Background

1/ Subantarctic seabirds : an ecological challenge

The seabirds populations which colonize Subantarctic islands are the richest and the most diverse in the world. To give one example: at breeding time, Crozet is home to more than 25 millions birds. Among those birds are 8 albatrosses species (of which one is endemic) and 23 petrels species.

But this heritage is fragile. Scientific work shows the critical conservation status of albatrosses populations, and the worsening of this status year after year: if 2 albatross species were classified as globally endangered in 1992, the number increased to 16 species in 2000.

In 2009, 18 out of 22 albatross species have been classified as globally endangered, and among them two as « critically endangered ».

Albatrosses populations are hence rapidly declining. The development of longline fisheries and illegal fishing play a major role in this decline.

France is strongly involved in the conservation of these birds. As a matter of fact, **seven albatrosses species (***Albatros à sourcils noirs, Albatros Hurleur, Albatros à tête grise, Albatros à bec jaune, Albatros Fuligineux à dos clair, Albatros Fuligineux à dos Sombre, Albatros d'Amsterdam*) **among the 8 species of French Austral territories** (Crozet, Kerguelen, Amsterdam and Saint Paul) are globally endangered. Most seabirds species impacted by accidental catches are listed in the Agreement on the conservation of albatrosses and petrels (ACAP), which France ratified in 2005. Parties to this Agreement have to implement stringent conservation measures.

In the Crozet and Kerguelen toothfish longline fishery, French overseas territories administration (Taaf) have put in place as early as 2002, in partnership with scientists and professionals, very strict conservation measures against accidental mortality of seabirds. These measures, which have been validated by CCAMLR, put an end to accidental catches of albatrosses in 2003 and considerably reduced petrels mortality. For petrels species, a national plan to reduce mortality was presented to CCAMLR, and validated.

A national plan of action is in preparation for the Amsterdam albatross (endemic to the island with the same name) classified as critically endangered. France alone bears the global responsibility for this species, as it breeds only on Amsterdam island.

Nonetheless, longline fisheries operated in the Southern part of the Indian Ocean impact a great number of these seabirds, whose distribution area extends far beyond French waters.

2/ Interaction with IOTC competence area

Up to now, it was accepted that the distribution area of albatrosses and petrels originating in the Austral Ocean islands did not extend North of 30°S, and this led IOTC to use this limit when adopting mitigation measures of seabirds bycatch in longline fisheries.

Recent studies, not published yet, based on the tracking of Amsterdam, Crozet and Kerguelen islands albatrosses and petrels show that several species regularly go up North of 30°S. On the basis of these conclusions presented to the Working Party on Ecosystems and Bycatch (WPEB) 2009 meeting in Mombasa, **the extension of the mitigation measures to 25°S (ultimate limit of the distribution areas) is recommended.**

The species originating in the Austral Ocean which would benefit from these measures are listed below :

- Amsterdam albatros, *Diomedea amsterdamensis*, critically endangered : global population 30 breeding pairs, increasing
- Sooty albatross, *Phoebetria fusca* : 2000 pairs in Crozet and 450 pairs in Amsterdam, sharply decreasing

- White-chinned petrel, *Procellaria aequinoctialis* : between 26470 and 49700 pairs in Crozet and between 186000 and 297000 pairs on Kerguelen, sharply decreasing

- Wandering albatross, *Diomedea exulans* 1800 pairs in Crozet and 1280 in Kerguelen, decreasing

- Northern giant petrel, *Macronectes halli* 850 pairs in Crozet and 910 in Kerguelen, stable/decreasing

- Southern giant petrel, *Macronectes giganteus* 950 pairs on Crozet, stable

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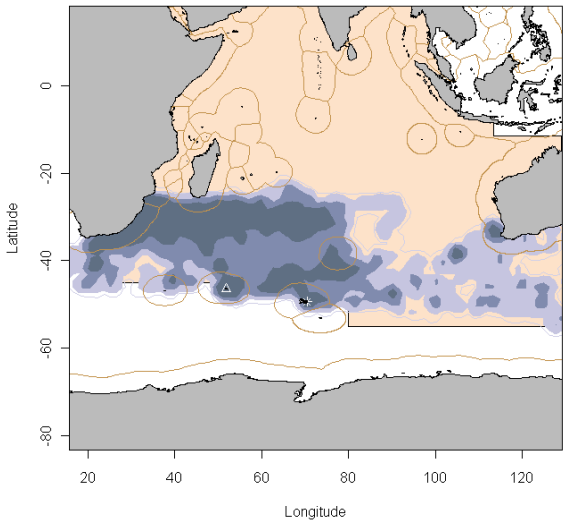
<td> 
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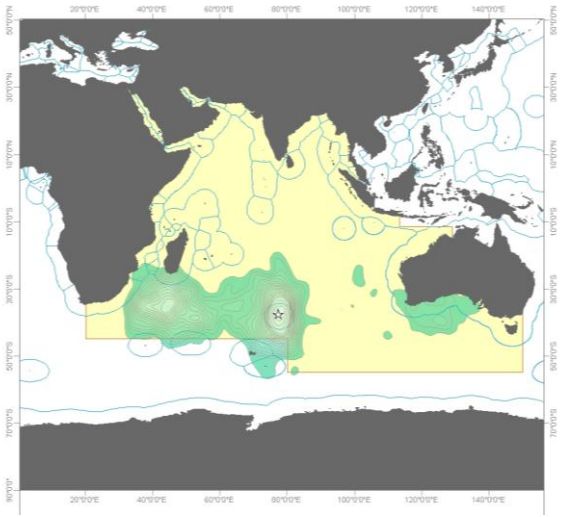
<td>  </td>
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<td>Distribution map of the juveniles of the three species : southern giant petrel, Sooty albatross and White-chinned petrel</td>
<td>Distribution map of adults Amsterdam albatross</td>
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RESOLUTION
ON REDUCING THE INCIDENTAL BYCATCH OF SEABIRDS IN LONGLINE FISHERIES

The Indian Ocean Tuna Commission (IOTC),

RECALLING *Resolution ~~06/04~~08/03 On reducing Incidental Bycatch of Seabirds in longline fisheries*, and in particular, its paragraph ~~7.~~8;

RECOGNISING the need to strengthen mechanisms to protect seabirds in the Indian Ocean;

TAKING INTO ACCOUNT the United Nations Food and Agriculture Organization (FAO) International Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (IPOA-Seabirds);

NOTING the recommendations of the IOTC Working Party on Ecosystems and Bycatch (WPEB) on measures to mitigate seabird interactions as outlined in their 2007 Report;

ACKNOWLEDGING that to date some Contracting Parties and Cooperating non-Contracting Parties (hereinafter referred to as "CPCs") have identified the need for, and have either completed or are near finalizing, their National Plan of Action on Seabirds;

RECOGNISING the concern that some species of seabirds, notably albatross and petrels, are threatened with global extinction;

NOTING that the Agreement on the Conservation of Albatrosses and Petrels, which opened for signatures at Canberra on 19 June 2001, has entered into force;

NOTING that the ultimate aim of the IOTC and the CPCs is to achieve a zero bycatch of seabirds for fisheries under the purview of the IOTC, especially threatened albatrosses and petrel species in longline fisheries;

ADOPTS in accordance with paragraph 1 of Article IX of the IOTC Agreement, that:

1. CPCs shall seek to achieve reductions in levels of seabird bycatch across all fishing areas, seasons, and fisheries through the use of effective mitigation measures.
2. Fishing operations shall be conducted in such a way that hooklines[1] sink beyond the reach of seabirds as soon as possible after they are put in the water.
3. CPCs shall as soon as possible and, at the latest before 1 November 2010, ensure that all longline vessels fishing south of 25°S use at least two of the mitigation measures in Table 1 below, including at least one from Column A. Vessels shall not use the same measure from Column A and Column B.
   Until 31 October 2010, CPCs shall ensure that all longline vessels fishing south of 30°S use at least two of the mitigation measures in Table 1 below, including at least one from Column A. Vessels shall not use the same measure from Column A and Column B.
4. In all other areas, CPCs may require that longline vessels use at least one of the measures in Table 1.
5. Mitigation measures used shall conform to the minimum technical standards for the measures as shown in Annex 1.
6. The design and deployment for bird scaring lines shall meet the specifications provided in Annex 2.

[1] Hookline is defined as the groundline or mainline to which the baited hooks are attached by snoods.

7. CPCs shall provide to the Commission, as part of their annual reports, information on how they are implementing this measure and all available information on interactions with seabirds, including bycatch by fishing vessels carrying their flag or authorised to fish by them. This is to including details of species where available to enable the Scientific Committee to annually estimate seabird mortality in all fisheries within the IOTC area of competence.
8. The Scientific Committee, based notably on the work of the WPEB and information from CPCs, will analyse the impact of this Resolution on seabird bycatch no later than for the 2011 meeting of the Commission. It shall advise the Commission on any modifications that are required, based on experience to date of the operation of the Resolution and/or further international studies or research on the issue, in order to make the Resolution more effective.
9. *Resolution ~~06/04~~08/03. On Reducing Incidental Bycatch of Seabirds in Longline Fisheries* is superseded by this Resolution.

Table 1: Seabird mitigation measures

Column A	**Column B**
Night setting with minimum deck lighting	Night setting with minimum deck lighting
Bird-scaring lines (Tori Lines)	Bird-scaring lines (Tori Lines)
Weighted branch lines	Weighted branch lines
	Blue-dyed squid bait
	Offal discharge control
	Line shooting device

ANNEX I

Mitigation Measure	**Description**	**Specification**
Night setting with minimum deck lighting	No setting between nautical dawn and before nautical dusk. Deck lighting to be kept to a minimum	Nautical dusk and nautical dawn are defined as set out in the Nautical Almanac tables for relevant latitude, local time and date. Minimum deck lighting should not breach minimum standards for safety and navigation.
Bird-scaring lines (tori lines)	A bird-scaring line shall be deployed during longline setting to deter birds from approaching the branch line.	Design and deployment for bird-scaring lines are provided in Annex 2 of this Resolution.
Weighted branch lines	Weights must be attached to all branch lines in accordance with specifications provided	– minimum of 45 grams weight attached to all branch lines; – less than 60 grams weight must be within 1 metre of the hook; – 60 grams or greater and less than 98 grams must be within 3. 5 metres of the hook; and – 98 grams or greater must be within 4 metres of the hook
Blue-dyed squid bait	All bait must be dyed to the colour and shade shown in the placard provided by the IOTC Secretariat.	The standardized colour shall be equivalent to bait dyed using "Brilliant Blue" food dye (Colour Index 42090, also known as Food Additive Number E133) mixed at 0.5% for a minimum of 20 minutes.
Management of offal discharge	No offal discharge during setting. Strategic offal discharge may occur during hauling.	No offal discharge during setting. Offal discharge during hauling should be avoided if possible. If offal discharge is essential during hauling, it must be from the opposite side of the boat to hauling activity.
Line-setter or line-shooter	Permits a mainline to be set slack (no tension astern)	Position line-setter as close to the water line as feasible. Ensure mainline is pulled at a constant speed and slightly faster than the speed of vessel during line-setting, to ensure lines are set slack to aid sinking rate. Avoid setting into propwash.

ANNEX II

DESIGN AND DEPLOYMENT OF BIRD SCARING LINES (TORI LINES)

Bird-Scaring Line Design

1. The bird-scaring line shall be a minimum of 100 m in length and if less than 150 m in length will include an object towed at the seaward end to create tension to maximise aerial coverage. The section above water shall be a strong fine line of a conspicuous colour such as red or orange.
2. The above water section of the line shall be sufficiently light that its movement is unpredictable to avoid habituation by birds and sufficiently heavy to avoid deflection of the line by wind.
3. Streamers for the bird-scaring line shall be made of material that is conspicuous and produces an unpredictable lively action (e.g. strong fine line sheathed in red polyurethane tubing) and shall be suspended in pairs from a robust three-way swivel attached to the bird scaring line and shall hang just clear of the water.
4. There shall be a maximum of 5 m between each streamer pair.
5. The number of streamers shall be adjusted for the setting speed of the vessel, with more streamers necessary at slower setting speeds.

Deployment of Bird scaring Lines

1. The line shall be deployed before longlines enter into the water.
2. The line should have an aerial coverage of at least 100 metres. To achieve this coverage the line shall be suspended from a point a minimum of 5 metres above the water at the stern on the windward side of the point where the branch line enters the water.
3. The bird scaring line shall be set so that streamers pass over baited hooks in the water. The position of the object towed shall be maintained so as to ensure, even during crosswinds, that the aerial extent of the bird-scaring line is over the branch line as far astern of the vessel as possible.
4. Because there is the potential for line breakage and tangling, spare bird scaring lines shall be carried onboard to replace damaged lines and to ensure fishing operations can continue uninterrupted.

Figure 1. Diagram of Bird-scaring Streamer Line.