

Journée technique **Bilan des connaissances sur les captures accidentelles d'oiseaux marins**

G.Simian et L.Guerin
MNHN, Paris, 25 janvier 2019

Travaux internationaux **JWGBIRD**

[cliché Alexandra Rohr]

INTRODUCTION

- **JWGBIRD = HELCOM-OSPAR-ICES JOINT WORKING GROUP ON SEABIRDS**

- ✓ Plateforme d'experts de la Mer Baltique, mer du Nord et de l'Atlantique Nord Est qui travaillent sur les problématiques oiseaux marins
- ✓ 1 réunion annuelle – 1 rapport annuel
- ✓ Terms Of Reference (TOR) décidés conjointement par HELCOM, OSPAR et ICES
- ✓ Espace de travail collaboratif en ligne: sharepoint
- ✓ Représentants français: B.Cadiou et G.Simian



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JWGBird 2018, 1-5 octobre 2018, Ostende



INTRODUCTION

- **JWGBIRD 2018 (1/5 OCTOBRE, OSTENDE) - TOR:**

- ✓ A) Construct an indicator of breeding productivity and conduct a trial assessment
- ✓ B) Continue analyses of trends from OSPAR and HELCOM assessments
- ✓ C) Review of techniques for measuring and communicating confidence in assessments
- ✓ **E) GES integration rules for birds** – test various methods for integrating within species of assessments of multiple criteria
- ✓ F) Review national MSFD assessments relating to OSPAR Candidate indicators on birds and recommend future action on these indicators
- ✓ **G) Review and sign-off a trial assessment of black-legged kittiwake** in the OSPAR Maritime Area, drafted by UK & NO
- ✓ **H) Provide a concise report on progress made so far in relation to assessing mortality in marine birds from bycatch**



JWGBIRD 2018 – Task H: Bycatch

- **CONTEXTE:**

- ✓ **Atelier OSPAR-HELCOM** sur les captures accidentelles de mammifères marins, oiseaux et tortues prévu en 2019;
- ✓ **BDC 2018:** lacune identifiée sur ce sujet (aucun indicateur commun OSPAR ou HELCOM);
- ✓ **Décision révisée** sur le BEE (2017): captures accidentelles = indicateur primaire pour le D1.



Agenda Item 2.4

ICG-COBAM (7) 18/2/1

OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic
Meeting of the Intersectoral Correspondence Group on the Coordination of Biodiversity
Assessment and Monitoring (ICG-COBAM)
Madrid: 27 – 29 November 2018

Proposal for joint OSPAR-HELCOM workshop on incidental bycatch assessment

Presented by the Convenors

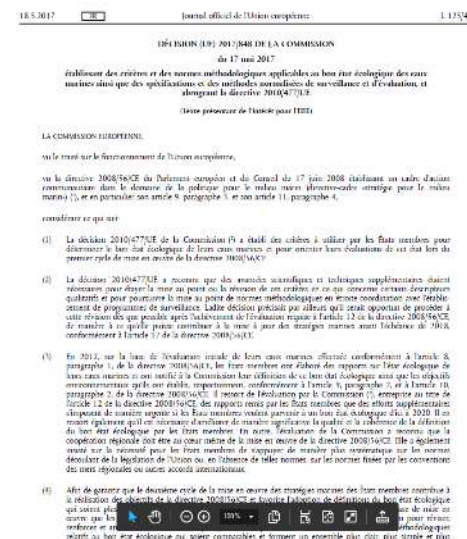
Issue: A proposal for terms of reference for a workshop on possibilities for the
Incidental bycatch has been developed and commented on. ICG-COBAM should
comments received on it and give guidance on development of a final proposal
2019.

Action Requested

1. ICG-COBAM is invited to:
 - a. consider the further developed proposal for a workshop on incidental bycatch and the most recent comments received on it and give guidance on development of a final proposal for submission to BDC 2019;
 - b. consider and review progress made in the expert group's workshop;
 - c. note the interest within HELCOM in developing this initiative as a pilot and consider how best to build linkages to other organisations and ACCOBAMS, ICES, DC-MAP and the regional coordination groups;
 - d. develop advice to BDC on practicalities and resources for organising (timing, preparation).

Background

2. BDC 2018 considered proposals for future orientation of OSPAR biodiversity work taking into account the revised EU Commission Decision 2017/946/EU. Decision includes primary criterion D1C1 addressing mortality of species from bycatch.
3. Of the current OSPAR common indicators, only MG (By catch of harbor D1C1). In preparing IAGOS-7 Contracting Parties expressed concerns over the available estimates of by-catch. Hence, no assessment against existing ACCOBAM made in IAGOS-7. For other species of marine mammals as well as for birds and no operational indicators for bycatch. Bycatch indicators for some species of as part of the EMFF funded MASTIC-STATS project.
4. ICG 2018 agreed that the ICG-COBAM Convenors, the Secretariat and the should develop proposals.



- **REQUEST:** Provide a concise report on progress made so far in the NE Atlantic, Baltic on the following tasks, in relation to assessing mortality in marine birds from bycatch:
 - ✓ **1-** Collate possible risks for species group associated with specific gears;
 - ✓ **2-** Collate any existing national or regional proposals for high risk areas based on species occurrence/density and occurrence/effort of gears associated with risk including the methods used to identify the areas;
 - ✓ **3-** Collate and list information on already existing data sources related to by-catch numbers and fishing effort;
 - ✓ **4-** Collate any existing national or regional indicator assessment methods of threshold setting for the species group, such as Catch Limit Algorithm advice by ICES for marine mammals.



1- Sensibilité de chaque groupe d'espèces et techniques de pêche associées

• TABLEAU DE SYNTHÈSE:

- ✓ Surveillance des prises accessoires d'oiseaux marins très limitée dans les eaux européennes
- ✓ Le risque de capture accessoire dépend à la fois de la présence et du comportement des oiseaux
- ✓ De façon générale:
 - Oiseaux de surface : plus sensibles aux prises accessoires dans les pêcheries à la palangre (+ tous types d'engins lors du déploiement)
 - Espèces plongeuses: davantage affectées par les filets maillants et les casiers / pièges

Gear type		Location of water column where gear is most likely to catch seabirds (from Bradbury et al., 2015)			Species/families known to be brought in by Atlantic	Global published reports of species groups caught by each gear type (number of publications in parentheses)
Midwater Level (2/3)	Midwater level (3)	Surface	Pelagic	Benthic	European waters (KCS 2003)	WoodsHole & Pratt 2007*
Isotry/Surface trawl	Purse Seine (PS)	X	X		Belted shearwater, Cory's shearwater, northern gannet, gulls, aul	Shearwaters (3) Sulls (4) Cormorants (1) Gulls (3) Ducks (1) Auls (4)
Isotry/Pelagic trawl	Midwater otter trawl (OTM)	X	X		OTM - northern gannet	OTM: Petrels (8) Shearwaters (4) Storm petrels (3) Sulls (1)
Isotry/Bottom trawl	Midwater pair trawl (PTM)					Auls (1) PTM: Sulls (1)
	Beam trawl (TBB)	X		X	OTB: northern gannet, shearwaters, great cormorant, European shag, gulls, guillemots,	OTB & TBB: Petrels and fulmars (7) Shearwaters (8) Storm petrels (2) Sulls (2)
	Bottom otter trawl (OTB)					Cormorants (4) Gulls (4) Auls (1)
	Multi-ring otter trawl (OTT)					PTB: Storm petrels (1)
	Bottom pair trawl (PTB)					
Driftgears	Bottom Dredge (DB)				None	Divers (1) Shearwaters (1) Gulls (2)
Reels	Trammel net (CTR)	X	X	X	CTR, GNS - shearwaters, northern gannet, great cormorant, European shag, common scoter and other diving ducks, divers, grebes, auls	GNS: Ducks (16) Divers (3) Petrels and fulmars (8) Shearwaters (10) Storm petrels (2) Grebes (4) Sulls (2) Cormorants (14) Gulls (3) Auls (13)
	Set gillnet (SNG)					SNG: Ducks (9) Divers (4) Petrels and fulmars (7) Shearwaters (11) Storm petrels (3) Grebes (3) Sulls (3) Cormorants (1) Phalaropes (1) Terns (1) Gulls (7) Skuas (3) Auls (21)
	Driftnet (SNG)					
Hooks and lines/longlines	Set longlines (LSD) Drifting longlines (LSD)	X	X	X	LSD, LSD: Northern fulmar, Belted shearwater, Cory's shearwater, northern gannet, great cormorant, European shag, great shag, gulls, terns, auls	Longlines set on or near the seafloor: Petrels and fulmars (11) Shearwaters (10) Storm petrels (2) Sulls (4) Cormorants (1) Gulls (17) Skuas (2) Auls (2)
						Longlines set near surface: petrels & fulmars (13) Shearwaters (11) Storm petrels (1) Sulls (7) Cormorants (1) Gulls (7) Skuas (5) Auls (2)
Traps	Pots and Traps (POT)	X	X	X	European shag	Petrels and fulmars (1)
						Shearwaters (2)
						Cormorants (10)
						Auls (1)
Most sensitive species to bycatch in UK waters (source: Bradbury et al., 2015)		N. Gannet N. Fulmar C. Guillemot Razorbill Black guillemot Puffin Atlantic Puffin	N. Gannet C. Guillemot Razorbill Black guillemot Puffin Shag Great Northern Diver	C. Guillemot E. Shag Great northern diver Scup Eider Common Scoter Cormorant		

1- Sensibilité de chaque groupe d'espèces et techniques de pêche associées

Gear type		Section of water-column where gear is most likely to catch seabirds (from Bradbury et al. 2017)			Species/families known to be bycaught in NE Atlantic European waters ICES (2013)	Global published reports of species groups caught by each gear type (number of publications in parentheses) Wiedenfeld & Pott 2017*
Metier Level 2/3	Metier level 3	Surface	Pelagic	Benthic		
Seines/surrounding nets	Purse Seine (PS)	X	X		Balearic shearwater, Cory's shearwater, northern gannet, gulls, auks	Shearwaters (5) Sulids (4) Cormorants (5) Gulls (3) Ducks (1) Auks (4)
Trawls/Pelagic Trawl	Midwater otter trawl (OTM)	X	X		OTM – northern gannet	OTM: Petrels (8) Shearwaters (4) Storm petrels (3) Sulids (1)
	Midwater pair trawl (PTM)					Auks (1) PTM: Sulids (1)
Trawls/Bottom trawls	Beam trawl (TBB)	X		X	OTB: northern gannet, shearwaters, great cormorant, European shag, gulls, guillemots,	OTB & TBB: Petrels and fulmars (7) Shearwaters (6) Storm petrels (2) Sulids (2)
	Bottom otter trawl (OTB)					Cormorants (4) Gulls (4) Auks (1)
	Multi-rig otter trawl (OTT)					PTB: Storm petrels (1)
	Bottom pair trawl (PTB)					
Dredges	Bottom Dredge (DRB)				None	Divers (1) Shearwaters (1) Gulls (2)
Nets	Trammel net (GTR)	X	X	X	GTR, GNS - shearwaters, northern gannet, great cormorant, European shag, common scoter and other diving ducks, divers, grebes, auks	GNS: Ducks (16) Divers (5) Petrels and fulmars (6) Shearwaters (10) Storm petrels (2) Grebes (4) Sulids (2) Cormorants (14) Gulls (5) Auks (15)
	Set gillnet (GNS)					GND: Ducks (9) Divers (4) Petrels and fulmars (7) Shearwaters (11) Storm petrels (3) Grebes (3) Sulids (3) Cormorants (4) Phalaropes (1) Terns (1) Gulls (7) Skuas (3) Auks (21)
	Driftnet (GND)					
Hooks and Lines/Longlines	Set longlines (LLS) Drifting longlines (LLD)	X	X	X	LLD, LLS: Northern fulmar, Balearic shearwater, Cory's shearwater, northern gannet, great cormorant, European shag, great skua, gulls, terns, auks	Longlines set on or near the seafloor: Petrels and fulmars (11) Shearwaters (10) Storm petrels (2) Sulids (4) Cormorants (3) Gulls (17) Skuas (2) Auks (2)
						Longlines set near surface: petrels & fulmars (13) Shearwaters (11) Storm petrels (1) Sulids (7) Cormorants (1) Gulls (7) Skuas (5) Auks(2)
Traps	Pots and Traps (FPO)	X	X	X	European shag	Petrels and fulmars (1) Shearwaters (2) Cormorants (10) Auks (1)
Most sensitive species to bycatch in UK waters (source Bradbury et al., 2017)		N. Gannet N. Fulmar C. Guillemot Razorbill Black guillemot Atlantic Puffin	N. Gannet C. Guillemot Razorbill Black guillemot Puffin Shag Great Northern Diver	C. Guillemot E. Shag Great northern diver Scaup Eider Common Scoter Cormorant		

Références principales:

- Pott and wiedenfeld, 2017
- Bradbury et al., 2017
- ICES 2013

2- Identification des zones à enjeux

- ✓ Deux études ont évalué la vulnérabilité des oiseaux marins aux prises accessoires en Atlantique NE :

- Bradbury et al. (2017) pour les eaux britanniques;
- Sonntag et al. (2012) pour la mer Baltique.

➡ utilisation des données sur **l'effort de pêche** pour estimer et cartographier le risque

- ✓ Besoin de données spatiales et temporelles sur:

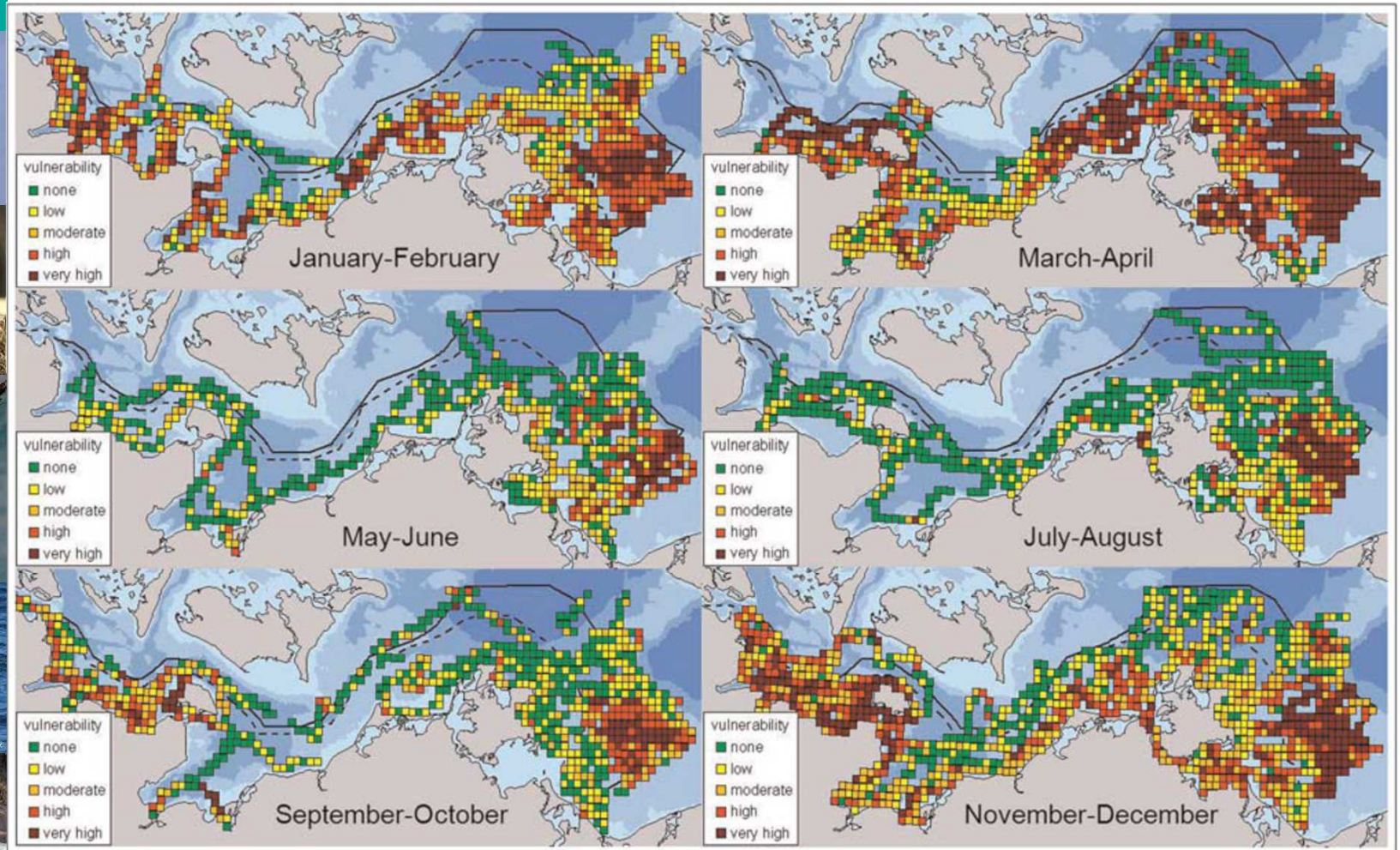
- l'abondance en mer et la répartition des oiseaux marins (relevés en bateau et aériens);
- l'effort de pêche (VMS et journaux de bord).

➡ La **disponibilité de ces données** est primordiale

- ✓ Pour des évaluations plus poussées, il est nécessaire de disposer d'informations supplémentaires sur le **risque de capture des différents groupes d'espèces /différents types d'engins et de pêcheries**.



2- Identification des zones à enjeux



Vulnérabilité des oiseaux à la mortalité par capture accidentelle dans un réseau au sud de la mer Baltique (données de 2000 à 2008). Sonntag et al. (2012).

3- Données existantes (nombre de captures et effort de pêche)

- ✓ Les informations collectées dans les pêcheries européennes (observateurs, surveillance électronique ou indirecte) semblent **largement insuffisantes** pour obtenir une estimation fiable des captures accessoires d'oiseaux marins.

- ✓ En particulier, sous-surveillance des navires de pêche artisanale.

➡ **Meilleure déclaration des captures accessoires** d'oiseaux marins nécessaire:

- navires de pêches commerciaux: collecte systématique;
- navires de petite taille: système de gestion à distance.



4- Méthodes d'évaluation existantes (indicateurs, definition de seuils)

- ✓ **Aucun indicateur** de capture accidentelle d'oiseaux marins n'est actuellement opérationnel au niveau OSPAR et HELCOM, car pas de suivi systématique des captures accessoires d'oiseaux à l'échelle régionale.
- ✓ L'utilisation des « prélèvements biologiques potentiels » (**PBR**) est recommandée **uniquement pour identifier les populations d'oiseaux marins** susceptibles d'être affectées par les captures accidentelles (surestimations significatives de la « mortalité admissible »)
- ✓ Autres méthodes possibles pas encore testées:
 - modèles matriciels Leslie;
 - analyse de la viabilité des populations (PVA);
 - « Removal Limits Algorithm »(RLA);
 - modèles de population intégrés (IPM).



- ✓ Rapport complet du JWGBIRD 2018 à paraître en mars 2019

<https://www.ices.dk/community/groups/Pages/JWGBIRD.aspx>

- ✓ JWGBIRD chairs:

- OSPAR co-chair Ian Mitchell, UK : ian.mitchell@jncc.gov.uk
- ICES co-chair Nele Markones, Germany: markones@ftz-west.uni-kiel.de
- HELCOM co-chair Volker Dierschke, Germany: volker.dierschke@web.de

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