

Extensive fresh water aquaculture

Ponds are maintained in such a way as to promote the development of aquatic fauna at a yield greater than that found in the natural ecosystem. Density is low and fish feed naturally. Certain producers provide additional feed. These ponds play an important and positive role in the landscape, water management and biodiversity.

Examples – Carp, in mixed farming with other species (whitefish, zander, pike, catfish, etc.).

Aquaculture of marine species in shore-based installations

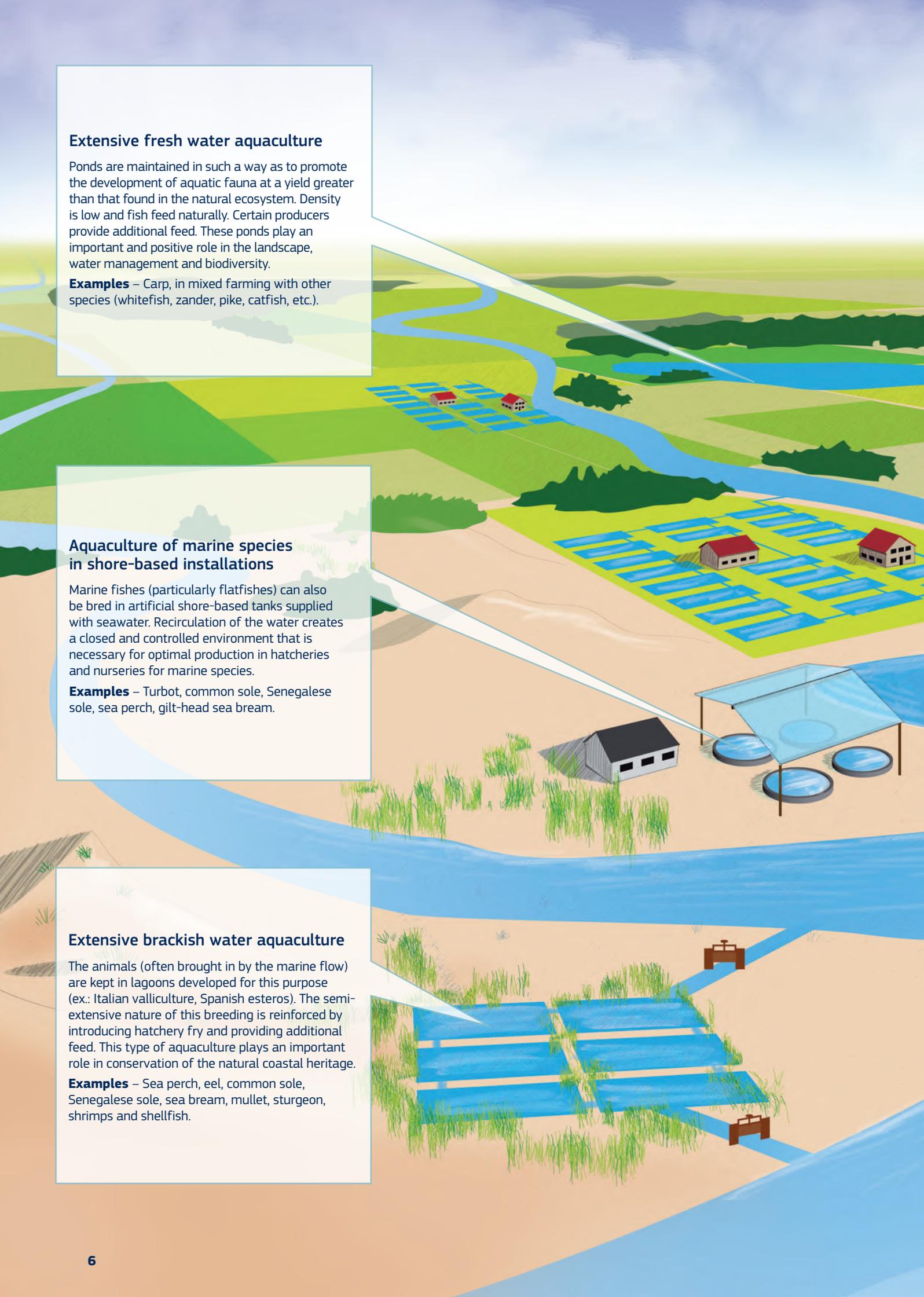
Marine fishes (particularly flatfishes) can also be bred in artificial shore-based tanks supplied with seawater. Recirculation of the water creates a closed and controlled environment that is necessary for optimal production in hatcheries and nurseries for marine species.

Examples – Turbot, common sole, Senegalese sole, sea perch, gilt-head sea bream.

Extensive brackish water aquaculture

The animals (often brought in by the marine flow) are kept in lagoons developed for this purpose (ex.: Italian valliculture, Spanish esteros). The semi-extensive nature of this breeding is reinforced by introducing hatchery fry and providing additional feed. This type of aquaculture plays an important role in conservation of the natural coastal heritage.

Examples – Sea perch, eel, common sole, Senegalese sole, sea bream, mullet, sturgeon, shrimps and shellfish.



Intensive fresh water aquaculture

In intensive systems, fish are bred in tanks until they reach marketable size. There are two techniques: continuous flow (river water enters tanks upstream and leaves downstream) and recirculation (the water remains in a closed circuit and is recycled and 'recirculated' in the tanks). Recirculation systems are more costly (energy), but offer better control of breeding conditions (temperature and oxygen) and water quality.

Examples – Rainbow trout, eel, catfish, sturgeon, tilapia, etc.

Marine cage aquaculture

The fish are kept in cages anchored to the seabed and maintained on the surface by means of a floating plastic framework. This form of breeding is practiced mainly in sheltered zones near shore, but more sophisticated techniques (submersible cages, remote monitoring, automatic feeding, etc.) may make it possible to move further from shore.

Examples – Atlantic salmon, sea perch, sea bream, meagre, etc.

Shellfish farming

Shellfish farming is based on the collection of wild or hatchery spat, which feed on natural nutrients found in the environment (filter-feeding animals). Oyster and mussel farming account for 90% of European production and use a wide range of techniques: bottom-farming, on tables, wooden posts, ropes, etc.

Examples – Oysters (oyster farming), mussels (mussel farming), clams and abalones.