Fifth Meeting of the Seabird Bycatch Working Group

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Assessment of the Action Plan aimed at reducing incidental catch of seabirds in the French EEZ included in the CCAMLR division 58.5.1 and subarea 58.6

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ABSTRACT

France presented at the CCAMLR XXVIIth meeting, an action plan aiming to reduce incidental seabird mortality by half in the French EEZ included in the statistic division and subarea 58.5.1 and 58.6, for the period 2008/2009 to 2011/2012.

France demonstrated at the CCAMLR XXXth meeting, to have successfully fulfilled its commitments and to have obtained encouraging results concerning the global diminution of seabird incidental mortality.

In addition to the sharp decrease in incidental catch of seabirds in the French EEZ (see statistical report), this document presents new proposals that France would like to implement in order to pursue its efforts to minimize incidental captures.

Statistical review (since the beginning of the action plan):

- 79% decrease of seabird mortality in the French EEZ (part of CCAMLR 58.5.1 & 58.6) in between the 2007/2008 and the 2011/2012 fishing season.

- For the Kerguelen EEZ (part of CCAMLR 58.5.1), the seabird mortality decreased by 82.3 % between 2007/2008 and 2011/2012. The avian mortality kept decreasing along the last two fishing seasons, reducing from 273 to 216 killed birds.

- At Crozet (part of CCAMLR 58.6), the high decrease in the number of birds killed observed between the 2009/2010 and 2010/2011 fishing seasons was followed by a noticeable increase of seabird bycatch. Between the last two fishing seasons, the number of birds killed has more than doubled (rising from 31 to 68 birds killed).

- The establishment of a scaring and protection system of Brickle Curtain type resulted in a 79.6 % decrease of birds caught during hauling operations for the period between 2007/2008 and 2011/2012.

RECOMMENDATIONS

1. Protective measures: (sinking rate when setting lines, devices for long lines launching, scaring devices and Brickle curtain deployment)
2. Regulation (seasonal closure of fishing, setting line at night, ban on discards of hooks, stop illegal fishing, etc.)
3. Education and training
4. Data collection
5. Research and Development

Evaluación del Plan de Acción diseñado para reducir la captura incidental de aves marinas en la ZEE de Francia incluida en la división 58.5.1 y subárea 58.6 de la CCRVMA

Francia presentó en la XXVII reunión de la CCRVMA un plan de acción diseñado para reducir a la mitad la mortalidad incidental de aves marinas en la ZEE de Francia incluida en la división estadística y subárea 58.5.1 y 58.6, durante el período 2008/2009 a 2011/2012.

Francia demostró en la XXX reunión de la CCRVMA que había cumplido satisfactoriamente con sus compromisos y que había obtenido resultados alentadores en relación con la disminución global de la mortalidad incidental de aves marinas.

Además de la marcada reducción de la captura incidental de aves marinas en la ZEE de Francia (ver informe estadístico), este documento presenta nuevas propuestas que Francia desearía implementar con el objeto de llevar a cabo su iniciativa para reducir al mínimo las capturas incidentales.

Revisión estadística (desde el inicio del plan de acción):

- Disminución del 79% de la mortalidad de aves marinas en la ZEE de Francia (parte de 58.5.1 y 58.6 de la CCRVMA) entre la temporada de pesca 2007/2008 y 2011/2012.

- Para la ZEE de Kerguelen (parte de la división 58.5.1 de la CCRVMA), la mortalidad de aves marinas disminuyó el 82,3 % entre 2007/2008 y 2011/2012. La mortalidad aviar continuó disminuyendo a lo largo de las dos últimas temporadas de pesca, y bajó de 273 a 216 aves muertas.

- En Crozet (parte de la división 58.6 de la CCRVMA), a la fuerte disminución de muertes de aves observada entre las temporadas de pesca de 2009/2010 y 2010/2011 le siguió un notable aumento de la captura secundaria de aves marinas. Entre las dos últimas temporadas de pesca, la cantidad de aves que murieron aumentó más del doble (aumentó de 31 a 68 aves muertas).

- La implementación de un sistema de espantapájaros y protección del tipo “Cortina de Brickle” dio como resultado una disminución del 79,6 % en la captura de aves durante las operaciones de recogida de la red durante el período entre 2007/2008 y 2011/2012.

RECOMENDACIONES

1. Medidas de protección: (tasa de hundimiento del lance, dispositivos para el lanzamiento de palangres, dispositivos espantapájaros y despliegue de cortina de Brickle)
2. Normativa (cierre estacional de pesca, lance nocturno, prohibición de descartar anzuelos, impedir la pesca ilegal, etc.)
3. Educación y capacitación
4. Recolección de datos
5. Investigación y desarrollo

Évaluation du Plan d'action destiné à atténuer les captures accidentelles d'oiseaux marins au sein de la ZEE française de la division 58.5.1 et de la sous-zone 58.6 de la CCAMLR

Lors de la 27ème réunion de la CCAMLR, la France a présenté un plan d'action destiné à réduire de moitié la mortalité accidentelle des oiseaux marins dans la ZEE française de la division 58.5.1 et de la sous-zone 58.6 pour la période allant de 2008/2009 à 2011/2012.

Au cours la 30ème réunion de la CCAMLR, la France a démontré qu'elle a honoré ses engagements et qu'elle a obtenu des résultats encourageants concernant la diminution globale de la mortalité accidentelle des oiseaux marins.

En sus de cette atténuation spectaculaire des captures accidentelles d'oiseaux marins dans la ZEE française (voir rapport statistique), ce document présente les nouvelles propositions que la France souhaite mettre en œuvre afin de continuer à atténuer les captures accidentelles.

Bilan statistique (depuis l'entrée en vigueur du plan d'action):

- la mortalité des oiseaux marins au sein de la ZEE française a baissé de 79% (division CCAMLR 58.5.1 et sous-zone 58.6) entre les saisons de pêche de 2007/2008 et 2011/2012.

- S'agissant de la ZEE des îles Kerguelen (division CCAMLR 58.5.1), la mortalité des oiseaux marins a baissé de 82,3% entre 2007/2008 et 2011/2012. La mortalité aviaire a continué à baisser lors des deux dernières saisons de pêche, passant de 273 à 216 décès.

- Dans les îles Crozet (division CCAMLR 58.6), la diminution substantielle du nombre d'oiseaux tués entre les saisons de pêche de 2009/2010 et 2010/2011 a été suivie d'une diminution considérable du nombre de captures accidentelles d'oiseaux marins. Entre les deux dernières saisons de pêche, le nombre de décès d'oiseaux marins a plus que doublé (passant de 31 à 68).

- La mise en place d'un dispositif de protection et d'effarouchement semblable au rideau de Brickle a entraîné une diminution de 79,6 % des captures d'oiseaux lors de la remontée de l'engin entre 2007/2008 et 2011/2012.

RECOMMANDATIONS

1. Mesures de protection : (vitesse d'immersion lors de la mise à l'eau des palangres, dispositifs de lancement des palangres, dispositifs d'effarouchement et déploiement d'un rideau de Brickle)
2. Réglementation (interruption saisonnière de la pêche, pose des palangres de nuit, interdiction de jeter des déchets provenant d'hameçons, pêche illégale interdite, etc.)
3. Éducation et formation
4. Collecte de données
5. Recherche et développement

1. QUANTITATIVE ASSESSMENT OF THE EVOLUTION OF SEABIRD MORTALITY

1.1. Evolution of mortality in the French EEZ's (Crozet and Kerguelen)

Thanks to the ongoing conservation measures, bird mortality decreased from 1355 to 284 birds killed in between 2007/2008 and 2011//2012, that is 79% decrease. This result underlines the continuous diminution in bird incidental mortality in the French EEZ (Figure 1.a).

This downward trend of bird mortality is also apparent since 2009 in the figure 1.b presenting the results based on CCAMLR season. However, we can observe a substantial change between French season results (1 September to 31 August) and CCAMLR season (1 December to 30 November) results. The offset between the two calendars and the difference of extrapolation calculation methodology of 25% observe data can explain these variations.

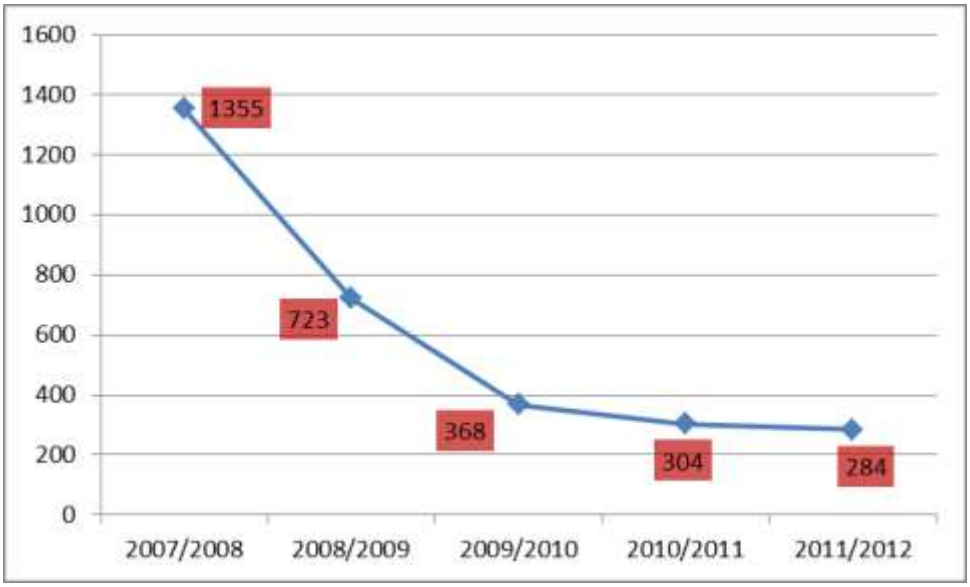

Figure 1.a : Trend in seabird mortality during deployment of longlines in the EEZ included in division 58.5.1 and subarea 58.6 between 2007/2008 and 2011/2012. Data based on French fishing season (1 September to 31 August).

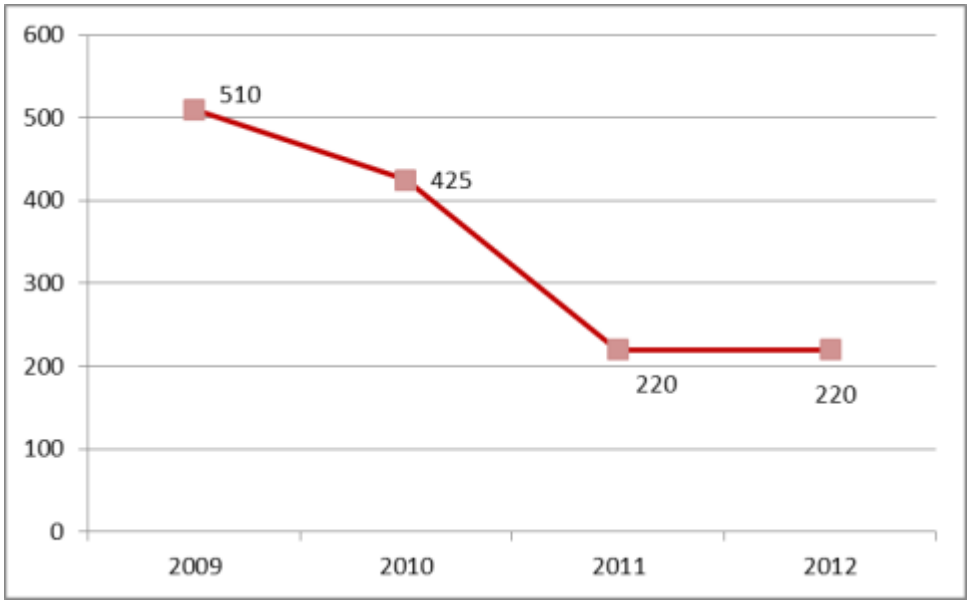

Figure 1.b : Trend in seabird mortality during deployment of longlines in the EEZ included in division 58.5.1 and subarea 58.6 between 2009 and 2012. Data based on CCAMLR season (1 December to 30 November).

Kerguelen EZ (part of division 58.5.1)

For the Kerguelen EEZ (part of division 58.5.1), seabird mortality decreased from 273 to 216, that is by 20.9%, between the two last fishing seasons (2010/2011 and 2011/2012) (Annex 1, Figure 2.a). This result is very encouraging as it is the best obtained since the implementation of the action plan. Capture rates (bird/1 000 hooks) follow the exact same trend with a decrease of 9.5% in between the two last fishing seasons. Over the same period, capture rates decrease from 0.0585 to 0.0099, which is a 83% diminution since the beginning of the action plan (Figure 3.a). This downward trend of bird mortality is also apparent since 2009 in the results based on CCAMLR season. (Annex 1, Figure 2.b et 3.b).

Crozet EZ (part of subarea 58.6)

For Crozet (subarea 58.6), the number of birds killed during the fishing season from 2007/2008 to 2011/2012 decreased of 48.1% (declining from 131 to 68). Over the last fishing season (2010/2011 to 2011/2012), however, results show a 54.4% increase in bird mortalities (Annex 2, Figure 4). These unsatisfactory results can be partially explained by the abnormal capture rates of vessels “3” and “6” of the French fishing fleet. Vessel “3” is responsible for more than half the number of birds killed in the subarea. This high capture rate is associated with technical incidents onboard the vessel (incidents during the setting of longlines resulting in slower sink rate).

Capture rates show high variability between fishing seasons 2008/2009 and 2011/20012 (Annex 2, Figure 5). As observed between 2008/2009 and 2009/2010, capture rates have been increasing between 2010/2011 and 2011/2012 fishing seasons.

Despite substantial variation between French and CCAMLR seasons results, trends are similar and both calendars (Annex 2, figure 4.b and 5.b).

1.1.1 Evolution of hauling incidental catch in the French EEZ

The establishment of a scaring and protection system of Brickle curtain type has allowed the decrease of incidental catch from the 2007/2008 fishing season. The decrease over the period 2007/2008 to 2011/2012 is 79.6 % (Figure 6).

For the entire French EEZ's (in division and subarea 58.5.1 et 58.6), seabirds bycatch decreased from 230 birds to 88 between 2010/2011 and 2011/2012 fishing seasons.

This highly satisfying result can be attributed to heavy work conducted to adapt scaring and protection systems to each vessel depending on its specificities.

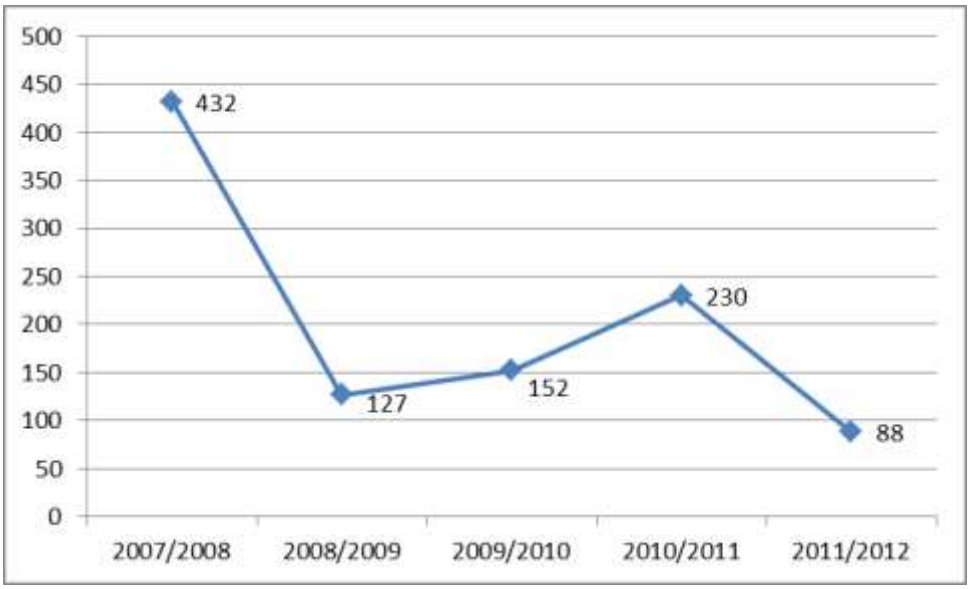

Figure 6 : Trend in the number of birds caught during longline hauling in the French EEZ's (part of division 58.5.1 and subarea 58.6) between 2007/2008 and 2011/2012. Data are based on French fishing season (1 September to 31 August).

2. RESEARCH PROJECTS ON THE LANDING SITES

The National Nature Reserve of the Southern French Territories, with the scientific support of CNRS-Chizé (France), has been conducting populations' census since 2010 on Kerguelen and Crozet bird's colonies.

2.1. Crozet archipelago (part of division 58.6)

Over the period 2010/2011, a comprehensive counting of the white-chinned petrel population has been conducted on the Possession Island (Crozet). Collected data are currently being analyzed at the CNRS-Chizé. This analyze should provide an accurate vision of the evolution

of the population since 2005 (year of the last census).
In addition, the demographic study started in 1986 by the CNRS-Chizé has continued to progress. Demographic parameters (survival rate of adults and chicks, recruitment rates, etc.) should be available by 2013.

At last, bird counts, notably for grey and white-chinned petrels, will be conducted in 2014 on the Islands of Apôtres, Pingouins, Cochons and Est (Crozet), as part of the management plan of the National Nature Reserve of the Southern French Territories. These counts aim at defining the population size of different bird species.

2.2. Kerguelen Archipelago (part of subarea 58.5.1)

In 2010, a population count of grey petrels was conducted on selected islands (Morbihan bay) of the Kerguelen archipelago. The resulting data should help refined the last estimation of grey petrels population size, proposed by *Barbraud et al*. in 2006. This work will be going on throughout 2012/2013 period.

In 2011, a demographic survey was again conducted on white-chinned petrels breading on île Haute (Morbihan bay, Kerguelen Archipelago). First demographic parameters should be obtained within 5-6 years from to this survey and therefore allow the monitoring of this population.

3. NEW IMPROVEMENTS PLANNED FOR THE 2012/2013 PERIOD

As announced at the last CCAMLR meeting, France wishes to pursue the entire set of conservation measures implemented within the framework of its action plan.

Taking into account results of the last fishing seasons, several measures will be strengthened in order to keep reducing seabird bycatch in the EEZ of Kerguelen and Crozet.

<u>Proposal for strengthening of measures:</u>

- Protective measures: (sinking rate when setting lines, devices for long lines launching, scaring devices and Brickle curtain deployment).

These measures will be continued.
Vessels with the higher capture rates, particularly vessels “3” and “6” of the French fishing fleet, will be closely monitored.

- Regulation (seasonal closure of fishing, setting line at night, ban on discards of hooks, stop illegal fishing, etc.)

These measures will be continued.

Beyond the general closure of the fishery (1st February – 15 March), the most sensitive statistical sectors of the Kerguelen fishing zone may be closed to fishing for the longliners

with the highest catch rates. This closure will take place in order to preserve the periods and areas where birds are most abundant.

Under the fishing regulations, and beyond the measures in the Action Plan, the managing fishery authority (TAAF) introduced in 2008 a strict quota allocation system based on objective criteria of ships' compliance. In addition to socio-economic and anteriority aspects, these criteria include the reduction of bird mortality, efforts to preserve the environment and the fishing capacity. Outcomes of incidental death represent the principal factor for which longliners with the worst results are sanctioned. Thus, for the 2012/2013 fishing season, the longliners with the highest catch rates (vessels "3" and "6") were sanctioned by a reduction in quota for the benefit of longliners with the best results. Sanctions (reduction of the quota), which are the immediate corollary of this objective distribution system of quotas, allow targeted actions on less efficient vessels

- Education and training

The steering committee on good fishing practices allows to regularly meet together the ship-owners, fishermen (masters and crew members), representatives of the management authority (TAAF) and scientists. This will be strengthened by regular meetings between fishing masters and the TAAF, at the departure and return of the longliners with the highest catch rates. These meetings will make it a point before and after the fishing cruise to ensure greater efficiency and better acceptance of the conservation measures.

- Data collection

Data collection and data transmission using CCAMLR standard will be continued.

- Research and Development

In 2011, at the Kerguelen Islands, a decision was made to launch a demographic study on the white-chinned petrel. This study will be conducted by staff from the nature reserve of the Southern French Territories, with the support of the National Center for Scientific Research (CNRS) of Chizé. The main objectives are to record various parameters (reproductive success, survival rate....) in this population.

Meanwhile, the counting of white-chinned petrels on the Kerguelen archipelago should allow evaluating the evolution trend in this bird population.

4. CONCLUSION

The results obtained (decrease of 80.2% between 2007/2008 and 2011/2012 fishing seasons) under the action plan represent a significant progress in the fight against incidental mortality in the French EEZ. These encouraging results should continue, particularly by strengthening the protection measures on the longliners with the highest catch rates. The daily work of monitoring the incidental mortality will be pursued as well as the awareness of the crew.

In the light of this year results for the fishing season in Crozet EEZ, a priority goal for the next season will be to reduce capture rates to those of 2010/2011 fishing season. Each

vessel, in particular vessels “3” and “6”, will therefore be daily monitored and the sustained work for the awareness of the crew will be pursued.

The strong diminution of incidental catch upon hauling highlights the ceaseless work being carried by all stakeholders involved in the fight against incidental seabird mortality. Results of the last fishing season leave to expect catch levels close to zero in the coming years.

The masters and crews are heavily involved in the implementation of the Action Plan. Advocacy work and the incentives created by the system of quota allocation encourage them to adopt best practices.

ANNEX 1. KERGUELEN seabird mortality trend

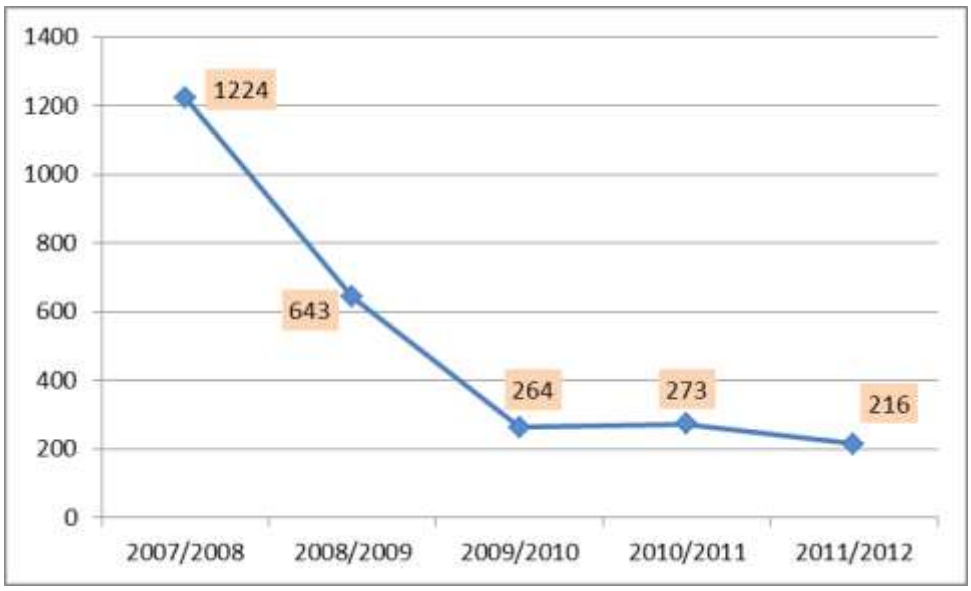

Figure 2.a : Trend in seabird mortality during deployment of longlines in the Kerguelen EEZ (belonging to division 58.5.1) between 2007/2008 and 2011/2012. Data are based on French fishing season (1 September to 31 August).

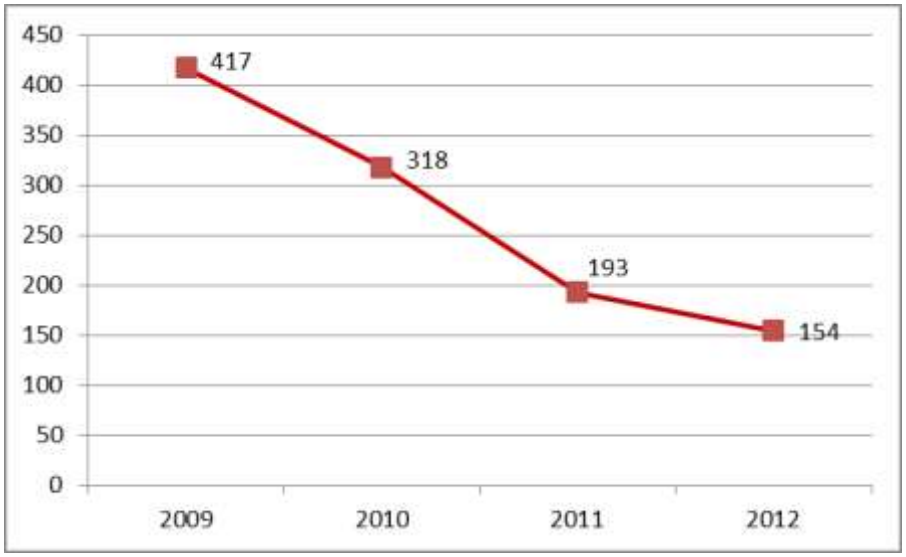

Figure 2.b : Trend in seabird mortality during deployment of longlines in the Kerguelen EEZ (belonging to division 58.5.1) between 2007/2008 and 2011/2012. Data based on CCAMLR season (1 December to 30 November).

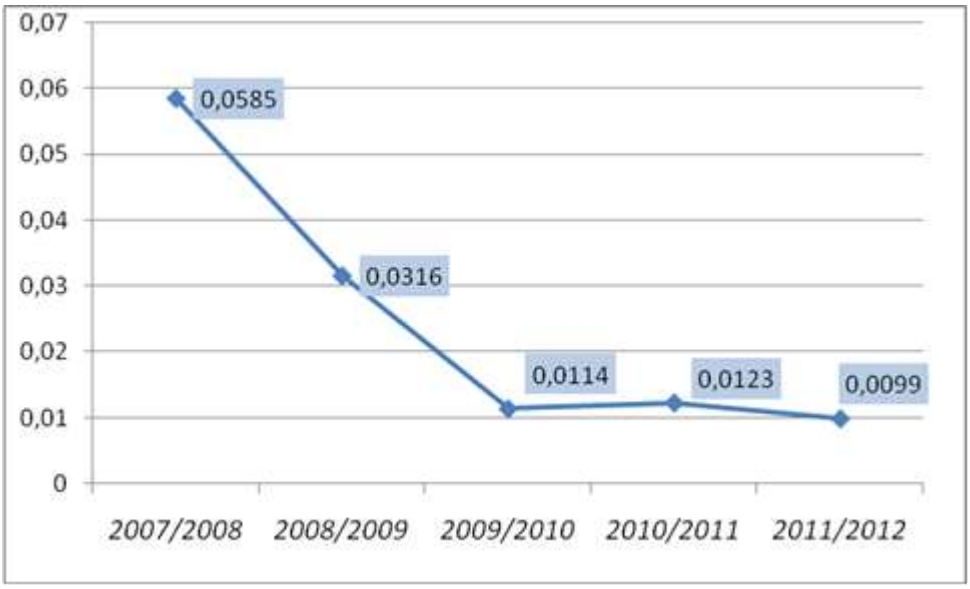

Figure 3.a : Trend of avian mortality dates during deployment of longlines in the Kerguelen EEZ (belonging to division 58.5.1) between 2007/2008 and 2011/2012. Data are based on French fishing season (1 September to 31 August).

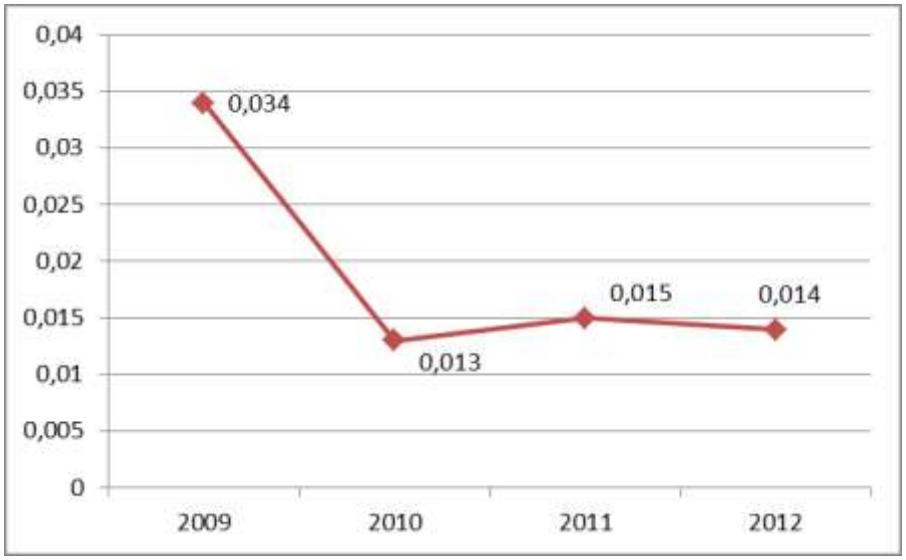

Figure 3.b : Trend of avian mortality dates during deployment of longlines in the Kerguelen EEZ (belonging to division 58.5.1) between 2007/2008 and 2011/2012. Data based on CCAMLR season (1 December to 30 November).

ANNEX 2. CROZET seabird mortality trend

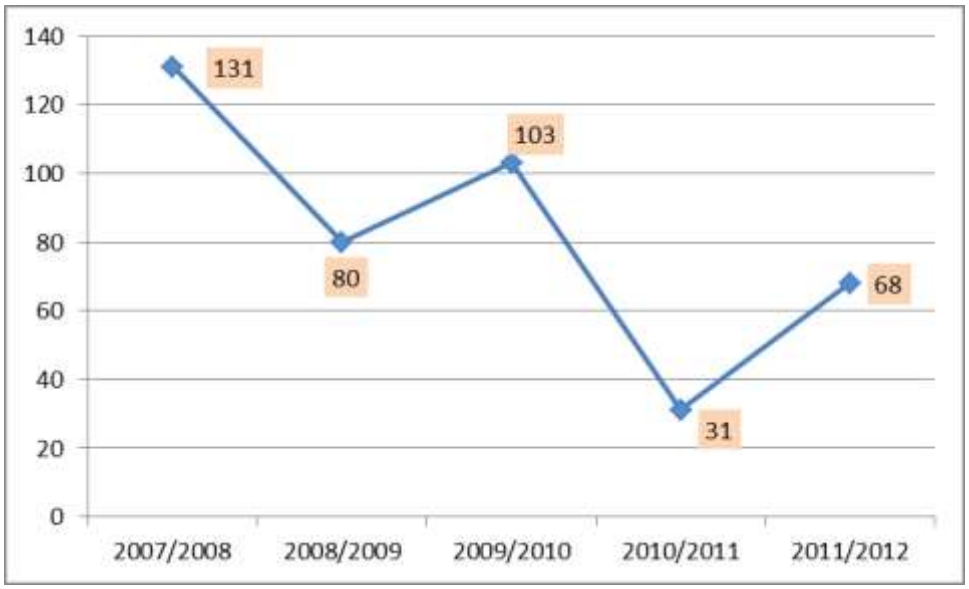

Figure 4.a : Trend in seabird mortality during deployment of longlines in the Crozet EEZ (belonging to subarea 58.6) between 2007/2008 and 2011/2012 fishing season. Data are based on French fishing season (1 September to 31 August).

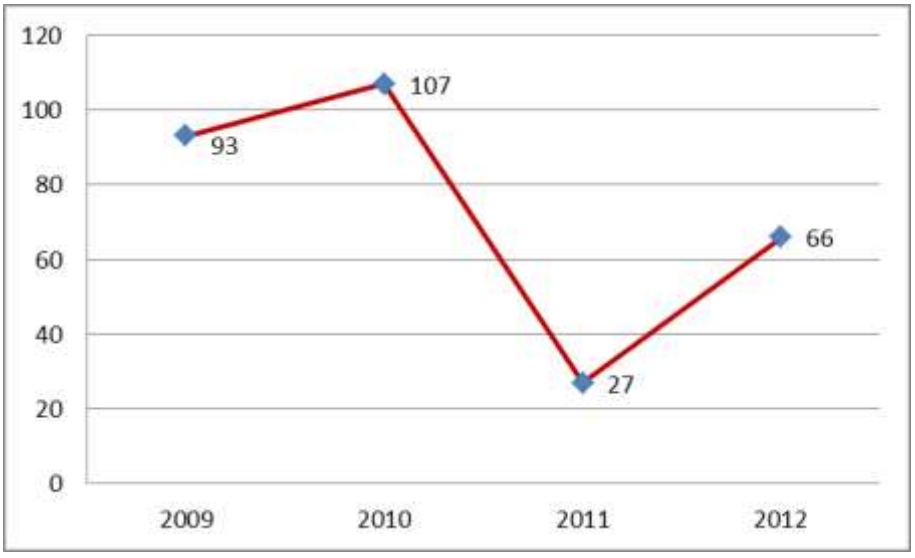

Figure 4.b : Trend in seabird mortality during deployment of longlines in the Crozet EEZ (belonging to subarea 58.6) between 2007/2008 and 2011/2012 fishing season. Data based on CCAMLR season (1 December to 30 November).

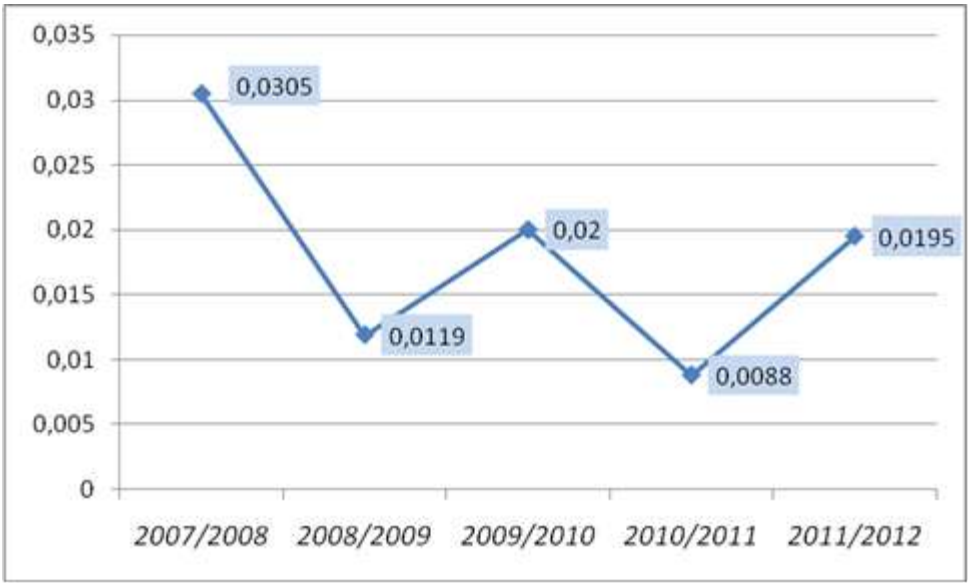

Figure 5.a : Trend of seabird mortality rates during deployment of longlines in the Crozet EEZ (belonging to subarea 58.6) between 2007/2008 and 2011/2012. Data are based on French fishing season (1 September to 31 August).

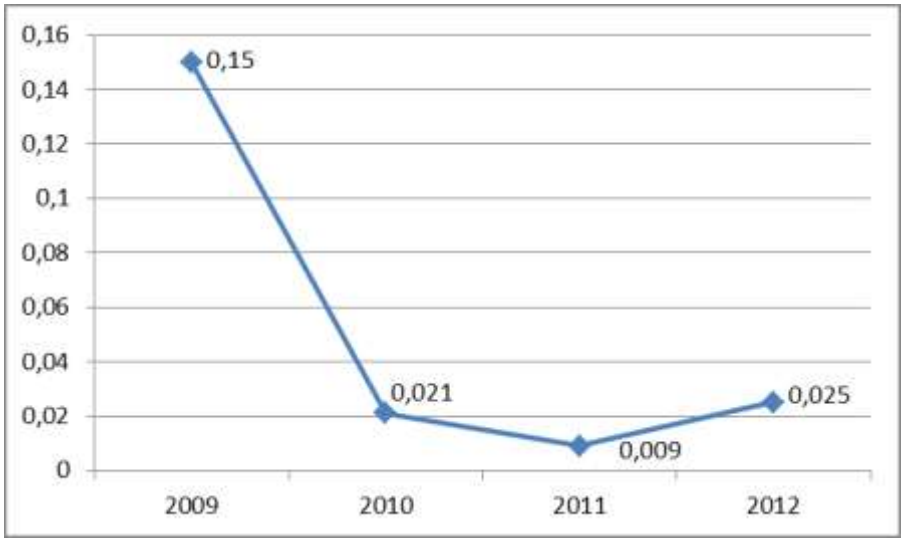

Figure 5.b : Trend of seabird mortality rates during deployment of longlines in the Crozet EEZ (belonging to subarea 58.6) between 2007/2008 and 2011/2012. Data based on CCAMLR season (1 December to 30 November).