

REVIEW

When is it legal to hunt strictly protected species in the European Union?

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In the European Union (EU), the Habitats Directive bans the killing of strictly protected animal species. The killing of individual animals may nevertheless be allowed when there is no satisfactory alternative and doing so would not be detrimental to the maintenance of species populations at favorable conservation status for one of five enumerated reasons. This exception has been used by national authorities to allow hunting, frequently triggering litigation. Here, we review several contested aspects of the provisions allowing exceptions from strict protection, particularly those in the controversial Article 16(1)(e), in order to clarify Member States' discretion in allowing hunting. Correctly interpreting these provisions is necessary to ensure species are protected at the level intended by the Habitats Directive, and that their conservation status is improved or maintained. Our review suggests that it would be very difficult for national authorities to allow the hunting of strictly protected species while complying with EU law.

KEYWORDS

Article 16(1)(e), bear, carnivores, derogation, environmental law, habitats directive, hunting, protected species, wolf

1 | INTRODUCTION

Biodiversity protection laws generally forbid or regulate human activities that negatively impact biodiversity. These laws often prohibit or require the prohibition of the killing or other removal of individuals of certain protected species. However, like many environmental and other laws, biodiversity laws may allow for exceptions from their restrictive provisions in certain situations (de Sadeleer, 2014). Some important biodiversity laws that allow such exemptions, or “derogations,” include the U.S. Endangered Species Act (ESA) of 1973, the Bern Convention on the Conservation of European Wildlife and Natural Habitats of 1979, the European Union (EU) Birds Directive of 1979 (Directive

2009/147/EC), and the EU Habitats Directive of 1992 (Directive 92/43/EEC). Derogations offer some flexibility in the application of the laws to allow for the killing or harming of otherwise protected species. For example, under the ESA, individuals from “experimental” or reintroduced populations, such as wolves (*Canis lupus*) in Yellowstone National Park and the whooping crane (*Grus americana*) in the eastern United States, do not receive the same level of protection as other endangered populations. Likewise, species that are listed as “threatened” rather than “endangered,” such as the Apache trout (*Oncorhynchus apache*), may be made subject to special regulations (“4(d) rules”) that allow exceptions from protection. However, too much flexibility can frustrate the goals of environmental legislation (Kingston, 2017). If the ability to derogate is not clearly and sufficiently limited, there is a risk that the protective legislation will be undermined and the exception becomes the rule.

This article interprets EU species protection law for policy makers, legal practitioners, and wildlife managers.

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There is currently a substantial body of scientific literature and Federal case law that examines when individual animals can be lawfully killed under the ESA (e.g., Kalen and Pan (2010)). For example, U.S. case law has confirmed the line drawn between the killing of endangered species through habitat modification in the course of otherwise lawful activities, and their direct and intentional killing (Humane Society v. Kempthorne, 2006). In the first situation, the relevant federal agencies may grant an “incidental take permit” allowing the habitat modification. The direct and intentional killing of protected animals, on the other hand, can be allowed only to further conservation interests. This may include culling actions “in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved” (ESA sec 3[3]). These actions are usually carried out by wildlife management authorities. Importantly, hunting—which we define here as the killing of animals by members of the public for sport, food, or profit (Cambridge Dictionary Online, 2019)—cannot be allowed for endangered species under the ESA, with a few delimited exceptions (see Epstein, 2017; ESA sec 10(b–e, j)).

There has been less scholarly and judicial analysis of the corresponding derogation provisions of the Habitats Directive (Schoukens & Bastmeijer, 2015). Although decisions by EU Member States to allow the culling or hunting of species that are protected by the Habitats Directive have frequently provoked a high level of controversy, there have been few rulings on the issues from the EU courts. The Court of Justice, the highest court in the EU (hereafter CJEU), ruled in CJEU (2007a) that Finland was in breach of its obligations under the Habitats Directive Article 16(1)(b) in allowing the killing of wolves, which are strictly protected by the Habitats Directive (i.e., listed in the Directive's Annex IV). In that case, Finland had stated a purpose of preventing damage to livestock but did not sufficiently demonstrate that the killing would prevent damage (CJEU, 2007b). A second case, the *Tapiola* case, also concerning the killing of wolves in Finland, this time under Article 16(1)(e), is expected as of this writing to be decided by the Court in the near future (Epstein and Chapron, 2018; CJEU, 2017b). In this article, we draw conclusions about questions at issue in this case and about the legal status of hunting and other killing of strictly protected animals in the EU more broadly.

1.1 | Background and legal context

The Habitats Directive aims to ensure biodiversity conservation in the EU by directing the Member States to enact measures to maintain or achieve the “favorable conservation status” of species and habitats (Habitats Directive Art. 2). What these measures consist of is largely up to the discretion of the Member States, but the Directive also contains some more specific requirements, including the establishment of the Natura 2000 network of protected habitats (Habitats Directive Art. 3; Cliquet, Decler, & Schoukens, 2015) and restrictions on the hunting or culling of certain species.

Box 1. Habitats Directive Article 16(1)

Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of [other articles on species protection]:

- (a) in the interest of protecting wild fauna and flora and conserving natural habitats;
- (b) to prevent serious damage, in particular to crops, livestock, forests, fisheries and water, and other types of property;
- (c) in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;
- (d) for the purpose of research and education, of repopulating and reintroducing these species and for the breedings operations necessary for these purposes, including the artificial propagation of plants;
- (e) to allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species listed in Annex IV in limited numbers specified by the competent national authorities.

Member States may allow the hunting or culling of species that are listed in Annex V of the Directive, which are “species of community interest whose taking in the wild and exploitation may be subject to management measures,” so long as these actions would not be incompatible with the species populations being maintained at favorable conservation status. Species listed in Annex IV of the Directive are designated “species of community interest in need of strict protection” and may not be hunted or culled unless there are specific and valid grounds for derogation. Approximately 360 vertebrates, 140 invertebrates, and 700 plant species are included in Annex IV of the Directive (European Environment Agency, 2018). The criteria for when Member States may derogate from the Directive's provisions related to species protection are described in Article 16(1) (see Box 1).

It is important to properly understand and interpret these criteria in order to ensure the effectiveness of the Habitats Directive, provide legal certainty to stakeholders, and avoid costly litigation. The last of the five derogation grounds, Article 16(1)(e), is particularly unclear. Unlike the first four grounds, it does not indicate a specific purpose for derogation. Instead, it allows Member States to derogate in unspecified situations if they comply with an additional set of

restrictions. This may allow nature protection laws to be adapted to new situations such as those caused by climate change (Cliquet, Backes, Harris, & Howsam, 2009). However, because of this flexibility, the risk may be particularly high that exceptions to the strict protection of species made under this derogation ground could undermine the intent of the law, and ultimately its effectiveness.

Article 16(1)(e) has often been invoked by Member States in allowing the hunting of strictly protected species, though other derogation grounds such as (b) and (c) are also used (Christiernsson, 2018; Epstein, 2018; European Commission, 2007). Some states have allowed hunting even for strictly protected species and populations that have a conservation status considered to be inadequate, or that lack scientifically sound population estimates. For example, the Balkan chamois (*Rupicapra rupicapra balcanica*) is hunted in Bulgaria although it is listed as Endangered in the Bulgarian Red Data Book with trends reported as unknown. In several cases, allowing hunting under Article 16(1)(e) has preceded a decrease in the size of protected populations. Finland, as stated above, allowed the hunting of wolves using Article 16(1)(e) with a stated purpose of increasing tolerance for wolves and reducing poaching (Epstein and Chapron, 2018). As a consequence, more than 60 wolves were hunted over the two consecutive winters of 2014/2015 and 2015/2016, and the population size, which had been recovering, decreased (Natural Resources Institute Finland, 2017). In Sweden, increased hunting of bears, justified under 16(1)(b), 16(1)(c), or 16(1)(e), has reduced the population from 3,300 to 2,800 individuals, with the species moving from Least Concern to Near Threatened in the Swedish Red List (Christiernsson, 2018).

In this review, we first aim to clarify several contested aspects of Article 16(1)(e), particularly what is meant by the terms “strictly supervised conditions,” “selective basis,” “limited extent,” “certain specimens,” and “limited numbers”. By clarifying these terms, we help evaluate when members of strictly protected species may be legally killed under Article 16(1)(e). Second, we examine the precondition that there exist no satisfactory alternative to derogating, a precondition that applies to all derogation grounds, and apply our analysis of this precondition to decisions to allow licensed hunting of strictly protected species. The second precondition, that derogation “is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range,” has been previously analyzed in Epstein and Chapron (2018), Epstein (2016), Epstein, López-Bao, and Chapron (2016), Trouwborst (2014), and Trouwborst, Boitani, and Linnell (2017).

This article uses legal sources in its analysis. Because legal terminology is often obscure to nonlawyers, we provide a legal glossary of the key terms to understand the Habitats Directive and Article 16(1)(e) (see Box 2). Importantly, the only binding sources of EU law are the texts of the EU treaties and other laws, and the decisions of the EU courts.

Box 2. Glossary

Advocate General: An officer of the court who delivers an independent legal opinion about a case prior to the decision by the judges.

Annexes of the Habitats Directive: Lists appended to the main text of the Habitats Directive. Annexes I and II, respectively, enumerate the natural habitat types and the animal and plant species of community interest whose conservation requires the designation of special areas of conservation. Annex III details the criteria for designating special areas of conservation. Annexes IV and V, respectively, enumerate animal and plant species of community interest in need of strict protection and animal and plant species of community interest whose taking in the wild and exploitation may be subject to management measures. Annex VI lists prohibited methods and means of capture and killing and modes of transport (e.g., night vision rifles or motorized vehicles). Annexes may be amended to be adapted to technical and scientific progress.

Conservation Status: The sum of the influences that may affect the long-term distribution and abundance of a population. The goal the Habitats Directive requires Member States to achieve or maintain favorable conservation status (see Epstein et al., 2016 for a legal-ecological interpretation). Conservation status is defined as favorable when: “population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis...”

Derogation: An exception or dispensation from a rule or law. According to the Habitats Directive, Member States may derogate from its species protection provisions under conditions described in Article 16(1).

Directive: A legal act of the EU that sets out a goal the EU Member States must achieve, but without dictating the means for achieving that goal. Directives are binding on all Member States, which must implement them in their national laws.

Regulation: A legal act of the EU that is directly enforceable (directly applicable), without further implementation by the Member States.

Species of Community Interest: Species protected by the Habitats Directive, that is, species which are endangered, rare, vulnerable, or endemic within the EU.

Strict Protection: Measures required by Article 12 of the Habitats Directive, which include a ban on the deliberate capture or killing of specimens of the species, among several other prohibitions.

The CJEU has not yet interpreted the Habitats Directive's Article 16(1)(e), but it has interpreted a similar provision in the Birds Directive, which protects EU birds, in multiple cases, which may indicate how it will rule when deciding on a Habitats Directive case such as the pending *Tapiola* case (Chapron and Epstein, 2018). The relevant portion of the Birds Directive states that exceptions may be allowed “where there is no other satisfactory solution” for one of six enumerated purposes, the last of which, set out in Article 9(1)(c), is “to permit, under strictly supervised conditions and on a selective basis, the capture, keeping, or other judicious use of certain birds in small numbers.” Additional EU materials relevant for interpreting the Habitats Directive include opinions from the CJEU's advocates general, guidance documents from the European Commission (hereafter Commission) (European Commission, 2007, 2008) and preparatory work used in the legislative process leading up to the enactment of legislation. The Commission also expresses its legal opinions in individual cases in infringement proceedings against Member States in letters of formal notice, reasoned opinions, and other legal documents. International treaties, especially the Bern Convention, which is implemented in the EU by the Birds Directive for birds and the Habitats Directive for other species, are also important in interpreting the Directive (Epstein, 2014; Trouwborst et al., 2017). The Bern Convention has a parallel provision to Article 16(1), Article 9(1), which states that exceptions from protection may be allowed provided that “there is no other satisfactory solution and that the exception will not be detrimental to the survival of the population concerned,” for one of five enumerated purposes, the last of which is “to permit, under strictly supervised conditions, on a selective basis and to a limited extent, the taking, keeping, or other judicious exploitation of certain wild animals and plants in small numbers.” Other documents produced by the Convention institutions, such as decisions and resolutions of the Bern Convention Standing Committee are also relevant for interpreting the Bern Convention (Linnell, Trouwborst, & Fleurke, 2017), and therefore the implementing provisions in the Habitats Directive.

2 | KILLING PROTECTED SPECIES UNDER ARTICLE 16(1)(E)

2.1 | Is killing “taking”?

A preliminary question is whether killing of animals can be allowed at all under Article 16(1)(e). This derogation allows

for “taking or keeping” but nothing is said about killing (Christiernsson, 2018; Michanek 2012). In contrast, the Bern Convention allows for “taking, keeping, or other judicious exploitation” and the Birds Directive allows for “capture, keeping, or other judicious use.” Judicious exploitation and use have been interpreted to allow hunting and killing (CJEU, 2003; Linnell et al., 2017). As there is no parallel term in the Habitats Directive, however, rulings on the “judiciousness” of hunting may be of limited importance in interpreting the Habitats Directive.

The European Commission has assumed that “taking,” as used in the Habitats Directive, does include killing (European Commission, 2007). Indeed, the word is used this way in other contexts, for example, in the ESA (ESA sec. 3 (19)). “Take” also does more clearly imply “kill” elsewhere in the Directive; it is specifically used in the context of hunting in Article 14, which pertains to the exploitation of Annex V species. The fact that “take” is used to mean kill in another part of the Directive, and the fact that “take” is sometimes used to mean kill in ordinary parlance, might lead to the conclusion that “take” could encompass killing in Article 16(1)(e) (Christiernsson, 2018). However, there are also arguments that point in the other direction.

Support for the position that “taking” does not include killing can also be found by comparing the words used in other language versions of the Habitats Directive. EU laws are equally authentic in each of their official languages. The word used in French, “la prise,” is similarly ambiguous to the English word. However, some other language versions of the Habitats Directive, such as those in Swedish and Danish, use words that translate to something closer to “collect” than “take” (Christiernsson, 2018). In Italian, the word “la cattura” is used, which means “capture.” The Swedish and Danish versions that use a word meaning “collect” instead of “take” use the same word in the in Article 14, where killing more clearly seems to be intended though, possibly indicating the intention to also use the word to include killing in Article 16. On the other hand, the Italian version does not use “la cattura” in that way. “La cattura” is used to mean “capture,” specifically in contrast to killing throughout the Habitats Directive, for example, in Article 12 prohibiting the “capture or killing” of strictly protected species (Michanek 2012).

Because all language versions of directives are equally valid, the CJEU determines the meaning of divergent text “by reference to the purpose and general scheme of the rules of which it forms part” (CJEU, 1995). The purpose of the Habitats Directive is biodiversity conservation. Further, the Court has previously held that all of Article 16(1) must be interpreted restrictively (CJEU, 2007b). Restrictive interpretation in this case might mean not interpreting a term that does not explicitly include killing to include killing.

Even if “taking” is found to encompass killing in some circumstances, it is less likely that it could be interpreted to

encompass licensed hunting. The Bern Convention, upon which the “taking or keeping” language is based, does not use the term “take” to mean hunting in other contexts. In its Article 7, which pertains to the exploitation of species for which hunting can be allowed, it refers to hunting as “exploitation.” The only place besides “taking, keeping, or other judicious exploitation” that “taking” is used in the Bern Convention is in requiring its parties to prohibit “the deliberate destruction or taking of eggs from the wild.” In this context, “taking” clearly means removal rather than killing or destruction. As Michanek (2012) notes, some guidance from the Bern Convention's Standing Committee assumes that “taking” does include hunting, however, the language of the Convention itself suggests otherwise. The fact that the Habitats Directive borrows the words “taking” and “keeping” from the Bern Convention while omitting “judicious exploitation” seems to imply an intention to exclude hunting as a possibility under Article 16(1)(e).

2.2 | What are strictly supervised conditions?

Article 16(1)(e) requires that derogation occur only under strictly supervised conditions. The CJEU has not addressed what is meant by this requirement in the context of the Habitats Directive. As noted above, the Bern Convention and Birds Directive contain similar provisions pertinent to the interpretation of the Habitats Directive's Article 16(1)(e). While the Habitats Directive's criteria differ from these earlier laws in several respects, it retains the requirement for strictly supervised conditions, and thus guidance and decision making around this term as used in the Bern Convention and Birds Directive may be particularly relevant.

What constitutes strict supervision was addressed briefly in the 1988 case *Commission v. France* (CJEU, 1988), in which the Court accepted France's argument that the capture of skylarks (*Alauda arvensis*) and thrushes (*Turdus philomelos*, *Turdus pilaris*, *Turdus iliacus*, and *Turdus viscivorus*) with limes and horizontal nets was sufficiently strictly supervised because there were a number of conditions as to how, when and how many birds could be captured, and competent authorities were said to ensure that the conditions were complied with. The fact that there were restrictive conditions, and a means of ensuring they were followed, was sufficient. In a 2018 ruling *Commission v. Malta* (CJEU, 2018), concerning the live capture of seven species of wild finch (*Fringilla coelebs*, *Carduelis cannabina*, *Carduelis carduelis*, *Carduelis chloris*, *Coccothraustes coccothraustes*, *Serinus serinus*, and *Carduelis spinus*), the CJEU explained the factors that led it to find a lack of strict supervision. The system of supervision in place combined self-reporting by license holders with occasional police inspection. CJEU found the self-reporting to be “uncertain,” noting that 30 license holders had reported reaching their bag limit on the last day of the season although there was the lowest recorded seasonal migration levels of the birds in question on that day.

Further, it stated that individual checks on only 23% of the over 4,000 license holders seemed inadequate. Additionally, it noted that an NGO study had found that rules intended to help track how many birds had been taken had not been followed. Together, according to CJEU, these factors indicated that Malta could not show that the hunt was strictly supervised.

Nonbinding guidance specific to the Habitats Directive is provided by the Commission (European Commission, 2007). Regarding the requirement for strictly supervised conditions, it states that use of Article 16(1)(e) requires “clear authorizations that can be related to particular individuals or groups of individuals, places, times and quantities” as well as “efficient enforcement ... to ensure compliance.” Additional interpretation of the term, as used in the Bern Convention, comes from a resolution of the Bern Convention Standing Committee, which argued that the requirement means that authorities that grant derogations must also have the capacity to check that they are properly implemented, either prior to granting the derogation, or as it is carried out, or both (Linnell et al., 2017, Bern Convention Standing Committee, 2011). It would seem that both prior and ongoing supervision capacity is therefore required under the Habitats Directive, as both are necessary to ensure that the restrictions on derogation are not exceeded.

2.3 | What is a selective basis?

Like the Habitats Directive, both the Bern Convention and Birds Directive require that derogations made under their counterparts to 16(1)(e) occur only on a selective basis. This term was discussed by the CJEU in its aforementioned Birds Directive ruling *Commission v. Malta* (CJEU, 2018). In that case, the court related the term to the use of nonselective or indiscriminate capture or killing methods, which is prohibited by both the Birds and Habitats Directives (Article 8 (1) and Article 15, respectively). In the *Malta* case, Malta had allowed the use of clapnets for the live capturing of finches. The use of nets is forbidden as a nonselective hunting method by the Birds Directive (Annex IV(a)), but can be allowed by way of derogation. Malta argued that its use of nets was selective because they were manually operated by trained and licensed trappers. The CJEU disagreed, noting that despite manual operation, bycatch had been reported, and ruled that the selectivity criterion was not fulfilled.

In that case, trapping using clapnets was found to be insufficiently selective because the traps could catch nontargeted species and because they were so large they could catch many more individuals than the trapping quota allowed. However, selectivity may also require differentiation between individuals of targeted species in some situations. While this has not yet been directly addressed by the CJEU, it has held more generally that derogations must be “applied appropriately in order to deal with precise requirements and specific situations” (e.g., CJEU, 1996a). Further,

Member States may derogate only as far as strictly necessary to address these requirements and situations (CJEU, 2009). These obligations suggest that, in populations where the removal of some individuals would cause more harm than others, selectivity means targeting those individuals that would result in the least harm to the population while addressing the problem (Christiernsson, 2018).

The Commission seems to have adopted this view. In its reasoned opinion criticizing Sweden's wolf hunt (European Commission, 2011), the Commission argued that more precise selective targeting may be demanded depending on the circumstances and reasons for derogation. Starting in 2009, Sweden had authorized wolf hunting seasons under Article 16(1)(e) with a stated purpose of improving the conservation status of the wolf population (Chapron, López-Bao, Kjellander, & Karlsson, 2013). Conservation status would be improved, Sweden argued, in part by improving social tolerance for wolves and in part by improving their genetic health by removing inbred individuals (Chapron 2014), as the Swedish wolf population is highly inbred due to having a very small number of founding individuals (Liberg et al. 2005). With regard to the requirement for “strictly supervised conditions,” Sweden argued the hunts were limited in terms of numbers to be hunted (bag limit), time period, and in which counties hunting may take place. The Commission, however, contended that these restrictions were not sufficient to meet the selectivity requirement (Darpö 2016). First, the hunt should have been more selective in terms of wolves to be targeted—restricting hunting geographically was not enough, especially because genetically valuable first-generation offspring that left their parents' territories could be hunted. Second, exempting only the first generation offspring of immigrant wolves was also insufficiently selective given the stated purpose of the derogation because the second-generation offspring of immigrant wolves were also valuable for reducing inbreeding. These arguments show that the Commission considered that the concept of selectivity might require the targeting of subsets of individuals in a population if doing so is supported by the reason for derogation.

2.4 | What is a limited extent?

The term “limited extent” is used in the Bern Convention and the Habitats Directive, but not in the Birds Directive. There is no ruling from CJEU that pertains to this term. According to the Bern Convention Standing Committee, it means that derogations must be limited in time and space. That is, permission to derogate must be valid only during a particular time period and in a particular area. The Standing Committee notes that exceptions made under this derogation ground should be temporary, though may be renewable “from time to time” (Bern Convention Standing Committee, 2011). The Commission's Habitats Directive guidance (European Commission, 2007) interprets “under strictly

supervised conditions, on a selective basis and to a limited extent” as a set of conditions. It argues that “to a limited extent” strengthens its interpretation of “under strictly supervised conditions” to require derogation authorizations to be clear and specific as to time, place, targets, and numbers. This aligns with the Bern Convention Standing Committee's interpretation of “limited extent” (Bern Convention Standing Committee, 2011). Additionally, according to the Commission, the term also “implies the need for efficient enforcement of ... derogations to ensure compliance” (European Commission, 2007).

The term “limited extent” was applied to the number and percentage of individuals that could be killed in the Commission's previously mentioned infringement proceeding against Sweden in relation to wolf hunting. While largely conflating the terms “limited extent” and “limited numbers,” the Commission stated that killing up to 15% of a strictly protected population of 275–310 animals could not be considered a “limited extent” (European Commission, 2011). It went on to state that the killing of any meaningful part of a strictly protected population would fail to meet this criteria, a finding it repeated in 2015 when arguing that bag limits corresponding to less than 7% of this strictly protected population could be considered neither a “limited extent” nor “limited number” (European Commission, 2015).

In its Habitats Directive guidance, the Commission argues that taken together, the first three above discussed restrictive elements of Article 16(1)(e) “clearly” indicate that “significant constraints” are intended (European Commission, 2007). The Commission's position appears sound; because this derogation ground gives Member States flexibility to allow the harming of protected species for reasons outside those named in Article 16(1) of the Directive, conditions for doing so are stricter than for other derogation grounds. If Article 16(1)(e) did not involve more stringent requirements, the other derogation grounds would be unnecessary because all derogations could be made under Article 16(1)(e).

2.5 | What are certain specimens?

Little guidance exists as to the interpretation of “certain specimens.” The term is unique to the Habitats Directive, however parallels exist in the Bern Convention's “certain wild animals and plants” and the Birds Directive's “certain birds.” However, while the Commission's guidance for the Birds Directive interprets the term to mean that individuals of only certain species of birds can be taken under this derogation ground (and suggests that bird species that do not have favorable conservation status are excluded) (European Commission, 2008), this interpretation cannot apply to the Habitats Directive, which more specifically refers to “certain specimens of the species listed in Annex IV.” This clearly refers to certain individuals of a species rather than certain species.

2.6 | What are limited numbers?

Derogation under the Habitats Directive 16(1)(e) must be restricted to “limited numbers specified by the competent national authorities.” The term “limited numbers” is not used in either the Bern Convention or Birds Directive, which both use the term “small numbers” instead. The CJEU has addressed the “small numbers” requirement in several cases pertaining to the Birds Directive. It held that this requirement cannot be satisfied if the derogation “does not ensure the maintenance of the population” at a satisfactory level (CJEU, 2003). It also has explained that “small” is a relative term, and therefore must be evaluated with consideration to the total population size and population dynamics of the species concerned, as well as other relevant factors (CJEU, 1988). More specifically, it has repeatedly embraced the recommendation of the ORNIS Committee (a scientific committee assisting the European Commission in the implementation of the Birds Directive), that “small numbers” means less than 1% of the total annual mortality (and not estimated size) of the population for birds that may not be hunted except by derogation, and in the order of 1% of the total annual mortality for birds that may be hunted according to national legislation (CJEU, 2004, 2005a, 2005b, 2006a). Even if the bag limit is below 1% of total mortality, it must be convincingly demonstrated that populations of the species in question will be maintained at a satisfactory level (CJEU, 2018).

The Commission has further explicated its understanding of “small numbers” in its Birds Directive guidance (European Commission, 2008). This guidance supports the rule that “small” must be relative to total annual mortality of the population. It further clarifies that the population to be considered is the population in the geographical area in which the derogation will take place (or, for migratory species, the “regions from which the largest numbers of migratory birds come before passing through the region where the derogation will take place”), rather than national population. It offers two possible approaches to determining the permissible percentage of total mortality that may be considered “small.” The first approach is that the bag limit must be at least an order smaller than the level of hunting that is characteristically allowed for the species. This approach is, however, not applicable to the Habitats Directive: the Birds Directive's provision is fundamentally different from the Habitat's Directive's Article 16(1)(e) in that the former applies to both birds that can be hunted and birds that cannot, whereas the latter applies only to strictly protected species that cannot be hunted in ordinary circumstances (species listed in Annex IV of the Directive). The Commission's second approach is that the derogation must have a “negligible effect on the population dynamics” of the species. The Commission argues that a taking of 1% or less of annual mortality is negligible due to the limits of modeling rather than for biological reasons, because “the parameters of population dynamics are seldom known to within less than one

percentage point and bird taking amounting to less than 1% can be ignored from a mathematical point of view in model studies” (European Commission, 2008). This second “negligible effect” approach can be applied to the Habitats Directive and Article 16(1)(e). The Commission further argues that derogation for larger amounts, up to 5% of total annual mortality, may be permitted if a species has favorable conservation status, and the permitting authority has performed in-depth scientific analysis to ensure that derogation would not be incompatible with the Birds Directive's conservation goals (European Commission, 2008), a position later endorsed by the CJEU (2010).

It is unclear to what extent the CJEU and Commission's interpretation of “small numbers” can be extrapolated to the Habitats Directive's “limited numbers.” “Small numbers” was also used in earlier drafts of the Habitats Directive (European Parliament, 1990), but changed in the enacted version. Clearly, some distinction was intended. A “limited” number can potentially be of any size, so long as a limit exists. If one assumes that hunting can be permitted under the Birds Directive's “capture, keeping, or other judicious use” and cannot be permitted under the Habitats Directive's “taking or keeping”, derogation under 16(1)(e) may be thought of as a possibly less harmful type of action than derogation under the corresponding provision in the Birds Directive. This could have justified a decision to allow greater discretion to national authorities to permit derogations that affect numbers that are “limited” but not necessarily “small.”

In any case, the limit must be tailored to take into account the conservation status of the species population, and the potential harm that would be caused. Given the Habitats Directive's aim of achieving and maintaining favorable conservation status and obligation to restore species that have not yet achieved this status (Schoukens, 2017), “limited” should mean at minimum that derogation should not worsen a species' conservation status. This is also a prerequisite for any derogation, and should apply even more strictly with regard to the additional requirements of this derogation ground. Whether or not the acceptable percentage of total mortality would be the same for non-birds as for birds, or for the many varieties of species that are protected by the Habitats Directive ranging from insects to amphibians to mammals, the Commission's reasoning that led to the 1% figure (European Commission, 2008), that the killing of individuals should have a negligible effect on population dynamics, should apply equally to the strictly protected species included in the Annex IV of the Habitats Directive.

3 | HUNTING AS A PURPOSE AND THE “NO SATISFACTORY ALTERNATIVE” PRECONDITION

Our review has shown that it is very difficult to allow derogation under Article 16(1)(e). As the CJEU has repeatedly

confirmed in its decisions pertaining to the Habitats and Birds Directives, it will interpret the provisions on derogation strictly and place the burden on the derogating Member State to prove that all conditions for derogation are met (CJEU, 2006a, 2007b). It is also clear from the several additional restrictions in Article 16(1)(e) that the legislator intended stricter standards than those required for the other derogation grounds. According to the Commission guidance, these additional restrictions add up to a situation in which use of Article 16(1)(e) should be “exceptional” (European Commission, 2007). We next consider the precondition in Article 16(1) that there exist no satisfactory alternative to derogation, which applies to all derogation grounds, and its relevance for the possibility to allow hunting in the exceptional circumstances when all criteria of Article 16(1)(e) are fulfilled.

In order to demonstrate a lack of satisfactory alternatives, one must first identify a purpose for derogation. The issue is therefore whether this requirement rules out derogation allowing hunting. The Bern Convention appears to be laxer than the Habitats Directive as to permissible purposes for derogation. In its guidance concerning the Bern Convention's provision that corresponds to the Habitats Directive's Article 16(1)(e), the Standing Committee states that parties are “free to decide” the reason for derogation, though derogation should take the Convention's goals into account (Bern Convention Standing Committee, 2011). It further states that the role of the Standing Committee is ensuring that the provision's formal requirements are met rather than evaluating whether an appropriate purpose has been selected (Linnell et al., 2017). While Member States do have significant discretion as to the purpose of an Article 16(1)(e) exception under the Habitats Directive, it is unlikely that the EU would take such a hands-off approach.

In the Finnish wolf case (CJEU, 2007b), the CJEU found that Finland failed to meet the requirements for allowing the killing of wolves. In that case, killing was justified under derogation ground (b), the prevention of serious damage, here predation on livestock. The Court criticized Finland for failing to state the reasons that there were no satisfactory alternatives for preventing damage other than killing wolves (i.e., the implementation of nonlethal interventions to reduce the number of livestock heads killed by wolves; e.g., Eklund, López-Bao, Tourani, Chapron, and Frank (2017)). As a lack of satisfactory alternatives is a requirement for derogation under all of the derogation grounds in Article 16, it may be extrapolated that a statement of reasons as to why there are no satisfactory alternatives to killing would be required for any of the derogation grounds. It therefore follows that a well-supported justification for derogation using ground (e) must be provided; otherwise, it would not be possible to state why no satisfactory alternative exists. This is supported by CJEU's rulings in Birds Directive cases which required a statement of reasons indicating

why there are no other satisfactory solutions for derogations made under its corresponding provision (CJEU, 1996b, 2010).

Not only must a justification be provided, it must be necessary to achieve a legitimate purpose. The CJEU has rejected reasons given in several cases relating to the Birds Directive for allowing hunting or other taking of birds under its Article 9(1)(c) as insufficient to support derogation. For example, in a case involving several wild birds, the Court ruled that the taking of birds for captive breeding on the grounds that breeders would otherwise have to change their practices, was not a sufficiently good justification to derogate (CJEU, 1996b). As summarized in Commission guidance, it is necessary that Member States demonstrate “compelling reasons” that derogation is justified (European Commission, 2008). On the other hand, in other cases, the Court has not looked into the reason for derogation. For example, in a case allowing hunting of thrushes through nonselective means, the CJEU found that the fact that a hunting practice was a deeply rooted tradition could not provide a justification for using a non-selective means for a derogation that was granted for the purpose of preventing serious crop damage (Birds Directive Article 9(1)(a), corresponding to Habitats Directive 16(1)(b), rather than 9(1)(c), corresponding to Habitats Directive 16(1)(e)). The Court then analyzed whether the derogation was permissible under the Birds Directive Article 9(1)(c) and found that the numbers were not sufficiently small. It did not comment on the justifications for hunting under that derogation ground (CJEU, 2004). The Commission has interpreted this ruling to indicate that a deeply rooted hunting tradition is an insufficient justification for derogation on any grounds (European Commission, 2008).

The requirement for no satisfactory alternatives to derogation has also been interpreted strictly with regards to the Habitats Directive's provisions on area conservation. An absence of alternatives must be well demonstrated and justified (CJEU, 2006b, 2016). These cases may point to a limitation on Member State discretion when it comes to evaluating alternatives to derogation.

The Advocate General commented in more detail on satisfactory alternatives when deeply rooted hunting traditions were the purpose of the derogation in her opinion in *Commission v. Malta* (CJEU, 2017a). She imagined a community which had a tradition of girls wearing feathers from protected birds on the mass nearest their 18th birthdays. She argued that another satisfactory alternative to hunting birds so that each girl could have their own necklace would be for girls and women in the community to share the necklaces. If the need for new necklaces were thus reduced, according to the Advocate General, it would be acceptable to derogate from the Birds Directive to allow the collection of feathers necessary to create new necklaces as the old ones wore out. She argues that “provided traditions evolve,” these traditions can

provide a justification for derogation. In other words, legitimate deeply rooted traditions may constitute a justification for derogation, according to the Advocate General, but only if derogation is proportionate to what is absolutely necessary to maintain the tradition, which also faces an obligation to adapt. However, these arguments were not discussed in the final ruling, in which the CJEU found simply that Malta had failed to state clear and sufficient reasons that the precondition of lack of other satisfactory solutions was met (CJEU, 2018).

Regardless, while hunting can be permitted under the Birds Directive's Article 16(1)(c), as the CJEU has repeatedly confirmed (CJEU, 2006a), there are both textual and purpose-based reasons why this determination does not apply to the Habitats Directive. As noted above, the Birds Directive explicitly permits derogation to allow the “judicious use” of species while the Habitats Directive does not. The Birds Directive's catchall provision also has a different purpose than the Habitats Directive's. The Birds Directive's provision applies to derogations relating to any of the EU's wild birds, including those that may be hunted, while the Habitats Directive's only applies to Annex IV species, which may not be hunted under ordinary circumstances. As this is an area in which the two directives differ, the CJEU's decisions regarding the Birds Directive are of limited value in analyzing whether hunting is allowable for strictly protected species under the Habitats Directive; as the Habitats Directive applies only to strictly protected species it may be that the provision should be interpreted more strictly. Nevertheless, it is worth noting that even concerning species that cannot ordinarily be hunted according to the Birds Directive, the Court has clarified that hunting can be a “judicious use” of birds and thus an appropriate purpose for derogation, so long as the species has favorable conservation status, there is no other satisfactory solution, and the requirements of the catchall provision are met (CJEU, 2010).

Still, it has not been addressed whether hunting—or a desire to hunt—is an acceptable purpose for derogation under Article 16(1)(e). Instead, the Commission's guidance has focused on the acceptability of hunting as means for achieving other purposes. It endorsed the Latvian lynx management plan (Ozolins, 2002), in which hunting was used to “manage” the lynx population. The guidance advises that where there is a flourishing population, and a management plan is in place, “limited and strictly controlled taking by hunters is considered to have a positive impact on the population as well as on public perception” (European Commission, 2007). However, this claim seems poorly supported from available evidence. Ecological research has highlighted several biological perturbations in hunted populations (Bischof et al., 2018; Keehner, Wielgus, Maletzke, & Swanson, 2015; Krofel, Treves, Ripple, Chapron, & López-Bao, 2015; Maletzke et al., 2014; Swenson et al., 1997; Wielgus, Morrison, Cooley, & Maletzke, 2013). Similarly, while

evaluations on how hunting impacts tolerance toward species are still limited, the few available studies indicate hunting has negative rather than positive impacts on the population demographics of hunted species (Browne-Núñez, Treves, MacFarland, Voyles, & Turng, 2015; Chapron & Treves, 2016a, 2016b; Hogberg, Treves, Shaw, & Naughton-Treves, 2016; Naughton-Treves, Grossberg, & Treves, 2003; Treves, Naughton-Treves, & Shelley, 2013) or that tolerance cannot be promoted by legal hunting alone (Suutarinen & Kojola, 2017). As Member States have the burden of showing that derogation is justified, it is likely they would be required to produce more convincing evidence (CJEU, 1999, 2017a).

In the Swedish wolf infringement case, the Commission argued that hunting was an unacceptable means for managing a population that was not at favorable conservation status, and there was no demonstration that hunting had a positive impact on the population or on public perception (European Commission, 2011). The issue has not yet been definitively addressed by the CJEU (Epstein and Chapron, 2018). However, other, less harmful, alternatives must always be sought before allowing the killing of individuals, and the scenario in which hunting following Article 16(1)(e) is truly the least harmful means to achieve a legitimate goal seems rare indeed.

4 | CONCLUSION

Despite the Habitats Directive's clear prohibition on hunting strictly protected species, several Member States have allowed it, for example Sweden, Finland, Latvia, and Bulgaria, often with the aid of the derogation provision in Article 16(1)(e). Our analysis indicates that while in theory hunting may be allowed in very narrow circumstances, in reality it would be very difficult to do so in a way that complies with all criteria of 16(1)(e), as well as questionable whether it could comply with the precondition that no satisfactory alternatives exist.

Hunting or a desire to hunt would likely not be an acceptable purpose that can justify derogation. Hunting may on the other hand be an acceptable means for achieving a legitimate purpose, but only if it were the least harmful way to resolve a specific and compelling problem. In the seemingly unlikely scenario in which hunting was the least harmful means for addressing such a problem, the technical requirements of the selected derogation ground must be met. Article 16(1)(e) is particularly restrictive: derogation can be allowed “under strictly supervised conditions, on a selective basis and to a limited extent” to take or keep “certain specimens ... in limited numbers.” As this article has discussed, these terms have been or are likely to be understood quite restrictively by the CJEU. First, it is not clear that the concept of “taking” includes killing; a strict interpretation would preclude it. Second, the requirement for strictly supervised

conditions means that there must be both restrictive conditions for hunting, and a means of ensuring that the conditions are followed. Third, the requirement that derogation occur on a selective basis means that hunting would have to be selective as to which species is hunted, and also as to which types of individual members of the species are hunted when relevant for the species population. Fourth, only “certain specimens” can be taken, implying that the individual animals to be hunted must also be identified. Finally, the derogation must be limited in extent and number, which implies that the killing of individuals should have a negligible effect on population dynamics, a high bar when it comes to hunting. It would be unlikely that an exploitive hunt carried out by individual hunters, and not restricted to particular animals, could meet these criteria.

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CONFLICTS OF INTEREST


The authors declare that they have no conflicts of interest.

AUTHOR CONTRIBUTIONS

Y.E. and G.C. designed the study. Y.E. drafted the manuscript. Y.E., A.C., J.V.L.-B., and G.C. contributed research and contributed to the text.

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