

SEABIRD BYCATCH MITIGATION IN THE MEDITERRANEAN

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SUMMARY

The paper provides an overview of seabird bycatch regulations and activities with the aim of providing an update on seabird mitigation activities and existing regulations at regional scale in the Mediterranean to the ICCAT Sub-Committee on Ecosystems of Recommendation GFCM/35/2011/3 on reducing incidental catches of seabirds in fisheries includes data submission requirements and identifies the Scientific Advisory Committee on Fisheries (SAC) as central to evaluating bycatch risk, developing monitoring and providing advice on specific mitigation options. The recommendation does not include requirements for the implementation of mitigation measures by vessels. In order to strengthen the collection and processing of data across the region the SAC has developed the Data Collection Reference Framework (DCRF), which establishes a minimum set of parameters against which countries must report. It includes area-based information on national fleets and their activities, catch and effort and biological information on the main species, including incidental catch of vulnerable species. Currently, GFCM Members are discussing the implementation of a mid-term strategy towards the sustainability of Mediterranean and Black Sea fisheries (2017-2020), which is expected to establish a bycatch monitoring programme to obtain representative data on discards and incidental catches, with a view to facilitating the adoption of required management measures towards the reduction of bycatch rates.

RÉSUMÉ

Le présent document fournit un aperçu général des réglementations et des activités concernant les prises accessoires d'oiseaux de mer dans le but d'offrir au Sous-comité des écosystèmes de l'ICCAT une mise au point sur les activités liées à l'atténuation des prises accessoires d'oiseaux de mer et des réglementations en vigueur à échelle régionale en Méditerranée. La Recommandation CGPM/35/2011/3 sur la réduction des captures accidentelles d'oiseaux de mer dans les pêcheries prévoit des exigences en matière de soumission des données et attribue au Comité scientifique consultatif (CSC) le rôle central d'évaluer les risques de prises accidentelles, de développer des mesures de suivi et de formuler un avis sur les possibilités spécifiques d'atténuation. La recommandation ne prévoit pas d'exigences en ce qui concerne la mise en œuvre de mesures d'atténuation par les navires. Afin de renforcer la collecte et le traitement des données dans la région, le Comité scientifique consultatif a mis au point le cadre de référence de collecte de données (DCRF) qui établit un ensemble minimal de paramètres sur lesquels les pays doivent faire rapport. Ce cadre inclut des informations fondées sur la zone concernant les flottilles nationales et leurs activités, la prise et l'effort ainsi que des informations biologiques sur les principales espèces, incluant la prise accidentelle d'espèces vulnérables. Actuellement, les membres de la CGPM étudient la mise en œuvre d'une stratégie à moyen terme en vue de la durabilité des pêcheries en Méditerranée et mer Noire (2017-2020), qui devrait établir un programme de suivi des prises accessoires en vue d'obtenir des données représentatives sur les rejets et les prises accidentelles, dans le but de faciliter l'adoption des mesures de gestion nécessaires à la réduction des taux de prise accessoire.

RESUMEN

Este documento proporciona una visión general de las reglamentaciones y actividades sobre captura fortuita de aves marinas con el objetivo de presentar al Subcomité de ecosistemas de ICCAT una actualización de las actividades de mitigación de captura fortuita de aves marinas y de las reglamentaciones existentes a escala regional en el Mediterráneo. La Recomendación

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CGPM/35/2011/3 sobre la reducción de las capturas incidentales de aves marinas en las pesquerías incluye requisitos sobre la presentación de datos e identifica al Comité científico asesor sobre pesquerías (SAC) como fundamental en la evaluación del riesgo de captura fortuita, el desarrollo del seguimiento y la formulación de asesoramiento sobre opciones de mitigación específicas. La recomendación no incluye requisitos para la implementación de medidas de mitigación por parte de los buques. Con el fin de reforzar la recopilación y procesamiento de los datos en la región, el SAC ha desarrollado un Marco de referencia para la recopilación de datos (DCRF) que establece un conjunto mínimo de parámetros sobre los que los países deben informar. Incluye información sobre las flotas nacionales y sus actividades basada en el área, información biológica y sobre captura y esfuerzo de las principales especies, lo que incluye la captura incidental de especies vulnerables. Actualmente, los miembros de la CGPM están debatiendo la implementación de una estrategia a medio plazo para la sostenibilidad de las pesquerías del Mediterráneo y el mar Negro (2017-2020), que está previsto que establezca un programa de seguimiento de la captura fortuita para obtener datos representativos de los descartes y las capturas incidentales, con miras a facilitar la adopción de las medidas de ordenación necesarias para reducir las tasas de captura fortuita.

KEYWORDS

GFCM, Mediterranean, seabird, bycatch, data collection, fishery regulations

1. Background

1.1 Threats to seabirds in the Mediterranean

The Mediterranean Sea and Black Sea are important for seabirds, including the Critically Endangered Balearic shearwater (*Puffinus mauretanicus*), the endemic Yelkouan shearwater (*Puffinus yelkouan*), Scopoli's shearwater (*Calonectris diomedea*), Audouin's gull (*Larus Audouinii*) and the European shag (*Phalacrocorax aristotelis*). In addition to these species, a number of other seabird species are listed in the Annexes of the Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean- a protocol of the Barcelona Convention.³ The Mediterranean region is a region of intensive human use. Many of the seabird species face threats on land and at sea. On land this includes high pressure from coastal developments affecting availability of breeding and wintering habitat, and predation at colonies from native and invasive species. At sea the main threats include interaction with fisheries (bycatch) and the lack of prey caused by depletion of fish stocks, and from acute and chronic pollution (oil spills, chemical discharges, etc.) and disturbance from maritime traffic (Tarzia *et al.*, 2015; Yesou *et al.*, 2016). Of these threats, bycatch in fisheries is predicted to be one of the most significant drivers in the population decline of the Balearic Shearwater (Genovart *et al.*, 2016).

1.2 GFCM role and activities

The General Fisheries Commission for the Mediterranean (GFCM) was established under the provisions of Article XIV of the FAO Constitution with competence over the Mediterranean Sea, the Black Sea and connecting waters (the GFCM area of application). The GFCM's objective in this area is to promote the development, conservation, rational management and best utilisation of living marine resources, as well as the sustainable development of aquaculture. The Commission plays a critical role in fisheries governance in the region, coordinating and fostering cooperation among its 24 Contracting Parties (23 countries and the European Union) and three Cooperating non-Contracting Parties (Bosnia and Herzegovina, Georgia and Ukraine). The GFCM closely cooperates with other international organisations, promoting issues of mutual interest and creating synergies for enhanced scientific cooperation and capacity-building.

The Commission has the authority to adopt binding recommendations for fisheries conservation and management in its area of application. The GFCM implements its policies and activities during the intersessional period by means of several technical committees, such as the Scientific Advisory Committee on Fisheries (SAC) and the Compliance Committee, as well as their respective working groups. The SAC, in particular, provides the

³ The Barcelona Convention <http://www.unepmap.org/index.php?module=content2&catid=001001001> and the Annex to the Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean http://195.97.36.231/dbases/webdocs/BCP/ProtocolSPA96annexesAmendmentsCoP18_Eng.pdf

Commission with independent advice on the technical and scientific basis for decisions related to fisheries conservation and management, including biological, social and economic aspects. The GFCM also supports technical assistance and capacity building efforts at the national, subregional and regional level in order to level the playing field and enhance the responsiveness of developing countries to agreed policies, priorities and strategies.

1.3 Recommendation GFCM/35/2011/3 on reducing incidental catch of seabirds in fisheries

Based on the GFCM seabird recommendation (Rec. 35/2011/3), which acknowledges ICCAT Recommendation 07-07 on reducing incidental catch of seabirds in longline fisheries, Contracting Parties and Cooperating non-Contracting Parties (CPCs) of GFCM should develop mechanisms to ensure that incidental capture of seabirds in fishing activities is monitored, recorded and kept to the lowest levels possible, particularly for species listed under Annex II of the SPA/BD protocol of the Barcelona Convention. While there is currently no seabird bycatch mitigation requirement for vessels fishing within the GFCM area of application, the recommendation encourages voluntary uptake of mitigation measures.

Recommendation 35/2011/3 requires that any event of incidental capture and release in the area of application shall be recorded by the vessel owner/master in the logbook (or any equivalent document as developed by a Contracting Party to this specific end) and reported to national authorities for notification to the GFCM Secretariat. The recommendation tasks the SAC and the GFCM Secretariat to develop mechanisms to enable CPCs to monitor and record data on seabirds and fishing interactions, including regular reporting to the GFCM Secretariat, either within the national annual reporting to the SAC (i.e. National Report) or through the recently developed Data Collection Reference Framework (DCRF, see 3.1 below).

Within the recommendation the SAC is invited to evaluate, on the basis of available information and in close cooperation with relevant international scientific committees, the risk of incidental capture and mortality of seabirds in different types of Mediterranean fisheries. Such evaluation should also take into account areas and seasons and should compare the effects of bycatch among them. In addition, the SAC shall provide advice on the most adequate mitigation measures and also compare the relative effectiveness of mitigation against action on other non-fishing related anthropogenic impacts.

The SAC, in close cooperation with scientific committees of other international organisations and in line with the FAO International Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (FAO-IPOA Seabirds), is also requested to provide advice on the technical details, feasibility, likely effectiveness and side effects, in particular, of the following options for the mitigation of bycatch of seabirds in Mediterranean fisheries:

- Setting of demersal and/or pelagic longlines only at night (one hour after dusk and one hour before dawn);
- Prohibition of setting demersal and/or pelagic longlines one hour after dawn until noon;
- Use of bird-scaring lines and wrap scares, in case of the setting of longlines during the day;
- Establishment of a minimum bait weight
- Use of only thawed baits conditioning instead of frozen baits;
- Discards and excess bait shall not be rejected at sea during setting or hauling operations;
- Establishment of a minimum distance from sea-bird breeding areas for setting bottom-set nets

These measures are not currently required under GFCM Recommendation 35/2011/3.

2. Existing and planned activities

2.1 Seabird bycatch reduction activities in the Mediterranean

BirdLife International established a European Seabird Task Force⁴ in 2014 to work with fishermen to help tackle the seabird bycatch problem in Europe. This established a team of seabird bycatch mitigation experts to work alongside fishermen to monitor bycatch and develop solutions to accidental capture, with activities currently focused on demersal longlines in Spain and set gillnets in Lithuania, Poland and Portugal. Within the Mediterranean this includes activities along Spain's north-eastern Mediterranean coast, in the region of Catalonia, working with Sociedad Española de Ornitología (SEO/BirdLife) and small-scale demersal longline

⁴ European Seabird Task Force website: www.seabirdbycatch.com

boats. These vessels - targeting sea bream and hake and operating over the continental shelf – are known to pose a threat particularly to Balearic Shearwater during the breeding season (Genovart *et al.*, 2016) and to the Scopoli's Shearwater (Least Concern) and potentially to the Yelkouan shearwater (Vulnerable). Due to the sporadic nature of bycatch further monitoring effort is necessary in order to provide a more accurate estimate of bycatch rates and assess the effectiveness of mitigation solutions.

Furthermore, BirdLife International has focused on European Union (EU) legislation and planning to achieve improvements to data collection on seabird bycatch. This has included providing recommendations to the EU institutions regarding the European Commission's proposal to update the Data Collection Framework Regulation of 2008.

2.2. GFCM mid-term strategy towards the sustainability of Mediterranean and Black Sea fisheries

In 2016, the GFCM published its first report on the State of Mediterranean and Black Sea fisheries (FAO, SoMFI – 2016), including a first attempt to estimate bycatch rates per area and fishing gear, as well as incidental catches of several groups of vulnerable species (birds, mammals and turtles). The report highlighted main fleet segments, areas and species affected by bycatch, and stressed on the need to improve the existing information, especially for vulnerable species, in order to have a comprehensive assessment on which to base future management measures.

On the basis of the situation highlighted within SoMFI 2016, the last session of the GFCM approved Resolution GFCM/40/2016/2 for a mid-term strategy (2017-2020) towards the sustainability of Mediterranean and Black Sea fisheries. Although the details of the implementation of this strategy are still under discussion, one of its targets is the reduction of bycatch rates (discards and incidental catch of vulnerable species) through the implementation of a bycatch monitoring programme, expected to obtain representative data on the discard component of total bycatch in Mediterranean and Black Sea fisheries, as well as information on the incidental catch of vulnerable species (including not only seabirds but also turtles and marine mammals) that could occur during sampled fishing operations, with a view to facilitating the adoption of required management measures towards the reduction of bycatch rates.

3. Data collection frameworks

3.1 The GFCM Framework Programme and Data Collection Reference Framework

Systematic collection and reporting of data is essential to tackling seabird incidental catch. Guidelines to tackle seabird bycatch (e.g. Carboneras, 2009) suggest that data collection protocols for Mediterranean observer programmes should follow the standards of appropriate RFMOs, such as ICCAT or GFCM, so that they can be shared and interpreted in international forums.

In 2014, the GFCM amended its legal framework and the Agreement for its establishment with a view to enhancing its efficiency and thus positioning itself to better respond to current and future regional challenges. Stemming from the amendment process, the GFCM created a Framework Programme (FWP), which was conceived as a platform to promote sustainable development and cooperation in the Mediterranean and the Black Sea through multiannual and multi-donor arrangements. It was also envisaged to strengthen intra-institutional cooperation and coordination in matters relating to marine capture fisheries and aquaculture at the regional level through the implementation of a series of work packages involving partner organisations.

In the context of this FWP, the GFCM has developed the Data Collection Reference Framework (DCRF), an instrument developed by the SAC as a concrete response to the need to strengthen the collection and processing of data on fisheries in the GFCM area. It aims to be instrumental in achieving a more efficient data collection programme in the whole region and to better integrate data collection and subregional management plans. In order to fulfil the GFCM objectives, the data collected within the DCRF encompass area-based information on national fleets and their activities, catch and effort and biological information on main species, including discards and incidental catch of vulnerable species.

In case of incidental catch of vulnerable species (i.e. seabirds, sea turtles, cetaceans, monk seal and sharks), countries should report a minimum set of parameters, such as the number of specimens caught per fishing gear. Reported data should be aggregated by species group and/or family if the detailed information by species is not available (e.g. when specimens could not be identified at species or genus level as it is the case of the recording of seabirds, which includes a large number of possible species). It will be also important to report the total number of individuals caught even though they have been released alive, dead or in unknown condition.

3.2 EU activities on seabird bycatch and synergies and gaps with GFCM DCRF

In 2012, the EU adopted the EU Seabird Plan of Action which detailed the ongoing problem of seabird bycatch in the EU and recommended actions that needed to be taken, including legislative, to minimise and where possible eliminate seabird bycatch. In 2013, the EU reformed its Common Fisheries Policy which committed to tackle seabird bycatch through fisheries management, in particular through technical conservation measures and data collection.

In 2015, the European Commission proposed an update to the Data Collection Framework (DCF) regulation. This regulation details the scope of what data Member States need to collect. The update of the 2008 DCF regulation intends to align to the commitments of the Common Fisheries Policy, including to minimise the impact of EU fisheries to the wider environment (e.g. seabirds). The European Commission has adopted a new implementing decision in August 2016 for a multiannual programme for data collection in the fisheries and aquaculture sectors for the period of 2017-2019. Even though the updated legislation has not yet been adopted, in the interim all fisheries, according to this new implementing decision, will observe and record incidental catches of all birds, mammals and reptiles and fish protected under EU legislation and international agreements - although they are not legally obliged to.

In March 2016, the European Commission further proposed a new legislation to tackle technical measures under fisheries management (Technical Conservation Measures (TCM) regulation), including to minimise and where possible eliminate seabird bycatch. This proposed legislation intends to set default measures per region that Member States will need to implement, including measures to tackle seabird bycatch in longlines in the Mediterranean. In the case of the Mediterranean, EU Member States will then propose sub-regional recommendations to the European Commission on any additional or different technical measures which would then be adopted as delegated acts by the European Commission.

GFCM has not yet proposed technical mitigation measures related to the incidental catches of seabirds in the Mediterranean therefore the current focus is on synergies between the data collection frameworks. Synergies exist between both the new EU DCF and GFCM's DCRF. Both frameworks include the request for the recording of incidental catch (in the EU case this will be legally binding once adopted). EU Member States do not currently have any EU legislative obligation to systematically collect data on seabird bycatch. Even with the new updated multiannual programme running from 2017-2019, until the DCF regulation is updated, Member States are not obliged to collect this data. The European Commission's legislative proposal to update its DCF legislation is of course a first step to remedy this. Nevertheless, this still needs to undergo ordinary legislative procedure, be translated to regional and national data collection plans, and then further controlled and enforced. Therefore due to the differing time frames in creating these two data collection frameworks, and the as yet unadopted EU DCF, there is a need for a detailed review on synergies and gaps between the two frameworks and for any future mitigation measures which might be proposed for the region.

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