J. C. FABRICIUS’ (1798) SPECIES OF ASTacus, WITH AN ACCOUNT OF HOMARUS CAPENSIS (HERBST) AND EUTRICHOCHELES MODESTUS (HERBST) (DECAPODA MACRURA)

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In his last revision of the genus Astacus, Fabricius (1798: 406-408) recognized eight species within that genus: A. marinus (= Homarus gammarus (L., 1758)), A. fluviatilis (= Astacus astacus (L., 1758)), A. norwegicus (= Nephrops norvegicus (L., 1758)), A. Bartonii (= Cambarus bartonii (Fabricius, 1798)), A. coerulescens (= Hippolyte coerulescens (Fabricius, 1793)), and three species that so far have been considered species dubia and have generally been ignored during the last 150 years. These three species are Astacus fulgens, A. fulvus, and A. scaber. Astacus fulgens Fabricius (1775: 415; 1793: 480; 1798: 408) is no Decapod Crustacean, but almost certainly a Euphausiacean. I have not been able to find any mention of it in modern literature on Euphausiacea, and it evidently is completely forgotten. Of Astacus fulvus the type specimen is still preserved in the Copenhagen Zoological Museum, and on examination proved to belong to Homarus capensis (Herbst). Astacus scaber, of which unfortunately no type material is extant anymore, most likely is identical with Eutrichocheles modestus (Herbst). Homarus capensis and Eutrichocheles modestus, both rare species, will be more extensively dealt with here and of both a complete synonymy is given.

NepHropidae

Homarus capensis (Herbst, 1792) (fig. 1)

Cancer (Astacus) capensis Herbst, 1792: 49, pl. 26 fig. 1; Huxley, 1879: 754.
Homarus fulous - Weber, 1795: 94.
Cancer (Astacus) Fulvus - Herbst, 1796: 171.
Cancer (Astacus) fulvus - Turton, 1806: 756.
Homarus capensis - H. Milne Edwards, 1837: 335; De Haan, 1841: 161; Krauss, 1843: 54; De Haan, 1849: xxvii, 239; H. Milne Edwards, 1851: 291, pl. 11 figs. 1, 2; Huxley, 1879: 755; Herrick, 1895: 8; Calman, 1910: 54; Calman, 1911: 239; Herrick, 1912: 58; De Man, 1916: 96; Bouvier, 1917: 14; Gilchrist, 1918: 44-46, 48, pl. (1); Calman, 1927: 50; C. von Bonde &

*Homarus Capensis* - Broderip, 1838: 274.


Description. — *Astacus fulvus* was first described by Fabricius (1793) who gave a short Latin diagnosis and a slightly longer, likewise Latin, description. In 1798 Fabricius repeated the diagnosis. Since 1793 the species has been mentioned by several authors: Herbst (1796) cited the Latin diagnosis and translated the description in German, Weber (1795) just listed the name and placed the species correctly in the genus *Homarus* (being the only author to do so), Bosc (1801-1802), Latreille (1802-1803) and Desmarest (1830), translated Fabricius' diagnosis in French, Turton (1806) gave an abbreviated English translation of Fabricius' account, but none of these authors added anything new and evidently did not see any material. However, all treated *Astacus fulvus* as a good species. H. Milne Edwards (1837), however, stated “L'Astacus coerulescens, l'Astacus fulvus et l'Astacus fulgens du même auteur [J. C. Fabricius] nous sont inconnus, et sont considérés par Latreille comme des espèces douteuses”. The last statement is incorrect, as Latreille (1802-1803) treated only the two other species, but not *Astacus fulvus*, as doubtful. H. Milne Edwards’ authority was so great that his 1837 remark killed the species. Except for a short statement by Broderip (1838) repeating what H. Milne Edwards said, *Astacus fulvus* was not mentioned anymore in carcinological publications. It was completely ignored until Zimsen (1964) in her list of Fabrician types indicated that the type of *Astacus fulvus* is still extant.

Thanks to the kindness of Dr. Torben Wolff of the Zoological Museum at Copenhagen, I was allowed to examine this type which is now preserved in the collection under his care. Until recently the specimen, which originally formed part of the Fabricius collection at Kiel, was preserved dry, but is now transferred to alcohol. The specimen is in a rather good condition. The carapace and the six abdominal somites are complete. The telson, however, is missing and so are most appendages. The third maxillipeds and the first pereiopods are present and complete, but of the other appendages only a few fragments are left. The uropods are present, but not so the pleopods. The carapace length of the specimen is 38 mm. The sex could not be determined. A photograph of the specimen, when still dry, is reproduced here (fig. 1), it was kindly made available by Dr. Wolff.