

these minute organs are of the form usual in the genus and indeed in the whole group, having a small inner plate between the two outer plates, the latter having the outer margin convex and the inner sinuous.

1885. KERVILLE, H. GADEAU DE.

Aperçu de la Faune actuelle de la Seine et de son embouchure depuis Rouen jusqu'au Havre. *In* L'Estuaire de la Seine, par G. Lennier. Le Havre, 1885. Tome 2. pp. 181-182. (É. Chevreux.)

See Note on Gadeau de Kerville, 1886 (p. 583).

1886. BROOK, G., and CALDERWOOD, W. L.

Report on the Food of the Herring. Appendix to Fourth Annual Report of the Fishery Board for Scotland. Edinburgh, 1886. pp. 102-128.

In allusion to this Appendix the Introduction to the Report states (p. xix) that "during winter and spring herring feed chiefly on *Hyperia Galba*, *Nyctiphanes norvegica*, and *Sagitta*."

In regard to *Hyperia galba* the Appendix itself says, "This species must be reckoned as one of the most important forms of herring food. Judging from its frequency in the stomach of the herring, this form must exist in myriads off the east coast of Scotland. The male is smaller than the female and leads an active pelagic existence. In structure it is so different that it has been described as a distinct genus (*Lestrigonus*). The males occur in much greater abundance than the females in the stomachs which we have examined, an occurrence which is doubtless to be attributed to the difference in habit of the two sexes. The female occurs plentifully in the summer time under the umbrella of *Aurelia*, *Rhizostoma*, and other Medusæ. We are not, however, acquainted with its habit during the colder months, that is during the period in which it is found as herring food." In the notes on the distribution of the species it is stated that "the statistics given for the area between Peterhead and Cromarty appear to show that *Hyperia* is frequent in that part in December, more abundant in January, while in February and March the supply gradually diminishes and the herring then seeks other food. A careful comparison, however, shows that so far as our material goes, *Hyperia* is by no means so abundant in this area as in those to the south of it." "This species," the authors say, does not "appear to form such an important part of the herring's food in the Wick district at any time, as it does in the waters south of Peterhead." They are also "of opinion that *Hyperia* cannot be a common form on the west coast."

Since the authors speak of *Hyperia* as a species, it may be presumed that they did not intend to lay any special stress on the specific name *Hyperia galba*, which has so long exercised and still continues to exercise the minds of writers on the synonymy of the Amphipoda. Indeed the herrings must be delicately sensitive in the matter of taste if they can discriminate the various closely connected species of the family Hyperidæ, let alone those of the genus *Hyperia*. The opinion of Thomas Edward as to the stay of *Hyperia galba* and *Hyperia obliqua* respectively at Banff, may be seen in the Note on that author, p. 382. Unless, however, some distinguishing marks are given, it is of little use to argue about the distribution of species, since authors may be referring to different species under the same name, or to the same species under different names. No great stress should, I think, be laid on the negative evidence regarding the occurrence of *Hyperia* on the west coast of Scotland, but it is corroborated by Mr. David Robertson's experience with regard to "*Parathemisto obliqua*," recorded in his Catalogue of the Amphipoda of the Clyde, 1888.