



Australian Government
Australian Fisheries Management Authority

Torres Strait Hand Collectables Working Group

Meeting 20

18-19 October 2023

Meeting record

Note all meeting papers and minutes
are available on the PZJA webpage:

www.pzja.gov.au

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1. Acknowledgment of traditional owners, welcome and apologies

1. The acting Chair welcomed members and observers to the 20th meeting of the Torres Strait Hand Collectables Working Group (the WG). The acting Chair acknowledged the Traditional Owners of the lands on which members were participating both in the meeting and those members on video conference and paid respect to Elders past, present and emerging.
2. The acting Chair asked members to communicate respectfully and welcomed members' requesting time if they wished to discuss any issues in smaller groups acknowledging that this worked well in the Hand Collectables Resource Assessment Group (HCRAAG) meeting.
3. The acting Chair noted that an apology had been received from the WG Chair Mr Nicholas McClean and Mr Daniel Takai, Chief Executive Officer of Zenadth Kes Fisheries Limited (ZK Fisheries).
4. The acting Chair noted that the Queensland Department of Agriculture and Fisheries (QDAF) Member, Ms Jenny Keys and Scientific member for the HCRAAG, Mr Tim Skewes, would be participating via video conference.

2. Adoption of agenda

5. The WG adopted the draft agenda with no additions (**Attachment A**). Members and observers did not object to the meeting being voice recorded for the purposes of developing the meeting record. The acting Chair noted that the recording is deleted once the meeting record is finalised and ratified by the WG.

3. Declarations of interest

6. The acting Chair advised members and observers that, as provided in the Protected Zone Joint Authority's (PZJA) *Fisheries Management Paper No. 1* (FMP1), all members must declare all real and potential conflicts of interest in Torres Strait hand collectables fisheries at the commencement of the meeting.
7. Where it is determined that a direct conflict of interest exists, the WG may allow the member(s) to continue to participate in the discussions relating to the matter but may also determine that, having made their contribution to the discussions, the member should retire from the meeting for the remainder of the discussions and/or the making of recommendations on that issue.
8. Declared conflicts of interest are detailed in **Table 1** below. Each group of members and observers with similar interests were asked to leave the meeting to enable the remaining members to:
 - a. freely discuss the declared interests;
 - b. discuss if the interests preclude the members from participating in any discussions and/or the making of recommendations; and
 - c. agree on any actions to manage declared interests.
9. Noting that attendees at the WG were the same as for the HCRAAG meeting on the preceding day and the conflicts declared at that meeting, the acting Chair proposed conflicts of interest be managed as follows:
 - a. The acting Chair noted that Traditional Inhabitant members were in attendance to represent the best interests of the entire fishery. If conflicts relating to individual commercial interests emerge and persist at the formulation of the recommendation(s) it will need to be managed, noted and recorded in the minutes.
 - b. With respect to government members, it was recognised that while there was no specific conflict, the acting Chair noted that all meeting participants attended the meeting in the interests of the fishery, in line with the objectives of the WG, and all meeting participants were expected to declare if a direct or perceived conflict were to arise.

- c. With respect to scientific members, it was identified that they should be part of the discussion but excluded from discussions about recommendations relating to research funding if there is likely to be a pecuniary interest in the recommendations.

Table 1. Declared conflicts of interest from each attendee.

Name	Position	Declaration of interest
Members		
David Brewer	Acting Chair	Director of Upwelling P/L (David Brewer Consulting). Chair of Torres Strait Finfish RAG. Scientific member of Torres Strait Finfish Working Group. Scientific member of Northern Prawn Fishery RAG. Current consultancies with Quandamooka Yoolooburrabee Aboriginal Corporation, Newcrest Mining Ltd. Co-investigator on the current Torres Strait 'Non-commercial catch' project. As a fisheries consultant, may apply for funds for Torres Strait fishery research projects in the future where consistent with his role as Chair.
Nicole Murphy	Scientific Member	Employed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and from time-to-time CSIRO receives funds to undertake research relating to Torres Strait fisheries. Principal Investigator on the project black teatfish sampling and stock assessment, white teatfish stock assessment and the development of conversion ratios for curryfish projects.
Assoc Prof Steven Purcell	Scientific Member	Scientific Member on the HCRAAG. Employed full-time by Southern Cross University as a teaching-research academic. Has interest in invertebrate fishery research has previously worked in the assessment of sea cucumber fisheries in the Pacific and New Caledonia, and on restocking/sea-ranching research. Specialist in sea cucumber ecology and fisheries. Currently involved in a sea cucumber population assessment in French Polynesia in partnership with Ginger-Soproner and CREOCEAN. As of 2023, acting as the global focal-point on <i>Sustainable Use</i> within the International Union for the Conservation of Nature (IUCN) Species Survival Commission's Sea Cucumber Specialist Group. 2023–2025 contracted by ADECAL-Technopole as the Scientific Member on a sea cucumber fishery advisory committee in New Caledonia.
John Tabo	Traditional Inhabitant Member, Kemer Kemer Meriam	Traditional Inhabitant Boat (TIB) licence holder with finfish, beche-de-mer (BDM), tropical rock lobster (TRL) and trochus entries. ZK Fisheries member.
Toshie Kris	Traditional Inhabitant Member, Maluialgal	TIB licence holder with TRL and Spanish mackerel entries. ZK Fisheries member.

Name	Position	Declaration of interest
Nicholas Pearson	Traditional Inhabitant Member, Kulkalgal	TIB licence holder with BDM, finfish and TRL entries. Family owns a TRL and BDM commercial fishing company. Member of the Torres Strait Regional Authority (TSRA) Board and ZK Fisheries.
Pabai Pabai	Traditional Inhabitant Member, Gudumalulgal	Previously held a TIB licence and is considering renewing. Interested in taking up commercial fishing in the future. ZK Fisheries member.
Graham Hirakawa	Traditional Inhabitant Member Kaiwalagal	TIB licence holder with Spanish mackerel, pearl shell and TRL entries. ZK Fisheries member.
Natalie Couchman	AFMA Member	Employed by AFMA, no pecuniary interests or otherwise.
Damien Miley	TSRA Member	Employed by TSRA, no personal pecuniary interests or otherwise. TSRA holds finfish and TRL quota on behalf of Traditional Inhabitants.
Jenny Keys	QDAF Member	Employed by QDAF in the Management and Reform Section, managing the East Coast Sea Cucumber Fishery and other harvest fisheries in Queensland. No pecuniary interests or otherwise.
Executive officer		
Sarah Kirkcaldie	Executive Officer, AFMA	Employed by AFMA, no pecuniary interests or otherwise.
Observers and invited industry participants		
Tim Skewes	Independent consultant	Independent consultant. Previously employed by CSIRO. Scientific Member on the HCRAAG. Previous principal scientist and co-investigator for Torres Strait Scientific Advisory Committee (TSSAC) and TSRA funded projects focused on the sea cucumber, TRL, finfish and traditional fisheries in the Torres Strait. Member on the TSSAC. Involved in the TSSAC endorsed research project 'Measuring non-commercial fishing catches (traditional subsistence fishing) in the Torres Strait in order to improve fisheries management and promote sustainable livelihoods' which is funded by the Fisheries Research and Development Corporation (FRDC).
Dr Eva Plaganyi-Lloyd	CSIRO	Employed by CSIRO and from time to time her organisation CSIRO receives funding to undertake research relating to Torres Strait fisheries as well as other Australian and international fisheries. Scientific Member on the HCRAAG. Scientific Member on the TRL and Northern Prawn RAGs. Lead scientist for PZJA funded TRL research projects conducted by CSIRO.

Name	Position	Declaration of interest
		Co-investigator on the TSSAC project 'Understanding climate variability and change relevant to key fisheries resources in the Torres Strait and adaptation and mitigation strategies'
Benjamin (Maluwap) Nona	Traditional Inhabitant observer, Mer Island	Holds a TIB licence and owns a private fishing business. Traditional Owner on Mer Island. Member of Malu Lamar (Torres Strait Islander) Corporation Registered Native Title Body Corporate (RNTBC) (Malu Lamar).
Sereako Stephen	Director, Malu Lamar	Director of Malu Lamar, Director of GBK, Chair of Ugar Ged Kem Le Zeuber Er Kep Le Corporation RNTBC and Member of the TSRA Board. TIB licence holder.
Ian Butler	Australian Bureau of Agriculture and Resource Economics (ABARES)	Employed by the Australian Bureau of Agricultural and Resource Economics and Science (ABARES), Department of Agriculture, Forestry and Fisheries (DAFF). No pecuniary interests or otherwise.
Quentin Hirakawa	TSRA Member	Employed by TSRA. Two TIB licences with BDM endorsement. TSRA holds finfish and TRL quota on behalf of Traditional Inhabitants.
Sian Breen	HCRAG Chair	Employed by the QDAF. No pecuniary interest in Torres Strait fisheries but from time-to-time other QDAF staff members may work on fishery research projects in the Torres Strait (not occurring now).

4. Action items from previous meetings

10. The WG noted the progress update provided against action items arising since the 19th meeting of the HCWG (HCWG19) held on 10 November 2022. Members noted that the industry proposal to use hookah gear to take white teatfish was discussed at the BDM Workshop held from 21-22 March 2023 and would be discussed under agenda item 10.

5. Out-of-session correspondence

11. The WG noted the list of correspondence that was circulated out-of-session since HCWG19. The AFMA member stated that copies of this correspondence can be requested at any time from the WG Executive Officer.

6. Working Group updates

12. The WG noted that the Traditional Inhabitant member, scientific member, native title and PNG National Fisheries Authority (NFA) updates were provided at the HCRAG meeting held on 17-18 October 2023. Members and observers had nothing further to add to these updates.
13. The TSRA member noted that there is a crown-of-thorns starfish (COTS) outbreak with a hot spot in the eastern Torres Strait although indication are that it is spreading from east to west. The WG noted that the impact of El Nino and bleaching is already putting stress on the reef. Members further noted that TSRA are putting a proposal to the TSRA Board recommending working in partnership with other agencies, Prescribed Body Corporates (PBCs) and Registered Native Title Body Corporates (RNTBCs) on a multi-prong approach to the outbreak. Members noted that part of the proposal includes grants to

support payments to fishers to euthanise COTS. Training will be undertaken through the Great Barrier Reef Marine Park Authority and the aim is to begin the program as soon as approval is received.

7. Climate and ecosystem update

14. The AFMA member stated that the effects of climate change are an ongoing concern in all fisheries globally including the Torres Strait. Members noted that under an El Nino climate pattern, it is likely that the water temperatures will warmer. There is also an increased likelihood of marine heatwaves. The WG noted that a program of work is being undertaken in Commonwealth fisheries to ensure that climate impacts are more strategically incorporated into the management of these fisheries to ensure that AFMA continues to meet legislative objectives relating to ecological sustainability. This work is a follow up action from the Adaption of Commonwealth fisheries management framework to climate change project (the climate adaptation project) that looked at the readiness of Commonwealth fisheries management arrangements to the potential impacts of climate change and provided a range of resources to assist with adaptation. The RAG noted that the outcomes of this project have not yet been applied to Torres Strait fisheries.
15. The AFMA member presented a draft Climate and Ecosystem Status report that utilises all the currently available information to try to better understand the potential impacts of climate change on Torres Strait fisheries. Members noted that the impacts of climate change need to be considered when discussing future management. The WG discussed whether climate change will affect how total allowable catches (TACs) are currently set. The AFMA member advised that it is not proposed that TACs be adjusted to take account of the impacts of climate change, but this is one of various adaptation tools that could be used in the future.
16. Members noted that sea cucumbers should be relatively resilient to climate change effects. However, it is important that the WG include climate change in any discussion on future management.
17. Members noted that it is important that on the water observations and data are provided to management and scientists to better inform the understanding of climate change effects.

8. Total allowable catches for the 2024 fishing season

18. The AFMA member noted that at the HCRAG meeting held on 17-18 October 2023, the RAG considered the TACs for the 2024 fishing season (commencing on 1 January 2024) and recommended the TACs as outlined in **Table 2**. In making this recommendation, the RAG noted concerns raised by the Scientific member for deepwater redfish and golden sandfish.

Table 2. TACs for the 2024 fishing season recommended at the HCRAG meeting held on 17-18 October 2023.

Species	TAC (tonnes, wet gutted weight)
Black teatfish (<i>Holothuria whitmaei</i>)	20
Curryfish common (<i>Stichopus herrmanni</i>)	60 (curryfish basket)
Curryfish vastus (<i>Stichopus vastus</i>)	
Deepwater redfish (<i>Actinopyga echinites</i>)	5
Greenfish (<i>Stichopus chloronotus</i>)	40
Hairy blackfish (<i>Actinopyga miliaris</i>)	5
Prickly redfish (<i>Thelenota ananas</i>)	15
Sandfish (<i>Holothuria scabra</i>)	0 (closed)
Surf redfish (<i>Actinopyga mauritiana</i>)	0 (closed)
White teatfish (<i>Holothuria fuscogilva</i>)	15

All other sea cucumber species (all other species in the families <i>Holothuriidae</i> and <i>Stichopodidae</i>)	50 (all other species basket)
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19. Members noted that management arrangements for white teatfish would be considered under agenda item 10. Members discussed why some species of sea cucumbers are not being taken in the BDM Fishery. The WG noted:

- a. The species that are currently targeted in the fishery is largely driven by market price. Most species in the 'all other species' basket are low value and not economical to take (e.g. elephant trunkfish has a beach price <\$1/kg).
- b. Some species are also patchy in their distribution or are not in abundance in areas that are currently fished (e.g. golden sandfish).
- c. White teatfish has limited accessibility to free diving due to the depth distribution of the species (e.g. majority of the stock is distributed in waters >20 m). The WG noted that white teatfish is able to be taken using hookah gear in the Queensland Sea Cucumber Fishery, though the fishery is managed under a rotational harvest strategy. Members noted that if required, the TSRA's Fisheries Advisory Committee (FAC) can be consulted on the industry proposal to use hookah gear to take white teatfish.

20. The scientific observer noted that it is important to be able to continue to take the basket species so that information can be gathered. AFMA agreed to better capture operational and market factors which influence the targeting and take of species in the BDM Fishery, in the information presented to the HCRA and WG when considering TACs.

Action arising 1 – AFMA to provide information on the operational and market factors which influence the targeting and take of species in the BDM Fishery to the next HCRA and HCWG meetings when considering TACs.

21. The WG considered the species summaries that were provided for each species which included climate, catch and market price information. The AFMA member noted that a sea cucumber biomass survey has been identified as a priority by industry. However, such a survey is expensive and cannot be accommodated within the current budget for Torres Strait fisheries. It will, however, be considered as part of the research priority setting process for potential funding in future years. The scientific member noted that it will be important to broaden the next survey as different species are of value to different communities, as well as to fill gaps in the understanding of the status of some species (e.g. blackfish species). Members noted that the total research budget for the Torres Strait fisheries is approximately \$400,000 and of this, between \$200,000-\$300,000 is committed to the annual TRL survey. The AFMA member stated that management must be precautionary in the absence of good data.

22. The ABARES observer noted that when producing the annual fisheries status reports, ABARES looks at how the management of a fishery performs against its harvest strategy. In the BDM Fishery they have found a mismatch between management TAC setting and the harvest strategy biomass targets particularly in relation to blackfish species. The ABARES observer noted historical surveys suggest high biomass levels in the past, which were then followed by high catch rates. More recent survey data indicates persistent low biomass, indicating that they are potentially overfished. The current TAC for hairy blackfish appears to be quite high relative to the estimated available biomass from the most recent surveys, inconsistent with harvest strategy targets. There are difficulties estimating the biomass of some of these species, which can be cryptic (e.g. *Actinopyga lecanora*, *A. miliaris*) through these surveys, however. The ABARES observer considered surveys to be important to understand biomass and changes in density over time, in the absence of reliable catch data.

23. The Scientific member suggested that legal lengths for various sea cucumbers in Torres Strait should be increased to allow for greater opportunity for growth and reproduction. Current legal lengths in the Torres Strait are set at length at first maturity or even smaller (e.g. elephant trunkfish). In fisheries elsewhere around the Pacific, the legal sizes for a number of the species are larger than those set in Torres Strait, allowing for one or two seasons for reproduction before they can be legally caught. Changes to the size limits would require changes to the harvest strategy. The AFMA member noted

recommendation at the preceding HCRAAG to investigate these limits and report back to the HCRAAG and WG.

24. The scientific observer stated that it would be very difficult to manage all sea cucumber species under individual TACs, which is why basket TACs and monitoring triggers are used for some species. However, if management changes (e.g. to allow the use of hookah gear), reconsideration of this approach would be required.
25. **Noting the discussions and recommendations at the HCRAAG meeting held on 17-18 October 2023, the WG endorsed the HCRAAG recommendations pertaining to TACs for the 2024 fishing season (commencing on 1 January 2024), as outlined in Table 2.**

9. 2023 black teatfish opening and future openings

26. Members noted that an update was provided to the HCRAAG on the 2023 black teatfish season which opened on 15 May 2023 for three and a half days, resulting in 17.9 tonnes of the 20 tonnes TAC being caught. The AFMA member noted that the HCRAAG provided advice on spawning periods for black teatfish and its implications for the timing of the annual opening, as well as additional data needs and the carryover of TAC undercatch.
27. Members noted that, at the BDM Workshop held in March 2023, industry participants were asked to identify the optimal timing for annual black teatfish openings, including the 2023 opening. While industry participants were able to identify a preferred opening date for 2023, they were unable to advise on the optimal timing for future black teatfish openings, until another survey of the BDM Fishery is undertaken to determine where and when spawning of key species, including black teatfish, is occurring.
28. Members noted that the spawning period for black teatfish in the Torres Strait region is most likely June/July with a smaller period in December. The scientific observer noted that the condition of animals is not as good during and immediately after spawning. However, there are no biological concerns with taking sea cucumbers prior to or whilst spawning, as the TAC is only a small proportion of the total spawning biomass, leaving the majority of the spawning biomass in the water to spawn. The scientific member presented research conducted into spawning periods for black teatfish (**Attachment B**).
29. Members noted that the warmer waters in the Torres Strait could cause variation to the cycle observed on the Great Barrier Reef, but it should be generally the same. The scientific observer noted that curryfish spawn on the full moon plus two days. The Scientific member noted that there was a small benefit with an opening date in May, as the gonads of animals could be checked whilst doing other sampling to collect data on spawning. The WG agreed that gonad staging should be added to the research priorities for further consideration.
30. The scientific member advised that it would be good to measure body widths for estimating animal sizes, not just body lengths, and that it be good to get from the landing surveys the number of fishers on the boat who were fishing and the number of hours in the water fishing to collect the animals. Records of the number of fishers and hours fishing would provide for valuable data on catch per unit effort.

Action arising 2 - Gonad staging for black teatfish to be added to the research priorities for hand collectables fisheries for further consideration by the HCRAAG.

Action arising 3 – Sampling protocols for the black teatfish size-frequency sampling program to be updated to collect body widths. AFMA to look at also collecting the number of fishers on the boat who were fishing and the number of hours in the water fishing to collect the animals.

Timing of openings

31. Members noted the key factors taken into consideration in setting past opening dates, including:
 - a. favourable weather (February to May)
 - b. favourable tides – neap tide preferred. In 2022, the last half day fell on a high tide which was not good for fishing

- c. not on the Sabbath or public holiday
 - d. during TRL openings (season and hookah) – for equity of opportunity
 - e. avoid spawning – June-July and December.
32. The AFMA member stated that a number of dates look to satisfy the above factors, in particular 15 April; 29 April and 13 May 2024. Each date falls:
- a. during favourable weather (February to May)
 - b. over a quarter moon (neap)
 - c. not on a weekend
 - d. not on a public holiday (public holidays in 2024 include Easter from 29 March to 1 April, ANZAC Day on 25 April and Labour Day on 6 May)
 - e. not during a moon-tide hookah closure (closures are proposed to be 7-13 March, 6-12 April and 5-11 May)
 - f. not during spawning (June-July, December).
33. Members agreed that a date needed to be agreed as soon as possible as a lot of work was required by both PZJA agencies and industry in the lead up to the opening. Traditional Inhabitant members and observers recommended a 2024 black teatfish opening date of 29 April 2024. This timing will also allow fishers to harvest black teatfish when they are in best condition in terms of thickness of the body wall.
34. **The WG supported the recommendation of Traditional Inhabitant members and observers and recommended a 2024 black teatfish opening date of 29 April 2024.**

Carryover of TAC undercatch

35. The AFMA member noted that AFMA has implemented overcatch and undercatch arrangements in a number of Commonwealth fisheries, under AFMA's *Fisheries Management Policy 10*. The general approach is to carryover up to 10% of an undercaught TAC from one season to the following season. It was clarified that the undercatch amount would not be able to be carried over for more than one season (i.e. if it is not caught in the subsequent season, it cannot be carried over again). The AFMA member explained that under the current TAC for black teatfish, this could result in 2 tonnes (up to 10% of the 20 tonnes TAC) being carried over to the following season. Members noted this was not a perfect solution as the fishery would still need to be closed before reaching the full TAC (in this example, 22 tonnes). However, it would be an improvement on current arrangements.
36. **Noting the discussions and recommendations at the HCRAG meeting held on 17-18 October 2023, the WG endorsed the HCRAG recommendation for the development of TAC undercatch carryover provisions for black teatfish to allow for up to 10% of the current fishing season's TAC, if not caught, to be carried over from the current season to the subsequent season.**

Timing of daily landing and catch reporting

37. The AFMA member noted that daily landing and reporting is a requirement to provide real time monitoring of catches against the TAC and ensure the fishery can be closed before the TAC is exceeded. Currently catch disposal records (CDRs) need to be submitted to AFMA by midnight on each fishing day. AFMA then determines where catch is against the TAC and sends this information (via email and SMS) to fishers and fish receivers just after midnight so they are aware of arrangements for the following day.
38. The midnight cut-off for daily reporting has previously caused delays in providing information to fishers and fish receivers on the status of the TAC and fishing arrangements for the following day, including the setting of the closure date. The 6pm cut-off for the last day of fishing (where it is a half day), resulted in some fishers remaining at sea, despite the direction to stop fishing by 12pm. The AFMA member noted that a cut-off time of 8pm or 10pm for a full fishing day during the opening/last day of fishing (full day) and a 2pm and 4pm cut-off time for fishers and fish receivers on a last day of fishing (half day)

respectively, would allow information to be provided earlier and closure arrangements to be finalised sooner.

39. Traditional Inhabitant members and observers noted that such changes would be difficult for fishers and fish receivers operating from Bourke Islet as they travel large distances to fish and often not returning until late at night (e.g. 9pm). Fish receivers then need time to weigh the catch and complete the CDRs. Noting this advice, the AFMA member noted that they would discuss this matter with communities when undertaking community consultations in 2024. Traditional Inhabitant members requested that AFMA ensure ZK Fisheries members are available during the consultations. Members further noted that AFMA will be visiting communities prior to the opening of the black teatfish season to provide licensing services and information on requirements so that fishers and fish receivers are prepared for the opening.

Community involvement in scientific data collection

40. The WG noted that an ongoing condition of the fishery for black teatfish remaining open is that reliable data collection continues, and preferably, under the middle tier decision rules, which includes additional data such as CPUE, spatial footprint and size composition. Advice was sought from members on options for community involvement in the size frequency sampling program, noting TSRA rangers may be an option. Traditional Inhabitant members noted that the TSRA rangers already have responsibilities and may not have the capacity to get involved. Other options discussed included ZK Fisheries members and fish receivers.

10. Management of white teatfish

41. The WG noted a summary provided by the AFMA member concerning an industry proposal for the use of hookah gear to fish for white teatfish in the BDM Fishery. Member noted under the *Torres Strait Fisheries (Bêche-de-mer) Management Instrument 2022* (the Management Instrument), the use of underwater breathing apparatus (including hookah), to take sea cucumber in the BDM Fishery, is not permitted. Over a number of years, some participants in the fishery have proposed the prohibition be removed to allow more effective targeting of white teatfish.
42. The WG noted that at the BDM Workshop in March industry participants recommended the use of hookah gear to fish for white teatfish be permitted as follows:
- a. Increase to the TAC for white teatfish from 15 tonnes to 20 tonnes.
 - b. Based on the area where white teatfish stock is concentrated (Meriam marine waters including the Cumberland Passage), the 20 tonnes TAC be accessed as follows:
 - i. Based on historical catches of TIB licence holders, 5 tonnes be reserved for free diving within the Meriam marine waters, noting free diving for white teatfish is currently permitted.
 - ii. The remaining 15 t will be accessed by hookah gear by fishers from the Meriam, Kulkagal, Guda Maluilgal, Maluilgal, Kauraraeg, Gudag/Yadaykenu and Angamuthi TIB licence holders within the Cumberland Passage area (pending community consultation).
 - iii. Access does not include areas beyond 10 degrees 41 minutes latitude South from the tip of Cape York (accessing the recent claimed areas).
 - c. Based on the area where white teatfish stock is concentrated (Meriam marine waters including the Cumberland Passage) and those islands that access this area, the islands of Ugar, Mer, Erub, Masig, Poruma and Warraber will be consulted on access to the 20 tonnes TAC.
 - d. TIB licence holders to hold an Australian Diving Course Certificate that meets all Australian standards and survey standards.
 - e. For improved safety, increase the current maximum boat length restriction from 7 metres to 20 metres.
 - f. Do not permit the use of hookah gear for white teatfish during the annual black teatfish opening.

- g. Hookah use to be permitted for white teatfish only.
 - h. Community consultation should be supported to endorse conditions for access to white teatfish using hookah gear.
43. The WG also noted that, at the workshop the industry participants unanimously agreed that while this issue is of high importance to industry, it is also of high importance that the right process is followed including Traditional Owner and community consultation, to ensure the sustainability of the fishery is protected for this and future generations.
44. Traditional Inhabitant members requested that fishers from Kaiwalagal be included with who can access the TAC under the proposal.

Action arising 4 - Fishers from Kaiwalagal to be included with who can access the TAC under the industry proposal for the use of hookah gear to fish for white teatfish in the BDM Fishery.

Access to the TAC

45. Members noted that concerns have previously been raised that the TAC for white teatfish is relatively small compared to the number of TIB licence holders (149 TIB licences). The limited TAC may not be able to sustain all fishers currently licensed to fish in the fishery if the use of hookah gear is permitted. Once the TAC is reached, fishing will need to cease. The industry proposal includes a recommendation for the TAC to be split between free divers and hookah divers. The level afforded to free diving is set to account for current levels of catch by free diving noting the annual catches of white teatfish by TIB licence holders in the fishery have ranged between 0.8-4.2 tonnes.
46. Members noted that concerns were also raised regarding the costs that could be incurred by fishers to gain the competencies to use hookah gear, as well as the costs of the hookah gear itself, is likely to be a barrier to entry and limit uptake should the use of hookah gear be permitted.
47. Advice was sought from the WG on whether the industry proposal adequately addresses previous concerns regarding sectoral access to the TAC, or whether additional management arrangements are needed. AFMA noted that monitoring, as well as surveillance and enforcement programs, would be required to ensure that only white teatfish is taken by hookah and that daily reporting occur to ensure the TAC is not overcaught. CDRs would also need to distinguish between white teatfish taken using free diving versus hookah diving.
48. The WG discussed three options to manage the catch of white teatfish if hookah gear is permitted:
- a. A registration system be implemented to keep track of the TAC allocation accessible via hookah diving. It was noted that this option would likely be complex to administer and simpler options were canvassed below.
 - b. Have a hookah diving opening with any catch during the opening period considered to be caught via hookah diving.
 - c. Or keep free diving open and hookah diving only allowed at the end of the fishing season (calendar year) to take the remainder of the TAC, until it is all caught.

Diver safety requirements

49. Members noted that concerns have previously been raised that hookah diving at depths of greater than 20 metres in remote areas of the eastern Torres Strait could pose a safety risk. Members noted that the nearest hyperbaric treatment centre is located in Townsville and would require air evacuation, in which the changes to air pressure and altitude would likely worsen the patient. Safety risks were considered as part of the original reasoning behind the prohibition on the use of hookah gear in the BDM Fishery, when Queensland managed the fishery.
50. Members noted that the industry proposal includes a recommendation for TIB licence holders who are using hookah gear, to meet regulatory requirements. The AFMA member provided a summary of regulatory requirements for commercial diving work (referred to as occupational diving work) under the Queensland government's *Work Health and Safety Act 2011* (the WHS Act) and *Work Health and Safety Regulation 2011* (the WHS Regulation) and as administered by Workplace Health and Safety Queensland

(WHSQ). Requirements include completing a dive medical, competency qualifications and training, risk assessment conducted, record keeping maintained, emergency plans, first aid qualifications and regular servicing of equipment. It was noted that further information was provided in the paper for this agenda item and WHSQ's *Occupational Diving Work Code of Practice 2005*.

51. The TSRA member noted that support for fishers in meeting these regulatory requirements will be provided as part of the new WAPIL 2 program that is currently under planning. This could include grants. The TSRA member agreed to provide members with further information on support to be provided under WAPIL 2, as well as details of how many fishers undertook Wild Harvest training previously.

Action arising 5 - TSRA to provide the HCWG with further information on support to be provided under WAPIL 2 relating to regulatory requirements for commercial diving work, as well as details of how many fishers undertook Wild Harvest training previously.

52. The QDAF member noted that there are two experienced skippers operating in the Queensland Sea Cucumber Fishery that have expertise in hookah diving which they may be willing to share. The QDAF member agreed to get in contact with the skippers to see what assistance may be able to be provided.

Action arising 6 – QDAF to contact skippers using hookah gear in the Queensland Sea Cucumber Fishery to seek sharing of expertise with fishers in the Torres Strait.

53. Traditional Inhabitant members noted that the ability to have motherships in the BDM Fishery would provide greater safety when operating away from home reefs. Concerns were also expressed that the competition for the small TAC could lead to safety risks, and that this would need to be considered as part of any trial (e.g. only permit hookah diving for half days). It was noted, that based on catch rates from a previous hookah trial, it was likely that the TAC would be caught in less than a week.
54. Members discussed that safety incidents in the fishing industry continue to happen in the Torres Strait. The TSRA member agreed to provide a Maritime Safety Queensland report detailing safety incidents in the Torres Strait.

Action arising 7 - TSRA to provide the HCWG with a Maritime Safety Queensland report detailing safety incidents in the Torres Strait.

Boat length restrictions

55. The WG noted that changes to the current 7 metre boat length restriction in the BDM Fishery has been discussed for many years. Industry members have expressed their interest in increasing the boat length restriction from 7 metres to 20 metres to allow larger vessels to operate and enable primary/tender operations. Members noted that larger vessels would also provide for improved safety and be more efficient through being able to travel further to areas currently unable to be fished easily and safely.
56. The WG noted that some concerns that have been raised in the past regarding relaxation of the 7-metre boat length restriction, including:
- a. Sea cucumber species are vulnerable to overfishing.
 - b. Increasing fishing efficiency may redistribute catches to fewer fishers under a competitive TAC and therefore may not be in line with the objectives of the *Torres Strait Fisheries Act 1984* (the Act).
 - c. Both fishing and processor/carrier licences in the TIB sector are not currently limited entry and allowing larger boats to tow tenders could significantly increase effort.
57. Members noted that the proposal to increase boat length restrictions will require further assessment against the objectives of the Act, including the implications of any change for the sustainability, optimum utilisation, the traditional way of life and livelihood of traditional inhabitants, economic development and employment opportunities.
58. The AFMA member explained that there are three types of carrier licences:
- a. Carrier A licenses authorise the use of primary boats for carrying and processing fish taken from tender boats included in the same licence package.

- b. Carrier B licenses are for cargo boats only. They can only carry, not process, fish.
- c. Carrier C licenses authorise the use of a boat to carry and process fish taken with the use of another licensed fishing boat. Fishing is not permitted from boats with this licence.

59. The WG discussed whether the existing carrier licences could be used to operate a mothership in the BDM Fishery. The AFMA member agreed to provide further advice to members on how carrier licences could be used to support the operations of smaller boats in the BDM Fishery, while complying with the 7-metre boat length restriction.

Action arising 8 – AFMA to provide advice to the HCWG on how carrier licences could be used to support the operations of smaller boats in the BDM Fishery, while complying with the 7-metre boat length restriction.

60. Members noted that new Wildlife Trade Operation (WTO) conditions may prevent an increase to the TAC and any conditions in place under the new WTO (currently being assessed) will be taken into consideration should the industry proposal proceed to a hookah trial.

Other considerations

61. The HCWG noted that there are number of additional issues that will require further consideration by industry, HCRA, the WG, PZJA agencies and the PZJA should the industry proposal proceed, including:

- a. PZJA agency resourcing required to support the industry proposal should it proceed to a trial – there will be significant resourcing demands associated with progressing the industry proposal which cannot be accommodated within existing operating budgets. PZJA agencies need to consider this in line with existing priorities and demands on resources. It is expected that resourcing demands will be equivalent or higher to that required for re-opening black teatfish.
- b. Surveillance and enforcement program required to support a trial - there will be significant costs associated with implementing an effective surveillance and enforcement program for the proposed activity which cannot be accommodated within existing operating budgets. Such a program will be risk-based and AFMA will need to consider both the design and funding of such a program should the industry proposal proceed.
- c. Data and monitoring needs required to support a trial – additional data collection and monitoring requirements may need to be implemented should the industry proposal proceed. If additional fine-scale catch and effort and/or biological data are required, additional monitoring tools may need to be used, in addition to the existing Fish Receiver System. These tools could include mandatory logbook reporting, vessel monitoring system (VMS), data loggers or scientific observers. There are significant costs associated with this which cannot be accommodated within existing operating budgets.
- d. Timing of a trial – the timing of a trial opening for white teatfish needs to be carefully considered. There are a range of operational (e.g. weather, tides, operations of other fisheries) and biological (e.g. spawning) considerations that need to be taken into account. It is proposed that this issue will be discussed as part of the consultation process.
- e. Over catch arrangements – clarification of over catch requirements under the BDM Fishery Harvest Strategy may be required.

62. Traditional Inhabitant members and observers noted that they do not support the use of VMS, and suggest existing monitoring tools be used instead (e.g. CDRs).

63. The AFMA member noted the next steps, should the industry proposal proceed include:

- a. Approval to be sought from the PZJA to undertake public consultation on the industry proposal.
- b. AFMA, in consultation with the proponents of the industry proposal if required, to prepare a draft statement of arrangements to support a trial, inclusive of the elements outlined in the industry proposal. Advice from the HCRA and HCWG to also be included as relevant/appropriate.

- c. AFMA, on behalf of the PZJA, to undertake public consultation with relevant stakeholders, inclusive of those identified in the industry proposal.
 - d. HCRAAG and HCWG to consider the outcomes of the public consultation process and recommend whether the industry proposal should proceed to a trial, and, if so, what arrangements should apply.
 - e. PZJA to make a decision concerning whether the industry proposal should proceed to a trial, and, if so, what arrangements should apply.
 - f. If endorsed by the PZJA, AFMA to implement arrangements for a trial. Full implementation of the industry proposal as it currently stands would require amendments to the Management Instrument, licence conditions, PZJA policy and administrative procedures. Implementation may also involve notification under the *Native Title Act 1993*.
 - g. A trial to be undertaken.
 - h. HCRAAG and HCWG to review the outcomes of the trial including the data and information collected, develop strategies to mitigate any issues or risks that may have arisen in the course of the trial, and advise on next steps.
 - i. PZJA to review the outcomes of the trial and advice from the HCRAAG and HCWG.
64. Traditional Inhabitant members expressed their disappointment at the length of time it has taken for this matter to be considered. It was expressed that fishers are willing to take responsibility for arrangements on their end, and government has a duty of care to develop the BDM Fishery through proposals such as this one, to promote economic development and opportunities for Traditional Inhabitants.
65. With regards to consultation, the Malu Lamar observer requested that Malu Lamar and PBC Chairs be consulted as part of the process. Malu Lamar may be able to assist with this. Traditional Inhabitant members also requested that they and other ZK Fisheries members be included in the consultation process.

Action arising 9 – AFMA to ensure Malu Lamar, PBC Chairs, HCWG Traditional Inhabitant members and ZK Fisheries are included in consultation on the industry proposal for the use of hookah gear to fish for white teatfish in the BDM Fishery.

66. **The WG recommended that AFMA continue to progress the industry proposal for the use of hookah gear to fish for white teatfish in the BDM Fishery, noting next steps will include notifying the PZJA of progress on the industry proposal and undertaking consultation with relevant stakeholders.**
67. The WG discussed that the current licencing system that allows open access to the BDM Fishery to Traditional Inhabitants is creating issues in terms of effective management and hindering the ability of some fishers to make a livelihood from the fishery. Traditional Inhabitant members suggested that fishers should require a catch history to fish in the BDM Fishery, and those fishers who weren't active in the fishery should lose the entry from their licence. It was agreed that the PZJA Licencing Policy is to be discussed at the next WG meeting.

Action arising 10 - PZJA Licencing Policy to be included on the agenda for discussion at the next WG meeting.

11. Research priorities for 2025/26

Assessment and management of the sea cucumber fishery in New Caledonia

68. The WG noted a presentation from the Scientific member, Associate Professor Steven Purcell, titled *Assessment and management of the sea cucumber fishery in New Caledonia (Attachment C)*.
69. Members noted the following background on the sea cucumber fishery in New Caledonia:
- a. similar size (although big island with a lagoon)

- b. fishing since 1840s and boomed in the 1920 to mid-1930s and 1980s targeting sandfish and teatfish
- c. production declined in the 1990s to around 60 tonnes
- d. mainly small-scale fishery (free diving and walking)
- e. initially fished for deepwater redfish, stonefish, prickly redfish, elephant trunk and chalkfish
- f. sea cucumbers are sold salted to processors who do rest of processing or processed to dried product
- g. since 2005, the number of boats in the fishery tripled
- h. total fishery exports in the past couple of years have declined further
- i. fishing has turned towards medium valued species, including leopardfish, hairy blackfish with sandfish and black teatfish still predominantly harvested.

70. The fishery has the following management regime:

- a. list of permissible species
- b. minimum size limitations
- c. some no-take reserves
- d. restriction on boat size (7 m)
- e. prohibited from using hookah, bombs and fishing at night
- f. in October 2020, quotas set for black teatfish (5 tonnes dried) and white teatfish
- g. stock surveys conducted in 2003-2008 and recent stock surveys in 2021-22 (only three species had average densities above 100 individuals/hectare)
- h. recently established management advisory group for the country.

71. The Scientific member noted that in summary:

- a. fleet capacity increased and there are too many fishers and boats
- b. not enough monitoring of fishery data
- c. suggest fishery not in good shape
- d. species that used to be sought after are no longer abundant and there was probably insufficient catch control on species in decline
- e. turned to lower value species
- f. management regulations have not adapted to changes in stocks and catches.

72. The acting Chair and members thanked the Scientific member for his informative presentation. The WG members discussed methods to better communicate with fishers and communities including providing support for Traditional Inhabitant members to travel to communities to communicate outcomes of meetings and consult on issues affecting fisheries. Traditional Inhabitant members also discussed undertaking community consultation before RAG and WG meetings.

Research priorities for 2025/26

73. The AFMA member explained that research priorities were not discussed at the HCRAAG due to time constraints. This item will be considered by the HCRAAG at a meeting in early 2024.

74. The WG noted that there are currently three research projects that have been recently completed or are underway that are relevant to Torres Strait hand collectables fisheries:

- a. *Research to support Beche-de-mer fisheries in Torres Strait* (AFMA project 2021-0815) – this project is completed, the outcomes from this project relating to white teatfish were considered

at the HCRAg meeting. The outcomes from this project relating to curryfish will be considered at the next HCRAg meeting.

- b. *Black teatfish size sampling and stock assessment update* (AFMA project 2023-0800) – this project is underway, preliminary outcomes from this project were considered at the HCRAg meeting.
- c. *Modelling climate change impacts on key fisheries resources in the Torres Strait to co-develop adaptation and mitigation strategies* – this project is pending final funding approval and contract. Members noted that TSRA are funding this project and it is critical to the management of the impacts of climate change on Torres Strait fisheries.

75. Members further noted that TSSAC met on 22-23 August 2023 to consider research priorities for Torres Strait fisheries for inclusion in the TSSAC 2024/25 call for research. TSSAC included two scopes for Torres Strait hand collectables fisheries in their 2024/25 call for research, released on 8 September 2023:

- a. Scientific stock survey of sandfish and other sea cucumber species on Warrior Reef; and
- b. Management Strategy Evaluation (MSE) of the BDM Fishery Harvest Strategy.

76. Members noted that research pre-proposals are due to the TSSAC secretariat by 30 October 2023. The HCRAg and WG will be consulted out-of-session on any proposals received relevant to hand collectables fisheries. Applicants will be advised by February 2024 whether a conditional approval has been given for their proposal, whether community engagement is required, and/or any changes to the proposal should be made. The AFMA member explained that TSSAC generally have \$450,000 annually to spend on research, which is used for all Torres Strait fisheries. Members noted that the TSRA and the Fisheries Research and Development Corporation also fund research in the Torres Strait.

77. The WG noted the draft Five-Year Research Plan for Hand Collectables Fisheries for 2025/26 to 2029/30 (the research plan), and provided the following advice.

78. Members noted that the research plan identifies six key projects for Torres Strait hand collectables fisheries for future funding:

- a. Black teatfish sampling – members noted that this is an ongoing long-term project to collect size and weight frequency data during black teatfish openings. The project's indicative annual cost is \$30,000-40,000 associated with the deployment of AFMA scientific observers.
- b. Sandfish stock survey – members noted this project is to undertake a survey of sea cucumber stocks on Warrior Reef area with a focus on sandfish and other commercially important sea cucumber species. Members noted this was identified as a high priority for funding in 2024/25 and TSSAC included it in their 2024/25 call for research. If no pre-proposal is received the project will be included in the 2025/26 priorities. Members requested that AFMA Compliance attend the next meeting to discuss compliance issues concerning Warrior Reef.

Action arising 11 - AFMA Compliance to attend the next meeting of the HCWG to discuss compliance issues concerning Warrior Reef.

- c. MSE of the BDM Fishery Harvest Strategy – members noted that the MSE project will be used to evaluate how well the BDM Fishery Harvest Strategy achieves the pre-specified objectives and identify opportunities for improvement to the strategy. Members noted this was identified as a high priority for funding in 2024/25 and TSSAC included it in their 2024/25 call for research. If no pre-proposal is received the project will be included in the 2025/26 priorities.
- d. Collecting socio-economic data for the BDM fishery – members noted that this project was considered by TSSAC but was not included in the 2024/25 call for research, pending further work on the scope to clarify what data is to be collected and for what purpose. Members noted that an updated scope will be circulated out of session for comment.

Action arising 12 – AFMA to circulate to the HCWG an updated scope for the project concerning the collection of socio-economic data for the BDM fishery for comment.

- e. Stock status survey – members noted that this project was to undertake a biomass survey of sea cucumber species in the east Torres Strait, with the last survey being undertaken in 2019/20. The project was identified as a priority by industry participants at the BDM Workshop in March. The AFMA member stated that the survey type, project timing and funding will be discussed at the next HCRAG meeting. The ABARES observer noted that ABARES endorses regular biomass surveys to support assessments, otherwise it can lead to increased uncertainties. Traditional Inhabitant members noted that a survey is important to complete prior to the white teatfish hookah trial. The WG noted that, given the time since the last survey in 2019/20, a further survey is a high priority for the BDM Fishery. Members suggested targeted small-scale surveys be considered by the HCRAG, for inclusion as a priority in the research plan, for those species which are not surveyed effectively using the current methodology, including the survey of areas not currently covered (e.g. area south of seven reefs).

Action arising 13 – HCRAG to consider whether targeted small-scale surveys should be included as a priority in the research plan, for those species which are not surveyed effectively using the current methodology.

- f. Understanding biological parameters of BDM Fishery species, including growth, mortality, size and breeding seasonality - members referred this project to the HCRAG for advice on whether it is essential rather than desirable. Members suggested gonad staging for black teatfish be considered by the HCRAG for inclusion as a priority in the research plan.

Action arising 14 - HCRAG to consider whether gonad staging for black teatfish should be included as a priority in the research plan.

12. Updates on other hand collectable fisheries

79. Members noted that the update on other hand collectable fisheries will be presented at the next HCWG meeting.

13. Other business

80. Members agreed that a one-page summary detailing the outcomes of the meeting should be prepared to support Traditional Inhabitant members to share key outcomes with their communities.

Action arising 15 – AFMA to prepare a one-page summary detailing the outcomes of the meeting to support Traditional Inhabitant members to share key outcomes with their communities.

14. Future priorities and date for the next meeting

81. The WG noted that the next working group meeting is tentatively scheduled for October 2024. Members noted that having the RAG and WG meetings back-to-back is the preferred approach.
82. The acting Chair thanked all members and observers for their contribution to a productive meeting. The acting Chair thanked TSRA for hosting and acknowledged the current collaborative relationship between TSRA and AFMA. The acting Chair and members thanked the AFMA member for her dedication and commitment to ensuring the meeting was successful.
83. Mr Sereako Stephen closed the meeting at 4:40 pm in Prayer.

List of attachments

Attachment A – Agenda

Attachment B – Black teatfish spawning information

Attachment C – Presentation from Associate Professor Steven Purcell

Summary of actions arising from HCWG 20

Item #	Action item	Responsibility
20.1	AFMA to provide information on the operational and market factors which influence the targeting and take of species in the BDM Fishery to the next HCRAAG and HCWG meetings when considering TACs.	AFMA
20.2	Gonad staging for black teatfish to be added to the research priorities for hand collectables fisheries for further consideration by the HCRAAG.	HCRAAG
20.3	Sampling protocols for the black teatfish size-frequency sampling program to be updated to collect body widths. AFMA to look at also collecting the number of fishers on the boat who were fishing and the number of hours in the water fishing to collect the animals.	AFMA
20.4	Fishers from Kaiwalagal to be included with who can access the TAC under the industry proposal for the use of hookah gear to fish for white teatfish in the BDM Fishery.	AFMA
20.5	TSRA to provide the HCWG with further information on support to be provided under WAPIL 2 relating to regulatory requirements for commercial diving work, as well as details of how many fishers undertook Wild Harvest training previously.	TSRA
20.6	QDAF to contact skippers using hookah gear in the Queensland Sea Cucumber Fishery to seek sharing of expertise with fishers in the Torres Strait.	QDAF
20.7	TSRA to provide the HCWG with a Maritime Safety Queensland report detailing safety incidents in the Torres Strait.	TSRA
20.8	AFMA to provide advice to the HCWG on how carrier licences could be used to support the operations of smaller boats in the BDM Fishery, while complying with the 7-metre boat length restriction.	AFMA
20.9	AFMA to ensure Malu Lamar, PBC Chairs, HCWG Traditional Inhabitant members and ZK Fisheries are included in consultation on the industry proposal for the use of hookah gear to fish for white teatfish in the BDM Fishery.	AFMA
20.10	PZJA Licencing Policy to be included on the agenda for discussion at the next WG meeting.	AFMA
20.11	AFMA Compliance to attend the next meeting of the HCWG to discuss compliance issues concerning Warrior Reef.	AFMA
20.12	AFMA to circulate to the HCWG an updated scope for the project concerning the collection of socio-economic data for the BDM fishery for comment	AFMA
20.13	HCRAAG to consider whether targeted small-scale surveys should be included as a priority in the research plan, for those species which are not surveyed effectively using the current methodology.	HCRAAG
20.14	HCRAAG to consider whether gonad staging for black teatfish should be included as a priority in the research plan.	HCRAAG
20.15	AFMA to prepare a one-page summary detailing the outcomes of the meeting to support Traditional Inhabitant members to share key outcomes with their communities.	AFMA

Summary of HCWG 20 recommendations

Agenda item #	Recommendation
8	Noting the discussions and recommendations at the HCRAAG meeting held on 17-18 October 2023, the WG endorsed the HCRAAG recommendations pertaining to TACs for the 2024 fishing season (commencing on 1 January 2024), as outlined in Table 2.
9	The WG supported the recommendation of Traditional Inhabitant members and observers and recommended a 2024 black teatfish opening date of 29 April 2024.
9	Noting the discussions and recommendations at the HCRAAG meeting held on 17-18 October 2023, the WG endorsed the HCRAAG recommendation for the development of TAC undercatch carryover provisions for black teatfish to allow for up to 10% of the current fishing season's TAC, if not caught, to be carried over from the current season to the subsequent season.
11	The WG recommended that AFMA continue to progress the industry proposal for the use of hookah gear to fish for white teatfish in the BDM Fishery, noting next steps will include notifying the PZJA of progress on the industry proposal and undertaking consultation with relevant stakeholders.

20th meeting of the Hand Collectables Working Group (HCWG 20)

18-19 October 2023

TSRA Boardroom (Level 1 Torres Strait Haus, 46 Victoria Parade, Thursday Island)

If joining by Microsoft Teams, please refer to the meeting request for joining details

Draft Agenda

Agenda Item	Action required	Speaker	Time
Day 1 – 18 October 2023 – 1300-1700			
1. Opening prayer, acknowledgement of country, welcome and apologies	Information	Chair	1300 5 minutes
The Chair will welcome HCWG members and observers to HCWG 20.			
2. Adoption of agenda	Decision	Chair	1305 1 minute
The HCWG is invited to consider and adopt the draft agenda.			
3. Declarations of interests	Decision	Chair	1306 10 minutes
HCWG members and observers are invited to declare any real or potential conflicts of interests and decide whether a member may or may not be present during the discussion of or decisions made on matters which are the subject of a conflict.			
4. Actions arising from previous meetings	Discussion	AFMA	1316 10 minutes
The HCWG is invited to note the status of action items arising from previous meetings.			
5. Out-of-session correspondence	Information	AFMA	1326 4 minutes
The HCWG is invited to note any out-of-session correspondence to the HCWG since the last meeting.			
6. HCWG updates	Information	All members	1330 15 minutes
HCWG members and observers are invited to provide updates on matters relevant to Torres Strait hand collectable fisheries, including fishing conditions, research, management and Native Title matters. As members and observers will have provided updates at HCRA3, only new updates need be provided.			
7. Climate and ecosystem update	Discussion	AFMA	1345 15 minutes
The HCWG is invited to note an update on climate and ecosystem changes and discuss their impacts on Torres Strait hand collectable fisheries. As HCRA3 will have discussed this item, only new updates or considerations need be provided.			
8. Total allowable catches for the 2024 fishing season	Recommendation	AFMA	1400 1 hour
Noting HCRA3 advice, the HCWG is invited to review the current monitoring triggers and TACs for sea cucumber species under the guidance of the BDM Fishery Harvest Strategy, taking into account catches during the 2022 fishing season and any other relevant information that is available. If required, the HCWG is invited to recommend to the Protected Zone Joint Authority (PZJA) new total allowable catches (TACs) for the 2024 fishing season.			

Afternoon tea (1500-1515)

9. 2023 black teatfish opening and future openings (further time on Day 2)	Recommendation	AFMA + CSIRO	1515 1 hour 45 minutes (further time on Day 2)
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Noting HCRAG 3 advice, the HCWG is invited to discuss management arrangements for future openings, including an appropriate TAC (if not discussed under agenda item 8), opening date, reporting and data collection requirements and any other conditions that should apply. Discussions to include consideration of relevant recommendations from the BDM Workshop held from 21-22 March 2023.

Day 2 – 19 October 2023 – 0900-1700

2023 black teatfish opening and future openings (continued from Day 1)	Recommendation	AFMA + CSIRO	0900 1 hour 15 minutes (continued from Day 1)
10. Outcomes of white teatfish + curryfish research project	Recommendation	CSIRO	1015 15 minutes

Noting HCRAG 3 advice, the HCWG is invited to consider the outcomes of research project 2021-0815 and make recommendations to the PZJA regarding their adoption. The project has undertaken new stock assessment modelling for white teatfish and developed new processing conversion ratios for curryfish species.

Morning tea (1030-1045)

11. Management of white teatfish (further time after break)	Recommendation	AFMA	1045 2 hours (further time after break)
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The HCWG is invited to consider the recommendations from the BDM Workshop regarding an industry proposal for the use of hookah gear to fish for white teatfish. If required, the HCWG is invited to recommend to the PZJA arrangements for the progression of the industry proposal.

Lunch (1245-1330)

Management of white teatfish (continued)	Recommendation	AFMA	1330 1 hour 15 minutes (continued)
12. Research priorities for 2025/26	Recommendation	AFMA	1445 30 minutes

Noting HCRAG 3 advice, the HCWG is invited to review the five-year research plan for Torres Strait hand collectable fisheries and recommend research priorities to the Torres Strait Scientific Advisory Committee for funding in 2025/26 and beyond.

Afternoon tea (1515-1530)

13. Updates on other hand collectable fisheries a. Pearl b. Crab c. Trochus	Recommendation	AFMA	1530 1 hour
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The HCWG is invited to note updates on the other Torres Strait hand collectable fisheries, and if required, make recommendations to the PZJA regarding their management.

14. Other business	Discussion	All members	1630 15 minutes
The HCWG is invited to nominate any other business for discussion.			
15. HCWG priorities and next meeting	Discussion	AFMA	1645 15 minutes
The HCWG is invited to discuss priorities for the year ahead and a suitable date for the next meeting.			

The Chair must approve the attendance of all observers at the meeting. Individuals wishing to attend the meeting as an observer must contact AFMA (fisheriesTI@afma.gov.au).

The meeting will be recorded for the purpose of developing the meeting minutes and will be deleted once the meeting minutes have been finalised.

Black teatfish - Breeding season

Study - Shiell & Uticke (2006)

- Northern GBR – Black teatfish observed to spawn in summer
- These were males – highly likely females also spawning
- **Winter – main spawning period**
- Science looked at gonad staging for Black teatfish

Results

- Immature - April
- Maturing – May
- Fully mature/Partial spawning - June
- Spawning – July
- Worse condition after spawning - August





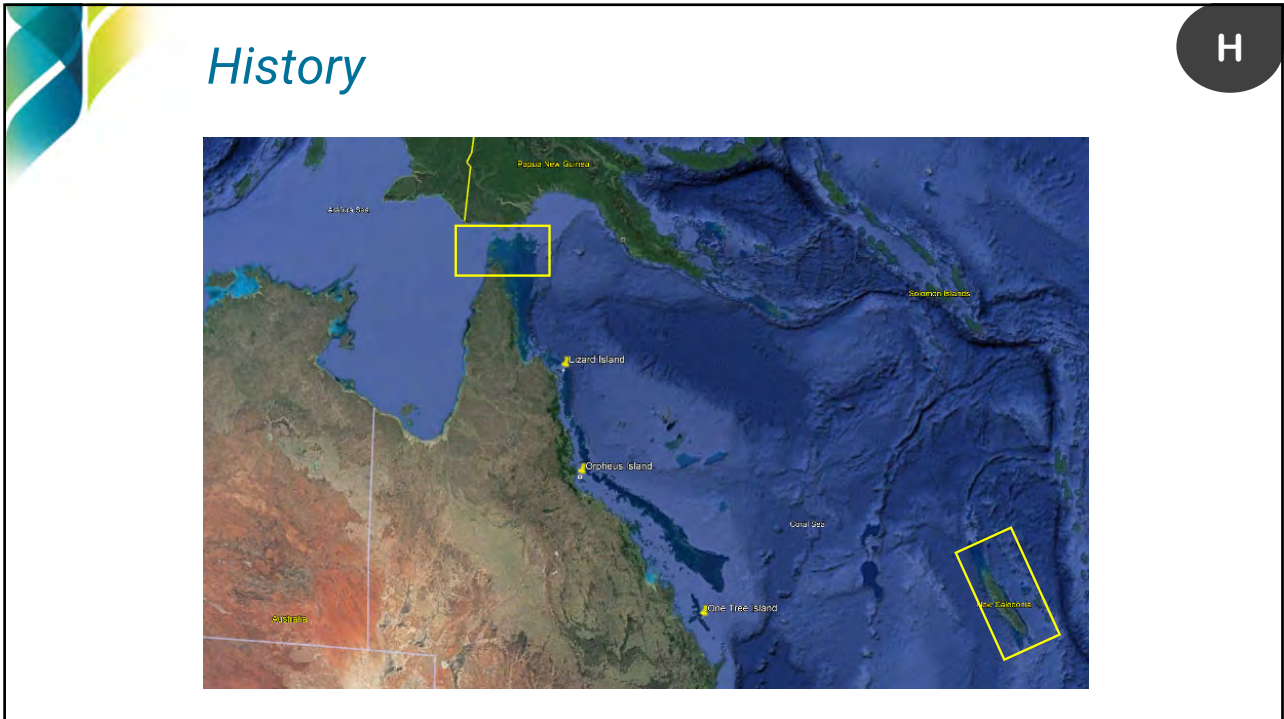
Assessment and management of the sea cucumber fishery in New Caledonia

Steve Purcell

Associate Professor
National Marine Science Centre

Contents

- History and context of the fishery
- Management regulations and governance
- Stock surveys by Ginger-Soproner for ADECAL: 2021–2022
- Non-detriment findings and new catch quotas for Teatfish
- Prospects and summary




History

- Fishing for sea cucumbers in New Caledonia dates back to 1840s
- Continued through to 1870s
- The fishery invigorated again in the early 1900s, booming in the 1920s until the mid-1930s

A black and white historical photograph showing a group of about ten men on a beach. They are dressed in simple, light-colored clothing. Some are standing near a large, shallow, circular stone or metal basin, while others are holding nets or other fishing gear. The background shows a simple wooden building and some trees.


Conand (1990)

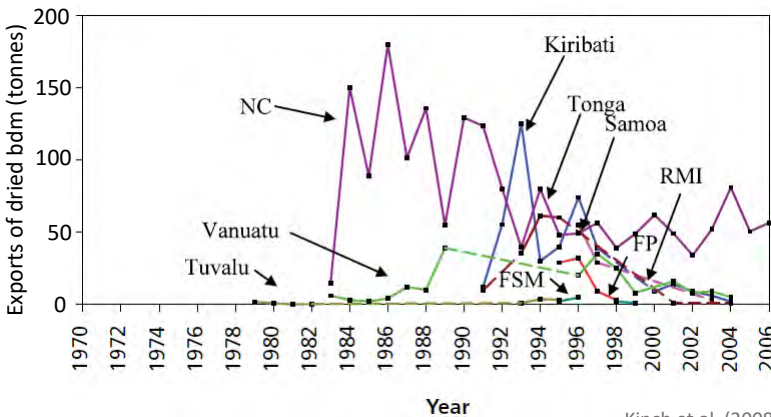


History

H

- Fishing for sea cucumbers boomed again in the 1980s
- Much of the fishing was concerned with high-value species: sandfish and the teatfish
- Production declined in the 1990s to around 60 t per year





Kinch et al. (2008)



History

H

- Fishing mainly artisanal using small boats
- Some fishers collect close to shore
- Sea cucumbers are sold salted to processors who do the rest of processing, or processed to dried product by fishers





History

H

➤ Wide range of species harvested

History

H

- Since 2005, the number of boats in the fishery **tripled**
- Export volumes (dried) have been variable in recent years trending downwards
- Apparently, total fishery exports in the past couple of years have declined further


	Exportations (poids sec en tonnes)									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<i>Actinopyga echinites</i>										
<i>Actinopyga lecanora</i>										
<i>Actinopyga varians</i>	-	5,5	1,6	5,2	5,8	5,1	11,8	10,1	6,3	5,3
<i>Actinopyga miliaris</i>										
<i>Actinopyga palauensis</i>										
<i>Actinopyga spinea</i>										
<i>Holothuria fuscogilva</i>	-	4,7	3,7	6,0	3,8	2,2	6,1	9,6	6,8	3,8
<i>Holothuria whitmaei</i>										
<i>Thelotrema ananas</i>	-	0,8	0,4	0,2	0,7	0,6	1,7	2,5	1,3	0,8
<i>Thelotrema anax</i>										
<i>Holothuria atra</i>										
<i>Holothuria fuscopunctata</i>										
<i>Holothuria lessoni</i>										
<i>Holothuria scabra</i>										
<i>Bohadschia argus</i>										
<i>Bohadschia marmorata</i>	2,9	17,7	11,5	16,8	39,5	30,4	29,8	43,9	31,0	26,9
<i>Bohadschia vitiensis</i>										
<i>Stichopus chloronotus</i>										
<i>Stichopus hermanni</i>										
<i>Holothurie spp.</i>										
Total	2,9	28,7	17,2	28,2	49,8	38,3	49,4	66,1	45,4	36,8

Gilbert et al. (2022)

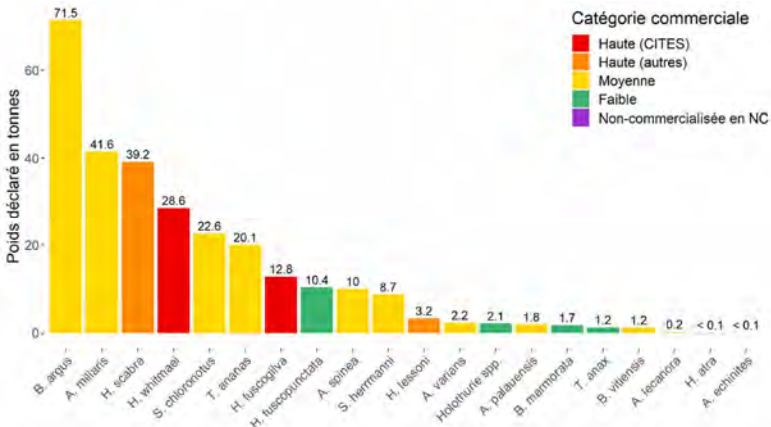
History

H

- Fishing has turned towards some medium-value species (leopardfish, hairy blackfish)
- Sandfish and black teatfish still harvested prominently



Total capture of sea cucumbers (whole, fresh) in 2019



Species	Poids déclaré en tonnes	Catégorie commerciale
<i>B. argus</i>	71.5	Moyenne
<i>A. miliaris</i>	41.6	Moyenne
<i>H. scabra</i>	39.2	Haute (autres)
<i>H. whitmael</i>	28.6	Haute (CITES)
<i>S. chlorouratus</i>	22.6	Moyenne
<i>T. ananas</i>	20.1	Moyenne
<i>H. fuscogilva</i>	12.8	Haute (CITES)
<i>H. hasegawacata</i>	10.4	Faible
<i>A. spongia</i>	10	Moyenne
<i>S. hermanni</i>	8.7	Moyenne
<i>H. tessoni</i>	3.2	Haute (autres)
<i>A. vaticana</i>	2.2	Moyenne
<i>Holothurie spp.</i>	2.1	Faible
<i>A. palauensis</i>	1.8	Moyenne
<i>B. marmorata</i>	1.7	Faible
<i>T. atax</i>	1.2	Faible
<i>B. vitiensis</i>	1.2	Faible
<i>A. lecanora</i>	0.2	Non-commercialisée en NC
<i>H. atra</i>	< 0.1	Non-commercialisée en NC
<i>A. echinites</i>	< 0.1	Non-commercialisée en NC

Gilbert et al. (2022)

Management

M

- List of permissible species (e.g., *A. echinites*, *A. lecanora*, *B. vitiensis* not authorised)
- Minimum legal size limits: fresh and dried
- Some no-take reserves
- Restriction on boat size: 7 m
- Prohibited:
 - SCUBA or hookah
 - Bombs
 - Fishing at night
- In Oct. 2020, quotas set for black teatfish (5 t dried) and white teatfish (2 t dried)

Management

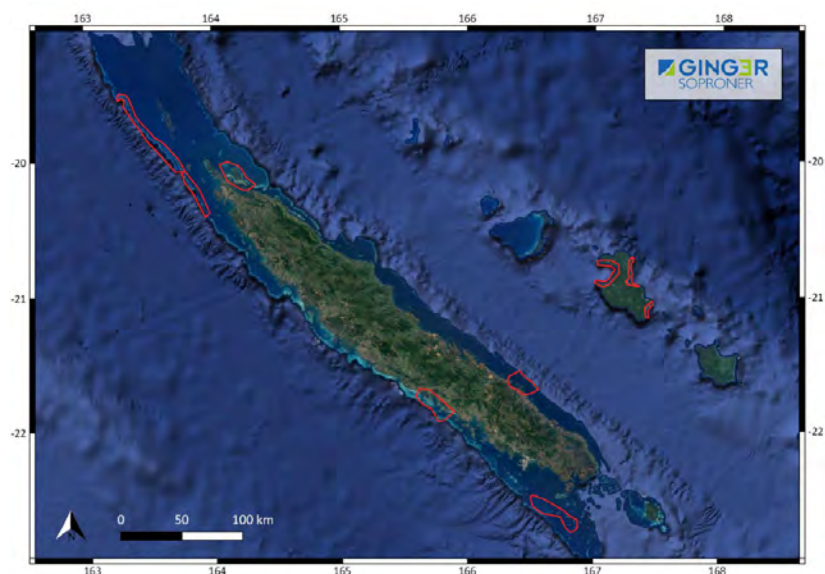
M

- Managed by provincial government fishery departments
- Recently established a management advisory group for the country
- Not much analysis of fishery data
- Stock surveys conducted in 2003–2008
- Recent stock surveys in 2021–2022

Stock surveys

S

- 9 survey areas chosen by the provincial governments
- Surveys done by swimming transects by snorkelling or on scuba
- Sea cucumbers counted and measured



Stock surveys

S

- Estimates of density of sea cucumbers per hectare and estimates of habitat surface area
- 'Reference' biomass (lower confidence interval of biomass of legal-sized animals) for each species for each survey area

Figure 6 : Figure bilan méthodologique

Gilbert et al. (2022)

Stock surveys

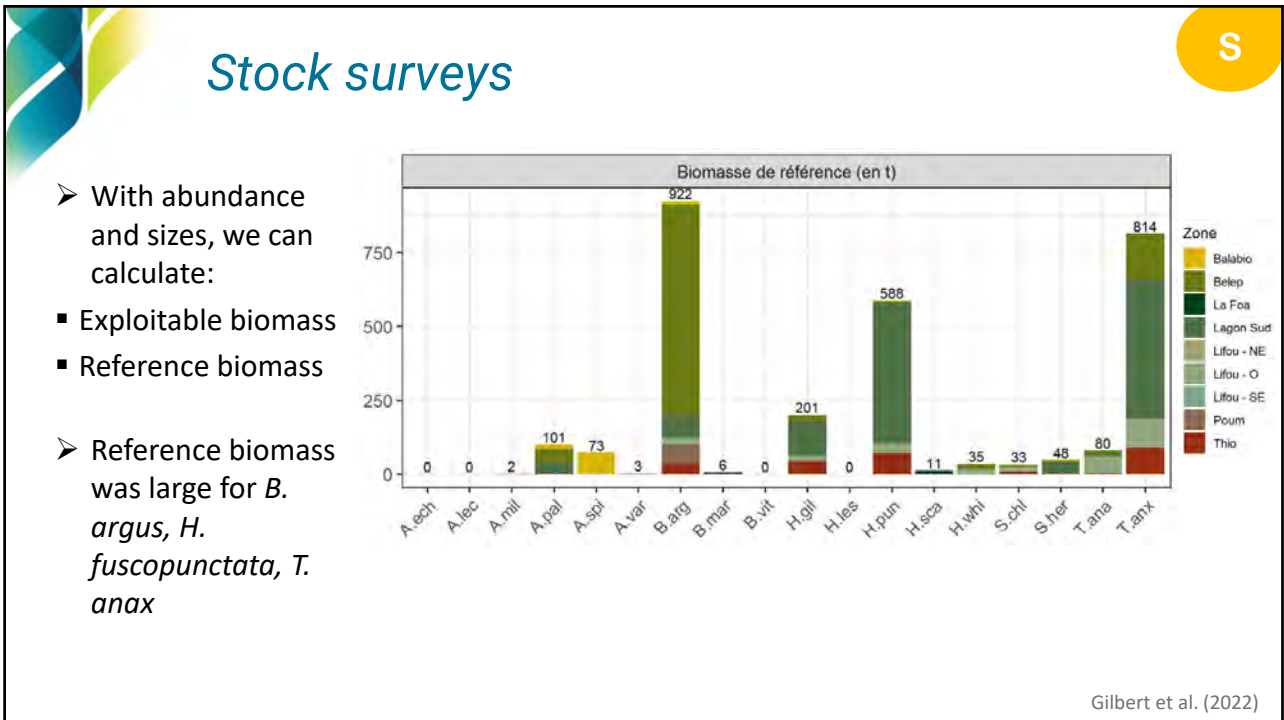
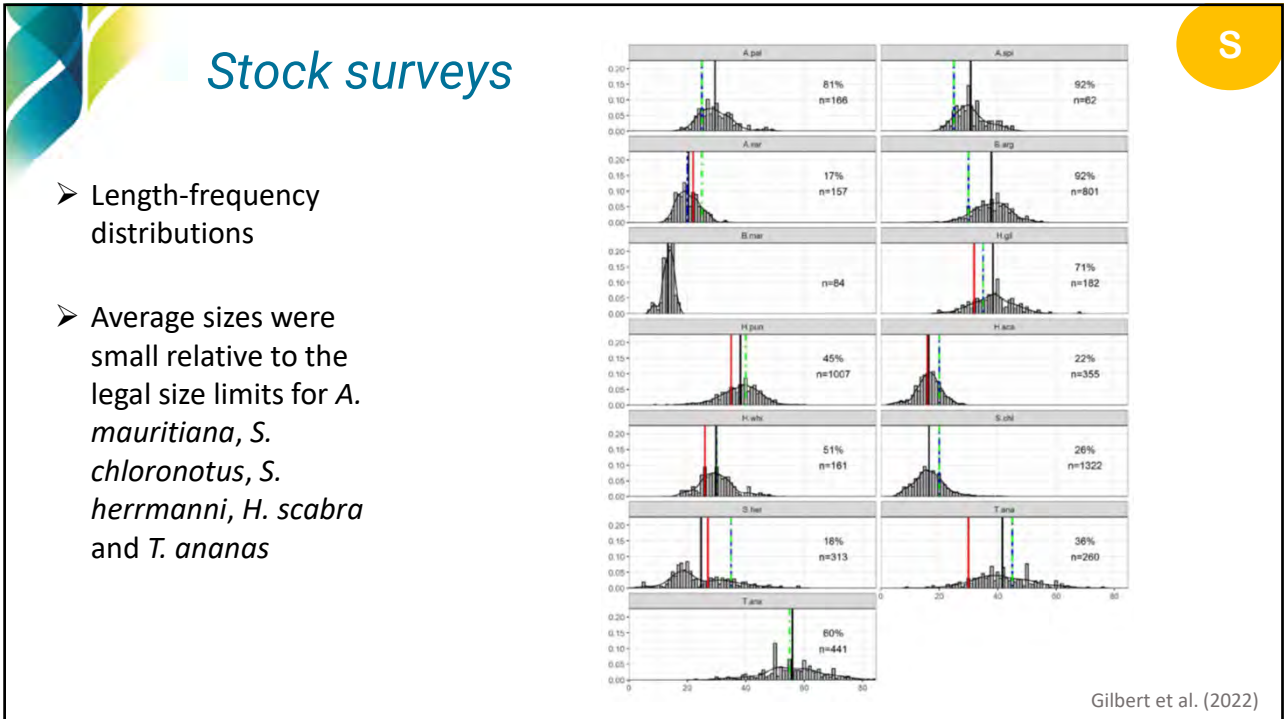
S

- Only three species had average densities above 100 ind/ha
- Densities of black teatfish were very low (3 ind/ha)
- Others very uncommon: Golden sandfish, Hairy blackfish, Stonefish, Brown sandfish, Prickly redfish

Overall average densities per hectare

Species	Average Density (ind/ha)	Commercial Status
H.altr	129	Non commerciale en NC
H.soa	116	Non commerciale en NC
B.nigr	108	Non commerciale en NC
H.aeu	82	Non commerciale en NC
H.dor	49	Non commerciale en NC
H.pir	40	Non commerciale en NC
H.ros	40	Non commerciale en NC
S.chi	38	Non commerciale en NC
H.lau	36	Non commerciale en NC
H.cok	35	Non commerciale en NC
A.ech	19	Moyenne
B.arg	18	Moyenne
T.ark	13	Moyenne
A.spl	11	Moyenne
A.yar	11	Moyenne
P.gra	10	Moyenne
S.yer	7	Moyenne
H.oil	6	Moyenne
A.pal	5	Moyenne
B.mec	5	Moyenne
B.vit	4	Moyenne
T.ana	4	Moyenne
H.wit	3	Moyenne
S.yor	3	Moyenne
B.ker	2	Moyenne
H.les	2	Moyenne
A.mil	2	Moyenne
A.lec	1	Moyenne
S.pae	1	Moyenne
H.hil	1	Moyenne



Gilbert et al. (2022)



Non-detriment finding

NDF



- Decision was quite political
- In New Caledonia, the Scientific Authority is a government research institution similar to CSIRO
- It advised 46% reduction in quotas to:
 - Black teatfish: 20 tonnes wet; 2.7 t dry
 - White teatfish: 10 tonnes wet; 1.36 t dry



Non-detriment finding

NDF

- The fishery departments proposed less restrictive quotas
 - 25% reduction in quota for white teatfish, to 1.5 t dried
 - 35% reduction in quota of black teatfish, to 3.25 t dried
- Other management measures to demonstrate sustainability:
 - Creation of a fishery management committee
 - Limitations on the number of fishing licences
 - Export quotas for all commercial species, even those not CITES listed





Prospects and summary

P

- Several indicators suggest the fishery is not in good condition
 - Fleet capacity has increased (more boats)
 - Previously productive areas are no longer productive and new fishing areas are being accessed
 - Species that used to be sought after are no longer abundant
 - Fishers have turned to lower-value species
 - Many high-value species are in low abundance



Prospects and summary

P

- Main problems causing declines in stocks
 - Too many fishers, too many boats
 - Not enough monitoring of fishery data
 - Insufficient catch controls on species in decline
 - Management regulations have not adapted to changes in stocks and catches

White teatfish
(under-surface)



- Beige or tan coloured under-surface
- Dark brown body colour
- Large yellow anal teeth



Black teatfish
(under-surface)



- Grey coloured under-surface
- Dark grey to black body colour
- Small grey or brownish anal teeth

