Regulatory bodies

1. The collecting of beche-de-mer in Queensland is controlled by the Fisheries Management Branch of the Queensland Department of Primary Industry (DPI) which issues permits for collectors and their vessels. Where relevant the Great Barrier Reef Marine Park Authority issues complementary permits for collecting from areas within their jurisdiction. For the past 18 months the 'fishery' has operated on the basis of a developmental fishery along the east coast of Queensland and the Torres Strait waters.

Management strategies

2. The permits issued by QDPI are subject to the following conditions as detailed in the second schedule of permits and represent the current management strategy.

   a. All species of beche-de-mer may be taken, subject to a minimum size of 15 cm.

   b. Collection will be permitted only in the area described in the First Schedule.

   c. Collection will be undertaken only by hand without use of dredging, trawling or other mechanical collecting equipment.

   d. Up to 10 persons may be engaged as divers for the collecting operation. These divers will operate under the direction of the permit holder or a person nominated in advance of collecting operations to the Director, Fisheries Management Branch, Department of Primary Industries by the permit holder. A record of divers employed is to be kept and made available for inspection if required.

   e. This permit does not negate or supersede any requirement of other authorities relating to the processing of beche-de-mer ashore.
f. Collections will be made only from areas covered by water at low tide.

g. Activities nominated within the authority of this permit shall be undertaken only in conjunction with the vessel nominated by the permit holder. This vessel is required to meet all survey requirements of the Marine Act. Any change of vessel must be notified to this office in advance of its use in collecting operations.

h. Returns must be lodged at the end of each month specifying quantities (kg) of beche-de-mer taken. "Nil" returns are to be lodged for periods where no product is taken. Returns are to be forwarded to the Director, Fisheries Management Branch, Department of Primary Industries, GPO Box 46, Brisbane, Qld, 4001.

3. Permits are issued annually and limited to a 1 degree square area (Fig. 1), nominated by the applicant and agreed to by Fisheries Management Branch, QDPI. There is currently no limitation on the amount of beche-de-mer to be collected.

Current activity in the beche-de-mer industry

4. There are 13 current permits to collect beche-de-mer in Queensland (Fig. 1). However few areas are actually being 'fished' on a commercial basis. It appears that some permits are collected speculatively, presumably in case either the price of beche-de-mer increases dramatically or that a genuine collector will negotiate with the permit holder to collect in that area under some financial arrangement.

5. The only large scale collector of beche-de-mer is collecting approximately 20 tonnes per month (net weight), using just 2 divers working from a 6.5 meter long boat. This operator uses traditional processing techniques and estimates 90% of his beche-de-mer is top grade quality. The species being collected is the sandfish, Holothuria scabra.

Observations on the current permit system

6. Currently there is no distinction between species with regards to minimum size (see a. above) and one could argue that the minimum 15 cm size limit for one species represents a different age and stage of sexual maturity than for another species. Pieces of beche-de-mer smaller than 15 cm once processed will result in a low grade product (size being an important grading quality) of low value. Therefore there would be a tendency for there to be a self regulation of sizes taken resulting from economic considerations even without a minimum size regulation. However, a minimum size remains the most easily enforced management control available and as such safeguards against total removal of stock from any one area.
7. With regards to managing the resource, treating all species of holothurian as if one homogeneous stock (see a. and h. above) could result in overfishing one species without this ever being apparent to the managing body. A listing of the catch by species would not be an arduous task, as pieces of bache-de-mer would be sorted as such prior to packing. This would enable fluctuations in the composition of the catch to be examined and acted upon if necessary.

8. The exclusions of all mechanical devices for the collection of beche-de-mer (see c. above) presumably is an environmental safeguard for the habitats where holothurians occur, which include such environmentally sensitive areas as seagrass beds and reef flats. This assumes that technology cannot be made environmentally safe. In India small, lightweight trawls are used to gather *H. scabra*. Similar equipment with minimum environmental impact, may prove useful for collection of some species occurring on soft sediments in Queensland waters.

Figure 1: The coast of Queensland with the edge of the continental shelf, the outer limit of the Great Barrier Reef marked (broken line), showing the areas currently covered by beche-de-mer permits (boxes).