A NEW CRAWFISH OF THE SUBFAMILY CAMBARINAE
FROM OREGON, U.S.A. (DECAPODA, ASTACIDAE)

BY

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Previously, only three crawfishes of the subfamily Cambarinae (as restricted by LaGuarda, 1961) were known to occur “naturally” west of the continental divide in North America. All three frequent streams along the Pacific slope in Mexico: Procambarus cligueti (Bouvier), P. bouvieri (Ortmann), and P. clarkii (Girard). The latter has also been introduced into California where it has become well established (Holmes, 1924; Hobbs & Zinn, 1948; Penn, 1954; Riegel, 1959; Villalobos, 1955; Hobbs, 1962).

The presence of a fourth Cambarine crayfish was revealed in June, 1962, when Dr. Perry C. Holt collected an undescribed species of the genus Orconectes from west of the divide in the Rogue River, Jackson County, Oregon. His collection has been supplemented by a series of 40 specimens which was collected by Messrs. C. M. Rivers and S. J. Westrheim of the Oregon State Game Commission. I should like to express my thanks to all these gentlemen and to the U. S. National Museum for their parts in making these specimens available to me. At the latter institution, I especially thank Dr. Harald A. Rehder for translating my summary into German and Dr. Horton H. Hobbs, Jr., for assistances too numerous to enumerate.

**Orconectes transfuga** sp. nov.

Diagnosis. — Pigmented, eyes normal. Rostrum usually with small marginal spines or tubercles, concave above, median carina present, margins subparallel or slightly converging distally and not thickened; average length of areola 34.0 per cent (range 30.8-36.3%) of entire length of carapace, averages 5.13 (range 4.36-6.55) times longer than broad, with four to five punctations across narrowest part; postorbital ridges strong, terminating cephalically in weak, divergent corneous spines or tubercles; a single weak lateral spine on each side of carapace, spine sometimes absent on one or both sides; chela with two rows of tubercles along inner margin. First pleopod reaching coxopodite of second pereiopod when abdomen is flexed; no strong cephalic shoulder present at level of base of central projection; central projection longer than mesial process, with tip curving caudo-

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distally and lateral to mesial process, proximal half curving mesially, distal half recurring; mesial process non-corneous, subparallel, in lateral aspect, to central projection in proximal three-fourths with distal one-fourth curving gently caudally; in caudal aspect, mesial process curving laterally in middle third, recurring in distal one-third such that tip is mesiad to long axis of pleopod (figs. N, O).

Annulus ventralis immovable, raised, ventrally, above the sternum with two prominent cephalic tuberosities, a deep transverse trough in cephalic half, sinus originates in trough and winds either dextrally or sinistrally through a prominent caudomesial tuberosity to be lost in caudal one-fourth (fig. F).

Holotypic male, Form I. — Body subcylindrical, slightly depressed. Abdomen narrower than cephalothorax (23.6 and 19.0 mm in widest parts, respectively). Width of carapace greater than depth in region of caudodorsal margin of cervical groove (22.0 and 15.8 mm).

Areola moderately broad (4.4 times longer than wide) with three or four punctations across narrowest part. Cephalic section of carapace about 1.9 times as long as areola; length of areola 34.2 per cent of entire length of carapace.

Rostrum with subparallel, moderately thickened margins terminating anteriorly in strong shoulders; upper surface deeply concave and bearing setiferous punctations; a single row of such punctations along mesial sides of marginal ridges extending onto acumen and along lateral margins; with a weak median carina. Acumen moderately long, slender, and extending almost to distal end of peduncle of antennule; tip not upturned. Subrostral ridges evident in dorsal aspect for a short distance at their bases.

Postorbital ridges strongly grooved dorsolaterally and produced cephalically in strong divergent tubercles. Suborbital angle lacking. Branchiostegal spines acute. Lateral surface of carapace with a prominent tubercle on left side; tubercle absent on right side. Entire carapace studded with setiferous punctations except in extreme cephalolateral ventral portions which bear setiferous granulations.

Abdomen longer than carapace (45.8-43.9 mm). Cephalic section of telson with two spines in each caudolateral corner.

Epistome (fig. H) broadly ovate in form and without ornamentation.

Antennules of the usual form with a prominent spine on basal segment. Antennae broken, length indeterminate. Antennal scale missing from right side, but left scale about 1.9 times longer than broad, widest slightly distal to mid-length, and with mesial margin evenly rounded.

Right chela broken. Left chela (fig. G) somewhat depressed, with palm inflated; all surfaces bearing setiferous punctations. Large tubercle present on lower surface of palm at base of dactyl. Inner margin of palm with two irregular rows of tubercles, lower row of nine and upper one of ten. Fingers gaping widely at base. Upper surface of immovable finger with a broad rounded submedian ridge flanked by setiferous punctations. Outer margin of immovable finger with a very weakly defined keel extending proximally about eight-tenths length of palm;