

Committee on Fisheries

Derogations for Cormorant (*Phalacrocorax* spp.) in the European Union's countries

Technical Background Note
prepared by the PECH Secretariat
in view of the PECH Committee Hearing on 11/5

May 2022

Background

Under the Birds Directive (Directive 2009/147/EC), Member States are bound to protect all birds and their habitats, however, the directive allows derogations to "prevent serious damage to crops, livestock, forest, fisheries and water" or to protect the interests of public health and safety, air safety and for the protection of flora and fauna. Member States are required to provide information on the management measures under this article. This information is available since 2002. However, until 2004 the information only contains details on the number of derogations granted and not individuals managed.

Derogations can foresee actions aimed at individuals, their eggs or nests. The data presented in this analysis refers to the total number of individuals, eggs and nests "actually affected" by management measures under derogation.

In the case of the Cormorant (*Phalacrocorax* spp.), conflicts with fishers and aquaculture operations, as well as the impact of cormorant predation on fisheries and protected fish species are well studied and documented (Jepsen et al, 2019; Veneranta et al, 2020; Arlinhaus et al, 2021). Derogations are thus necessary in order to reduce the impact of cormorant predation on economic activities as well as on biodiversity.

This overview gathers information available on the website of the European Commission on the derogations implemented by the Member States from 2004 to 2020 as well as the population trend, also provided by MS until 2018.

Figure 1 highlights the countries that asked for derogations in 2019, with centroids proportional to the number of individuals managed¹.

2

¹ For other countries like Portugal, Germany, Croatia, France and Malta (among others) there is no data available for 2019, even though they may have submitted data in other years.

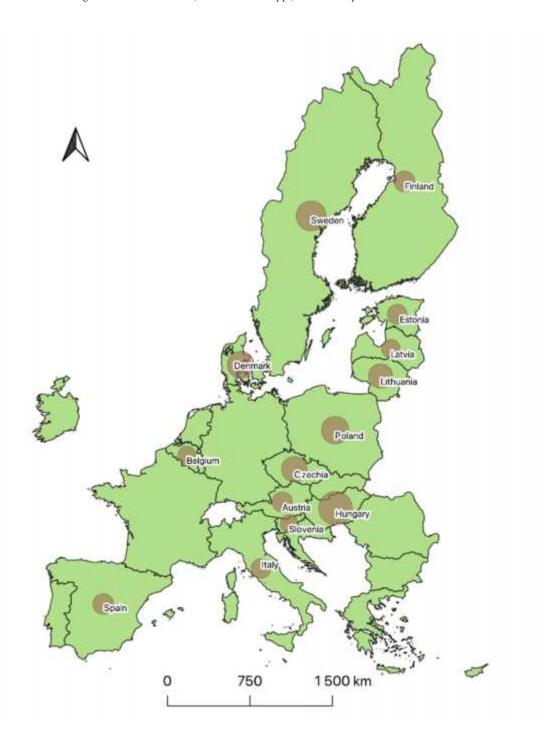


Figure 1. Map showing the Member States that submitted information on cormorant derogations in 2019, with proportional centroids to the number of individuals managed.

Population status

Since the adoption of EEC Directive 79/409 on the Conservation of Wild Birds, the cormorant population in the EU experienced an increase (Marzano et al. 2013). Today this species is protected under the Birds Directive (2009/147/EC). Under article 12, the Commission elaborates an assessment of birds' populations status and trends. According to its webtool² the breeding population of the Great Cormorant (*Phalacrocorax carbo*) (table 1) is growing in most countries, while it is considered stable in countries like Belgium, Germany, Hungary, Lithuania, the Netherlands and Sweden. In Austria, Denmark and Croatia, the breeding population appears to be decreasing. It should be noted that Denmark's and Hungary's winter populations are reported as fluctuating, not being possible to have a clear trend for these two countries.

Table 1. Population status of Cormorant in Member states according to article 12 reporting. Min - Minimum breeding pairs, Max - Maximum of breeding pairs, Period - Time frame that the information refers to. (+ is used when the population is increasing, - is used when population is decreasing, = is used when population is stable, F is used when population is fluctuating).

	Breeding Population				Breeding Distribution (area)		Winter Population			
Coutry	Period	Min	Max	Trend	Period	Trend	Period	Min	Max	Trend
AT	2007-2017	103	156	-	2007-2018	=	2007-2018	2700	3900	+
BE	2008-2018	1400	2100	=	2008-2018	+	2007-2018	6200	8500	=
CZ	2001-2017	238	319	+	2002-2016	-	2008-2019	11979	14186	-
DE	2004-2016			=	2004-2016	=	2003-2016			-
DK	2004-2017			-	2004-2017	+	2016-2017			F
EE	2006-2017	15000	25000	+	2007-2018	=	2006-2017	300	100	+
ES	2007-2012			+	2007-2012	+	2007-2018	68417	71371	=
FI	2007-2018	18662	26704	+						
FR	2006-2018			+	2006-2018	+	2005-2018	96000	101000	+
HU	2007-2018	2390	2721	=	2007-2018	=	2007-2018	2000	10000	F
HR	2001-2012	1230	1653	-	2001-2012	=		12000	20000	
IE	2002-2018			+						
IT	2007-2018	3050	3220		2007-2018	+	2009-2015	74997	86345	+
LT	2006-2018	5600	5800	=	2006-2018	=				
LV	2012-2017	2300	3487	=	2000-2017	-				
MT										
NL	2006-2017	18650	22500	=	2000-2015	+	2006-2017	30134	55174	=
PL	2010-2018	25767	30066	+	2006-2018	=	2011-2018	12900	23400	+
PT	2005-2018	200	500	+	2005-2018	+		3641	7687	
SE	2007-2018	35000	45000	=	2007-2018	=	2007-2018	7000	21000	+
SI								2000	3300	
SK	2007-2018	100	175	+	2007-2018	-	2007-2018	4899	6607	=

² https://nature-art12.eionet.europa.eu/article12/

Individuals

Figure 2 shows the total number of managed cormorant individuals (*Phalacrocorax* spp.) in countries with data available. It should be noted that for 2020 and several MS have not submitted their reports which explains the abrupt downward trend.

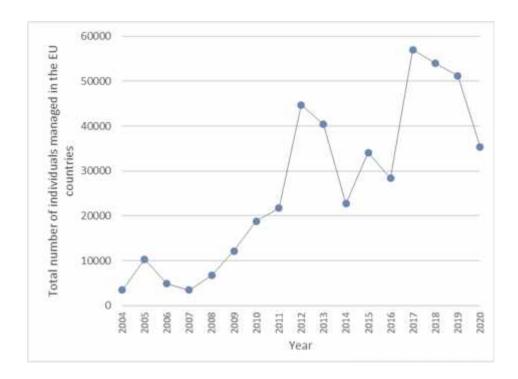


Figure 2. Total amount of cormorant individuals managed based on available data.

Figure 3 shows a cumulative graph with all the countries information of managed individuals per year and the breeding pairs in Europe (except UK) from 2004 to 2014 (line). It should be noted that Germany has not submitted information for the year 2019 yet. For the year 2020 only 8 countries provided information.

Figure 4 shows the information separated for each country.

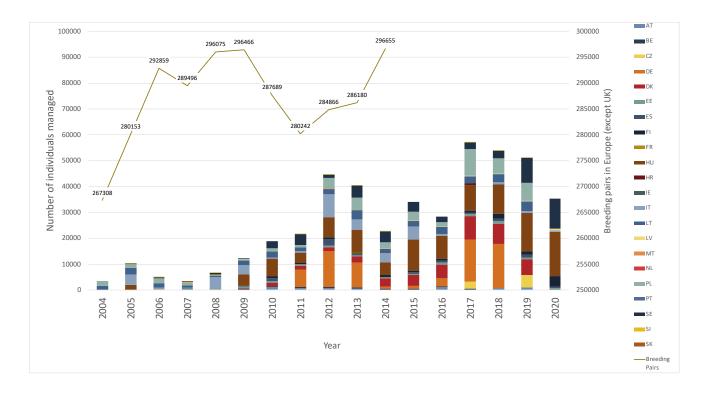


Figure 3. Cumulative number of individuals managed for all the countries per year.

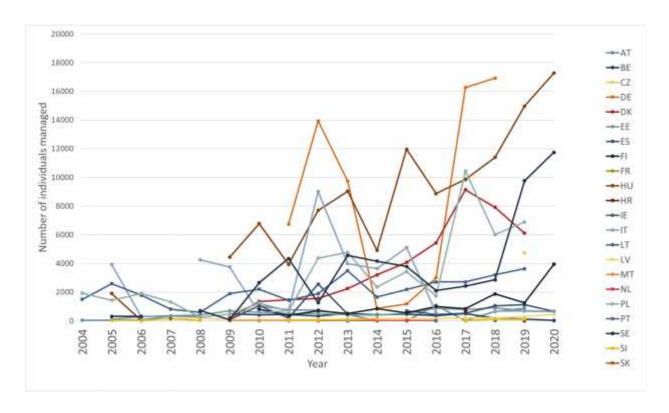


Figure 4. Number of individuals managed for each country.

Eggs

Besides managing individuals directly, it is also possible to take the eggs from the nests in order to reduce reproductive success. Data on management actions on the eggs of cormorant is only available since 2009. Figure 5 shows the cumulative numbers of each country that reported on this measure.

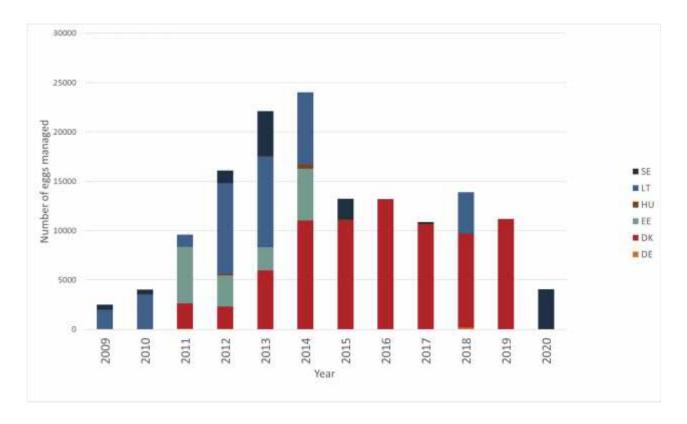


Figure 5. Cumulative number of cormorant eggs taken as a management measure per year and per country.

Nests

The derogation also foresees disturbing nests and reproduction sites as a management measure. In figure 6 we can see the cumulative number of nests and breeding sites which underwent nest disturbance. Reporting only started in 2014.

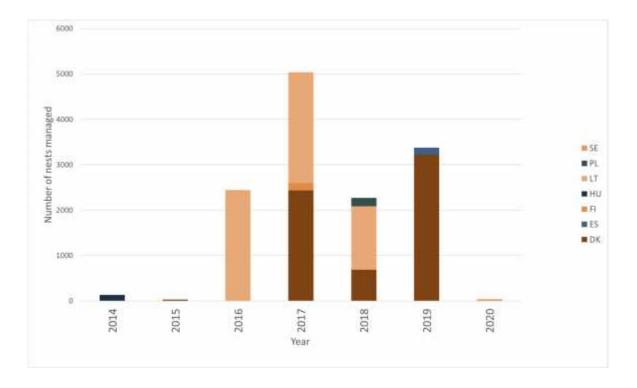


Figure 6. Number of nests and breeding subjected to nest disturbance measures.

Conclusions

Data available on the website of the European Commission do not permit a conclusive assessment on the effectiveness and efficacy of management measures over the years. Countries like Latvia, Spain, Finland and Estonia have a stable trend, not oscillating a lot during the years. However, remaining countries show considerable heterogeneity. It appears that after a reduction of management measures from 2013 to 2016, cormorant management under derogation increased again in 2017. Due to the lack of data, it is not possible to evaluate the recent trend, since most countries have not submitted 2020 data. Germany, reporting managing 16.264 individuals in 2017 and 16.921 in 2018, is still to submit information for 2019 and 2020.

The erratic and uneven use of derogations under article 9 of the Birds Directive as shown in Figure 4 appears to be hinting at difficulties in their application rather than to the reliability of the present legal framework.

The breeding populations reported as being stable and not growing are in the countries who consistently asked for derogations and used it to manage individuals (Belgium, Germany, Hungary, Sweden).

The MS around the Baltic Sea (Denmark, Sweden, Finland, Estonia, Latvia, Lithuania, Poland and Germany) make up for 60% of the total managed individuals. As for eggs and nests/breeding sites management, these same countries make up for 99% of the total. Svels et al. (2019), based on interviews to local commercial fishers about their economic losses due to seals and cormorants' predation estimated that damages caused by cormorants to individual fishers for the year 2017 amounted to 6 188€ in Finland, 6 534€ in Sweden, 1 698€ in Estonia and 2 507€ in Germany.

The European Commission also falls short from providing important data on the total number of breeding population and wintering population. The last known data is from 2014 and the more recent is expressed in trends, with the real values unknown to the public.

References

Arlinghaus, R., Lucas, J., Weltersbach, M. S., Kömle, D., Winkler, H. M., Riepe, C., ... Strehlow, H. V. (2021). Niche overlap among anglers, fishers and cormorants and their removals of fish biomass: A case from brackish lagoon ecosystems in the southern Baltic Sea. *Fisheries Research*, 238.

Jepsen, N., Flávio, H., & Koed, A. (2019). The impact of Cormorant predation on Atlantic salmon and Sea trout smolt survival. *Fisheries Management and Ecology*, *26*(2), 183–186.

Marzano, M., Carss, D. N., & Cheyne, I. (2013). Managing European cormorant-fisheries conflicts: Problems, practicalities and policy. *Fisheries Management and Ecology*, 20(5).

Svels, K., Salmi, P., Mellanoura, J., & Niukko, J. (2019). The impacts of seals and cormorants experienced by Baltic Sea commercial fishers.

Veneranta, L., Heikinheimo, O., & Marjomäki, T. J. (2020). Cormorant (Phalacrocorax carbo) predation on a coastal perch (Perca fluviatilis) population: Estimated effects based on PIT tag mark-recapture experiment. *ICES Journal of Marine Science*, 77(7), 2611–2622.