UN environment programme

CMS

CONVENTION ON MIGRATORY SPECIES

UNEP/CMS/COP15/Doc.31.3.14/Rev.1
22 January 2026
Original: English

15th MEETING OF THE CONFERENCE OF THE PARTIES
Campo Grande, Brazil, 23 – 29 March 2026
Agenda Item 31.3.14

PROPOSAL FOR A CONCERTED ACTION FOR THE BASKING SHARK (*Cetorhinus maximus*) ALREADY LISTED ON APPENDICES I and II OF THE CONVENTION*

Summary:

Marine Research and Conservation Foundation (MARECO) and the Irish Basking Shark Group have submitted the attached proposal for a Concerted Action for the Basking Shark (*Cetorhinus maximus*) in accordance with the process elaborated in Resolution 12.28 (Rev. COP14).

Revision 1 implements recommendations made by the Scientific Council at its 8th Meeting of the Sessional Committee in December 2025.

PROPOSAL FOR A CONCERTED ACTION FOR THE BASKING SHARK (*Cetorhinus maximus*) ALREADY LISTED ON APPENDICES I and II OF THE CONVENTION

Proponent(s)

Irish Basking Shark Group (IBSG), and Marine Research and Conservation Foundation (MARECO)

Target species, lower taxon or population, or group of taxa with needs in common

Class: Chondrichthyes

Subclass: Elasmobranchii

Order: Lamniformes

Family: Cetorhinidae

Genus: Cetorhinus

Species: *Cetorhinus maximus*

Listed on CMS Appendices I and II

Geographical range

The basking shark is a highly migratory species, found worldwide in temperate waters. Basking sharks typically occupy water temperatures of 9-17 ºC but can tolerate a more extreme range of 6-27 ºC (Johnston et al. 2022), from the surface to depths to over 1200 m (Gore et al. 2008). In the North Atlantic, they are observed in shallow, coastal habitats from April to September forming large aggregations at recognised hotspots, such as those in the Republic of Ireland (Martin & Clark, 2008; CSAS, 2008). In the Pacific, basking sharks are mainly reported from October to May, historically along the California coast, moving from California to Mexico and Hawaii (Dewar et al., 2018; Squire, 1990). However, since an eradication campaign in the latter half of the 20th Century, basking shark populations have declined in the Pacific Coast of the United States and Canada by as much as 90%, and sightings along these coastlines are now rare (CSAS, 2008; McInturf et al. 2022). Although data are limited in the Southern Hemisphere, basking sharks are seasonally found in parts of South America and Southern Africa, with historical and recent records in both Brazil and Argentina (Lucifora et al., 2015). Shifts in basking shark occurrence and population declines have been observed across the globe (CSAS, 2008; McInturf et al., 2022).

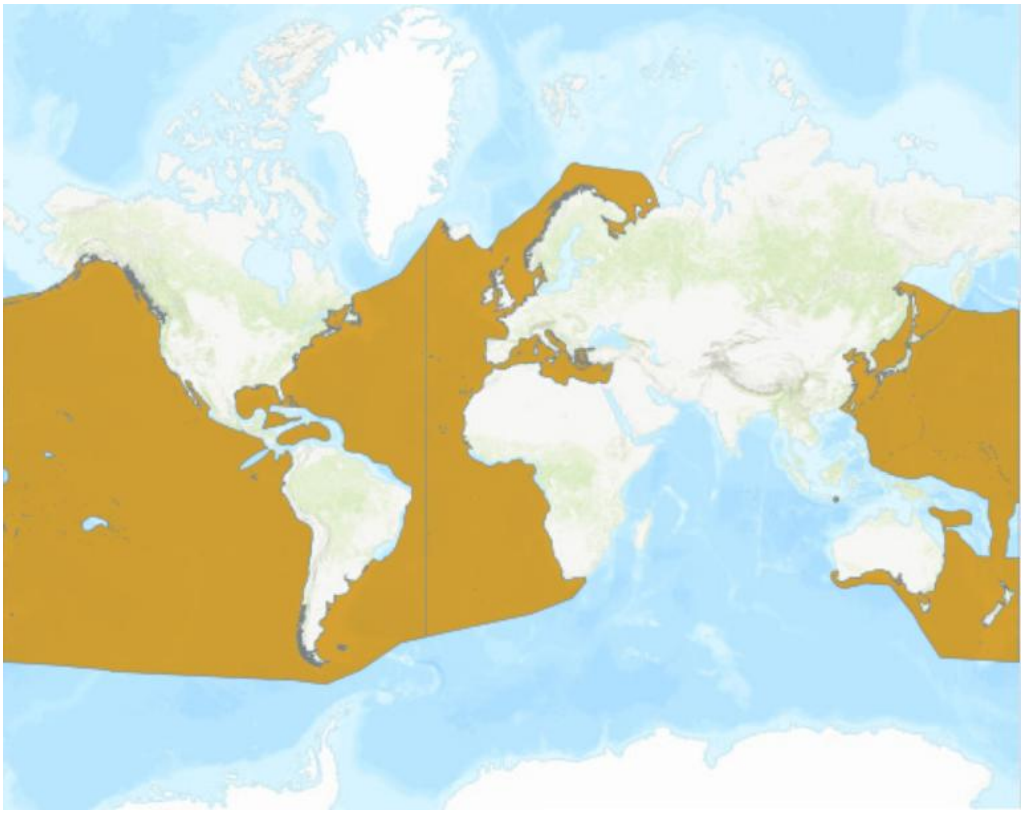

Figure 1: Distribution of the basking shark (©IUCN Red List).

Summary of activities

This Concerted Action proposes to:

1) Via science and conservation organizations facilitate research, education, and engagement with policymakers, so that Parties can effectively engage with other Multilateral Environmental Agreements, regional fisheries bodies (RFBs), and other relevant entities to enhance basking shark management (prevention of bycatch and ship strikes) including contributing to the planned IUCN SSC SSG Conservation Strategy and Action Plan for Pelagic Sharks and Rays, in cooperation with the Sharks MOU;

2) Identify inconsistencies in the level of protection provided by different Party Range States and make recommendations to regional or national bodies under whose management the basking shark falls, to encourage alignment with protective measures globally;

3) Refine and promote unified species-specific international guidelines for best practices for tourism operations, in compliance with UNEP/CMS/COP14/CRP27.3.1/Annex 2, to guide Party Range States in management and regulation of basking shark tourism;

4) Encourage research into the impacts of fisheries on basking sharks (fisheries-induced mortality, discards), including improved reporting to RFBs, the design of bycatch mitigation strategies and the assessment of post-release mortality of basking sharks across regions, demographics (i.e. male, female, adult, juvenile) and fishing gears. Encourage a unified and consistent reporting methodology, and the adoption of ICCAT's handling guidelines;

5) Encourage further research to assess the impacts of vessel strikes on basking sharks (rate of incidents, mortality, and methods to mitigate impact);

6) Standardise data collection methodologies for sightings, bycatch, and vessel strikes across Party States to better understand global patterns of habitat use and threats that the species faces throughout its range;

7) Identify critical habitats for basking sharks and promote/ support research to document basking shark movements between parts of their range (e.g. tagging), to identify possible migration routes or corridors, which will inform management strategies;

8) Support research on the population-specific and/ or region-specific impacts of climate change on basking sharks;

Associated benefits

Basking shark tourism has the potential to deliver significant socio-economic benefits to local communities and could create alternative livelihoods in coastal communities. Ecotourism focusing (wholly or in part) on basking sharks is growing rapidly in the North Atlantic, where seasonal aggregations attract considerable public interest. The impacts of these tourism activities, as well as the impacts of fisheries, recreational boat use, drone traffic and other human activities, must be managed to ensure the sustainability and longevity of such tourism activities.

The species would benefit from improved management and conservation efforts across jurisdictional boundaries. This document should act as a blueprint for CMS Parties to help with their implementation of obligations under CMS and also contribute to a more sustainable future for basking sharks. Although basking sharks are found worldwide, most of the research has focused on the North Atlantic and in particular, limited information is currently available on the species' presence and status in the Global South. Further research on basking shark population size, distribution, foraging patterns, and migratory patterns is essential to effectively address global threats. The actions proposed within this Concerted Action could deliver more consistent protection for migratory species throughout its range, and a greater impact for the work of CMS and its Parties.

Timeframe

Please refer to Activities and Expected Outcomes.

Relationship to other CMS actions

This CA would significantly contribute to the implementation of the following mandates established under CMS and the Sharks MOU:

- Resolution 12.22 and Decisions 13.62 to 13.63 on Bycatch
- Resolution 13.3 and Decisions 13.71 to 13.73 on Chondrichthyan Species
- Decisions 13.66 to 13.68 on Marine Wildlife Watching
- Sharks MOU Programme of Work 2023-2025: Development of a global strategy, and
- Regional action plans for pelagic sharks

Conservation priority

A 2018 reassessment of the species' global conservation status for the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species classified the species as globally Endangered (Rigby et al. 2019). This was owing to abundance estimates well below historic levels, the ongoing demand for the high-value fins, a global population reduction of 50–79% suspected over the past three generations (102 years), and trans-Atlantic migrations (Gore et al., 2008) leading to considerable debate on the possibility of a single genetic population in the North Atlantic. Confirmation of the existence of a single trans-Atlantic population would have significant implications for management authorities and conservation bodies on both sides of the Atlantic, and the scale at which protective measures are implemented.

Major contemporary threats to basking sharks include fisheries impacts and vessel strikes. Whilst researchers have documented a ship strikes of a basking shark in Ireland's only marine park (Páirc Náisiúnta na Mara), the issue of ship strikes remains understudied (Chapple et al., 2024), despite the fact that basking shark migratory routes overlap with many shipping routes globally. Increased efforts to collect data on this topic will contribute to improving regulations and best practices, such as voluntary or mandatory boat speed limits in important basking shark habitats (Chapple et al., 2024). While similarly underreported, entanglements in nets have also been reported, both in Ireland (via underwater photographers; Michael O'Donnell, Nicholas Pfeiffer, pers. obs.) and other locations worldwide (e.g. Hernandez et al. 2011). International trade in basking sharks has been documented since its listing in CITES Appendix II (Magnussen et al. 2007).

Relevance

This CA will play a crucial role in strengthening the political commitment to the protection of basking sharks and encourage the coordinated and timely implementation of conservation measures. The actions recommended in this CA aim to encourage more cooperative research and management for this species.

This CA is relevant to the delivery of measures related to highly migratory species, as the Basking Shark is currently listed in CMS Appendices I and II, in Annex 1 of the CMS Memorandum of Understanding on the Conservation of Migratory Sharks, and in Annex I (Highly migratory species) on the United Nations Convention on the Law of the Sea (UNCLOS). Some Range States do not have legal protections for basking sharks (e.g. U.K., Cayman Islands; Lawson and Fordham, 2018), although they may have conservation legislation that benefits the species. Collective action is essential for the conservation of this species due to its highly migratory nature.

The actions proposed in this CA also support the fulfillment of duties related to other conservation measures, as basking sharks are also currently listed under Appendix II of CITES, which pertains to International Trade in basking sharks. Several Regional Fisheries Management Organisations (RFMOs) also have remits to manage tuna and tuna-like species and those species impacted by tuna fisheries, such as basking sharks. Whilst several RFMOs (the Inter-American Tropical Tuna Commission (IATTC) 2023; the International Commission for the Conservation of Atlantic Tunas (ICCAT) 2025; the General Fisheries Commission for the Mediterranean (GFCM) 2012, and the North East Atlantic Fisheries Commission (NEAFC)2014); and the Northwest Atlantic Fisheries Organisation (NAFO) 2016, have adopted conservation management measures (CMMs) prohibiting targeting, retention, and sale of basking sharks, other RFMOs/RFBs are yet to adopt CMMs. Therefore, the actions/activities proposed by this Concerted Action provides a necessary and streamlined approach to compliance with international agreements, as well as methods of addressing persistent threats to basking sharks.

Absence of better remedies

Currently, there is no coordinated international approach to research the severity of threats to basking sharks such as vessel strikes, climate change, unregulated tourism, drone traffic and other anthropogenic disturbances, and to address these threats. Basking sharks also make trans-oceanic migrations and thus spend significant time in the high seas, where there are insufficient protection measures.

Proposed actions, such as assessing the impacts of fisheries on basking sharks, documenting connectivity between critical habitats and developing strategies for mitigating threats globally to the species, will promote a more coordinated approach and result in a connected, global understanding of the species' status. Many of these actions also align with the recently ratified High Seas Treaty.

Readiness and feasibility

Recent initiatives at other international fora have shown that expert networks exist that could support Range States with the implementation of the proposed activities. Support from the Sharks MOU and Cooperating Partners would be valuable in facilitating the development and execution of the action plans. In addition, the global network of researchers and managers established during the 2025 International Conference on Basking Sharks will prove a useful starting point for contacting multiple Range States and appropriate NGOs and encouraging them to engage in the actions relevant to their ocean basin or sea area.

Likelihood of success

With support from Range States, engaged NGOs, experts and organisations, these Concerted Actions have a high likelihood of success. Moreover, the alignment of some of the Concerted Actions herein with the proposed Conservation Strategy and Action Plans for Pelagic Sharks and Rays under the Sharks MOU, means that there is already active stakeholder engagement. Some potential barriers to success include lack of funds to enable delivery, lack of political buy-in, and/ or higher priority of other species or management concerns.

Magnitude of likely impact

It is anticipated that these Concerted Actions can improve the management and conservation outlook of the basking shark, resulting in a greater degree of protection for the species across its geographic range by encouraging all CMS Parties to engage in these activities. Simultaneously, it can pave the way for greater consideration of basking shark conservation in the high seas by working together with RMFOs to ensure adoption of consistent management measures across RFMOs and encourage compliance with RFMO data requirements.

A primary purpose of the CA is to encourage Range States to collect data in data-poor areas, so this document is intended to highlight to Range States how they might increase their knowledge on basking sharks at a national and regional scale, through connecting with the established basking shark network to build collaborations with other researchers and through committing to the actions that are appropriate for their region. Some actions (e.g. tourism guidelines) will only be relevant to a subset of range states, whereas others will be relevant to the majority of states.

In some sea areas, a lack of sightings or fisheries-dependent data for basking sharks results in data-poor regions. This CA offers Range States an opportunity to highlight how they might increase data collection and reporting on basking sharks at a national and regional scale. Range states can achieve this through committing to the actions outlined in this CA that are

appropriate for their region, including fulfilling the required reporting requirements to national bodies, FAO & RFMOs.

Tourism is a fast-growing industry (e.g. in the UK and Ireland) and basking sharks are becoming increasingly popular, particularly in locations where sightings appear to be increasing (e.g. Ireland; McInturf et al., in review). It is expected that the demand for basking shark tourism will rise globally, becoming both a threat and an opportunity. If well managed, this economic activity can assist in the management of the species, help raise awareness and facilitate research. This Concerted Action under CMS can provide a starting point to refine the guidelines established under UNEP/CMS/COP14/CRP27.3.1/Annex 2 with a sustainable model also applicable (with modifications) to other species.

Cost-effectiveness

One of the key components of the Concerted Actions is to encourage cooperation between Parties, information and knowledge exchange, and the development of effective strategies. If conservation successes can be replicated and best practices (such as tourism guidelines and bycatch data reporting) established, this collaboration will prove vastly more cost-effective than individual countries forging their own paths.

Consultations planned / undertaken

The first International Basking Shark Conference in almost two decades was held in Ireland in August 2025 bringing together approximately 120 participants from across the globe. Attendees represented individuals and organisations from the Northern and Southern Hemispheres, and both the Pacific and Atlantic regions. A subsequent 'Basking Shark Network' of experts has been? developed as an outcome of this meeting, to strengthen collaboration and coordination going forward.

A workshop was also held at the conference with the specific goals of ensuring collaboration amongst all groups and individuals holding or collecting basking shark data and developing stronger data sharing and management across international boundaries. An online basking shark Data Directory has since been established to signpost users towards organisations holding basking shark data (e.g sightings, tracking, photo-identification) along with details of the data owner. This directory is intended to present a more informed image to researchers, policy makers and other interested parties examining trends in different regions (https://www.sharktrust.org/basking-shark-data-directory). Similarly, International Collaborators have been working with NOAA to compile data from basking sharks in the Northeast Pacific and the IBSG have consulted with government officials in Ireland. Basking shark working groups in the Salish Sea and Northeast Pacific, in collaboration with NOAA, are also developing a regional sightings scheme, including opportunistic sightings reports and data from online sources (e.g. social media).

Researchers in the UK, Ireland and US/Canada are currently undertaking or planning to undertake research that will expand our understanding of the transatlantic movements of basking sharks as well as their vulnerability to vessel strikes and bycatch. As the Basking Shark Network is strengthened and data collection from other Range States is increased and standardized the primary threats in other parts of the species' range may be revealed.

Activities and expected outcomes

Note: These activities are not presented in order of priority. Different Range States are likely to have different priorities for actions relating to basking sharks, and some of the recommended activities will be relevant to only some Range States (e.g. tourism activities will only be relevant in range states where basking shark-focused tourism occurs). It is recommended that each Range State identifies their own priorities, and/ or consults with other Range States in their sea area or region to prioritise actions.

The development of a Single Species Action Plan for basking sharks, which can focus on one or more specific regions, may be considered as a next step in this process.

Activity	Outputs/Outcomes	Timeframe	Responsibility	Funding
Management				
Identify inconsistencies in the level of protection provided by different Party Range States and make recommendations to regional or national bodies under whose management the basking shark falls, to encourage alignment of with protective measures globally	Closed loopholes in protection for basking sharks at national and/or regional levels; Incorporate a dedicated section on basking sharks (or dedicated sub-sections) in the IUCN Shark Specialist Group's (proposed) Pelagic sharks & rays conservation strategy.	2026-2028	CMS Party Range states, NGOs, Researchers and groups with global/regional management and policy engagement expertise	
Facilitate research, education, and engagement with policymakers, so that Parties can effectively engage with other Multilateral Environmental Agreements, RFBs, and other relevant entities.	Improved long-term population outlook for basking sharks; Provide up-to-date recommendations (e.g. white papers) to Parties with relevant information related to basking sharks so that they may develop science-based policies at MEAs, RFBs, and other relevant entities to enhance basking shark management	2026-2028	NGOs, Researchers, groups and individuals with regional/global expertise in marine species management and policy engagement	
Sustainable Tourism				
Refine and promote unified international guidelines for best practices for tourism operations.	The CMS tourism guidelines for sharks, which are directly based on the Shark Trust's ST's guidance, will be further refined.	2026-2028	NGOs, Researchers, and groups with global/regional management and policy engagement	

Activity	Outputs/Outcomes	Timeframe	Responsibility	Funding
	Voluntary protocols for responsible basking shark tourism interactions established/ All Parties with tourism activities informed of good practices and encouraged to include those into their tourism management plan; Published guidance document on responsible basking shark tourism, make available online and shared with relevant tour operators globally. Tourism guidance will be based on guidelines developed by experts, not tour operators.		(e.g. The Shark Trust)	
Research				
Encourage research into the impacts of fisheries on basking sharks (fisheries-induced mortality, discards), including improved reporting to RFBs, the design of bycatch mitigation strategies and the assessment of post-release mortality of basking sharks across regions, demographics (i.e. male, female, adult, juvenile) and fishing gears.	Interactions incidence and mortality rates determined; Proposals to reduce risk of interactions of basking sharks produced (e.g. based on likelihood that sharks are at or just below surface seasonally and in specific locations); A better understanding of the impacts of fisheries on basking shark populations; Whatever information is available at the time will also be incorporated into the basking shark section of the AP for pelagic sharks and rays.	2026-2029	CMS Party and non-Party Range States; NGOs, Researchers, Groups with fisheries management expertise. The 2025 Prohibition recently passed by ICCAT (Rec 25-xx (tbc)) includes reporting requirements. Thus, an MOU between CMS and RFMOs would contribute to addressing the data deficit.	Paul M. Angell Foundation Conservation Grant (for research funded in Ireland; other national and international funding sources.

Activity	Outputs/Outcomes	Timeframe	Responsibility	Funding
Encourage further research to assess the impacts of vessel strikes on basking sharks.	Support the assessment of the impacts of vessel strikes on basking sharks; Interactions incidence and mortality rates determined; Proposals to reduce risk of interactions of basking sharks produced (e.g. based on likelihood that sharks are at or just below surface seasonally and in specific locations); A better understanding of the threats posed to basking sharks vessel strikes, which can be used to inform future management actions.	2026-2029	CMS Party and non-Party Range States; NGOs, Researchers (e.g. The Irish Basking Shark Group - North Atlantic Focus)	Paul M. Angell Foundation Conservation Grant (for research funded in Ireland)
Standardise sightings, bycatch, and vessel strike data collection methodology across Party States	Shared databases with consistent methodology.	2026-2029	NGOs, Research groups (e.g. The Shark Trust See database: https://www.sharktrust.org/basking-shark-data-directory)	
Identify critical habitats and understand habitat connectivity and migration routes.	Critical areas identified; Migratory routes identified; Priority areas for conservation (PAC) identified (e.g. predictable feeding/ breeding areas); A global database of basking shark key habitats based on sightings reports; PACs identified and shared with global	2026-2029	NGOs, Research groups, State and federal agencies. This has also already been initiated to a degree by the, IUCN Shark Specialist Group's ISRA (Important Shark and Ray Areas) process	Paul M. Angell Foundation Conserva-tion Grant (for Research funded in Ireland), EU PEACEPLUS programme funding, Commission for Environmental Cooperation (US, Mexico, Canada);

Activity	Outputs/Outcomes	Timeframe	Responsibility	Funding
	initiatives (e.g. ISRAs).			
Support assessments into the impacts of climate change on basking sharks.	Fine-scale regional maps of impacts of climate change on basking shark distributions, to supplement large-scale predictions (Sun et al. 2024).	2026-2030	NGOs, Researchers (e.g. The Irish Basking Shark Group - North Atlantic Focus)	Paul M. Angell Foundation Conservation Grant (for research funded in Ireland)

References:

Berrow, S.D. 1994. Incidental capture of elasmobranchs in bottom set gill net fishery off the south coast of Ireland. Journal of Marine Biological Association United Kingdom 74: 837-847.

Berrow, S.D. 2008, article summarising Irish basking shark research and history. http://www.iwdg.ie/article.asp?id=2053

Berrow, S. D. & Heardman, C. 1994. The Basking Shark *Cetorhinus maximus* (Gunnerus) in Irish waters: patterns of distribution and abundance. Biology & Environment. Proceeding of the Royal Irish Academy B 94(2): 101-107.

Chapple, T. K., Cade, D. E., Goldbogen, J., Massett, N., Payne, N., & McInturf, A. G. 2024. Behavioral response of megafauna to boat collision measured via animal-borne camera and IMU. Frontiers in Marine Science, 11. https://doi.org/10.3389/fmars.2024.1430961

CSAS (Canadian Science Advisory Secretariat) 2008. Status of Basking Sharks in Atlantic Canada, Science Advisory Report 2008/036.

Crowe, L. M., O'Brien, O., Curtis, T. H., Leiter, S. M., Kenney, R. D., Duley, P., & Kraus, S. D. 2018. Characterization of large basking shark *Cetorhinus maximus* aggregations in the western North Atlantic Ocean. Journal of Fish Biology, 92(5), 1371–1384.

Dewar, H., Wilson, S. G., Hyde, J. R., Snodgrass, O. E., Leising, A., Lam, C. H., Domokos, R., Wraith, J. A., Bograd, S. J., Van Sommeran, S. R., & Kohin, S. 2018. Basking Shark (*Cetorhinus maximus*) Movements in the Eastern North Pacific Determined Using Satellite Telemetry. Frontiers in Marine Science, 5.

Doherty, P. D., Baxter, J. M., Gell, F. R., Godley, B. J., Graham, R. T., Hall, G., ... & Speedie, C. 2017. Long-term satellite tracking reveals variable seasonal migration strategies of basking sharks in the north-east Atlantic. Scientific Reports 7: 42837.

Gore, Mauvis A., David Rowat, Jackie Hall, Fiona R. Gell and Rupert F. Ormond, 2008. Transatlantic migration and deep mid ocean diving by basking shark. Biology Letters 4(4): 395-398.

Harvey-Clark, C. J., Stobo, W. T., Helle, E., & Mattson, M. (1999). Putative Mating Behavior in Basking Sharks off the Nova Scotia Coast. Copeia, 1999(3):780.

Hernandez, S., Vögler Santos, R., Bustamante, C., and Lamilla, J. 2011. Review of the occurrence and distribution of the basking shark (*Cetorhinus maximus*) in Chilean waters. Marine Biodiversity Records 3: e67.

ICES WGEF Report 2008. Basking Shark in the Northeast Atlantic (ICES areas I-XIV). Ch 7.

ICES, 2005. Report of the Working Group on Elasmobranch Fishes ICES, CM 2005/ACFM:03.

Johnston, E. M., Mayo, P. A., Mensink, P. J., Savetsky, E., & Houghton, J. D. R. 2019. Serendipitous re-sighting of a basking shark *Cetorhinus maximus* reveals inter-annual connectivity between American and European coastal hotspots. Journal of Fish Biology 95(6): 1530–1534.

Kelly, C., Glegg, G. A., & Speedie, C. D. 2004. Management of marine wildlife disturbance. Ocean & Coastal Management, 47(1-2):1-19.

Kunzlik P.A. 1988. The Basking Shark, Scottish Fisheries Information Pamphlet Number 14, Dept. of Agriculture and Fisheries Scotland.

Lack M. and G. Sant. 2008. Illegal, unreported and unregulated shark catch: a review of current knowledge and action. Dept. of Environment, Water, Heritage and the Arts and TRAFFIC, Canberra.

Lawson, Julia & Fordham, Sonja. (2018). Sharks Ahead: Realizing the Potential of the Convention on Migratory Species to Conserve Elasmobranchs.

Lucifora, L. O., Barbini, S. A., Di Giácomo, E. E., Waessle, J. A., & Figueroa, D. E. 2015. Estimating the geographic range of a threatened shark in a data-poor region: *Cetorhinus maximus* in the South Atlantic Ocean. Current Zoology, 61(5: 811–826.

Magnussen, J. E., Pikitch, E. K., Clarke, S. C., Nicholson, O., Hoelzel, A. R., Shivji. M. S. 2007. Genetic tracking of basking shark products in international trade. Animal Conservation 10(2): 199-207.

Martin R.A. and Harvey-Clark ,2008, Draft Background Document for *Cetorhinus maximus* (Basking Shark) Marine Protected Areas Species and Habitats (MASH) working Group.YEAR. OSPAR Convention for the Protection of the Marine Environment. MASH 08/4/1 Add.15-E

McInturf, A. G., Muhling, B., Bizzarro, J. J., Fangue, N. A., Ebert, D. A., Caillaud, D., & Dewar, H. 2022. Spatial Distribution, Temporal Changes, and Knowledge Gaps in Basking Shark (*Cetorhinus maximus*) Sightings in the California Current Ecosystem. Frontiers in Marine Science 9.

Sims, D.W. 2000. Can threshold foraging responses of basking sharks be used to estimate their metabolic rate? Marine ecology progress series 200: 289-296.

Sims D.W., E.J. Southall, J.D. Metcalfe, M.G. Pawson, 2005. Basking Shark Population Assessment, Final report for Global Wildlife Division of DEFRA.

Sims, D.W., Emily J. Southall, Victoria A. Quayle and Adrian M. Fox, 2000. Annual social behaviour of basking sharks associated with coastal front areas. Procedures of the Royal Society London B 267: 1897-1904.

Sims, D. W. & Reid, P. C. 2002. Congruent trends in long-term zooplankton decline in the north-east Atlantic and Basking Shark (*Cetorhinus maximus*) fishery catches off west Ireland. Fisheries Oceanography 11(1): 59-63.

Sims, D.W., E.J. Southall, D.A.Merrett, J. Sanders, 2003. Effects of zooplankton density and diel period on surface swimming duration of basking sharks. Journal of Marine Biological Association of the United Kingdom 83: 643-646.

Sims, D. W., Southall, E. J., Richardson, A. J., Reid, P. C. & Metcalfe, J.D. 2003. Seasonal movements and behaviour of basking sharks from archival tagging: no evidence of winter hibernation. Marine Ecology Progress Series 248: 187-196.

Sims, D. W., Berrow, S. D., O'Sullivan, K. M., Pfeiffer, N. J., Collins, R., Smith, K. L., Pfeiffer, B. M., Connery, P., Wasik, S., Flounders, L., Queiroz, N., Humphries, N. E., Womersley, F. C., & Southall, E. J. 2022. Circles in the sea: Annual courtship 'torus' behaviour of basking sharks *Cetorhinus maximus* identified in the eastern North Atlantic Ocean. Journal of Fish Biology 101: 1160-1181.

Sims, D.W. & Victoria A.Quayle, 1998. Selective foraging behaviour of basking sharks on zooplankton in a small scale front. Letters to Nature 393: 460-464.

Squire, James L. 1990. Distribution and apparent abundance of the basking shark, Cetorhinus maximus, off the Central and Southern California Coast, 1962 - 85. Marine Fisheries Review 52(2): 8-11.

UK and Australia Governments. 2000. Proposal to include the basking shark (Cetorhinus maximus) on Appendix II of the Convention on International Trade in Endangered Species (CITES). Submission to the Convention on CITES parties, Proposal I/10 and II/17.

UK Government on behalf of the Member states of the European Community, 2002. CITES consideration of proposals for amendment of APPENDICES I and II. Proposal 12:36.