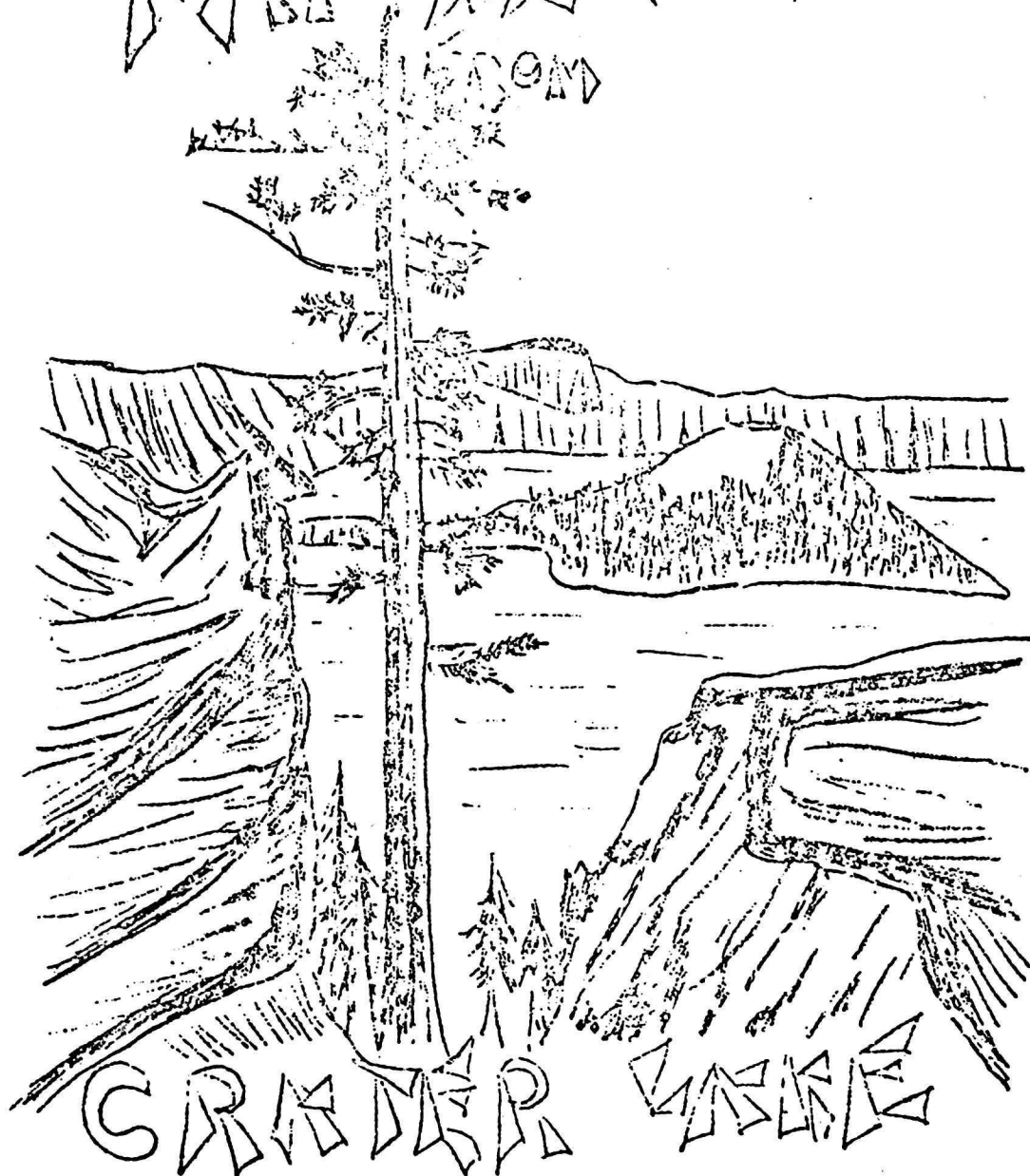


NATURE NOTES



CRATER LAKE

VOL. II. NO. 3.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CRATER LAKE NATIONAL PARK
OREGON

Mr. E.C. Solinsky
Superintendent

Mr. Earl U. Hemuth
Acting Park Naturalist

NATURE NOTES FROM CRATER LAKE

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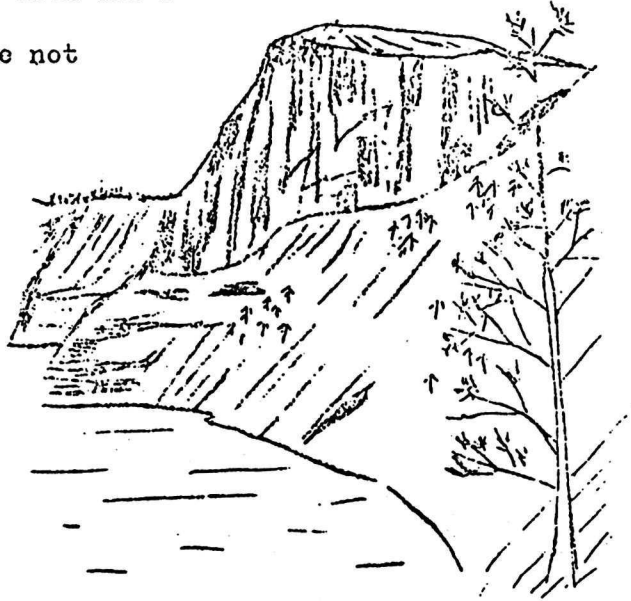
This is one of a series of bulletins issued monthly during the summer season, by the staff of the Educational Division to give information on subjects of interest concerning the Natural History of Crater Lake. It is supplemental to the lectures and field trips conducted by the staff.

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For copies which are free, address the Superintendent
or Acting Park Naturalist.

AN INDIAN LEGEND

Many of the prominent cliffs above Crater Lake bear names derived from Indian legends. In 1885, William G. Steel obtained several legends from Allen David, then Chief of the Klamaths. The stories were not disclosed without some persuasion. Allen David at first refused to divulge any information. A new silver dollar casually handed to the interpreter seemed to arouse his interest, and a second silver dollar, which to him represented a new trinket, proved to be too great a temptation, and when once he started to talk it was with some difficulty that he was prevailed upon to stop.



According to one legend, many years before the white man came to the region, a band of Klamaths hunting in the forests came upon a lake set deep within a hollow in the mountains. Recognizing it as an abode of the gods they passed silently down the slopes of the mountain and camped far away. One brave, however, returned. He camped upon the very edge of the precipice, slept till morning, then arose and joined the tribe far below upon the mountainside. Again he returned, and each visit bore a greater charm. Voices, mysterious and strange, emanated from the waters. After many moons this brave descended to the

water, remained for the night, and again returned to his tribe. Thereafter he spent many nights on the lake shore. On these occasions he saw wonderful forms (Llaos, or minor gods) similar to a Klamath Indian except that they lived entirely in the water.

A strange influence came upon this Indian; he was more hardy and stronger than any member of the tribe. Older warriors sent their sons for the strength and courage which were gained by his experience.

On one occasion the youth who first came to the water's edge captured and killed one of the monsters of the lake. Immediately he was overpowered by countless others who carried him to the great rock which stands above the west shore. His throat was cut with a stone knife and his body torn to pieces and hurled into the water, where it was devoured by other angry Llaos.

While relating this story to Mr. Steel, Allen David held his hands before him, palms inward, thus describing the cliff from which the body of the Indian was thrown. When Mr. Steel later returned to the lake, he recognized the cliff and gave it the name Llao Rock, which it bears today.

As told by W. G. Steel to E. U. H.

MORE POISON!

The Monk's Hood or Aconite (Aconitum columbianum) is a very common plant in Crater Lake Park. It is especially common along the streams near Park Headquarters and along the Castle Crest Flower Trail.

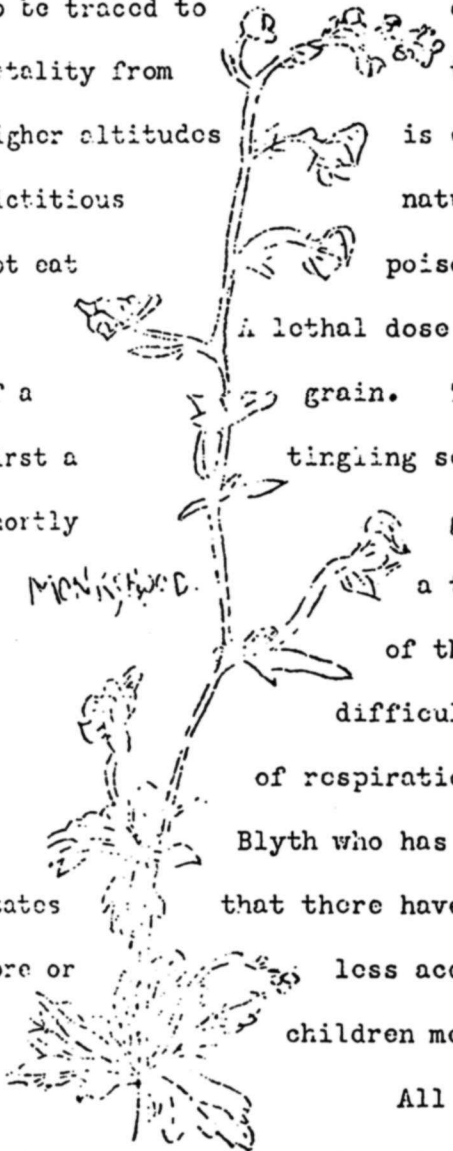
Most species of Aconitum are poisonous. One species has long been used in medicine. Cases of human poisoning are largely to be traced to over-doses of the drug used in medicine. Fatality from this plant among animals grazing in the higher altitudes is common. This is another example of the fictitious nature of the popular belief that animals will not eat poisonous plants.

A lethal dose is exceedingly small amounting to only 1/16 of a grain. The effect of poisoning in human beings is first a tingling sensation on the end of the tongue, which shortly gives rise to burning. This is followed by a tingling sensation in the throat. The action of the heart becomes depressed and breathing difficult. Death is caused by a complete stoppage of respiration.

Blyth who has studied records of poisoning in Europe states that there have been cases of murder, suicides, and many more or less accidental deaths. In two of these cases children met death by chewing the flower.

All parts of our species are poisonous but the seeds and roots are especially potent. The exact nature of the lethal substance is not yet known to science, and there is no specific antidote available at the present time. However, physicians have used atropin and amyl-nitrate. Artificial respiration is often necessary during treatment.

From the above, one can readily see the danger which lurks in one of our most beautiful plants. -- F. Lyle Wynd.



PUMICE AND SCORIA

Tourists who are interested in rock collections usually find the display of vesicular lava in the museum at Crater Lake National Park fascinating. These forms of lava are known as pumice stone and volcanic scoria. In physical appearance both are closely related since each is very porous. However, the color of pumice is usually very light while that of scoria varies from red to black. Another relationship may be shown when it is considered that both of these vesicular forms are found on the surface of lava flows.

When hot lavas pour out upon the earth's surface they are known to contain an abundance of gases as evidenced in the clouds of vapor which arise from them. From the study of scoria and pumice, which are found on the surface of the cooled lava flows, it is believed that there is not a complete liberation of all gases since these rocks are very porous.

This porosity is probably created by the expansion of gases which are retained in the body of the lava, the expansion being permitted when the extrusive lavas are subject to a release of pressure. The top layers assume a foamy aspect. Upon cooling, the surface lavas maintain this puffed condition and their porosity is in this way explained.

It is interesting to note that the cooled surface lavas known as pumice arose from a very viscous flow, while that lava known as scoria arose from one which was very liquid. The greatest expansion of gases occurring in lava flows occurs in the more liquid types

and for that reason scoria has a characteristic spongy appearance. Pumice on the other hand contains many small gas chambers being formed from a viscous rock. Consequently, the porosity is sufficient to allow pumice to float.

At Crater Lake National Park the greatest amount of scoria is found on Wizard Island and pumice is very abundant around the old Crater Rim.

Dale Leslie, Ranger Naturalist

EAGLES

Throughout the summer several eagles have been noticed flying about the crags near the southeast part of the Rim. While it is very difficult to positively identify birds flying so far away, it is believed that these were Golden Eagles.

In their immature stages Golden and Bald Eagles are very much alike. The mature birds are very easily distinguished if one is sufficiently close to see the white head and tail of the Bald Eagle. Both species are known to occur at Crater Lake. The only Bald Eagle so far reported this year was seen by Ranger Croghan in the early part of the season.

Several years ago, Golden Eagles nested in the vicinity of Castle Crest and a pair of Bald Eagles have been known to nest on Wizard Island. It is presumed that those seen over the lake are nesting somewhere about the Rim.

F. Lyle Wynd.

IN CASTLE CREST GARDEN

The Castle Crest Wild Flower Garden, which has been developed with a path displaying to best advantage the various habitats in which the variety of wild flowers grow in particular profusion, has been visited daily by a large number of tourists. When this new feature becomes more generally known it will undoubtedly attract considerable attention.

Other than being a wild

flower garden it

has proved to be among the best places in which to observe Park animals.

Where the trail passes under talus lying at the foot of Castle Crest, the visitor is invariably greeted by whistles of conies from the rocks above.

Marmots are particularly numerous.

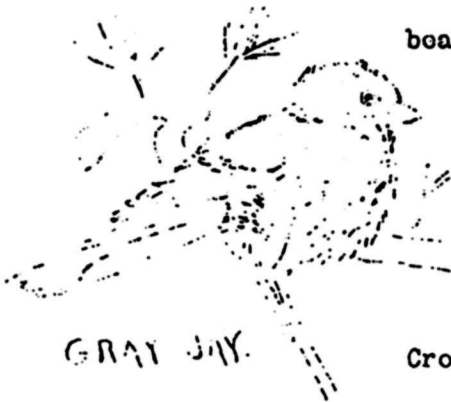
It is related by one

visitor that he saw an older marmot hurriedly covering several younger ones with earth at his approach.

The grass and flowers upon a moist slope were crushed as by the weight of some heavy object passing down the slope. A workman



clearing the trail reports that he observed the bears descending this hill, sliding through grasses into the meadow below.



Of the birds, many species not common on the Rim are to be found. The Gray Jay, Steller's Jay, and Clarke's

Crow are common, the Warblers of many species are numerous, the Creepers, Nuthatches, and

Robins are seen or heard daily. As a place in which the bird student could spend time to advantage it is not excelled in the Park.

The flowers attract great numbers of butterflies, and the hum of smaller insects is distinctly audible during the warmer part of the day.

Several picnic benches



have been constructed beside the stream, which is formed by dozens of springs flowing from the cliffs, or in the shade of huge pines and firs, overlooking meadows which terminate in the colored mass of Castle Crest above.

A FRIENDLY-PORCUPINE

The large hemlock forests of Crater Lake National Park are known to harbor many porcupines as evidenced in various bark peeled trees. This rodent, living in both trees and ground, feeds upon the bark of the hemlock, which for him is a delicacy just as are the old scraps of leather, soap and other materials which he finds while raiding a deserted camp.

It is seldom, however, that a nature study group of tourists has the opportunity to study a living porcupine at close range. One morning while such a group was making its way over an old glacial moraine, a porcupine came from its hiding place beneath some of the large loose boulders a few feet from the party. Many of the startled tourists ran, believing in the old story that the creature would "shoot" its needles. This erroneous idea was soon forgotten when the porcupine, a slow moving fellow, worked his way over the rocks to a near-by hemlock which he proceeded to climb in his clumsy fashion, bracing himself with his broad tail.

In order to see most of the wild, roaming animal life of Crater Lake Park one must leave the immediate camp grounds along the Rim and travel the trails which lead into the forests. Here, where there are no dogs barking from the ends of their leashes, the natural denizens of the forest work and play unafraid. -- Dale Leslie, R.N.



MINERAL SPRINGS

That volcanic action in the Crater Lake region has long since ceased may be indicated by the fact that no hot springs or fumeroles are known to exist. It is possible, however, that some may still be discovered, as many of the deeper canyons on the lower slopes of the mountain have not yet been thoroughly explored.

A recent discovery of several mineral springs in Annie Creek Canyon, by Chief Ranger Godfrey, is of importance in this respect. He states that in his experience this is the largest flow of mineral water to issue from a single spring. The walls below have been heavily stained from the fluid which is deep red in color, and which has a taste similar to that of the mineral springs in the vicinity of Ashland.

Specimen bottles have been sent to the laboratories for analysis.

SOME LATE FLOWERS

This late in the season the majority of the smaller varieties of wild flowers have disappeared. Those early blooming species are nearly all annuals, while those flowers that now line the stream sides are chiefly perennials.

Of the latter, one of the most beautiful is the Pink Monkey Flower (Mimulus lewisii). Along the streams that flow through Castle Crest Garden great masses of them flourish. There are also three other kinds of Monkey Flower in bloom--all of which are yellow in color.

The Monk's Hood or Aconite (Aconitum columbianum) is another of these late flowers. It never appears in masses, as does the

Pink Monkey Flower, but is scattered throughout the vegetation of the damp places. Its deep blue blossoms are rather attractive, but the plant is one of the most poisonous in existence.

The swamps just below Park Headquarters abound in large patches of the Swamp Onion (Allium validum). This species is easily identified as it has the typical odor of onions, a characteristic of all members of the genus Allium.

The Pink Spiraea (Spiraea densiflora) is a prominent autumn shrub. Considerable thickets may be found near the streams of Castle Crest Garden.

In the deep forests of Mountain Hemlock, the Prince's Pine or Pipsissawa (Chimaphila umbellata) with its clusters of pink flowers is likewise a common late summer shrub. This is a small plant about eight inches in height. An examination of its structure shows it to be a member of the Heath Family.

F. Lylo Wynd

