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SPECIAL REPORT
ON
WILDLIFE INVESTIGATION
of the
SNAKE RIVER CANYON

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Regional Wildlife Technician

**SPECIAL REPORT
ON
WILDLIFE INVESTIGATION
of the
SNAKE RIVER CANYON**

Submitted: October 17, 1939

**E. Lowell Sumner, Jr.
Regional Wildlife Technician**

**SPECIAL REPORT
ON
WILDLIFE INVESTIGATION
of the
SHAKE RIVER CANYON**

Submitted: October 17, 1939
H. Lovell Sumner, Jr., Regional Wildlife Technician

Introduction

Reference is to a memorandum of July 15, 1939, from Mr. Demaray, requesting that arrangements be made for a joint investigation by the U. S. Forest Service and the National Park Service of the Snake River Canyon. Due to difficulty in arranging for a meeting in the field of Forest Service representatives and local representatives of the two states concerned, tentative dates for the investigation had to be postponed at various times. A field party was finally arranged at the invitation of the Idaho State Planning Board, and the area was studied from September 26 to 29. Members of the Idaho State Planning Board together with representatives of the Hesperus National Forest, the Boise National Forest and Halloway National Forest, together with numerous interested local groups and individuals also invited by the Planning Board, investigated the east (Idaho) side of the Canyon on September 26 and 27, in company with Regional Architect Davidson, Regional Geologist Lewis and the writer. For the sake of brevity, a complete list of the twenty-two persons comprising the exploration party is not given here. The list was submitted by the above mentioned Service representatives in a memorandum of October 1, and it is believed that the same list will appear in the general report on the Snake River Canyon which is now being prepared by Mr. Davidson, who is Chairman of the Service Committee.

On September 27, the Idaho State Planning Board completed its investigation and left the field. The investigating committee of the National Park Service, together with Assistant Regional Forester F. V. Norton, continued with an investigation of the west (Oregon) side of the Canyon, which was terminated September 29.

Physical Characteristics

Topography

A more detailed account of the Snake River Canyon will be given in the geological report (to be included in the technical appendix of the general report now being prepared by the committee) by Regional Geologist J. V. Lewis. For wildlife purposes it is sufficient to state that the Snake is a very long and extensively meandering river of tremendous volume which forms more than half of the eastern boundary of Oregon, and also part of the boundary between Washington and Idaho during its course northward and prior to its turning westward to join the mighty Columbia River. What is called the Grand Canyon of the Snake is a tremendously deep, narrow gorge which has been cut through not only several thousand feet of lava flows but even through the underlying and such older mountain masses which the lava flows once covered up.

In general outline, the topography of the area under consideration is that of a fairly level lava plateau on the Oregon side with the gorge of the Snake cutting deeply through and forming the state boundary, while on the Idaho side the older mountains, being higher, rise through and above the lava plateau at the edge of the canyon and form the series of jagged peaks which parallel the Snake River Canyon and are known as the Seven Devils Range. The elevation of the highest of the Seven Devils peaks is 9387 feet, while the river bottom opposite is only 1460 feet, thus giving a maximum depth for the canyon of 7927 feet in theory at least. If, instead of using the crest of the Seven Devils Range, one computes the height of the canyon walls on the basis of the general elevation of the lava flows on the Oregon side (6656 feet) one obtains for the depth of the canyon a figure of 5196 feet, which is not inconsiderable.

Life Zones

As a result of the enormous differences in altitude within the area, at least three Life Zones are represented. The bottom of the canyon is in the Upper Sonora Life Zone. The precipitation is light and a sagebrush flora dominant. Unofficial temperature records made by some members of our party on earlier trips have reached 122 degrees in summer, and there is no reason to believe that this is the maximum. So dry is the narrow canyon bottom that the xerophytic vegetation comes right down to the water's edge (Fig. 1).

The narrowest and most spectacular portion of the entire Snake River Canyon commences almost immediately at Eagle Bar and extends northward approximately to Seattle Creek (Fig. 2). Along this most precipitous part of the gorge the rocks tower steeply upwards (Figs. 3,4) and are largely devoid of vegetation.



Fig. 1: Snake River Canyon looking north,
as seen from road to Eagle Bar.
So dry and hot is this narrow, heat-reflecting
canyon that xerophytic sagebrush and bunch
grass reach to the water's edge.




Fig. 2: Boundaries proposed for a Snake River Canyon National Monument. The narrowest and most spectacular portion of the entire Snake River gorge commences almost immediately at Eagle Bar and extends from there north approximately to Saddle Creek.

R.50E. R.2W.

R.1W.

R.49E.

T.2 S.

T.3 S.

48 E

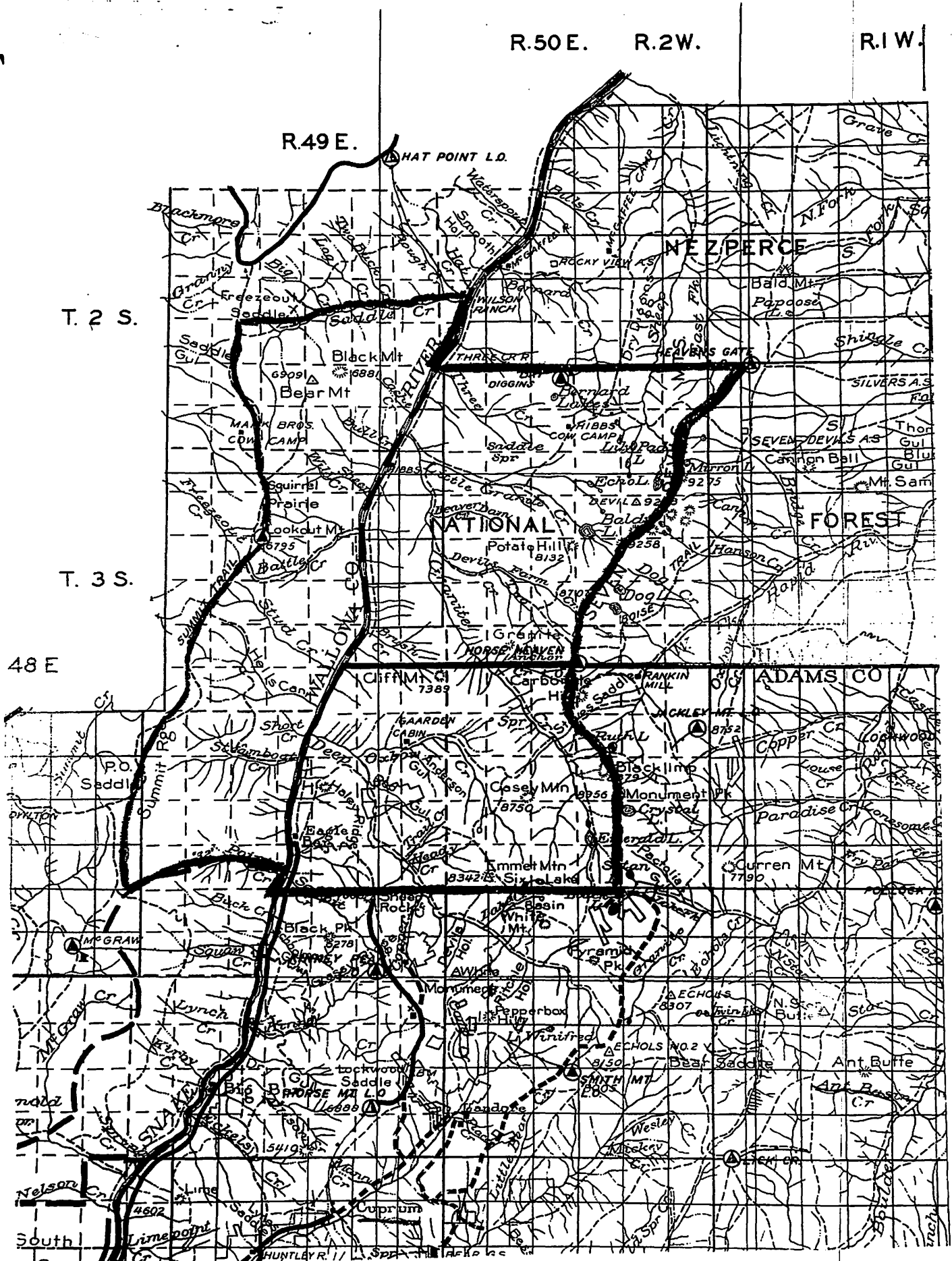




Fig. 3t Barron, steeply rising canyon wall
opposite Eagle Bar, looking south.

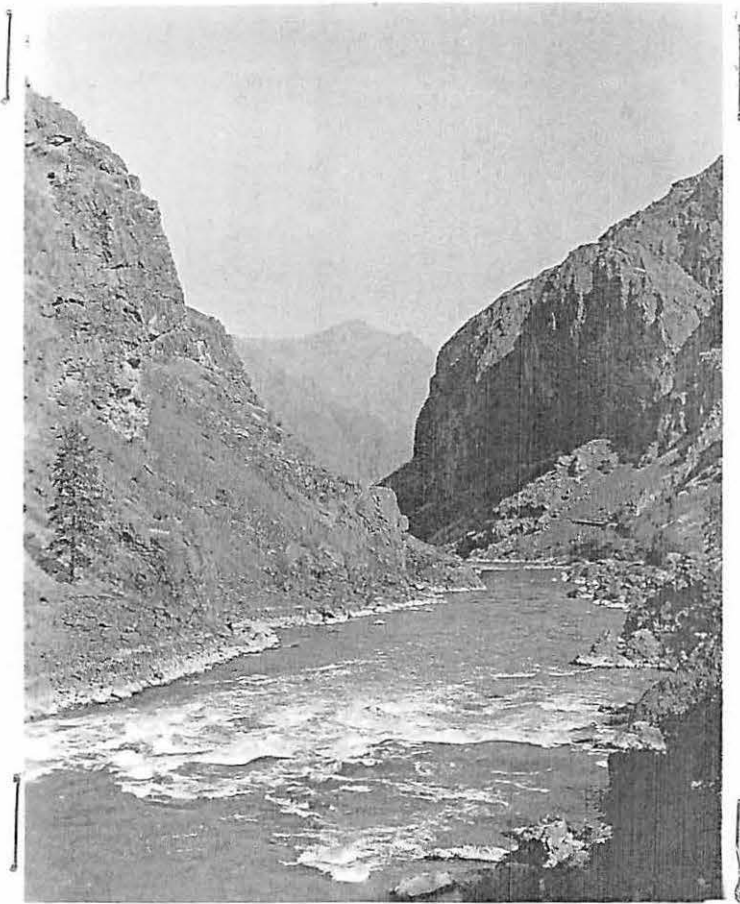


Fig. 4: View near entrance to the narrows of the Snake River gorge as seen on road to Eagle Bar.

North and south of the stretch referred to above, however, (and outside of the boundaries of the proposed monument) sagebrush- and bunch grass-covered slopes rise less steeply from the river affording good wintering ground for deer and other wildlife which is driven down by the snows from the higher and colder surrounding territory. The lower 1000 feet at least of this territory lies in the Upper Sonoran Zone (Fig. 5)

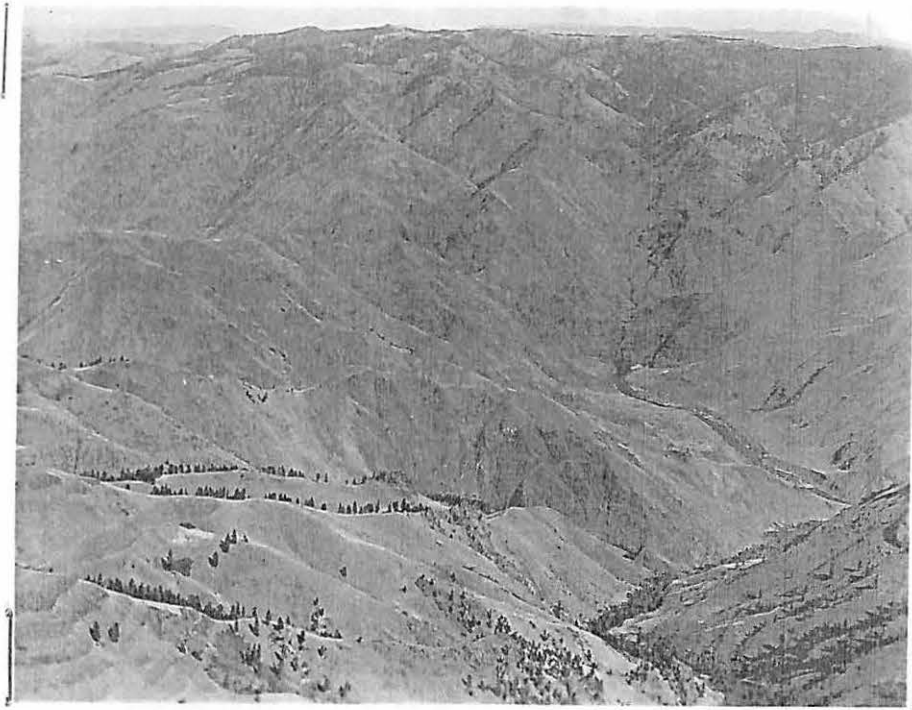


Fig. 5: Snake River Canyon as seen looking north from the Hot Point Lookout (cf. Fig. 2). The lower elevations are in the Upper Sonoran Life zone and afford an excellent wintering ground for deer, which descend from the higher forested areas in thousands each winter. These lower elevations are also grazed quite extensively.

Although the steepness of the canyon walls and eccentricities of slope and exposure render a determination of the Life Zones difficult, the Transition Zone becomes clearly evident along the upper third of the rugged slopes (Fig. 6).



Fig. 6: View of the Snake River Canyon looking east from the Hat Point Lookout toward the Seven Devils Range, which is visible in the background. So deep is the canyon that the river itself cannot be seen from this point. The opposite wall of the canyon (center of picture) shows Transition Zone forest. The peaks of the Seven Devils are in the Canadian Life Zone.

In the Seven Devils Range on the east side of the canyon and on the more level plateaus of the west side (Fig. 7) the Canadian Zone appears. Characteristic of this Zone is the Rocky Mountain Mule Deer and the Richardson Grouse.

At the very crest of the Seven Devils Range the Hudsonian Life Zone seems to occur (Figs. 8, 9), although it was not possible to completely verify this. Numerous glacial tarns form a turquoise chain along both sides of the Seven Devils crest in this high, wild, quiet, roadless country (Figs. 10, 11). These have been well stocked and are a prime fishing attraction to the local population. Some of the more ardent fishermen have declared their opposition to road building in this country on the ground that fishing would soon be spoiled thereby.



Fig. 7: Typical view of the west side plateau region covered with Canadian Zone forest.



Fig. 8: Sparse Hudsonian (?) forest along crest of Seven Devils Range in the vicinity of Black Lake.

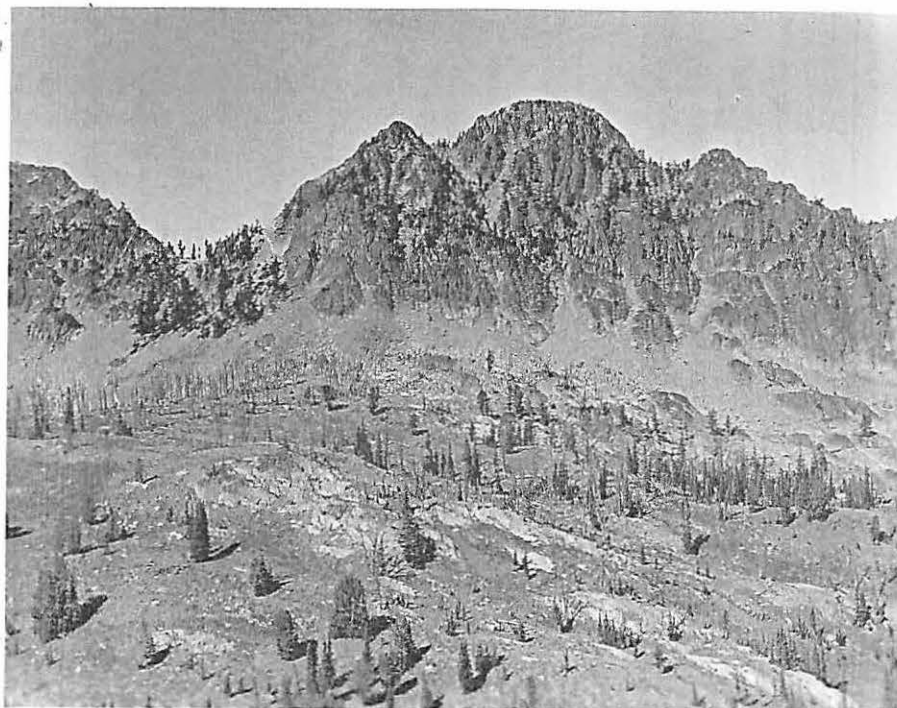


Fig. 9: Typical view of the crest of the Seven Devils Range immediately west of Black Lake. This territory represents good wildlife habitat, particularly for grouse and deer, but it is by no means outstanding scenically as compared with many other areas in Oregon and Idaho.



Fig. 10: Black Lake, Seven Devils Range. This is at the end of a Forest Service truck trail.



Fig. 11: Emerald Lake, Seven Devils Range. Those who wish to visit this and the many other sparkling lakes, northward along the crest, must leave their automobiles. If they are willing to make this sacrifice, however, they are well repaid.

Wildlife

Black bears are said to be numerous in the forested portions of the Snake River drainage, but relatively few could be found within the limited territory proposed for monument status because the boundaries have been carefully drawn to exclude nearly all lands not actually barren or inaccessible.

Mountain lions have maintained themselves in this rugged country in spite of the persecution of the grazing interests. District Ranger E. Grady Miller, of the Hat Point Lookout, stated that not long ago he heard two cougars screaming not far from the lookout station. At first he thought that a man, who had passed the station a short time previously, must have fallen and injured himself. The growling and screaming sounds

kept up for many minutes. Mr. Grady got his rifle and attempted to stalk the animals but could not get a glimpse of them, although the sounds indicated that they were moving in a rough circle over the plateau on which the lookout station stands. On going back to the spot the next morning, he found the tracks of the lions (relative to the screaming of the cougar, Assistant Regional Forester F. V. Horton stated at this time that he had actually seen and heard a cougar make such sounds. The cougar in question was one also observed by the writer, but not screaming, in a cage at Tuhkenitch Lake during last year's Oregon Game investigation).

Coyotes are said to be scarce because of the activities of the Biological Survey trappers.

Marten are fairly numerous, while deer are really abundant. With the onset of winter, the latter are accustomed to travel down the innumerable side canyons of the Snake to the vicinity of the river bottom, which is largely free of snow and much warmer than the surrounding higher country so that it forms an ideal wintering ground. One Forest Service winter count along a short section of the Snake gave a figure of 5,000 deer actually seen.

The animal most needing protection at the present time in the Snake River Canyon area, undoubtedly, is the bighorn. Apparently, the subspecies occurring there is the Lava Beds Bighorn (*O. a. californicus*), at least that is what Vernon Bailey calls it and subsequent taxonomic studies by Cowan seem to substantiate this. As in other parts of Oregon, the bighorn is greatly reduced in numbers in the Snake River Canyon and, in fact, no animals have been seen by any one for a number of years. Mr. W. Grady Miller stated that four years ago he saw a bighorn track on Black Mountain (Figs. 12, 13, 2) and that prior to this it was known that there was a herd of fourteen in the Black Mountain area. Black Mountain is exceedingly rough and inaccessible and no one in the Forest Service has visited it since his observation. He stated, however, that some one (he could not recall whom) had told him that a track had been seen there within the present year.

As indicated above, the small lakes provide excellent fishing. Although originally barren, they have been stocked with trout by the Forest Service. Undoubtedly, the tributaries to the Snake River could provide good fishing if the fishermen could be provided with parachutes. The Snake, itself, undoubtedly is considerably polluted as well as being silt-laden.

Richardson Grouse are exceedingly common throughout the Snake area surrounding the canyon itself. The area is famous for its grouse hunting but, probably, an important reason for the continuation of the grouse in large numbers is that the country is isolated and relatively inaccessible so that only local people do the hunting. Even so, the residents admit that the grouse are not nearly as numerous as they were twenty years ago.

It is possible that grazing competition has had as much to do with the reduction in grouse numbers as has hunting.

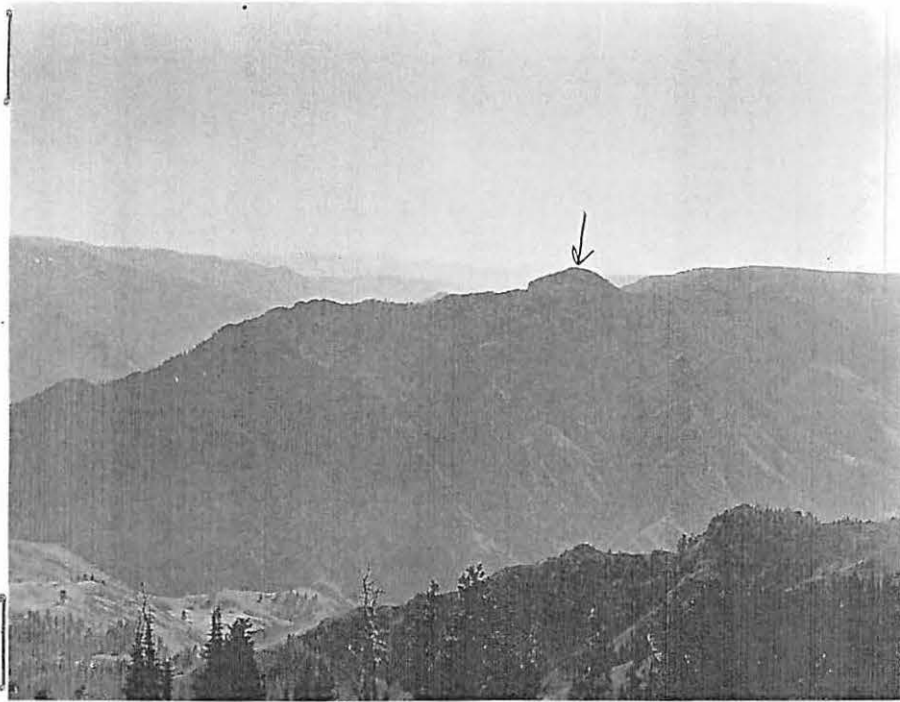


Fig. 12: View of the ridge between Saddle Creek and the Snake River as seen looking south from the Hat Point Lookout. Black Mountain is designated by the arrow. Saddle Creek Canyon is in the foreground, while the main Snake River Canyon lies behind ^{the} ridge. Black Mountain is believed to be the last stronghold of a remnant band of bighorn.



Fig. 13: View of the ridge between Saddle Creek Canyon and the main Snake River Canyon as seen from Freezeout Saddle. Saddle Creek Canyon is shown diagonally in the foreground, and the Snake River Canyon is seen joining it at the left. This rugged, inaccessible ridge is not reached by domestic stock and would seem an ideal refuge for the bighorn remnant.

Human Use

The boundaries of the proposed monument have been carefully drawn to exclude grazing and almost any other potential land use of any importance other than recreation.

The rather scant forest is composed of timber types which, for various reasons, would not ever be utilized even for pulp, according to representatives of the Forest Service who accompanied our party.

If the boundaries of the proposed national monument were extended either eastward or westward considerable grazing land would be included in the area (Figs. 14, 15). The limited area of the proposed monument,

by its ruggedness, largely excludes the possibility of opposition from grazing interests. To indicate the relative unimportance of grazing in this vicinity, it may be said that in the Hesperce National Forest there are only about 4,000 sheep and 1,000 cattle in a strip along the river which extends approximately ten miles beyond the northern boundary of the proposed monument area. Only five or six grazing permits are involved and, according to Forest Service estimates, only seventeen people are dependent upon grazing on these Forest Service lands. Within the monument area, which is much more rugged than that lying to the north, these figures would be very much less.

In the Heiser National Forest there are approximately 7200 sheep and 850 cattle in the entire Seven Devils area, and twenty to twenty-five people depend upon grazing on the National Forest. The season during which cattle are grazed on Forest Service lands is eight months, but in the case of sheep it is only four months. A study of the figures for, and areas involved in, grazing in the Seven Devils area shows that practically all of the 850 cattle and most of the sheep graze on Forest Service lands lying south and southwest of the proposed monument area.

In the case of the Hallosea National Forest, on the west side of the river, the boundaries as drawn for the monument would practically exclude all grazing.



Fig. 14: Typical open ridge in Forest Service land outside of the proposed national monument. This view is of a ridge along the Forest Service truck trail from Smith Mountain to Caprus. This country has been burned and logged over in the past and this accounts for the openness of many of these ridges. They are grazed by domestic sheep, although on the Forest Service map many of them are classified as "open seed range" and are covered to a large extent with a native non-palatable *Rhus*. If undisturbed, much of this land will eventually revert to forest.



Fig. 15: Some good grazing country as seen from "Five Mile Viewpoint" looking down into the Lamba Canyon. This country is largely covered with bunch grass and under Forest Service management has shown considerable recovery from early abuse, although certain limited areas still give the appearance of over-use as in the case of the slope in the foreground. Grazing land of this type has been excluded from the boundaries of the proposed monument.

The subject of mining will be discussed by the geologist. With the possible exception of one mine which at present is not producing and is tied up in extensive litigation, the outlook for mining developments within the monument does not seem promising.

Summary and Recommendations

From the wildlife point of view,^a Snake River Canyon National Monument does not present an outstanding opportunity for conservation. Important economic considerations render it impossible to include the extensive areas beyond the rim of the canyon which would be necessary to give adequate protection to fur-bearers. Deer are already numerous and in no danger from

over-hunting, so that the establishment of the monument is not important for the protection of these animals. In the case of the bighorn, the establishment of the monument may be regarded as of potential assistance but this can only be limited at best because of the small area involved. Originally the Snake River Canyon was rather well populated by bighorn but, as in other parts of the West, the latter have been unable to compete with the herds of domestic sheep and have retreated to the most precipitous and barren parts of their range. Unfortunately, however, wildlife cannot subsist solely on scenery any more than can man. Unavoidably this Service has in many cases been able to acquire only such mountain tops and other rugged lands as were not wanted by lumbering, grazing or other powerful interests. The fertile valley lands adjacent to such rugged inhospitable areas are the lands needed by wildlife for food (either primarily, as by herbivores, or secondarily, as by carnivores) just as they are by man. In some cases, as in Yellowstone and part of the Olympics, Yosemite, Sequoia and a little bit of Glacier, the Service has obtained a minimum of these food-bearing valley lands. In the case of the Snake River Canyon, however, this objective probably cannot be obtained. The canyon itself is too narrow and rugged at this point to serve the purpose referred to, while to extend the boundaries eastward or westward would meet with the insurmountable opposition of agricultural interests. Much greater hope for wildlife seems to lie in the consideration of certain other areas. The Heliens Mountains (part of which are designated officially as a mountain sheep refuge on Forest Service maps and even on oil company maps, although the Forest Service permits 15,000 to 20,000 domestic sheep to graze on this bighorn refuge) appear to offer a much better opportunity for wildlife conservation. The bighorn there have been greatly reduced in numbers in recent years, and are split into three bands which altogether total only about fifty individuals. With adequate protection, however, it is believed that they could be brought back. (Doubtly many miles of low plateau of high value for grazing and other types of farming intervene between the Snake River Canyon and the Heliens so that combining these two areas into one monument or park seems entirely out of the question).

A description of the boundaries of the proposed monument (with which, for practical reasons, the Wildlife Division concurs) will be given in the main report. They are also indicated by the map (Fig. 2) which accompanies the present Wildlife report. Briefly, the northern boundary follows the northern line of Township 23 N, Ranges 1 and 2 E. (Dodge meridian), to the Snake River, thence ^{north} to the Snake River to its junction with Saddle Creek, thence up Saddle Creek to the crest of the hydrographic divide which separates the Snake River drainage from the Snake drainage. The east boundary follows this hydrographic divide south to the boundary between the Heliens and the Hitiyan National Forests. The south boundary of the monument follows the aforementioned Forest boundary to the Snake River, thence eastward along the south line of Township 22 N, Ranges 3 and 2 E, to the crest of the Seven Devils Range. The east boundary of the monument would follow the crest of the Seven Devils Range from the aforementioned south line of Township 22 N, to the previously mentioned north line of Township 23 N.