

ARTIFICIAL FERTILIZATION

Artificial production of fish seed involves human intervention in the natural propagation processes. This may be achieved by creating appropriate environmental conditions which are conducive to the spawning of the species. More commonly, the fish may be artificially induced to ovulate and spawn through injection of natural and synthetic reproductive hormones. Artificial production of fish seed is beneficial to the fish farmers in that the juveniles of the required species can be produced as when required, irrespective of the quantity and the time of the year. It also makes possible the production of seed from good quantity stock and hybrids of desired species. The processes of artificial production of fish seed are carried out in enclosures known as hatcheries which may be an indoor or outdoor facility and require various inputs like brood stock adequate water supply and suitable feed. The sequence of steps involved in artificial production of seed is as follows:

Transfer of mature spawners to spawning ponds

Selection and segregation of potential spawners

Brood stock maintenance for maturation

Selection of gravid spawners during breeding period

Hypophysation or hormone treatment

Stripping of fish

Artificial fertilization of eggs

Incubation of fertilized eggs

Hatching

Natural spawning

Removal of brood stock

Harvesting of seed

Sequence of steps in the artificial rearing of fish seed