# Marine Fish and Culture 

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# Gilthead seabream - Sparus aurata Linnaeus, 1758 [Sparidae] 



## Production cycle




## Seed supply

- Usually every hatchery has its own broodstock unit, where breeders of various age groups, from 1 year-old males to 5 -year old females, are kept under long-term stocking conditions. Breeders can come either from a farm or from the wild. At the beginning of the spawning season selected batches of breeders are transferred from their longterm location to the spawning tanks. The control of the sex ratio in spawning tanks is a very important factor for gilthead seabream and precautions need to be taken because sex reversal is socially determined. The presence of young males at the end of the spawning period, for instance, increases the number of older fish that become females. On the other hand, the occurrence of older females reduces sex reversal in younger fish.


## Ongrowing techniques

- Gilthead seabream can be farmed in various ways: in coastal ponds and lagoons, with extensive and semi-intensive methods; or in landbased installations and in sea cages, with intensive farming systems. These methods are very different, especially regarding fish farming density and food supply.



## Nursery

- Juveniles at about 45 days old are generally moved into a dedicated section of the hatchery equipped with larger round or rectangular tanks ( $10-25 \mathrm{~m}^{3}$ ), where weaning takes place. The weaning stage is a truly intensive rearing system. Initial fry density is generally $10-$ $20 /$ litre at a temperature of $18{ }^{\circ} \mathrm{C}$ and salinity of $35-37 \%$. Final density can reach $20 \mathrm{~kg} / \mathrm{m}^{3}$ of $2-3 \mathrm{~g}$ fish. Feed is presented at 2 -hour intervals from 08.00 to 20.00, using increasing percentages of artificial feeds composed of $150-300 \mu \mathrm{~m}$ particles. Dry feed should initially be presented at about $20 \mathrm{~g} / \mathrm{m}^{3}$.



