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WESTERN STRIPED RACER IN WASHINGTON

James R. Slater

While on a field trip to central Washington, the Biology Club of the College of Puget Sound visited Ginko Petrified Forest State Park and took one western striped racer, *Coluber taeniatus taeniatus*, there about 7:00 A.M. on May 24, 1941. Richard Musser started it, I caught up with it and detained it, and Oscar Anderson put it in the bag. The nearest reported record is for Hatrock, Umatilla County, Oregon, given by Kenneth Gordon (The Amphibia and Reptilia of Oregon, Studies in Zoology, Oregon State College, 1939:72). The place where we took our specimen is about 90 miles northwest of Hatrock.

Our specimen (CPS 4028) agrees with Van Denburg's description (1922:686, Occas. Pap. Calif. Acad. Sci. 10) for this species except in minor details. Ours is more pink on the lower posterior surface of the body and tail; has only one postocular on the right instead of two; and the temporals are one followed by three. Our specimen is a female 958 mm. in length (head and body 728, tail 230); greatest diameter is 15 mm.

I do not find any previous reference in literature of the striped racer having been taken in the state of Washington.

COLLEGE OF PUGET SOUND, TACOMA, WASHINGTON

ISLAND RECORDS OF AMPHIBIANS AND REPTILES FOR WASHINGTON

James R. Slater and Walter C. Brown

Since our last report of the herpetology of the islands of Washington (Occas. Pap., Biol., Col. Puget Sound, No. 4, 1939), we have accumulated several new island records. These records have all been made between August 1940 and June 1941 with the exception of one from McNeil Island. Other people have helped collect on different islands as follows: Roger Crossman on Harstine, Reach, Indian, Marrowstone, Squaxin, Hope, Herron, and McMicken; Frank Bower on Squaxin, Hope, Herron, and McMicken; Millard Quale on Herron and McMicken; the Biology Club, C.P.S. on Steamboat, Blake, Raft, and Deadman's islands. Mr. Bower furnished a motor boat for two days. Mr. Chester Creso and son collected on Camano Island in April 1941. For all this help we are very grateful.

The 43 new island records which follow, added to the 128 already reported makes 171 island records for the state.

AMPHIBIANS

TRITURUS GRANULOSUS (Skilton)

(the same as *Triturus similans* of former paper)

PIERCE COUNTY: Herron Is., N end (CPS 2798).

PLETHODON VEHICULUM (Cooper)

MASON COUNTY: Hope Is., E end (CPS 2793). PIERCE COUNTY: Fox Is., Sylvan (CPS 2849-51).

ENSATINA ESCHSCHOLTZII Gray

PIERCE COUNTY: Herron Is., SE corner (CPS 2797); Raft Is. (CPS 2862); Fox Is., W side (CPS 2716-7, collected by Sam Allen). MASON COUNTY: Hope Is., E end (CPS 2792); McMicken Is., NW side (CPS 2799-2809); Squaxin Is., S end (CPS 2790-1). KITSAP COUNTY: Blake Is., E side (CPS 2852-6).

BUFO BOREAS BOREAS (Baird and Girard)

MASON COUNTY: Harstine Is., 3 mi. S of ferry landing (CPS 2773); 2 mi. N of ferry landing (CPS 2810).

HYLA REGILLA Baird and Girard

ISLAND COUNTY: Camano Is., Camano Beach (CPS 2843-4). JEFFERSON COUNTY: Marrowstone Is., Redding farm (CPS 2783-5); Indian Is., 3 mi. N of ferry landing (CPS 2787-9). PIERCE COUNTY: Fox Is., Sylvan (CPS 2847-8); Raft Is., (CPS 2859-61).

RANA AURORA AURORA (Baird and Girard)

JEFFERSON COUNTY: Marrowstone Is., swamp on Redding farm (CPS 2780-2); Indian Is., 2.9 mi. N of ferry landing (CPS 2786). PIERCE COUNTY: Raft Is. (CPS 2857-8).

REPTILES

SCELOPORUS OCCIDENTALIS OCCIDENTALIS (Baird & Girard)

PIERCE COUNTY: Fox Is., N end (CPS 3996-9); Herron Is., SE corner (CPS 3942-4).

GERRHONOTUS COERULEUS PRINCIPIS (Baird and Girard)

JEFFERSON COUNTY: Marrowstone Is., 1 mi. NE of bridge (CPS 3908); Indian Is., near bridge (CPS 3910-1); Protection Is. (CPS 3982, collected by Cecil E. Gabser). MASON COUNTY: Har-

stine Is., 2 mi. S of ferry landing (CPS 3899-900), S end (CPS 3918); Squaxin Is., S end (CPS 3919). PIERCE COUNTY: Fox Is., Sylvan (CPS 4002), ferry landing (CPS 4003-4). McNeil Is., (CPS 3571, collected by John W. Slipp). KITSAP COUNTY: Blake Is., E side (CPS 4014), W side (CPS 4013).

THAMNOPHIS ORDINOIDES ORDINOIDES (Baird and Girard)

ISLAND COUNTY: Camano Is., Camano Beach (CPS 3994-5). JEFFERSON COUNTY: Marrowstone Is., 1 mi. NE of bridge (CPS 3909); Protection Is. (CPS 4097); Indian Is., S end (CPS 3912), 2 mi. N of ferry landing (CPS 3914). MASON COUNTY: Hope Is., S end (CPS 3920-7); Reach Is. (CPS 3903-5); Squaxin Is., S end (CPS 3928-9); McMicken Is. SW corner (CPS 3978); Steamboat Is. (CPS 3971-5). PIERCE COUNTY: Herron Is., N end (CPS 3976); Raft Is. (CPS 4005-6, 4015-6); Deadman's Is. (CPS 4007). KITSAP COUNTY: Blake Is., E side (CPS 4010-12).

THAMNOPHIS SIRTALIS PICKERINGII (Baird and Girard)

MASON CO.: Harstine Is., 2 mi. N of ferry (CPS 3902). PIERCE CO.: Herron Is., N end (CPS 3977); Fox Is., Sylvan (CPS 4001).

THAMNOPHIS SIRTALIS TETRATAENIA (Cope)

(the same as *T. s. concinnus* of former paper)

JEFFERSON COUNTY: Indian Is., 2 mi. N of ferry landing (CPS 3913), 2.9 mi. N of ferry landing (CPS 3915). KITSAP COUNTY: Blake Is., E side (CPS 4009), W side (CPS 4008). PIERCE COUNTY: Raft Is. (CPS 4017).

A summary of the study to date is shown in the accompanying table on page 77.

In the course of our study, several islands have been visited on which we have not found any herpetological specimens. They are Frost, Colville, Strawberry, Dot, and Hat. These are omitted from the present chart. Eleven islands on which we have recently found herpetological specimens for the first time have been added. These are: JEFFERSON CO.: Protection, Marrowstone, Indian; KITSAP CO.: Blake; PIERCE CO.: Raft, Deadman's, Herron; MASON CO.: Hope, Steamboat, Squaxin, and McMicken.

COLLEGE OF PUGET SOUND, TACOMÁ, WASHINGTON

TABLE I. DISTRIBUTION CHART OF AMPHIBIANS AND REPTILES FOR ISLANDS OF WASHINGTON

| Counties | Islands | Name of Species | Number of Islands | | | | | | | | | | | Number of Counties | | | | | | | | | | | | | |
|--------------------|---------|-----------------------------------|-------------------|-----------|----------|---------|--------|--------|--------|------|--------|-------|--------------------|--------------------|----|----|----|----|----|----|----|----|----|----|-----|---|-----|
| | | | CLALLAM | JEFFERSON | SAN JUAN | WHARTON | SKAGIT | ISLAND | KITSAP | KING | PIERCE | MASON | Number of Counties | | | | | | | | | | | | | | |
| AMPHIBIANS: | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <i>Triturus gramineus</i> | | | | | | | | | | | | | | | | | 6 | | | | | | | | |
| | | <i>Ambystoma gracile</i> | | | | | | | | | | | | | | | | | 12 | | | | | | | | |
| | | <i>Ambystoma macrodactylum</i> | | | | | | | | | | | | | | | | | 4 | | | | | | | | |
| | | <i>Plethodon vehiculum</i> | | | | | | | | | | | | | | | | | 4 | | | | | | | | |
| | | <i>Ambystoma eschscholtzii</i> | | | | | | | | | | | | | | | | | 5 | | | | | | | | |
| | | <i>Bufo boreas boreas</i> | | | | | | | | | | | | | | | | | 5 | | | | | | | | |
| | | <i>Hyla regilla</i> | | | | | | | | | | | | | | | | | 4 | | | | | | | | |
| | | <i>Rana aurora aurora</i> | | | | | | | | | | | | | | | | | 5 | | | | | | | | |
| | | <i>Rana catesbeiana</i> | | | | | | | | | | | | | | | | | 14 | | | | | | | | |
| REPTILES: | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <i>Sceloporus o. occidentalis</i> | | | | | | | | | | | | | | | | | 5 | | | | | | | | |
| | | <i>Gerrhonotus c. principis</i> | | | | | | | | | | | | | | | | | 11 | | | | | | | | |
| | | <i>Charina bottae</i> | | | | | | | | | | | | | | | | | 14 | | | | | | | | |
| | | <i>Thamnophis o. ordinoides</i> | | | | | | | | | | | | | | | | | 11 | | | | | | | | |
| | | <i>Thamnophis o. vagrans</i> | | | | | | | | | | | | | | | | | 18 | | | | | | | | |
| | | <i>T. sirtalis pickeringii</i> | | | | | | | | | | | | | | | | | 24 | | | | | | | | |
| | | <i>T. sirtalis tetrataenia</i> | | | | | | | | | | | | | | | | | 17 | | | | | | | | |
| | | Number of species on each island | 2 | 2 | 4 | 5 | 1 | 2 | 6 | 2 | 1 | 7 | 8 | 7 | 11 | 4 | 8 | 7 | 5 | 3 | 1 | 3 | 9 | 2 | 7 | 2 | 173 |
| | | Island records for each county | 2 | 11 | 33 | 2 | 16 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 37 | 27 | 173 | | |

THE DISTRIBUTION OF AMPHIBIANS AND REPTILES IN IDAHO

James R. Slater

Since Van Denburgh made a summary of the reptiles of Idaho in his general work on the Reptiles of Western North America in 1922 and Slevin did the same for Amphibians in 1928, there has been no general paper on the herpetology of Idaho. This paper attempts five things: (1) a historical review of the herpetology of Idaho, the synonymy of each species gives the dates when various authors have written about specimens of that species taken in Idaho and the bibliography gives the full titles of these authors; (2) a key to the species and subspecies; (3) a collection of information on the distribution of the various species in the state; (4) a bibliography of the herpetology of Idaho; (5) one new species and one new subspecies are added to the state list. No claim is made that any of the above sections are complete but merely represent what information I could assemble to date.

Inquiries concerning any amphibians and reptiles of Idaho, criticisms of this paper, and added information will be welcome. The author will be happy to identify specimens sent to him for that purpose; and contributions will be gratefully received.

Scientific names will be used throughout the paper but those who prefer common names may find them at the heading of sections dealing with individual species. The present accepted scientific names will be used in the historical sketch even though the authors may have reported the species under another name (which name is now known as a synonym). Synonyms for each species are given under its general heading.

The following people and museums have been very generous in helping assemble this information by furnishing lists of specimens which they have in their museums: Joseph R. Slevin, California Academy of Sciences (CAS); E. Raymond Hall, Museum of Vertebrate Zoology (MVZ); University of California; L. M. Klauber, San Diego Society of Natural History (SDSNE); Leonhard Stejneger and Doris M. Cochran, United States National Museum (USNM); Karl P. Schmidt and Clifford H. Pope of the Field Museum of Natural History (FM); George S. Hudson of the Charles R. Conner Museum, Washington State College, Pullman, Washington (WSC).

Walter E. Lockwood, Librarian, Idaho State Traveling Library, went to considerable effort to locate some places, lakes, and creeks for me. Some of my students have collected in Idaho and for the most part have deposited the specimens in the College of Puget Sound Museum of Natural History. These students are Robert Ridgeway, Gordon D. Alcorn, Murray L. Johnson, John W. Slipp, Walter C. Brown, and Frank P. Seabeck. Miss Pomla Normand helped with the manuscript. For all this help, I am very grateful. It was only through their fine cooperation that this much information could be assembled.

Other records have been gleaned from the scattered literature. If a museum number was given, that is recorded after the place, otherwise a page reference is given. Other abbreviations used are as follows:

Academy of Natural Sciences of Philadelphia (ANSP)
Carnegie Museum, Pittsburgh (CM)
College of Puget Sound, Museum of Natural History (CPS)
Museum of Zoology, University of Michigan (MZ)
Stanford University, Museum of Natural History (SU)
Slevin 1928 Amphibians of Western North America (S)
Van Denburgh 1922 Reptiles of Western North America (V)

HISTORICAL SKETCH

The Lewis and Clark Expedition to the Pacific Ocean during the years 1804 to 1806 furnishes the first information about the amphibians and reptiles of Idaho. The expedition was especially commissioned by President Jefferson to study and report, among other things, on the reptiles of the country visited. Their report was prepared for the press by Paul Allen and published in 1814. On their return trip in the spring of 1806, they were delayed in western Idaho along the Clearwater River for a few weeks while the heavy snows melted in the mountains to the east.

Under date of May 17, 1806, Captain Clark mentions and describes "reptiles common to this country--". It is not entirely clear that all those mentioned were seen right there on the Clearwater River, but it is likely they were. From reading other parts of their narrative and the present knowledge of Idaho herpetology, I believe their report would include the following forms: *T. o. vagrans*, *T. s. parietalis*, *C. v. oregonis*, *S. o. biseriatus*, *P. d. ornatissimum*, *H. regilla*, *R. p. pretiosa*, and *P. c. deserticola*.

But the more scientific reports for Idaho started in 1860 with Cooper's "Report upon the reptiles collected on the (R. R.) survey" in which he established three species for the state as follows: *C. wislizenii*, *T. o. vagrans* and *P. c. deserticola*. Cope in 1879 added three more: *S. hammondii* (or *bombifrons*), *P. n. triseriata*, and *A. t. slateri* (or *maurtium*); while in 1883, he added eight more: *B. b. boreas*, *A. macrodactylum*, *P. platyrhinos*, *C. c. baileyi*, *U. s. stansburiana*, *S. o. biseriatus*, *C. c. mormon*, *T. s. parietalis*. Stejneger in 1891 added five: *R. p. pretiosa*, *S. g. gracilis*, *P. d. ornatissimum*, *C. v. viridis*, and *C. v. lutosus*. Van Denburgh in 1895 reported two: *R. p. pipiens* and *C. t. tessellatus*; in 1912 he added two more: *C. t. tasniatus* and *C. v. oregonus*, and in 1920 *C. bottae*. In 1921 Van Denburgh and Slevin were the first to report: *H. regilla*, *R. catesbeiana*, *E. s. skiltonianus*, and *R. lecontia*. Erwin in 1925 added three: *S. m. miniata*, *S. s.*

semiannulata, *L. t. ochrorhyncha*. In 1928 Slevin added *B. w. woodhousii*. In 1933 Linsdale reported *A. truei*. In 1940 W. W. Tanner added *D. r. regalis*, Unler added *D. a. occidentalis* and Slater and Slipp reported *P. idahoensis* and *Dicamptodon ensatus*, and Slipp made certain that *G. c. principis* was found in the state. These, together with two reported for the first time in this paper, *R. p. luteiventris* and *C. b. bellii*, makes forty herpetological forms known to inhabit the state.

Dr. C. B. R. Kennerly, as a physician and naturalist in the Northern Boundary Survey of 1858 to 1860, collected specimens some of which he labeled "Clark's Fork, Lower Kootenai River" specimens thus labeled in the U.S. National Museum are: *B. b. boreas*, *R. p. pipiens*, *G. c. principis*, *E. s. skiltonianus*. It is still uncertain just where these were taken, whether in northern Idaho or northwestern Washington.

Further indications of the progress of herpetology in Idaho will be found in the references given in connection with the synonymy of each species; and in the general bibliography.

Two subspecies which have been reported for the state have been dropped, namely: (1) *Thamnophis ordinoides couchi* because Fitch (1940) in his recent study of the *Ordinoides* group of garter snakes has not allowed this subspecies outside of California; and (2) *Thamnophis sirtalis concinnus* because Murray L. Johnson thinks we should continue to use the original description of *concinnus* as the one-lined, red-barred *sirtalis* and that the other red-barred gartersnakes of the Pacific northwest should be called by some other name. *Concinnus* is confined to northwestern Oregon and southwestern Washington.

KEY TO SPECIES AND SUBSPECIES

The following key to the species and subspecies has been kept as simple as possible so that any high-school student will be able to use it to identify any specimen of a species of amphibian or reptile now known to inhabit Idaho which he may find in the state.

KEY TO THE ADULTS OF IDAHO AMPHIBIANS AND REPTILES

- a. Skin moist and soft, without scales.....Class: Amphibians
- b. Body slender, with prominent tail, front and hind limbs about equal in development.....Order: Caudata
- c. No minute groove connecting nostril and upper lip; snout rounded.
- d. Fingers slender, longer than palm; a mid-dorsal stripe of yellowish color; total length less than 6 inches; vomerine teeth in four patches
.....*Ambystoma macrodactylum*
- dd. Fingers not longer than palms; vomerine teeth in two patches.

- e. Body coloration blackish, with irregular spots of pale yellow; costal grooves distinct, generally 13 between limbs.....*Ambystoma tigrinum slateri*
- ee. Body coloration "marbled" with dark brown and black; body robust; costal grooves less distinct, generally 12.....*Dicamptodon ensatus*
- cc. Minute groove connecting nostril and upper lip; body slender, snout truncate.....*Plethodon idahoensis*
- bb. Body stout, without prominent tail; hind limbs much longer than forelimbs.....Order: Salientia
- c. A very short tail-like process; no tympanic membrane.....*Ascaphus truei*
- cc. No tail-like process in adults; tympanic membrane present.
- d. Pupil of eye vertically elliptical; sole of hind foot smooth, without tubercles but with a single black cutting "spade" on inner margin.
.....*Scaphiopus hammondi*
- dd. Pupil of eye rounded or horizontally elliptical; sole of hind foot with low rounded tubercles.
- e. Large parotid glands over shoulders; jaws without teeth; skin warty.
- f. Cranial crests absent; parotid glands slightly longer than wide.....*Bufo boreas boreas*
- ff. Cranial crests present; parotid glands long; skin rougher with conical black-ringed warts.
.....*Bufo woodhousii woodhousii*
- ee. No parotid gland over shoulder; teeth on upper jaw.
- f. Tips of digits broadened into adhesive disks; skin of belly granular.....Family: Hylidae
- g. Disks on digits moderate; head obtuse in front; dark line extending along side of head.
.....*Hyla regilla*
- gg. Disks on digits minute; head long and pointed; longitudinal dorsal lines present.
.....*Pseudacris nigrita triseriatus*
- ff. Digits without expanded adhesive disks.
.....Family: Ranidae
- g. Dorso-lateral folds prominent; distinct rounded light-bordered black spots on back.
.....*Rana pipiens pipiens*
- gg. Dorso-lateral folds less distinct or absent; spots on back less distinct and not light bordered.
- h. Dorso-lateral folds not present; tympanic membrane as large or larger than eye.
.....*Rana catesbeiana*
- hh. Dorso-lateral folds moderate; tympanum never as large as eye.
- i. Back and top of head marked with inky black spots; a small outer metatarsal tubercle.
.....*Rana pretiosa pretiosa*
- ii. Back and top of head marked with dark spots but not so dark as in *pretiosa*; no outer metatarsal tubercle; palmar tubercle small or wanting.....*Rana pretiosa luteiventris*

- aa. Skin dry, with scales.....Class: Reptilia
- b. Body elongate and covered with small scales.
.....Lizards and Snakes
- c. Limbs present; eyelids movable; external ear opening.....Lizards
- d. Tail shorter than body; body dorso-ventrally flattened and widened.....Horned Lizards
- e. Head spines small, erect; body small.
.....*Phrynosoma douglassii ornatissimum*
- ee. Head spines large slanting posteriorly; body large.
.....*Phrynosoma platyrhinos*
- dd. Tail longer than body; body slender.
- e. A series of femoral pores (on under side of femur).
- f. Lateral scales not abruptly smaller than ventrals; ventrals in numerous series; tongue not deeply divided at tip.
- g. One or more well developed transverse gular folds; or a lateral fold between limbs.
- h. Caudal scales small, not strongly keeled nor sharply pointed; no large interparietal plate; no dark spot behind axilla; tail long and tapering (over twice the length of head and body).
.....Genera; *Crotophytus*
- i. Two black bars across shoulders.
.....*Crotophytus collaris baileyi*
- ii. No black bars across shoulders
.....*Crotophytus wislizenii*
- hh. Caudal scales often large, strongly keeled and sharply pointed; very large interparietal plate; a dark spot behind axilla; tail 1.6 times length of head and body.
.....*Uta stansburiana stansburiana*
- gg. No complete transverse gular fold; no lateral fold between limbs.....Genera: *Sceloporus*
- h. Size smaller, adults usually less than 65 mm. from snout to anus; 42-53 dorsal scales in a row from last median head plate to back of thighs; usually with very distinct longitudinal stripes on body...*Soelopus graciosus graciosus*
- hh. Size larger, adults usually 75 to 90 mm. from snout to anus; 35 to 44 dorsal scales in a row from last median head plate to back of thighs.
.....*Sceloporus occidentalis biseriatus*
- ff. Lateral scales granular like dorsals, abruptly smaller than ventrals; ventrals in eight longitudinal series; tongue ending in two long slender points.....*Cnemidophorus tessellatus tessellatus*
- ee. No femoral pores.
- f. Lateral scales very much smaller than dorsals and ventrals (usually hidden by lateral fold), dorsal scales keeled.....*Gerrhonotus coeruleus principis*
- ff. Lateral scales not much smaller than dorsals and ventrals; no lateral folds; dorsal scales smooth.
.....*Eumeces skiltonianus skiltonianus*
- cc. Limbs absent (very rudimentary in *bottae*); no movable eyelids; no external ear openings.....Snakes

- d. No pit between eye and nostril; tail not ending in rattle.
- e. A small spur on each side of anus; tail short and blunt.....*Charina bottae*
- ee. No small spur on each side of anus; tail longer and tapering.
- f. Scales smooth.
- g. Anal plate divided; scales on under side of tail in two series.
- h. Pupil round.
- i. A narrow light transverse collar behind head.
- j. Scales on belly to anus 180-212.
.....*Diadophis ambilis occidentalis*
- jj. Scales on belly to anus 212-237.
.....*Diadophis regalis regalis*
- ii. No light collar behind head.
- j. Scales on lower side of tail fewer than 75.
- k. Dorsal surface with transverse dark bands.
.....*Sonora semiannulata semiannulata*
- kk. Dorsal surface uniform color (reddish or pinkish); length up to 14 inches.
.....*Sonora miniata miniata*
- jj. Scales on lower side of tail more than 75.
- k. Dorsal color uniform; length up to 36 inches.
.....*Coluber constrictor mormon*
- kk. Dorsal color striped.
.....*Coluber taeniatus taeniatus*
- hh. Pupil vertically elliptical; coloration in blotches.....*Leptodeira tarquata ochrorhyncha*
- gg. Anal plate single; scales on underside of tail in single series (at least in front).
.....*Rhinocheilus lecontei*
- ff. Dorsal scales keeled.
- g. Dorsal scales in 29 to 35 rows; no longitudinal lines.....*Pituophis catenifer deserticola*
- gg. Dorsal scales in 17 to 23 rows; usually with longitudinal lines, sometimes spotted or unicolor.
- h. Eye small; scale rows 21 (very rarely 19); no red in coloration.....*Thamnophis ordinoides vagrans*
- hh. Eyes large, scale row 19; red spots or bars on lateral surface.....*Thamnophis sirtalis parietalis*
- dd. Pit between eyes and nostrils; tail ending in rattle except in very young.
- e. Ground color usually green or olive-green; less often olive-brown; scale rows 27 or 25; dorsal scale rows at center of tail 13 or more; adult size exceeding 850 mm. A pattern of even-edged dark-brown rectangular or subhexagonal blotches usually surrounded by a thin light line.....*Crotalus viridis viridis*
- ee. Ground color not green or olive-green.
- f. Ground color lighter, usually buff or drab; body blotches occupy less or but little more longitudinal space than interspaces; secondary series of lateral blotches little in evidence; a pattern of dark-brown dorsal blotches (often with light centers) on a buff or drab ground color.....*Crotalus viridis lutosus*

- ff. Ground color darker, usually dark-gray, olive, brown, or black; dark-brown or black dorsal blotches (usually diamonds or hexagons) occupying considerably more longitudinal space than the interspaces; a secondary series of lateral blotches conspicuously in evidence. Some mountain specimens nearly uniform black, only patches of yellow scales representing the interspaces on the mid-dorsal line.
*Crotalus viridis oregonus*
- bb. Body short and wide, enclosed in two (upper and lower) shields (Turtles).....*Chrysemys bellii bellii*

SALAMANDERS

DICAMPTODON ENSATUS (Eschscholtz) Pacific Giant Salamander

Dicamptodon ensatus, Slater and Slipp 1940:69.

Range: Southern British Columbia south to Santa Cruz County, Calif.; in northern Idaho, and Rocky Mountains of Montana.

Type locality: California, environs of Bay of San Francisco.

Idaho: Recently discovered in Benewah and Shoshone counties.

COUNTIES: BENEWAH: Mannering Cr., 12.2 mi. N of Harvard (CPS 2689-2692). SHOSHONE: Rock Run Cr. in deep canyon W of Monumental Peak (CPS 2812-4).

AMBYSTOMA MACRODACTYLUM (Baird) Long-toed Salamander

Amblystoma epixanthum, Cope 1883:16; Cope 1889:97.

Amblystoma epixanthum, Stejneger 1891:111.

Amblystoma macrodactylum, Van Denburgh and Slevin 1921:40; Stejneger and Barbour 1923:5; Storer 1925:73; Slevin 1928:30; Stejneger and Barbour 1933:6, 1939:8.

Range: Southern British Columbia south to central California and east to Alberta, Montana, and certainly in Iowa.

Type locality: Astoria, Oregon.

Idaho: Northern, central, and southwestern part of state.

COUNTIES: ADA: Black's Cr. S of Boise (SDSNH 1458, FM 6970). BENEWAH: Plummer, 6 mi. S (CPS 2698-2707). BLAINE: Sawtooth L. (USNM 16792). BOISE: Garden Valley (MVZ 10244-8); Idaho City, 10 mi E (SDSNE 1457). BONNER: Priest L. (CAS 63840-4). CAMAS: Swamp near the head of S. Boise R. on S side of the Sawtooth Mountain Range (Cope 1883:16). IDAHO: White Bird, 6 mi. N on H'y US 95 (CPS 2833-6). SHOSHONE: Willow Cr. 1 mi. E of Mullan, (CPS 2113). VALLEY: Smith Ferry (CAS 53843-928); McCall (CAS 45821-63; USNM 61131-42); Payette L. (CAS 41580-1, 43539-57); Lardo (S:30; USNM 40123); near top of mountain NE of Big Payette L. (USNM 39536).

AMBYSTOMA TIGRINUM SLATERI Dunn Northwestern Tiger Salamander

Amblystoma mavortium, Cope 1879:437-438; Cope 1889:308.

Amblystoma tigrinum, Cope 1889:83.

Amblystoma tigrinum, Van Denburgh and Slevin 1921:41; Slevin 1928:34; Stejneger and Barbour 1933:10; Slater 1937:81; Stejneger and Barbour 1939:10.

Amblystoma tigrinum slateri, Dunn 1940:160.

Range: South central British Columbia south to Oregon east to Alberta, North and South Dakota, Nebraska, and Wyoming.

Type locality: Coulee Dam, 5 mi. SE Grant Co., Wash.

Idaho: Probably throughout the state.

COUNTIES: BEAR LAKE: Bear L. (CAS 47745); Deep Ls. (CAS 47746-9); Bloomington Canyon (S:34). BONNEVILLE: N side South Fork, 3 mi. W Swan Valley (MVZ 21536). FREMONT: Ashton, 17 mi. E, 4 mi. N, 6275 ft. (MVZ 32107). JEFFERSON: Market L. as *A. mavortium* (Cope 1889:308). KOOTENAI: Lake Chatcolet (Slater 1937:81). LATAH: Moscow (CPS 2058-9). ONEIDA: Malad (USNM 48659). No county given: Snake R. (USNM 11693, 14 specimens). Dunn (1940:160) states, "One would expect *A. t. nebulosum* in southern Idaho."

PLETHODON IDAHOENSIS Slater and Slipp Coeur d'Alene Salamander

Plethodon idahoensis, Slater and Slipp 1940a:38.

Range: Known only from type locality.

Type locality: Northeast corner of Coeur d'Alene Lake, Kootenai County, Idaho.

Idaho: Known only from type locality.

COUNTIES: KOOTENAI: S shore of Wolf Lodge Bay, Lake Coeur d'Alene, 1.6 mi. S of RJ US 10-95A (CPS 2710-11).

TOADS AND FROGS

ASCAPUS TRUEI Stejneger American Ribbed Toad

Ascaphus truei, Linsdale 1933:223; Slater and Slipp 1940:69.

Range: Western Montana, northern Idaho, southern British Columbia, western Washington and Oregon including the Cascades south to Humboldt County, California.

Type locality: Humpstulips, Washington.

Idaho: Northern and central Idaho.

COUNTIES: ADAMS: Black L. 1/2 mi. E, Alt. 6800 ft. (MVZ 12337-43, 123345). BENEWAH: Mannering Cr., 12.2 mi. N of Harvard (CPS 2685-2688). SHOSHONE: Little N. Fork of Clearwater R., 1/2 mi. E of H'y crossing from Avery to Clarkia (CPS 2815). WASHINGTON: Heath, 1 mi. NE (MVZ 12336, 12344); W slope Cuddy Mtn., 4600 ft. (MVZ 15231).

SCAPHIOPUS HAMMONDII Baird
Western Spadefoot Toad

Spea hammondii bombifrons, Cope 1889:307.
Spea bombifrons, Cope 1879:436; Smith 1934:434; Stejneger and Barbour 1939:29.
Scaphiopus hammondii, Van Denburgh and Slevin 1921:41; Slevin 1928:86.
Scaphiopus hammondii bombifrons, Dickerson 1931:61.
Range: British Columbia south to southeastern California, east of the Cascades, east to Idaho.
Type locality: Fort Reading, California.
Idaho: Southern part of the state.
COUNTIES: ADA: Boise (CAS 43533-8, 45739-46, 53820-2; MVZ 10229). BANNOCK: Pocatello (Kans. Univ. 14567 identified as *bombifrons*). JEFFERSON: Market L. 4 mi. N of Roberts as *Spea bombifrons* (Cope 1889: 308). MINIDOKA: Acequia (MVZ 17012). OWYHEE: Murphy, 5 mi. SE (MVZ 18278).

BUFO BOREAS BOREAS (Baird and Girard)
Northwestern Toad

Bufo columbiensis, Cope 1883:17; Cope 1889:271; Cope 1895:207.
Bufo boreas boreas, Van Denburgh and Slevin 1921:41; Slevin 1928:94; Tanner, W. W. 1940:139.
Range: Prince William Sound, Alaska, south to Mono County, California, east to Colorado and Montana.
Type locality: Columbia River and Puget Sound.
Idaho: In all parts of the state.
COUNTIES: ADA: Boise (CAS 41535, 53818-9); Boise, 12 mi. /A SE (FM 16235-6); near Boise R. (USNM 65195). ADAMS: Thorn Cr. R. S. 5400 ft. (MVZ 15212-3); Payette L., 3 mi. W, 5400 ft. (MVZ 15217-21). BANNOCK: Mink Cr. near Pocatello (S:94). BEAR LAKE: Deep Ls. (CAS 47744); Bloomington Canyon (S:94). BLAINE: Guyer Hot Springs (MVZ 10260-1); Alturas L. 7000 ft. (MVZ 15224-6, 21539-40); Bellevue (Cope 1883:17); Alturas L. (S:94; 39690, 39696); Sawtooth L. (S:94; USNM 39688-9). BOISE: Daggett Cr. (MVZ 10263-4); Garden Valley (SDSNH 1439). BONNER: Cocolalla, 5 mi. W, 3500 ft. (MVZ 15214-5, 15227-30). BONNEVILLE: S side S.Fk., 3 mi. W Swan Valley (MVZ 21538). CAMAS: Fairfield (Tanner, W. W.:139). ELMORE: Atlanta (Cope 1883:17); GOODING: Hagerman, 2 mi. E (MVZ 18279-80). IDAHO: White Bird, 6 mi. N on H'y US 95 (CPS 2841). JEROME: between Blue Ls. and Shoshone Falls (S:94). KOOTENAI: Blue L. (S:94); Mount Carlton (S:94). SHOSHONE: 35 mi. N of Wallace, Elev. 3000 ft. North (CPS 2369) Fork of Coeur d'Alene R. TETON: Victor, 3 mi. SW, 6300 ft. (MVZ 21537). VALLEY: Payette L. (CAS 41571-5); McCall (CAS 45820); Smith's Ferry (CAS 53841, MVZ 10262); Warm L., 5 mi. E, 7000 ft. (MVZ 15222); Cape Horn, 5 mi.

W, 7000 ft. (MVZ 15223). County not ascertained: Clark's Fork, Lower Kootenai R. (USNM 6278); Meadow Cr. (USNM 39691-3).

BUFO WOODHOUSII WOODHOUSII (Girard)
Rocky Mountain Toad

Bufo woodhousii, Slevin 1928:13; Kellog 1932:72.
Range: South central Washington, central Oregon, and eastern California east to Kansas, Nebraska, and Montana.
Type locality: "New Mexico" = San Francisco Mountain, Coconino County, Arizona.
Idaho: Central and southwestern part of state.
COUNTIES: ADA: Boise (Kellog:72, CAS 41521-34, 45747-56). CANYON: L. Lowell (MVZ 10230); Nampa (FM 11244). GEM: Emmett, 11 mi. NW (CPS 2763). NEZ PERCE: Lewiston (USNM 25322).

PSEUDACRIS NIGRITA TRISERIATA (Wied)
Western Marsh Toad

Chorophilus triseriatus, Cope 1879:437; Cope 1889:344.
Pseudacris triseriata, Stejneger and Barbour 1917:31, Van Denburgh and Slevin 1921:40; Stejneger and Barbour 1923:29; Slevin 1928:120.
Pseudacris nigrata triseriata, Stejneger and Barbour 1933:32; Wright and Wright 1933:94; Stejneger and Barbour 1939:37; Tanner, W. W. 1940:139.
Range: Allegheny Mountains to New Mexico, Arizona, and Idaho.
Type locality: Mt. Vernon, Ohio River, Indiana.
Idaho: Central and southwestern parts of state.
COUNTIES: ADA: Boise (S:120). CANYON: Nampa (ANSP 18, 034); Walters on Snake R. (CPS 2830). CASSIA: Declo (Tanner, W. W.: 139). FRANKLIN: Franklin (Cope 1879:437; 1889:344). VALLEY: Smith's Ferry (CAS 64182-4, 64993-7).

HYLA REGILLA Baird and Girard
Pacific Tree-Toad

Hyla regilla, Van Denburgh and Slevin 1921:41; Storer 1925:218; Slevin 1928:116; Stejneger and Barbour 1933:35; Wright and Wright 1933:124; Stejneger and Barbour 1939:40.
Range: Southern British Columbia to Lower California east to Idaho, Utah, and Arizona.
Type locality: "Sacramento River, in Oregon and Puget Sound."
Idaho: Northern, central and southwestern part of state.
COUNTIES: ADA: Boise (CAS 41536-9, 43532, 45527-738; FM 6939-40; MVZ 10232-41); Boise, 4 mi. S (CAS 64138-50; MVZ 10265-79); Boise, 5 mi. S. (SDSNH 1460-74; FM 11260, 62-3,

16237); Indian Cr. (MVZ 10231); Indian Cr. W of Regena (SDSNH 1459). BONNER: Priest Lake, Luby Bay (CPS 2678-9). BOUNDARY: International Junction, 2 mi. S (CPS 2926). IDAHO: White Bird, 6 mi. N (CPS 2837-40). LATAH: Moscow (CPS 2545-47); Harvard, 1 mi. W (CPS 2936). OWYHEE: Riddle, 1 mi. S, 5300 ft. (MVZ 17013); Murphy, 6 mi. W (MVZ 18281-3). VALLEY: Payette L. (CAS 41540-1); Lardo (USNM 39844-50, 40126); Smith's Ferry (FM 6933-8).

RANA CATESBEIANA Shaw
Bullfrog

Rana catesbeiana, Van Denburgh and Slevin 1921:41; Storer 1925:279; Slevin 1928:144.

Range: North America east of the Rocky Mts. except extreme southeast and Gulf States coastal plain. Introduced into many localities in the west and spread from these "plantings."

Type locality: South Carolina.

Idaho: Reported in two counties but should be found in others.

COUNTIES: ADA: Boise (CAS 41453-510, 53790-817; MVZ 10259; USNM 65195); Eagle (CAS 53825); Swan Falls (MVZ 10242). CANYON: Melba (FM 11234). KOOTENAI: Harrison 2 mi. N (CPS 2938-9); Harrison 13.2 mi. N (CPS 2693-7).

RANA PIPIENS PIPIENS (Schreber)
Leopard Frog

Rana pipiens brachycephala, Van Denburgh 1895:207; Stone 1911:224; Van Denburgh 1912:158.

Rana pipiens, Van Denburgh and Slevin 1921:42; Storer 1925:268; Slevin 1928:125; Kellog 1932:204; Tanner, W. W. 1940:139.

Range: Southern Connecticut, west and south to include most of the states and northern Mexico and southern Canada.

Type locality: Raccoon, New Jersey, and New York.

Idaho: Through the state except the higher mountains.

COUNTIES: ADA: Boise (CAS 41388-520, 45476-526, 53787-9, 53795, FM 11232); Boise, 1 mi. W (SDSNH 1441); Black's Cr. S of Boise (SDSNH 1440). BEAR LAKE: Bear Lakes (CAS 47742); Bloomington Canyon (S:125); Deep Lakes (CAS 47743); Fish Haven Cr. (CAS 54202). BINGHAM: Blackfoot (S:125; USNM 46160); Fort Hall (CAS 41307-52). BONNER: Sand Point (V 1895:207; USNM 20922); Hope (S:125; USNM 39706-7); Pend Oreille R. at Sand Point (CPS 2115); Sand Point, 5 mi. NE (CPS 2931-2). BOUNDARY: International Junction, 5 mi. S (CPS 2924-5); International Junction, 3 mi. NW (CPS 2927-8). CANYON: Caldwell (S:125; USNM 21469); Walters on Snake R. (CPS 2827-8). CASSIA: Elba (MVZ 17014); Deelo (Tanner, W. W.:139). ELMORE: Mountain Home (ANSP 18011-4); Hammett (MVZ 21541). FREMONT: Ashton, 17 mi. E, 4 mi. N (MVZ 32137-46). GOODING: Hagerman, 2 mi. E (MVZ

18284); Hagerman, 2 mi. S (CPS 2832); Lower Salmon Falls (USNM 39801). JEROME: Spring Brande just above Shoshone Falls (S:125); Hanson's Bridge, 5 mi. NE (CPS 2829, 2831). POWER: American Falls (S:125). TWIN FALLS: Rogerson, 3 mi. E and 1 mi. N (CPS 2941-2). WASHINGTON: Weiser (S:125); Montgomery's Ferry mouth of Weiser Cr. (S:125); Man Cr. 10 mi. Weiser (USNM 39739-40).

RANA PRETIOSA PRETIOSA (Baird and Girard)
Western Spotted Frog

Rana pretiosa, Stejneger 1891:112; Van Denburgh 1895:207; Van Denburgh and Slevin 1921:42; Slevin 1928:136.

Rana pretiosa pretiosa, Storer 1925:273.

Range: Utah and Montana west to the Pacific coast, California to Mt. Lassen area, British Columbia, and Arizona.

Type locality: Puget Sound, Washington.

Idaho: Northern and central parts of the state.

COUNTIES: ADAMS: Indian Valley (S:136; USNM 39794). BENEWAH: Hangan Cr. and H'y 95 near Tensad (CPS 2933). BLAINE: Guyer Hot Springs near Ketchum (CAS 41584-639); Saw Tooth L., 7200 ft. Alt. (USNM 16796-7, 39766-7); Pettit L. (S:136; USNM 39821-3). BOISE: Thorn Cr. (CAS 64179-81, 64215; FM 16232-4). BONNER: Sand Point (S:136; USNM 20923-7, 21464-7); Hope (S:136; USNM 39806); Cocolalla, 5 mi. W, 5700 ft. (MVZ 15249); Pend Oreille R. at Sand Point (CPS 2114); Priest Lake, Luby Bay (CPS 2923). BOUNDARY: Meadow Cr., 4 mi. W, 3000 ft. (MVZ 15250); Addie, 7 mi. W (CPS 2929-30). CLEARWATER: Weippe, 2 mi. NE, 3000 ft. (MVZ 15286). IDAHO: Castle Cr. R. S., 1800 ft. (MVZ 15239-43). KOOTENAI: Coeur d'Alene (S:136); Mount Carlton (S:136); Coeur d'Alene L. (USNM 21470-1). LATAH: Moscow (CPS 2252, 2539, 2548-9); Harvard, 1 mi. NE (CPS 2934-5); Harvard, 8.2 mi. at giant white pine in St. Joe Nat. Forest (CPS 2937). LEMHI: Salmon R. Mts. (- Lemhi Range) (USNM 16793-4); Lemhi Indian Agency at 5400 ft. Alt. (USNM 16795). LEWIS: Lawyer's Cr., Canyon, 4 mi. W on H'y US 95 (CPS 2842). SHOSHONE: Glidden Ls., 5700 ft. (MVZ 15244-8); Willow Creek, 1 mi. E of Mullan (CPS 2110-12); Potsville, Spike Cr. (CPS 2373); Thompson Pass (USNM 46159). VALLEY: Payette L. (CAS 41542-70); McCall (CAS 45779-819); Lardo (S:136; USNM 39709-10); Smith's Ferry (CAS 53842; SDSNH 1442-3; FM 6941-4). County not ascertained: White's Warm Springs (USNM 39725).

RANA PRETIOSA LUTEIVENTRIS Thompson
Nevada Spotted Frog

Range: Northeastern California, eastern Oregon, southern Idaho, western Utah and Nevada.

Type locality: Anne Creek, Elko Co., Nevada.

Idaho: Central and southern parts of state. I believe this is the first this subspecies is reported for the state.

COUNTIES: ADAMS: Payette L. 3 mi. W, 5400 ft. (MVZ 15265-7).
BLAINE: Geyser Hot Springs (MVZ 10243, 10251-6); Alturas L.
7000 ft. (MVZ 15280-5). BOISE: Thorn Cr. (MVZ 10249-50).
FREMONT: Ashton, 17 mi. E, 4 mi. N, 6275 ft. (MVZ 32147-59).
OWYHEE: S. Fk. Owyhee R., 4500 ft., 22 mi. N Nevada line (MVZ
24418-9); 2.5 mi. E Jordan Valley (Oreg.) 4300 ft. (MVZ 24420).
VALLEY: Smith's Ferry (MVZ 10257-8); Warm L. 5 mi. E (MVZ
15274-9); Donnelly (MVZ 15268-73).

LIZARDS

CROTAPHYTUS COLLARIS BAILEYI (Stejneger) Western Collared Lizard

Crotaphytus collaris, Cope 1883:15.
Crotaphytus baileyi, Van Denburgh 1897:56.
Crotaphytus collaris baileyi, Stejneger and Barbour 1917:45;
Van Denburgh and Slevin 1921:40; Van Denburgh 1922:108;
Stejneger and Barbour 1923:44, 1933:49, 1939:54.
Range: Southwestern Texas to southeastern California, north-
ern Mexico and Lower California, north to southern Idaho, and
eastern Oregon.

Type locality: Painted Desert, Arizona.

COUNTIES: ADA: Boise (FM 11254); Vic. south of Melba (CAS
64173); Snake R. near Canyon Co. line (FM 16192-8); below Swan
Falls (MVZ 10223). ELMORE: Hammett, 3 mi. W (MVZ 21542).
OWYHEE: Bruneau River mouth (Cope 1883:15; CAS 64163-4); Home-
dale, S of (FM 11255); Hot Springs S of Bruneau (SDSNH 1444-5;
FM 16200); Murphy, 6 mi. W (MVZ 18285); Snake R. E of Murphy
(FM 16191); Wickahoney Cr. S of Bruneau (FM 16199). No county
given: Snake River (USNM 65182).

CROTAPHYTUS WISLIZENII Baird and Girard Leopard Lizard

Crotaphytus wislizenii, Cooper 1860:294 Fort Boise, near Parma.
Van Denburgh 1895:206; Van Denburgh 1897:59; Van Den-
burgh 1912:155; Stejneger and Barbour 1917:46; Van Den-
burgh and Slevin 1921:42; Van Denburgh 1922:123; Stej-
neger and Barbour 1923:45, 1933:50, 1939:55.
Crotaphytus wislizeni, Cope 1883:15; Stone 1911:225.

Range: Western Texas to Lower California north to Colorado,
central Idaho, and eastern Oregon.

Type locality: Near Santa Fe, New Mexico.

Idaho: Central, southwestern and southcentral parts of state.

COUNTIES: ADA: Boise (CAS 41366-71, 45417-27, 53775-83);
Boise, foothills N of (SDSNH 1450-2); Snake R. near Canyon Co.
line (FM 16188-90); below Swan Falls (MVZ 10222); Ten-mile Cr.
(FM 16187). BINGHAM: Fort Hall (CAS 41275-6). CANYON: Fort
Boise, near Parma (Cooper 1860:294). CASSIA: Cottonwood Cr.

(V:123). ELMORE: Glenn's Ferry (V:123; USNM 48157-8); Ham-
mett (FM 6951-2); King Hill, 4 mi. SE (MVZ 18287-9); Mountain
Home (ANSP 18015-7 and CPS 3509); no place given (USNM 58301-
3). GOODING: Plains between Bliss and Snake R. (USNM 21477);
Plains N side Snake R. between Upper Salmon Falls and Bliss
(V:123). JEROME: Blue Lakes to Shoshone Falls (V:123).
OWYHEE: Bruneau (CAS 64161-2); Bruneau, 7 mi. S (MVZ 17015);
Bruneau near Hot Springs (FM 11249); mouth of Bruneau R. (Cope
1883:15); plains across river from Glenn's Ferry (V:123);
Grandview (CAS 64155-6); Homedale (FM 6950); S bank Snake R.
Homedale (MVZ 21543-5); Indian Cove (CAS 64151-4); Murphy,
5 mi. SE (MVZ 18286); Hole in Rock Cr. (MVZ 10304). TWIN
FALLS: Rogerson, 4 mi. E (CPS 4103-4); S side of Snake R.
near Salmon Falls (V:123). WASHINGTON: Weiser (V:123). No
county given: Snake R. (USNM 65183).

UTA STANSBURIANA STANSBURIANA (Baird and Girard) Northern Brown-shouldered Lizard

Uta stansburiana, Cope 1883:15; Van Denburgh 1895:206, 1897:68,
1912:156; Richardson 1915:412.

Uta stansburiana stansburiana, Stejneger and Barbour 1917:52;
Van Denburgh and Slevin 1921:40; Van Denburgh 1922:232;
Stejneger and Barbour 1923:53, 1933:58, 1939:63.

Range: Northeastern California, eastern Oregon, south-
western Idaho, Utah, and Nevada.

Type locality: Salt Lake Valley.

Idaho: Southwestern part of the state.

COUNTIES: ADA: Swan Falls to 8 mi. below (MVZ 10221,
10280-7); Swan Falls, Swan R. (FM 7002-3, 11237-41). CANYON:
Across Snake R. from Given's Warm Springs (FM 16202-7); Melba,
2 mi. S (MVZ 1894). ELMORE: Rimrock, 3 mi. NE Hammett (MVZ
21546); no place given (USNM 58203-4). GOODING: Plains be-
tween Bliss and Snake R. (V:232); Snake R. bottom near Bliss
(V:232); Hagerman, 2 mi. S (MVZ 18291-2); Lower Salmon Falls
(USNM 40122). JEROME: Blue Lakes to Shoshone Falls (V:232).
LINCOLN: Snake R. (Richardson 1915:412 S. U.). OWYHEE:
Bruneau R. mouth (Cope 1883:15); Bruneau (CAS 64168-72);
Grandview (CAS 64157), 7 mi. NW (CPS 3988); Guffey, near
(SDSNH 1455-6); Hot Springs (FM 11235-6); Little Owyhee R.,
4 mi. N Nevada line (MVZ 24465); Murphy (USNM 48163); Murphy,
19 mi. SE (MVZ 18293); S Fork Owyhee R., 4800 ft., 15 mi.
N Nevada line; S Fork Owyhee R., 5000 ft., 22 mi. N Nevada
line; Sinkers Cr. (MVZ 10288); Walters, 4 mi. W on west side
of Snake R. (CPS 3983). TWIN FALLS: Rogerson (CPS 3865);
Salmon Cr., 8 mi. W Rogerson (MVZ 18290); south side of Canyon
between Shoshone Falls and Twin Falls (V:232).

SCELOPORUS GRACIOSUS GRACIOSUS (Baird and Girard)
Sage-brush Swift

Sceloporus graciosus, Stejneger 1891:109; Van Denburgh 1895:
206, 1897:76, 1912:156.

Sceloporus graciosus graciosus, Van Denburgh and Slevin 1921:
43; Van Denburgh 1922:278; Tanner, W. W. 1940:140.

Range: Oklahoma, west to California, north to Montana,
central Idaho, and eastern Oregon.

Type locality: Valley of Great Salt Lake.

Idaho: Central and southern parts of the state.

COUNTIES: ADA: Boise (CAS 41383, 45435-6, 53756-74, 53778);
Boise, 10 mi. SE (FM 16208-10); Orchard, 5 mi. S (USNM 65184-6).
BANNOCK: Pocatello (V:278). BINGHAM: Blackfoot (SDSNH 24970-1;
USNM 16768, 44742); Fort Hall (V:278). BONNEVILLE: Idaho Falls
(V:278); N side S. Fork Snake R., 3 mi. W Swan Valley (MVZ
21551). BUTTE: Big Lost R. (USNM 16769). CASSIA: Bridge (USNM
48160-1); plains near Conant (V:278); Elba (MVZ 21547-50).
ELMORE: Mayfield, N of (FM 11233). FRANKLIN: Bear R. Narrows
(SDSNH 23529-34); Franklin (SDSNH 24972). GOODING: Bliss (V:
278); plains between Bliss and Snake R. (V:278). JEROME: Blue
Lakes Canyon (V:278); plains between Shoshone and Blue L.
(V:278). LEMHI: Lemhi Indian Agency at 5400 ft. (USNM 16770).
MADISON: Rexburg (Tanner, W. W.:140). ONEIDA: Malad City
(USNM 48664). OWYHEE: Plains across river from Glenn's Ferry
(V:278). TWIN FALLS: Rogerson (CPS 3866-7). WASHINGTON:
Weiser (V:278). County not ascertained: Water Hollow (SDSNH
23518-28).

SCELOPORUS OCCIDENTALIS BISERIATUS (Hallowell)
Western Blue-bellied Lizard

Sceloporus smaragdinus, Cope 1893:15.

Sceloporus biseriatus, Van Denburgh 1897:83, 1912:156; Van
Denburgh and Slevin 1921:43.

Sceloporus occidentalis biseriatus, Stejneger and Barbour 1917:
55; Van Denburgh 1922:311; Stejneger and Barbour 1923:57,
1933:63, 1939:68.

Range: Texas westward to California, north to Wyoming,
central Idaho and Asotin County, Washington.

Type locality: El Paso Creek, Tejon Valley, California.

Idaho: Central and southwestern part of the state.

COUNTIES: ADA: Boise (CAS 41372-84, 45447-50, 53737-55);
Boise, NE of, near Boise Co. line (FM 16224); Five-mile Cr. E
of Boise (FM 6948-9); Snake R. near Canyon Co. line (FM 16221,
16230); Snake R. W of Swan Falls (FM 16227); Swan Falls, below
(MVZ 10220, 10289). BOISE: 15 mi. E Boise (MVZ 10290); N of
Boise (FM 11257); E of Horse Shoe Bend in Jackass Basin (FM
16226). CANYON: Snake R. across from Givens (SDSNH 1446-7;
FM 16225); Snake R. W of Guffey Bridge (FM 16228-9). CASSIA:

Conner Cañon, 4 mi. N Elba (MVZ 18297). ELMORE: Willow Cr.
(CAS 64176-7). GEM: Willow Cr., near Ada Co. line (FM 16231).
JEROME: Blue Lakes (V:311); Blue Lakes Canyon (V:311); between
Blue Ls. and Shoshone Falls (V:311); plains between Shoshone
and Blue Lakes (V:311); Shoshone Falls N of ferry (V:311).
OWYHEE: Bruneau (CAS 64158, 64166-7); Bruneau R. mouth (Cope
1883:15); Guffey (MVZ 10219); Jump Cr. S of Homedale (FM
16223); Owyhee R., 4500 ft., 22 mi. N Nevada line (MVZ 24487-
90); Silver City, near (FM 11256); Swan Falls (FM 16222);
Walters, 4 mi. W on west side of Snake R. (CPS 3986-7). TWIN
FALLS: Salmon Cr., 8 mi. W Rogerson (MVZ 18295-6). No county
given: Fiddle Cr. (USNM 44740); Snake R. (USNM 65189); near
Pear, or Pearl, L (USNM 65187-8).

PHRYNOSOMA DOUGLASSII ORNATISSIMUM (Girard)
Short-horned Horned (Toad) Lizard

Phrynosoma douglasii, Stejneger 1891:109; Van Denburgh 1895:
206, 1897:91, 1912:156; Van Denburgh & Slevin 1921:43.

Phrynosoma douglassii brevirostae, Stone 1911:229.

Phrynosoma douglassii ornatissimum, Van Denburgh 1922:380;
Stejneger and Barbour 1923:62, 1933:68, 1939:74.

Range: Deserts of northeastern Arizona, northern New Mexico,
Colorado, Idaho, Nevada, and Utah.

Type locality: Mountainous region of New Mexico.

Idaho: Drier parts of state from Nez Perce County south.

COUNTIES: ADA: Boise (USNM 63266). BANNOCK: Pocatello
(USNM 48665). BINGHAM: Blackfoot (USNM 16771); Ft. Hall (CAS
41305); Springfield (ANSP 17566-7). BUTTE: Arco (V:380); Big
Butte (USNM 16772-3); Big Lost R. (USNM 16318-9, 16774-5);
Sink in Big Lost R. (USNM 16318-9). CASSIA: Plains near Conant
(V:381); Cottonwood Cr. (V:381). LEMHI: Near the head of Birch
Cr. (USNM 16315-7). LINCOLN: Shoshone (V:380). NEZ PERCE:
Clearwater R. 7 mi. above Lewiston (USNM 21473); Lewiston
(V:380). OWYHEE: Little Owyhee R. 7 mi. N Nevada line, 5000
ft. (MVZ 24509-10), 10 mi. N Nevada line, (MVZ 24517), 11 mi.
N Nevada line, (MVZ 24508); no place given (MVZ 24507). POWER:
American Falls (V:381).

PHRYNOSOMA PLATYRHINOS Girard
Desert Horned Lizard

Phrynosoma platyrhinum, Cope 1883:10,15; Van Denburgh 1895:207.

Phrynosoma platyrhinus, Van Denburgh 1897:99, 1912:157; Stej-
neger and Barbour 1917:60; Van Denburgh and Slevin 1921:
43; Van Denburgh 1922:424; Stejneger and Barbour 1923:63,
1939:75.

Range: Southeastern Washington to northeastern Lower Cali-
fornia, east to Idaho, Utah, Nevada, and southwestern Arizona.

Type locality: Great Salt Lake Valley, Utah.

Idaho: Southwestern part of the state, with one doubtful record for Sand Point, Bonner County.

COUNTIES: ADA: Black Cr. (CAS 64178; FM 6945-6); Boise (CAS 45433-4, 53784-5, 64135; MVZ 10298); Murphy, 14 mi. E (MVZ 10300-1; USNM 48153); Swan Falls, 8 mi. below (MVZ 10302-3); Swan Falls, near (FM 11246). BONNER: Sand Point, report by Cope, Van Denburgh questions it, (USNM 21474). CANYON: Snake R. across from Givens (SDSNH 1448-9). CASSIA: Cottonwood Cr. (V:424). ELMORE: Cleft, 4 mi. S (MVZ 10291; USNM 65192-4); Hammett (MVZ 10292-3); Mountain Home (CPS 3507-8, 3557, 3687); no place given (USNM 58661). GOODING: Plains between Bliss and Snake R. (V:424). JEROME: Plains near Blue Ls. (V:424); plains between Shoshone and Blue Ls. (V:424); plains between Shoshone and Snake R. (V:424). OWYHEE: Mouth of Bruneau R. (Cope 1883:15); Bruneau R. Cañon (MVZ 10294-5); Bruneau R. near Hot Springs (FM 6947, 11247-8); plains across river from Glenn's Ferry (V:424); S bank Snake R., Homedale (MVZ 21552); Murphy, 5 mi. SE (MVZ 18298); S Walter's Ferry (MVZ 10299); Wickahoney Cr. (MVZ 10224-5, 10296-7). PAYETTE: Payette (USNM 45231-2). TWIN FALLS: Rogerson, 4 mi. E (CPS 4105-6).

GERRHONOTUS COERULEUS PRINCIPIS (Baird and Girard)
Northern Alligator Lizard

Gerrhonotus principis, Van Denburgh 1922:439 (Lower Kootenay River, possibly should be credited here rather than in Stevens Co., Wash.)

Gerrhonotus coeruleus principis, Slipp 1940:35.

Range: Southern British Columbia to northwestern California, east to northern Idaho and western Montana.

Type locality: Oregon and Puget Sound.

Idaho: Northern part of the state.

COUNTIES: BONNER: Hope, 4.5 mi. NW (CPS 4080); Sandpoint, a few mi. S (Slipp:35). LATAH: Harvard, 8 mi. N (Slipp:35).

CNEMIDOPHORUS TESSELLATUS TESSELLATUS (Say)
Desert Whiptail Lizard

Cnemidophorus tigris, Van Denburgh 1895:207, 1897:136, 1912:57.

Cnemidophorus tessellatus tessellatus, Van Denburgh and Slevin 1921:43; Van Denburgh 1922:513.

Range: Texas to western Sonora and Lower California north to eastern Oregon and southern Idaho.

Type locality: Arkansas River, near Castle Rock Creek, Colo.

Idaho: Central and southwestern part of state.

COUNTIES: ADA: Boise (CAS 41386, 45429-32, 53786); Snake R. Canyon (CM; USNM 65179-81); Snake R. Valley SE of Melba (FM 16211-20); Swan Falls, 4 mi. below (MVZ 10216-8); Swan Falls on Snake R. (MCZ; FM 11242-3). CANYON: Given's Hot Springs (MVZ 10307-8); Snake R. across from Given's (SDSNH 1454); Snake

R. SE of Melba (FM 6953-5, 6957). CASSIA: Conant (Richardson 1915:425). ELMORE: Glenn's Ferry (USNM 48159); Hammett (MVZ 21561). GOODING: Bliss (V:513); Hagerman, 2 mi. E (MVZ 18299-300). JEROME: Blue L. (Richardson: 425); Blue L. Canyon (McLain :9); sage plains near Blue L. (McLain :9); between Blue L. and Shoshone Falls (SU). LEMHI: Upper Salmon Falls (CAS 20944). OWYHEE: Bruneau (CAS 64165); Bruneau, 18 mi S (MCZ); Bruneau R. Canyon (FM 6956); Homedale, S of (FM 6958); South of Nampa (CM); Reynolds Cr. S of Walter's Ferry (SDSNH 1453); S bank Snake R., Homedale (MVZ 21553-60). PAYETTE: Payette (USNM 45233 carried as *tigris*). TWIN FALLS: Between Shoshone Falls and Twin Falls (V:513; USNM); Snake R. plains near Upper Salmon Falls (SU).

EUMECES SKILTONIANUS SKILTONIANUS (Baird and Girard)
Western Skink or Western Blue-tailed Lizard

Plestiodon skiltonianus, Van Denburgh and Slevin 1921:44; Van Denburgh 1922:583.

Eumeces skiltonianus skiltonianus, Taylor 1935:426.

Range: British Columbia south to Lower California, east to Idaho and Utah.

Type locality: Oregon.

Idaho: Throughout the state but no records for central Idaho.

COUNTIES: ADA: Boise (CAS 41387). BANNOCK: Pocatello (Taylor: 426). BINGHAM: Fort Hall (CAS 41306). BONNER: Hope, 4.5 NW (CPS 4081). KOOTENAI: Coeur d'Alene 4 mi. SW on H'y 95 (CPS 4083); Harrison, 10 mi. SE (CPS 4082). NEZ PERCE: Lewiston (Taylor 1935:426; CAS 65026). No county given: Clark's Fork, Lower Kootenai R. (USNM 6282).

SNAKES

CHARINA BOTTAE (Blainville)
Pacific Rubber Snake; Two-headed Snake

Charina bottae utahensis, Van Denburgh 1920:32; Van Denburgh and Slevin 1921:44; Van Denburgh 1922:643.

Charina bottae, Van Denburgh 1897:156; Stejneger and Barbour 1917:74, 1923:80, 1933:86; Tanner, V. W. 1933:82; Stejneger and Barbour 1939:95.

Range: British Columbia south to San Bernardino Mts., California, east to Montana and Wyoming, including Idaho, Utah, and Nevada.

Type locality: California.

Idaho: Probably throughout the state.

COUNTIES: ADA: Vic. east of Boise (CAS 65130). BANNOCK: Bannock Co. (MVZ); Pocatello (SDSNH 25827-8). BEAR LAKE: Fish Haven Creek (CAS 54201); Paris (Tanner, V.:82). BONNER: Cocolalla, 5 mi. W, 3500 ft. (MVZ 15287); Hope (USNM 40121). BON-

NEVILLE: No place given (MVZ). KOOTENAI: Blue Lake (V:643); Hood's Valley (V:643). OWYHEE: Walter's Ferry (CAS 64213).

DIADOPHIS AMABILIS OCCIDENTALIS Blanchard
Northwestern Ring-necked Snake

Diadophis amabilis occidentalis, Uhler 1940:136.

Range: Southern Washington to Sonoma County, California east to Boise County, Idaho.

Type locality: Bridgeville, Humboldt County, California.

Idaho: West-central part of the state.

COUNTIES: BOISE: Horseshoe Bend, 5 mi. SW (Uhler:136; US Biological Survey H8859).

DIADOPHIS REGALIS REGALIS (Baird and Girard)
Sonoran Ring-necked Snake

Diadophis regalis regalis, Tanner, W. W. 1940:141, 1941:17.

Range: Southern Idaho, Utah, southeastern Arizona, to central Texas, and to the State of Vera Cruz, Mexico.

Type locality: Sonora, Mexico.

Idaho: Southeastern part of state.

COUNTY: FRANKLIN: Preston (Tanner, W. W.:141).

COLUBER CONSTRICTOR MORMON (Baird and Girard)
Western Yellow-bellied Racer

Bascanium ventustum, Cope 1883:15, 17.

Bascanium vetustus, Stejneger 1891:110.

Bascanium constrictor vetustum, Van Denburgh 1897:186.

Coluber constrictor mormon, Van Denburgh and Slevin 1921:44; Van Denburgh 1922:663; Stejneger and Barbour 1923:87, 1933:94, 1939:104; Tanner, W. W. 1940:142.

Range: Southern British Columbia south to southern California, east to Montana, Idaho, Utah, and Nevada.

Type locality: Valley of the Great Salt Lake, Utah.

Idaho: Most of the records are from the southwestern part of the state but it will likely be found in most of the counties.

COUNTIES: ADA: Boise (CAS 41353-61; 43530, 45402-10, 53728-34); Vic. east of Boise (CAS 64129); Eagle (CAS 53823); Meridian (SDSNH 1438). BUTTE: Big Butte (USNM 16778). CANYON: Caldwell (Tanner, W. W.:142). ELMORE: Atlanta (Cope 1883:17; V:663); Regena, E of (SDSNH 1437). GEM: Emmett, near (FM 11251). GOODING: Upper Salmon Falls (USNM 40071). KOOTENAI: Coeur d'Alene (USNM 44262). OWYHEE: Mouth of Bruneau R. (Cope 1883:15); Hot Springs (MVZ 10228); S. Fk. Owyhee R., 22 mi. N Nevada line (MVZ 24576). TWIN FALLS: No place given (MVZ 18301).

COLUBER TAENIATUS TAENIATUS (Hallowell)
Western Striped Racer

Bascanium taeniatum, Van Denburgh 1897:192; Van Denburgh 1912:157.

Coluber taeniatum taeniatum, Stejneger and Barbour 1917:80; Van Denburgh and Slevin 1921:45; Van Denburgh 1922:687; Stejneger and Barbour 1923:89, 1933:96, 1939:105.

Range: Northern Oregon, eastern Washington, southwestern Idaho, south to the Mexican border states just entering Texas and California.

Type locality: New Mexico, west of the Rio Grande.

Idaho: Found only in the southern counties.

COUNTIES: ADA: Boise (CAS 41363); Cinder Cone Butte (CAS 64203-6; FM 6963); Snake R. SE of Melba (SDSNH 1432). ELMORE: Cleft (CAS 64207); Vic. of Cleft (CAS 64185); Hammett, 4 mi. W (MVZ 21562). GOODING: Between Bliss and Snake R. (V:687); No place given (MVZ 18303). OWYHEE: Hot Springs, E of (SDSNH 1431); S. Fk. Owyhee R., 4500 ft., 22 mi. N Nevada line (MVZ 24580-1). FREMONT: Yellow Stone (USNM 56018). TWIN FALLS: Rogerson, 4 mi. E (CPS 4102).

PITUOPHIS CATENIFER DESERTICOLA Stejneger
Desert Gopher Snake; Desert Bull Snake

Pituophis wilkesii, Cooper 1860:300.

Pituophis catenifer, Cope 1883:15; Stejneger 1891:110; Van Denburgh 1912:158.

Pituophis catenifer stejnegeri, Van Denburgh and Slevin 1921:45; Van Denburgh 1922:732.

Pituophis catenifer deserticola, Van Denburgh 1897:199; Stejneger and Barbour 1917:86; Pack 1919:16; Stejneger and Barbour 1933:103, 1939:113; Stull 1940:172; Tanner, W. W. 1940:143.

Range: Desert regions of California, Nevada, Utah, Colorado, Idaho, and eastern parts of Oregon and Washington, and south-central British Columbia.

Type locality: Great Basin and southwestern deserts.

Idaho: In all sections of the state.

COUNTIES: ADA: Boise (SDSNH 30724-6; CAS 45129-30, 53735-6); Boise, 6 mi. N (CAS 64117), 10 mi. N (CAS 64137); Boise, 6 mi. S (CAS 64119), 15 mi. S (CAS 64119, 64123-6, 64128), Boise, 6 mi. SW (CAS 64118, 64136); Vic. of Kuna (CAS 64199); Vic. South of Melba (CAS 64202); Regena (SDSNH 1434); Ten-mile Cr., 10 mi. S of Boise (SDSNH 28799-800). ANAD: Indian Valley (USNM 40070). BANNOCK: Swan Lake and Pocatello (Tanner, W. W.:143). BEAR LAKE: East side of Bear Lake (USNM 44441). BONNEVILLE: Lava beds, 17 mi. W Idaho Falls (MVZ 21563-4). BUTTE: Arco (USNM 16778); Big Butte (USNM 16776). CANYON: Nampa, S of (SDSNH 1433); Fort Boise, near Parma (Cooper 1860:300). CASSIA:

Elba, 8 mi. N (MVZ 17019). ELMORE: Cleft (MVZ 10316), 4 mi. S (MVZ 10315); Hammett (CAS 64201); Indian Cr. (MVZ 10226); No place given (U. Okla. 6401). FRANKLIN: Preston (Pack 1919:16). JEROME: Jerome, 5 mi. S (CPS 4099). LEMHI: Colsom Cr. Salmon R. (Tanner, W. W.:143). NEZ PERCE: Lewiston (Stull 1940:172). OWYHEE: Bruneau R., mouth (Cope 1883:15); Snake R. west of Bruneau R. (ANSP 10849). TWIN FALLS: Blue Lakes (Stanford 4064); Rogerson, 4 mi. E (CPS 4107); No place given (MVZ 18303).

RHINOCHILUS LECONTEI Baird and Girard
Long-nosed Snake

Rhinocheilus lecontei, Van Denburgh and Slevin 1921:45; Van Denburgh 1922:776; Stejneger and Barbour 1933:112; Stejneger and Barbour 1939:121.

Range: Southern Idaho to Lower California, east to Texas, northern Mexico.

Type locality: San Diego, California.

Idaho: Known from only the southwestern part of the state.

COUNTIES: ELMORE: South Range, Glenn's Ferry (USNM 56535).

SONORA MINIATA MINIATA Stickel
Vermillion Ground Snake

Sonora without rings, Erwin 1925:6.

Sonora miniata miniata, Stickel 1938:187; Stejneger and Barbour 1939:122.

Range: South central Arizona to southwestern Idaho.

Type locality: Mesa, Arizona.

Idaho: Known from only the southwestern part of the state.

COUNTIES: ADA: North bank of Snake R. south of Boise (Erwin:6 and Stickel:187); Swan Falls, Snake R., 4 mi. W (FM 6971).

SONORA SEMIANNULATA SEMIANNULATA (Baird and Girard)
Bicolor Ground Snake

Sonora semiannulata, Erwin 1925:6; Stejneger & Barbour 1933:112.

Sonora semiannulata semiannulata, Stickel 1938:485; Stejneger and Barbour 1939:123.

Range: Arizona, Utah, Nevada; Inyo County, Calif.; Snake River region, Idaho; Mexico only in the type locality.

Type locality: Sonora, Mexico.

Idaho: Known only from the southwestern part of the state.

COUNTIES: ADA: North bank of Snake R. south of Boise (Erwin:6 and Stickel:185; USNM 65178); Vic. south of Melba (CAS 64214).

THAMNOPHIS ORDINOIDES VAGRANS (Baird and Girard)
Wandering Garter Snake

Eutainia vagrans, Cooper 1860:297; Stejneger 1891:110.

Eutainia leptocephala, Cooper 1860:297.

Thamnophis ordinoides couchii, Erwin 1925:6.

Thamnophis vagrans vagrans, Van Denburgh 1895:207, 1897:211, 1912:158.

Thamnophis ordinoides vagrans, Van Denburgh and Slevin 1918:240, 1921:46; Van Denburgh 1922:832; Stejneger and Barbour 1923:115, 1933:124, 1939:136; Fitch 1940:24.

Range: Southern Alberta and British Columbia south to eastern California and east to include the Rocky Mountain region, with one record in Texas and one in South Dakota.

Type locality: California.

Idaho: Throughout the state.

COUNTIES: BOISE (MZ; CAS 41364-5, 43531, 45411-6, 64131-4); Boise, near (MZ; SDSNH 30675-9, 30727; FM 6964-6, 11245); Boise, 6 mi. W (MZ); Willow Cr. (CAS 64200). ADAMS: Bear Ranger Sta., 1 mi. N, SW slope of Mt. Smith, 5400 ft. (MVZ); Black L., 1/2 mi. E, 6800 ft. (MVZ). BANNOCK: Pocatello (SDSNH 25826). BEAR LAKE: Bear Lake (CAS 47732-41); Montpelier Cr. (USNM 44433). BINGHAM: Aberdeen, 2 mi. SW (MVZ); Fort Hall (CAS 41271-4). BLAINE: Alturas L. (USNM 40087, 40111, 40118); Alturas L., 7000 ft. (MVZ 15290-4, 21569-70); Ketchum, Guyer Hot Springs (MZ; CAS 41582-3); Ketchum (USNM 45280); Ketchum, Warm Springs (MZ; CAS 45864-73); Petit L. (USNM 40112, 40117); Petit L. 7000 ft. (MVZ 21573); Trail Cr. (USNM 16785). BOISE: Idaho City (MZ). BONNER: Gamlins L., near Hope (USNM 40090, 40110); Hope (USNM 40106); Sand Point (USNM 21468). BONNEVILLE: Idaho Falls, 7 mi. W (MVZ 21567). BUTTE: Arco (V:832); Birch Cr., possibly should be credited to Clark Co. (USNM 16781-2); Pass Cr. tributary of Lost R. (MZ). CANYON: Fort Boise, near Parma (Cooper 1860:297); Snake R. near Walter's Ferry (SDSNH 1436). CASSIA: Albion (USNM 48156); Bridge (USNM 48155); Cottonwood Cr., Albion (V:832); Elba (MVZ 21566). CUSTER: Challis Valley (USNM 16783-4); Shaw's Ranch near Obsidian (USNM 64961-3). FRÉMONT: Henry's Lake inlet (MZ); Island Park (MZ); Sheridan Cr. (MZ); Snake R. near Yellowstone Nat. Park (MZ). GOODING: Malad R. Canyon (V:832). IDAHO: Castle Cr. Ranger Sta., S fork Clearwater R. 1800 ft. (MVZ 15289); Grangeville (CPS 3990). JEROME: Shoshone Falls (V:832). LATAH: Troy (MZ). LEMHI: Salmon R. Mountains, "8000 ft." (USNM 16779-80). LINCOLN: Little Wood R. (MVZ). NEZ PERCE: Lewiston (USNM 21472). ONEIDA: Malad (USNM 48660). OWYHEE: Castle Cr., 8 mi. S of Oreana (MVZ 18305); Homedale, S bank Snake R. (MVZ 21565); Indian Cr., 2 mi S of Riddle, 7000 ft. (MVZ 17020); S. Fk. Owyhee R. 4500 ft., 22 mi. N Nevada line (MVZ 24619-38); Reynolds Cr. 12 mi. S of Snake River (MVZ 18306-7);

Snake R. N of Murphy (SDSNH 1435); Sinker Cr. (USNM 65176). POWER: Aberdeen, 2 mi. S (MVZ 18308). SHOSHONE: Wardner (V:832). TETON: Victor, 3 mi. SW, 6300 ft. (MVZ 21568). TWIN FALLS: Snake River near Upper Salmon Falls (USNM 40083-6). VALLEY: Lardo (USNM 40080-2, 40088-9); Little Payette L. (CAS 45765-7); McCall (CAS 45757-64); Payette Lakes (CAS 41576-9); Smith's Ferry (CAS 53826-30, 64211). WASHINGTON: Crane Cr., 15 mi. E of Midvale, 2800 ft. (MVZ); Heath, 1 mi. NE and 1 mi. NW, Cuddy Mt., 4000 ft. (MVZ); Weiser (V:832). No county ascertained: N Fork, Lake Fork Cr. (CAS 45768-9).

THAMNOPHIS SIRTALIS PARIETALIS (Say)

Prairie Garter Snake

Eutaenia sirtalis, Cope 1883:17.

Thamnophis parietalis, Van Denburgh 1897:203, 1912:158.

Thamnophis sirtalis parietalis, Van Denburgh and Slevin 1918:190, 1921:40; Van Denburgh 1922:794; Stejneger and Barbour 1923:117, 1933:126, 1939:138.

Thamnophis sirtalis concinnus, Van Denburgh and Slevin 1918:192, 1921:45; Van Denburgh 1922:798.

Range: Alberta, Manitoba, British Columbia, Minnesota, Iowa, Missouri west to Washington, Oregon, Nevada, and Utah.

Type locality: Stone quarry on west side of Missouri River, 3 miles above the mouth of Boyer's River.

Idaho: Throughout the state.

COUNTIES: ADA: Black's Cr. Canyon (FM 6968); Boise (CAS 45428; FM 6967, 6969, 11250); Boise, 6 mi. S (CAS 64198); Eagle (CAS 53824). BEAR LAKE: Bear Lake (V:794). BENEWAH: St. Maries, 7 mi. NW (CPS 4079). BONNER: Koalin (CPS 4076-7); Sand Point, 5 mi. NE (CPS 4078). ELMORE: Atlanta (Cope 1883:17). JEROME: Blue Lakes (V:798). LATAH: Collins (WSC 104). PAYETTE (USNM 44538). VALLEY: McCall (CAS 45770-8); Payette L. (V:798); Smith's Ferry (CAS 53831-40, 64212). WASHINGTON: Weiser (V:798). County not ascertained: Pearl L. (USNM 65117).

LEPTODEIRA TARQUATA OCHRORHYNCHA (Cope)

Spotted Night Snake

Hypsiglena ochrorhynchus, Erwin 1925:6; Stejneger and Barbour 1933:113, 1939:140.

Range: Southwestern Texas to northwestern Mexico, north to central Washington and southern Idaho, east to Kansas.

Type locality: Cape St. Lucas, Lower California.

Idaho: Known only from the southwestern section.

COUNTIES: ADA: Black's Creek Canyon (Erwin:6); Boise, 15 mi. S (Erwin:6; CAS 64998). CANYON: Melba, 2 mi. S (MVZ 18304).

CROTALUS VIRIDIS VIRIDIS Rafinesque

Prairie Rattlesnake

Crotalus confluentus, Stejneger 1891:111; Van Denburgh 1897:220; Van Denburgh and Slevin 1921:40; Van Denburgh 1922:930.

Crotalus viridis viridis, Klauber 1936:241.

Range: The Great Plains, from about the 95th Meridian to the Rocky Mountains and from southern Canada to northern Mexico.

Type locality: Upper Missouri River.

Idaho: Known only from east central part of the state.

COUNTY: LEMHI: Baker (SDSNH 32552); Haynes Cr. W of Baker (SDSNH 30515); Horse Cr. at mouth of Colt Cr. (SDSNH 32551); Lemhi Indian Agency, 5400 ft. alt. (USNM 16791); Lemhi Co. (SDSNH 32554); Middle Fork, Salmon R. (SDSNH 32555); Shoup, near (SDSNH 30514); Square Top (SDSNH 32553).

CROTALUS VIRIDIS LUTOSUS (Klauber)

Great Basin Rattlesnake

Crotalus lucifer, Stejneger 1891:111; Van Denburgh 1895:207, 1897:217.

Crotalus oreganus, Van Denburgh 1912:158, 1922:936; Stejneger and Barbour 1923:125.

Crotalus viridis lutosus, Klauber 1936:242; Stejneger and Barbour 1939:153; Tanner, W. W. 1940:145.

Crotalus confluentus lutosus, Stejneger and Barbour 1933:134.

Range: Southern Idaho, western Utah, northwestern Arizona, Nevada, northeastern California and southeastern Oregon.

Type locality: 10 miles northwest of Abraham on the road to Joy, Millard County, Utah.

Idaho: Southcentral and southern parts of the state.

COUNTIES: ADA: Black's Cr. Canyon (FM 6959-62); Boise (SDSNH 28731-3, 30711-6); Boise, 6 mi. S (CAS 64195-6), 5 mi. SE (FM 11252), 16 mi. S (CAS 64120-2, 64127), 20 mi. S (CAS 64194); Boise, 15 mi. S (MVZ 10312-14; SDSNH 740); Boise, near (MVZ 27028); Swan Falls (CAS 64191-3); Table Rock, 1 mi. E of Boise (SDSNH 4481); Ten Mile Creek (SDSNH 1427, 1429-30); Ten Mile Creek, 15 mi. S of Boise (CAS 63908-9; SDSNH 1425; FM 11253, 11261); Ten Mile Cr., 10 mi. S of Boise (SDSNH 29100-9, 29470-4); Ten Mile Cr. Canyon (SDSNH 4466-80). ADAMS: Council (lutosus-oreganus intergrade SDSNH 8105, 8477-99). BANNOCK: Pocatello (SDSNH 22651, 22838-46). BUTTE: Big Butte (USNM 16786-7, 16790); Little Lost R. (USNM 16788-9). CANYON: Caldwell (SDSNH 8649-52); Vic. south of Melba (CAS 55225-7 labeled oreganus). CASSIA: Conner Cañon, 4 mi. N Elba (MVZ 18309). ELMORE: Cleft, 4 mi. S (MVZ 10227; CAS 5522-4, labeled oreganus; SDSNH 1428); Mt. Home (CAS 64208); Regena (SDSNH 835, 863); Sheep Cr., near Regena (SDSNH 1426); Sheep Cr., 2 mi. NE of Regena (SDSNH 4483-5). JEROME: Blue Lakes Canyon (V:936).

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COLLEGE OF PUGET SOUND,
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LIFE ZONE DISTRIBUTION OF THE OREGON REPTILES

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In the following summary of the reptile fauna of Oregon we have presented, on the basis of available data, the distribution of the forms in the Life Zones.

In this work the locality records found in the literature (titles given in bibliography of this paper), and the actual specimen records now in the College of Puget Sound Collection have been used as a basis for the Life Zone Distribution Chart. In the *Thamnophis ordinoides* group, the classification of Henry S. Fitch (1940) has been followed.

No claim is made that this is a complete study, but merely presents the distribution as represented by records now available, and the chart has not been modified to include information known about the species distribution in other states. We strongly suspect that more reptilian records will be found in the Canadian and Hudsonian zones.

In plotting this distribution, Bailey's map, Life Zones of Oregon, 1935 (The Mammals and Life Zones of Oregon, 1936), was used. But in our charts (page 114) one difference was made, namely, that the transition area east of the Cascades is called the Arid Transition and that part of the Transition Zone west of the Cascades is called Humid Transition. Life Zones represented by Bailey are the Arctic Alpine, Hudsonian, Canadian, Transition and Upper Sonoran. These are somewhat broken areas scattered throughout the state but can be found prevailing in certain general areas.

The Humid Transition occupies most of the strip west of the Cascade Range. The exceptions are a few scattered areas of Canadian Zone in the southern portion of the coast range.

The largest area of Canadian Zone in Oregon extends north and south through approximately the mid-western part of the state. Scattered areas of this zone extend also along the south portion and the northeastern part. These latter areas are quite irregular and broken.

The Hudsonian Zone lies at higher elevation than the

Canadian regions and is found on the higher points of the Cascade Range, the Willowa and Baker ranges of the Blue Mountains to the northeast, and the Steens Mountains to the southeast.

The Arctic Alpine, which includes all the area above timberline, is to be found on the higher points in the ranges given above.

The semiarid (semihumid) division of the Transition Zone covers the slopes east and south of the Cascades and the Plateau areas of the Blue Mountains country. The breadth and altitude are governed by the configuration of the land, base level, and slope exposure. In the Rogue River region it extends from Mount McLoughlin to the arid country of the Medford area.

The drier subdivision of the Transition Zone, known as Arid Transition, characterized by bunch grass and open pine forests, occupies eastern Oregon high valleys, plateaus and lower mountain slopes taking in mountains and plateaus east of Goose and Summer lakes and south of the Blue and Maury mountains.

The arid division of Oregon, Upper Sonoran Zone, characterized by sagebrush, covers most of the Columbia and Snake River valleys of eastern Oregon, and about half of the higher sagebrush area east of the Cascade Range. Here are many characteristics of the Great Basin area. Limited areas of this zone are found in the Rogue and central Umpqua River valleys, along the Klamath River, and near the Klamath Lakes.

As would be expected no records for reptiles have been found for the Arctic Alpine Zone; however, contrary to expectations there are few records available for the Hudsonian and Canadian zones. There is an abundance of reptile life in the other Life Zones of Oregon.

Actual records used from the College of Puget Sound are listed below under the various species. Where no specimens of a species were available a brief statement of the distribution in the state has been given based on the literature for that species.

A geographical or county summary of the distribution of reptiles in Oregon is presented in Tables V-VI (pages 115-116). This, and the other charts, represents the literature records as well as specimens in the collection of the College of Puget Sound.

Inquiries concerning these summaries will be welcomed. Limitation of space prevents the repetition here of all the literature records. A few records have not been used due to the fact that some species have been split into subspecies and limits of distributions have been changed in some cases by recent works; and we have not had an opportunity to examine specimens in distant museums.

Crotaphytus collaris baileyi (Stejneger). Records are limited to extreme eastern part of the state in the Upper Sonoran Zone.

Crotaphytus wislizenii Baird and Girard. Reported from Upper Sonoran Zone. MALHEUR CO.: near Harper (CPS 3893).

Uta stansburiana stansburiana (Baird and Girard). In Upper Sonoran Zone. GILLIAM CO.: Arlington (CPS 3702). MORROW CO.: north fork of Butter Cr. (CPS 3716-9, 3725). UMATILLA CO.: Hermiston (CPS 3704-6).

Sceloporus graciosus graciosus (Baird and Girard). Reported from Upper Sonoran Zone in Harney and Lake counties.

Sceloporus graciosus gracilis (Baird and Girard). Upper Sonoran Zone. MORROW CO.: Irrigon (CPS 3721-2). UMATILLA CO.: (CPS 3703, 3707-8). WASCO CO.: Maupin (CPS 3555).

Sceloporus occidentalis occidentalis (Baird and Girard). Represented in the Transition (Humid, east of the Cascades and Semiarid in the Rogue River area); Arid Transition east of Cascades, and also found in the Upper Sonoran Zone. BENTON CO.: Marys River, at covered bridge (CPS 3737-3790). JACKSON CO.: Rogue River (CPS 3729, 3732-3, 3736, 3738, 3770). JOSEPHINE CO.: Snailback Cr. (CPS 3740); Hays Hill, near Grants Pass (CPS 3741-2). LINN CO.: Albany (CPS 3773-4). MULTNOMAH CO.: Portland (CPS 3798-3801). WALLOWA CO.: Grouse Flats, Moore Ranch (CPS 3476-80 may be *biseriatus*). WASHINGTON CO.: Beaverton (CPS 3560-1, 3564).

Sceloporus occidentalis biseriatus (Hallowell). Reported in literature from the Sonoran Zone in Baker, Grant, Harney and Malheur counties.

Phrynosoma douglassii douglassii (Bell). Mainly in Upper Sonoran Zone, but reported also in the literature for the Canadian Zone. HARNEY CO.: Wagontire (CPS 3025). MORROW CO.: north fork of Butter Cr. (CPS 3715, 3720). UMATILLA CO.: Hermiston (CPS 3727). WASCO CO.: Antelope (CPS 3558-9).

Phrynosoma platyrhinos Girard. Reported from the John Day Country; Malheur, Harney and Lake counties: Upper Sonoran Zone.

Gerrhonotus coeruleus principis (Baird and Girard). Humid Transition and Hudsonian zones. COLUMBIA CO.: near Vernonia (CPS 3802). LINCOLN CO.: Toledo, seven miles east at old mill site (CPS 3778, 3804). MULTNOMAH CO.: Portland (CPS 3138, 3700).

Gerrhonotus coeruleus shastensis Fitch. Restricted to the southern part of the state. Arid Transition and Upper Sonoran zones.

Gerrhonotus multicarinatus scincicauda (Skilton). Taken from Humid Transition, Arid Transition and Upper Sonoran zones: JACKSON CO.: Rogue River (CPS 3727, 3737, 3758). JOSEPHINE CO.: Snailback Cr. (CPS 3739). LINN CO.: Albany (CPS 3583-8). MULTNOMAH CO.: Portland (CPS 3806). WASCO CO.: Maupin (CPS 3565).

Cnemidophorus tessellatus tessellatus (Say). The only available records are from the literature. Reported from Malheur and Baker counties: Upper Sonoran Zone.

Eumeces skiltonianus skiltonianus (Baird and Girard). This form is found in Humid Transition, Arid Transition, and Upper Sonoran zones. BAKER CO.: Washington Creek, near Baker (CPS 3562). JACKSON CO.: Rogue River (CPS 3728, 3730, 3759). MULTNOMAH CO.: Portland (CPS 4051).

Charina bottae (Blainville). Found in the Humid Transition, Hudsonian and Arid Transition; also extending into the Upper Sonoran Life Zone. LINN CO.: Albany (CPS 3474, 3589-90, 3772).

Diadophis amabilis occidentalis (Blanchard). Humid Transition, Arid Transition and Upper Sonoran. JACKSON CO.: Rogue River (CPS 3748).

Coluber constrictor mormon (Baird and Girard). Collected from the Humid Transition, Arid Transition, and the Upper Sonoran zones. HOOD RIVER CO.: Mitchell's Point (CPS 3771). LINN CO.: Albany (CPS 3779). UMATILLA CO.: Umatilla Butte, near Hermiston (CPS 3711-12). WALLOWA CO.: Snake River (CPS 3485).

Coluber taeniatus taeniatus (Hallowell). Reported from the Upper Sonoran Life Zone: Umatilla, Malheur, Jackson, and Harney counties and from the Snake River region.

Pituophis catenifer catenifer (Blainville). Humid Transition and Upper Sonoran zones. JACKSON CO.: Rogue River (CPS 3747). JOSEPHINE CO.: Store Gulch (CPS 3745); Grants Pass (CPS 3750).

Pituophis catenifer deserticola Stejneger. Arid Transition and Upper Sonoran zones. BAKER CO.: near Baker (CPS 4098). UMATILLA CO.: near Hermiston (CPS 3713). WALLOWA CO.: Cache Cr. (CPS 3469).

Lampropeltis getulus boylii (Baird and Girard). Reported from Humid Transition and Upper Sonoran Zones. JOSEPHINE CO.: Grants Pass (CPS 3760).

Lampropeltis multicincta (Yarrow). The reports are for specimens collected in the Humid Transition and the Upper Sonoran zones.

Contia tenuis (Baird and Girard). Found in very restricted areas of the Humid Transition and Upper Sonoran Zones. Taken in BENTON CO.: on Marys River, Highway 26 (CPS 3777).

Thamnophis ordinoides ordinoides (Baird and Girard). Abundant in the Humid Transition Zone, and to be looked for in other zones. BENTON CO.: Marys River, at covered bridge, Highway 26 (CPS 3780). CURRY CO.: Pistol River, one-half mile south of mouth (CPS 3897). HOOD RIVER CO.: Odell (CPS 3809-11). LINCOLN CO.: seven miles east of Toledo (CPS 3781-5). MULTNOMAH CO.: Portland (CPS 3185-6, 3560-2, 3591-9). POLK CO.: Grand Ronde (CPS 3795-7).

Thamnophis ordinoides atratus (Kennicott). This form is

reported from Siskiyou, Jackson County, and from Coos County: Humid Transition Zone.

Thamnophis ordinoides biscutatus (Cope). Reported from Humid Transition and Upper Sonoran zones of the southern part of the state.

Thamnophis ordinoides elegans (Baird and Girard). This form is recorded for Curry, Douglas, and Jackson counties: Found in the Humid Transition and Upper Sonoran zones.

Thamnophis ordinoides hydrophila Fitch. This subspecies has been taken in the Humid Transition and Upper Sonoran zones. It has a very limited distribution in the southwestern part of the state.

Thamnophis ordinoides vagrans (Baird and Girard). This snake is found in the Humid Transition, Arid Transition, and the Upper Sonoran Zone. JACKSON CO.: Rogue River (CPS 3751, 3753, 3761). POLK CO.: Grand Ronde (CPS 3793-4). WALLOWA CO.: Grouse Flats (CPS 3856-7, 3861). WASCO CO.: The Dalles (CPS 3808). WASHINGTON CO.: Beaverton (CPS 3764).

Thamnophis sirtalis concinnus (Hallowell). Found mainly in the Humid Transition, but also frequents the Upper Sonoran Zone. LINN CO.: nine miles east of Albany, Highway 56 (CPS 3775). MULTNOMAH CO.: Portland (CPS 3578-82). TILLAMOOK CO.: three miles south of Boyer (CPS 3786). WASHINGTON CO.: Hyland Road, south of Beaverton (CPS 3767-9).

Thamnophis sirtalis infernalis (Blainville). The Upper Sonoran, Arid Transition, and the Canadian zones are frequented by this snake.

Thamnophis sirtalis tetrataenia (Say). Taken mostly in the Humid Transition but also in Arid Transition and the Upper Sonoran. CURRY CO.: at Pistol River, one-half mile south of mouth (CPS 3970). JACKSON CO.: Rogue River (CPS 3731, 3734-5, 3745, 3749, 3754-7). LINCOLN CO.: Ocean Park (CPS 3776). WALLOWA CO.: Grouse Flats (CPS 3459-63, 3858-60, 3862).

Leptodeira torquata ochrorhyncha (Cope). Upper Sonoran Zone. To the authors' knowledge, only two specimens have been collected in Oregon. UMATILLA CO.: at Umatilla Butte near Hermiston (CPS 3709, 3714).

Crotalus viridis lutosus Klauber. Reported from the Upper Sonoran Zone in Harney, Klamath, Lake, and Malheur counties.

Crotalus viridis oreganus Holbrook. This snake is more abundant in the Upper Sonoran Zone, but is also found in the Humid and Arid Transition Zones. UMATILLA CO.: Columbia River, north of Hermiston (CPS 3613). WHEELER CO.: Clarno (CPS 3612).

Clemmys marmorata (Baird and Girard). This turtle is found in the Humid Transition and the Upper Sonoran life zones. JACKSON CO.: at irrigation ditch near Gold Hill (CPS 3736, 3762). JOSEPHINE CO.: near Grants Pass (CPS 3744).

Chrysemys bellii bellii (Gray). Reported from the Humid Transition Zone in which it is abundant in the Willamette and Columbia River regions. Also taken in Upper Sonoran Zone along the latter. LINN CO.: Albany (CPS 3589, 3590, 3474). MARION CO.: Champoeg Lake (CPS 3563, 3812-4). UMATILLA CO.: slough near Hermiston (CPS 3710).

| SPECIES OF LIZARDS | No. of Localities | LIFE ZONES | | | | | |
|----------------------------|-------------------|---------------|-----------------|------------------|----------|-----------|---------------|
| | | Upper Sonoran | Arid Transition | Humid Transition | Canadian | Hudsonian | Arctic Alpine |
| OREGON | | | | | | | |
| <i>C. c. baileyi</i> | 4 | ■ | | | | | |
| <i>C. wislizenii</i> | 8 | ■ | | | | | |
| <i>U. s. stansburiana</i> | 14 | ■ | | | | | |
| <i>S. g. graciosus</i> | 8 | ■ | ■ | | | | |
| <i>S. g. gracilis</i> | 9 | ■ | | | | | |
| <i>S. o. occidentalis</i> | 25 | ■ | ▲ | ◆ | | | |
| <i>S. o. biseriatus</i> | 8 | ■ | | | | | |
| <i>P. d. douglassii</i> | 19 | ■ | ▲ | | ■ | | |
| <i>P. platyrhinos</i> | 5 | ■ | | | | | |
| <i>G. c. principis</i> | 20 | | | ■ | | ▲ | |
| <i>G. c. shastensis</i> | 8 | | ▲ | | | | |
| <i>G. m. scincicauda</i> | 17 | ■ | ▲ | ■ | | | |
| <i>C. t. tessellatus</i> | 3 | ■ | | | | | |
| <i>E. s. skiltonianus</i> | 23 | ■ | ■ | ■ | | | |
| TURTLES | | | | | | | |
| <i>Clemmys marmorata</i> | 11 | ■ | | ■ | | | |
| <i>Chrysemys b. bellii</i> | 6 | ■ | | ■ | | | |

| SPECIES OF SNAKES | No. of Localities | LIFE ZONES | | | | | |
|---------------------------|-------------------|---------------|-----------------|------------------|----------|-----------|---------------|
| | | Upper Sonoran | Arid Transition | Humid Transition | Canadian | Hudsonian | Arctic Alpine |
| OREGON | | | | | | | |
| <i>Charina bottae</i> | 22 | | ■ | ◆ | | ■ | |
| <i>D. a. occidentalis</i> | 7 | | ▲ | ■ | | | |
| <i>C. c. mormon</i> | 27 | ■ | ▲ | ■ | | | |
| <i>C. t. taeniatus</i> | 4 | ■ | | | | | |
| <i>P. c. catenifer</i> | 9 | ■ | | ■ | | | |
| <i>P. c. deserticola</i> | 6 | ■ | ▲ | | | | |
| <i>L. getulus boylii</i> | 5 | ■ | | ■ | | | |
| <i>L. multicincta</i> | 9 | ■ | | ■ | | | |
| <i>Contia tenuis</i> | 4 | ■ | | ■ | | | |
| <i>T. o. ordinoides</i> | 75 | | | ■ | | | |
| <i>T. o. discutatus</i> | 20 | ■ | | ■ | | | |
| <i>T. o. elegans</i> | 7 | ■ | | ■ | | | |
| <i>T. o. hydrophila</i> | 32 | | | ■ | | | |
| <i>T. o. vagrans</i> | 23 | ■ | ▲ | ■ | | | |
| <i>T. s. concinnus</i> | 32 | ■ | | ■ | | | |
| <i>T. s. infernalis</i> | 6 | ■ | ■ | | ■ | | |
| <i>T. s. tetrataenia</i> | 6 | ■ | ■ | ■ | | | |
| <i>L. t. ochrorhyncha</i> | 1 | ■ | | | | | |
| <i>C. viridis lutosus</i> | 1 | ■ | | | | | |
| <i>C. v. oregonus</i> | 18 | ■ | ▲ | ■ | | | |

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