# Marine Fish and Culture

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#### European seabass - *Dicentrarchus labrax* (Linnaeus, 1758) [Moronidae]



## **Biological features**

• Body rather elongate. Opercle with 2 flat spines; preopercle with large, forward-directed spines on its lower margin. Mouth terminal, moderately protractile Vomerine teeth in a crescentic band, without a backward extension on midline of roof of mouth. Two separate dorsal fins; the first with 8 to 10 spines; the second with 1 spine and 12 or 13 soft rays. Anal fin with 3 spines and 10 to 12 soft rays. Scales small; lateral line complete with 62 to 74 (mode 70), but not extending onto caudal fin.Caudal fin moderately forked.

Colour silvery grey to bluish on the back, silvery on the sides, belly sometimes tinged with yellow. Young with some dark spots on upper part of body but adults never spotted. A diffuse spot on the edge of opercle.

#### Historical background

 Seabass were historically cultured in coastal lagoons and tidal reservoirs before the race to develop the mass-production of juveniles started in the late 1960s. Fish culture was initially associated with salt production in coastal evaporation pans and marshes. The salt was harvested during the high evaporation season of summer and autumn, and fish were cultured during winter and spring. The supply for this culture came from trapping schools of fish that lived in these estuarine areas.

#### During the late 1960s, France and Italy competed to develop reliable mass-production techniques for juvenile seabass and, by the late 1970s, these techniques were well enough developed in most Mediterranean countries to provide hundreds of thousands of larvae. The European seabass (*Dicentrarchus labrax*) was the first marine non-salmonid species to be commercially cultured in Europe and at present is the most important commercial fish widely cultured in Mediterranean areas. Greece, Turkey, Italy, Spain, Croatia and Egypt are the biggest producers.



### Habitat and biology

• The European seabass are eurythermic (5-28 °C) and euryhaline (3‰ to full strength sea water); thus they are able to frequent coastal inshore waters, and occur in estuaries and brackishwater lagoons. Sometimes they venture upstream into freshwater. There is only one breeding season per year, which takes place in winter in the Mediterranean population (December to March), and up to June in Atlantic populations. Seabass spawn small (1.02-1.39 mm) pelagic eggs in water with salinities lower than 35‰, near to river mouths and estuaries or in littoral areas where the salinity is high (≥30‰). Being not particularly sensitive to low temperature some fish may over-winter in coastal lagoons instead of returning to the open sea. Seabass are predators and their feeding range includes small fish, prawns, crabs and cuttlefish.

