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THE LITTORAL FAUNA
OF GREAT BRITAIN
A HANDBOOK FOR COLLECTORS

BY

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With a Foreword by

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long peduncles and short flagella. Antennae longer than the body and spiny, but without a scale. Colour reddish or purplish brown with white spots. 30-45 cm. long. South and west coasts only. Used for food but not as good as the true lobster.

NEPHROPSIDAE.

True lobsters and crayfish. Antennule with a short peduncle and two fairly long flagella. Antenna with very long flagellum and a scale as exopodite. The first, second and third pereopods are chelate, the first pair being long and very strong (chelipeds).

Homarus vulgaris. The lobster. Bell, 1853, p. 242. Chelipeds large, flattened and smooth except for a few serrations on the edge of the propodite, the carpopodite spiny. Right and left claws usually unequal in size. Carapace almost smooth. Colour blue, brownish blue or reddish, spotted with white. Length 25-50 cm. On rocky shores, in deep pools or under rocks, to shallow water. On all coasts.

ANOMURA

GALATHEIDAE.

The squat lobsters have symmetrical, depressed bodies with oval cephalothorax. Abdomen well developed, usually flexed, but capable of full extension, with uropods and a telson forming a tail fan. Only the first pereopods chelate, the fifth pair slender and folded within the branchial chamber. Antennules resemble those of *Palinurus*. Antennae without a scale.

Galathea. Rostrum large and triangular, with the median spine the longest, and four spines on each side. Each abdominal tergum has at least one transverse furrow, but the telson has a median longitudinal groove, scales, bristles and spines. Chelipeds very large, equal to twice the length of the body.

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| 1. Basal joint of antennule with two sharp spines. Each abdominal tergum with one transverse furrow. | G. intermedia |
| Basal joint of antennule with three sharp spines. | 2 |
| 2. Propodite of cheliped spiny all over dorsal surface. Colour of body red and blue. | G. strigosa |
| Propodite of cheliped spiny on side only. | 3 |

3. Meropodite of third maxilliped much longer than ischiopodite. Chelipeds covered with scaly tubercles. Colour greenish brown.

G. squamifera

Meropodite of third maxilliped about the same length as ischiopodite.

4. Chelipeds very hairy. Abdominal segments with one transverse groove. Rostrum concave, not very hairy. Colour greenish red with blue markings on side of body and on labrum.

G. nexa

Chelipeds not very hairy. Abdominal segments with three transverse grooves. Rostrum flat, thickly covered with setae. With red, yellow or orange but no blue colour.

G. dispersa

G. squamifera (Pl. XI, fig. 45). Bell, 1853, p. 197; Selbie, 1914, p. 69. The most scaly species, the carapace being crossed by transverse ridges covered with scaly tubercles. Rostrum short, with nine spines, of which the three central ones are enlarged and subequal. Chelipeds covered with scaly tubercles and spiny along their edges. Colour greenish brown. Joints dark coloured and the spines dark green, tipped with red. The species attains a length of 7.5 cm. but is usually about 5 cm. long. Common off all coasts and migrates inshore in spring.

G. strigosa. Bell, 1853, p. 200. The largest and most spiny species. Red with blue transverse lines and spots, handsome but very ferocious. Chelipeds very spiny, with large flat claws. Second, third and fourth pereopods also spiny. 8 cm. long or more. Under stones. Littoral to deep water.

G. nexa. Bell, 1853, p. 204; Bull, 1937, p. 42. Larger and more heavily built than *G. dispersa*. Carapace fringed with fine setae. Rostrum tipped with red. General appearance smooth and glossy. Chelipeds vary with sex and age but differ from those of *G. dispersa*, being thickly covered with long plumose setae, which give them the furry appearance peculiar to the species. Colour greenish red with a brilliant blue labrum and a blue stripe on the pleural fold. The blue colour is very constant. From the tip of the rostrum to the end of the abdomen 30-40 mm. in male, less in female. Total length including chelipeds 50-80 mm. Very local in distribution. Usually in shallow water but may be taken on the shore.

G. dispersa. Bull, 1937, p. 46. Lateral margin of carapace irregularly spiny. General appearance dull and rough. Chelipeds rather long, with irregular spines, tubercles, scales and fine setae, but not woolly or furry. Red, yellow, orange, but without greenish

red or blue colouring. Body 35 mm. including abdomen, 72 mm. including chelipeds. Shallow water. Common.

G. intermedia. Selbie, 1914, p. 66.. Basal joint of antennule with two spinous processes (all others have three). Chelipeds of male very large, twice the length of the body with abdomen folded, unequal. Both fingers end in a broad curved tooth, and above this is a smaller and sharper tooth in line with the outer margin. Smallest British species. 12–20 mm. long. From littoral zone to shallow water. On all coasts.

PORCELLANIDAE.

Porcelain crabs. Small circular crabs with a terminal swimming fan on the flexed abdomen, long slender antennae and reduced fifth pereopods. They resemble the Galatheidæ in most characters.

Porcellana. Antennules small, antennae long whip-like, rostrum reduced, chelae large and broad, abdomen large, nearly as long as the rather rounded carapace. Pleopods in male on second abdominal segment only, in female four pairs.

P. platycheles (Pl. XI, fig. 46). Bell, 1853, p. 190; Selbie, 1914, p. 87. Hairy porcelain crab. Carapace broadly pear-shaped, grooved and polished, but often hairy in young individuals. Three blunt teeth between the eyes. Antennae longer than the carapace, slender. The most marked feature of the species is the large flattened chelae, which are fringed with dirty greyish setae and have a denticulate knob on the carpopodite. Reddish brown to dirty grey, usually coated with mud. Carapace 12 mm. Chelipeds 30 mm. Under stones in muddy situations. Local.

P. longicornis. Bell, 1853, p. 193; Selbie, 1914, p. 87. Minute porcelain crab. Carapace smooth, almost circular, not grooved. Antennae nearly twice as long as the carapace, very slender. Chelipeds unequal, grooved and keeled. Colour pale, often with a reddish tinge, and the body is free from mud. Carapace 4 mm. long. Under stones. Generally distributed and very common.

CALLIANASSIDAE.

Rare burrowing forms which occur in sandy situations on the south and east coasts. Carapace short and laterally compressed. Abdomen extended, large and broadest about the middle. Rostrum small or absent. Tail fan well developed. Antennules and antennae

of moderate size, third maxillipeds foot-like, chelipeds large, equal or unequal, pereiopods 2-5 small, equal. The exopodite of the uropod has no suture. Clumsily built forms.

1. Chelipeds equal.
Chelipeds unequal.

Upogebia
Callianassa

Callianassa. Rostrum and eyes small. Propodite of third pereiopod much flattened and expanded for burrowing.

C. subterranea. Bell, 1853, p. 219 (page wrongly numbered 217). Carapace smooth, less than half the length of the abdomen. The larger cheliped may be three times as long and four times as broad as the smaller one, and may belong to either side. Second pereiopod chelate. Bright red. 5 cm. long. Rare, south coast only. Littoral to deep water. In sand.

Upogebia. Rostrum of moderate size, pointed. Carapace very narrow anteriorly. Abdomen thick, narrowing towards the tail fan. Chelipeds imperfectly chelate.

U. stellata. Bell, 1853, p. 223, as *Gebia*. Antennae as long as the body. Carapace well calcified. Body hairy. 3-5 cm. Burrowing in sand. North and east Scottish coasts, English Channel. Not common. Another species, *U. deltaura*, occurs on the south and east coasts.

PAGURIDAE.

Hermit crabs. Asymmetrical, with soft, swollen, unsegmented abdomen adapted for holding on to the Molluscan shell in which the animal lives. Carapace partly membranous, shorter than the abdomen and covering only a portion of the thorax dorsally. The abdomen is membranous, tapering and coiled, with vestigial terga. As in the Callianassidae, the third maxilliped is foot-like. Chelipeds large and unequal, the second and third pereiopods with nail-like dactylopodites, the fourth and fifth pairs reduced. The abdominal appendages are reduced, and the pair of uropods act as prehensile organs for holding on to the Molluscan shell. Most of the hermit crabs inhabit deep water, but young specimens of two species of *Eupagurus* are to be found on the shore. *Eupagurus* is a right-handed crab with four pleopods in the female, three in the male, on the left side only.

E. bernhardus. Soldier crab. Bell, 1853, p. 171, as *Pagurus*;

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