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Endangered Plants and Animals of Oregon I. Fishes

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FOREWORD

The publications under this title list and locate plants and animals in Oregon that represent "endangered species" — ones which can be easily destroyed. They are usually found in relatively small areas. Because they are often rare or unusual, they possess unique scientific value. For this reason alone, their preservation is considered beneficial to man's interest. Moreover, they can be easily eliminated or their numbers seriously reduced through man's manipulation of the environment. Habitat essential to survival, for example, is and can be altered through a number of man's activities, including pesticides, toxic materials, or other pollutants in the environment.

Those responsible for planning and carrying out operations which may destroy or modify natural habitat or pollute it with toxic materials need objective information regarding undesirable or unwanted effects of their activities. Also, there is danger of contaminating high-value natural resources such as the water supply of fish hatcheries or natural breeding areas of fishes which reproduce at specific times in limited areas. The publications grouped under this heading provide additional facts not generally known or available regarding the location of endangered species. Through these publications, it is hoped that the public will select alternatives which will insure the continued preservation of our rare plants and animals.

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I. FISHES

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The following list includes species, subspecies, or races of fish which occupy narrow geographical or ecological ranges in Oregon. Some occur nowhere else; others are represented in other states by the same, or, more likely, different forms. Deterioration of habitat or excessive unnatural mortality could endanger any of those mentioned.

I. Petromyzontidae (Figure I).

- a. <u>Lampetra</u> (Entosphenus) sp. Klamath Brook lamprey. This undescribed species is known from tributaries of Upper Klamath and Agency lakes. It is non-parasitic and does not feed in the adult stage. Ammocoetes are numerous in the ponds of the Oregon State Game Commission Klamath Hatchery on Crooked Creek.
- b. Lampetra (Entosphenus) tridentata subsp. Several types of small and dwarf parasitic lampreys apparently referable to L. tridentata may be found in the Klamath and Goose Lake drainages. Preliminary examination indicates that at least two of the races are well-differentiated from the others and might be regarded as subspecies. Systematic studies are needed for the clarification of relationships of the races.

2. Salmonidae (Figure 2).

- a. Salmo clarki henshawi Gill and Jordan. Lahontan cutthroat trout. This subspecies is found in the streams flowing north from the Nevada border, south and east of the Alvord Desert. It was once numerous in Trout Creek but has been destroyed there through hybridization with introduced rainbow trout. It possibly has racial characteristics different from the remainder of the subspecies represented by California and Nevada populations.
- b. Salmo sp. (gairdneri?) native trout of Catlow Valley. Not enough is known of this fish, which apparently represents the species variously referred to as either cutthroat or rainbow by early explorers. Long-headed, long-jawed, and often small-scaled, it resembles a cutthroat without basibranchial teeth. It is found in Rock Creek and in drainages along the western face of the Steens Mountains.

3. Catostomidae (Figure 3).

a. Chasmistes brevirostris Cope. Shortnosed sucker. This species was formerly abundant in the Klamath Basin of Oregon but now is found mainly in reservoirs along the Klamath River in California. Rough fish control has removed it from Lake of the Woods, Oregon, and unknown causes (probably change in environment) have reduced it in Lost River, Agency Lake, and Upper Klamath Lake. Whether the species actually remains anywhere in Oregon is problematical.

b. <u>Catostomus</u> <u>warnerensis</u> Snyder. Warner sucker. This representative of <u>C. occidentalis</u> is confined to the Warner Lakes basin and could be endangered by drouth or rough fish control.

4. Cyprinidae (Figure 4).

a. <u>Hybopsis crameri</u> Snyder. Oregon chub. This species occupies a fairly wide geographical range in the Willamette and Umpqua drainages but is usually found only in quiet water. Rapid changes in water level can be harmful to the reproduction of this species. In years of good spawning success it can be numerous in some impoundments, but in other years it can be rare in the same area. This is the only Hybopsis native to the Pacific Coast of the United States.

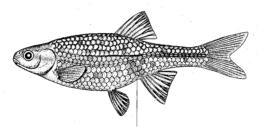


Figure 5. Oregon chub (actual size).

- b. Undescribed species, southeastern Oregon. Dr. Carl L. Hubbs of the Scripps Institution of Oceanography has under study a new species of minnow from the Alvord drainage and Catlow Valley. This species may represent an undescribed genus. It is found in many permanent waters of the drainages mentioned.
- c. Rhinichthys osculus (Girard). Speckled dace. This dace is represented in southeastern Oregon by many races, probably one to each isolated drainage.

5. Cottidae (Figure 6).

- a. Cottus "bendirei" (Bean). Malheur sculpin. This species was described from Rattlesnake Creek east of Burns. It represents an unprickled form of Cottus bairdi and differs from the bairdi of most of the Harney Basin. Specimens from the eastern section of the basin Rattlesnake and Riddle creeks fit the original description, and those from Upper Silver Creek are quite similar. Attempts to collect the Malheur sculpin from Rattlesnake Creek in 1961 and 1965 disclosed none. Only about a dozen specimens have been preserved from the eastern section of Harney basin.
- b. Cottus pitensis Bailey and Bond. Pit River sculpin. Although numerous in California, this species may be extinct in Oregon. Specimens were collected from Thomas Creek of the Goose Lake drainage about 10 years ago, but attempts to find the species in 1957 and 1963 failed.

6. Various Lahontan Basin fishes.

In the small section of the Lahontan Basin encompassed by Oregon (McDermitt, Oregon Canyon, Tenmile creeks) some of the fishes typical of that basin are found. These are Catostomus tahoensis Gill and Jordan, Pantosteus lahontan Rutter, Rhinichthys osculus robustus (Rutter), Siphateles bicolor obesus (Girard), and Richardsonius egregius (Girard).

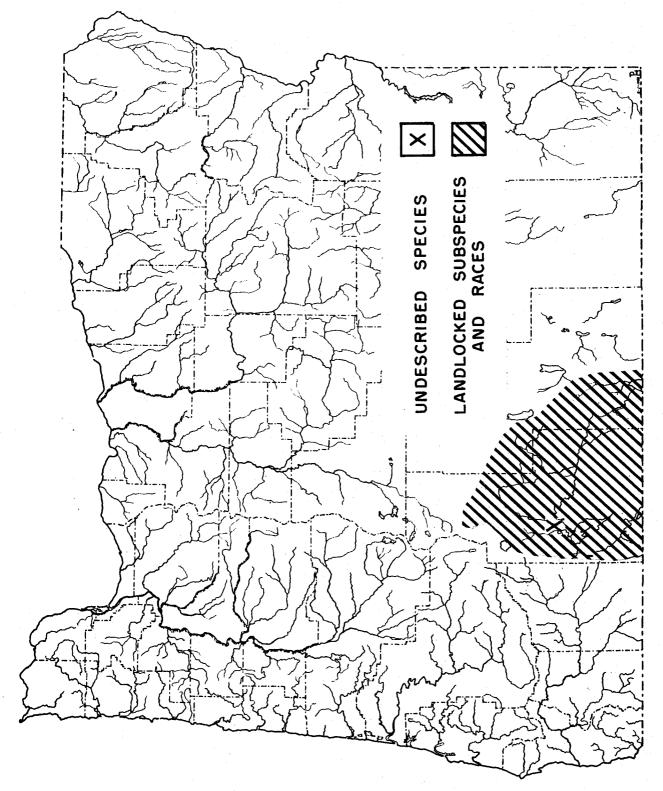


Figure I. Distribution of Klamath brook lamprey Lampetra (Entosphenus) sp.

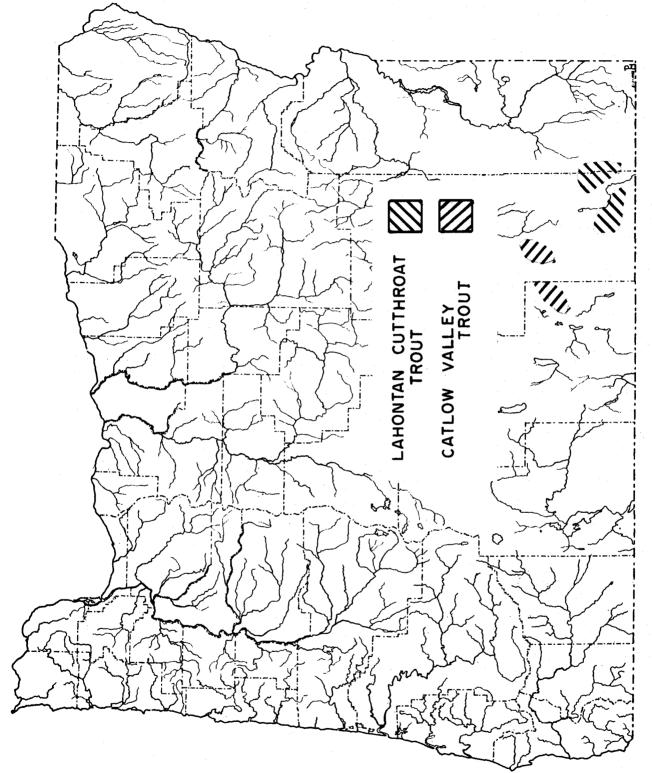


Figure 2. Distribution of Lahontan cutthroat trout (Salmo clarki henshawi) and Catlow Valley trout (Salmo) sp.

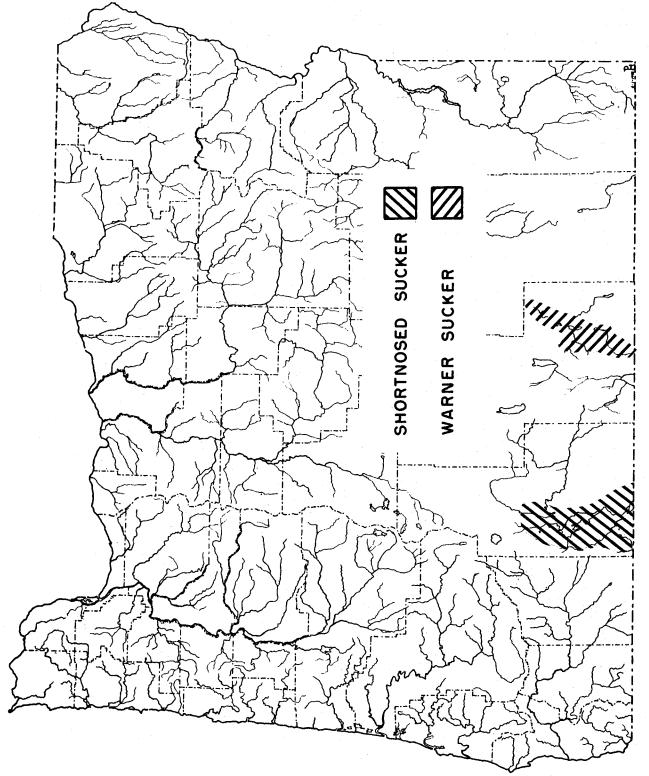


Figure 3. Distribution of shortnose sucker (Chasmistes brevirostris) and Warner sucker (Catostomus warnerensis).

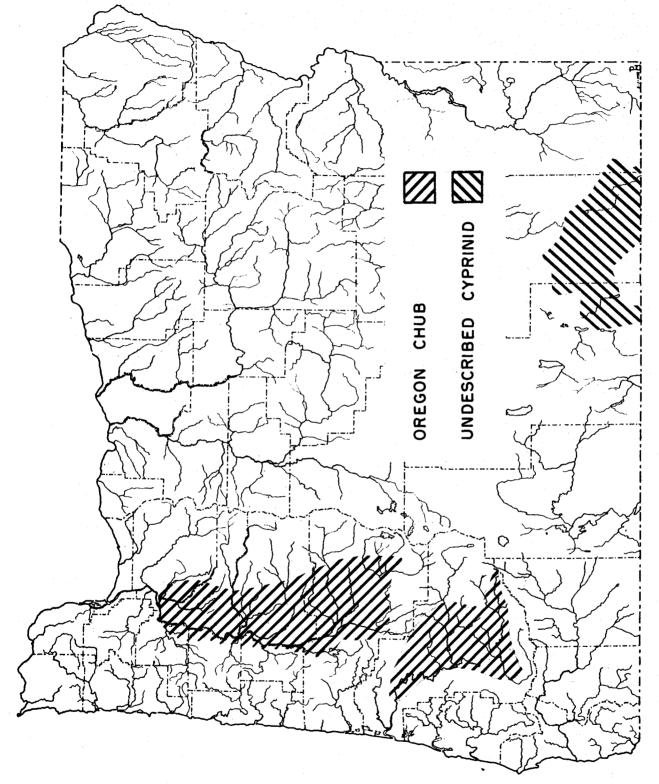


Figure 4. Distribution of Oregon chub (Hybopsis crameri) and undescribed cyprinid.

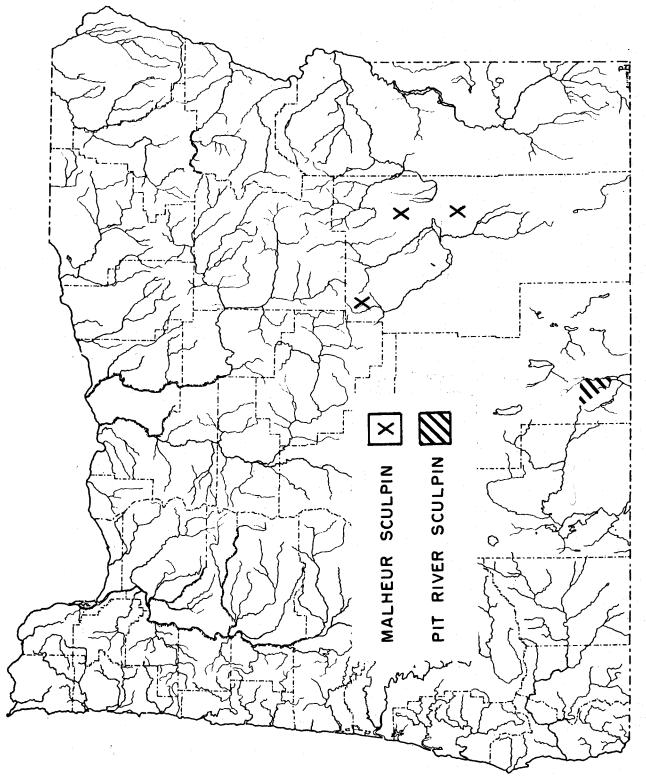


Figure 6. Distribution of Malheur sculpin (Cottus "bendirei") and Pit River sculpin (Cottus pitensis).