

<b>TORRES STRAIT PRAWN MANAGEMENT ADVISORY COMMITTEE</b>	<b>Meeting No. 4 14-15 June 2007</b>
<b>Update on US export accreditation</b>	Agenda Item No. 9.1

## **RECOMMENDATION**

The TSPMAC **NOTES** that:

1. The US Government has requested a postponement of their US TED certification assessment visit to Australia until October/November 2007.
2. The US Government accreditation of the Torres Strait Prawn Fishery is still current.

## **BACKGROUND**

In 1996, the United States banned all imports of prawns from fisheries not utilising TEDs as a conservation measure, which effectively banned all Australian exports of 'wild caught' prawns to the US.

In 2005, five Australian trawl fisheries, including TSPF were certified by the US as compliant with their import regulations regarding the use of TEDs. In late 2005, the US notified all wild caught prawns exporting countries of its intention to amend its TED regulations to include 'leatherback requirements', because research showed larger turtle species could not escape from the current US legislated TED's.

The TSPMAC agreed to the new US TED amendments at its meeting on 19 – 20 September 2006 meeting. However, at the 26 October 2006 PZJA 20 meeting, the Torres Strait Prawn Entitlement Holders Association raised concerns about the matter of floatation devices. In light of these concerns the PZJA agreed to implement the new US amended TED dimensions but the implementation of floatation devices would be referred back to the TSPMAC for advice prior to the commencement of the 2007 season.

On this basis the chair of the PZJA approved FMN81 on 19 December 2006, which revokes FMN60 and specifies the requirements for TEDs that must be met to fish in the TSPF in 2007.

## **DISCUSSION**

A US TED certification team, mandated by US congress, postponed their March/April visit to Australia to evaluate whether TSPF vessels have implemented changes to TEDs as required under FMN81. It is unclear whether the US certification team will accept the changes in the use of TEDs in the TSPF, contained in FMN81, as it does not meet US import requirements for the use of floatation devices.

Correspondence received from US representatives indicates that there appears to be some flexibility in the use of floatation devices but this will need further discussion with Industry in October/November 2007.

At the 17 February 2007 TSPMAC 3 meeting, Industry was willing to meet with the US representatives to discuss the requirement for the use of floatation devices.

<b>TORRES STRAIT PRAWN MANAGEMENT ADVISORY COMMITTEE</b>	<b>Meeting No. 4 14-15 June 2007</b>
<b>Popeye Fish Excluder BRD</b>	Agenda Item No. 9.2

## **RECOMMENDATION**

The TSPMAC recommends that:

- 1) the PZJA **AGREES** to add the ‘Popeye Fish Excluder’ to the list of approved Bycatch Reduction Devices in the fishery; and
- 2) the PZJA **AGREES** that the ‘Popeye Fish Excluder’ should be defined as it is in the East Coast Otter Trawl Fishery in recognition of the overlap of operators between the two fisheries.

## **BACKGROUND**

The primary aims of the Bycatch Action Plan for the Torres Prawn Fishery (TSPF) are as follows:

1. Eliminate to the greatest extent feasible, the catch of large animals such as turtles, sharks and stingrays, other protected species; and other species unable to withstand the effects of trawling;
2. Substantially reduce the ratio of bycatch to prawns;
3. Provide protection for areas that are important habitat for vulnerable species of marine life.

In line with the second primary aim to substantially reduce the ratio of bycatch to prawns, a Bycatch Reduction Device (BRD) must be used in all nets except try nets. Currently there are 6 such devices listed in Fisheries Management Notice No. 70. They are as follows:

1. Square Mesh Codend
2. Square Mesh Panel
3. Fisheye
4. Bigeye
5. Radial Escape Section
6. V-Cut / Flap

## **DISCUSSION**

A new device has recently been implemented in the East Coast Otter Trawl Fishery (ECOTF) and tested in the Northern Prawn Fishery (NPF). The Popeye fish excluder was developed by Robert ‘Popeye’ Bennett and is a variation of the “Fish box” trialled in the United States. The BRD consists of an aluminium frame designed to create an area of low water flow. Fish are attracted to the low water flow and swim out through the adjacent escape hole. Prawn loss is eliminated through the use of an accelerator funnel under the escape hole.

The Popeye fish excluder was tested in the ECOTF onboard the “Rodan Lee” in the area between Cairns and Cooktown in July 2004. 30 shots were completed with the BRD over 8 nights. The target species were tiger and endeavour prawns with small quantities of king prawns.

The results were encouraging with a 29% reduction in bycatch. The difference in bycatch catch rate attributed to the BRD was far greater than the natural variation and it can be concluded that the reduction was caused by the Popeye fish excluder and not by any other factors. On one night, the BRD reduced the bycatch from one net by 121 kg. If the BRD was installed in all 4 nets this would have been 480 kg or approximately 12 lug baskets less bycatch that the crew would have to sort through.

In contrast, the natural variation in prawn catch rates between shots was higher than the difference attributed to the BRD. This means that there was no difference in prawn catch rates caused by the BRD.

Following these tests the Popeye Fish Excluder was approved as an effective BRD and added to the list of BRDs in the *Fisheries (East Coast Trawl) Management Plan 1999*.

A far more comprehensive testing regime of the device was undertaken in the NPF. The Popeye fish excluder was assessed for approval in Australia’s Northern Prawn Fishery (NPF) against the NPF Bycatch Subcommittee’s performance requirements during October and November 2006.

The assessment was undertaken over three weeks for a total of 82 trawls, with 54 trawls trialed with the BRD positioned at a distance of 70 meshes from the codend draw strings and a further 28 trawls trialed at 100 meshes. During the assessment twin trawl nets each containing the same standard Turtle Excluder Device (TEDs) were compared. One net contained the Popeye fish excluder while the other net did not contain a BRD. All small bycatch (including sharks and rays) from both nets were separated and weighed in lug baskets.

All prawn catch was also weighed separately to assess the effect on prawn catches. Tests with the BRD located at 70 meshes from the codend draw strings produced a 48% reduction in the weight of small bycatch, an 87% reduction in the number of seasnakes captured and a 35% reduction in the number of sharks and rays captured. Tests with the BRD located at 100 meshes from the codend draw strings produced a 28% reduction in the weight of small bycatch and 27% reduction in the number of sharks and rays captured.

Differences in the catch of prawns between nets with and without the BRD were not statistically different. The Popeye fish excluder has achieved the best results to date for BRDs trialed in the NPF making the implementation of the BRD in the NPF highly desirable. Testing of the BRD at different distances from the codend drawstrings during the trial (70 and 100 meshes) suggests that the location of the Popeye Fishbox BRD (and other BRDs) is an important factor in achieving improved bycatch reduction. Further testing of the BRD would be highly beneficial in defining bycatch reduction performance.

The proposed BRD definitions for the Popeye Fish Excluder in the Torres Strait Prawn fishery are as per the ECOTF. This is due to the large number of boats that are licensed to fish in both fisheries and the need for complementary arrangements where possible. The device is set at 95 meshes from the codend drawstring, which equates to 29% bycatch reduction. However, this is a maximum distance and does not restrict operators from placing the device closer to the codend and achieving higher bycatch reduction rates.

**Proposed wording of device in Management Plan:**

## Popeye fish excluder

(1) A combination of a funnel, frame and a rectangular opening in the net is a recognized BRD if—

- (a) they comply with subsections (2) and (3); and
- (b) nothing covers any part of the opening during trawling.

(2) The funnel must—

- (a) be attached to the net for all of the funnel's front edge circumference; and
- (b) be held open by—
  - (i) a hoop attached to the net at the funnel's front edge; or
  - (ii) a TED that is not more than 62cm from the funnel's front edge; and
- (c) have a number of meshes in its rear edge circumference of no more than 60% of the number of meshes in the circumference of the net at the rear edge; and
- (d) have a stretched length no longer than 2.25m; and
- (e) be no more than 110 meshes of the net from the the cod end drawstrings of the net.

(3) The opening must be—

- (a) no more than 95 meshes of the net from the drawstrings; and
- (b) at least 40cm long and 38cm wide; and
- (c) held open by a frame made of material that is rigid enough to ensure that, while the net is being used for trawling, the opening is at least 40cm long and 38cm wide.

## Popeye fish excluder by-catch reduction device (BRD)

