IMPROVING WATER QUALITY FOR AQUACULTURE

In February 1975 the Western Australian Fisheries Act was amended to provide for the establishment of private fish farms.

In time, certain scheduled species will be grown under licensed aquaculture conditions in various parts of the State. The first instance will apply specifically to the indigenous freshwater crayfish called Marron, *Cherax tenuimanus* (Smith).

At present, the extreme south west of the State of Western Australia is the centre of the natural distribution of marron. In the future, under artificial conditions, it will be seen that the animals will be cultured by professional and amateur growers in areas previously too hot and dry under natural conditions. This may be seen as the start of an era where, with the establishment of Marron in capitivity, there will be a relaxation in the fishing pressure on the animals in their natural habitat.

At the present time, however, drought conditions and increasing salinity of some rivers have reduced the natural habitats in quality and quantity, placing an even greater strain on wild stocks. Persons who are currently pioneering aquaculture in this State may be experiencing difficulties in maintaining the water quality of their dams, pools and streams.

Studies conducted for the Xodar Corporation by the University of Rhode Island Graduate School of Oceanography have revealed the efficiency of a new Xodar r.Aerato

The 360 *tm* aeration diffuser fabricated from PVC and porous plastic is able to withstand a full range pH attack and accounts for a tiny bubble swarm and high oxygen-to-water transfer. It is ballasted for bottom diffusion and will operate efficiently in any position.

Performance was judged on its ability to effect high oxygen transfer in a given body of water over measured time. Economy is accredited to the tests which showed air flow volume used is very low, in order to achieve sufficient discharge pressure to produce an efficient bubble swarm for the desired maximum oxygen-to-water transfer.

The mechanism of oxygen transfer in water is a rather complicated one. A variety of influences are brought to bear on this process such as temperature, salinity, pressure, depth, flow volume, intensity of turbulence, bubble size, bubble distribution, bubble ascent velocity, and of course, biological and chemical oxygen demand.

Submarine or underwater bottom diffusers, while illustrating the ability to improve dissolved oxygen content also demonstrate that desired water quality may be established without damaging the ecology of an aquatic system. In some cases such as pond or lake treatment, it may be desirable to maintain a body of water in a natural state. Oxygen input may be used to overcome ecological imbalance caused by unnatural influences and restore a body of water to its natural state in a safe, rapid manner.

For more information, write the Xodar Corporation, Powder Hill Drive, Lincoln, Rhode Island, U.S.A. 02865.

GETTING THE FACTS STRAIGHT

Readers will recall an article entitled "Animals in Sanctuary" in the last issue of SWANS.

In the article, reference was made to a child being blinded in one eye by an emu at Tidbinbilla, New South Wales.

The Director, Conservation and Agriculture Branch of the Department of the Capital Territory, questioned the fact that the child had lost an eye.

The author of the article was drawing on memory in relation to the incident which he recalled was "reported in a newspaper a year or so ago". The editor has since checked out the source and discovered it to be a short item which appeared in the *Daily News* of June 30, 1975. The story was as follows:—

> A 21-month-old boy had eight stitches inserted in an 8 cm scalp wound after being attacked by an emu at the Tidbinbilla nature reserve near Canberra yesterday. The boy, Scott Woods, was playing with a ball in the picnic area when the emu, nearly 2 m tall, attacked him. Scott's father, Mr. John Woods, ran 36 metres to his son and fought off the emu with a lump of wood. There are about 40 emus in the reserve.

We regret the publication of this wrong fact and apologise for any inconvenience that may have been occasioned by it.