

 <p>Agreement on the Conservation of Albatrosses and Petrels</p>	<p style="text-align: center;">Eighth Meeting of the Advisory Committee <i>Punta del Este, Uruguay, 15 -19 September 2014</i></p> <p style="text-align: center;">Contributions for ACAP species conservation in Brazil</p> <p style="text-align: center;"><i>Sant'Ana, R.¹, Santoro, A. A. R.^{1,2}, Neves, T.¹, Peppes, F.V.¹, Costa-Silva, A.^{1,2}, Saviolli, J. Y.¹, Gianuca, D.³, Ranieri, C.¹ and Serafini, P.⁴</i></p> <p style="text-align: center;"><small>1-Projeto Albatroz, 2-Albatross Task Force-Brazil, 3-University of Exeter/UK, 4-CEMAVE/ICMBio</small></p>
---	---

SUMMARY

This brief report was prepared in order to complement the information provided on the National Report and contains the some of the most important activities addressed to the conservation of ACAP species in Brazil. It is presented a summary about the implementation of NPOA-Seabirds/Brazil and the national rules for the mitigation measures, subject that have being received a lot of attention from government, fishing sectors, researchers and NGOs. Also it is presented the researches on the development of mitigation measures on board of longliners as an activity of Albatross Task Force Program in Brazil. Among this trails is highlighted the tests with hook pods and lumo leads, project approved by ACAP and in development at this moment. Also it is presented the creation of the Albatroz Network for Conservation Research by Projeto Albatroz and a brief explanation on education activities for fishermen and also for students.

Contribuciones para la conservación de especies del ACAP en Brasil

Este breve informe se elaboró con el objetivo de complementar la información provista en el Informe nacional e incluye algunas de las actividades más importantes dirigidas hacia la conservación de las especies del ACAP en Brasil. Se presenta un resumen de la implementación del PAN-Aves/Brasil y las reglamentaciones nacionales en materia de medidas de conservación, tema que ha recibido mucha atención por parte del gobierno, sectores pesqueros, investigadores y organizaciones no gubernamentales. Asimismo, también se sintetizan las investigaciones sobre el diseño de medidas de conservación a bordo de palangreros, como tarea del Programa del Grupo de trabajo sobre albatros de Brasil. Entre estos ensayos, caben resaltar las pruebas realizadas con los dispositivos de encapsulado de anzuelos Hookpod y los plomos deslizantes fosforescentes (*lumo leads*), proyecto aprobado por el ACAP y actualmente en curso. Además, se presenta la Red Albatroz para la investigación sobre la conservación, creada por la organización Projeto Albatroz y se explican brevemente las actividades educativas llevadas a cabo para pescadores y alumnos.

Contributions pour la conservation des espèces de l'ACAP au Brésil

Ce bref rapport a été préparé pour compléter les informations fournies dans le Rapport national, et il contient certaines des activités les plus importantes abordées à la conservation des espèces de l'ACAP au Brésil. Il présente un résumé sur la mise en œuvre du PAN-Oiseaux marins / Brésil et les règles nationales pour les mesures d'atténuation, sujet qui a reçu une grande attention de la part du gouvernement, des secteurs de la pêche, des chercheurs et des ONG. Il présente également les recherches sur le développement de mesures d'atténuation à bord des palangriers, une activité du Programme du groupe de travail sur les Albatros au Brésil. Parmi ces essais, l'accent est mis sur les essais réalisés avec des capsules à hameçon et des plombs luminescents, un projet approuvé par l'ACAP et en cours de développement. Enfin, il présente aussi la création du Réseau des Albatros pour la recherche sur la conservation, par Projeto Albatroz, et une brève explication sur les activités de formation destinées aux pêcheurs ainsi qu'aux étudiants.

1. POLICY ACTIONS

1.1. Brazil's National Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries (NPOA-Seabirds/Brazil)

Six years after publication of the NPOA-Seabirds/Brazil, its implementation went through an update and critical analysis of its implementation in the second half of 2012. Aiming its adaptation to the current national scenario and maximizing its synchronization with the correlated ACAP Plan of Action - Annex II It was taken in consideration the Best Practice Guides published in 2011 by the ACAP workgroup with the objective to reduce to minimal levels the incidental Seabirds catches. This revision included some species that were not contemplated in first edition of the National Action Plan. Therefore, the new list encompasses the following species: (i) Diomedeidae - *Diomedea dabbenena*, *Diomedea epomophora*, *Diomedea exulans*, *Diomedea sanfordi*, *Thalassarche cauta*, *Thalassarche chlororhynchos*, *Thalassarche melanophris*; (ii) Procellariidae: *Calonectris borealis*, *Calonectris edwardsii*, *Procellaria aequinoctialis*, *Procellaria conspicillata*, *Pterodroma arminjoniana*, *Pterodroma incerta*, *Puffinus lherminieri*, *Puffinus gravis*.

1.2. Surveillance and Compliance

Among the implementation actions of the ACAP and NPOA-Seabirds in Brazil, the most relevant procedures included the publication of Brazilian government normative that push forward the fishing fleet compliance in the use of the mitigation measures to reduce the incidental catches and mortalities of albatrosses and petrels. These associated with surveillance effort culminated in 2013, in the fining and embargo of the foreign Japanese longline fishery vessels acting in disconformity with Brazilian fisheries regulations.

1.3. Fishery Regulations

Despite of having related regulations since 2011, at this moment Brazil goes through midst of ongoing NPOA-Seabirds discussions regarding the review of effective fishery normative law shifts to the proposition of an enhanced regulation plan. This new fishery regulation establish updates in the mitigation structures composition. Adopting some recommendations proposed by ICCAT and according the ACAP Best Practices Guidelines plus a few new points in terms of fishing operations safety. Also formalizing the opening of opportunities to scientific observers on board of the commercial longline fishing vessels, expansion in the obliged scope of the satellite tracking to include the small longline fishing fleet and others relevant measures to ensure the data assessment and reduction Seabird bycatches.

2. SCIENTIFIC RESEARCH

2.1. Hookpod Experiments

As an effort of Albatross Task Force Program in Brazil (RSPB/BirdLife/Save Brasil), Projeto Albatroz conducted in 2013 the hookpod experiments that consisted in compare seabird bycatch and fishery production on pelagic long line between common used branch line (75 g leaded swivel 7 m off the hook) and branch line with hookpod (hookpod 7 m off the hook). The hookpod protect the barb of the hook during setting operations. When the fishing gear sinks to a safe depth (about 20m), the pod opens releasing the hook to begin fishing.

2.1.1. Seabird bycatch reductions

The hookpod was efficient to reduce seabird bycatch. When the hookpod was used with no additional mitigation measure (torilines, recommended line weighting, night setting) the seabird bycatch was zero, while 20 birds were caught with the same effort and under the same conditions. Only a single bird was caught on hookpod treatment during a night set.

2.1.2. Fisheries productions

The fish production of the fishing gear containing the hook pods did not differed from the standard gear contained leaded swivels. The analyses were made for four groups: tuna, shark, billfish and total. That's a important issue, once a mitigation measure that affects negatively the fishery production is likely to be refused by fisherman. So this result on fish catches is also an important key to promote the use of hookspods and convince fisherman about the advantages of use it. Despite the catches with the pods was not greater than in the control, the use of pods will became economically positive, once it save costs related to disposable chemical light sticks or constant replacement of batteries of electro lumens.

2.2. Lumo Leads Experiments

2.2.1. Ongoing summary

During the year of 2013 the project entitled "Comparative trials of Lumo Leads and traditional line weighting in the Brazilian pelagic longline fishery" was approved for ACAP grant to be executed in the years of 2014 and 2015. The project has the objective to evaluate the performance of the operational effectiveness of the Lumo Leads methods, comparing the branch lines sink and fish target catch rates against the traditional line weighting method used by the Brazilian fishing fleet. The Best Practice Guidelines published in 2011 by the

ACAP workgroup reported that the mitigation measures to reduce seabird bycatch have its efficiency improved when used together, as the Toriline combined with the night setting and/or an adequate line-weighting. The best weighting regimes recommended are the ones that make the baited hook reach a depth of at least 10 m while in the protection of a Toriline aerial coverage (~100m).

Brazilian active regulations instates that longliners fishing vessels, operating under 20° south, are obligated to use line weighting of at least 60 g no further than 2 m from the hook. One major concern raised from the vessel captains, fisherman and vessel owners about the regulation is the fisherman safety issue regarding the proximity of the weight to the hook, that could fly-back to the fisherman in an event of line breaking during the activity of pulling the catch of the water. The Lumo Lead experiment is of great importance to show to the fisherman, in a practical way, a safer lead weight alternative to help in the compliance of the mitigation measures and reduce the risk of work related accidents. The Lumo Leads experiment consists in testing three different treatments; (i) branch lines with 60g Lumo Leads weight placed at 0.5m from the hook.; (ii) branch lines set with 60g Lumo Leads weight placed at 3.5m away from the hook.; (iii) branch lines set with 60-75g simple lead weight placed at 5.5m away from the hook (control).

The project is separated in three critical phases; (i) Phase 1, the contact of vessels captain and owners in order to identify a partnership to allow the development of the research in the vessel.; (ii) Phase 2, organise six fishing cruises with observers to prepare and conduct the experiments along with the crew.; (iii) Phase 3, analyses of the collected data and production of reports with results to be presented during the AC9 meeting.

At the present moment the project has already identified partner vessels for the execution and is preparing to start the experimentation. The Lumo Leads weight have already been imported from the manufacturer and is current only awaiting for documentation clearance in the Brazilian customs. As soon as the material is at hand, the phase 2 will take place with the two ATF instructor's located in the ports of Itajaí (SC) and Rio Grande (RS).

3. CONSERVATION MEDICINE

3.1. Ongoing summary

Aiming for the strengthening, research development, management actions foundations and environment public policies toward the maintenance of the environment health, the Projeto Albatroz created in 2013 the Conservation Medicine Coordination. The ecological health promotion, that means, the connection between the human health, animal health and ecosystem health, will bring research and assessments from multiple ecological interactions, such as the transposition of different disciplines knowledge. Such Brazilian action came forth to attend the demands presented by ACAP, through the implementation of the Action Plans and its actions and measures, as 1. Species Conservation; 3. Management of human activities; 3.1 Impact assessment, fisheries incidental mortality; 3.3 Pollutants and marine debris; 3.4 Disturbance and; 4. Research and monitoring.

Also attending the national demands through the Specific Objective 3. Research and monitoring of biological aspects, the interaction between fishing and others relevant impacts for the conservation of albatrosses and petrels, and action 3.19 Evaluation and sanitary

monitoring of albatrosses and petrels populations that occurs in Brazil, from the NPOA-Seabirds.

Along with the conservation medicine coordination, it was created the “Rede Albatroz de Pesquisa para Conservação” (Albatroz Network for Conservation Research). Managed by the Projeto Albatroz, it has the purpose to expand the research potential, inciting new acting lines through the expertise produced by Projeto Albatroz throughout its history. This network will unite participating members, such as research institutes, fauna monitoring, rehabilitation centers, laboratories, museums, researchers and others who are willing to be part, generate and disseminate information in the field of marine ecosystem conservation in Brazil. Recently approved, the document of the “Network” creation, find it self in ways of its implementation and signature of the first technical cooperation terms between members.

4. ENVIRONMENTAL EDUCATION AND AWARENESS

Environmental education and awareness activities are developed with fishermen and students, always focusing on the preservation of marine resources and, mostly, on the conservation of endangered species which are incidentally caught by fisheries in Brazil. Such activities of informative nature and awareness for preservation of the oceans and their natural resources are developed for each of the stakeholders in an appropriated language.

4.1. Environmental education for students

Projeto Albatroz maintains the “Albatross in Schools” program since 2012 sponsored by Petrobras through Programa Petrobras Socioambiental (Petrobras Social and Environmental Program) for children of first scholar stage (from 7 to 11 years old) from both private and public schools in Brazil. During this work the teachers are capacitated and encouraged to adopt content about the marine conservation on classes. They get a manual of marine environmental education, especially developed by Projeto Albatroz’ team of educators, with suggested activities to be applied to kids during the classes in several disciplines. At same time, the students receive a booklet with similar content. During a week, many activities are developed by the Projeto Albatroz team and volunteers involving presentations and the “Albatross Space”, built in a common area of the school, where the students learn the main characteristics of albatrosses and petrels and the importance of the sea in our lives with games and ludic activities.

4.2. Environmental education for fishermen

Efforts of environmental education for fishermen (skippers, crewmembers) are systematically applied by Projeto Albatroz’s instructors as an activity of Albatross Task Force Program. Since the creation of Projeto Albatroz these activities were already being done and it is one of the most important tools to test, develop, introduce and implement mitigation measures on board of longline vessels in order to reduce seabirds bycatch in Brazil. Educational material is continuously distributed to inform fishermen about their role in saving these birds from extinction in a way to aware them about the necessity to use the mitigation measures simultaneously in order to contribute to the marine conservation. This work is made at the ports but also during the fishing trips when instructors are at sea following the fishing activities, collecting data and testing the measures.