

AQUACULTURE

Regional Research and Development Overview

Aquaculture in the north coast bioregion is dominated by the production of pearls from the species *Pinctada maxima*. This industry utilises both wild-caught and hatchery-reared oysters for the production of cultured pearls. The wild-stock fishery is reported in the commercial fisheries section on pp. 150-155. The Department also has a major role in the management of pearl hatcheries and pearl oyster grow-out on farm leases. The Research Division's Fish Health Unit, led by B. Jones, is actively involved in assisting the commercial hatcheries in terms of disease control, and the annual certification of hatchery facilities is required under the *Fish Resources Management Act 1994*.

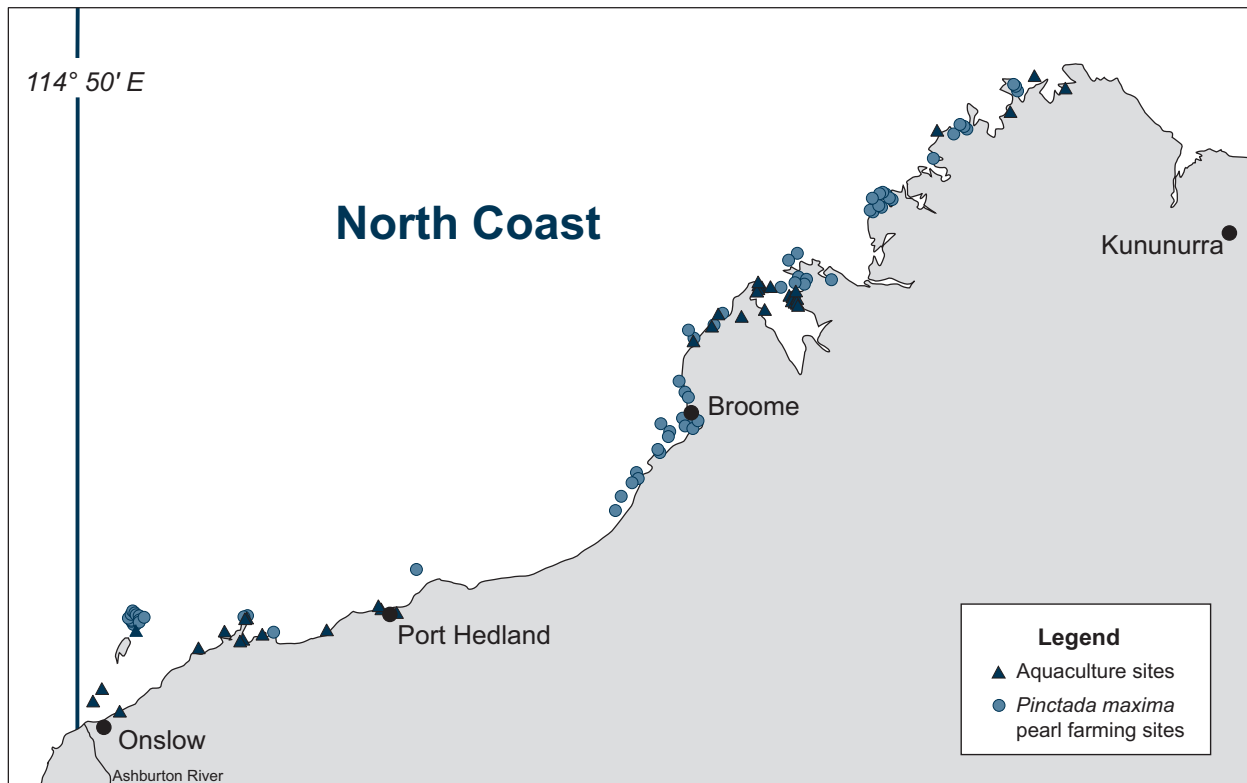
In other areas of aquaculture, a key management activity during 2003/04 has been to accommodate commercial interest in use of the Broome Tropical Aquaculture Park managed by the Department.

Research staff, including J. Bellanger, have taken on leading roles in an ongoing project funded by the Australian Centre

for International Agricultural Research and managed by the Kimberley Aquaculture Aboriginal Corporation (KAAC). This project is evaluating the effectiveness of moving broodstock trochus (*Tectus niloticus*) to reefs to improve recruitment of juveniles in the Dampier Peninsula (north of Broome), Vanuatu and Western Samoa. Initial results have been encouraging locally. Assistance has also been provided with production and stocking of hatchery-produced trochus juveniles in this area.

Research staff, including G. Maguire, are also involved in a major Kimberley Sustainable Regions Program (KSRP) project managed by the KAAC. Broodstock surveys and collection of black tiger prawns (*Penaeus monodon*) have enabled significant hatchery production. Grow-out trials should commence next year when recently completed baseline environmental monitoring by research staff and a private company allows operation of commercial-scale ponds within the KSRP project.

Research and Regional Services staff were also involved in assessing a range of potential sites in areas occupied by local indigenous communities interested in aquaculture projects.



NORTH COAST AQUACULTURE FIGURE I

Map showing the major licensed aquaculture and pearl farming sites of the north coast bioregion. Note that aquaculture operations may also encompass the culture of non-*Pinctada maxima* pearl oysters.