

# Bycatch: a threat to seabirds in Europe



# Seabirds

- One of the most threatened groups of birds
- Europe: >26% threatened; >30% population declines

**Bycatch** Non-targeted species caught in fishing gear, hooks and nets  
= one of the most significant threats

**+200,000**

seabirds bycaught  
in Europe annually

At least

**29**

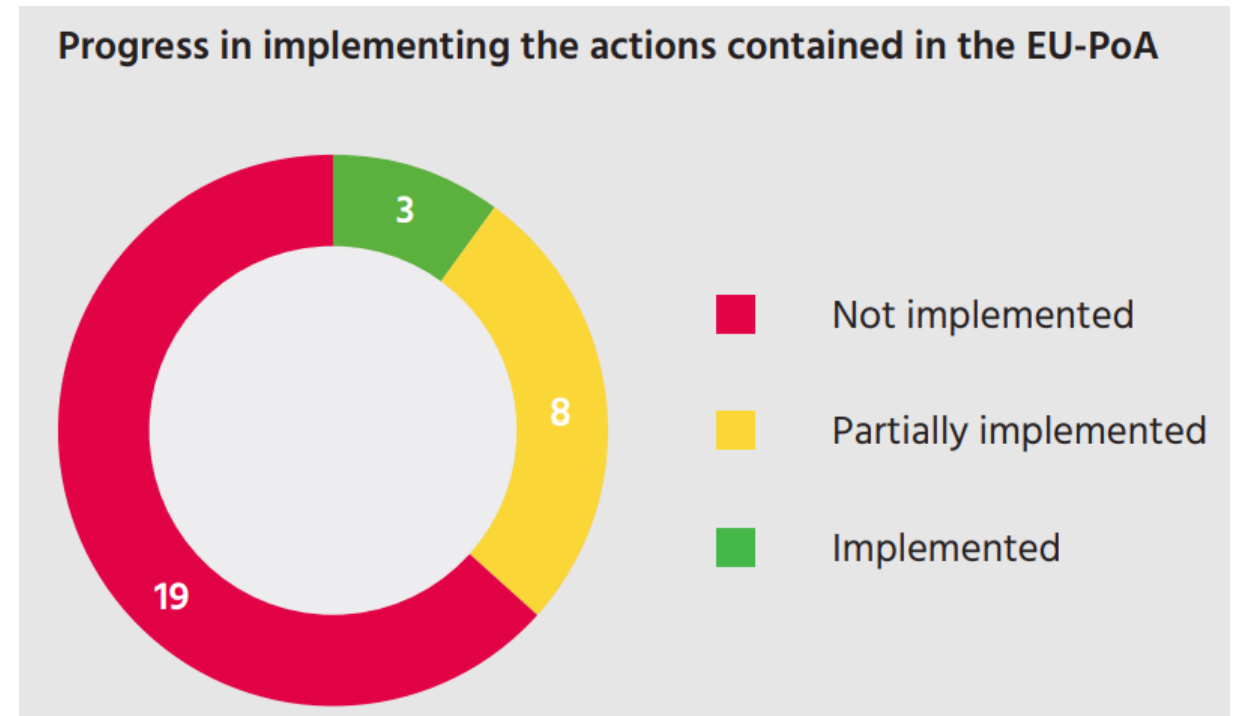
seabird species listed in  
Annex I of Birds Directive are  
affected



# 2012 – Publication of the EU Plan of Action to reduce bycatch of seabirds in fishing gears (EU-PoA)

**Objective:** to minimise and, where possible, eliminate the incidental catches of seabirds...by EU vessels operating in EU and non-EU waters, as well as by non-EU vessels operating in EU waters.

- Assessment in 2021 - almost **10 years since the EU-PoA** was published - showed **very little progress**
- Breach of Member State's obligations under:
  - EU Common Fisheries Policy
  - EU Birds Directive
  - EU Marine Strategy Framework Directive
  - UN Convention on Migratory Species (CMS)



# How is bycatch being addressed by the CFP

- Member States failing to properly monitor and take measures to tackle bycatch.
- Weaknesses in the Article 11 process under the Common Fisheries Policy for establishing Joint Recommendations for fisheries measures.
- Despite evidence of high levels of bycatch in specific areas, MS are not forthcoming with Joint Recommendations with appropriate and adequate measures.
- In many MPAs there is an absence of management plans and fisheries management measures meaning they offer little, if any, benefits in terms of bycatch reduction.
- The EC has been slow and inefficient in reacting to MS' lack of compliance and hasn't used its powers under the CFP to establish emergency measures.
- Bycatch data is often of poor quality with significant gaps and is insufficient to estimate robust confidence intervals around estimates of bycatch rates.
- Standardised bycatch data collection and monitoring protocols lacking.



# BirdLife recommendations

1

Strict protection of seabirds in line with EU Birds Directive: **ensure proper application of and compliance with existing rules**

2

Use technologies like Remote Electronic Monitoring (REM) to ensure **better data collection** on seabird bycatch and management of fisheries

3

Urgently mandate **mitigation measures** or any other effective measures, such as spatio-temporal closures

4

Improve **education and training for fishers** to accurately identify and report seabird bycatch

5

Invest in **research and development** of practical and effective mitigation measures

# First systematic review of seabird bycatch in European waters

Ramirez, I.; [Mitchell, D.](#); Vulcano, A.; Rouxel, Y. et al.  
(2022)



# Introduction

## Bycatch

- Europe has a diverse fishing fleet
- Impact of bycatch on birds influenced by fishing practices, species' abundance, biological traits, & feeding behavior
- Good data needed to quantify population-level impacts





# Seabird bycatch review

- 1st multi-gear regional assessment

Previous assessments:

- Žydelis et. al. 2009 – Baltic & North Sea, gillnets, estimate **100,000-200,000** birds
- Anderson et. al. 2011 – Global, longlines, estimate at least **160,000** seabirds (Gran Sol: **56,000** seabirds)

## Aims

- a) **review** all available published and unpublished data on seabird bycatch in Europe (all gears)
- b) **compile country level** bycatch assessments and compare these with previous estimates (when available)
- c) **identify blackspots** of seabird bycatch in Europe
- d) highlight **data gaps** and **priorities for action**

Ideas that fly.



# Approach

- 33 European coastal states; 4 marine regions
- Territorial (including inland) waters and EEZs
- Currently active fisheries
- Used available estimates (and in some cases extrapolated from available data)
- To assess reliability scoring system
- National and sea basin estimates by summing bycatch estimates derived from non-overlapping studies
- Verified data with national experts



Estimate for European waters: **192,000** birds

EU waters: **>146,000** birds

Upper estimate **~375,000** birds

Estimate(s) of seabird bycatch

- YES
- NO

### Highest country estimates

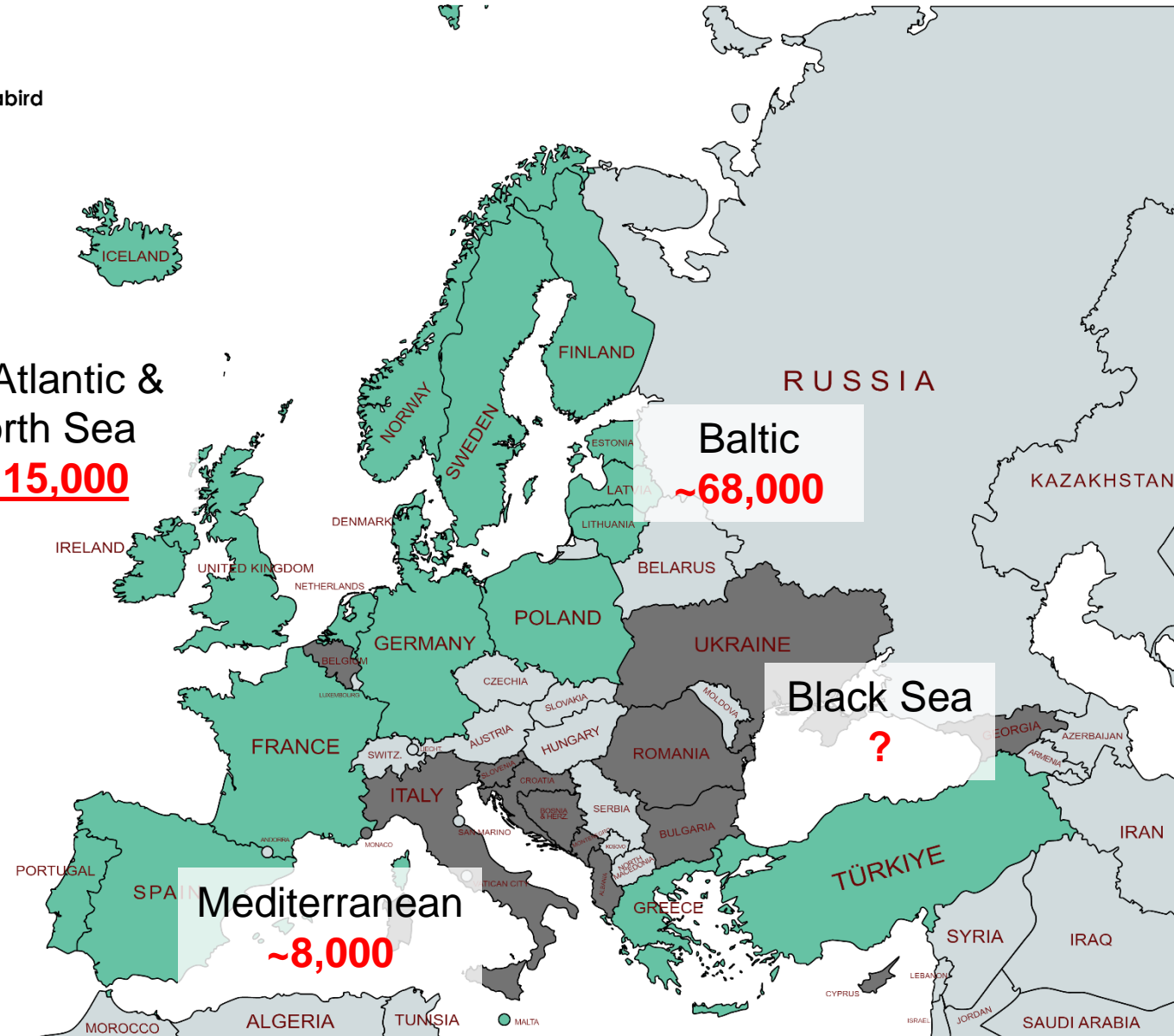
France	>34,000
Poland	>21,000
Portugal	>19,000
Iceland	almost 19,000
Spain	>18,000
Sweden	>17,000
Germany	>17,000
Norway	>16,000
UK	>8,000
Denmark	>3,000

NE Atlantic & North Sea  
**~115,000**

Baltic  
**~68,000**

Black Sea  
**?**

Mediterranean  
**~8,000**



Ideas that fly.

Created with mapchart.net



# Seabird bycatch

By gear type

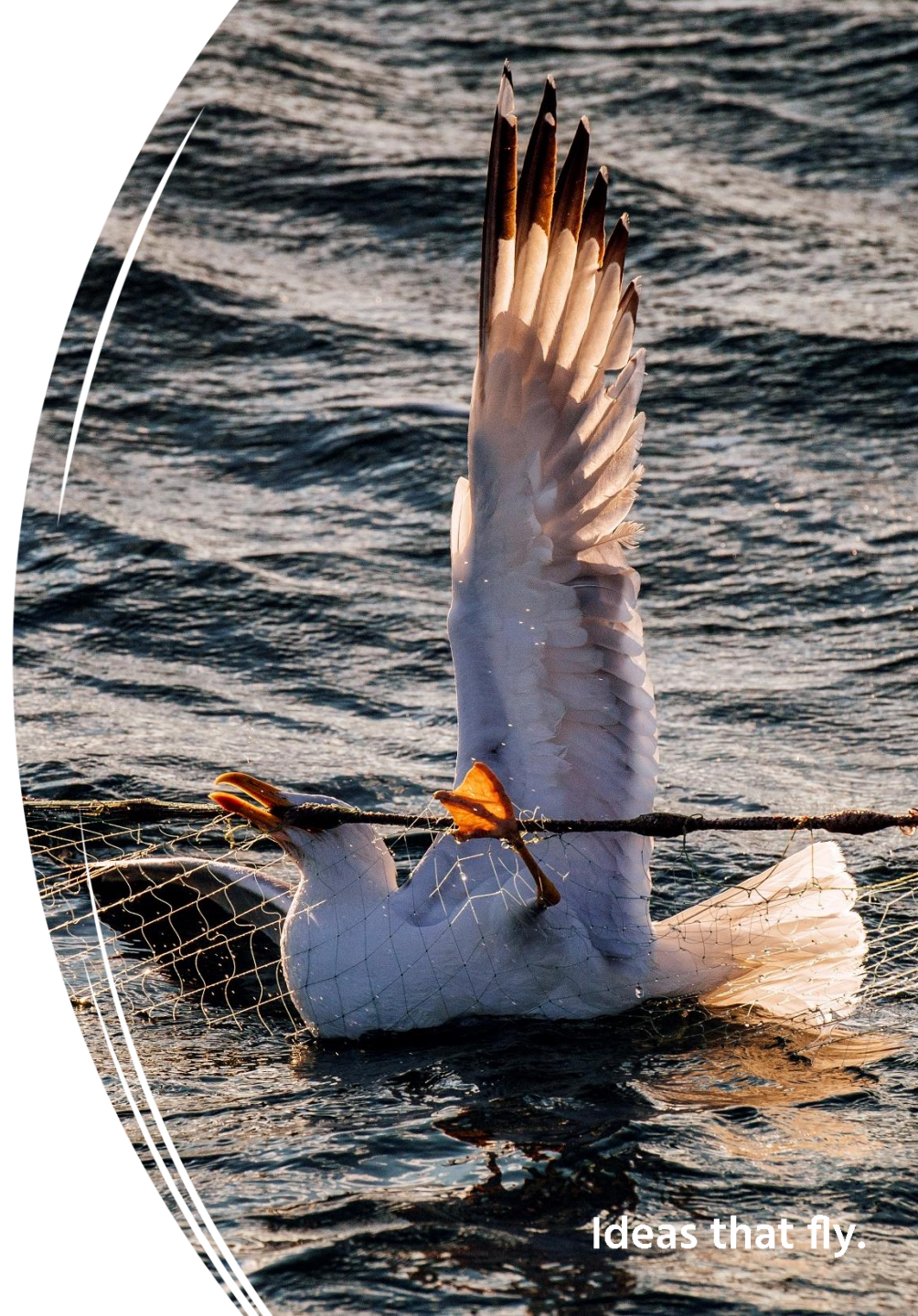
Set nets	<b>104,000</b>
Longlines	<b>77,000</b>

By family		By species			
Anatidae	<b>&gt;41,000</b>	Long-tailed duck	<i>Clangula hyemalis</i>	LC	~17,000
		Common eider	<i>Somateria mollissima</i>	EN	>8,000
		Greater scaup	<i>Aythya marila</i>	LC	>5,000
		Velvet scoter	<i>Melanitta fusca</i>	VU	~4,000
Alcidae	<b>&gt;36,000</b>	Common guillemot	<i>Uria aalge</i>	LC	>31,000
		Black guillemot	<i>Cepphus grylle</i>	LC	>2,000
Procellariidae	<b>&gt;28,000</b>	Northern fulmar	<i>Fulmarus glacialis</i>	VU	>19,000
		Scopoli's shearwater	<i>Calonectris diomedea</i>	LC	3,000
Sulidae	<b>&gt;18,000</b>	Northern gannet	<i>Morus bassanus</i>	LC	>18,000
Phalacrocoracidae	<b>&gt;14,000</b>	Great Cormorant	<i>Phalacrocorax carbo</i>	LC	~13,000

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# Discussion

- Significant gaps
  - No estimates for 12 (36%) countries
  - Estimates rarely cover a country's entire fishing fleet/waters
- Most estimates not based on non-systematic data collection
- Many estimates are based on less reliable data collection methodologies (self-reporting & questionnaires)
- 192,000 birds/year likely an underestimation
- Figures broadly corroborate previous estimates



## NE Atlantic = region with highest estimate

Mainly due to:

- Gillnet fleet in Iceland (lumpsucker & cod)
- Norwegian offshore longline fleet & coastal gillnet fishery
- Portuguese demersal longliners
- Gran Sol demersal longliners (Hake)

Updated estimate for Gran Sol fishery: **36,000 birds/year**, still the fishery with highest bycatch (but caution advised)



## Mediterranean region with low bycatch levels

BUT estimates for only four countries (Spain, Greece, Turkey & Malta)

## Gaps

- More data needed for Gran Sol demersal longliners
- 12 countries with no estimates
- Certain fleets/national sub-areas with no estimates
- More attention on mortality of European breeding species from bycatch outside of European waters
- Recreational fishing

## Conclusions

- Lack of standardized data collection
- Lack of systematic and dedicated monitoring programmes for bycatch
- Bycatch data missing for many countries and questions over the reliability of available estimates
- Despite good legislation (at least in EU) implementation is lacking

