



Europe's Hunttable Birds

A Review of Status and Conservation Priorities



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European Federation for Hunting and Conservation (FACE)

Established in 1977, FACE represents the interests of Europe's 7 million hunters, as an international non-profit-making non-governmental organisation. Its members are comprised of the national hunters' associations from 37 European countries including the EU-27. FACE upholds the principle of sustainable use and in this regard its members have a deep interest in the conservation and improvement of the quality of the European environment. See: www.face.eu

Reference

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Executive summary

Context

The EU State of Nature report (2020) provides results of the national reporting under the Birds and Habitats directives (2013 to 2018), and a wider assessment of Europe's biodiversity. For FACE, the findings are of key importance as they provide a timely health check on the status of hutable birds listed in Annex II of the Birds Directive.

Drawing on the results of the most recent reporting exercise (2013-2018) under the Birds Directive, this report outlines the status of Annex II (hutable) bird species, whilst making comparisons to the previous reporting exercise (2008-2012). Considering that Europe has approximately 500 wild bird species, the report makes comparisons to Annex I and non-Annex species using the EU State of Nature (2020) findings.

The annexes of the Birds Directive in brief

Certain species and sub-species of birds are covered by Annex I and II of the Birds Directive:

- Annex I includes 194 species and sub-species that are particularly threatened. Member States must designate Special Protection Areas (SPAs) for their survival and all migratory bird species.
- Annex II includes 82 bird species that can be hunted. However, the hunting periods are limited, and hunting is forbidden during birds' return migration to nesting areas, reproduction and the raising of their chicks¹.
- Non-Annex species include all other birds (approx. 220 species) not listed in Annex I or II.

Overall situation

In general, the findings illustrate that hutable birds are in a broadly similar situation to non-hutable birds (i.e. Annex I and non-Annex birds). Although showing slightly more species in 'threatened' or 'near threatened', 'declining' or 'depleted' categories, there are fewer hutable birds with an 'unknown' status compared to non-hutable birds. Annex I birds have the highest proportion of species holding a 'threatened' or 'unknown' population status and the lowest proportion of 'secure' status. The species listed in Annex I and Annex II have deteriorated since the previous Article 12 reporting exercise, which follows the general trend of biodiversity loss in Europe.

Non-Annex species show the highest proportion of 'secure' status and the lowest of 'threatened' status. Taking all wild birds into account, the situation has deteriorated from the 2008-2012 to the 2013-2018 assessments.

In the State of Nature report (2020), 'agriculture' is the most frequently reported pressure for habitats, birds and species other than birds. Following agriculture, the report then lists urbanisation, forestry, exploitation of species, invasive alien species, natural processes, modification of water regimes, energy production, climate change and pollution in order of importance. Exploitation of species, which re-groups hunting with other pressures such as illegal shooting, bycatch or poisoning altogether, is then placed third.

Trends of hutable birds (Annex II)

In terms of population trends, 46% of hutable birds show a decreasing breeding population trend, for both short and long-term trends. In comparison, 32% of the long-term breeding population trends of all bird species listed in the Bird Directive are decreasing. However, 58% of wintering birds have increasing long-term population trends, which is broadly similar to non-hutable wintering birds (54%).

Through comparing the situation with 'breeding pairs' of hutable birds between the (EU27²) 2008-2012 and (EU28) 2013-2018, the report shows that the numbers of breeding pairs have mainly decreased but discusses, via examples, some issues between these large-scale assessments. The case of the waterbird species is also discussed, showing that many species have either increased (numbers of breeding pairs) or did not suffer significant declines.

The report goes on to discuss the various pressures and threats potentially affecting hutable birds as well as the link between hunting and conservation by highlighting important recommendations that relate to species and habitat conservation, monitoring, research, and communication.

¹ https://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

² Greece was not included in the previous assessment.

Résumé analytique

Contexte

Le rapport de la Commission européenne sur l'État de la Nature dans l'Union européenne (2020) fournit les résultats des rapports nationaux produits dans le cadre des Directives Oiseaux et Habitats (de 2013 à 2018) ainsi qu'une vaste évaluation de l'état de la biodiversité européenne. Pour la FACE, ces constats sont fondamentaux car ils constituent un bilan de santé actuel sur le statut des oiseaux chassables figurant dans l'Annexe II de la Directive Oiseaux.

S'inspirant des résultats du plus récent exercice de rapportage (2013-2018) réalisé dans le cadre de la Directive Oiseaux, ce rapport décrit le statut des espèces d'oiseaux (chassables) de l'Annexe II, tout en effectuant des comparaisons avec l'exercice précédent (2008-2012). En tenant compte que l'Europe compte environ 500 espèces d'oiseaux sauvages, le rapport propose une comparaison avec les espèces de l'Annexe I et celles ne figurant pas dans les Annexes sur la base des conclusions de l'État de la Nature dans l'UE (2020).

Les Annexes de la Directive Oiseaux en bref

Certaines espèces et sous-espèces d'oiseaux sont couvertes par les Annexes I et II de la Directive Oiseaux :

- L'Annexe I reprend 194 espèces et sous-espèces particulièrement menacées. Les États membres doivent désigner des Zones de protection spéciale (ZPS) pour leur survie et celle de toutes les espèces d'oiseaux migrateurs.
- L'Annexe II compte 82 espèces d'oiseaux qui peuvent être chassées. Cependant, les saisons de chasse sont limitées et la chasse est interdite pendant la migration de retour des oiseaux vers les zones de nidification, de reproduction et d'élevage des oisillons¹.
- Les espèces hors annexes concernent tous les autres oiseaux (environ 220 espèces) ne figurant ni dans l'Annexe I ni dans l'Annexe II.

Situation générale

De manière générale, les constats illustrent le fait que la situation des oiseaux chassables est, de manière générale, similaire à celle des oiseaux non-chassables (à savoir les oiseaux de l'Annexe I et les oiseaux hors annexes). Bien qu'il y ait légèrement plus d'espèces sous statut « menacé » ou « quasi menacé », « en déclin » ou « diminué », il y a moins d'oiseaux chassables dont le statut est « inconnu » en comparaison avec celui des oiseaux non-chassables. Les oiseaux de l'Annexe I représentent la plus haute proportion d'espèces caractérisées par un statut de population « menacé » ou « inconnu » et la proportion la plus basse de statut « sécurisé ». Les espèces figurant aux Annexes I et II ont connu une détérioration depuis

l'exercice de rapportage précédent dans le cadre de l'Article 12, ce qui reflète la tendance générale de perte de biodiversité en Europe.

Les espèces hors annexe témoignent de la plus haute proportion de statut « sécurisé » et la plus basse de statut « menacé ». Si l'on prend en compte l'ensemble des oiseaux sauvages, la situation s'est détériorée entre l'évaluation de 2008-2012 et celle de 2013-2018.

Dans le rapport sur l'État de la Nature dans l'UE (2020), « l'agriculture » est la pression la plus fréquemment mentionnée à l'égard des habitats, des oiseaux et des espèces autres que celles d'oiseaux. Viennent après l'agriculture dans ce rapport, l'urbanisation, la sylviculture, l'exploitation des espèces, les espèces exotiques invasives, les processus naturels, la modification des régimes hydrologiques, la production énergétique, le changement climatique et la pollution, ceci en ordre d'importance. L'exploitation des espèces, qui regroupe la chasse et d'autres types de pression tels que l'abattage illégal, les prises accidentelles ou l'empoisonnement, occupe donc la troisième place.

Tendances des oiseaux chassables (Annexe II)

Pour ce qui est de leur évolution démographique, 46% des oiseaux chassables témoignent d'une tendance à la baisse des populations reproductrices, qu'il s'agisse de tendances à court ou à long terme. À titre de comparaison, 32% des tendances des populations reproductrices sur le long terme pour toutes les espèces d'oiseaux figurant dans la Directive Oiseaux sont caractérisées par une diminution. Cependant, 58% des espèces d'oiseaux chassables hivernantes affichent une tendance de population croissante sur le long terme, ce qui est dans l'ensemble similaire à l'évolution des oiseaux hivernants non chassables (54%).

Par la comparaison des « couples reproducteurs » des oiseaux chassables entre (la situation dans l'UE à 27 pays²) 2008-2012 et (la situation dans l'UE à 28 pays) 2013-2018, le rapport montre que le nombre de couples reproducteurs a essentiellement diminué mais lance un débat, au travers d'exemples, sur certains problèmes posés par ces évaluations à grande échelle. Le cas des espèces d'oiseaux d'eau est également traité, et révèle que de nombreuses espèces ont soit connu une hausse (du nombre de couples reproducteurs) ou qu'elles n'ont pas expérimenté de déclin significatif.

Le rapport discute ensuite des différents types de pressions et de menaces qui affectent potentiellement les oiseaux chassables ainsi que le lien entre la chasse et la conservation, en mettant en exergue des recommandations importantes qui concernent les espèces et la conservation des habitats, le suivi, la recherche et la communication.

¹ https://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

² La Grèce ne figurait pas dans l'évaluation précédente.

Kurzbericht

Kontext

Der Bericht der EU über den Zustand der Natur (2020) stellt die Ergebnisse der einzelstaatlichen Berichte nach den Vorgaben der Vogel- und Habitat-Richtlinien für den Zeitraum von 2013 bis 2018 vor und führt eine allgemeine Bewertung der Biodiversität in Europa durch. Für FACE sind diese Ergebnisse von zentraler Bedeutung, da sie einen zeitgerechten Gesundheitscheck des Zustands der in Anhang II der Vogelrichtlinie aufgeführten jagdbaren Vögel ermöglichen.

Ausgehend von den Ergebnissen der jüngsten Berichterstattung (für den Zeitraum vom 2013 bis 2018) nach den Vorgaben der Vogelrichtlinie, zeigt dieser Bericht den Zustand der in Anhang II aufgeführten (jagdbaren) Vogelarten auf und vergleicht diesen mit dem vorangegangenen Berichtszeitraum (2008 bis 2012). Angesichts der Tatsache, dass es in Europa etwa 500 wildlebende Vogelarten gibt, zieht der Bericht einen Vergleich zu den in Anhang I sowie nicht in den Anhängen aufgeführten Arten anhand der Ergebnisse des Berichts der EU über den Zustand der Natur (2020).

Kurzer Überblick über die Anhänge der Vogelrichtlinie

In Anhang I und Anhang II der Vogelrichtlinie werden bestimmte Arten und Unterarten aufgeführt:

- Anhang I umfasst 194 Arten und Unterarten, die besonders gefährdet sind. Mitgliedstaaten müssen für ihr Überleben und sämtliche Zugvogelarten besondere Schutzgebiete ausweisen.
- Anhang II umfasst 82 Vogelarten, die bejagt werden können. Allerdings sind die Jagdzeiten begrenzt und die Frühjahrsjagd ist während des Rückzugs der Vögel zu ihren Nistplätzen, der Fortpflanzung und Aufzucht ihrer Küken verboten¹.
- Nicht in den Anhängen aufgeführte Arten umfassen alle anderen Vögel (etwa 220 Arten), die nicht in Anhang I oder Anhang II aufgeführt sind.

Gesamtsituation

Im Allgemeinen veranschaulichen die Ergebnisse, dass sich jagdbare Vögel in einer weitestgehend ähnlichen Situation wie nicht jagdbare Vögel befinden (d.h. in Anhang I aufgeführte sowie nicht in den Anhängen aufgeführte Vögel). Obwohl etwas mehr Arten in den Kategorien ‚gefährdet‘, ‚potenziell gefährdet‘, ‚zurückgehend‘ oder ‚stark zurückgegangen‘ zu verzeichnen sind, weisen weniger jagdbare Vögel einen ‚unbekannten‘ Zustand im Vergleich zu nicht-jagdbaren Vögeln auf. In Anhang I aufgeführte Vögel weisen den höchsten Anteil an Arten mit ‚gefährdetem‘ oder ‚unbekanntem‘ Bestandszustand sowie den geringsten Anteil an Vögeln mit einem ‚sicheren‘ Zustand aus. Der Zustand der in Anhang I und II aufgeführten Arten hat sich

seit der letzten Berichterstattung nach Artikel 12 verschlechtert und folgt damit dem allgemeinen Trend des Verlusts der biologischen Vielfalt in Europa.

Nicht in den Anhängen aufgeführte Arten weisen den höchsten Anteil eines ‚gesicherten‘ Zustands und den geringsten Anteil eines ‚gefährdeten‘ Zustands auf. Unter Berücksichtigung sämtlicher wildlebender Vögel hat sich die Situation seit der Bewertung für den Zeitraum von 2008 bis 2012 gegenüber der Bewertung für den Zeitraum von 2013 bis 2018 verschlechtert.

Im dem Bericht der EU über den Zustand der Natur (2020) wird die ‚Landwirtschaft‘ als häufigste genannte Belastung für Lebensräume, Vogelarten und andere Arten genannt. Nach der Landwirtschaft führt der Bericht dann die Urbanisierung, die Forstwirtschaft, die Ausbeutung von Arten, invasive gebietsfremde Arten, natürliche Prozesse, die Veränderung des Wasserhaushalts, die Energieerzeugung, den Klimawandel und die Verschmutzung in der Reihenfolge ihrer Bedeutung auf. Damit steht die Ausbeutung von Arten, welche die Jagd mit anderen Belastungen wie illegale Entnahmen, Beifänge und Vergiftungen umgruppiert, an dritter Stelle.

Trends der jagdbaren Vögel (Anhang II)

Hinsichtlich der Populationstrends weisen 46 % der jagdbaren Vögel sowohl kurzfristig als auch langfristig einen zurückgehenden Populationstrend der Brutvogelbestände aus. Im Vergleich hierzu weisen 32 % der langfristigen Populationstrends der Brutvogelbestände sämtlicher, in der Vogelrichtlinie aufgeführten Vögel, einen Abwärtstrend auf. Allerdings weisen 58 % der überwinternden Vogelarten steigende Populationstrends auf, was weitestgehend dem der nicht jagdbaren überwinternden Vogelarten (54 %) entspricht.

Durch den Vergleich der Situation mit ‚Brutpaaren‘ jagdbarer Vögel zwischen 2008 bis 2012 (27 EU-Mitgliedstaaten²) und 2013-2018 (28 EU-Mitgliedstaaten) zeigt der Bericht, dass die Anzahl der Brutpaare im wesentlichen zurückgegangen ist, greift aber anhand von Beispielen auch einige Probleme zwischen diesen groß angelegten Bewertungen auf. Diskutiert werden auch Wasservogelarten, wobei sich zeigt, dass viele Arten entweder einen Anstieg (Anzahl der Brutpaare) oder keinen wesentlichen Rückgang verzeichnen.

Der Bericht geht weiter auf die verschiedenen Belastungen und Gefährdungen mit potentiellen Auswirkungen für jagdbare Vögel sowie die Verbindung zwischen der Jagd und Naturerhaltung ein und gibt wichtige Empfehlungen für die Erhaltung von Arten und Lebensräumen sowie die Überwachung, Forschung und Kommunikation.

¹ https://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

² Griechenland war in der vorhergehenden Bewertung nicht erfasst.

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Grey Partridge (*Perdix perdix*)

1. Introduction

As a means to measure progress towards the targets set out in the European Union (EU) Biodiversity Strategy to 2020, FACE welcomes the latest State of Nature in the EU report which presents the collaborative efforts of many thousands of people across the EU. FACE is firmly of the opinion that systematic monitoring and evaluation are integral components of biodiversity conservation as they enable the setting of management and policy objectives, adaptation of interventions and measurement of effectiveness. In this regard, there is little prospect of effective action to limit biodiversity loss unless biodiversity can be measured.

Drawing on the findings of the Article 12 reporting under the Birds Directive, the State of Nature report (2020) provides an up to date evaluation of the status of hutable (i.e. Annex II) bird species in the EU. In doing so, it compares the findings of the most recent EU Member State Article 12 assessment (2013-2018) with the previous assessment (2008-2012).

1.1. Background: State of Nature in the EU

EU nature conservation is primarily based around two main pieces of legislation - the Birds Directive of 1979 and the Habitats Directive of 1992. The Birds Directive provides a common framework for the conservation of naturally occurring species of wild birds and their habitats throughout the EU. It owes its origin to the fact that wild birds, which are mainly migratory, represent a shared heritage of the Member States and whose effective protection typically entails common responsibilities (European Commission, 2008).

Under the Birds Directive, Member States are legally required to monitor progress and report back to the European Commission (EC). This currently takes place every six years. The first reporting exercise covered the periods from 2008 to 2012 for the Birds Directive, where the status of around 450 wild bird species was assessed. This was the first time that EU Member States' included information on the population sizes and trends of birds in their respective countries. Now, a second assessment has been completed, covering the periods from 2013 to 2018 which involved additional reporting requirements including harvest data. The status of around 500 species was assessed.

The State of Nature report also serves as part of the final assessment of the EU Biodiversity Strategy 2020, in particular Target 1 on improvements to the status of species and habitats, and Target 3 which focuses on pressures from agriculture and forestry. Target 1 of the EU biodiversity Strategy to 2020 has not been met. For the sub-target on the status of birds a 20% gap remains, compared to a 2% gap to reaching the target

for species covered by the Habitats Directive (EEA, 2020). As Annex II birds are subject to many of the same influences as all bird species, FACE considers this as a particularly useful opportunity to take stock of the population status of hutable birds at EU level.

1.2. The Birds Directive and hunting

Hunting is a highly popular form of nature recreation, an activity enjoyed by 7 million people in Europe (FACE, 2010). It is one of the oldest forms of consumptive use of renewable natural resources and provides significant social, cultural, economic and environmental benefits in different regions of Europe (e.g. see European Commission, 2008; Kenward and Sharp, 2008; Hunt, 2015). European hunters are motivated by recreational, consumptive and social aspects, with regionally varying emphasis on these elements.

Sustainable hunting also represents a strong incentive to support the maintenance of habitats and species (e.g. see MacDonald and Johnson, 2000; Stoate, 2002; Oldfield et al., 2003; Ewald et al., 2006; Connor and Draycott, 2010; Rouxel, 2000; Fletcher et al., 2010; Scallan, 2012; Díaz-Fernández et al., 2013). In this regard, hunters frequently contribute to the conservation of game and other species through, for example, habitat provision, monitoring and the control of mammalian/avian predators. Some of the most important wildlife sites in Europe have survived the pressures of development and destruction as a result of game management interests.

In order to provide an overview of hunters' contribution to conservation, the FACE Biodiversity Manifesto Report (2019) assessed 430 European case studies of various conservation projects undertaken by hunters. The FACE Biodiversity Manifesto Report (2019) also demonstrates the link between the conservation actions of hunters to 4 of the 6 targets of the EU Biodiversity Strategy to 2020.

The Birds Directive fully recognises the legitimacy of hunting wild birds as a form of sustainable use. In this context, hunting is limited to certain bird species listed in the Directive (the Annex II). It also provides a series of ecological principles and legal requirements relating to hunting to be implemented through legislation in Member States.

In the case of the Birds Directive, the concept of 'Favourable Conservation Status' is not used (as in the Habitats Directive), but the overall objective is broadly similar: to maintain and restore the populations of all naturally occurring wild bird species present in the EU at a level that will ensure their long-term survival. More specifically, the Birds Directive states:

“Member States of the European Union shall maintain the populations of European bird species at a level that corresponds to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements or to adapt a population to that level”.

Article 7 of the Birds Directive allows for the hunting of certain species, which is considered to constitute ‘acceptable exploitation’. This is due to the “population level, geographical distribution and reproductive rate” of these bird species throughout the European Community. More specifically, the Directive states:

“Because of their high population level, geographical distribution and reproductive rate in the Community as a whole, certain species may be hunted, which constitutes acceptable exploitation where certain limits are established and respected, as such hunting must be compatible with maintenance of the population of these species at a satisfactory level”.

Hunting under Article 7 is not an exception to the protection afforded to all wild birds under the Birds Directive. More accurately, the level

of protection should be applied without detriment to Article 7. As is clearly stated in Article 5:

“Without prejudice to Article 7 and 9, Member States shall take the requisite measures to establish a general system of protection for all species of birds.”

With regard to Article 9 and the management and control of birds, it should be noted that many species not listed in Annex II are subject to offtake and scaring in the interest of human safety or prevention of serious damages. An example being the Cormorant (*Phalacrocorax carbo*), which is subject to wide-scale control measures. Making assessments on a per annex basis does not give the whole picture. Species grouping by ecological niche and habitat use may be of greater value than their legal status. Variation within Annex II is discussed in this report.

In all cases, Member States shall ensure that the hunting or management of these species does not jeopardise conservation efforts in their distribution area. In other words, the activity must comply with the principles of **‘sustainable use’ and ‘ecologically balanced control’**.



Yellow-legged Gull (*Larus michahellis*), Stanislas Sibille

1.3. Annex II species

There are 82 huntable species listed on Annex II of the Birds Directive, 23 species on Annex II part A and 57 species on Annex II part B

- The species referred to in Annex II/A may be hunted in any Member State.
- The species referred to in Annex II/B may be hunted only in the Member States in respect of which they are indicated.

However, it is interesting to note that while there are 82 species listed in Annex II, there are 86 taxa assessments used in the analysis of the results³. The reasons for this are as follows:

- The Willow Ptarmigan (*Lagopus lagopus*) has been split into three sub-species, generating three different assessments; for *Lagopus lagopus hibernica*, *Lagopus lagopus scotica* (listed in Annex II part A) and the nominate race *Lagopus lagopus lagopus* (Listed in Annex II part B).
- The Black-necked Pheasant or Caucasus Pheasant (*Phasianus colchicus colchicus*) found present in part of Greece (see section 4.3.3.3) is reported separately from the Common Pheasant (*Phasianus colchicus*).
- The Rock Pigeon (*Columba livia*) has been split into wild and feral populations; the latter not being assessed. It was grouped into one status in the last report.

- The Yellow-legged Gull (*Larus michahellis*) has recently been recognised as a species, rather than a sub-species of Herring Gull (*Larus argentatus*), and is therefore not officially listed in the Bird Directive but its status is assessed by the latest assessment and is included in the Annex II.

The Birds Directive covers all bird species that naturally occur in the Member States, including accidental visitors. It does not extend to introduced species unless they are explicitly mentioned in one of the Annexes to the Directive, (e.g. Canada Goose, *Branta canadensis* in Annex II). However, introduced species are covered by the terms of the Directive in a Member State if they are native to another Member State (European Commission, 2008).

Hunting is carried out under national legislation and in this regard, the listing of a species in Annex II does not oblige a Member State to allow for it to be hunted (European Commission, 2008). Aside from the Birds Directive, there are a number of other overlapping frameworks in Europe that guide national hunting regulations for wild birds. These include the Convention on Migratory Species (CMS) the African Eurasian Waterbird Agreement (AEWA) and the Bern Convention.

³ Note that EU population status assessments are not conducted for: Canada Goose (*Branta canadensis*), Rock pigeon (*Columba livia* (feral)), and Wild Turkey (*Meleagris gallopavo*)



Willow Ptarmigan (*Lagopus lagopus*)

2. Methodology: Reporting under the Birds Directive

Birds are an excellent biodiversity indicator (i.e. a barometer of change) and their populations can be measured in various ways. The goal of the recent Article 12 reporting exercise was to combine national data sets provided by each country into one large EU-level data set, which summarises the population status of each species at EU28 level.

Under the Birds Directive, the status of a bird's population can be either 'secure', 'depleted', 'declining', 'near threatened', 'threatened' or 'unknown' where data is not sufficient to allow an assessment (Table 1). This system outlines whether taxa are regionally threatened or near threatened, i.e. if they meet or are close to meeting any of the IUCN Red List criteria.

Table 1. Criteria to allocate bird species to population status categories. Used in the EU level assessment in 2020.
For the sake of common presentation with results under the Habitats Directive in the State of Nature report, broad categories & colour codes may be used. Source: European Commission, 2019.

Broad category	EU population status category (and acronym)	Brief description of criteria 2020
THREATENED / BAD	Regionally Extinct (RE)	As per IUCN (i.e. no reasonable doubt that last individual in EU28 has died)
	Critically Endangered (CR)	Meets any of the IUCN Red List criteria for CR at EU28 scale
	Endangered (EN)	Meets any of the IUCN Red List criteria for EN at EU28 scale
	Vulnerable (VU)	Meets any of the IUCN Red List criteria for VU at EU28 scale
NOT SECURE / POOR	Near Threatened (NT)	Close to meeting IUCN Red List criteria for VU at EU28 scale
	Declining	EU28 population or range declined by $\geq 20\%$ since 1980 with continuing decline since 2007
	Depleted	EU28 population or range declined by $\geq 20\%$ since 1980 but no longer declining since 2007
SECURE / GOOD	Secure	Does not currently meet any of the criteria above in EU28
UNKNOWN		Inadequate information available to assess EU28 status

3. Results

3.1. Population sizes

Notwithstanding that some Annex II species have small and threatened populations in the EU (e.g. Garganey, *Spatula querquedula*), many of the species within Annex II have large populations, which may explain why almost half of birds (i.e. 46%) have a 'secure' population status. Table 2 outlines the percentage of birds in Annex II with breeding EU populations: i) less than 100.000 breeding pairs; ii) between 100.000 and 1.000.000 breeding pairs and iii) populations with over 1 million breeding pairs. To avoid confusion and possible double counting, no wintering data are included. It is important to note that Table 2 only includes the birds breeding within the EU. In this regard, a high number of bird species have much of their population breeding outside of the EU (e.g. Woodcock (*Scolopax rusticola*) or the Northern Pintail (*Anas acuta*)).

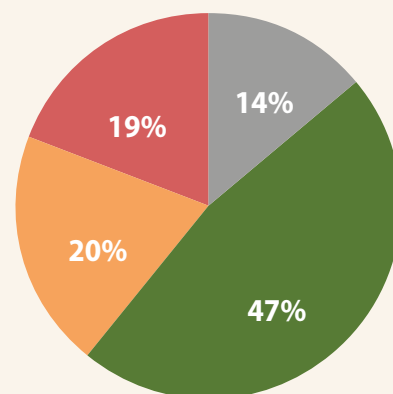
Table 2. Percentage of species per population category (2013-2018).

Number of Breeding pairs in EU	%
< 100,000	38%
100.000 to 1 million	34%
> 1 million	29%

3.2. Population status

In total, EU countries produced population status assessments for 463 bird species. The results of the assessment of population status indicate that almost half of bird species (47%) have a 'secure' population status in the EU. However, 19% of species hold a 'threatened' population status and 20% are assessed as 'near threatened, declining or depleted'. The population status of 14% of the bird species in the EU is unknown. The adjacent pie chart (Figure 1) provides a breakdown of the population status of EU birds, while Figure 2 provides a breakdown on the various bird species as per the different Annexes.

As illustrated in Figure 2 and more specifically in Table 3, the Annex II and the general assessment ('all taxa') both have the same level of 'secure' species population status which is higher than the Annex I (40%), but lower than for the Non-Annex I/II (51%). The proportion of species under 'threatened' population status is slightly lower for Annex II (24%) than for Annex I (26%) but is higher than Non-Annex I/II (13%) and that of the general assessment (20%). The Annex II has the lowest number of unknown population status, with 6% compared to 16% for the Annex I or 14% for the assessment in general.



■ Secure ■ Near Threatened Declining or Depleted
■ Threatened ■ Unknown

Figure 1. Birds Directive: Population status. Article 12 assessment period: 2013-2018, n=463, one assessment per species (EEA, 2020).

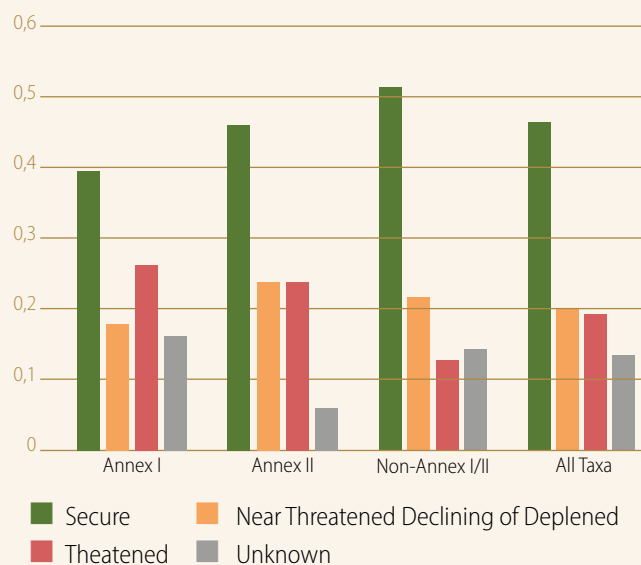


Figure 2. Birds Directive: Aggregated population status. Status of the species of bird listed in the Bird Directive have been aggregated in Annex I, Annex II, birds not in Annexes I or II, and all birds. Article 12 assessment period: 2013-2018, n=505 (EEA, 2020).

Note that Appendix 2 contains a table of the population status of each Annex II bird species and sub-species. In the table, the data (where available) includes the population status of each species for the 2008-2012 assessment and, for each species, the population status, the minimum and maximum EU breeding and wintering population size, the short and long-term trends for breeding and wintering populations for the 2013-2018 assessment.

Table 3. EU population status of birds. Species of bird have been aggregated in Annex I, Annex II, non-Annex birds, and all birds. Data from the Article 12 assessment 2013-2018. Source: EEA, 2020 and Preliminary results presented in NADEG, May 2020.

Population Status	Annex I	Annex II	Non-Annex I/II	All taxa
Secure	40%	46%	51%	47%
Near Threatened, Declining or Depleted	18%	24%	22%	20%
Threatened	26%	24%	13%	19%
Unknown	16%	6%	14%	14%



Rock Ptarmigan (*Lagopus muta*)

3.3. Population trends

The Article 12 reporting exercise also examined the population trends of birds. In total, 467 long-term (Figure 3) and 465 short-term (Figure 4) breeding population trends and 91 long and short-term wintering (Figure 6) population trends were produced. In this regard, data from Member States were combined, weighting each Member State's contribution according to the size of its population. Weightings were based on the geometric mean of the Member State's minimum and maximum population size compared to the geometric mean of the equivalent totals for the overall EU population. This analysis was carried out using a dedicated tool developed by the IUCN⁴ to estimate overall trends based on data from multiple (national) subpopulations (EEA, 2015).

Member States reported population trends for all regularly occurring breeding species for two periods:

- short term, i.e. 12 years: ideally 2007-2018
- long term, i.e. 38 years: ideally since 1980-2018.

Regarding the 467 long-term breeding population trends of bird species covered in the assessment, approximately a third of the species are showing an increasing (29%) or decreasing (32%) trends, as can be seen in Figure 3. Stable and unknown trends account for approximately 20% for each. Hence, roughly half of the species are showing a 'positive' trend (either stable or increasing) and a third are showing decreasing trends. The situation appears to be similar for the short-term breeding population trends (see Figure 4).

Concerning the hutable (Annex II) birds, 46% of the short-term breeding population trends are decreasing (Figure 5). In comparison, the short-term trends of 30% of all breeding bird taxa are decreasing, as can be seen in Figure 4. The increasing trend proportions are of 19% for the short-term breeding populations of Annex II compared to 23% for all birds. Overall, the general situation of all birds assessed appears to be better than for the hutable (Annex II) species. Although the proportion of stable and increasing trends are roughly similar. Here as well, it should be noted that there is a higher proportion of species for which the status of the trend is unknown in the general overview (19%) than in the Annex II (9%).

⁴ Available at: <http://www.iucnredlist.org/technical-documents/red-list-documents>

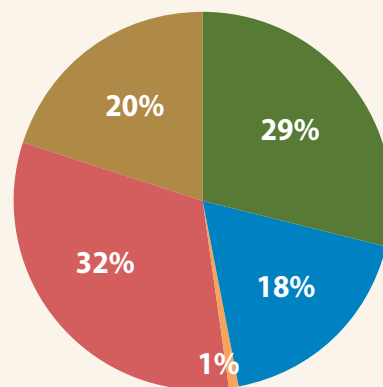


Figure 3. Birds Directive: Long-term breeding population trends. Article 12 assessment period: 2013-2018, n=467 (EEA, 2020).

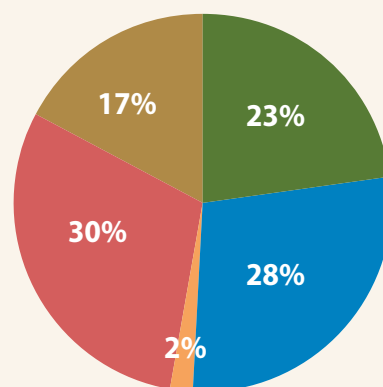


Figure 4. Birds Directive: Short-term breeding population trends. Article 12 assessment period: 2013-2018 (EEA, 2020).

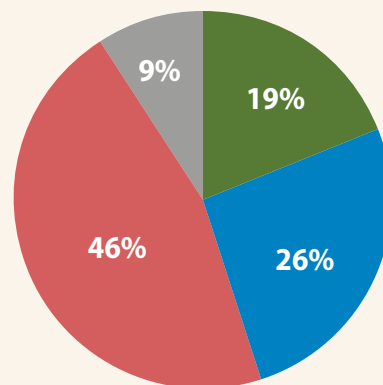


Figure 5. Annex II birds: Short-term breeding population trends. Article 12 assessment period: 2013-2018, n=80.

■ Increase ■ Stable ■ Stable
■ Decreasing ■ Uncertain ■ Unknown

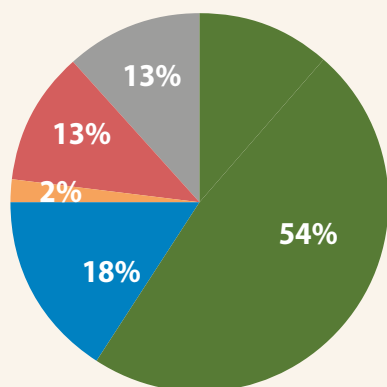


Figure 6. Birds Directive: Long-term wintering population trends. Article 12 assessment period: 2013-2018, n=91 (EEA 2020).

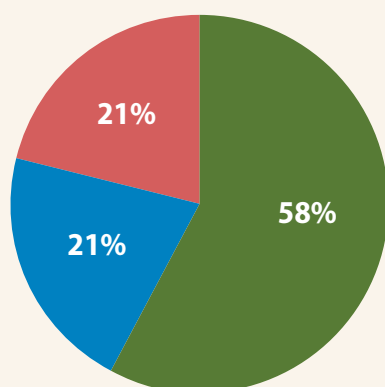


Figure 7. Annex II birds: Long-term wintering population trends. Article 12 assessment period: 2013-2018, n=35.

■ Increasing ■ Stable ■ Fluctuating
■ Decreasing ■ Uncertain ■ Unknown

Table 4. Percentage breakdown comparing Article 12 assessments 2008-2012 and 2013-2018.

Status	2008-2012	2013-2018
Secure	54%	46%
Near Threatened, Declining or Depleted	17%	24%
Threatened	24%	24%
Unknown	5%	6%

According to the latest assessment (2013-2018), 58% of the long-term EU wintering population trends of the species of Annex II are increasing, which is slightly higher than the percentage of increasing long-term trends of wintering populations of all bird species (54%), as can be seen in Figures 6 and 7. However, 21% are decreasing in Annex II, versus 13% for all bird species. The proportion of stable population trends are roughly similar. It should be noticed that there is a proportion of 13% of unknown long-term wintering population trends for the overall assessment and none regarding the Annex II.

3.4. Comparison with the last EU assessment

Table 4 and Figure 8 compare the status of huntable (Annex II) birds from the previous 2008-2012 (Article 12) assessment. The two main differences between the two assessments is that the percentage of 'secure' species has gone from 54% to 46%. Further, the percentage of 'near threatened', 'declining' and 'depleted' status has increased from 17% to 24%. The percentage of 'threatened' and 'unknown' status are similar in both assessments. For the huntable (Annex II) birds, the number of 'threatened' species has not changed between the two assessments.

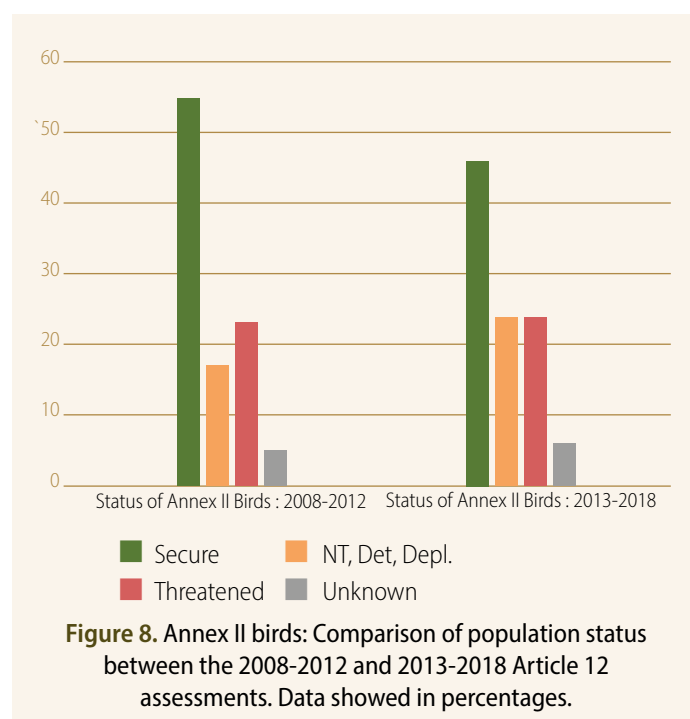


Figure 8. Annex II birds: Comparison of population status between the 2008-2012 and 2013-2018 Article 12 assessments. Data showed in percentages.

As can be seen in Table 5, 15 huntable species have moved to a worse status and 10 have switched to a better status. Besides, 2 species have been given an unknown status that were secure in the previous assessment (i.e. the Black Scoter, *Melanitta nigra*, and the Yellow-legged Gull, *Larus michahellis*). It should be noted that 3 species moved from a 'threatened' to a 'secure' status and 3 species went the opposite way.

Table 5. Huntible (Annex II) species changes of status between the 2008-2012 and 2013-2018 assessments.

	Worse			Better		
	Species	Status 2012	Status 2018	Species	Status 2012	Status 2018
Anatidae	Northern Shoveler <i>Spatula clypeata</i>	Depleted	Near Threatened	Red-breasted Merganser <i>Mergus serrator</i>	Threatened	Near Threatened
	Eurasian Wigeon <i>Mareca Penelope</i>	Near Threatened	Threatened	Long-tailed Duck <i>Clangula hyemalis</i>	Threatened	Depleted
	Eurasian Teal <i>Anas crecca</i>	Secure	Declining			
	Bean Goose <i>Anser fabalis</i>	Secure	Threatened			
	Tufted Duck <i>Aythya fuligula</i>	Secure	Threatened			
Galliformes	Black Grouse <i>Lyrurus tetrix</i>	Depleted	Threatened	Willow Grouse <i>Lagopus lagopus lagopus</i>	Threatened	Near Threatened
	Hazel Grouse <i>Bonasa bonasia</i>	Secure	Threatened	Rock Ptarmigan <i>Lagopus muta</i>	Threatened	Secure
	Grey Partridge <i>Perdix perdix</i>	Declining	Threatened	Rock Partridge <i>Alectoris graeca</i>	Threatened	Near Threatened
	Red-legged Partridge <i>Alectoris rufa</i>	Declining	Near Threatened			
Charadriiformes	Black-headed Gull <i>Larus ridibundus</i>	Depleted	Threatened	Ruff <i>Calidris pugnax</i>	Threatened	Near Threatened
	Herring Gull <i>Larus argentatus</i>	Near Threatened	Threatened	Jack Snipe <i>Limnocyptes minimus</i>	Unknown	Secure
	Mew Gull <i>Larus canus</i>	Secure	Declining			
	Greater Black-backed Gull <i>Larus marinus</i>	Secure	Near Threatened			
Passeriformes	Rook <i>Corvus frugileus</i>	Secure	Declining	Redwing <i>Turdus iliacus</i>	Threatened	Declining
	Common Starling <i>Sturnus vulgaris</i>	Secure	Declining	Fieldfare <i>Turdus pilaris</i>	Threatened	Secure
Rallidae				Common Coot <i>Fulica atra</i>	Near Threatened	Depleted

As explained earlier, 2 species (the Common Pheasant and the Rock Pigeon) have been split into sub-species, generating 2 new status assessments. The remaining species and sub-species retained their status as per the previous assessment.

The following species are good examples of improved populations:

- **Long-tailed Duck** (*Clangula hyemalis*): The Long-tailed Duck moved from a 'threatened' to a 'depleted' status. This species is benefiting from an international Single Species Action Plan since 2015.
- **Rock Ptarmigan** (*Lagopus muta*): The breeding populations of the Rock Ptarmigan have been estimated in the latest Article 12 assessment at 113.000-247.000 pairs with increasing short and

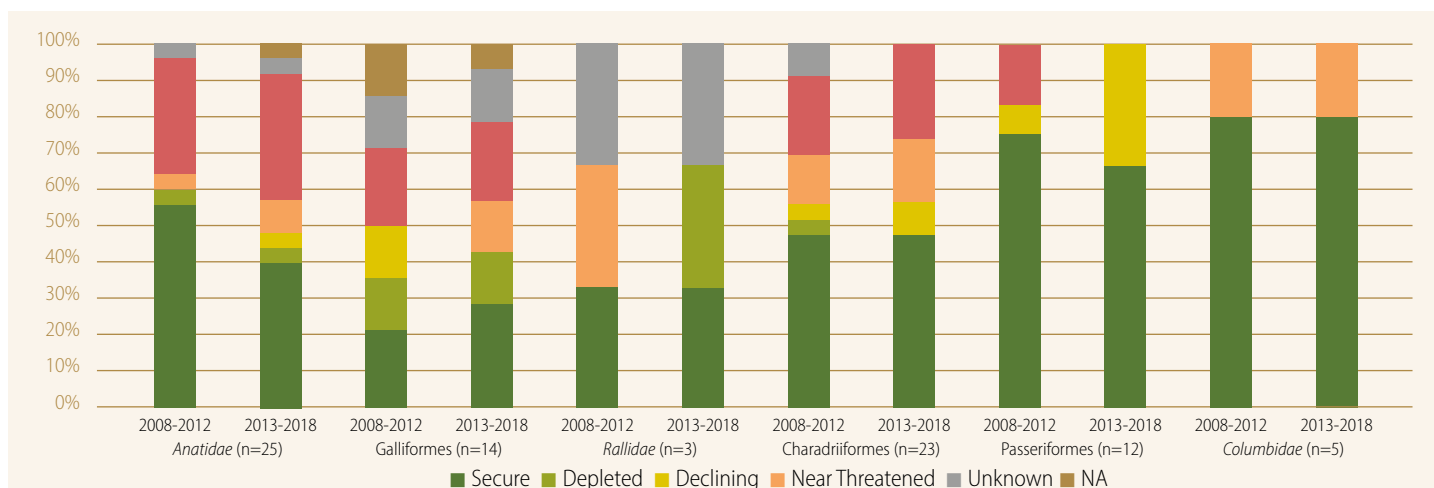


Figure 9. Annex II birds: Status changes between the 2008-2012 and 2013-2018 Article 12 assessments. Bird species have been grouped per order or family.



long-term trends. This species moved from a 'threatened' to a 'secure' status and represents a good example of conservation success. Its populations are either stable or increasing in most of the countries where hunting takes place.

- **Fieldfare** (*Turdus pilaris*): This is another example of a species that moved straight from a 'threatened' to a 'secure' status. Its populations are now estimated at 3.410.000 - 5.150.000 breeding pairs with stable short and long-term trends. Regarding the thrushes (*Turdus sp.*), the Redwing (*Turdus iliacus*) has also improved, from the last assessment where it was listed as 'threatened'; it now has a 'declining' status. It is the only huntable *Turdus* species, out of 5, that is not 'secure'.

The changes of proportions of status per order or family of birds listed in Annex II can be analysed in Figure 9. The group of species within Annex II that has worsened the most is the Anatidae group with fewer 'secure' and more 'threatened' species, while the other groups appear to be relatively similar between the two assessments. The number of secure species has decreased in 2 groups, increased in 1 and did not change in 3, while the number of threatened species has decreased in 1 group, increased in 2 and did not change in 1. All in all, the general situation for huntable species seems to be relatively similar between the two assessments but nevertheless has deteriorated.

Large-scale assessments can sometimes provide mixed messages, particularly those which group trends for both rare and common species

and species across different habitat groups. This is mainly because the species within these groups are often not of comparable size and frequently have different ecological and biological requirements. For example, consider the diversity of Annex II species within *Anatidae* (i.e. ducks, geese, swans) and the *Galliformes*.

Within species groups, there are often contrasting situations with regard to species' population status. For example, within the taxonomic group *Columbidae*, the status of the Collared Dove (*Streptopelia decaocto*) which listed in Annex II (Part B), is 'Secure' while the Turtle Dove (*Streptopelia turtur*) in the same category is 'Near threatened'. Similarly, within the *Anatidae*, the Mallard (*Anas platyrhynchos*) is 'Secure', while the Northern Pintail (*Anas acuta*) is 'Threatened'.

In order to highlight the challenges associated with large-scale assessments, Figure 10 compares the estimates of breeding pairs of Annex II bird species from the 2008-2012 assessment to the recent Article 12 assessment using the Wild Birds Population Indicator (WBI).

The WBI is an all-species index that calculates the geometric mean of all the individual indices, with no weightings, so that each species has the same relative effect on the indicator. The baseline (i.e. the 2008-2012 data) was given a value of 100 and thereafter, the index expresses the population as a percentage of this 'baseline' (i.e. comparing two

points in time). Note that the data only include breeding pairs and not wintering data.

Figure 10 shows that none of the six different groups (i.e. order or family) of birds present in Annex II have increased their number of breeding pairs through the latest assessment. More specifically, three groups have retained broadly similar number of breeding pairs (although slightly lower, -6% max), that is the case of the *Charadriiformes*, the *Passeriformes* and the *Rallidae*. Two groups have had a decrease of maximum 15% and the group undergoing the worse decline is the *Galliformes* with a decline of 26%.

It is interesting to note that decreases in breeding pair numbers in a group of species can be due to the fact that only a few species are declining. Take for example the *Columbidae*, showing a decline of 13%. It is composed of 5 species in which only the European Turtle Dove (*Streptopelia turtur*) listed as 'near threatened' is declining and is therefore responsible of the decline for the whole group.

In attempting to have a better understanding of the decrease in breeding pairs of the different species groups (Figure 10), the generally decreasing breeding trends (Figure 5) and rather good wintering trends (Figures 6 and 7), more detail will be provided about the huntable 'waterbirds' of the Annex II, and then about one species group, the *Anatidae*.

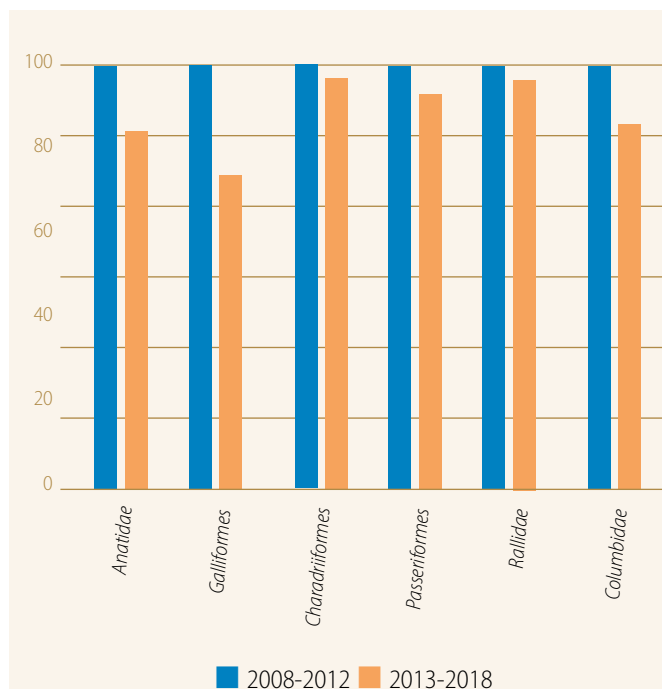
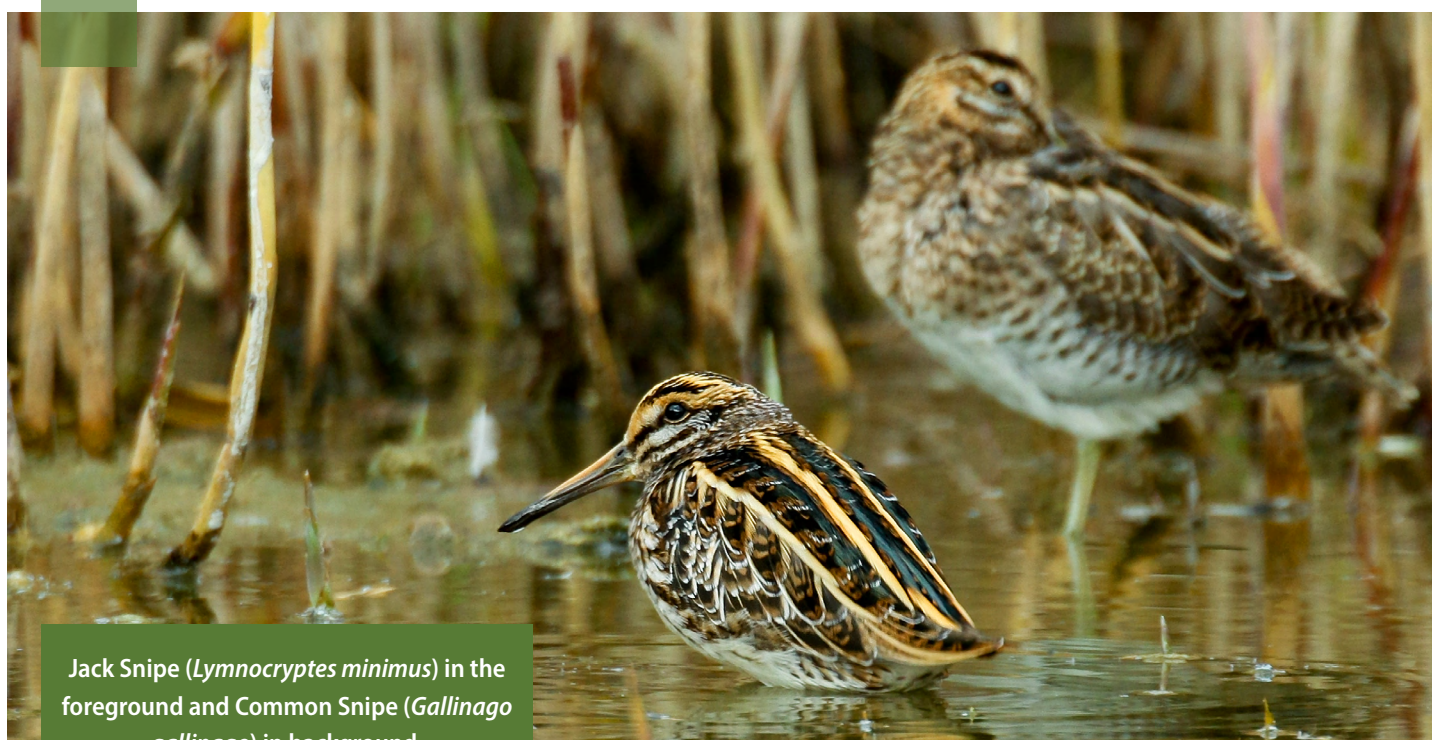


Figure 10. Annex II birds: Comparison of breeding pairs numbers between the 2008-2012 and 2013-2018 Article 12 assessments. Annex II taxa are aggregated by family or order.



Jack Snipe (*Lymnocryptes minimus*) in the foreground and Common Snipe (*Gallinago gallinago*) in background.

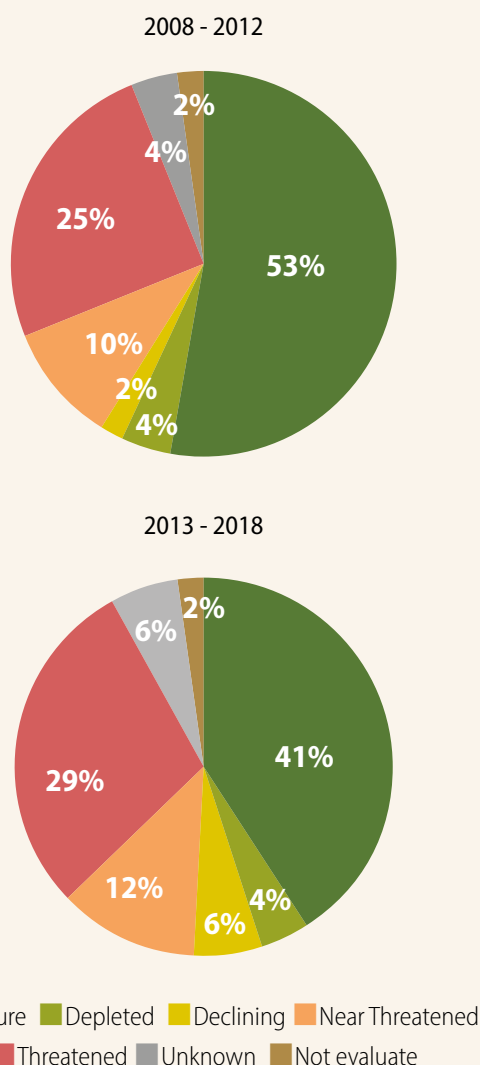


Figure 11. Annex II Waterbirds: Comparison between status of the 2008-2012 and 2013-2018 Article 12 assessments. 'Waterbirds' include a grouping of the *Anatidae*, *Charadriiformes* and *Rallidae* species listed in Annex II, n=51.

3.5. The case of 'waterbirds'

3.5.1. *Anatidae*, *Charadriiformes* and *Rallidae*

The 'waterbirds' are a grouping several families of birds that vary greatly in behaviour and ecology, for example, take a dabbling duck species, such as the Gadwall (*Mareca strepera*), and a wader, such as the Ruff (*Calidris pugnax*). In Annex II, the *Anatidae* family includes 25 species of geese, ducks and swans, the *Charadriiformes* order includes 16 species of waders as well as 7 species of gulls and the *Rallidae* family is comprised of 3 species. The latest status assessment comprises less waterbirds in a 'secure' status and more in a 'threatened' status, as can be seen in Figure 11. The 2% of 'not evaluated' accounts for the Canada Goose (*Branta canadensis*).

3.5.1.1. Wintering versus Breeding population status assessments

A new element for the 2013-2018 reports is separate population status assessments for EU breeding and wintering birds. This is a useful indicator for Annex II species as hunting takes place outside the breeding period when populations may also be supplemented by birds breeding from more northern and eastern parts of Europe. While the status of the breeding population is a better indicator of productivity (e.g. nesting and fledgling success), winter populations are a better indicator of survival rates, which can be subject to hunting off-take, particularly as the winter counts themselves take place in January when most hunting has finished or decreased.

Separate assessments are now available for most migratory birds and from the 51 species of waterbirds listed in Annex II, 34 have a wintering status (Figure 12A) and 39 have wintering trends (Figure 12B), but one, the Ruff (*Calidris pugnax*), is 'not assessed'. It is important to underline that a small number of waterbird species listed in Annex II cannot be assessed regarding their wintering populations and trends, e.g. the Garganey (*Spatula querquedula*) that winters in Africa. As can be seen, **73% of the waterbirds have been assessed as 'secure' regarding their wintering status** (and 12% as 'threatened') and around **70% are assessed as having increasing or stable long-term population trends** (around 80% when excluding gull species). The 4 waterbird species that received a 'threatened' wintering status are the Common Pochard (*Aythya ferina*), the Velvet Scoter (*Melanitta fusca*), the Eurasian Oystercatcher (*Haematopus ostralegus*) and the Northern Lapwing (*Vanellus vanellus*).

Of these 4 species, the Common Pochard is the most widely hunted (18 countries) although hunting bag numbers are low. The harvest of the 3 other species is relatively low, also in terms of the countries where they are hunted. The Velvet Scoter is hunted in 3 countries (Germany,

Denmark and Latvia). In Denmark, the mean bag for the 6 years reporting period (2013-2018) is around 3.000 individuals. There are no bag data available for Germany and Latvia, but numbers harvested are considered to be low. The Eurasian Oystercatcher is only hunted in France. The estimate bag for the season 2013-2014 is 8.165 individuals and the bag trend is decreasing (Trolliet *et al.*, 2018). These numbers correspond to approximately 1% of its wintering population in the EU 28. Finally, the Northern Lapwing is hunted in 6 countries and, according to the available harvest data collected within the reporting process, the total mean bag for this 6 years period and for the 6 countries together is around 111.000 individuals, with France representing the largest share (i.e. 96.361 harvested individuals for the 2013-2014 hunting season (Aubry *et al.*, 2016)). This total mean bag represents less than 4% of the Lapwing's wintering population in the EU 28.

Another interesting point can be made about the Northern Lapwing (*Vanellus vanellus*). This species is undergoing significant declines since the 1990s mainly due to agricultural intensification hampering their breeding success (Peterson, 2000). It is now considered as 'threatened' with both short and long-term trends decreasing. However, of its three biggest populations (i.e. more than 100.000 breeding pairs), only the one occurring in the Netherlands (and that is the smallest of the three) is decreasing while the biggest one, occurring in Finland, is increasing. The third one being stable. Furthermore, when analysing the breeding population numbers and associated trends for each country reporting for the species, almost half of the EU breeding population is either stable or increasing regarding both short and long-term trends (45% and 48% respectively). Thus, the conclusion of a 'threatened' status for this species appears unwarranted.

Like the Lapwing, the Tufted Duck (*Aythya fuligula*) is another example of 'threatened' status that seems unjustified. Its breeding and wintering numbers have just slightly decreased between the 2008-2012 assessment (for which the species was assessed as 'secure') and the recent 2013-2018 assessment, for which it has been assessed as 'secure' regarding its wintering population but 'threatened' for its breeding population, generating an overall 'threatened' status despite large numbers for both wintering and breeding populations and only small decreases.

In order to have a good understanding of the situation of these Annex II species, it is important to realise what species are actually hunted and at what scale. From these species, the *Anatidae* group is the hunted in most countries with more than half of the 25 species hunted in more than 10 countries in the EU. Regarding the *Charadriiformes*, only two out of 22 species are hunted in more than 10 countries (i.e. the Eurasian Woodcock (*Scolopax rusticola*) and the Common Snipe (*Gallinago gallinago*), and most of the species (15) are hunted in less than 5

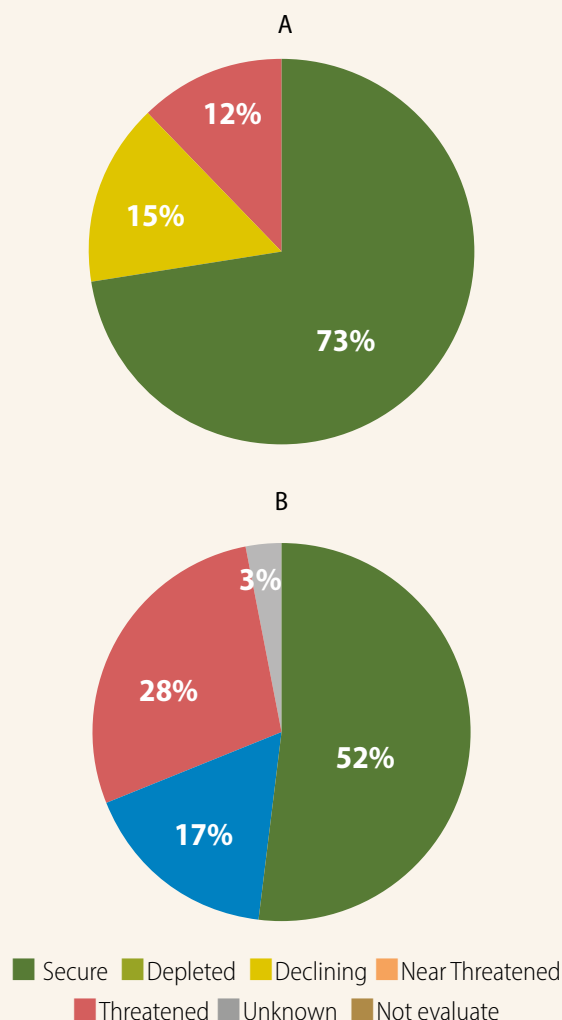


Figure 12. Annex II Waterbirds: Wintering status and trends. A: Status (n=33) & B: Long-term wintering trends (n=39). Assessment period: 2013-2018.

Bar-tailed Godwit
(*Limosa lapponica*)



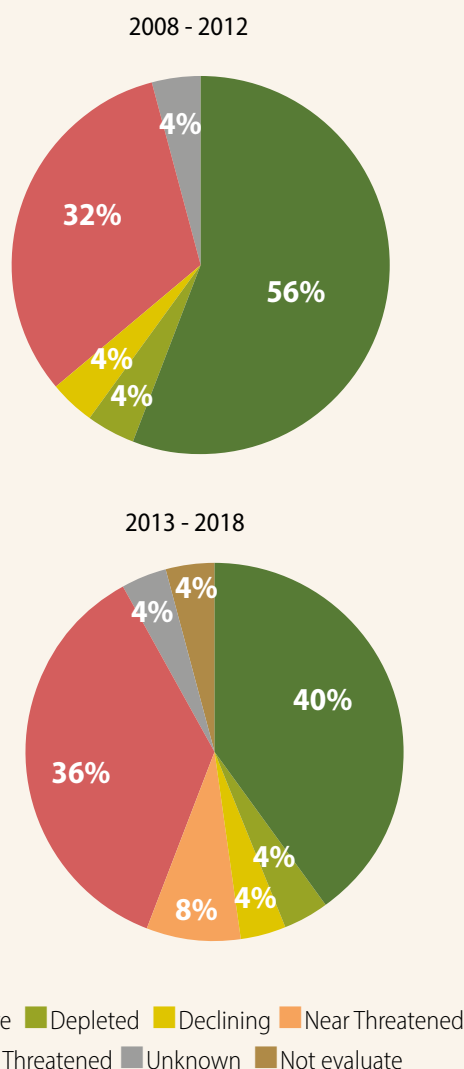


Figure 13. Annex II: Anatidae - Comparison between status of the 2008-2012 and 2013-2018 Article 12 assessments. The *Anatidae* family is grouping the ducks, geese and swans misted in Annex II, n=25.

countries in the EU (many of them only in one (9)). Concerning the 3 species of *Rallidae*, only the Common Coot (*Fulica atra*) is hunted in more than 10 countries. The next section will discuss in more detail the *Anatidae* species listed in Annex II as they are the most representative of the huntable waterbirds species.

3.5.2. *Anatidae*

3.5.2.1. Status

The situation of the *Anatidae* species is roughly similar from the 2012 assessment to the recent one. It can be noticed that the number of 'secure' status has decreased from 16%, which represents 4 species. The 'unknown', 'declining', 'near threatened' and 'threatened' categories all count one more species (or 4%) in the 2013-2018 assessment as can be seen in Figure 13.

In the 2008-2012 assessment for Annex II *Anatidae* there were no species with an 'unknown' status, while for the more recent assessment the status of Common Scoter (*Melanitta nigra*) is considered as unknown. This species had a 'secure' status in the 2008-2012 assessment and its wintering populations have more than doubled between the two assessments (from 673.000- 793.000 in 2012 to 1.420.000- 1.950.000 individuals in 2018), resulting in a 'secure' wintering status and increasing and stable short and long-term wintering trends. However, its breeding status was assessed as 'unknown' in the latest assessment, despite an increasing short-term breeding trend. This resulted in the attribution of an overall 'unknown' status for the species, explaining the loss of one 'secure' status and the appearance of an 'unknown' status in the *Anatidae* species.

3.5.2.2. Breeding populations

Figure 14 shows the actual numbers of breeding pairs for the *Anatidae* listed in the Annex II. Note that the Mallard (*Anas platyrhynchos*) was intentionally discarded of this figure because its number of breeding pairs reaching more than 2.3 million prevented the clarity of the graph.

The offset panel in Figure 14 breaks down the changes in breeding pair numbers of the *Anatidae* species under Annex II. More than half (55%) of the species are showing either an increase in breeding pair numbers or no change (i.e. max -5%). Of the remaining 40%, 40% are showing a loss of max 20% of breeding pairs and 60% are showing losses between 20 and 46%. **Hence, slightly less than a third (27%) of the *Anatidae* species under Annex II are showing serious declines in breeding pair numbers.**

Showing actual numbers provides a good comparison between breeding pair numbers for each species. Numerous species can then

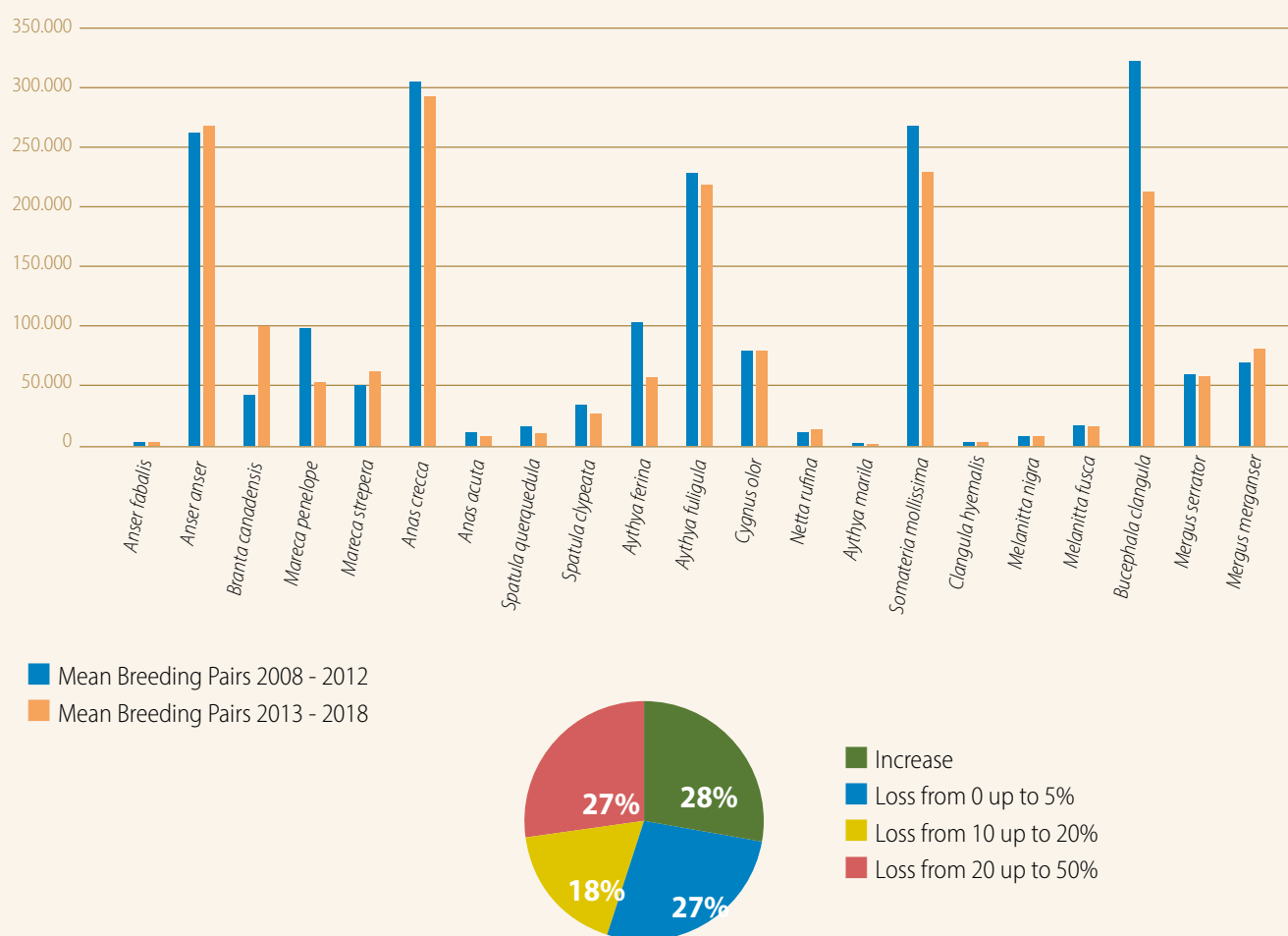


Figure 14. Annex II Anatidae: Comparison between breeding pair numbers of the 2008-2012 and 2013-2018 Article 12 assessments. The Mallard (*Anas platyrhynchos*) has been excluded. The offset panel shows the proportion of changes in wintering numbers between the two assessments.

be identified as well as others characterised by very small populations. As an example, it can be noticed that 3 of the 6 biggest populations of *Anatidae* of Annex II, (except the Mallard) are not listed as 'secure'. Those are the Eurasian Teal (*Anas crecca*) listed as 'declining' and the Tufted Duck (*Aythya fuligula*) and the Common Eider (*Somateria mollissima*), both listed as 'threatened'.

The two most dramatical decreases in breeding pair numbers are recorded for the Eurasian Wigeon (*Mareca penelope*) and the Common Pochard (*Aythya ferina*), two species under 'threatened' status, with a close to 50% drop. However, despite the steep declines, their number of breeding pairs in the EU are still above 50,000.

Eurasian Wigeon:

- The breeding populations of Eurasian Wigeon in the EU declined from 79,500-124,000 to 41,600-70,100 breeding pairs between the 2008-2012 and 2013-2018 assessments, with decreasing breeding trends in both assessments and in long and short-term trends. Thus, it received a 'threatened' breeding status at EU level. However, this species mostly breeds outside of the EU, but winters there in high numbers. Its wintering estimates have decreased as well but stayed roughly similar (from 1,900,000-2,270,000 to 1,780,000-2,090,000 individuals), with increasing long-term trends, so its wintering status is 'secure'. The overall status is now 'threatened' in the latest assessment moving from was 'near threatened' in the previous one. Climate change, eutrophication and predation on breeding grounds have been found to influence reproductive success of the Eurasian Wigeon (Fox et al., 2016b).

Common Pochard:

- The Common Pochard breeding populations declined from 85.300-127.000 to 46.100-71.400 breeding pairs between the 2008-2012 and 2013-2018 assessments, with decreasing breeding trends in long and short-term trends. Its wintering populations declined from 380.000-594.000 to 347.000-526.000 individuals between the 2008-2012 and 2013-2018 assessments, with decreasing wintering trends in both assessments for long and short-term trends. Its status was 'threatened' in the previous assessment and the latest one. Eutrophication and loss of certain types of wetlands, potentially exacerbated by increased predation rates, have contributed to the decline of the Common Pochard over the last 2-3 decades (Fox *et al.*, 2016a).

On the other hand, other species' breeding pair numbers have increased since the last assessment. The most notable one is the Canada Goose (*Branta canadensis*) but also the Greylag Goose (*Anser anser*), the Gadwall (*Mareca strepera*), the Mallard (*Anas platyrhynchos*), the Red-crested Pochard (*Netta rufina*) and the Common Merganser (*Mergus merganser*). All these species are listed as 'secure'.

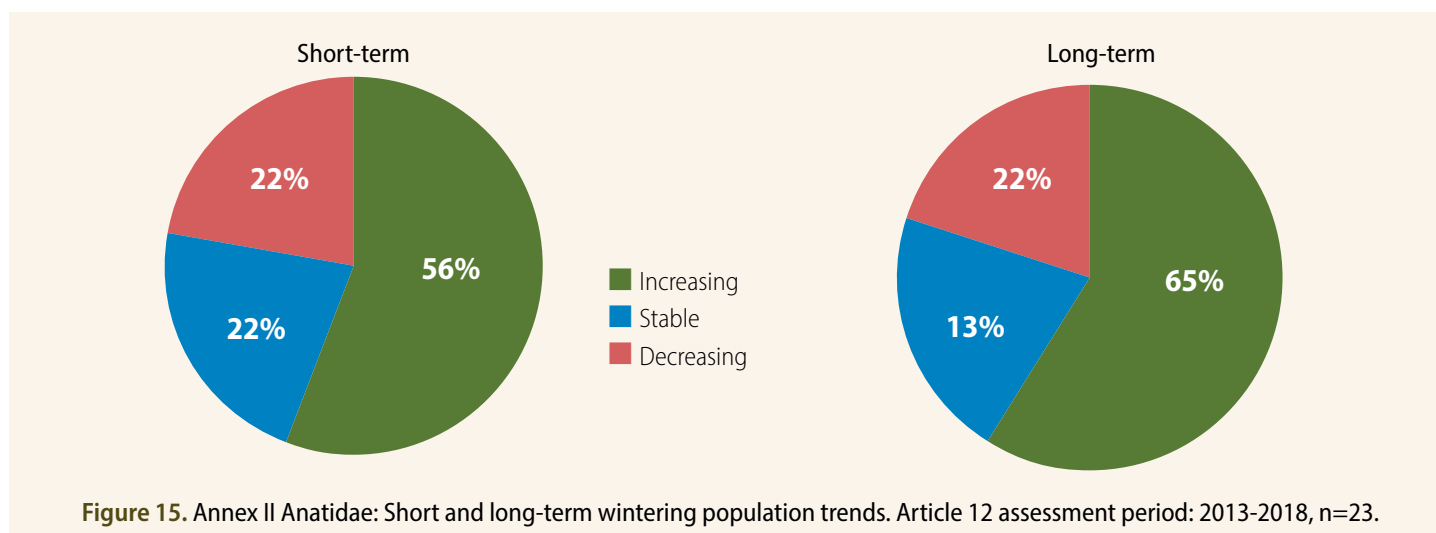
It is interesting to note that the Eurasian Teal (*Anas crecca*) which is listed as 'declining', the Red-breasted Merganser (*Mergus serrator*) which is listed as 'near threatened', the Tufted Duck (*Aythya fuligula*) and the White-winged Scoter (*Melanitta fusca*) which are both listed as 'threatened' have maintained similar (although slightly lower, -5% max) numbers of breeding pairs in the latest assessment. This is also the case for the Mute Swan (*Cygnus olor*) and the Common Scoter (*Melanitta nigra*). The remaining species show a decline in numbers of breeding pairs ranging from -12% to -34%.

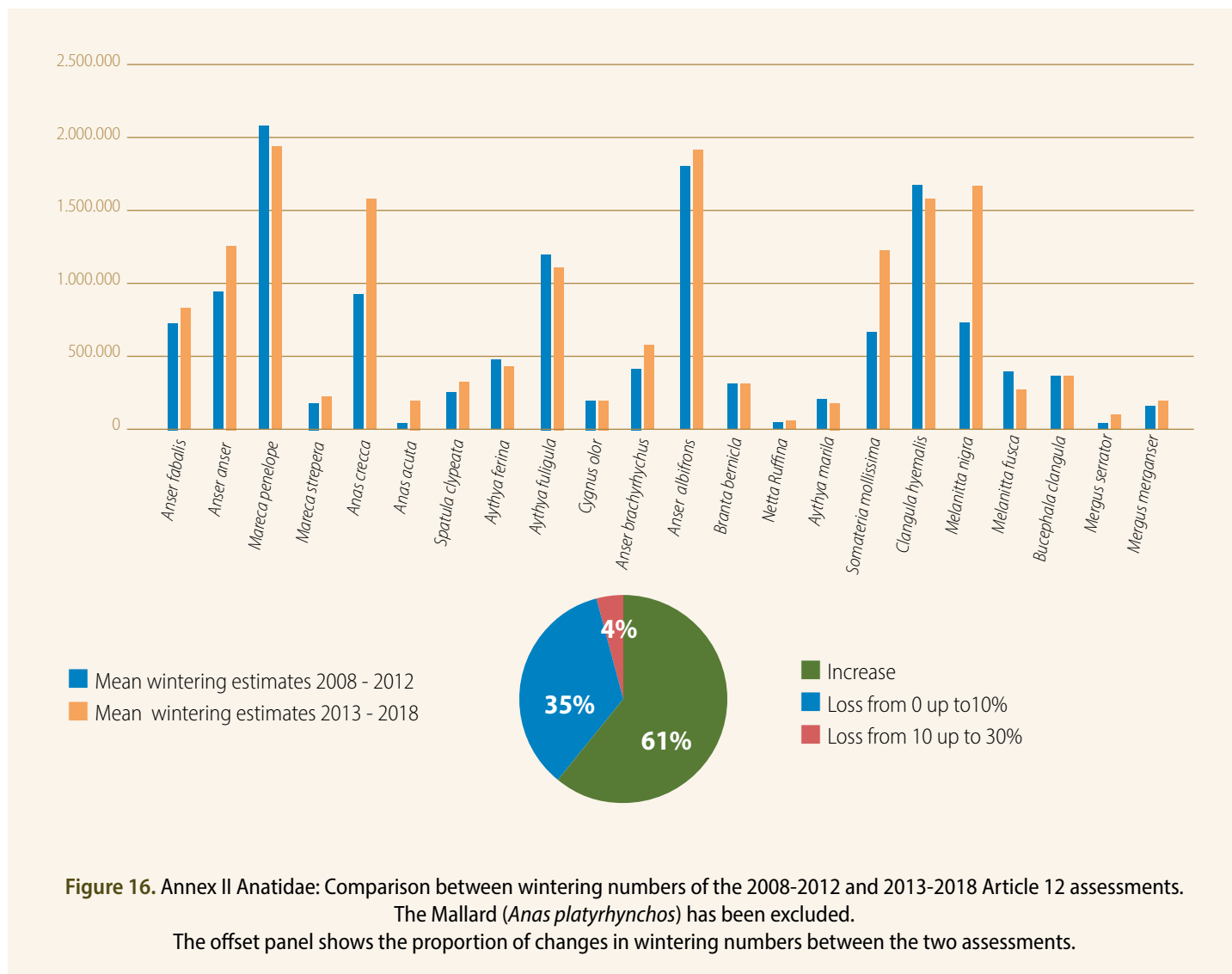
3.5.2.3. Wintering populations

The latest data indicate that the breeding trends of Annex II birds are mostly declining. For the *Anatidae* species listed in Annex II, 59% and 45% are declining in short and long-term breeding trends, respectively. However, many of those species are showing an increase in wintering trends. As can be seen in Figure 15, 65% of these species' wintering populations are predicted to increase in the long-term. Only 22% of the *Anatidae* species under Annex II are decreasing, for both long and short-term wintering trends.

When looking at Figure 16, actual wintering numbers of the *Anatidae* species of Annex II can be analysed. Note that the Mallard was intentionally discarded from this figure because its number of breeding pairs, reaching more than 4 million, prevented the clarity of the graph. Most (61%) of the species for which wintering data was provided showed an increase in wintering numbers between the two assessments. The most notable increases are the Common Scoter (*Melanitta nigra*) with an increase of 128%, and which was discussed above regarding the attribution of its status, and the Eurasian Teal (*Anas crecca*) with an increase of 70%. The two most notable decreases in wintering numbers have been recorded for the Velvet Scoter (*Melanitta fusca*) with a decrease of 30% and for the Common Pochard (*Aythya ferina*) with a decrease of 10%. The latter being therefore recorded to decrease in both wintering and breeding numbers.

Overall, the majority of the *Anatidae* species are showing an increase in wintering numbers and only 4% (2 species) are showing a decrease of 10% or more. The rest (35%) are showing no change or losses of max. 10%.





It should be noted that wintering numbers provided by the Article 12 assessment are limited to the EU distribution only, and therefore do not always reflect the actual population sizes of a given species. Hereafter, four examples are given, illustrating the potential differences between wintering number in the EU and at flyway level. For this purpose waterbird population estimates from Wetlands International and the 7th AEW Conservation Status Report (2018) are used which correspond best to the numbers given Article 12 assessment (2008-2012), although there is some overlap in the census periods.

Red-breasted Merganser:

- The Red-breasted Merganser (*Mergus serrator*) wintering populations have been estimated by the Article 12 assessment 2008-2012 at **44.500-59.500 individuals**. These birds are part of 2 different flyway populations reaching a total estimate of **92.000-136.000**

individuals. The North-east Europe/Black Sea & Mediterranean population: 22.000-31.000 individuals and the North-west & Central Europe population: 70.000-105.000 individuals, both estimated for the 2000-2012 period (Wetlands International, 2020). The species was assessed as 'threatened', and 'near threatened', with 'secure' wintering population status, for the Article 12 assessments 2008-2012 and 2013-2018 respectively. However, it is regarded as 'least concern' in the IUCN Red List.

Northern Pintail:

- The Northern Pintail (*Anas acuta*) is even more striking. Its wintering populations were estimated at **94.900-167.000 individuals** by the Article 12 report 2008-2012. However, birds wintering in the EU are part of 2 flyway populations reaching a total estimate of **515.000-815.000 individuals**. The North-west Europe population estimated

at 65.000-65.000 individuals for the 2008-2012 period and the W Siberia, NE & E Europe/S Europe & West Africa population, estimated at 450.000-750.000 individuals for the 2000-2013 period (Wetlands International 2020). The species was assessed as 'threatened', and 'near threatened', with 'secure' wintering population status, for the Article 12 assessments 2008-2012 and 2013-2018 respectively. However, it is regarded as 'least concern' in the IUCN Red List.

In other cases winter population estimates are roughly similar:

Tufted Duck:

- The Tufted Duck (*Aythya fuligula*) wintering population was estimated at **1.030.000-1.410.000 individuals** in the 2008-2012 Article 12 assessment in the EU27. However, the Tufted Ducks wintering in the EU are part of two different populations: the North-west Europe, estimated at 800.000-1.000.000 individuals and the Central Europe, Black Sea & Mediterranean population estimated at 400.000-500.000, both during the 2008-2012 period (Wetlands international, 2020). Reaching a total estimate of **1.200.000-1.500.000 individuals**, which corresponds to the numbers estimated in the 2008-2012 Article

12 assessment for the EU27. According to the Article 12 report results, it was assessed as 'secure' in the EU regarding the 2008-2012 period, but it has been assessed as 'threatened' for the 2013-2018 assessment. However, it is assessed as 'Least Concern' in the IUCN Red List.

Eurasian Wigeon:

- The Eurasian Wigeon (*Mareca penelope*) had an estimated wintering population of **1.900.000-2.270.000 individuals** in the 2008-2012 assessment. The birds wintering in the EU are part of two different populations; the Western Siberia & NE Europe/NW Europe that was estimated in at 1,300,000-1,500,000 individuals and the W Siberia & NE Europe/Black Sea & Mediterranean population that was estimated at 422.000-535.000 individuals, during the 2003-2012 and 2007-2013 periods respectively (Wetlands International, 2020). Reaching a total of **1.722.000-2.035.000 individuals** at flyway level. Both estimations are roughly similar as a large proportion of the population winters in Europe. The species was assessed as 'near threatened' in 2008-2012 and as 'threatened' (with a 'secure' wintering population) in 2013-2018. It is assessed as 'Least Concern' in the IUCN Red List.



Tufted Duck (*Aythya fuligula*)

4. Discussion

Thus far, this report has shown that the population status of Annex II birds is similar (albeit doing slightly better) than Annex I birds in Europe, but Non-Annex birds are faring a bit better. The situation regarding trends, however, differs with 46% of birds within Annex II showing a decreasing population in both breeding short and long-term trends. However, wintering birds are deemed to have increasing population trends with no significant difference between huntable and non-huntable(wintering) species, although a slightly higher proportion of huntable species show decreasing trends.

According to the latest assessment, many of the species listed in Annex II are decreasing. It is the opinion of FACE, however, that a broader discussion is required regarding the trends of Annex II bird species in as large-scale

assessments only give a partial indicator. It is therefore important to assess the hunting pressure on declining species. For some Annex II species the hunting offtake maybe marginal in comparison to their population levels. Moreover, in various cases, hunting brings conservation measures as well, and therefore should not be considered as an offtake only, including for declining species.

The remainder of this section discusses some potential issues associated with large-scale species assessments as well as the potential pressures and threats affecting huntable birds. It concludes with a discussion of the potential links between hunting and conservation with reference to specific examples.



Northern Pintail (*Anas acuta*)

4.1. Pressures and threats

Member States are required to report on the principal causes of species (and habitat) in the reporting processes under the Birds and Habitats Directives. Species and habitats are facing both 'pressures' and 'threats', that are not to be confused or considered the same. Factors that have affected habitats and species within the reporting period are considered as 'pressures', while factors that are expected to have an impact during the subsequent two reporting periods are considered as 'threats' (EEA, 2020). However, the reporting on pressures and threats is structured into two levels; 15 categories (level 1) divided in 203 individual pressures/threats (level 2). Thus, pressures and threats are mixed into 2 levels, mostly listed as 'activities', which makes it very difficult to distinguish between pressures acting at present, and potential future threats.

In the State of Nature report (2020), 'agriculture' is the most frequently reported pressure at Level 1 (Figure 17), for habitats, birds and species other than birds. Following agriculture, the report then lists urbanisation, forestry, exploitation of species, invasive alien species, natural processes, modification of water regimes, energy production, climate change and pollution in order of importance. Exploitation of species, which regroups hunting with other pressures such as illegal shooting, bycatch or poisoning altogether, is then placed third.

In Europe, the decline of birds breeding on farmland from about 1970 onwards is well documented and largely attributable to agricultural intensification (e.g. see Pain and Pienkowski, 1997; Donald et al., 2001). In this regard, broad-scale analyses and modelling have shown the hypothesis of agricultural change driving the decline of farmland birds.

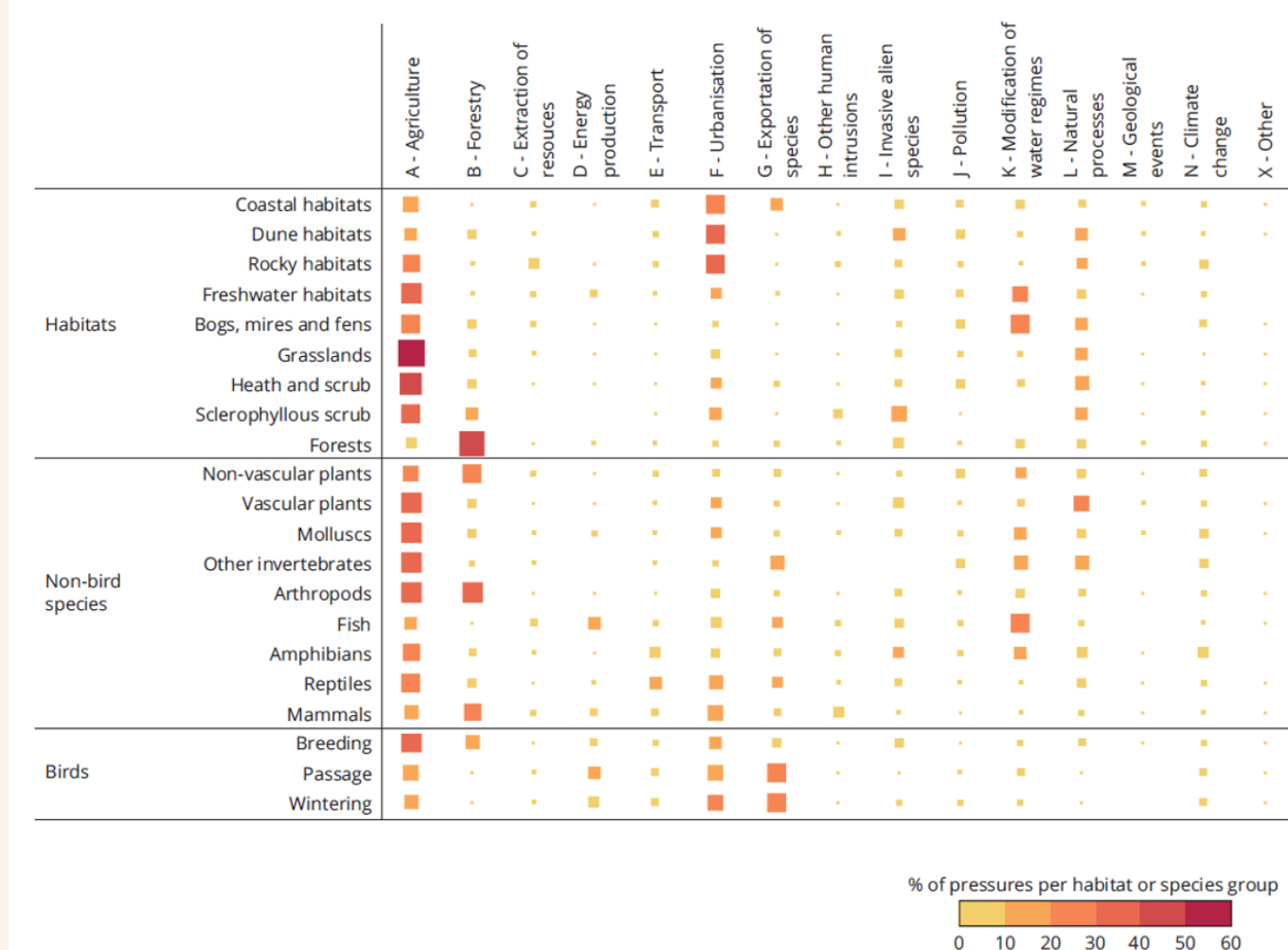


Figure 17. Most frequently reported level 1 key pressure categories on habitats and species. Source: EEA, 2020.

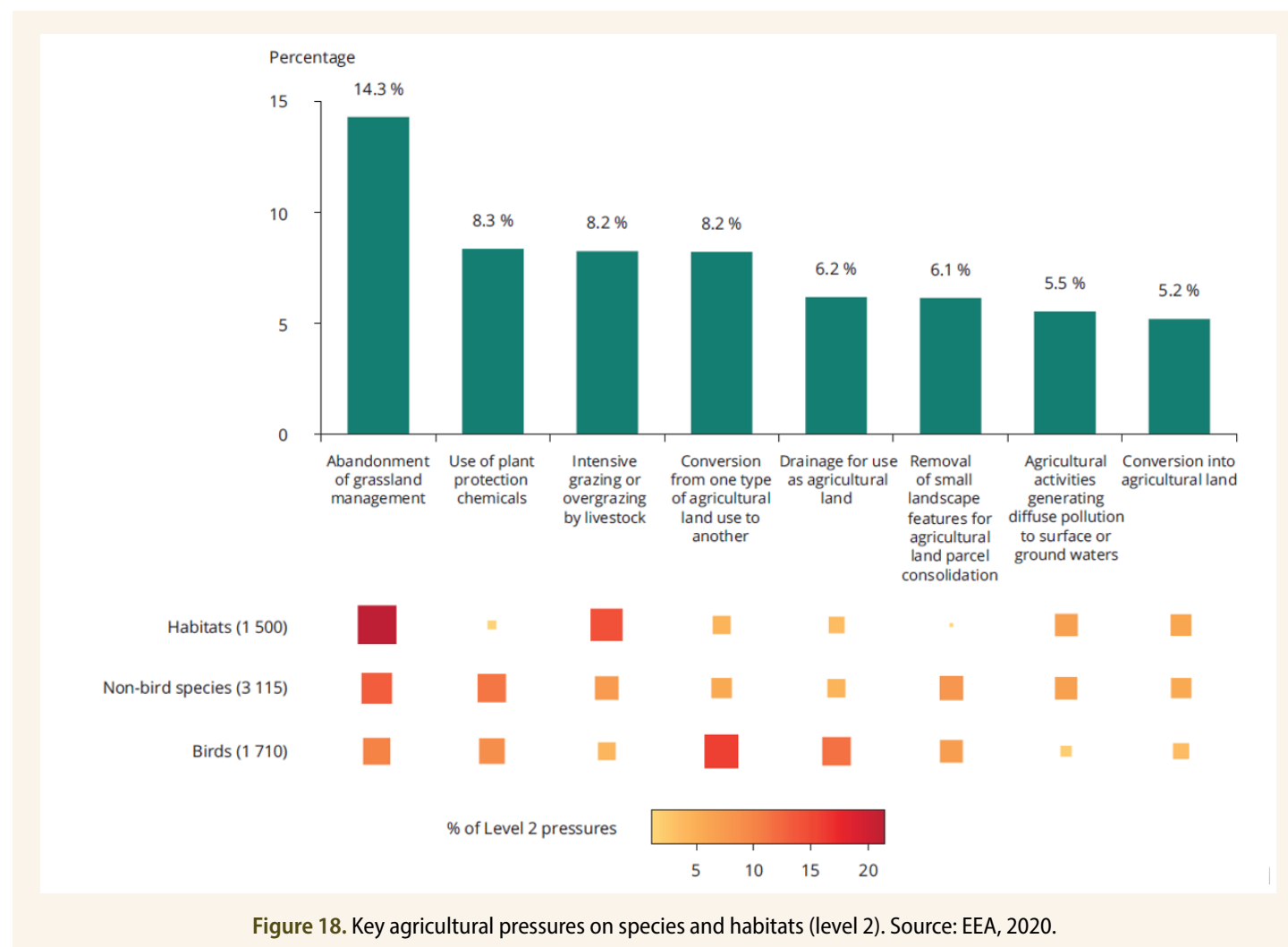
In fact, the level of knowledge of the interaction between farmland management and biodiversity is exceptional (Aebischer *et al.* 2000; Vickery *et al.* 2004), a trend that is directly linked to the Common Agricultural Policy. The latest (post-2020) reform of the CAP is unlikely to change this worrying situation.

The latest data also show that farming-related activities are the most prominent pressures and threats to birds (Figure 17). Within the agricultural pressure, conversion of agricultural land, followed by drainage and abandonment of grassland management are the prominent threats on birds, as can be seen in Figure 18. Regarding the habitats, abandonment of grassland management, intensive grazing or overgrazing by livestock and agricultural activities generating diffuse pollution to surface or ground water are the most frequently reported high-ranked pressures and threats.

Regarding farmland habitats, the Grey Partridge (*Perdix perdix*) is a good example of a species affected by agricultural change in Europe.

The breeding population trend in the EU28 is 'decreasing' in both short and long-term. According to the latest Article 12 assessment, the EU population size is now estimated to be 762.000-1.290.000 breeding pairs (previously estimated at 1.020.000-2.030.000 pairs for the EU27). Although it is a species mainly in decline, there are many examples of successful conservation projects established by hunters to restore populations at a local level. Sometimes these projects have an effect on Article 12 reports. For example, a few countries show increasing (Ireland and Lithuania) or stable (Denmark, Latvia, Sweden) short-term trends for this species and in the case of Greece, stable populations both short and long-term.

In countries with larger populations, however, it can be difficult to see the effects of conservation work at a local level, notwithstanding there is positive conservation work taking place, for example, in France (Bro *et al.*, 2003), the United Kingdom (Ewald *et al.*, 2012), Sweden (Jönsson *et al.* 2010) and Hungary (Fargo *et al.* 2012).



A better understanding of trend declines in Annex II birds can be gained through looking at the factors affecting specific species groups and individual species. For example, a relatively high proportion of breeding waders, pheasants, partridges and grouse that depend on agricultural systems are assessed as having a decreasing population trend. This applies to both short-term trends and long-term trends, which is worrying, particularly set against a background of increasingly fragmented semi-natural habitats due to current land use practices.

Regarding waterbirds, Delaney and Scott (2006) cited land-use changes and resulting habitat destruction as the most frequent known cause of population decrease. In most cases, this is mainly as a result of agricultural expansion and intensification, which is widespread in developing regions and continues in more developed countries.

Newton (2004) noted that population sizes might be limited by severe competition at restricted stop-over sites, where bird densities are often high and food supplies heavily depleted (Kirby *et al.*, 2008).

Christensen and Fox (2014) analysed data on age and sex ratios of common duck species from the long-term collection of wings provided by Danish hunters during 1982 to 2010. They were exploring long-term changes in proportions of first-winter birds and in adult female/male ratios and associated links to the population dynamics of these species in Western Europe. Their findings showed significant declines in the proportions of young (i.e. an index of reproductive success) in the samples of wings from several duck species, which reflected (declining) population trends based on monitoring.



Northern Lapwing (*Vanellus vanellus*) nest in farmland

4.2. Improving conservation status of non-secure species of Annex II – Prioritisation

At the time of writing the European Commission is in the process of setting priorities for the species listed in Annex II with an 'non-secure' status. This is motivating a focus on Annex II to set conservation priorities despite the fact that the status of Annex II birds is roughly similar to non-hunttable birds (Figure 2) and subject to many similar pressures from land-use change and habitat loss. The suggested priority setting for non-Secure species listed on Annex II will be based on the criteria listed in Table 6.

Table 6. Criteria for setting priority to 'non-secure' species listed in Annex II (NADEG, 2020).

1.	Population trend status
2.	Minimum size of the EU 27 breeding population
3.	Conservation status assessment under Article 12 (EU Red List status)
4.	Global Red List status
5.	EU's global responsibility for the taxon
6.	The prior existence of a (former) EU Management Plan

Thus, "the highest-ranking taxa under this scheme will be those that are declining in both the long- and short-term, have a small EU breeding population, have high EU and global Red List status, are globally concentrated in the EU, and have been the subject of previous EU management planning." (NADEG, 2020). To date, of the 42 Annex II non-Secure species, 14 are subject to existing EU management plans and 6 are subject to existing international management plans under AEWA (NADEG, 2020).

It is important to underline that, in this species list, there are a large diversity of circumstances to consider. Some species are listed as having 'secure' wintering population status, such as the Black-tailed Godwit (*Limosa limosa*) or the Northern Pintail (*Anas acuta*), while having an overall 'threatened' status, some have improved, such as the Long-tailed Duck that was assessed as 'threatened' in the 2008-2012 Article 12 report and is now listed as 'depleted', or again some are assessed as 'unknown'. Other species are listed as 'threatened' but have large breeding population numbers, such as the Tufted Duck (*Aythya fuligula*),

or large wintering numbers, such as the Eurasian Wigeon (*Mareca Penelope*). Prioritisation will therefore need a careful analysis of each species situation.

It is FACE's view, that the above criteria (Table 6) should account for the different approach required for sedentary versus migratory birds in terms of scale of conservation measures and governance, as well as other human dimensions, such as the ability of hunters and other stakeholder to undertake successful conservation actions. A focus on wintering trends of birds rather than breeding trends and numbers may also be more logical for migratory birds as this is the period when hunting offtake takes place.

4.3. Hunting and conservation

4.3.1. Efforts made by hunters

The following graph (Figure 19) provides an overview of the initiatives undertaken by European hunters for biodiversity conservation. It shows the quantity and diversity of actions that hunters implement. Most hunters' initiatives focus on species conservation, ensuring sustainable use and habitat restoration. This demonstrates hunters' commitment and contribution to conservation. These initiatives include managing priority habitats and species, both within and outside Natura 2000 sites, combatting Invasive Alien Species (IAS), promoting farmers' uptake in suitable agri-environmental schemes under the Common Agricultural Policy (CAP) and tackling illegal killing.

The majority (79%) of hunters' actions focus on species conservation, of

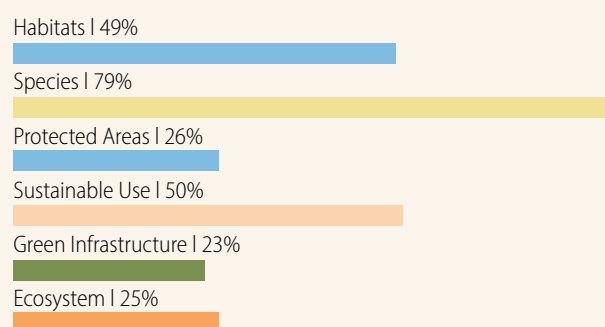


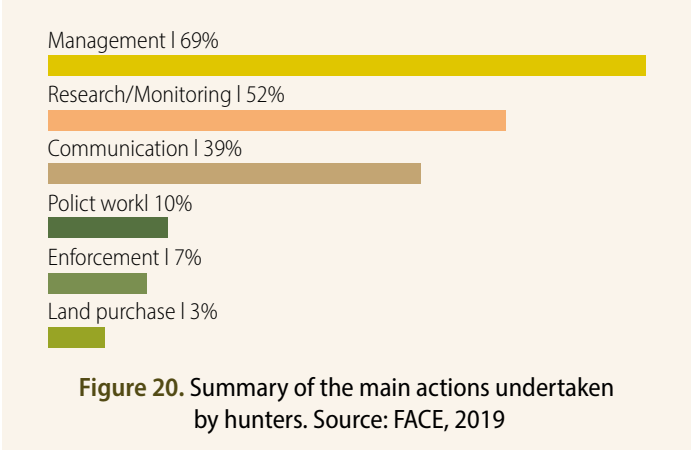
Figure 19. Summary of the 430 initiatives undertaken by hunters for nature conservation. Source: FACE, 2019.

which most deal with birds and interestingly, over 41% cover species which typically non-hunttable. Out of the 430 case studies, 212 (49%) deal with habitat conservation with wetland and farmland habitats being the most common engaged with. The following graph gives a summary of the main actions undertaken by hunters in the FACE Biodiversity Manifesto projects.

In general, management (e.g. conservation and restoration) of habitats/ species and research/monitoring are the most common actions (Figure 20) undertaken by hunters. These actions help to halt the deterioration of species' protection status and habitats covered by EU nature legislation. Over 76 % of the habitat types involved in hunters' projects are farmlands and forests. These actions have a positive contribution towards biodiversity conservation and sustainable use of above-mentioned habitats.

Case studies:

It is important to recognise the role of hunting in species and habitat conservation. The beneficial consequences of game management are most evident with sedentary species; however, many wetlands have been actively managed for migratory waterfowl. A good example is the story of two hunters that decided in 1974 to take over the management



of the (disused) Nuova Demi quarry in Italy. With verbal agreement of the owner, they undertook to restore the wetland on the site.



After years of work, the site now hosts 65 ha of wetland biodiversity and welcomes a huge amount of birds as Ferruginous Duck (*Aythya nyroca*), Tufted duck (*Aythya fuligula*) and Common Pochard (*Aythya ferina*). Currently, in contrast with this amount of waterfowl, the hunting pressure there is extremely low. This work was carried out without any public funding and the substantial costs were covered by the Nuova Demi quarry company owner. The rest of the expenses were covered by the hunters themselves. Another example found in Italy is the habitat restoration that takes place in private shooting areas in the Venice Lagoon and resulting in increasing numbers of wintering Pochards in the recent years (Basso, 2020), as can be seen in Figure 21. Such activity also benefits protected species, such as the Eurasian Curlew (*Numenius arquata*) and the Grey Plover (*Pluvialis squatarola*) which numbers have also increased there (Basso, 2020), as can be seen in Figure 22.

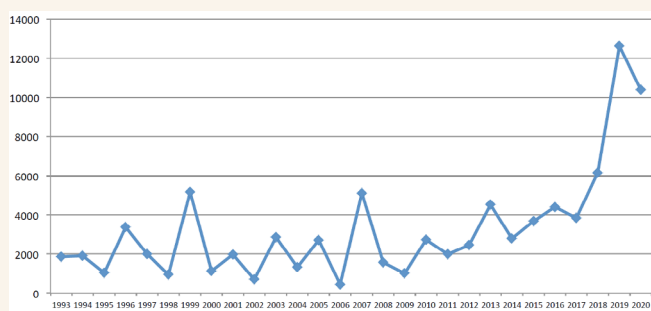


Figure 21. IWC counts of Common Pochards (*Aythya ferina*) in Venice Lagoon from 1993 to 2020 (Basso, 2020).

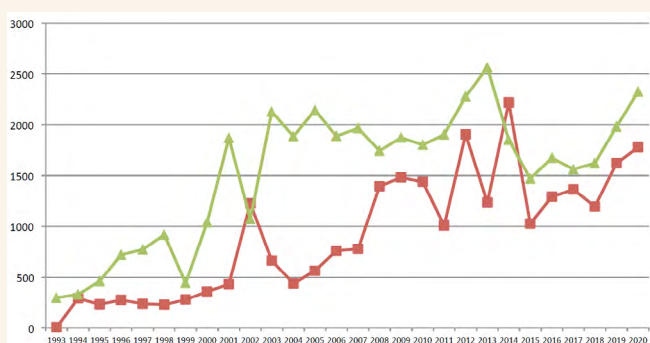


Figure 22. IWC counts of Eurasian Curlew (*Numenius arquata*) and Grey Plover (*Pluvialis squatarola*) in Venice Lagoon from 1993 to 2020 (Basso, 2020). The green line represents the Eurasian Curlew, and the red line represents the Grey Plover counts.

Furthermore, hunters often take actions in order to maximise the breeding success of their quarry, as it is a key factor in bird population trends. These actions often benefit non-huntible species as well. This is the case of the nesting baskets projects for example. The use of nesting

baskets aims to provide suitable breeding habitat to bird species. This practice generally targets duck species, such as the Mallard, but other species are known to benefit from it, like the Common Moorhen (*Gallinula chloropus*) and the Little Owl (*Athene noctua*). Baskets are also designed to reduce predation by both land-based, by placing them over water, and bird predators like crows.

Predator management:

For many species, **the influence of generalist predators like foxes and crows can play a significant role**, especially as many habitats have deteriorated. Hunters frequently undertake the practice of predator control as it can prove productive at delivering conservation objectives (Gilsdorf & Rossi, 2008; Kämmerle & Storch, 2019) and lead to increases in populations of certain ground-nesting bird species (e.g. Fletcher et al., 2010; Ludwig et al., 2019; Newton, 1993; Roos et al., 2018).

Hence, this practice can bring conservation benefits not only to huntible but also to other species of birds. For example, Haworth and Thompson (1990) found that Golden Plover (*Pluvialis apricaria*), Curlew (*Numenius arquata*), and Redshank (*Tringa tetanus*) were more frequent in upland areas managed by gamekeepers. Similarly, Tharme et al. (2001) found that densities of breeding Golden Plover and Lapwing (*Vanellus vanellus*) were five times higher, and those of Red grouse and Curlew, twice as high on grouse moors as on other moors. Fletcher et al. (2010) also showed that managing the numbers of common predators can significantly increase the breeding success of Red grouse and other ground-nesting birds of conservation concern. Predator control is likely to achieve short-term conservation benefits for grouse if well-designed and rigorously conducted (Kämmerle & Storch, 2019). More recently, Littlewood et al. (2019) also found evidence that not only the Red Grouse benefits from predator control but also three other species of the Annex II: the Eurasian Curlew, the Common Snipe, and the Golden Plover.

In other research, Côté and Sutherland (1997) assessed the results of 20 published studies of predator removal programmes using a meta-analysis. Their analysis showed that removing predators had a large, positive effect on hatching success of the target bird species, with removal areas showing higher hatching success, on average, than 75% of the control areas. Predator removal also increased post-breeding population sizes (i.e. autumn densities) of the target species. However, in terms of increasing breeding bird population sizes, the analysis shows that predator control is less consistent, possibly due to inherent characteristics of avian population regulation, but also ineffective predator removal and inadequate subsequent monitoring of the prey populations.



North American Mink (*Neovison vison*)

A recent scientific study by McMahon *et al.* (2020) showed that **74% of all ground-nesting bird species are declining in Europe, which is partly due to an increased abundance of generalist predators.** They found evidence strongly implicating generalist predators in causing declines in European bird populations. The study suggests that in some areas or circumstances habitat management alone is not sufficient to stop negative population trends and suggest that lethal removal of foxes and corvids can take away the pressure for local ground-nesting birds.

Empirical evidence from throughout Europe also suggests that the **levels of predation on wader nests are unsustainably high in many cases** (MacDonald and Bolton, 2008). For example, work in Scotland by Ratcliffe *et al.* (2008) showed how managing North American Mink (*Neovison vison*) delivered considerable benefits for Common Terns (*Sterna hirundo*) in west Scotland. In the Netherlands, the significance of nest predation on grassland breeding shorebirds was demonstrated by Teunissen *et al.* (2008) in highlighting the importance of multiple approaches to bird conservation at the site-specific level. In Ireland,

the Boleyrack Red Grouse Habitat Management Project (Scallan and Carslake, 2014; Scallan 2016) and the Grey Partridge Project in Boora, Co. Offaly (Buckley *et al.*, 2013; McMahon *et al.*, 2013) have shown that game management strategies that include effective predator control can lead to improved productivity for a variety of bird species (e.g. Red Grouse, Grey Partridge, Lapwing and Golden Plover). In Poland, Niemczynowicz *et al.* (2017) lead a seven-year study of the nesting success of the Northern Lapwing, Common Redshank and Black-tailed Godwit in Biebrza National Park, alongside a control programme of the invasive American Mink. They found that a decline in mink density led to increases in daily survival rates of nests and to the overall nesting success of all three wader species. These results demonstrate that the American Mink should be considered as a key predator affecting ground-nesting wetland bird populations.

In their 2020 study, Bolam *et al.* (2020) found that invasive species were the most frequent threat to endangered birds species that would have gone extinct without conservation action since 1993, and that controlling

these invasive species was the conservation action that prevented most of endangered birds from extinction. Predation from invasive or native predator, especially on breeding sites, is also cited as a threat for the species of Annex II that benefits from an international single species action plan. Those species are the Black-tailed Godwit (*Limosa limosa*), the Velvet Scoter (*Melanitta fusca*) and the Long-tailed Duck (*Clangula hyemalis*). As well as the Common Eider (*Somateria mollissima*) that will soon benefit from one. Predation is also classified as high for the Baltic Dunlin (*Calidris alpina schinzii*), «European» Black-tailed Godwit (*Limosa limosa limosa*), Common Redshank (*Tringa totanus*), Common Snipe (*Gallinago gallinago*), Eurasian Curlew (*Numenius arquata*), Eurasian Oystercatcher (*Haematopus ostralegus*), Northern Lapwing (*Vanellus vanellus*) and Ruff (*Calidris pugnax*) that benefit from an international multi-species action plan.

In terms of **human-wildlife conflict reduction**, it is also important to consider that some of the Arctic-breeding geese are increasing as demonstrated in the 2008-2012 and 2013-2018 assessments. Although these geese are a highly valued resource, their growing numbers are causing agricultural conflicts in wintering and staging areas as well as to vegetation on their breeding grounds. In this regard, the African-Eurasian Migratory Waterbird Agreement (AEWA) provides mechanisms to manage certain populations causing conflicts with certain human economic activities (through, for example, hunting). In most cases, the management of such populations requires an adaptive harvest management framework to maintain their population at levels that correspond to ecological, scientific, and cultural requirements while taking account of economic and recreational requirements (Madsen *et al.*, 2015b).

Finally, while fluctuations within the frame of population dynamics are common, the Birds Directive sets out to ensure that the EU and its Member States strive to protect birds and their habitats. At the same time, however, it is important to be aware of the ecological concept of competition, which recognises that all species may struggle to maintain an increasing population trend, due to limited resources and limited space⁵. This manner of thinking relates to the classical density-dependent fashion (Hairston *et al.*, 1960).

In this context, allowing the hunting of a species can provide a strong incentive to manage habitats and address other factors contributing to population declines, therefore contributing to the objective of restoring populations to favourable status. Furthermore, steps taken to improve the condition for target species can not only enhance the sustainable yield, but also benefit a range of other animals and plants that have similar ecological requirements.

4.3.2. Hunting bags

Information specific to hunttable (Annex II) birds was required for the first time in the latest article 12 reporting exercise. This included information if the species is nationally hunted and the hunting bag statistics over the period 2013 to 2018. As for population estimates, Member States had to select from a list of options indications of the method used.

Some **common errors** when assessing bag statistics at a glance include:

- **Subtracting the total bag from the winter population estimates** – For waterbirds, for example winter population estimates are based on counts in mid-January when most of the hunting has already taken place. Calculating off-take using total bag and total winter counts is effectively counting the bag twice. Hunting starts after the breeding period when populations are highest.
- **Only considering the wintering or breeding population present in the EU or Europe** - It should be noted that **for migratory birds, the breeding populations subject to hunting often originate from outside of the EU** (Madsen *et al.*, 2015), which is an important factor to consider regarding EU assessments of birds. Consideration is also required for EU wintering population estimates which do not account for the proportion of birds wintering further south, after passage through Europe. Population delineation is an essential part of harvest assessment and management.
- **Only considering birds within national borders** – By way of illustration, in late 1990s the annual bag of Teal (*Anas crecca*) was around 330.000, nearly 4 times the number counted in mid-winter (Mondain-Monval & Girard, 2000) and during a time when the wintering population was increasing. For the reasons noted above, understanding of the population dynamics during the annual cycle, timing of hunting and population delineation are essential to assess hunting bags.
- **Finally, hunting is more than just off-take due to the efforts made year-round** by hunters to increase productivity and survival of birds, and hunting bags are estimates like any other estimates and vary in terms of methodology and data quality.

⁵ Competition can exist among different and similar species as well as at different trophic levels (Begon *et al.* 1996). This can relate to, for example, resource competition for food, nesting sites or predation. An increase in the population of one species can mean that that same species will require more resources, therefore possibly reducing (resource) availability for other species that require the same resources.



European Turtle-Dove (*Streptopelia turtur*)

4.3.3. Species actions

4.3.3.1. The European Turtle Dove

The European Turtle Dove (*Streptopelia turtur*) populations are declining in Europe, from 2.330.000 - 4.060.000 to 1.980.000 - 3.440.000 breeding pairs (EU28) according to the 2008-2012 and 2013-2018 Article 12 assessments. Both its short and long-term populations trends are declining. However, its status of 'Near Threatened' did not change between the two assessments.

The species is declining due to poor breeding success as a result of agricultural intensification. As an example, in 2003, Browne & Aebischer found that a lack of suitable breeding and foraging habitats in Britain, where the species is not hunted, was hampering its breeding success, leading to its decline.

One of the main stakeholder groups generating action on the ground, due to its closeness with the farming and landowner communities, is the hunting community. There are multiple examples of hunters successfully pushing farmers to put in place agri-environmental schemes for huntable species. The hunting community currently invests considerable resources into habitat improvement and supplementary feeding for the Turtle Dove. The management (in the field) of this migratory bird can have a positive impact, because the species presents

a great site fidelity (philopatry), or systematic return each year to the same breeding sites.

In Italy, the results of a 2018 survey from the Federazione Italiana della Caccia showed that, in a small sample of departments, 990 hectares of habitat measures (including 25% in non-hunting areas) were made for an amount of 397.000 euros. These results represent evidence of the hunter's community real and potential impact for Turtle Dove habitat, via the income from hunting taxes (Sorenti 2020, pers. comm.).

In Spain, the Turtle Dove has declined in most regions, but it was especially remarkable in the North, where hunting is relatively unimportant (Moreno *et al.*, 2017). This is likely a reflection of both habitat changes and the important management put in place by the hunting community in Spain.

The most dramatic declines are observed in countries where the species is not hunted. As an example, a decline of more than 99% was observed in the Netherlands. During the period 1960 to 2018, the population went from 75.000 to 500 breeding pairs.

When hunting Turtle Dove, harvest should not simply be considered as "taking" from the population. Wild bird population dynamics are much more complicated and involve density-dependent mortality rates, emigration, immigration, recruitment, and compensatory mortality.

In this case, the Turtle Dove suffers an annual natural mortality rate estimated at 50% for adults and 64% for juveniles (EC, 2008, page 86). That means that more than half of the post-breeding population will die before the next reproductive season, because of natural causes. This high mortality rate (as in many hutable bird species) means that hunting off-take is typically compensatory (not additive) to other forms of mortality.

Further, when we calculate the harvest rate from the data in the SAP, it shows a value between 15 and 20% (e.g. European Commission's NADEG note on Turtle Dove for the extraordinary NADEG meeting 26-04-2018) of the post-breeding population. This value is well below the natural mortality rate, and it could be argued that at least a great part of such mortality is compensatory. It is noteworthy that more than 70% of the Turtle Doves are infected by deleterious parasites (see SAP and recent work of Dunn *et al.*, 2017). In other words, the amount of birds that die through hunting would have died for other reasons.

Bacon *et al.* (2020) recently developed a population model for the Turtle Dove in view of its adaptive harvest management for the western flyway. Using 2013 data, they estimated the harvest rate (from hunting bags and breeding population size at the flyway scale) at 18.5% of the population available in August-September (including juveniles born that year). The harvest rate for 2017/2018 using data reported by Member States (Art. 12 report), was estimated at 17% or 11% (minimum or maximum population size). According to their model, harvest rates higher than 8.2% (i.e. ca. 45% of the 2013 estimated harvest rate, including crippling losses) lead to a population decline. A probability of 50% was found that the population would continue to decline with harvest rates of 8.2 or below. However, the probability that the population would continue to decrease without harvest was found to be 29%. Since 2018 hunting in France, Spain, and Portugal has been dramatically should in terms of length of seasons, number of days when hunting is permitted, and bag limits.

If the Turtle Doves' reproductive success does not increase, the population will continue to decline, due to natural mortality and insufficient productivity. Stopping hunting (which motivates habitat and other management) will not improve the breeding productivity of the species. Moreover, the effects of temporarily suspending the hunting of this species would result in the disappearance of important management practices applied by hunters, which consists of providing extra food, especially at the end of the breeding period and starting the postnuptial migration. This contribution at that time is crucial because of the extreme scarcity of food resources.

This point was made by Professor Sebastián J. Hidalgo de Trucios, University of Extremadura, Spain during the SAP consultation process

with a strong focus on what would happen in the southern half of the Iberian Peninsula, Spain following a hunting moratorium. This point is supported by the conclusion of Marx *et al.* 2016: *"Nevertheless, the stop of hunting might not support population recovery, since Browne & Aebischer (2004) have revealed that Turtle Dove declines were mainly caused by conditions on breeding grounds. Hence, the improvement of conditions and productivity in breeding areas might support the population recovery more effectively than prohibition of hunt."*

Examples of changes in hunting regulations with the aim of reducing the level of harvest of Turtle Dove:

- In France, the quota was set at 18.000 Turtle Doves for the 2019-2020 hunting season resulting in a reduction of around 80% of the hunting bag. This quota was set accordingly to the CEGA advice (2019) on Turtle Dove hunting. Models treating hunting as an additive mortality to the population resulted in a 2.6% annual increase rate if no hunting was allowed in France. The quota was then set to match half of this increase. For the 2020-2021 hunting season, 17.460 birds are allowed in the bag.
- Italy allows only a few fixed days hunting in early September; there are hunting quotas, and protected areas that do not allow hunting.
- Greece implements hunting quotas and close monitoring of harvest bags. They also have an extensive mapped network of non-hunting areas established especially for Turtle Dove.
- In Portugal the number of hunting days has been reduced from 12 to 4 days. For the 2018/19 season the total bag was around 45,000 birds, a reduction of 50% compared to previous years.
- In 2020, Spain has reduced its harvest from 25/30 day season (3 full days per week) to a 4 day season in total (max. 2 partial days per week) and Turtle Dove hunting will only be permitted in 7 out of 17 regions in Spain.

4.3.3.2. The Irish Red Grouse

Throughout Europe, the Willow Grouse (*Lagopus lagopus*) has stable short-trend populations and a 'depleted' status.

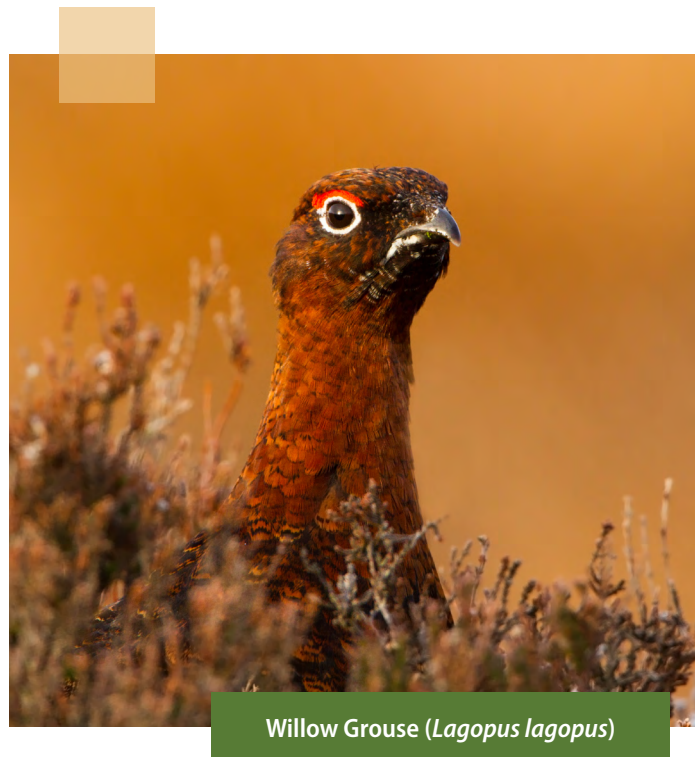
The populations of the sub-species *Lagopus lagopus scotica* that occurs in the UK are estimated at 264.000-265.000 breeding pairs with an increasing short-term trend and a stable long-term trend and are assessed as 'secure'.

Significant conservation and management work is undertaken for Red Grouse in the United Kingdom, whereby large areas of heather moorlands are managed for hunting interests. The existence of this rare heathland habitat is largely due to its value for Red Grouse and other threatened birds, which provides a strong basis for protecting this

habitat against other less-nature-friendly land use interests, such as commercial afforestation.

In Ireland, the Irish Red Grouse (*Lagopus lagopus hibernica*) is another example of a declining and threatened huntable species. A 2010 Irish Red Grouse survey indicated that the population in the Republic of Ireland was just over 4,200 birds suggesting a 50% decline in range in the last 40 years (Cummins *et al.*, 2010). Now, with the last Article 12 assessment, Irish populations has been estimated at 1,708-2,116 breeding pairs. Its population trends are declining, and its status is 'threatened'.

A Red Grouse Species Action Plan was developed in 2013, with a variety of stakeholders, is still ongoing until 2023 (National Red Grouse Steering Committee, 2013). It demonstrates that although the species is declining, some 36 conservation projects have been established by hunters to address local declines (Figure 21). Specific actions include habitat management, predator control, disturbance control, provision of grit, improving public awareness and monitoring.



4.3.3.3. The last native Pheasant population in Europe

In Europe, one last native population of pheasant, the Black-necked Pheasant (*Phasianus colchicus colchicus*), remains in Greece, at the Nestos River Delta. The release of pheasants in the area is prohibited and this population has not been genetically impacted by released

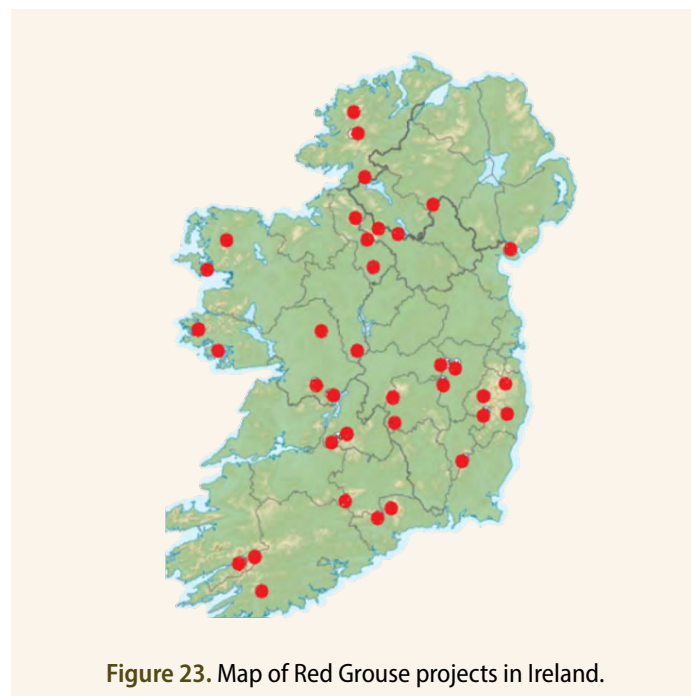
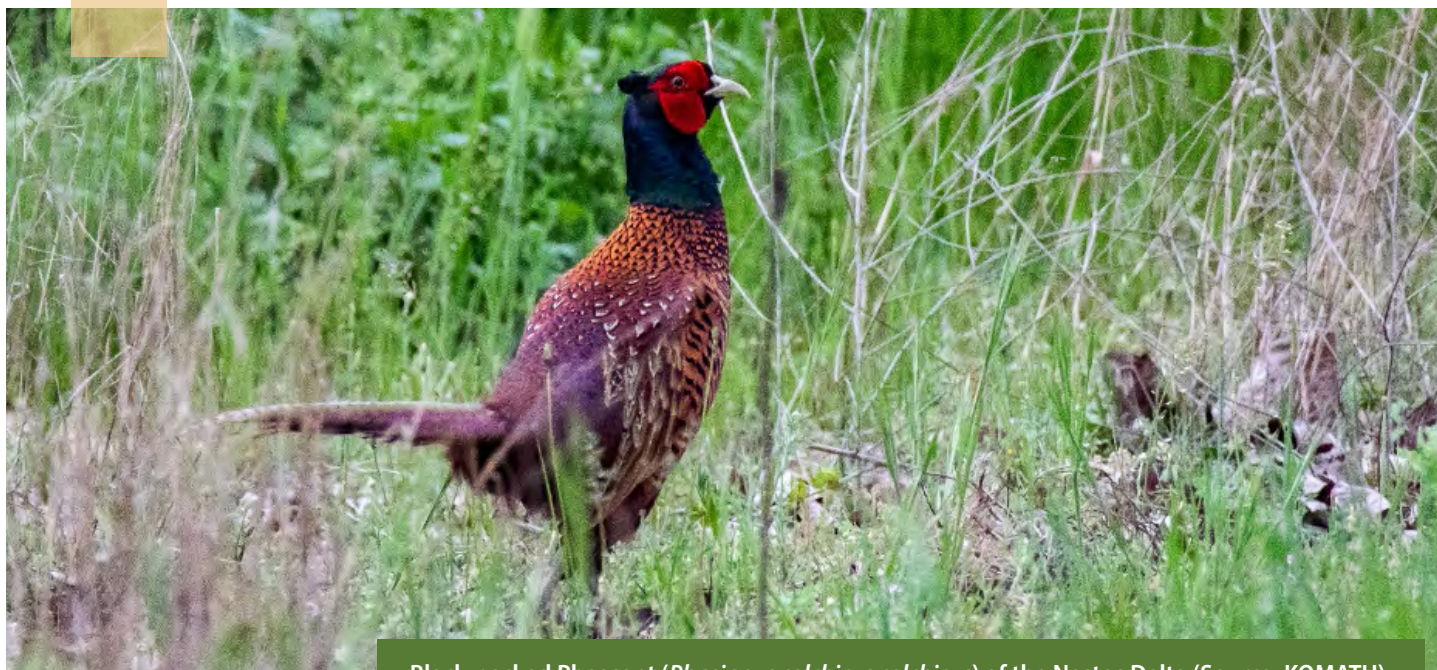


Figure 23. Map of Red Grouse projects in Ireland.

pheasants (Paralikiadis *et al.*, 1997). The species was widespread in Greece until 50 years ago but underwent a steep decrease due to a loss of habitat (GWCT, 2017). It has decreased over the years to the last current refuge of Nestos Delta, despite a prohibition of hunting already dating from 1923 (Sokos & Birtsas, 2014). During the 2003-2012 period, the Nestos Delta population was estimated at 100 - 250 birds (Sokos & Birtsas, 2014).

The most recent Article 12 reporting assessment (2013-2018) takes Greece's native pheasant's population into account and estimates its breeding population to 50 - 100 breeding pairs, but recent counts seem to indicate a small increase. Its short-term population trend is regarded as 'stable' but its status is 'threatened'. The Greek Hunting Associations are monitoring the population using the spring count methods. The most recent results give a better view of the population. In 2020, there were more cock pheasant territories expanding to new areas, probably as a result of the applied habitat improvement measures.

Various threats are affecting this population. They range from loss of habitat, intensive agriculture, flooding, poaching and predation. Good populations of predators are found in the Delta such as the Wildcat (*Felis silvestris*), the Beech Marten (*Martes foina*) and the Golden Jackal (*Canis aureus*). Raptors and sheep dogs are also considered as a threat (Sokos & Birtsas, 2014). Moreover, Wild Boar (*Sus scrofa*), corvids and gulls may predate pheasant nests (Paralikiadis 2005). Concerning law enforcement, no illegal hunting action has been recently recorded.



Black-necked Pheasant (*Phasianus colchicus colchicus*) of the Nestos Delta (Source: KOMATH).

Despite the century long ban on hunting of this population, its recent decline is an alarming raised to attention by the Hunting Federation of Macedonia and Thrace (KOMATH), a hunters' organization funded by its members. Over the last two decades, they have been active in the conservation of the population by spring monitoring and habitat management. They also carried out a number scientific study. Recently, they agreed on a six-year action plan for the Nestos Delta Black-necked Pheasant, together with the World Pheasant Association and the Game and Wildlife Conservation Trust (GWCT, 2017).

It is noteworthy to add that a population collapse could have serious consequences as it could mean the extinction of the last indigenous population of Black-necked Pheasant in Europe. The Hunting Federation of Macedonia & Thrace (member of Hellenic Hunters Confederation) continues the monitoring of habitat conditions, following an approved study for wild pheasant conservation in the Nestos river delta.



Game wardens of Greek Hunting Federation participating in the habitat management of the Nestos Delta for the native pheasant population.



Team participating in the monitoring (employees of Hunting Associations and some volunteers).

5. Recommendations

5.1. Policy recommendations

FACE believes that there are a number of key recommendations which, if implemented, would greatly strengthen the long-term conservation of Europe's Annex II (hunnable) and other birds. Some of these recommendations are summarised below.

5.1.1. Conservation policy priorities

- Sustainable use must continue to be promoted in line with the Birds Directive and the EU's implementation of the Convention on Biological Diversity thereby empowering community-based conservation.
- A better alignment of other sectoral policies, particularly the CAP, with the requirements of the Birds Directive is urgently required.
- Agri-environmental schemes implemented through the CAP should focus more on results, gaining inspiration from results- and community-based schemes recently implemented in a number of European countries.
- Predator control should be a key part of agri-environmental schemes that target ground-nesting birds.
- Conservation programmes implemented at national level need to be more targeted (e.g. outputs driven) and flexible to make better use of landowner/hunter knowledge and experience.
- New international species action plans should be developed for some huntable species, for example, the Eurasian Wigeon (*Mareca Penelope*) and the Common Pochard (*Aythya ferina*).
- Greater priority and more funding should be directed into targeted habitat restoration programmes involving a diversity of stakeholders, empowering community-based conservation.
- Ensure that the threats to migratory huntable birds are tackled on a flyway scale through existing international agreements e.g. AEWA.
- For huntable bird species of the highest conservation concern, action plans should be developed at the appropriate geographic scale using a multi-stakeholder approach for the recovery of the species.



Hazel Grouse (*Bonasa bonasia*)

- Ensure that invasive alien species are detected early and, where appropriate, rapidly managed and/or eradicated.
- The principle of subsidiarity must be respected in discussions and decisions about hunting moratoriums at EU level. FACE is against moratoriums at this scale because they often equate to permanent bans and have not delivered any results for the species concerned.

5.1.2 Habitat conservation

- Ensure that land use policies, such as the CAP, are reformed to effectively safeguard farmland biodiversity through appropriate conditionality and incentives.
- Improve the effectiveness of agri-environmental schemes (under Pillar II of the CAP) within Member States by setting specific long-term objectives incorporating targeted and measurable mechanisms that support biodiversity.
- Ensure that Pillar II (agri-environmental) incentives provide suitable mechanisms to allow for the creation and management of habitats for huntable bird species. Such mechanisms may have a greater uptake by farmers and support the ongoing conservation investments by the hunting community.
- Enhance policy to strengthen the implementation of the Natura 2000 Network through promoting sustainable use and community-based conservation approaches as well as decision-making at the site level.
- Promote the conservation of High Nature Value (HNV) farmland, in particular, within the CAP.
- Ensure key habitats for waterbirds are protected through existing instruments e.g. AEWA via greater dedication from Contracting Parties.

5.1.3. Monitoring

- Ensure that hunting is sustainable by placing greater priority on the annual reporting of harvest levels of game birds. If such general systems are not possible to implement in the short term, priorities should be given to declining populations of species, for example, to those waterbirds listed in Column A and B of AEWA.
- Promote the development of EU bag collection monitoring schemes that make better use of distribution and demographic data to help understand the mechanisms of reduced growth rate.

5.1.4. Sustainable hunting

- The Birds Directive must continue to provide a fair approach to hunting recognising the conservation efforts by the hunting community and the “cultural requirements” which are at the same level as the “ecological requirements” (Article 2, Birds Directive).
- Migratory Birds:
 - Adaptive harvest management should be promoted for relevant species, which can provide a science-based framework to ensure harvest can be placed within socially and ecological limits.
- Sedentary game birds:
 - Decisions on sustainable hunting should be made at the lowest level in conjunction with local stakeholders based on monitoring and conservation efforts.

5.1.5. Research

Managing to create, restore, or enhance habitats and food resources for huntable (and other) birds can be challenging not only because such needs may vary greatly across seasons (breeding, migration, winter) and among species, but such efforts also must balance the needs of other wildlife and humans. In this context, additional research should be conducted into:

- Limiting factors – for Annex II birds ranked of high conservation priority, conduct studies on the life stages and factors (at both local and landscape scales) that limit reproductive success or overwinter survival. Combine distribution and demographic data to help understand the mechanisms of reduced growth rate.
- Disturbance effects – study the effects on nesting or foraging waterbirds of human disturbance and if and how such effects can be mitigated.

5.1.6. Communication

Communication strategies on best-practice habitat and species management should be directed towards resource-users e.g. hunters and land managers as well as policy-makers and the general public.

⁶ Waterbirds, like all wildlife, require specific habitats (or habitat features) to complete critical phases of their life cycle.

⁷ Collection of waterbird hunting bag statistics has a long history in Europe, in some countries dating back to the first half of the 20th century (Lampio, 1983) and nowadays, systems exist in the majority of European countries (www.artemis-face.eu). However, the way in which data are collected and the species and geographical resolution and coverage vary greatly between countries.

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Appendix: Status of Annex II Birds

Population Size (Art. 12)												
2013-2018												
Annex II (part 1)		2008-2012	Estimated EU Breeding					Estimated EU Wintering				
		EU Population status	Breeding (Low)	Breeding (High)	Short-term trend	Long-term trend	EU Population status	Wintering (Low)	Wintering (High)	Short-term trend	Long-term trend	EU Population Status
ANATIDAE												
Bean Goose	<i>Anser fabalis</i>	Secure	1 200	3 100	Decreasing	Unknown	Threatened	703 000	970 000	Increasing	Increasing	Threatened
Greylag Goose	<i>Anser anser</i>	Secure	223 000	321 000	Increasing	Increasing	Secure	1 160 000	1 350 000	Increasing	Increasing	Secure
Canada Goose	<i>Branta canadensis</i>	Not assessed	91 300	109 000	NE	NE	Not evaluated					Not evaluated
Eurasian Wigeon	<i>Mareca penelope</i>	Near Threatened	41 600	70 100	Decreasing	Decreasing	Threatened	1 780 000	2 090 000	Decreasing	Increasing	Threatened
Gadwall	<i>Mareca strepera</i>	Secure	52 400	77 500	Increasing	Increasing	Secure	195 000	262 000	Increasing	Increasing	Secure
Eurasian Teal	<i>Anas crecca</i>	Secure	234 000	367 000	Decreasing	Decreasing	Declining	1 420 000	1 750 000	Increasing	Increasing	Declining
Mallard	<i>Anas platyrhynchos</i>	Secure	1 850 000	3 020 000	Stable	Stable	Secure	3 770 000	4 440 000	Decreasing	Decreasing	Secure
Northern Pintail	<i>Anas acuta</i>	Threatened	4 500	18 800	Decreasing	Decreasing	Threatened	145 000	275 000	Increasing	Increasing	Threatened
Garganey	<i>Spatula querquedula</i>	Threatened	9 100	18 200	Decreasing	Decreasing	Threatened					Threatened
Northern Shoveler	<i>Spatula clypeata</i>	Depleted	24 100	34 500	Decreasing	Decreasing	Near Threatened	258 000	413 000	Increasing	Increasing	Near Threatened
Common Pochard	<i>Aythya ferina</i>	Threatened	46 100	71 400	Decreasing	Decreasing	Threatened	347 000	526 000	Decreasing	Decreasing	Threatened
Tufted Duck	<i>Aythya fuligula</i>	Secure	166 000	288 000	Decreasing	Decreasing	Threatened	1 000 000	1 230 000	Decreasing	Stable	Threatened
GALLIFORMES												
Red Grouse	<i>Lagopus lagopus hibernica</i>	Threatened	1900	2400	Declining	Declining	Threatened					Threatened
Red Grouse	<i>Lagopus lagopus scoticus</i>	Secure	264 000	265 000	Increasing	Stable	Secure					Secure
Rock Ptarmigan	<i>Lagopus muta</i>	Threatened	113 000	247 000	Increasing	Increasing	Secure					Secure
Rock Partridge	<i>Alectoris graeca</i>	Threatened	25 500	37 700	Unknown	Decreasing	Near Threatened					Near Threatened
Red-legged Partridge	<i>Alectoris rufa</i>	Declining	4 970 000	6 850 000	Decreasing	Decreasing	Near Threatened					Near Threatened
Grey Partridge	<i>Perdix perdix</i>	Declining	767 000	1 320 000	Decreasing	Decreasing	Threatened					Threatened
Common Pheasant	<i>Phasianus colchicus (native)</i>		50	100	Stable	Unknown	Threatened					Threatened
Common Pheasant	<i>Phasianus colchicus (non-native)</i>	Secure	2 500 000	3 480 000	Stable	Stable	Secure					Secure
COOT												
Common Coot	<i>Fulica atra</i>	Near Threatened	560 000	844 000	Stable	Decreasing	Depleted	1 930 000	2 340 000	Decreasing	Stable	Secure
WOODCOCK & SNIPES												
Jack Snipe	<i>Limnacropteryx minimus</i>	Unknown	8 700	23 400	Stable	Unknown	Secure					Secure
Common Snipe	<i>Gallinago gallinago</i>	Declining	422 000	758 000	Decreasing	Decreasing	Declining					Declining
Eurasian Woodcock	<i>Scolopax rusticola</i>	Secure	706 000	1 460 000	Stable	Stable	Secure					Secure
COLUMBIDAE												
Rock Pigeon	<i>Columba livia (wild)</i>	Secure	2 450 000	4 740 000	Stable	Stable	Secure					Secure
Rock Pigeon	<i>Columba livia (feral)</i>		10 300 000	18 900 000	Not Evaluated	Not Evaluated	Not assessed					Not assessed
Common Wood-pigeon	<i>Columba palumbus</i>	Secure	18 900 000	26 000 000	Increasing	Increasing	Secure					Secure

Population Size (Art. 12)												
2013-2018												
Annex II (part 2)	2008-2012		Estimated EU Breeding				Estimated EU Wintering					
	EU Population status		Breeding (Low)	Breeding (High)	Short-term trend	Long-term trend	EU Population status	Wintering (Low)	Wintering (High)	Short-term trend	Long-term trend	EU Population Status
ANATIDAE B												EU Population Status
Mute Swan	Secure		66 100	93 600	Stable	Increasing	Secure	182 000	225 000	Increasing	Increasing	Secure
Pink-footed Goose	Secure							555 000	566 000	Increasing	Increasing	Secure
Greater White-fronted Goose	Secure							1 570 000	2 350 000	Stable	Increasing	Secure
Brent Goose	Secure							298 000	337 000	Stable	Increasing	Secure
Red-crested Pochard	Secure		11 600	15 500	Increasing	Increasing	Secure	36 100	68 300	Increasing	Increasing	Secure
Greater Scaup	Threatened		1 000	1 500	Decreasing	Decreasing	Threatened	133 000	281 000	Increasing	Increasing	Threatened
Common Elder	Threatened		176 000	296 000	Decreasing	Decreasing	Threatened	1 010 000	1 480 000	Increasing	Decreasing	Threatened
Long-tailed Duck	Threatened		2 200	3 200	Unknown	Unknown	Near Threatened	1 160 000	2 130 000	Stable	Decreasing	Near Threatened
Common Scoter	Secure		6 000	9 900	Unknown	Increasing	Unknown	1 420 000	1 950 000	Increasing	Stable	Unknown
Velvet Scoter	Threatened		11 000	24 000	Decreasing	Decreasing	Threatened	201 000	384 000	Increasing	Decreasing	Threatened
Common Goldeneye	Secure		187 000	241 000	Decreasing	Stable	Secure	312 000	424 000	Stable	Increasing	Secure
Red-breasted Merganser	Threatened		44 600	73 900	Decreasing	Stable	Near Threatened	87 300	114 000	Decreasing	Stable	Near Threatened
Common Merganser	Secure		62 900	105 000	Increasing	Stable	Secure	160 000	245 000	Stable	Increasing	Secure
GALLIFORMES B												
Hazel Grouse	Secure		548 000	927 000	Decreasing	Decreasing	Threatened					Threatened
Red Grouse	Threatened		108 000	495 000	Declining	Declining	Near Threatened					Near Threatened
Black Grouse	Depleted		523 000	868 000	Decreasing	Decreasing	Threatened					Threatened
Western Capercaillie	Depleted		468 000	1 170 000	Stable	Decreasing	Depleted					Depleted
Barbary Partridge	Unknown		7 700	20 500	Unknown	Unknown	Unknown					Unknown
Chukar	Secure		260 000	374 000	Stable	Stable	Secure					Secure
Black Francolin	Secure		3 600	7 600	Increasing	Increasing	Secure					Secure
Common Quail	Unknown		1 130 000	2 490 000	Unknown	Unknown	Unknown					Unknown
Wild Turkey	Not assessed						Not evaluated					Not evaluated
RAILS & MOORHENS												
Water Rail	Unknown		84 100	197 000	Unknown	Uncertain	Unknown					Unknown
Common Moorhen	Secure		672 000	921 000	Decreasing	Stable	Secure					Secure
OYSTERCATCHERS, PLOVERS & SANDPIPERS												
Eurasian Oystercatcher	Threatened		175 000	197 000	Decreasing	Decreasing	Threatened	784 000	838 000	Decreasing	Decreasing	Threatened
Eurasian Golden-plover	Secure		207 000	338 000	Stable	Stable	Secure	746 000	1 220 000	Decreasing	Increasing	Secure
Grey Plover	Secure							125 000	150 000	Stable	Increasing	Secure

Northern Lapwing	<i>Vanellus vanellus</i>	Threatened	805 000	1 140 000	Decreasing	Decreasing	Threatened	2 210 000	3 500 000	Decreasing	Decreasing	Threatened	Threatened
Red Knot	<i>Calidris canutus</i>	Secure						403 000	487 000	Decreasing	Stable	Secure	Secure
Ruff	<i>Calidris pugnax</i>	Threatened	41 500	94 700	Decreasing	Decreasing	Near Threatened	3 000	5 400	NE	NE	Not evaluated	Near Threatened
Black-tailed Godwit	<i>Limosa limosa</i>	Threatened	37 900	46 700	Decreasing	Decreasing	Threatened	126 000	186 000	Increasing	Increasing	Secure	Threatened
Bar-tailed Godwit	<i>Limosa lapponica</i>	Secure	1 300	4 500	Stable	Increasing	Secure	148 000	178 000	Stable	Increasing	Secure	Secure
Whimbrel	<i>Numenius phaeopus</i>	Secure	47 100	67 700	Increasing	Increasing	Secure						Secure
Eurasian Curlew	<i>Numenius arquata</i>	Near Threatened	155 000	173 000	Stable	Decreasing	Near Threatened	494 000	560 000	Decreasing	Stable	Secure	Near Threatened
Spotted Redshank	<i>Tringa erythropus</i>	Near Threatened	8 900	24 500	Decreasing	Decreasing	Near Threatened						Near Threatened
Common Redshank	<i>Tringa totanus</i>	Threatened	92 300	115 000	Decreasing	Decreasing	Threatened	139 000	154 000	Decreasing	Stable	Declining	Threatened
Common Greenshank	<i>Tringa nebularia</i>	Secure	68 400	105 000	Stable	Stable	Secure						Secure
GULLS													
Common Black-headed Gull	<i>Larus ridibundus</i>	Depleted	811 000	1 080 000	Stable	Decreasing	Threatened						Threatened
Mew Gull	<i>Larus canus</i>	Secure	221 000	318 000	Decreasing	Decreasing	Declining						Declining
Caspian Gull	<i>Larus cachinnans</i>	Secure	5 600	9 600	Increasing	Increasing	Secure						Secure
Lesser Black-backed Gull	<i>Larus fuscus</i>	Secure	308 000	338 000	Decreasing	Increasing	Secure						Secure
Herring Gull	<i>Larus argentatus</i>	Near Threatened	419 000	479 000	Decreasing	Decreasing	Threatened						Threatened
Yellow-legged Gull	<i>Larus michahellis</i>	Secure	382 000	491 000	Unknown	Unknown	Unknown						Unknown
Great Black-backed Gull	<i>Larus marinus</i>	Secure	28 100	45 000	Decreasing	Decreasing	Near Threatened						Near Threatened
PIGEONS & DOVES													
Stock Pigeon	<i>Columba oenas</i>	Secure	610 000	972 000	Increasing	Increasing	Secure						Secure
Eurasian Collared-dove	<i>Streptopelia decaocto</i>	Secure	5 990 000	14 500 000	Increasing	Increasing	Secure						Secure
European Turtle-dove	<i>Streptopelia turtur</i>	Near Threatened	1 980 000	3 440 000	Decreasing	Decreasing	Near Threatened						Near Threatened
SKYLARK & THRUSHES													
Eurasian Skylark	<i>Alauda arvensis</i>	Declining	23 300 000	31 700 000	Decreasing	Decreasing	Declining	150 000	1 310 000	NE	NE	Not evaluated	Declining
Eurasian Blackbird	<i>Turdus merula</i>	Secure	47 800 000	71 400 000	Increasing	Increasing	Secure						Secure
Fieldfare	<i>Turdus pilaris</i>	Threatened	3 410 000	5 150 000	Stable	Stable	Secure						Secure
Song Thrush	<i>Turdus philomelos</i>	Secure	12 200 000	20 500 000	Increasing	Stable	Secure						Secure
Redwing	<i>Turdus iliacus</i>	Threatened	1 960 000	2 370 000	Decreasing	Decreasing	Declining						Declining
Mistle Thrush	<i>Turdus viscivorus</i>	Secure	2 320 000	4 370 000	Stable	Stable	Secure						Secure
CORVIDAE & STARLING													
Eurasian Jay	<i>Corvus glandarius</i>	Secure	4 130 000	7 080 000	Stable	Increasing	Secure						Secure
Magpie	<i>Pica pica</i>	Secure	6 900 000	10 800 000	Stable	Stable	Secure						Secure
Eurasian Jackdaw	<i>Corvus monedula</i>	Secure	5 440 000	9 460 000	Increasing	Increasing	Secure						Secure
Rook	<i>Corvus frugilegus</i>	Secure	2 770 000	5 330 000	Decreasing	Decreasing	Declining						Declining
Carrion Crow	<i>Corvus corone</i>	Secure	5 220 000	8 030 000	Stable	Increasing	Secure						Secure
Common Starling	<i>Sturnus vulgaris</i>	Secure	18 200 000	31 900 000	Decreasing	Decreasing	Declining						Declining



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