

THE SECOND OCCURRENCE OF A RARE FISH (*LUVARUS*) IN AUSTRALIA.

By

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A very rare and interesting fish was caught at South-west Rocks, northern New South Wales, in June 1939 by Mr. T. Egstein. It came to the Sydney Fish Markets, where it was recognized as *Luvarus imperialis* by Mr. T. C. Roughley, and Mr. George Koutalis purchased the specimen and generously presented it to the Australian Museum. I was away in Western Australia at the time, so regret that I did not see the fresh fish. Mr. H. S. Grant, taxidermist of the Museum, however, obtained particulars of its occurrence and checked its measurements; but the specimen was considered to be too damaged about the body¹ and fins for casting or even preservation, so only the head was kept. The fish was 6 feet 4 inches long, a record size, and weighed 225 lb.; depth about 18 inches. The body was silvery and the tail reddish. Photographs appeared in the papers, and Miss Lily Cook, of South-west Rocks, has sent me a snapshot and some notes, but these do not enable any fin-formulae or other details to be gleaned. This is only the second time the genus *Luvarus* has come to light in Australia, so that it is a pity that the fish was so damaged; the head is registered Austr.Mus.No.IB.2.

Luvarus imperialis was first described by Rafinesque in 1810 from a Sicilian example. The genus and species has received many names since, because it undergoes a remarkable metamorphosis in its larval and half-grown stages. The fish is now regarded as an extremely modified Scombroid. There is a great deal of literature concerning European specimens and the synonymy is complex. It is difficult to compare Australasian specimens with European ones on account of insufficient material here and the known variability of the latter forms, but if ours be distinct, it will require a new specific name.

The following synonymy of the genus *Luvarus* and list of records from Australia and New Zealand will, it is hoped, assist future students to determine the status of the local form, when further specimens may come to light.

Order PERCOMORPHI.

Series LUVARIFORMES.

Family LUVARIDAE.

Genus *Luvarus* Rafinesque, 1810.

Luvarus Rafinesque, Carat. n. gen. Sicil., 1810, p. 22. Haplotype, *L. imperialis* Raf., figured in Ind. Ittiol. Sicil., 1810, pl. i, fig. 1.

Diana Risso, Hist. Nat. Eur. Mérid., iii, 1826, pp. 106 and 267. Haplotype, *D. semilunata* Risso.

Ausonia Risso, Hist. Nat. Eur. Mérid., iii, 1826, p. 341. Haplotype, *A. cuvieri* Risso.

Astrodermus Cuvier, Règne Anim., ed. 2, ii, April 1829, p. 216, ex Bonelli, MS.

Haplotype, *A. guttatus* Cuvier, equals *Diana* Risso. Variants: *Astrodermes* Swainson, 1838; *Asterodermus* Agassiz, 1843; *Astroderma* Lowe, Dec. 1843.

Proctostegus Nardo, Diario Chem. et H.N. Ticino, i, 1827, pp. 18 and 42—*fide* Nomencl. Anim., but Sherborn gives: Giorn. di Fisica, (2) x, 1827, p. 27,

¹ Steaks had been removed for food.