

The problem of whether this is due to more active invasive properties of the trophoblast itself when it encounters antigenically dissimilar decidua or to a reaction of the maternal decidua, for example by increased hyperaemia, to the dissimilar trophoblast, or to both, awaits solution. These experiments do not throw light on this problem, but they do indicate that immunological dissimilarity of mother and foetus favours, rather than hinders, foetal development in the mouse.

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W. D. BILLINGTON*

Department of Zoology,
University College of North Wales,
Bangor,
Caernarvonshire.

* Present address: Department of Zoology, University Museum, Oxford.

Occurrence of *Atherina boyeri* Risso in Britain

Atherina boyeri Risso 1810¹ (Teleostei: Mugiloidea) has previously been recorded only once in Britain by Couch², who identified a few specimens from a large shoal observed off the coast of Cornwall in 1846. Unfortunately Couch gave only a very brief description of his specimens which were afterwards lost³, and, since there are no other confirmatory British records in the literature, the occurrence of the species in Britain has usually been doubted^{4,5}. Recently, however, atherines agreeing closely with published descriptions of *Atherina boyeri*^{1,6} have been found abundantly in a dock at Swansea, South Wales. Specimens were observed at various times during 1956-63 and occasional collections have been made by dropping bait into a hand net which was then gently raised from the water with the fish inside.

A sample of 25 arbitrarily chosen fish ranged in total length from 33 to 70 mm (standard length 29 to 62 mm) and few specimens seemed to be larger than the greatest of these lengths. Meristic data for the fish, together with data given by some previous authors, are presented in Table 1. The specimens are quite distinct from the only other British atherine, *Atherina presbyter* Cuvier and Valenciennes, which reaches a much larger size, has relatively smaller eyes and a less-sloping lower jaw, and has higher vertebral counts. Moreover, there is little doubt that dock specimens were breeding since, among a few specimens which were dissected, all those of more than 55 mm total length were sexually mature, and very small specimens were occasionally observed and collected in summer.

Taken by itself the present record does not necessarily indicate the 'natural' occurrence of the species in Britain, since the dock is artificially heated by a power station effluent^{7,8}, and eggs or adult fish may have been introduced by shipping, as seems to have occurred with some other dock species^{9,10}. This could be particularly so in this case since *Atherina boyeri* is normally a warm-water species which is recorded from the whole of the Mediterranean Sea and adjoining parts of the Atlantic as far as Madeira^{11,12}. The opportunity to examine good preserved material and to observe living specimens 'loosely

scattered' with 'not more than two or three being near each other' exactly as Couch describes does, however, persuade us of the accuracy of Couch's identification. Couch identified his specimens from Cuvier and Valenciennes⁶, whose description fits our specimens very well, and it seems unlikely that a trained observer would have confused *A. boyeri* with *A. presbyter*. It is perhaps possible that *A. boyeri* is a warm-water form of *A. presbyter* which, in contrast, is predominantly found outside the Mediterranean from Gibraltar to the southern North Sea¹³. However, the ranges of the two forms appear to overlap considerably, and there is no evidence of a change in the body-form and habits of *A. boyeri* at Swansea in the time since November 1960 when the dock became cooler⁸. More careful comparisons of the two forms in a variety of localities would clearly be valuable, but if, as seems likely, the two species are valid then the occurrence of *Atherina boyeri* at Swansea, whether 'accidental' by remote dispersal or 'natural' by marginal dispersal, suggests that the original record from Cornwall in 1846 may well have been correct.

Twelve intact specimens of present material have been deposited at the British Museum (Natural History) and we thank Mr. A. C. Wheeler for radiographs of this material, and Mr. P. Miller for his advice.

A. B. BOWERS

Marine Biological Station,
Port Erin, Isle of Man.

E. NAYLOR

Department of Zoology,
University College of Swansea.

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Effect on Body Composition and Weight of Ingesta of the Number of Lambs reared by Romney Marsh Ewes

THE 39 two-year-old Romney Marsh ewes described by Barton and Ulyatt¹ in an investigation of the effects of four pasture types on body composition could also be divided into four birth-rank categories. The statistical analysis used was that of fitting constants by least squares, and birth-rank effects were separated from any associated effects of pasture type. The birth-rank categories were as follows: Ewes rearing twin lambs; ewes rearing single lambs; ewes which bore a lamb but did not rear it (lost lamb); and dry ewes. The lambs were weaned on December 4, 1958, and the ewes were slaughtered approximately two weeks later. The procedures used at slaughter and in the chemical analysis of the carcasses have already been outlined¹.

Table 1. FIN-RAY AND VERTEBRAL COUNTS OF *Atherina boyeri* RISSO

Authority	Fin-rays						Vertebrae
	1st dorsal	2nd dorsal	Pectoral	Pelvic	Anal	Caudal	
Risso 1810	7	9	13	1/5	15	16	—
Cuvier and Valenciennes 1830	7	1/12	14	1/5	1/13-14	17	44
Gunther 1861	6-8	1/12	—	—	1/13-14	—	47
Day 1880	7-8	1/11-12	14-15	1/5	1/12-14	17	44-46
Ninni 1931	7	13	—	1/5	—	17	—
Present material	7-9	12-14	13-14	1/5	1/11-14	15-17	43-46