

submerged woodwork six Amphipoda are mentioned, p. 98 (392), among which it is curious to note that *Chelura terebrans* is not included. Of Amphipods ordinarily found on the bottoms of the bays and sounds, he enumerates for those that are rocky, p. 115 (409), nine species; for those that are gravelly and shelly, p. 128 (422), seven species; for those that are sandy, p. 134 (428), two species, *Lepidactylis dytiscus* being included in this and the two preceding lists; lastly, for those that are muddy, p. 140 (434), "several species" of Lysianassinæ, and eight of genera in other families.

In the section on "free-swimming and surface animals," he says, "several species of Amphipods are also common at the surface. The most abundant were *Calliopius læviusculus*, of which Mr. V. N. Edwards also took numerous large specimens in February and March; *Gammarus natator*, which was usually common, and occurred in immense numbers August 10 and on several other occasions; and a *Hyperia*, which infests several species of large jelly-fishes, and also swims free at will. The *Phronima* is a related genus, but is very remarkable for its extreme transparency, which renders it almost invisible in water." The list, p. 158 (452), mentions "several species" of Lysianassinæ, and eleven species of genera in other families.

At p. 163 (457), he says, "among the Crustacea there are a few species of Amphipods that are parasitic. One of these, *Laphystius sturionis*, lives upon the gills of fishes and upon the surface of the body. It was found on the gills of the "goose-fish" (*Lophius*), in Vineyard Sound, and on the back of skates at Eastport." In the list of external parasites, he mentions, besides *Laphystius sturionis*, "*Hyperia*, species, on jelly-fishes."

On the sandy shores and bottoms of estuaries, three Amphipods are recorded, p. 170 (464); on the muddy shores and bottoms of brackish waters, eight species, p. 177 (471); on oyster beds in brackish waters, four species, p. 182 (476); among eel-grass in brackish waters, eight species, p. 186 (480); on piles, etc., in brackish waters, four species, p. 188 (482); on outer rocky shores, nine species, p. 193 (487); on sandy shores of the open coast, four species, p. 196 (490); on the stony and rocky bottoms on the open coast, nine species, or more, since he says, "species of *Caprella* occur in considerable numbers," p. 200-204 (494-498); on sandy and gravelly bottoms off the open coast, eight species, p. 210 (504); on soft mud and sandy mud off the outer coast, seven species, p. 217 (511).

In the "lists of species found in the stomachs of fishes," pp. 220-227 (514-521), he mentions "SCUP; PORGEE; (*Stenotomus argyrops*.) Forty young specimens, one year old, taken at Wood's Hole in August, contained large numbers of Amphipod Crustacea, among which were *Unciola irrorata*, *Ampelisca*, sp., etc." "HADDOCK; (*Melanogrammus æglifinus*.) . . . A specimen taken at Wood's Hole, November 6, 1872, contained a large quantity of *Gammarus natator*." "TOM-COD; FROST-FISH; (*Microgadus tom-codus*.) Several specimens from New Haven Harbor, January 30, contained numerous Amphipods, among which were *Mæra levis*; *Gammarus*, sp.; *Ampelisca*, sp.;" others at Wood's Hole, in March, contained "large quantities of Amphipods, especially of *Gammarus annulatus*, *G. natator*, *Calliopius læviuscula*, and *Microdeutopus minæ*; and smaller numbers of *Gammarus ornatus* and *G. mucronatus*. Another lot of twelve, taken in April at the same place, contained most of the above, and in addition several other Amphipods, viz., *Mæra levis*, *Pontogeneia inermis*, *Ptilocheirus pinguis*, and *Cuprella*." "OCCELLATED FLOUNDER; SUMMER FLOUNDER; (*Chænopsetta ocellaris*.) . . contained . . . Amphipod Crustacea belonging to the genus *Ampelisca*." "SPOTTED FLOUNDER; (*Lophopsetta maculata*.) . . contained . . . numerous Amphipods, *Gammarus mucronatus*." "SEA-HERRING; (*Clupea elongata*.) . . contained . . . large numbers of an Amphipod, *Gammarus natator*."

The Systematic Catalogue of the Amphipoda inhabiting the coast between Cape Cod and New York, drawn up by Mr. S. I. Smith, occupies pages 261-273 (555-567). It includes