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Chapter 33 The ormer (*Haliotis tuberculata*) fishery of France and the Channel Islands

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ABSTRACT: *Haliotis tuberculata* is a medium-sized, white-fleshed abalone. It makes a much appreciated dish with a relatively high value for local market or export. *Haliotis tuberculata* exploitation is of minor economic importance in Europe. The fishing grounds are restricted to the intertidal zone where the populations are overexploited. The bulk of the stock is therefore distributed below low tide level and a potential small fishery exists. At present, biological knowledge is sufficient to define management options for the fishery and exploitation is likely to increase.

RESUMEN: De tamaño medio, *Haliotis tuberculata* tiene un músculo pedal de color blanco muy apreciado comercialmente. La pesquería de *H. tuberculata* presenta una importancia débil en Europa. Actualmente, esta pesquería se localiza en la zona de entremareas donde se observan signos de sobrepesca. Sin embargo, las mayores concentraciones se encuentran bajo el nivel de la baja marea y potenciales zonas de pesca existen. Ahora, los conocimientos biológicos son suficientes para determinar las medidas de administración más seguras dentro de la cuales puede manejarse la pesquería y el incremento en la explotación.

INTRODUCTION

Only one species of *Haliotis*, the ormer (*H. tuberculata* L.) is taken commercially in Europe. One other species (*H. lamellosa*) inhabits the Mediterranean sea, but is too small to be harvested. *Haliotis tuberculata* lives on the Atlantic coast from the south of the English Channel down to the northwest of Africa (Fig. 33.1). The species reaches its highest densities at the northernmost limit of its distribution.

BIOLOGY

The first biological studies on the ormer date from the end of the nineteenth century (Wegman, 1884; Boutan, 1898, 1899). Since then, an abundant literature has been devoted to this species. The anatomy and reproduction are described by Crofts (1929), with later more detailed reproductive studies performed in France (Girard, 1972; Koike, 1978; Cochard, 1980) and in the Channel Islands (Hayashi, 1980a). The growth of *H. tuberculata* is described by Forster (1967), Hayashi (1980b) and Cochard (1982), and juvenile growth by Koike (1978) and Clavier & Richard (1986a). Movement *in vitro* has been observed by Robert (1907), Crofts (1929), Lissman (1945) and Hayashi (1982), and in nature by Clavier & Richard (1984). Feeding of the ormer is described by Stephenson (1924) and feeding preferences by Culley & Peck (1981). Information on predation is provided by Stephenson (1924), Crofts (1929) and Forster (1962). The factors influencing spatial distribution are described by Clavier & Chardy (1989).

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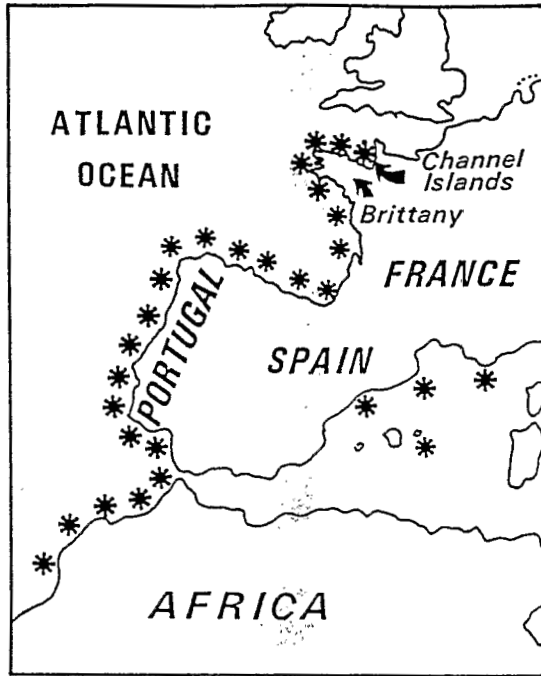


Fig. 33.1 Distribution of *Haliotis tuberculata*, after Gaillard (1958).

Abundance and biomass of ormer populations have been estimated in the vicinity of St Malo, in France (Clavier & Richard, 1986b), but no mathematical model for managing the fisheries has yet been published.

THE FISHERY

Reviews of the ormer exploitation in the Channel Islands and in France are given by Bossy & Culley (1976) and Berthou *et al.* (1985) and are summarized below.

The ormer is mostly gathered in the Channel Islands and in Brittany. The use of any diving gear is forbidden except in Guernsey, one of the Channel Islands, where the gathering of ormers using diving gear was permitted until 1973. Thus the fishing grounds are now restricted to the intertidal zone where the animal is levered off the rocks with a knife or metal bar.

Ormer gathering is a traditional activity for the coastal population. *Haliotis tuberculata* has always been regarded as a delicacy and a great number of fishermen search along the shore at each spring tide for it. For example, in March 1984, more than 2000 shore gatherers were counted in three days along a 5-mile 'ormer ground' in northern Brittany. This activity is mainly recreative and most of the ormers are taken for domestic use. The minimum legal size of *H. tuberculata* is 80 mm.

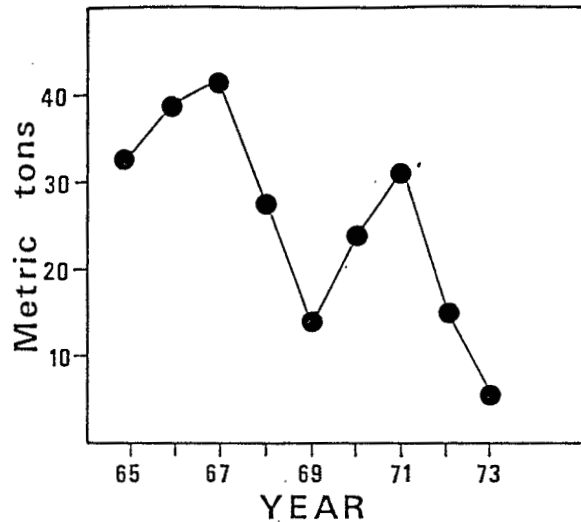


Fig. 33.2 Ormer landings in Guernsey (Channel Islands) from 1965 through 1973, after Bossy & Culley (1976).

Minor exploitation of *Haliotis* by scuba divers took place in Guernsey Island until 1973. An official ban on ormer fishing has been imposed since this date, because of the severe drop in the yields (Fig. 33.2).

Official statistics give a total annual catch of about 2 tonnes in France. This value is underestimated and the actual catch by shore gathering may be estimated to be about 20 tonnes. The illegal catch by divers must be added to this estimate, so that 40–50 tonnes of ormers are probably taken from the French coasts. About half of this production is marketed with a mean price to fishermen of 60–70 francs (about US\$9–10) per kg.

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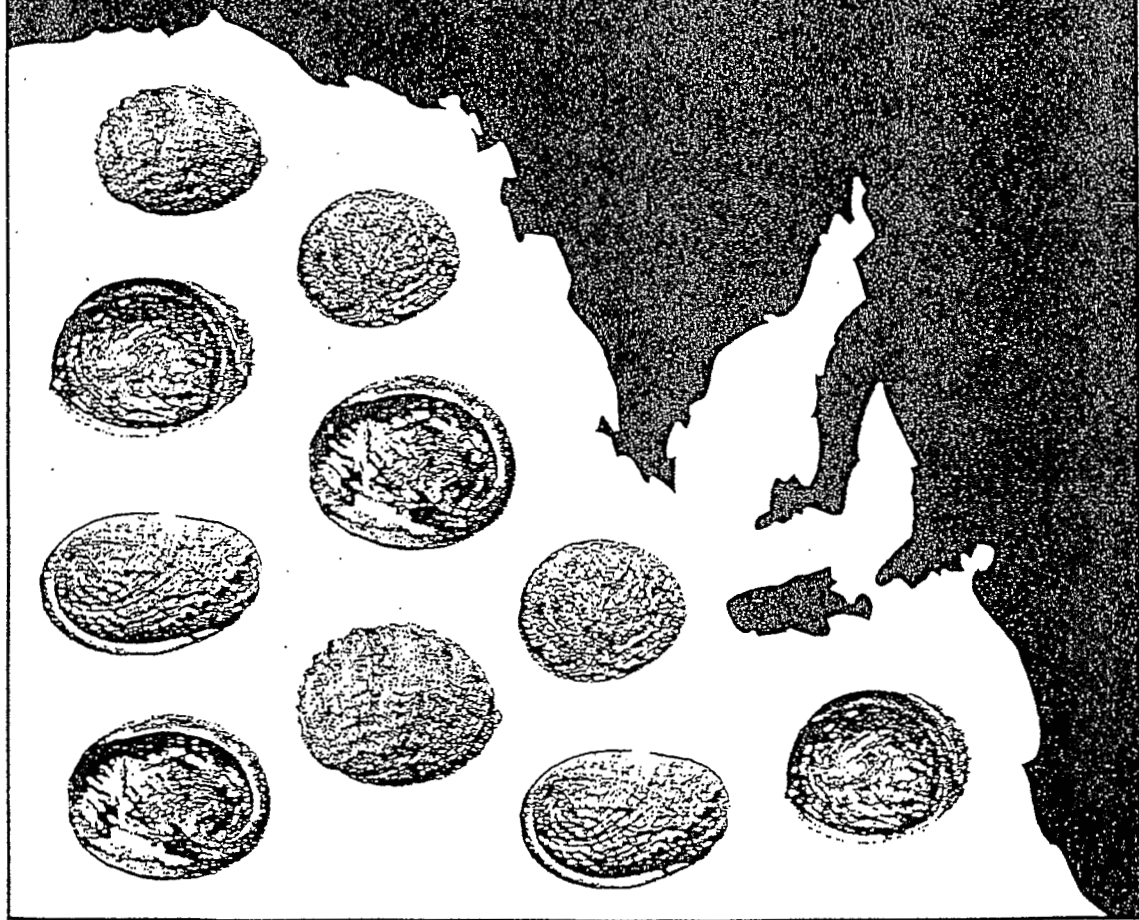
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