PLETHODON DUNNI IN OREGON AND WASHINGTON

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Dr. S. C. Bishop described *Plethodon dunni* (P. Biol. Soc. Wash., 47: 169-172) from specimens collected by Stanley G. Jewett, Jr. at Eagle Creek, Clackamas County, Oregon; Jewett (Copeia, 1936:71) does not extend the range beyond that county, so it is thought desirable to report on some specimens collected this spring. On March 21, 1937 we collected a few specimens of this species very close to a small stream at the highway crossing 4.4 miles southeast of Grays River (village), Wahkiakum County, (C. P. S. No. 1932); and near the base of a falls 1 mile east of Oak Point, Cowlitz County, (C. P. S. No. 1843, 1918-1920). At both of these stations we also obtained *Rhyacotriton olympicus, Dicamptodon ensatus* larvae, and *Plethodon vehiculus,* besides *Triturus torosus* at the first station and *Rana aurora aurora* at the second.

On May 1, 1937 Mr. Murray Johnson, a student of mine, collected amphibians in a gulch just below the Medical School at Portland, Multnomah County, Oregon, and two of the specimens (C. P. S. No. 1970-1971) presented to me are *Plethodon dunni.* Specimen No. 1970 is 130 mm. in length and contains 18 light cream colored eggs about 2 mm. in diameter and many smaller ones.

This extends the known range of this salamander 80 miles down the Columbia River from Portland and adds three counties to its distribution.

EXTERNAL SEXUAL DIFFERENCES IN THE ALLIGATOR, *ALLIGATOR MISSISSIPIENSIS*

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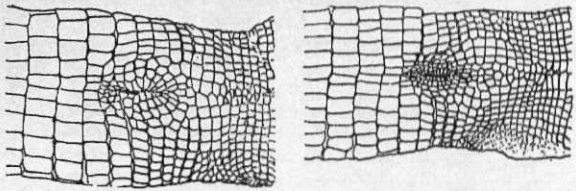
For a number of years the Southern Biological Supply Company has been called upon to supply live animals of known sex of various species of which the sexes are not generally known to be distinguishable by external criteria. This has necessitated close observation, sometimes of large numbers, and has resulted in several interesting discoveries. One paper, on sex differentiation in *Pseudemy troostii*

(Copeia, 1933: 208-210) has been published as a result of these scattered observations and this is the second.

To determine the sex of a live alligator our earlier procedure was to lay the animal, belly upward on a bended knee, pressing on both sides of the vent with the thumbs and bending the tail downward at the same time. In most cases, if a male, the penis would protrude. This method was not infallible, however, especially with very young specimens, and entailed some danger in case of large specimens if sufficient assistance was not at hand.



Tracings from photographs of alligator skins showing scutellation in the region of the vent. Left, a 97-inch hide of a male; right, an 87-inch hide of a female.

Closer observation of both sexes disclosed a difference in the partly opened cloaca and, later, external differences in the scutellation around the vent. The accompanying illustration shows that in the male, the scutes on each side of the vent are in three fairly definite rows, with rudiments of a fourth lining the vent. In the female there are four fairly definite rows on either side with rudiments of a fifth lining the vent. There are, however irregularities in both sexes in this regard.

It will also be noted that in the case of the male, the scutes referred to are larger, more often sub-triangular, and more plate-like; whereas in the female they are smaller, more rounded, and beadlike. There are also differences in the scutellation just anterior and posterior to the vent, but these have not been studied in a sufficiently large series to determine their value.

As the animals approach maturity, other secondary sexual characters become obvious, notably the physiognomy of the head, which difference is similar to that exhibited by mammals, the jaw being more massive in the male, and the aspect of both sexes suggestive of that in the corresponding sex of the dog.