The Treatment of Wild-Caught Fish Under EU Law

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ACHIEVING BETTER TREATMENT FOR ANIMALS

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Executive Summary

Article 13 of the Treaty on the Functioning of the European Union (TFEU) requires the Union and the Member States to "pay full regard to the welfare requirements of animals as sentient beings" in a number of policy areas, including fisheries policy.[1] Since 1976, the EU institutions have enacted a series of directives and regulations establishing standards for the protection of animals used for food. However, none of these statutes have covered wild-caught marine fish.

As a result, EU law takes into account the inherent interests of wild fish in a limited way. It is, however, possible to identify measures that benefit individual wild fish among the measures intended to protect marine ecosystems, although such measures remain insufficient. The reform of the Common Fisheries Policy (CFP Regulation), which will be negotiated in the upcoming years, presents an opportunity for EU lawmakers to bring commercial fishing activities into better alignment with animal welfare standards, as per Article 13 TFEU.

This Research Note provides an overview of the EU legislative acts relevant to the treatment of wild-caught fish. In doing so, this Note further lists recent legislative and legal developments, as well as reform proposals to achieve a more humane treatment of aquatic animals living in the sea.

1 Article 13, Consolidated version of the Treaty on the Functioning of the European Union, 2016 OJ C 202/54.

Fishermen empty the trawler net's catch into the hold of a ship. France, 2018. © Selene Magnolia / HIDDEN / We Animals Media

Introduction

Article 13 of the Treaty on the Functioning of the European Union (TFEU) requires the Union and the Member States to "pay full regard to the welfare requirements of animals as sentient beings" in a number of policy areas, including fisheries policy.[2] Since 1976, the EU institutions have enacted a series of directives and regulations establishing standards for the protection of animals used for food. However, none of these statutes have covered wild-caught marine fish. As a result, commercial marine fisheries remain virtually unregulated from an animal welfare perspective, leaving the 90 million tons of fish caught annually in the oceans[3] without protection from human-induced suffering.

EU law primarily refers to fish as "fish stocks," expressed in tons, or "fishery resources" and the impetus for protecting them is to achieve "maximum sustainable yield (MSY)."[4] EU law thus takes into account the inherent interests of wild fish – starting with the reduction of suffering at the time of capture – in a limited way. It is, however, possible to identify measures that benefit individual wild fish among the measures intended to protect marine ecosystems, although such measures remain insufficient.

The reform of the Common Fisheries Policy (CFP Regulation), which will be negotiated in the upcoming years, presents an opportunity for EU lawmakers to bring commercial fishing activities into better alignment with animal welfare standards, as per Article 13 TFEU.

2 Article 13, Consolidated version of the Treaty on the Functioning of the European Union, 2016 OJ C 202/54.

3 FAO, *State of World Fisheries and Aquaculture* (2020).

4 Recitals 6 and 7, and Article 2(2) Regulation 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, 2013 OJ L 354/23.

1. Fish as Sentient Beings

1.1. Scientific Evidence of Fish Suffering

Despite the growing body of scientific work on fish physiology, research on aquatic animal welfare remains sparse compared to research on terrestrial animals. Furthermore, the few publications on fish welfare are mostly related to fish from aquaculture.[5]

However, among the scientific community, there does appear to be a broad consensus that fish are able to feel pain.[6] In particular, scientists have been able to demonstrate that fish out of water suffer from a lack of oxygen. In 2016, scientists also demonstrated that fish were conscious animals and, as such, were capable of experiencing emotions.[7] Other studies have also demonstrated that fish suffer when confined, in conditions similar to what fish likely feel when captured and extracted out of the water.

1.2. Fish Suffering in the Context of Marine Fisheries

1.2.1. SUFFERING AT THE TIME OF CAPTURE

Commercial fishing methods cause immense physical suffering and stress to fish. Before being hauled aboard, many fish die from exhaustion, stress, crushing, decompression, and prolonged exposure to air resulting in asphyxiation.[8] Once aboard the vessel, fish may undergo brutal and lengthy handling before being killed.[9] Species caught unintentionally by fishermen also suffer severe external injuries and are discarded, most often dead or dying, back into the sea.

Commercial fisheries mainly use six types of fishing equipment, all of which cause significant harm to fish:

- **Bottom and pelagic trawls** are large nets capable of catching up to 60 tonnes of fish in as little as 20 minutes.[10] Fisheries use bottom trawls to catch species living on the ocean floor, or nearby, such as sole, or Norway lobster. Bottom trawls are a type of fishing equipment with limited selectivity that may lead to the unauthorized capture of juvenile specimens and the deterioration of marine habitats.[11] Pelagic trawls are more selective compared to bottom trawls, targeting species that move in schools, located in the water column between the bottom and the surface, with limited effects on marine habitats.[12] However, because they are more selective, pelagic trawls can result in overfishing targeted species. In addition, the use of pelagic trawls can lead to incidental catches of cetaceans.[13] The use of bottom and pelagic trawls implies

5 L.J.L. Veldhuizen et al, Fish Welfare in Capture Fisheries: *A Review of Injuries and Mortality,* Fisheries Research (2018)

6 Victoria Braithwaite published her study Do Fish Feel Pain? (2003) and E. Lambooij, H. Digré, SGM Reimert, IG Aursand, L. Grimsmo, J.W. Van de Vis, *Effects of on-board storage and electrical stunning of wild cod (Gadus morhua) and haddock (Melanogrammus aeglefinus) on brain and heart activity,* Fisheries Research (2012).

7 Jonathan Balcombe, *Fishes have feelings, too*, The New York Times (2016).

8 Douglas Waley, Moira Harris, Ian Goulding and Margarida Correira, MegaPesca Lda, and Griffin Carpenter, *Catching Up: Fish welfare in wild capture fisheries*, Eurogroup for Animals (2021)

9 *Ibid.*

10 World Wildlife Fund, "La fin de la pêche en eau profonde" (2017), https://www.wwf.fr/vous-informer/effet-panda/la-fin-de-la-peche-en-eau-profonde (last visited July 14th, 2023) (in French).

11 IFREMER, "Chalut de fond," https:// peche.ifremer.fr/Le-monde-de-la-peche/ La-peche/comment/Les-engins/Chalut-de-fond (last visited July 14th, 2023) (in French).

12 IFREMER, "Chalut pélagique," https://peche.ifremer.fr/Le-monde-de-la-peche/La-peche/comment/Les-engins/Chalut-pelagique (last visited July 14th, 2023) (in French).

13 *Ibid.*

bringing fish to the sea surface quickly and in a way that sees most fish crushed by their fellow fish, while suffering from the effects of decompression.

- **Demersal (or Danish) seine fishing** is similar to bottom trawling in that it consists of placing a funnel-shaped net connected by 2.5 kilometer-long cables in order to concentrate and haul fish.[14] This practice causes deleterious effects on marine ecosystems due to the fact that demersal seines scrape the ocean floor, and so poses the same selectivity problems as bottom trawling.
- **Gillnets** are nets deployed vertically in the water to trap fish in meshes.[15] The mesh size of gillnets is adapted to the target species, making this fishing method relatively selective.[16] The trapping of fish in the meshes causes serious external injuries to the fish, whose gills become caught in the meshes. In addition, fishing vessels often lose gillnets at sea, a phenomenon referred to as "ghost nets," and it is common for these ghost nets to drift for several months or even years, often trapping other animals, including cetaceans. Ghost nets also comprise a significant source of oceanic plastic pollution.[17]
- **Longline fishing** consists in using a static line to which hooks are attached. Fishery operators typically let longlines sit for several hours or days before hauling them back. As a result, fish can remain attached to the hooks through a hole in the cheek for long periods of time.[18] The longline is a non-selective fishing technique and so it is common for shark species or birds attracted by the bait to be caught.[19]
- **Seines** are surface nets that encircle schools of fish detected by sonar and gradually tighten to capture the targeted species. These nets only target pelagic species (fish suspended in the water column) and have no impact on the seabed. However, these nets are not selective. Furthermore, when catches prove disappointing, fishing may be interrupted, leaving many stressed and injured fish in the sea. This method, called "slipping,"[20] allows the fishermen not to exceed their quotas with by-catches.
- **Electric fishing** is a type of net that uses an electric current. This practice generally targets species buried in the sand such as sole or turbot. Fishery operators first place the trawl on the bottom of the sea and then activate an electrical impulse through the mesh of the net, thus paralyzing animal species present on the net. Operators then haul the trawl with the dead fish. This practice is not selective and causes significant harm to the affected fish.[21] In addition, electric fishing causes a great deal of damage to marine ecosystems. As a result, electric fishing has been prohibited under EU law since 2021.[22]

14 Ethic Ocean, *Guide des espèces à l'usage des professionels*, (2022) disponible en ligne: https://guidedesespeces.org/fr/les-engins-de-peche-actifs

15 IFREMER, "Filet maillant," https://peche.ifremer.fr/Le-monde-de-la-peche/La-peche/comment/Les-engins/Filet-maillant (last visited July 14th, 2023) (in French).

16 *Ibid*.

17 *Ibid*.

18 IFREMER, "Palangre," https://peche.ifremer.fr/Le-monde-de-la- peche/La-peche/comment/Les-engins/Palangre (last visited July 14th, 2023) (in French).

19 *Ibid*.

20 Minouw-project.eu, "The slipping method - can a net modification improve by-catch survival rates?," September 27th, 2017, http://minouw-project.eu/the-slipping-method-can-a-net-modification-improve-by- catch-survival-rates/ (last visited July 14th, 2023).

21 Including hemorrhages and fractures of the spine. Source: D. De Haan, *Pulse Trawl Fishing: Characteristics of the Electrical Stimulation and the Effect on Behaviour and Injuries of Atlantic Cod (Gadus Morhua)*, ICES Journal of Marine Science (2016).

22 Article 7 (1)(b), Regulation 2019/1241 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, 2019 OJ L 198/105-201.

Trawler nets are pulled on the deck of the fishing boat Fasilis. Greece, 2020. © Selene Magnolia / We Animals Media.

Deck crew pulls nets filled with sardines onboard the purse seine fishing boat Pandelis II. Greece, 2020.. © Selene Magnolia / We Animals Media.

1.2.2. SUFFERING AT THE TIME OF KILLING

Commercial fisheries do not typically use one specific killing or stunning method. Operators usually throw fish into large tanks of cold water or ice to preserve their flesh, where the fish die from asphyxia or hypothermia[23] after several minutes or even hours.[24]

1.3. Alternatives to Cruel Capture Methods

To limit the suffering of fish, certain operators prefer killing fish via exsanguination, which consists of bleeding them through the gills or throat.[25] This practice is often used without stunning prior to bleeding, so the fish dies gradually from their injuries, still conscious all the while. Decapitation[26] is another common method of killing. However, this method requires proficient operators and, depending on the species, does not result in rapid death of the fish.[27]

The Ikejime method, a traditional Japanese method of killing fish, is also an alternative to more cruel fish killing methods. This method involves driving a "thin spike into the fish's brain with a quiet crunch-pop" and then cutting "the gill arches and vertically through the base of the fish's tail to bleed it." This is followed by folding "the tail back against the body, exposing the spinal cord and neural tube above" and threading "a long wire into the tube and reaming it back and forth."[28] Compared to killing by asphyxiation, ikejime allows for a quicker death and presents the benefit of preserving more tender flesh because, with this method, carbon dioxide is less concentrated in the flesh.[29] However, the Ikejime method is a practice almost exclusively used in the luxury food sector,30 such as with bluefin tuna.[31]

Lastly, there are also prototype killing methods for conventional fisheries, such as electric "dry stunner" followed by bleeding caused by throat cutting.[32]

23 *Ibid*.

24 Tim Carman, *Scientists Say Fish Feel Pain. It Could Lead to Major Changes in the Fishing Industry*, The Washington Post, May 24th 2018, https://www.washingtonpost.com/news/food/wp/2018/05/24/scientists-say-fish-feel-pain-it-could-lead-to-major- changes-in-the-fishing-industry/ (last visited July 14th, 2023).

25 Douglas Waley et al., *Catching Up: Fish Welfare in Wild Capture Fisheries,* Eurogroup for Animals (2021).

26 *Ibid*.

27 Verheijen, F.J. and Flight W.F.G. *Decapitation and Brining: Experimental Tests Show That After These Commercial Methods for Slaughtering Eel Anguilla Anguilla (L.), Death Is Not Instantaneous*, Aquaculture Research (1997).

28 Cat Ferguson, *How to Kill a Fish,* Animalia n.11 (2018).

29 *Ibid*.

30 *Ibid*.

31 *Ibid*.

32 E. Lambooij, H. Digré, S.G.M. Reimert, IG Aursand, L. Grimsmo, J.W. Van de Vis, *Effects of On-Board Storage and Electrical Stunning of Wild Cod (Gadus Morhua) and Haddock (Melanogrammus Aeglefinus) on Brain and Heart Activity*, Fisheries Research (2012).

A small fish dying from asphyxiation. Italy 2020 © Stefano Belacchi / We Animals Media

2. Wild Fish Welfare Rules

2.1. The Absence of Fish Welfare Rules During Capture and Killing

Because commercial fishing activities do not qualify as farming activities under EU law, fish caught in the wild are excluded from the scope of Directive 98/58/EC Concerning the Protection of Animals Kept for Farming Purposes.[33]

Similarly, Regulation 1099/2009 On the Protection of Animals at the Time of Killing[34] excludes wild fish from its scope, as it only covers "animals bred or kept for the production of food, wool, skin, fur or other products."[35] In any event, whether they originate from aquaculture operations or from the wild, fish remain excluded from all the provisions of the Regulation.[36] However, the EU Legislature notes that "separate standards should be established on the protection of fish at killing" at least with farmed fish.[37]

2.2. Fish Welfare Rules in the Common Fisheries Policy

2.2.1. THE COMMON FISHERIES POLICY

Aquaculture and fishing activities are regulated under the Common Fisheries Policy (CFP), by way of three regulations: Regulation 1380/2013 on the Common Fisheries Policy (CFP Regulation),[38] Regulation 2021/1139 establishing the European Fund for Maritime Affairs, Fisheries and Aquaculture, known as the (EFMAFA Regulation),[39] and Regulation 1379/2013 on the Common Organization of the Markets in Fishery and Aquaculture Products.[40]

The management of marine fisheries under the CFP is an exclusive competence of the EU,41 unlike aquaculture, which is shared with the Member States. The CFP was introduced in 1983[42] and has been reformed three times, in 1992,[43] 2002,[44] and 2013, and is expected to undergo further reform in the next few years.

The scope of the CFP Regulation covers "the conservation, management and exploitation of living aquatic resources"[45] on "the territory of the Member States, or in Community waters or by Community fishing vessels or, without prejudice to the primary responsibility of the flag State, nationals of Member States."[46] The objective pursued by the Legislature under the CFP is the "exploitation of living aquatic resources that provides sustainable economic, environmental and social conditions."[47]

33 Article 1(2)(a), Council Directive 98/58/EC Concerning the Protection of Animals Kept for Farming Purposes, 1998 OJ L 221/23.

34 Council Regulation 1099/2009 on the Protection of Animals at the Time of Killing, 2009 OJ L 303/1-30.

35 Article 1, *ibid*.

36 With the exception of Article 1, which produces no tangible effects: "Animals shall be spared any avoidable pain, distress or suffering during their killing and related operations." Council Regulation 1099/2009 on the Protection of Animals at the Time of Killing, 2009 OJ L 303/9.

37 Recital 11, , *ibid*.

38 Regulation 1380/2013 on the Common Fisheries Policy, 2013 OJ L 354/22-61.

39 Regulation 2021/1139 Establishing the European Maritime Affairs, Fisheries and Aquaculture Fund, 2021 OJ L 247/1 - 49.

40 Regulation 1379/2013 on the Common Organization of the Markets in Fishery and Aquaculture Products, 2013 OJ L 354/1-21.

41 Article 3, Consolidated version of the Treaty on the Functioning of the European Union, 2008 OJ 115/51.

42 Regulation 170/83 Establishing a Community System for the Conservation and Management of Fishery Resources, 1983 OJ L 24/1-13.

43 Regulation 3760/92 Establishing a Community System for Fisheries and Aquaculture, 1992 OJ L 389/1-14.

44 Regulation 2371/2002 On the Conservation and Sustainable Exploitation of Fisheries Resources Under the Common Fisheries Policy, 2002 OJ L 358/59-80.

To this end, since 2002, EU law has required the Union and the Member States to apply the precautionary principle[48] in the context of the CFP, when adopting measures intended for the conservation or exploitation of marine resources, which must be based on "sound scientific advice."[49]

2.2.2. ANIMALS IN THE REGULATIONS OF THE COMMON FISHERIES POLICY

- **Regulation 1380/2013 on the Common Fisheries Policy**

The CFP Regulation was last revised in 2013. This revision brought significant changes to the Regulation, including the mention that the CFP shall take "full account, where appropriate, of animal health and welfare."[50] However, none of the provisions of the Regulation reflect such a commitment.

The next revision of the CFP has the potential to improve fish welfare standards. The conclusions on the implementation of the CFP adopted by the Council of EU on June 16, 2023 is a positive step in that direction. In its conclusions, the Council of the EU noted "that animal welfare improvements are necessary to strengthen the sustainability

of the fisheries and aquaculture sectors;" and further encouraged "the Commission to provide guidance on improving aquatic animal welfare, taking into account the practical feasibility in the fisheries and aquaculture management."[51]

- **Regulation 2021/1139 Establishing the European Maritime, Fisheries and Aquaculture Fund (EMFAF Regulation)**

The EMFAF Regulation serves to implement the CFP by setting rules for the distribution of those fisheries subsidies alloted under the CFP.

The EMFAF Regulation furthermore determines the objectives of the fisheries subsidy policy,[52] including achieving "sustainable fisheries" and "restoration and conservation of aquatic biological resources."[53] Before 1993, the measures established by the EMFAF were funded by the general budget of the European Union. Since 1993, the EMFAF Regulation has benefited from its own fund,[54] the name of which has changed with each revision of the EMFAF Regulation.[55]

The EMFAF Regulation provides a budget of €6 billion for the period ranging from 2021 to 2027.[56] This fund is managed as follows: one portion is directly managed by the European Commission (€797 million),[57] while the bulk of the funding is managed by both the European Commission and the Member States (€5.3 billion).[58] As a general rule, EMFAF funds are only disbursed to operators for measures contributing to "the achievement of the Union's environmental objectives and climate change mitigation and adaptation."59 Among these measures are animal welfare measures, which are categorized as environmental and animal health protection actions.[60] The FEAMPA Regulation further provides performance indicators to evaluate the effectiveness of animal welfare measures.[61]

45 Article 1 (1)(a), *ibid*.

46 Article 1 (1), *ibid*.

47 Article 2 (1), Regulation 2371/2002 on the Conservation and Sustainable Exploitation of Fisheries Resources Under the Common Fisheries Policy, 2002 OJ L 358/59-80.

48 *Ibid*.

49 Article 2 (2.b), *ibid*.

50 Recital 16, Regulation 1380/2013 on the Common Fisheries Policy 2013, 2013 OJ L 354/22-61.

51 Point 56, Council Conclusions on the Fisheries Policy Package – for a Sustainable, Resilient and Competitive Fisheries and aquaculture sector, 10505/23, 16 June 2023, available online: https://data.consilium.europa.eu/doc/document/ST-10505-2023-INIT/en/pdf

52 Articles 1 and 3, Regulation 2021/1139 Establishing the European Maritime, Fisheries and Aquaculture Fund , 2001 OJ L 247/1-49.

53 Article 3, *Ibid*.

54 Article 1 (2)(a), Council Regulation 2080/93 Laying Down Provisions for Implementing Regulation 2052/88 as regards the Financial Instrument for Fisheries Guidance, 1993 OJ L 19/1-4

55 In 1993, this fund was called the "Financial Instrument for Fisheries Guidance," in 2006 the "European Fisheries Fund," in 2014 the "European Maritime and Fisheries Fund," and since 2021 the "European Maritime, Fisheries and Aquaculture Fund."

56 EUR 6 108 000 000 in current prices. Article 4, Regulation 2021/1139 Establishing the European Fund for Maritime Affairs, Fisheries and Aquaculture, 2021 OJ L 247/1-49.

57 Article 7, *ibid*.

58 Articles 4 and 5, *ibid*.

59 Article 3, *ibid*.

60 Intervention Type 9, Appendix IV, *ibid*.

61 Indicators C106 and CR10, Appendix I, *ibid*.

However, the EMFAF Regulation provides that only aquaculture activities are eligible for fish welfare subsidies,[62] thus excluding wild-caught fish enterprises from the possibility of receiving subsidies for fish welfare measures. Furthermore, Member States can only grant limited subsidies for fish welfare measures as the EMFAF Regulation does not allow Member States to derogate from limitations on state aid rules for fish welfare reasons, whereas Member States can derogate from such rules for measures concerning health, safety and working conditions on board fishing vessels.[63] Lastly, the EMFAF Regulation does not include a regulatory definition of "commercial fishing" or "industrial fishing" activities,[64] thereby paving the way for the least sustainable, most inhumane fishing activities to receive subsidies.[65]

As a result, the EMFAF Regulation does not provide measures that support fish welfare in commercial fisheries. Furthermore, the EMFAF Regulation refers to the notion of sustainable development in a restrictive way, by specifically referring to environmental, social, and economic sustainability,[66] with animal welfare notably omitted.

Despite these significant limitations in the EMFAF Regulation's fish welfare considerations, a number of environmental protection measures contained in the EMFAF Regulation contribute directly to the welfare of wild fish. Such is the case of subsidies in support of measures aimed at permanently or temporarily stopping fishing activities;[67] the prohibition of subsidizing operations that increase the fishing capacity of a fishing vessel;[68] and the replacement or modernization of engines only for fishing vessels measuring less than 24 meters.[69]

However, unlike the financial regulations of the Common Agricultural Policy, which include animal welfare measures for farmed terrestrial animals,[70] the CFP and the EMFAF Regulations do not include welfare measures for wild-caught fish. The absence of an EU legislative act on fish welfare in the wild could easily explain such a shortcoming.

However, the CFP and the EMFAF also fail to provide incentives for best practices – incentives that could be modeled on CAP subsidies to farmers who voluntarily comply with higher animal welfare standards than those provided by the legislation.[71] Although the CFP Regulation states that "the common fisheries policy shall take full account, where appropriate, of the health and welfare of animals," such an account does not appear to have been taken in any of the CFP Regulations thus far.

62 Article 26 (3), *ibid*.

63 Recital 23 and Annex III, *ibid*.

64 Article 2, *Ibid*.

65 Article 8(2), 12, 13, *ibid*.

66 Ex: Article 14 (1.a), *ibid*.

67 Article 20 - 21, *ibid*.

68 Article 13(a), *ibid*. Although Article 19 provides a derogation from this rule, with the requirement that the increase in the vessel's capacity is offset by a reduction in the fishing capacity of the fleet (Article 19(2)(d)).

69 Articles 13(m) and 18, *ibid*.

70 Alice Di Concetto, *Le bien-être animal dans la politique Agricole Commune: la prise en compte d'une attente sociétale,* Revue de droit rural (2023) (in French).

71 *Ibid*.

3. Fish Protection in EU Environmental Law

3.1. Fish Protection and Marine Ecosystems Protection

3.1.1. GENERIC LEGISLATIVE ACTS

EU law provides a series of legislative acts pertaining to the protection of marine ecosystems. Directive 2008/56/EC Establishing a Framework for Community Action in the field of Marine Environmental Policy[72] (The Marine Strategy Framework Directive) provides guidelines for the conservation of the marine environment. One of the objectives of this Directive is to achieve "good environmental status of the marine environment by the year 2020 at the latest."[73] However, The Marine Strategy Framework Directive provides no protection for fish due to the absence of specific provisions concerning fish or marine species.

Only "qualitative descriptors (...) which are to be used to determine good environmental status for that marine region or subregion" [74] are listed in the Directive, such as the fact that "populations of all commercially exploited fish and shellfish are within safe biological limits" or that "biological diversity is maintained." However, this wording is too vague to require Member States to take effective conservation measures for marine resources.

In addition, Directives 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the "Habitats Directive") and 2009/147/EC on the Conservation of Wild Birds (the "Birds Directive") establish a list of protected marine species as well as a European network of protected areas, which are called "Natura 2000 sites" and which include marine areas. In these areas, Habitats and Birds Directives restrict the capture of animals belonging to protected species[75] and further restrict non- selective hunting methods.[76] However, both directives contain numerous derogations to such restrictions. The Habitats Directive allows Member States to provide derogations for reasons including "[the prevention of] serious damage, in particular to crops, livestock, forests, fisheries, water and other types of property."[77] Similarly, the Birds Directive allows the adoption of derogations "to prevent significant damage to crops, livestock, forests, fisheries and water."[78]

Directive 2019/904 on the Reduction of the Impact of Certain Plastic Products on the Environment also aims to preserve marine ecosystems. The scope of this Directive includes plastics from fishing gear such as nets, lines, or traps.[79] Under Directive 2019/904, Member States must implement a monitoring system for fishing gear containing plastic [80] and further ensure that fish gear producers are liable for the damages caused by their fishing gear ("extended producer responsibility").[81]

72 Directive 2008/56/EC Establishing a Framework for Community Action in the field of Marine Environmental Policy, 2008 OJ L 164/19-40.

73 Article 1, *ibid*.

74 Appendix I, *ibid*.

75 Article 12 (1)(a) Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, 1992 OJ L 206/13; Article 8, Directive 2009/147/EC on the Conservation of Wild Birds, 1992 OJ L 20/7-25.

76 Article 15, Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, 1992 OJ L 206/13; Article 8, Directive 2009/147/EC on the Conservation of Wild Birds, 1992 OJ L 20/7-25

77 Article 16 (1)(b), Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, 1992 OJ L 206/13.

78 Directive 2009/147/EC on the Conservation of Wild Birds, 2010 OJ L 20/10.

79 Article 2, Directive 2019/904 on the Reduction of the Environmental Impact of Certain Plastic Products, 2019 OJ L 155/ 1-19.

80 Article 8 (8), *ibid*.

81 Article 8 (8), *ibid*.

However, this extended producer responsibility only implies that fishing gear producers must pay for the cost of implementing a "collection system" for litter resulting from used fishing gear, including transporting and treating such litter after collection, in addition to taking "awareness-raising measures."[82]

Regulation 1143/2014 on the Prevention and Management of the Introduction and Spread of Invasive Alien Species aims to reduce the adverse effects of invasive species on biodiversity.[83] Although the Regulation lists species of crustacean and bivalve animals, there are no provisions in this regulation that relate to fishing activities in general.

Lastly, Regulation 2019/1241 on the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures[84] provides a set of conservation rules, including rules related to species protection.[85]

3.1.2. AREA-SPECIFIC REGULATIONS: THE EXAMPLE OF REGULATION 2016/2336 (DEEP SEA REGULATION)

In addition to generic legislative acts, there exist legislative acts aimed at protecting specific marine areas, such as Regulation 2016/2336 Establishing Specific Conditions for Fishing for Deep-Sea Stocks in the Northeast Atlantic[86] (Deep Sea Regulation). This regulation establishes a ban on "fishing with bottom trawls at a depth below 800 meters."[87]

To ensure the proper implementation of the Deep Sea Regulation, the European Commission adopted an Implementing Regulation in 2022 on Vulnerable Marine Ecosystems (VME),[88] which prohibits the use of bottom fishing gear in a list of 87 areas between 400 and 800 meters of depth, where there are or are likely to be VMEs. This measure was taken following scientific advice, in 2022, from the International Council for the Exploration of the Sea (ICES).[89] The measure aims to restore the fauna and flora in these areas and to rebuild certain fish stocks threatened by fishing activities.

3.2. Fish Protection and Species Conservation

3.2.1. THE PROHIBITION ON FINNING

Finning consists of fishing sharks, cutting off their fins and throwing the wounded sharks back into the sea in agony or dead. Consumers in Asian countries, such as Hong Kong and China, use shark fins for their therapeutic properties, usually under the form of a traditional soup.

Since 2003, finning, defined as "[removing] shark fins on board vessels and [retaining] on board, [transshipping] or [landing] shark fins," has been prohibited under EU law in EU waters.[90] In 2013, the EU also put an end to derogation rules for Spain and Portugal, thereby strictly prohibiting finning in the EU.[91] As a result, under EU law, fishing sharks for their fins alone is prohibited. Instead, "shark fins may be partially sliced and folded back against the carcass, but they are not removed from the carcass before being landed."[92]

82 Article 8 (9), *ibid*.

83 Article 1, Regulation 1143/2014 on the Prevention and Management of the Introduction and Spread of Invasive Alien Species, 2019 L317/35-45.

84 Regulation 2019/1241 on the conservation of fisheries resources and protection of marine ecosystems through technical measures, 2019 OJ L 198/105-201.

85 See section 3.2.3 *infra*.

86 Regulation 2016/2336 Establishing Specific Conditions for Fishing for Deep-Sea Stocks in the Northeast Atlantic and Provisions Relating to Fishing in International Waters of the Northeast Atlantic, 2016 OJ L 354/ 1-19.

87 Article 8(4), *ibid*.

88 Commission Implementing Regulation 2022/1614 Determining Existing Deep Sea Fishing Areas and Establishing a List of Areas That Support or Are Likely to Support Vulnerable Marine Ecosystems, 2022 OJ L 242/1-141.

89 ICES, EU request for a Technical Service to provide the data outputs of ICES 2021 advice on the deep-sea access regulationas coordinates for the EU waters area only, Technical Services Report (2002).

90 Article 3 (1), Regulation 1185/2003 on the Removal of Shark Fins on Board Vessels, 2003 OJ L 167/2.

91 Regulation 605/2013 Amending Regulation 1185/2003 on the Removal of Shark Fins on Board Vessels, 2013 OJ L 181/1-3.

92 Article 1(2), Regulation 1185/2003 on the Removal of Fins of Sharks on Board Vessels, 2003 OJ L 167/2.

However, EU law does not ban the sale of shark fins imported from third countries. To remedy such a shortcoming, a nonprofit petitioned the European Commission in 2023 to ban the import of shark fins of all species into the EU by way of a European Citizens' Initiative (ECI).[93]

In July 2023, the European Commission responded favorably to the ECI and committed to conduct an impact assessment of current EU rules and to improve the enforcement of inspection rules applicable to fishing activities in the EU.[94]

3.2.2. THE PROHIBITION ON ELECTROFISHING

Since 2021, electrofishing has been prohibited in the EU as per Regulation 2019/1241 on the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures.95 In 2019, the Netherlands sought to annul Regulation 2019/1241 by way of an action for annulment before the Court of Justice of the European Union.96 However, the Court rejected the Netherlands' action, thereby upholding the legality of the ban on electrofishing.97

The Ban on Electrofishing: An Example of a Successful Litigation-Based Campaign

In 1998, the EU institutions enacted a ban on the capture of "marine organisms by methods involving the use of explosives, fish, soporific substances or electric current."[98] However, since 2007, EU law also provided an exemption from the ban for commercial fishing activities in the waters of the Southern North Sea. Specifically, the exemption authorized Member States to equip up to 5% of their beam trawler fleet with electrodes.[99]

In 2017, 2018, and 2019, the ocean protection organization BLOOM filed several complaints against the Netherlands before the European Commission[100] on the basis that nearly 28% of the beam trawlers in the Dutch fleet were equipped with electrodes.[101] Although the Dutch fleet violated EU law,[102] the European Commission had allowed the Netherlands to maintain illegal derogations. Electrofishing was definitively banned in 2021, after the Court of Justice of the European Union rejected the Netherlands' action for annulment of Regulation 2019/1241, which strictly prohibits electrofishing.

93 European Citizens' Initiative, "Stop Finning - Stop the trade" https://stop-finning-eu.org/fr/ (last visited July 14th, 2023).

94 Communication from the Commission on the European Citizens' Initiative (ECI) "Stop Finning - Stop the Trade" C(2023) 4489 final, July 5th, 2023, available online: https://europa.eu/citizens-initiative/sites/default/files/2023-07/C_2023_4489_1_EN.pdf

95 Article 7 (1)(b), Regulation 2019/1241 on the Conservation of Fisheries Resources and Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/105-201.

96 Case C-733/19, *Kingdom of the Netherlands v. European Parliament and Council of the European Union*, 15 April 2021.

97 *Ibid*.

98 Regulation 850/98 for the Conservation of Fishery Resources Through Technical Measures for the Protection of Juveniles of Marine Organisms, 1998 OJ L 125.

99 Annex III, Part A, Point 4, Regulation 41/2007 Fixing for 2007 the Fishing Opportunities and Associated Conditions for Certain Fish Stocks and Groups of Fish Stocks, Applicable in Community Waters And, for Community Vessels, in Waters Where Catch Limitations Are Required, 2007 OJ L 15/184.

100 European Commission, Complaint for Non-Compliance With EU Legislation, available online: https://bloomassociation.org/wp-content/uploads/2017/11/Plainte-pêche-électrique-1.pdf

101 Bloom association, "Pêche électrique: notre action judiciaire," October 2, 2017, https://bloomassociation.org/nos-actions/action-juridique/peche-electrique-action-juridique/ (lastvisisted July 14th, 2023) (in French).

102 Article 7 (1)(b), Regulation 2019/1241 on the Conservation of Fisheries Resources and Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/105-201.

3.2.3. REGULATION OF UNWANTED CATCHES

3.2.3.1. By-Catch and Incidental Catches

EU law regulates fishing to limit the catch quantity of fishing vessels in certain geographical areas. However, fishing vessels regularly catch unwanted animals – called "unwanted catches"[103] – often due to the use of non-selective fishing gear. The EU Legislature uses the terms "non-targeted,"[104] "unintentional,"[105] or "unwanted"[106] catch to designate unwanted catches in a generic manner. There are, however, two types of unwanted catches:

- "By-catch" is the catch of animals that exceed the allocated quota for that specific animal, or the catch of animals whose size does not comply with the conservation reference size (i.e. animals are too small, or too young, and so are not allowed for fishing). Under EU law, by-catch is not prohibited but is limited by both species-specific quotas and quotas on by-catch.[107]
- "Incidental Catch" refers specifically to the capture of fish, crustaceans, marine mammals, or birds protected under the Habitats and Birds Directives and Regulation 2019/1241.[108] Unlike by-catch, incidental catches of these species are prohibited.

3.2.3.2. Two Distinct Legal Regimes

- **Landing Requirement for By-Catch**

  Fisheries operators are under the obligation to land by-caught animals. Landing obligation is the obligation for a vessel to bring on board the animals caught, to keep them on board, and then record these catches once in port. The landing obligation aims to ensure that these catches are accounted for in the calculation of the quotas.[109]

  Based on the wording of the CFP Regulation, the landing obligation applies only to species which are subject to a quota ("catch limits") or to "minimum sizes," (i.e. species that operators are authorized to fish). Similarly, Regulation 2019/1241 on the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures provides that "by-catches of species subject to the landing obligation [shall] be landed and counted against quotas."[110]

  Regulation 2016/2336 Establishing Specific Conditions for Fishing for Deep-Sea Stocks in the Northeast Atlantic also provides a European "by-catch fishing authorizations" for vessels that catch "deep-sea species as by-catch."[111]

- **The Prohibition on Accidental Captures of Animals Classified as Protected Species**

  Regulation 2019/1241 provides protection for animals belonging to a "sensitive species," which is "a species whose conservation status, including its habitat, distribution, population size or population condition is adversely affected by pressures arising from human activities, including fishing activities."[112] The protection regime provided

103 Article 2(5), Regulation 1380/2013 on the Common Fisheries Policy, 2013 OJ L 354/22-61.

104 For example: Article 4 (1)(12), Regulation 1380/2013 on the Common Fisheries Policy, 2013 OJ L 354/22-61; Recital 30 and Article 20(2), Regulation 2019/1241 on the Conservation of Fisheries Resources and Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/105-201.

105 For example: Article 8 (2)(c), Regulation 2019/1241 on the Conservation of Fisheries Resources and Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/105-201 ; Article 4(2)(i), Article 5(5)(6), Regulation 2016/2336 Laying Down Specific Conditions for Fishing for Deep-Sea Stocks in the North-East Atlantic and Provisions Relating to Fishing in International Waters of the North-East Atlantic, 2016 OJ L 354/ 1-19.

106 For example: Recitals (22), (32), (39), Article 14, Regulation 2019/1241 on the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/105-201; Article 2 (5)(a) and b), Article 14, Regulation 1380/2013 on the Common Fisheries Policy, 2013 OJ L 354/22-61

107 Annexes, Regulation 2023/194 Fixing for 2023 the Fishing Opportunities for Certain Fish Stocks, Applicable in Union Waters And, for Union Fishing Vessels, in Certain Non-Union Waters and Fixing for 2023 and 2024 Such Fishing Opportunities for Certain Deep-Sea Fish Stocks, 2023 OJ L 28/1-219

108 Articles 3, 10, and 11, Regulation 2019/1241 on the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures,2019 OJ L 198/105-201.

109 Article 15 (1), Regulation 1380/2013 on the Common Fisheries Policy, 2013 OJ L 354/22-61.

110 Annex VI, Part C, (2.2)(ii) and (2.3)(ii), Regulation 2019/1241 on the Conservation of Fisheries Resources and Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/105-201.

111 Article 5(1), Regulation 2016/2336 Establishing Specific Conditions for Fishing for Deep-Seastocks in the Northeast Atlantic and Provisions for Fishing in International Waters of the Northeast Atlantic, 2016 OJ L 354/1-19.

A fisherman holds a shark taken from the nets of a fishing boat. Common bycatch victims of industrial trawling include sharks, dolphins, turtles and some endangered species. France, 2018. © Selene Magnolia / HIDDEN / We Animals Media.

in Regulation 2019/1241 articulates itself with protection rules in the Birds and Habitats Directives.

Since 1979, the Birds Directive has prohibited the non-selective capture of seabird species, including marine species.[113] Similarly, since 1994, the Habitats Directive has prohibited the capture of species listed in its Annex IV. In 2019, Regulation 2019/1241 reinforced the protection regime of the Habitats Directive by explicitly prohibiting the capture of cetacean, crustacean, fish,[114] and reptile species[115] listed in Annex II of the Habitats Directive. This protection regime particularly applies to bottlenose dolphins (*Tursiops truncatus*), harbor porpoises (*Phocoena phocoena*) and loggerhead sea turtles (*Caretta caretta*),[116] whose capture is prohibited under Regulation 2019/1241 – while it was previously tolerated by the Habitats Directive.[117]

Regulation 2019/1241 also strengthened the protection regime of protected species by specifying the list of prohibited acts. While the Habitats Directive generally prohibits (among other things) "the keeping, transport, trade and sale or exchange and offering for sale or exchange of specimens taken from the wild,"[118] Regulation 1241/2019 specifies that "the catching, retention on board, transhipment or landing"[119] of marine mammals, birds, and reptile species listed in the Habitats Directive is also prohibited.

112 Article 6(8), Regulation 2019/1241 on the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/121 and 137.

113 Article 8(1), Directive 2009/147/EC on the Conservation of Wild Birds, 2010 OJ L 20/10. Except for derogations (Article 9).

114 Article 10(1) in light of Article 6(8), Regulation 2019/1241 on the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/120 - 121.

115 Article 11, *ibid*.

116 Annex II, Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, 1992 OJ L 206/22.

117 However, Regulation 2019/1241 does not strengthen the protection regime for seabirds compared to the Birds Directive, as the latter already prohibits the capture of birds listed in its annex.

118 Article 12(2), Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, 1992 OJ L 206/7.

Regulation 2019/1241 further specifies that these protected species "shall not be harmed and specimens shall be promptly released."[120] Similarly, Regulation 2019/1241 also prohibits the transhipment or landing of seabirds listed in the Birds Directive,[121] where the Birds Directive only generally prohibits their capture.[122]

Lastly, Regulation 2019/1241 extends protection to marine species beyond those listed in the Habitats Directive by prohibiting the capture, keeping, transhipment, landing, as well as the storage, sale, display, and offer for sale of animals belonging to species listed in Annex I of Regulation 2019/1241. These species covered in Regulation 2019/1241 but not in the Habitats Directive include the Alfred's manta ray (*Manta alfredi*), the basking shark (*Cetorhinus maximus*), and the great white shark (*Carcharodon carcharias*).[123]

Therefore, the regime applicable to incidental catches is much stricter (prohibition with monitoring and information obligations) than the regime applicable to by-catches (authorization, although by-catch is still subject to fishing quotas).

Monitoring and Information Obligations in the Habitats Directive

Fishery operators must also comply with the information and monitoring requirements of the Habitats Directive.

Specifically, the Habitats Directive requires Member States to implement "a system to monitor the incidental capture and killing of the animal species" covered in the Directive.[124] As a result, the Habitats and Birds Directives have been powerful tools to limit incidental catches, as they have provided the legal basis for many of the infringement proceedings that the European Commission has launched against Member States for non-compliance with the prohibition and prevention measures against incidental catches.[125]

Regulation 1241/2019 further imposes a duty of information on Member States in the event of the adoption of mitigation measures or restrictions on the use of certain fishing gear towards the other Member States concerned.[126] On the basis of this provision, the French Council of State handed down a decision in March 2023 ordering the French government to close fishing areas in the Bay of Biscay for appropriate periods to limit dolphin beachings occurring as a result of commercial sea bass fishing.[127] The court justified its decision by the application of the precautionary approach provided in the CFP Regulation, the obligation to adopt of technical measures for the protection of cetaceans in Regulation 2019/1241,[128] as well as the provisions contained in the 1992 Habitats Directive.[129]

119 Article 11 (1), Regulation 2019/1241 on the Conservation of Fisheries Resources and Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/120 - 121.

120 Article 11 (2), *Ibid.*

121 Article 11(1), *Ibid.*

122 Article 8 (1), Directive 2009/147/EC on the Conservation of Wild Birds, 2010 OJ L 20/10.

123 Article 10(2) and Annex I, Regulation 2019/1241 on the Conservation of Fisheries Resources and Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/121 and 137.

124 Article 12 (4), Council Directive 92/43/ EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, 1992 OJ L 206/7.

125 Formal notice to Bulgaria by the European Commission for failure to fulfil its obligations under the Habitats Directive in relation to cetacean by-catch, INFR(2022)2052; Formal notice to France by the European Commission for incorrect application of Community law for the protection of marine mammals and birds from fishing activities in France, INFR(2020)4036.

126 Article 11 (4) and (5), Regulation 2019/1241 on the Conservation of Fisheries Resources and Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/120 - 121.

127 Conseil d'État, N° 449788, March 20,2023, https://www.conseil-etat.fr/fr/arianeweb/CE/decision/2023-03-20/449788 (in French).

128 Recitals 6 – 9, Regulation 2019/1241 on the Conservation of Fisheries Resources and Protection of Marine Ecosystems Through Technical

129 Recital 10, *ibid.*

130 Regulation 338/97 on the Protection of Species of Wild Fauna and Flora by Regulating Trade Therein, 1997 OJ L 61/1-69.

131 Article 2(u), Regulation 338/97 on the Protection of Species of Wild Fauna and Flora by Regulating Trade Therein, 1997 OJ L 61/4.

132 Article 8 (1) and (2), *ibid*.

133 Articles 4 and 5, , *ibid*.

134 Annex B, Commission Implementing Regulation 2019/1587 Prohibiting the Introduction Into the Union of Specimens of Certain Species of Wild Fauna and Flora Pursuant to Regulation 338/97 on the Protection of Species of Wild Fauna and Flora by Regulating Trade Therein, 2019 OJ L 248 / 5-21.

135 Article 4(36), Regulation 1380/2013 on the Common Fisheries Policy, 2013 OJ L 354/2-61. As opposed to "Directed fishing" which are "fishing effort[s] targeted at a specific species or group of species."

136 Article 6 (3), Regulation 2019/1241 On the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/120 - 121.

137 ICES, Cod (Gadus morhua) in divisions 7.e–k (western English Channel and southern Celtic Seas), https://doi.org/10.17895/ices. advice.19447898.

138 Annex IA, Part A - autonomous stocks of the Union (Area 7, Gadus morhua - Cod), Regulation 2022/109 Fixing for 2022 the Fishing Opportunities for Certain Fish Stocks and Groups of Fish Stocks, Applicable in Union Waters And, for Union Fishing Vessels, in Certain Non-Union Waters, 2022 OJ L 21/1.

- **Protection of Animal Species Under Regulation 338/97 on the Protection of Species of Wild Fauna and Flora by Regulating Trade Therein**

Certain animal species can become the subject of unwanted catches and yet are not protected by the Habitats Directive, the Birds Directives, nor Regulation 2019/1241. As a result, these animals are not protected by provisions related to by-catch or incidental catch.

However, Regulation 338/97 on the Protection of Species of Wild Fauna and Flora by Regulating Trade Therein[130] has the potential to offer some protection to these animals. Regulation 338/97 regulates "the introduction into [the EU], including introduction from the sea, and the export and re-export from [the EU], as well as the use, movement and transfer of possession within [the EU], including within a Member State"[131] of animal species listed in its annexes. Listed animal species are divided into different annexes according to their conservation status, with each annex corresponding to a different protection regime. The Regulation thus prohibits trade in the animal species listed in Annex A,[132] while it allows the import and non-commercial export of specimens of animal species listed in Annexes A and B, provided that the holders are in possession of a permit.[133] These annexes include aquatic animal species, such as certain species of sharks, which are listed in Annex B of Regulation 338/97 (for instance: whale shark [*Rhincodon typus*] and the oceanic shark [*Carcharhinus longimanus*]).[134]

However, some species that are subject to unwanted catches are not listed in the Birds and Habitats Directives, nor in Regulations 1241/2019 and 338/97. Consequently, these species do not benefit from any legal protection. Such is the case with jellyfish. Species not protected by species conservation legislation are thus the most at risk of suffering since they do not even benefit from any form of general protection provided by environmental law.

3.2.3.3. ENFORCEMENT ISSUES OF BY-CATCH QUOTAS IN MIXED FISHERIES

Mixed fisheries are "fisheries in which more than one species is present and where different species are likely to be caught in the same fishing operation."[135] In this specific context, by-catches are not regulatedas such, and therefore are not subject to quotas.[136]

The North Sea gadidae fishery is an example of a mixed fishery simultaneously targeting haddock, cod, and whiting. As a result, fishing vessels targeting whiting catch species do so in areas which are also populated by other species of fish, including cod. However, the implementation of by-catch quotas for cod, a species with a poor conservation status, remains difficult.

Given the poor conservation status of cod fish, the International Council for the Exploration of the Sea (ICES) has recommended a zero-catch level for cod in the Celtic Sea for the year 2023.[137] However, given the impossibility of discriminating between the species caught in mixed

fisheries, the EU Legislature, by way of Regulation 2022/109 Fixing the Fishing Quotas for the Year 2022, has authorized a catch quota for cod in the Celtic Sea, although "exclusively for by-catches of cod in fisheries for other species. No directed fisheries are permitted under this quota."[138]

While target fisheries are prohibited from catching cod, such a prohibition does not apply to mixed fisheries. However, it may happen that vessels from mixed fisheries catch more cod than whiting, thus making more use of the by-catch quota than of the quota for the targeted species. This situation results in over reliance on by-catch quotas, which defeats the conservation purpose of such quotas.

3.3. Conservation Measures in the Common Fisheries Policy

3.3.1. THE REGULATION ON THE COMMON FISHERIES POLICY

- **The Quota System**

The CFP Regulation aims to ensure minimum protection of marine ecosystems by limiting fish catches through a system of quotas.

This quotas system is expressed in tons and distributed among Member States with fishing fleets, according to fish species and geographical areas. Because of its exclusive competence, each year the European Commission establishes a "total allowable catches" (TAC) for each fish "stock"[139] in EU waters. These TACs are divided into quotas allocated to each Member State during annual negotiations in the Council of the EU. These quotas are published through the adoption of two regulations: one "fixing (for the year) the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and for Union fishing vessels in certain non-Union waters" and the other "fixing (for the year) the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Mediterranean and Black Seas."

The TACs are determined "in accordance with the best available scientific advice."[140] This advice comes from expert committees within EU institutions – such as the Scientific, Technical and Economic Committee for Fisheries – and international institutions, such as the International Council for the Exploration of the Sea (ICES) whose area of competence covers the waters of the North Atlantic and its adjacent seas.

However, consideration of fish welfare remains absent from the scientific advice of expert committees. Environmental protection objectives are also significantly constrained by the main objective of the CFP, which is the exploitation of seafood, including fish. Instead, the scientific committees determine the TACs on the basis of the "maximum sustainable yield," which is the maximum volume of catches that can be exploited routinely without depleting these fisheries in the long term.

Fishing restrictions are not aimed at protecting the environment for its own sake, but at preserving the capacity to exploit marine resources, which may explain, in part, the failure of these restrictions to protect natural fish habitats.

139 "A marine biological resource that occurs in a given management area," Article 4 (1) (14), Regulation 1380/2013 on the Common Fisheries Policy, 2013 OJ L 354/22-61.

140 Article 3(c), Regulation 1380/2013 on the Common Fisheries Policy, 2013 OJ L 354/22-61.

Bluefin tuna caught in the Mediterranean Sea for the sushi market. Italy, 2012. © Jon Amad / HIDDEN / We Animals Media

- **Landing Obligations**

Since 2013, the CFP Regulation has required that all catches made in the course of commercial fishing activities be "returned and retained on board fishing vessels, then recorded, landed and counted against quotas where appropriate"[141] to combat mass discarding of non-target species.

Landing obligations and fishing quotas are pivotal instruments to strictly limit by-catches. However, such an obligation has not resulted in any significant effects due to limited enforcement, as underlined in a 2022 report by the Fisheries and Aquaculture Monitoring, Evaluation and Local Support Network (FAMENET).[142] Regarding quotas, FAMENET specifically underlines the persistence of exemptions and the fact that the Council of the EU constantly chooses the maximum catch level advised by scientists.[143] Similarly, FAMENET noted that many Member States do not provide data on how they distribute the share of national quotas among fisheries, and that the most common method of quota allocation consists of referring to historical quotas, thus favoring commercial fisheries to the detriment of an objective distribution of the fish stocks.[144] Concerning the landing obligation, FAMENET also noted a lack of enforcement and the persistence of illegal discards.[145]

3.3.2. THE EFMAFA REGULATION

The EFMAFA Regulation provides financial measures aimed at conserving species, including subsidies for measures intended to: permanently or temporarily stop fishing activities; [146] prohibit financing operations that seek to increase the gross tonnage of vessels [147] (except where derogations apply);[148] compensate for the increase in tonnage on a vessel by a reduction in the fishing capacity of the fleet; [149] or replace or modernize the engines of fishing vessels of a length not exceeding 24 meters.[150]

3.3.3. TECHNICAL MEASURES ASSOCIATED WITH QUOTAS

For some stocks in particular, operators must comply with periodic fishing prohibitions and rules related to fishing gear (called "technical measures") in addition to quota rules. For instance, Regulation 2023/194,[151] which determines the quotas for the year 2023 in the waters of the Union,[152] provides for periodic closures for certain stocks in view of their degraded state. Under this regulation, fishing for European eel is currently prohibited "as a target species or as a by-catch, at all life stages, for a period of at least six months."[153] Finally, the fishing of certain species is also prohibited depending on the area, such as the thresher shark (Alopias)[154] in the area under the control of the International Commission for the Conservation of Atlantic Tunas. Similarly, Regulation 2023/195, which applies to the Mediterranean Sea, provides for closed seasons, such as for turbot from April 15 to June 15,[155] or sets a limit on the fishing capacity of certain types of gear, such as for trawlers and longliners.[156]

141 Article 15, *ibid*.

142 FAMENET (Fisheries and Aquaculture Monitoring, Evaluation and Local Support Network), Survey report, April 2022.

143 *Ibid*.

144 *Ibid*.

145 *Ibid*.

146 Article 20 - 21, Regulation 2021/1139 Establishing the European Maritime Affairs, Fisheries and Aquaculture Fund, 2021 OJ L 247/1-49.

147 Article 13, *Ibid*.

148 Article 19, *Ibid*.

149 Article 13 (2)(d), *Ibid*.

150 Article 18, *Ibid*.

151 Regulation 2023/194 Fixing for 2023 the Fishing Opportunities for Certain Fish Stocks, Applicable in Union Waters and, for Union Fishing Vessels, in Certain Non-Union Waters, and Fixing for 2023 and 2024 Such Fishing Opportunities for Certain Deep-Sea Fish Stocks, 2023 OJ L 28/ 1-219.

152 For example, Articles 11 and 16, *ibid*.

153 Article 13, *ibid*.

154 Article 25, *ibid*.

155 Article 21, Council Regulation 2023/195 Fixing for 2023 the Fishing Opportunities for Certain Fish Stocks and Groups of Fish Stocks Applicable in the Mediterranean and Black Seas and Amending Regulation (EU) 2022/110 as Regards Fishing Opportunities for 2022 in the Mediterranean and Black Seas, 2023 OJ L 28 / 220-248

156 Deep-sea species. Article 7(2), *ibid*.

4. European Consumer Law and Fish Welfare

4.1. Labeling Rules for Seafood Products

The CFP Regulation also includes rules on labeling the catch method of fish.[157] Regulation 1379/2013 on the Common Organization of the Markets in Fishery and Aquaculture Products of 2013 specifies the information that must appear on live fish and shellfish; fresh or chilled; dried, salted or in brine, smoked; flours, meals and pellets.[158]

Such information must include "the production method, in particular the following words: '...caught...' or '...caught in freshwater...' or '...farmed...'" and "the category of fishing gear used in capture."[159]

Although the catch method of fish only indirectly informs on the level of fish welfare, the requirement to label the method of production and capture can be useful to consumers not inclined to buy fish caught with non-selective fishing gear. However, such information rules can suffer from limited enforcement, as shown by an investigation conducted by the French competent authorities in 2016.[160]

4.2. Sustainable Fishing Labels

Considering the absence of robust consumer information rules, both the nonprofit and the for-profit sectors have created sustainable fishing labels to assist consumers. The best known of these labels is the private MSC label, which aims to guarantee that fish come from "fishing healthy stocks," and stocks that are "being well-managed so stocks can be fished for the long-term," and in a way that fisheries "minimize their impact on other species and the wider ecosystem."[161] Similarly, the French government also created a food label called "Pêche Durable" ("sustainable fishing") available for fisheries that meet economic, social, and environmental requirements. However, these labels do not include any animal welfare standards.

157 Article 35(1)(g), Regulation 1380/2013 on the Common Fisheries Policy, 2013 OJ L 354/45.

158 Article 35(1) and Annex I, Regulation 1379/2013 on the Common Organization of the Markets in Fishery and Aquaculture Products, 2013 OJ L 354/12 and 16.

159 *Ibid*.

160 DGCCRF, "Produits de la mer et d'eau douce : contrôle du respect de la réglementation" (2017) (in French).

161 MSC, "What Does the Blue MSC Label Mean?," https://www.msc.org/what-we-are-doing/our-approach/ what-does-the-blue-msc-label-mean (last visited July 14th, 2023).

Conclusion

Since 2019, the European Commission has undertaken several initiatives to further regulate fishing activities and limit the impacts of fishing activities on marine ecosystems. In 2019, the European Commission enacted new technical measures,[162] including the ban on electrofishing in 2021.[163] In 2022 and 2023 respectively, the European Commission prohibited deep-sea fishing in certain vulnerable marine ecosystems[164] and established the temporary closure of European eel fishing.[165]

However, EU law still fails to include any measures directly concerning the ways in which fish are treated in the course of fishing activities. The expected reform of the Common Fisheries Policy (CFP) represents an opportunity to remedy this shortcoming.

Stricter regulation of fishing gear and equipment to make fishing activities more humane would be a central reform. The allocation of fishing quotas to fleets should also be strictly conditioned to their performance in terms of animal protection, both for targeted fish caught and by-catch quantities. The EU Legislature should also strengthen consumer information rules by improving the implementation of fish labeling rules to better inform consumers of existing industry practices, which may influence consumption habits and shape market demand.

Finally, the European Commission should make greater use of its competence in enacting criminal law provisions. Since the 2009 Treaty revision,[166] the European Commission has had the power to require Member States to establish minimum criminal sanctions for by-catches, incidental catches, as well as for violations of landing obligations.

Beyond animal protection goals, the above measures would also carry the advantage of making existing legislation more consistent with the European Commission's objectives as formulated in the European Green Deal, which includes ambitious language regarding animal welfare and the need to transition to "more plant-based diets."[167]

162 Regulation 2019/1241 on the Conservation of Fisheries Resources and Protection of Marine Ecosystems Through Technical Measures, 2019 OJ L 198/120 - 121.

163 Article 7(1)(b), *ibid*.

164 Article 2 (1), Commission Implementing Regulation (EU) 2022/1614 Determining Existing Deep Sea Fishing Areas and Establishing a List of Areas That Support or Are Likely to Support Vulnerable Marine Ecosystems, 2022 OJ L 242/1-141.

165 Article 13, Regulation 2023/194 Fixing for 2023 the Fishing Opportunities for Certain Fish Stocks, Applicable in Union Waters And, for Union Fishing Vessels, in Certain Non-Union Waters, and Fixing for 2023 and 2024 Such Fishing Opportunities for Certain Deep-Sea Fish Stocks, 2023 OJ L 28/1-219.

166 Article 83(2), Consolidated version of the Treaty on the Functioning of the European Union, 2008 OJ C 115/80–81.

167 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, "A Farm to Fork Strategy For a Fair, Healthy and Environmentally-Friendly Food System," Brussels, 20.5.2020 COM(2020) 381 final, p.13.

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Pauline Koczorowski is a lawyer specializing in law of the sea. In 2023, she joined the European Institute for Animal Law & Policy, where she specializes in the legal protection of aquatic animals. Pauline interned with the French Directorate-General for Maritime Affairs, Fisheries and Aquaculture in 2021 - 2022. She graduated from the Nice Côte d'Azur Law School in 2021 in law of the sea, and from the Sorbonne Law School in 2022 in agricultural law.

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