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# Some basics of marron production

Marron are native to the South-West of Western Australia, and are keenly sought by inland fishermen. However, supplies do not equal the apparent demand.

One solution is to cultivate marron in farm dams, or more intensively as a commercial enterprise. This article suggests a few guidelines for marron production. The information is based on research by the Department of Fisheries and Wildlife.

#### Hobby marron

Intensive commercial production of marron must be clearly distinguished from hobby marron in the farm dam. Intensive production is best sited in the extreme South-West, although marron will grow in most farm dams.

In farm dams, marron can grow to legal size within 15 months, but their growth is limited by the amount of food available, numbers of marron in the dam, and water temperatures.

Preferably the dam selected should contain at least 1.5 metres of water at the end of summer. The water should be turbid or milky, and not clear. Turbid water gives protection from cormorants and summer heating. Ideally the salt content should be less than 1 000 mg per litre to promote clay turbidity.

Avoid dams which have heavy, green algal blooms, as overnight, blooms of algae may develop and cause oxygen deficiencies. The bottom of the dam should not have a build-up of manure and pasture debris. This build up also may cause severe oxygen problems.

The dam selected should contain no koonacs, yabbies or redfin perch.

#### **Intensive commercial production**

Size of individual ponds can vary from 500 square metres for breeding stock to 5000 square metres for rearing. A total of about 5 hectares (50000 square metres) of ponds is a minimum economic unit. Breeding stock should be held in smaller ponds about one-fifth the size of the total rearing dams.

An approximate idea for size for rearing dams would be to allow 1 square metre for each 10 marron newly released from parent females.

Ponds with turbid water need not to be more than 1 metre deep. Under these conditions good holding clay should be available close to the surface. Normal construction procedures for excavated earth dams should be followed.

If the water is not turbid the pond will have to be covered by a net to protect the marron from birds.

Ponds should have a bottom pipe for emptying, so that they can be fully drained. To help replenish oxygen in the water, the ponds should be exposed to the action of the wind. They should not be long and narrow as this design reduces the effect of the wind.

A continuous supply of good quality water is needed, to change the water at least monthly. Ponds must be emptied once a year for cleaning.

The water should be slightly alkaline (pH 7 to 8). Road limestone should be put on the bottom of the dam to encourage the breakdown of added food (poultry or lucerne pellets).

The water must contain adequate oxygen. An oxygen meter is essential for intensive commercial production. Oxygen is used up by breakdown of organic matter, and sometimes natural circulation does not maintain oxygen. A circulating pump is therefore required.

The water can be tested for suitability for marron farming by the Government Chemical Laboratories.

Survival rate for young marron is normally not less than 50 per cent over a year even if proper attention is paid to adequate feeding, stocking the correct density of marron, and maintaining oxygen levels.

Commercial marron farming ventures are subject to strict control by the Department of Fisheries and Wildlife. Applications for licences should be forwarded to the Director, 108 Adelaide Terrace Perth 6000.

#### Further information

Publicity and Extension Officer, Department of Fisheries and Wildlife, Perth.



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