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Endangered Plants and Animals of Oregon

II. Amphibians and Reptiles

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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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II. AMPHIBIANS AND REPTILES

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Oregon has approximately 50 species of amphibians and reptiles. It is second only to the southeastern United States in the number and variety of its salamanders, for example. Although most of these species are in no obvious danger, a few are of limited distribution in the state and could be endangered by any of the following: 1) contamination of food supply by insecticides or herbicides; 2) alteration of large blocks of habitat, by logging, for example; 3) by the introduction of non-native competitors, such as bullfrogs; and 4) by over-enthusiastic collecting by an increasing number of amateur herpetologists. It is difficult to arouse sympathy for these rare amphibians and reptiles. They are a native of part of the state's fauna, harmless for the most part, and, in many cases, beneficial to man's interest.

In this paper, a number of rare amphibians and reptiles will be described and their locations shown on accompanying maps.

AMPHIBIANS

1. Pacific giant salamander (Dicamptodon ensatus) (Figure 1). Although this animal is widely distributed in western Oregon, its only known distribution in the state east of the Cascade crest is at Oak Springs, 2 miles north of Maupin in Wasco County. In this unique area of a few acres, Dicamptodon occurs in limited numbers in the cold springs above the fish hatchery. As an isolated and quite possibly genetically divergent population, an effort should be made to preserve these animals.

2. Rough-skinned newt (Taricha granulosa) (Figure 1). Very abundant in western Oregon, this animal too occurs in limited numbers at the Oak Springs site. For similar reasons (see above), they should be protected.

3. Larch Mountain salamander (Plethodon larselli) (Figure 2). Discovered as recently as 1953, this species has a very limited distribution in the Columbia gorge. Currently considered rare, it is felt that insect control programs in this area should be carefully controlled until more is known of the extent and numbers of this population.

4. Siskiyou Mountain salamander (Plethodon stormi) (Figure 3). First named in 1965, this species is known only from one or two talus slopes in the upper Applegate River Valley in Jackson County, and from a single locality 15 miles east of the junction of U. S. 199 and the Oregon Caves road. Its present rarity may simply be lack of knowledge, but it would currently seem to merit special protective efforts.

5. Oregon slender salamander (Batrachoseps wrighti) (Figure 4). Occurs at middle elevations on the west flank of the Cascades. Limited to Oregon, this species must have originally been a species of the heavy coniferous forest. The extent to which logging has hurt populations is not known, but drastic habitat changes have occurred throughout its range, and there is a possibility that this species is declining in numbers.

6. Black salamander (Aneides flavipunctatus) (Figure 3). Although widespread in northern California, this form occurs only in the upper Applegate River Valley, above McKee Bridge, in Oregon. This is its most northern distribution, and a species at the limits of its range may be more susceptible to unfavorable environmental circumstances.

7. Tailed frog (Ascaphus truei) (Figure 5). Common in western Oregon, but limited to a few localities in the high Willows in eastern Oregon. Any permanent rise in the water temperature of its home streams or a sustained reduction of flow could be disastrous to these isolated Willowa populations.

8. Western spotted frog (Rana pretiosa pretiosa) (Figure 5). This is the red-legged variety of this species. Formerly common in the valleys of western Oregon, it has been nearly or completely exterminated there by the introduced bullfrog. It survives in a few high Cascade lakes, among which are Gold Lake, Davis Lake, the Lava Lakes, Mud Lake, and Goose Lake. Other populations probably exist, and although bullfrogs probably cannot survive in high-altitude lakes, any program involving removal of vegetation in the water or altering of water level might well destroy populations of this beautiful frog.

REPTILES

1. Collared lizard (Crotaphytus collaris) (Figure 6). Widely distributed in southwestern United States, this form extends a short distance into southeastern Oregon. It is peculiar to hillsides strewn with large boulders, is somewhat conspicuous, and is easily collected. Currently in no danger, this species could be over-collected by a small army of amateur herpetologists.

2. Leopard lizard (Crotaphytus wislizeni) (Figure 7). Reaching its northward limits in Oregon (see map), certain populations of this lizard are quite probably relict. This is probably true of the Hat Rock and Huntington populations. These lizards inhabit shrubby areas of loose and sandy soil. Extensive removal of desert shrubs in some areas has eliminated this lizard from them. Fortunately, up to this time, they have been able to re-invade from surrounding undisturbed areas, but widespread clearing of desert areas would be harmful.

3. Short-horned lizard (Phrynosoma douglassi). Fairly widespread in eastern Oregon, this species extends high into the Cascades, having been collected at near 7,000 feet on Mount Washington. High Cascade populations inhabit areas of dark lava dust, and probably occur in fairly discrete populations. The relative isolation of such areas is protective, but widespread insect spraying might wipe out entire populations.

4. Sharp-tailed snake (Contia tenuis) (Figure 8). This snake appears to occur as relict populations in western Oregon valleys. Never common, this little snake is eagerly sought after by collectors. Its habit of hibernating in numbers at some site in its range has led to wholesale removal by collectors in some instances. Probably not in danger, but considered relatively rare.

5. Western rattlesnake (Crotalus viridis) (Figure 9). It is doubtful if protective sympathy can be aroused for the rattlesnake. Nevertheless, relict populations occur on rocky buttes in the Willamette Valley. These are quite probably isolated from one another, and present interesting possibilities for studies of genetic divergence. Efforts to dynamite wintering dens may often be destructive to many snakes, but seldom eliminate them from an area.

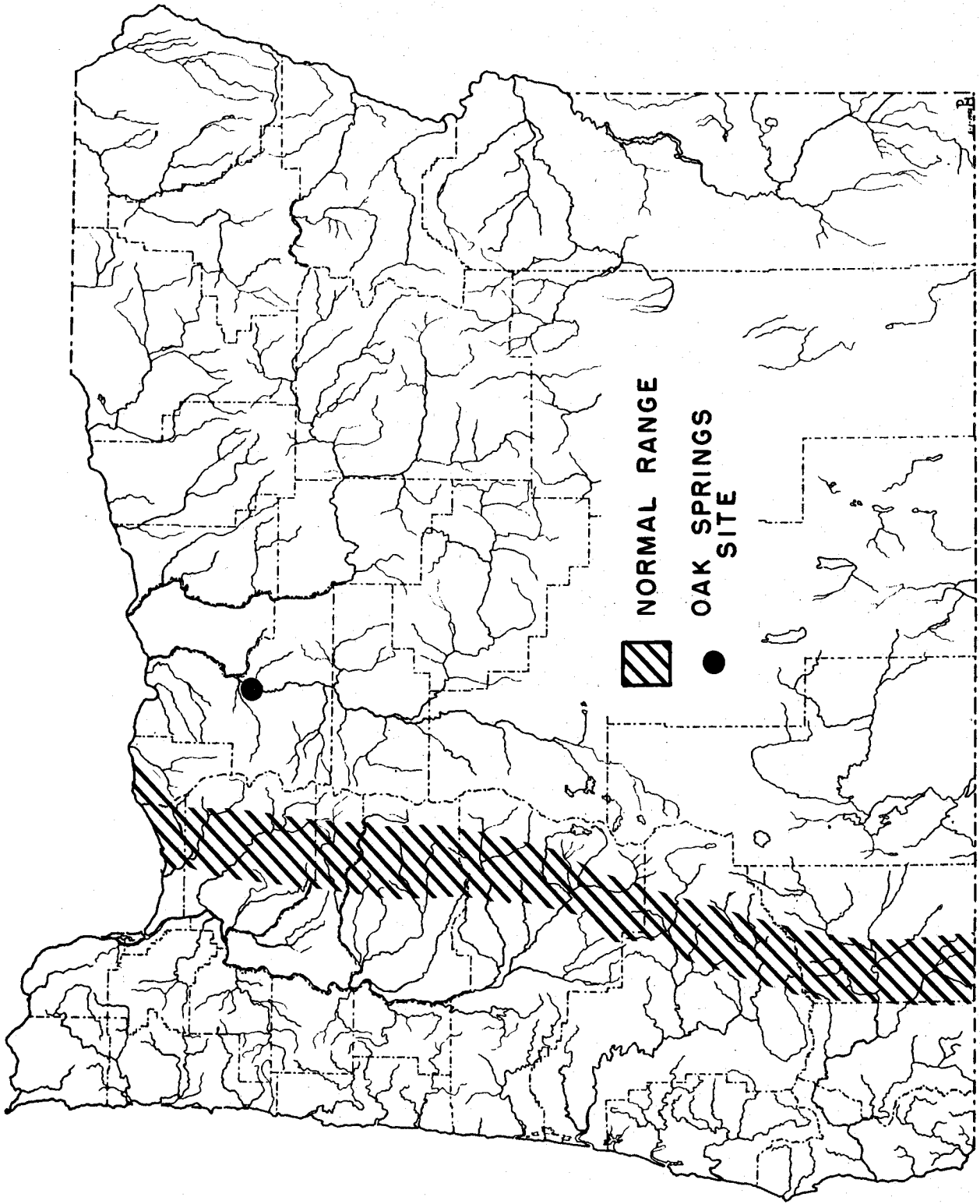


Figure 1. Distribution of Pacific giant salamander (*Dicamptodon ensatus*), and rough-skinned newt (*Taricha granulosa*). Note rare occurrence at Oak Spring site, Wasco County.

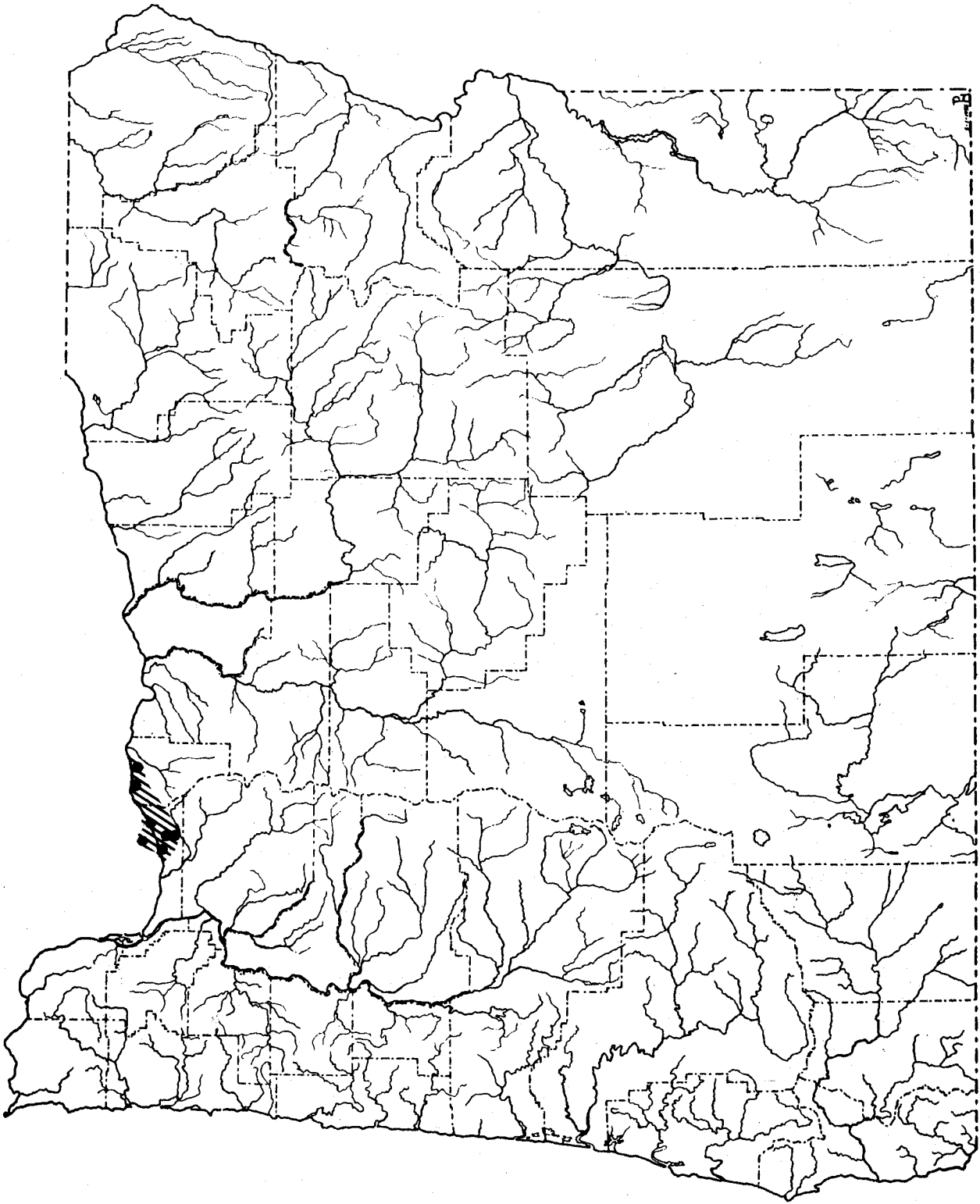


Figure 2. Known distribution of Larch Mountain salamander (Plethodon larselli).

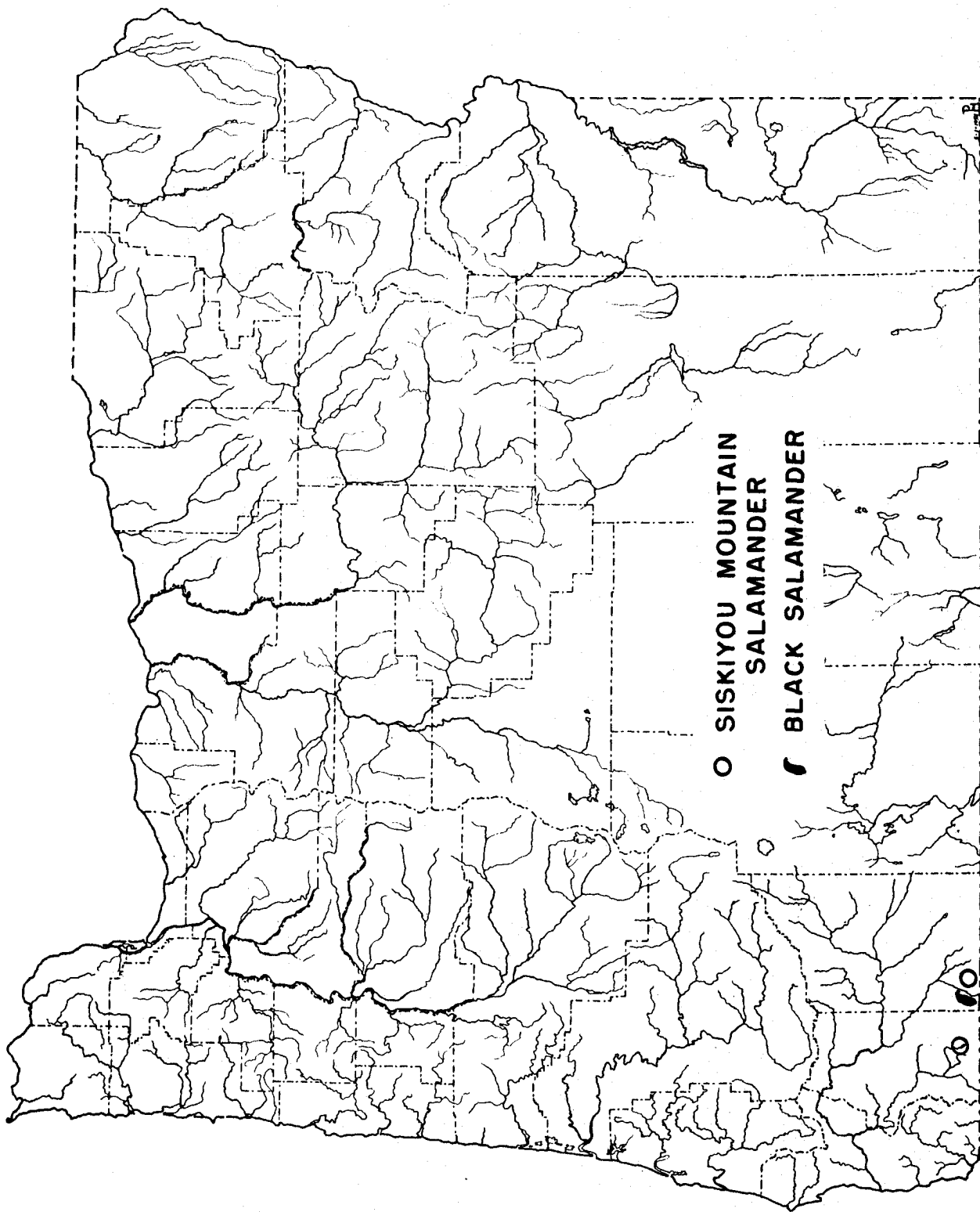


Figure 3. Oregon distribution of black salamander (*Aneides flavipunctatus*) and the Siskiyou Mountain salamander (*Plethodon stormi*).

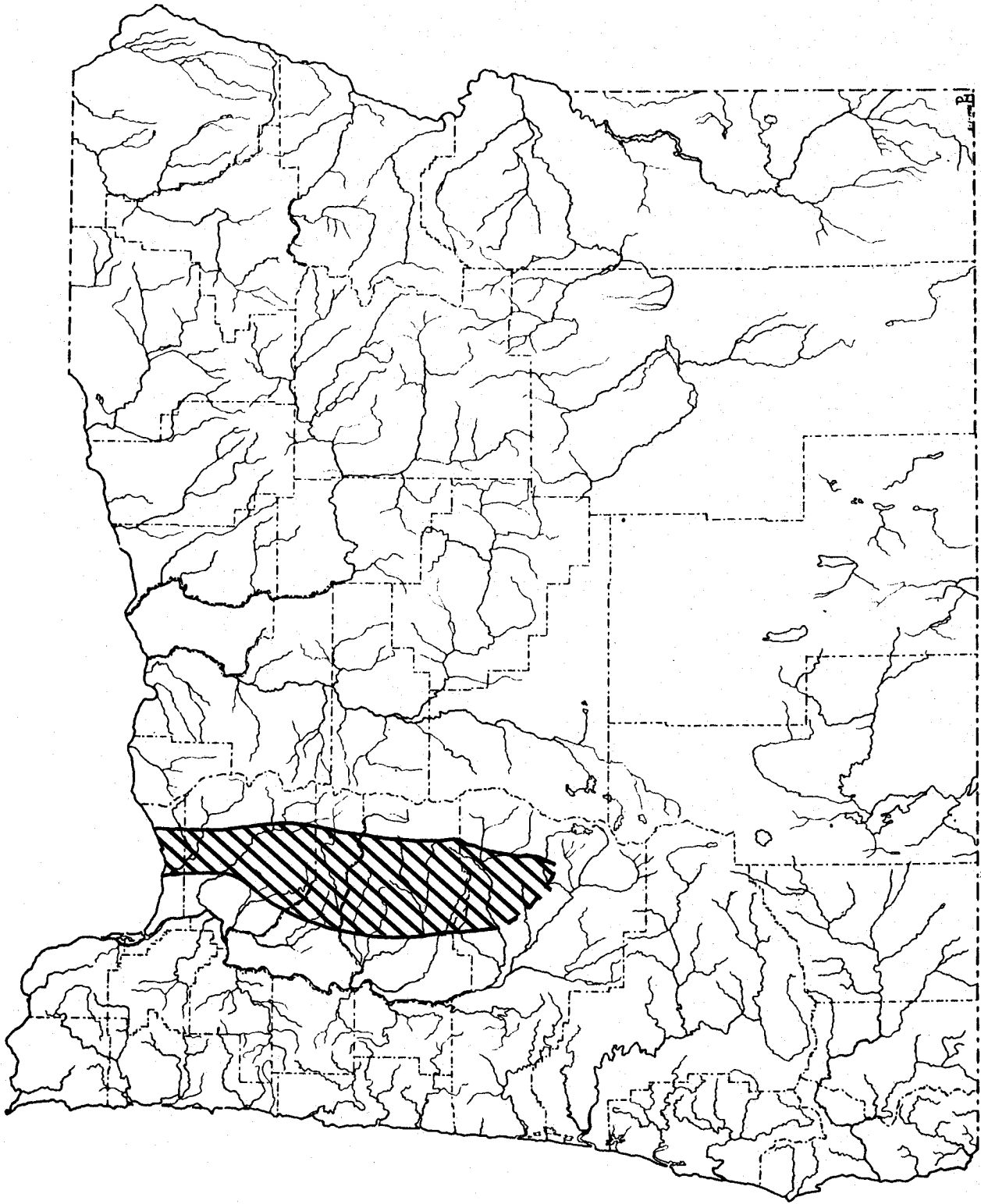


Figure 4. Distribution of Oregon slender salamander (Batrachoseps wrighti).

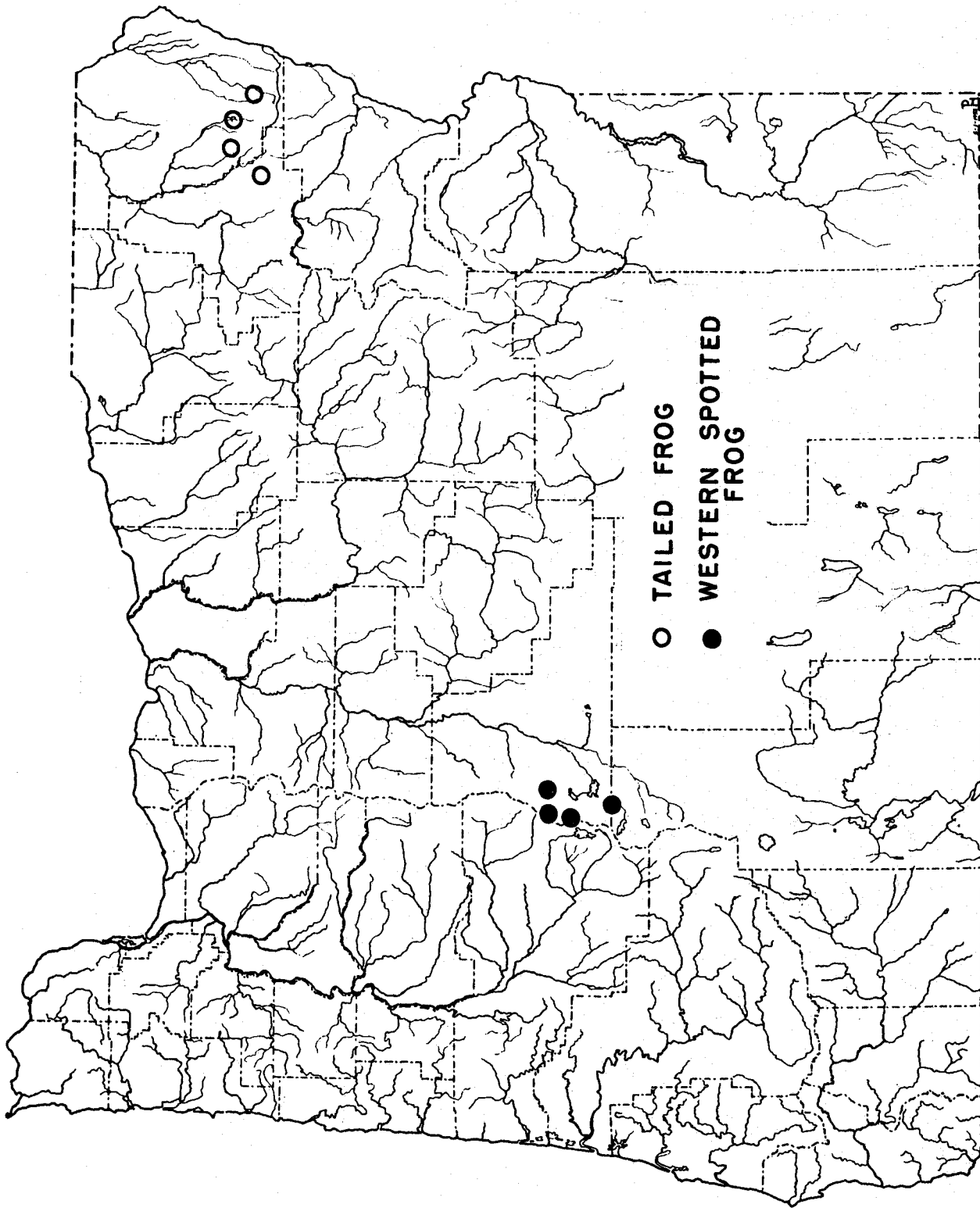


Figure 5. Distribution of the Wallowa populations of the tailed frog (Ascaphus truei) and the Cascade populations of the western spotted frog (Rana pretiosa pretiosa).

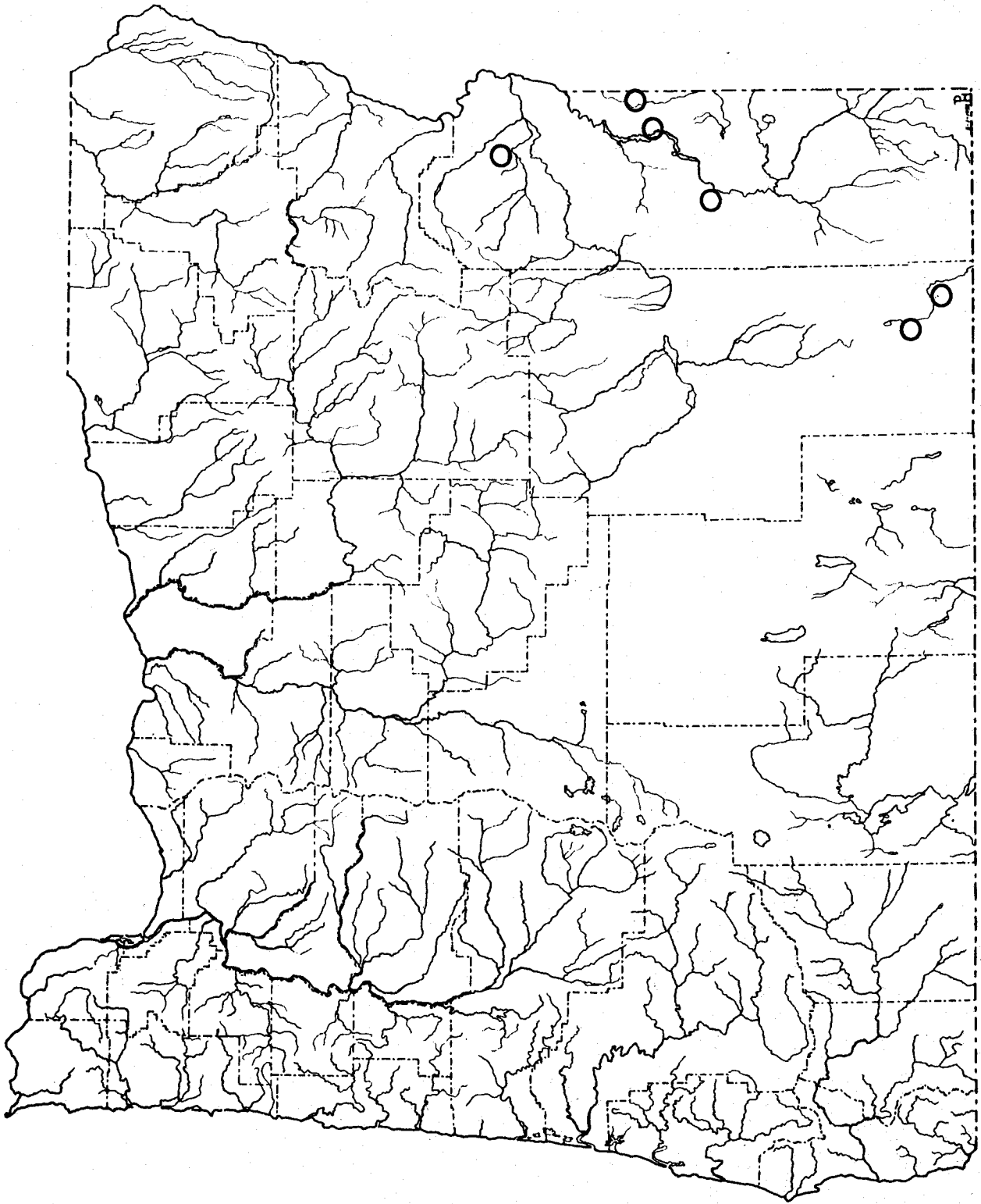


Figure 6. Oregon populations of the collard lizard (*Crotaphytus collaris*).

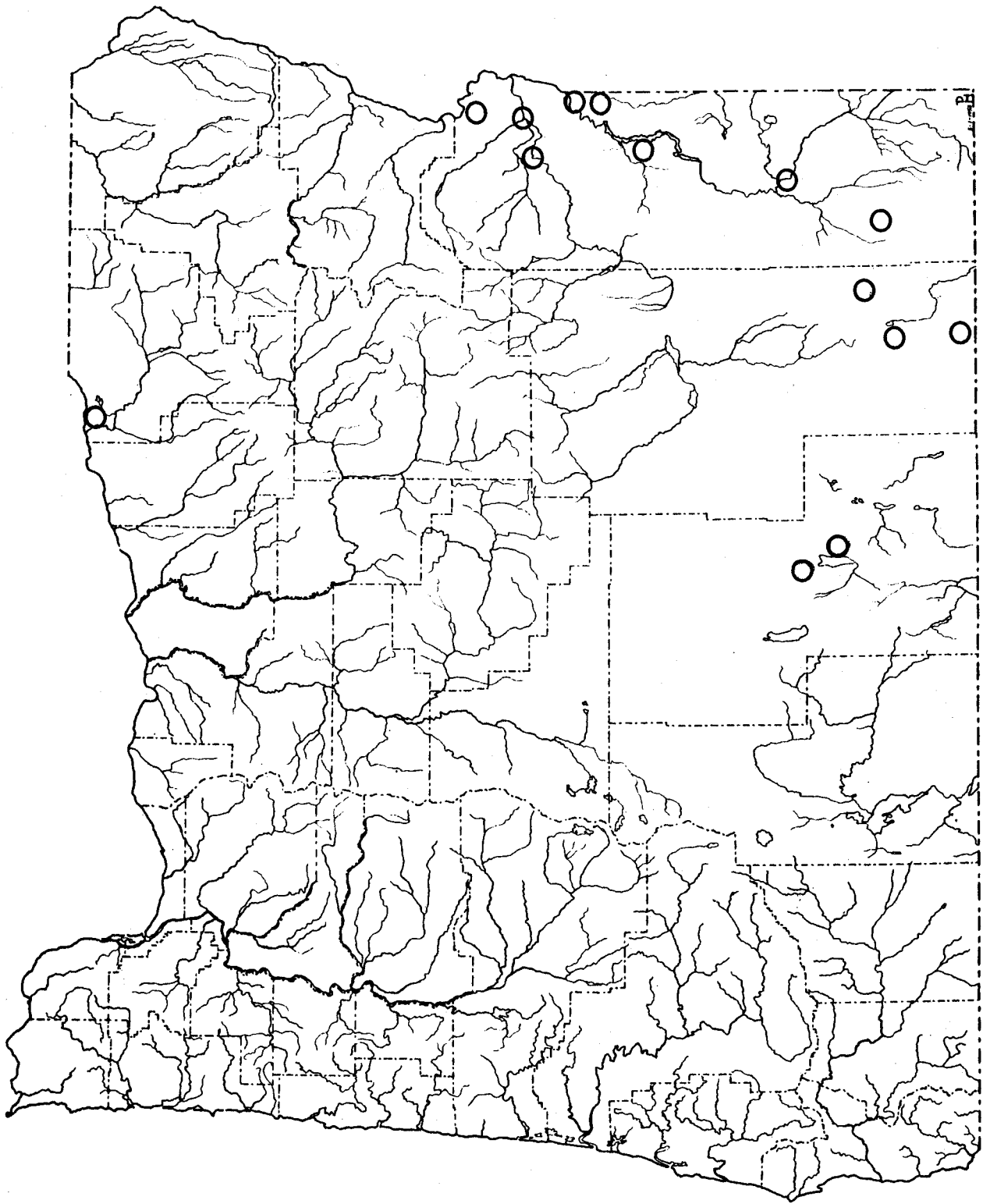


Figure 7. Distribution of the leopard lizard (*Crotaphytus wislizeni*).

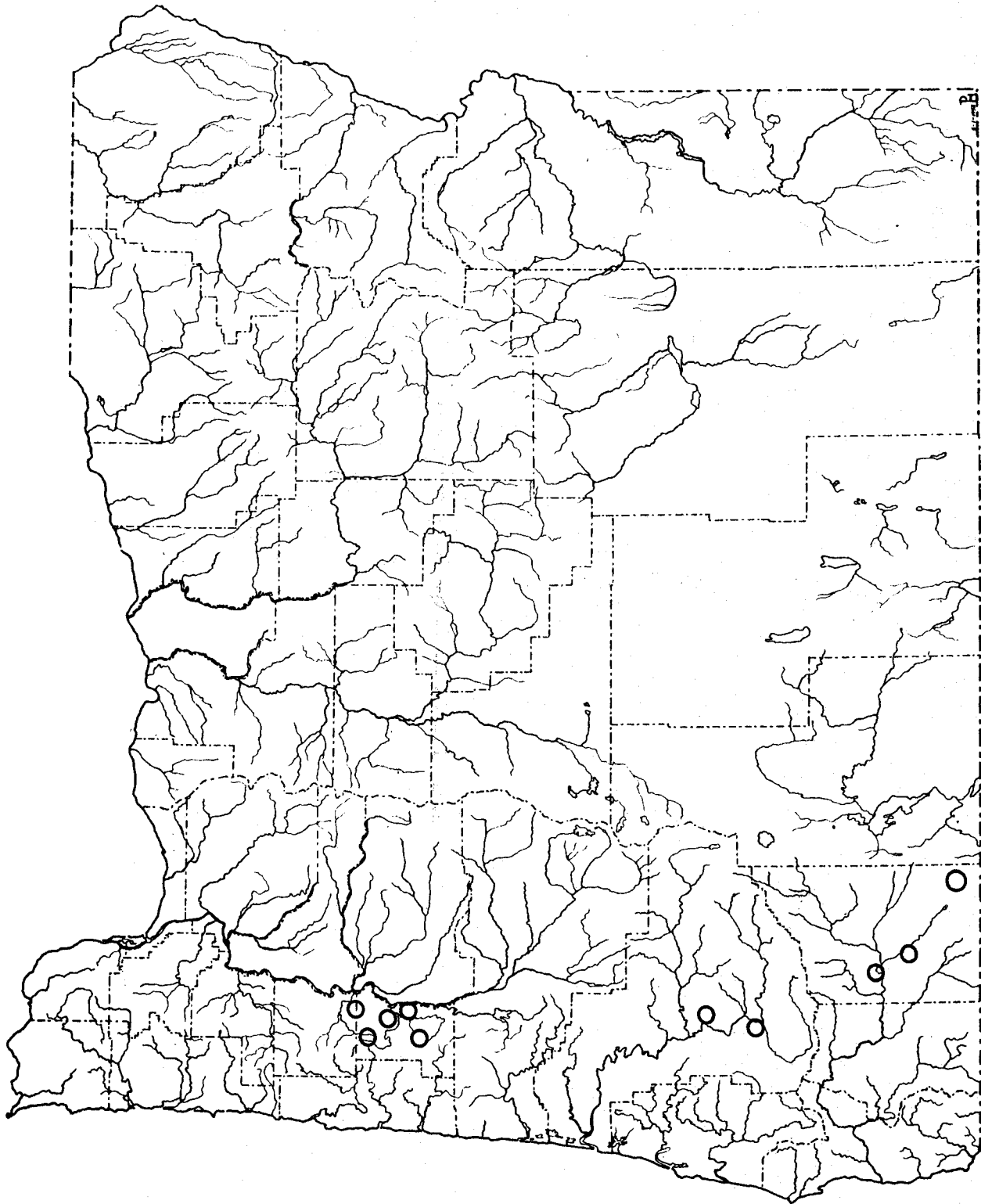


Figure 8. Population of the sharp-tailed snake (Contia tenuis).

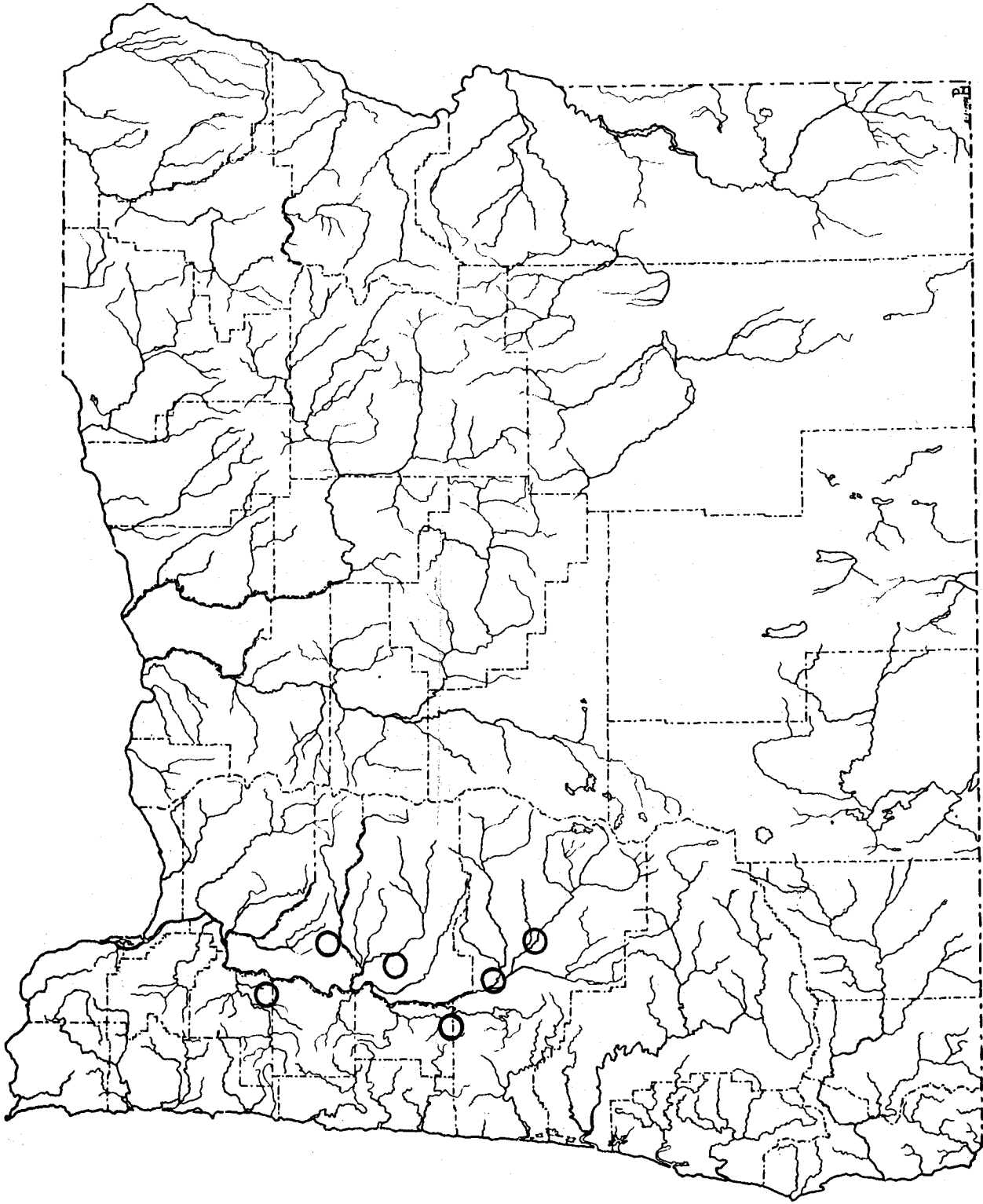


Figure 9. Some known populations of the western rattlesnake (*Crotalus viridis*) in the Willamette Valley.