DRAFT BECHE-DE-MER HARVEST STRATEGY

An Overview

There are 18 commercial species of sea cucumber in the Fishery, however only a few species are targeted for their high market value.

Until the Fish Receiver System was introduced on 1 December 2017, the BDM Fishery did not have much catch and effort information available to sustainably grow the Fishery.

Some historic underwater dive survey information is available, however the last full fishery survey was undertaken in 2009. The lack of information plus the vulnerability of BDM species to overfishing, is why the current management of the BDM Fishery relies on a lot of precautionary management controls.

The draft BDM Harvest Strategy is designed to be responsive to changes in the BDM Fishery that may occur over time. As our knowledge and understanding of the Fishery changes, the monitoring, data collection and management rules will also change to better support the growth of the Fishery.

Objectives

The objectives of the draft BDM Harvest Strategy are:

- a. To provide for the sustainable use of all BDM in the Torres Strait to take account of long-term of sustainability for future generations;
- b. To develop BDM populations for the benefit of Australian Traditional Inhabitants (as defined by the *Torres Strait Treaty*) and accommodating commercial considerations;
- c. To acknowledge area-specific issues;
- d. Where possible, to consider an ecosystem approach to management that reduces impacts on, or optimises interactions with, other harvested and dependent species; and
- e. To develop long-term recovery strategies for species, where appropriate.

The Harvest Strategy must also have regard to traditional knowledge and the ability of communities to manage fishery resources locally, through acknowledging and incorporating customary and traditional laws.

Decision Rules (Tiers)

The draft BDM Harvest Strategy has three tiers that account for the understanding that more data and information reduces the risk to a fishery and reduces the need for precautionary management.

Low Tier

In the low tier, the minimum data needed for each species is the total catch taken each fishing season. The low tier has rules to guide:

- a. what happens to a species if the total allowable catch (TAC) is over caught or a trigger limit for a species within a joint TAC is reached; and
- b. what happens if there is no data reported for a species at all.

Depending on the information available, the low tier allows single species TACs to be maintained or reduced. For species with individual triggers, within a joint TAC, the low tier may allow changes to the joint TAC, or to individual species triggers (up or down).

Middle Tier

To move to the middle tier (and possibly increase the TAC for a single species) more data and information on a species is needed. This might include information on catches per day (called *catch per unit effort*), where BDM are being caught, the size of each BDM or how much of one species is caught compared to other species. These are called primary indicators.

The information from these primary indicators will guide how much TACs should be varied. If the primary indicators suggest an increase is possible, there are preagreed rules that set a maximum level that the TAC can increase by before high quality survey data is required.

High Tier

The high tier may be applied to all species if species-specific, if high quality survey data becomes available. Under this tier, TACs may be adjusted upwards (in cases where there is evidence of scope to increase TACs) or downwards (in cases where there are concerns about the status of a fished species).

Closed Species

A species may be closed to fishing if it has been overfished, the TAC has been significantly over caught, or if fishing has been occurring but there is no reported catch. The draft BDM Harvest Strategy also has rules to guide how to reopen a fishery if enough information is available.

Fishing for sandfish, black teatfish and surf redfish is currently closed.

Changes to TACs and minimum size limits

If the draft BDM Harvest Strategy is agreed to, there will be some changes made to the starting TACs for some species: a. The TAC for brickly redfish and white teatfish will remain at 15 tonnes;

- b. Some species that are currently counted in a 80 tonne basket with other species, will have their own TACs:
 - deepwater redfish (5 tonnes);
 - ii. hairy blackfish (5 tonnes);
 - iii. greenfish (40 tonnes);
 - iv. due to the recent interest in curryfish species, the three curryfish species will be removed from the 80 tonne basket and have their own combined 60 tonne TAC. This includes the common curryfish, curryfish vastus and curryfish occelatus species;
- c. These changes mean that the 80 tonne basket of all other species will be reduced to a combined 50 tonne TAC.

Some changes to size limits are proposed (see Table 1) in response to updated information on age-at-first-maturity and to be more comparable with size limits from other BDM fisheries (i.e. Queensland East Coast BDM Fishery).

Table 1. Summary of proposed changes to minimum size limits under the draft Beche-de-mer Harvest Strategy. Changes are noted in red text.

Species	Current Size Limit	New Size Limit
Sandfish	18cm	18cm
Surf Redfish	22cm	22cm
Black teatfish	25cm	25cm
White teatfish	32cm	32cm
Prickly redfish	35cm	35cm
Hairy blackfish	22cm	22cm
Curryfish (common)	27cm	31cm
Elephant's Trunkfish	24cm	24cm
Lollyfish	15cm	15cm
Deepwater redfish	12cm	20cm
Curryfish (vastus)	No limit	15cm
Burrowing blackfish	22cm	22cm
Deepwater blackfish	22cm	22cm
Golden sandfish	18cm	22cm
Brown sandfish	No limit	25cm
Leopardfish	No limit	30cm
Greenfish	No limit	No limit
Stonefish	No limit	No limit