

1827—JOHNSTON, GEORGE, born 1797, died 1855 (Hagen).
1828.

Contributions to the British Fauna. By George Johnston, M.D., Fellow of the Royal College of Surgeons of Edinburgh. The Zoological Journal, vol. iii. From January, 1827, to April, 1828. London, 1828, pp. 173–181, 490–491.

Under “(Class. Crustacea. Order. Heterobranchia. Sect. Amphipoda. Gen. Gammarus) Lamarck,” he described “1. GAM. MACULATUS,” from sea coast near Berwick, with the observation, “it belongs to Leach’s restricted genus *Gammarus*, of which he has described four species. Three of these are well known to me. His *G. aquaticus* is common here, as everywhere else in our wells and ditches; the *G. locusta* swarms in the pools left on the recess of the tide; and the *G. marinus*, remarkable by its strongly ridged back, is frequently taken here, in great abundance, in the baskets used for catching crabs. Our animal is quite distinct from any of these, nor can it be the *G. Camylops*, which I have not seen, for that is characterized by having ‘flexuous eyes,’ a character not in the least applicable to our *G. maculatus*.”

“2. GAM. PUNCTATUS.” “*Hab.* Amongst confervæ in pools left by the tide, very common near Berwick. *Obs.* In the arrangement of Dr. Leach this is an *Ampithoë*. He describes one species, the *Cancer Gammarus rubricatus* of Montagu (Linn. Trans. ix. 99, tab. v. fig. 1), which differs from ours in the following particulars:—it is of a “reddish, or pale pink” colour; the eyes are crimson, in ours brown, and so dark that if not attentively examined they might be pronounced black; the hands have no notch or fissure between their articulations; and, if Montagu’s figure be correct, the outline of the body is different. Moreover, in the description, Montagu makes no mention of the punctures on the dorsal portion of the segments, a character not likely to have escaped the notice of that excellent naturalist.”

“3. GAM. DUBIUS,” which Johnston at one time thought synonymous with *Pherusa fucicola*, Leach, but in *Gammarus dubius* “the basilar joint of the superior [antennæ is] longer than the second or third,” and this species has “arms with nearly equal hands, monodactyle, oblong, not much dilated, and sparingly ciliated,” whereas he observes, “in the figure of the *Pherusa fucicola* given in the Supplement to the Encyclopædia Britannica, the second joint of the superior antennæ is represented as elongated, the first pair of feet or arms filiform without any hand, and the hand of the second pair oval with a very small claw. There is also a considerable difference about the tail, the *Pherusa* having no terminal conical processes. Other distinctions might be mentioned, but those already specified seem of as high a value as many of those which divide the genera of Dr. Leach.”

“4. GAM. NOLENS.” “*Hab.* amongst confervæ, not rare. *Obs.* To the preceding species I gave the specific appellation *dubius*, since it seemed doubtful to which of the genera of Dr. Leach it ought to be referred; this I have named *nolens*, as it will arrange with none of them. It seems allied to the *Gammarus monoculoides* (Linn. Trans. xi. 5, tab. ii. fig. 3.) of Mr. Montagu.”

He enumerates as also occurring at Berwick, “the *Talitrus Locusta* and *Orchestia littorea* of Leach,” the *Mæra grossimana* and *Jassa pulchella* of the same author, “the *Gam. monoculoides* of Montagu,” and “the *Corophium longicorne*,” all of them in abundance.

At p. 490, the habitat of *Gammarus punctatus* is described.

The description of *Gammarus maculatus* is quoted by Bate and Westwood, vol. i. p. 339, who distinguish it from the later *Gammarus maculatus* of Lilljeborg, but can give no further clue to its identification. There can, I think, be little doubt that it is the same as *Gammarus (Gammaropsis) erythrophthalmus*, Lilljeborg, which must in that case receive the name *Gammaropsis maculatus*, Johnston. *Gammarus punctatus* is identified by Spence