



# Memorandum of Understanding on the Conservation of Migratory Sharks

## Angelsharks in the Mediterranean

Online Workshop, 15, 21 and 27 April 2021

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UNEP/CMS/Angelshark1/Doc.2

### IMPLEMENTATION OF THE CONCERTED ACTION FOR THE ANGELSHARK (*Squatina squatina*)

#### Background

1. The Angelshark (*Squatina squatina*) was included in CMS Appendices I and II in 2017 at CMS COP12. In addition, Concerted Action for the Angelshark ([Concerted Action 12.5 \(Rev.COP13\)](#)) were first adopted at CMS COP12 and extended at COP13 2020. The Concerted Action aim at restoring and safeguarding Angelshark populations throughout their range in the East Atlantic and Mediterranean Sea. To this end the Concerted Action foresee amongst other activities to convene a regional workshop for the Mediterranean region, to

*„2.3 Develop in collaboration with CMS Range States an annex for the Regional Action Plan<sup>1</sup> that includes actions to be implemented by CMS Parties (CMS Annex) developed and agreed by Range States 2021;*

*2.4 Submit the Regional Action Plan to CMS COP14 for review and adoption ...”*

2. It is suggested to develop a Single Species Action Plan for the Angelshark in the Mediterranean (SSAP Angelshark Med) as a stand-alone document under CMS subject to adoption at COP14, which would later be annexed as “CMS Annex” to the Regional Action Plan for Angelsharks in the Mediterranean (Gordon et al. 2019).
3. Annex 1 to this document includes suggested governmental / CMS Party actions for inclusion in an SSAP Angelshark Med under CMS.

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<sup>1</sup> The Regional Action Plan for Angelsharks in the Mediterranean (Gordon *et al.* 2019) considers the three species of *Squatina* that occur in the Mediterranean, whereas the Concerted Action focuses on *S. squatina*, as this species is listed on Appendices I and II of the CMS. The document is provided as [UNEP/CMS/Angelshark1/Inf.2](#).

4. Annex 2 to this document includes a suggested procedure and timeline for the development of an SSAP Angelshark Med.
5. The Principality of Monaco is generously supporting the implementation of the Concerted Action for Angelsharks financially through the CMS Champions Programme.
6. Support for implementation was also agreed by the Signatories of the CMS Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MOU) at their 3<sup>rd</sup> Meeting (Sharks MOS3).

#### **Inclusion of *Squatina squatina* in CMS Appendices and Annex 1 of the Sharks MOU**

7. In 2017, the Angelshark (*Squatina squatina*) was listed in Appendices I and II of CMS. In 2018 the species was also included in Annex 1 of the Sharks MOU.
8. Some of the relevant commitments from Parties to the Convention, including those relating to species listed on Appendix I, are highlighted below:

#### Article II - Fundamental Principles

##### *3. In particular, the Parties:*

- a) should promote, co-operate in and support research relating to migratory species;*
- b) shall endeavour to provide immediate protection for migratory species included in Appendix I;*

#### Article III - Endangered Migratory Species: Appendix I

##### *4. Parties that are Range States of a migratory species listed in Appendix I shall endeavour:*

- a) to conserve and, where feasible and appropriate, restore those habitats of the species which are of importance in removing the species from danger of extinction;*

##### *5. Parties that are Range States of a migratory species listed in Appendix I shall prohibit the taking of animals belonging to such species.*

*Exceptions may be made to this prohibition only if:*

- a) the taking is for scientific purposes;*
- b) the taking is for the purpose of enhancing the propagation or survival of the affected species;*
- c) the taking is to accommodate the needs of traditional subsistence users of such species; or*
- d) extraordinary circumstances so require;*  
*provided that such exceptions are precise as to content and limited in space and time.*

*Such taking should not operate to the disadvantage of the species.*

7. The Parties shall as soon as possible inform the Secretariat of any exceptions made pursuant to paragraph 5 of this Article.

Article IV – Migratory Species to be the Subject of AGREEMENTS: Appendix II

1. Appendix II shall list migratory species which have an unfavourable conservation status and which require international agreements for their conservation and management, as well as those which have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement.

4. Parties are encouraged to take action with a view to concluding agreements for any population or any geographically separate part of the population of any species or lower taxon of wild animals, members of which periodically cross one or more national jurisdiction boundaries.

**Regional Action Plan and “CMS Annex / SSAP Angelshark Med”**

9. A collaborative Regional Action Plan for Angelsharks<sup>2</sup> in the Mediterranean was published in 2019 (Gordon *et al.*, 2019) and is provided as [UNEP/CMS/Angelshark1/Inf.2](#). The identified actions were spread across three higher-level goals, namely:
- (1) Fisheries-based angel shark mortality is minimized in the Mediterranean,
  - (2) Angel shark habitat is identified and protected,
  - (3) National legislation for angel sharks is established, implemented and enforced.
10. Parties could usefully consider more focused work on *Squatina squatina*, including furthering progress of the Concerted Action for Angelshark in the Mediterranean Sea<sup>3</sup>, specifically, in relation to:
- Species protection
  - Identification of important sites (and spatial management if required)
  - Scientific studies and data collection
11. These three broad topics, which could also address the various potential actions (as indicated by Gordon *et al.*, 2019), would all be in alignment with the CMS Convention Text, and demonstrate the commitment of the Parties to the Concerted Action.

<sup>2</sup> The Regional Action Plan drafted by Gordon *et al.* (2019) considers the three species of *Squatina* that occur in the Mediterranean, whereas the Concerted Action focuses on *S. squatina*, as this species is listed on Appendices I and II of the CMS. <https://www.cms.int/en/document/eastern-atlantic-and-mediterranean-angel-shark-conservation-strategyenglish>

<sup>3</sup> Whilst there have been some records of *S. squatina* in the Black Sea, these have tended to be in close proximity to the Sea of Marmara, and this species does not seem to have been distributed over the wider Black Sea.

12. The various objectives and actions identified in Gordon *et al.* (2019) included some for which governments and CMS Signatories were identified as best placed to act on and which are suggested for inclusion in the SSAP Angelshark Med (see Annex 1).

**It was agreed in the Concerted Action for Angelsharks that:**

**a) Species protection**

13. The main anthropogenic sources of mortality of Angelshark are expected to be the result of (i) commercial fisheries (including artisanal and subsistence fisheries), and (ii) recreational fisheries.
14. Recommendation GFCM/36/2012/3 states that “*Specimens of shark species as listed in Annex II of the SPA/BD Protocol cannot be retained on board, transhipped, landed, transferred, stored, sold, displayed or offered for sale*”<sup>4</sup>. Given the listing of *S. squatina* on the Barcelona Convention, this indicates that it should be a ‘prohibited species’ in relation to commercial fisheries.
15. Whilst GFCM/36/2012/3 confers a degree of species protection (depending on levels of education, monitoring, compliance and enforcement), it may not confer full protection. For example, Angelshark may also be taken in a range of recreational fisheries, including rod-and-line and spearfishing.
16. Hence, there is a rationale for Parties to determine whether there are other national legislative instruments that can provide more wide-ranging species protection. Furthermore, improved education, monitoring and enforcement to facilitate compliance by fishers may also be required.
17. Such efforts would be in alignment with the Convention (Article II, paragraph 3(b); Article III, paragraph 5).

**b) Identification of important sites**

18. A range of scientific studies have provided overviews of some of the recent occurrence of Angelshark. However, such studies may not have had full access to all available national data, both historical and contemporary.
19. Hence, national programmes to collate information on the sites of Angelshark occurrence, including from fisheries reports, commercial landings and observer data, historical accounts, fisher knowledge, could usefully be considered, as well as the potential utility of eDNA to identify potential sites of occurrence. The collation of national data would allow Parties to determine the current occurrence of Angelshark in national waters (and regional seas).
20. Such data could then be used to inform on (1) options for non-destructive surveys of stock size, (2) habitat modelling and identification of other potential sites, and (3) potential role of spatial management.

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<sup>4</sup> Recommendation GFCM/36/2012/3 on fisheries management measures for the conservation of sharks and rays in the GFCM area of application

21. Such efforts would be in alignment with the Convention (Article III, Section 4(a)).

**c) Scientific studies, data collection and liaison with the fishing industry**

22. In support of the Concerted Plan of Action, there is a rationale for national programmes to improve scientific data collection as well as improved liaison with fishing industries and fishing communities (including artisanal and subsistence fisheries, and recreational fisheries).

23. Such initiatives could facilitate an improved knowledge of historic and contemporary distribution of Angelshark, a better understanding of the current levels of bycatch and estimates of discards (including dead and live discards).

24. Projects involving science-fisher collaboration can enhance scientific data collation and provide assistance to educational initiatives (e.g. in relation to GFCM recommendations and any national management measures).

25. There is also a strong rationale for the results of scientific studies to be used in collaborative scientific studies with other Parties.

26. Such efforts would be in alignment with the Convention (Article II, Section 3(a)).

**References**

27. Gordon, C.A., Hood, A.R., Al Mabruk, S. A. A., Barker, J., Bartolí, A., Ben Abdelhamid, S., Bradai, M.N., Dulvy, N.K., Fortibuoni, T., Giovos, I., Jimenez Alvarado, D., Meyers, E.K.M., Morey, G., Niedermuller, S., Pauly, A., Serena, F. and Vacchi, M. 2019. Mediterranean Angel Sharks: Regional Action Plan. *The Shark Trust*, United Kingdom. 36 pp.

Available at: <https://www.sharktrust.org/news/action-plan-for-mediterranean-angel-shark> and at <https://www.cms.int/en/document/mediterranean-angel-sharks-regional-action-plan-0>

**Annex 1:** Suggested governmental / CMS Party actions for inclusion in a Single Species Action Plan for Angelsharks in the Mediterranean (SSAP Angelshark Med)  
(adapted from Gordon et al.)

<b>Goal 1: Fisheries-based angel shark mortality is minimised in the Mediterranean</b>	
<b>Objective 1.1: Reporting and monitoring in all segments of Mediterranean fisheries, including recreational, is improved for the angel sharks</b>	
	Action 1.1.2: Develop guidance documents for reporting procedure in line with GFCM Recommendations for data recording and ensure the document is accessible to industry
	Action 1.1.5: Comply with existing GFCM and national reporting procedures.
<b>Objective 1.2: Incidental catch of angel sharks by all segments of Mediterranean fisheries is minimised.</b>	
	Action 1.2.1: Ascertain the level of bycatch and incidental catch by gear type in order to inform further necessary action.
	Action 1.2.3: Secure spatial/temporal management and gear restrictions based on collated data.
<b>Objective 1.3: Retention is reduced, and post-release survival enhanced, through information, training, and education for fishers.</b>	
	Action 1.3.2: Identification (see Action 1.1.1) and handling guides (see Action 1.3.1) to be disseminated amongst fishing industry, recreational anglers, enforcement bodies, fish markets, governments etc.
	Action 1.3.3: Develop training programmes to educate fishers about conservation status and prohibited status of angel sharks, as well as best practice handling techniques.
<b>Objective 1.4: The extent of interaction between marine recreational fishing activities and angel sharks is ascertained and minimised.</b>	
	Action 1.4.1: Quantify the level of recreational fishing activity in the Mediterranean, guided by GFCM recreational fisheries handbook.
<b>GOAL 2 Angel shark habitat is identified and protected.</b>	
<b>Objective 2.1: Angel shark distribution is better understood.</b>	
	Action 2.1.3: Use fisheries data and other reporting methods to improve spatial data on distribution.
<b>Objective 2.3: Angel shark habitat is identified, specifically Critical Angel Shark Areas (CASAs).</b>	
	Action 2.3.3: Increase engagement with SPA/RAC habitat mapping programmes to identify potential CASAs.
	Action 2.3.6: Identify activities and develop management plans aiming to conserve and restore CASAs in CMS Range States, in line with CMS Appendix I obligations.
<b>Objective 2.4: Angel shark habitat is reflected in marine spatial planning and coastal development.</b>	
	Action 2.4.1: Engage with Environmental Impact Assessment (EIA) process prior to coastal developments near CASAs.
	Action 2.4.2: Monitor coastal developments near CASAs and mitigate impacts where possible.
	Action 2.4.3: Identify what spatial/temporal management measures would be most appropriate according to each subarea.

	Action 2.4.4: Include CASAs in MPA processes and EIA to ensure these areas are managed sustainably, that important habitat features are conserved and maintained or re-established and that impacts on angel sharks are kept at acceptable levels.
<b>Goal 3: National legislation for angel sharks is established, implemented and enforced.</b>	
<b>Objective 3.1: Angel sharks are protected by regional and national management measures (where GFCM/42/2018/2 has been adopted, go to Action 3.1.5 or Objective 3.2)</b>	
	Action 3.1.1: Review national legislation and identify gaps in the implementation of relevant international and regional obligations, including those under GFCM and CMS.
	Action 3.1.2: Transpose GFCM/42/2018/2 into national legislation where lacking.
	Action 3.1.3: Fulfil obligations under CMS App I & II listing and CMS Sharks MoU Annex I.
	Action 3.1.5: Where absent, seek adoption of full protective measures to cover recreational activities and disturbance.
<b>Objective 3.2: Management measures are implemented and enforced.</b>	
	Action 3.2.1: Implement and enforce GFCM/42/2018/2 & national legislations.
	Action 3.2.2: Implement CMS Appendix I listing in all Mediterranean and Black Sea Range States.
	Action 3.2.3: Reinforce compliance reporting processes at regional fora, requiring more detailed documentation.
	Action 3.2.7: Ensure regulatory obligations are reflected in training for fishers, accommodating subregional constraints (see Action 1.3.3).
<b>Objective 3.3: CASAs are protected through appropriate spatial and/or temporal management of non-fishing as well as fishing activities (in line with Goal 2).</b>	
	Action 3.3.2: Ensure CMS obligations are reflected in marine spatial planning (e.g. MPAs, FRAs, SPAs) and coastal development processes.

**Annex 2:** Suggested procedure and timeline for the development of a Single Species Action plan for the Angelshark in the Mediterranean (SSAP Angelshark Med)

<b>Activity</b>	<b>Time/Deadline</b>	<b>Who</b>	<b>Outcome</b>
<b>Hold 1st workshop for Range States</b>	15, 21 and 27 April 2021	Principality of Monaco, Secretariat, Sharks MOU AC and Angelshark Conservation Network	Range States and relevant IGOs informed about the status of implementation of the Angelshark Concerted Action in the Mediterranean region; procedure for development and objectives of a <b>SSAP Angelshark Med</b> discussed
<b>Solicit comments and input from Range States and IGOs</b>	By 30 April 2021	Secretariat	
<b>Finalize Report and Outcomes</b>	By 15 May 2021	Secretariat	a) Workshop report b) agreed procedure for the development of the SSAP c) agreed Structure and objectives of the SSAP
<b>Finalize draft SSAP Angelshark Med</b>	By 15 June 2021	Sharks AC members with support from external experts and the Secretariat	1 <sup>st</sup> Draft SSAP Angelshark Med
<b>Invite Range States to provide written comments on and input to the draft SSAP and update draft (several iterations)</b>	Consultation rounds: – 15 June – 15 July 2021 – 20 July – 31 July 2021	Secretariat, updates in consultation with Sharks AC	Complied comments and updated draft SSAPs
<b>Hold sub-regional or multilateral online meetings with Range States as required to facilitate negotiations</b>	Tbd, upon request	Secretariat	Consensus building

<b>Activity</b>	<b>Time/Deadline</b>	<b>Who</b>	<b>Outcome</b>
<b>Summer break</b>	August		
<b>Solicit final comments on draft SSAP Angelsharks Med from Range States</b>	01-20 September 2021	Secretariat	Comments incorporated in final draft SSAP Angelsharks Med
<b>Circulation of final draft SSAP Angelsharks Med</b>	01 October 2021	Secretariat	Final draft SSAP Angelsharks Med circulated
<b>Hold Final Range State Meeting Agree final SSAP and procedure for adoption</b>	November 2021	Principality of Monaco, Secretariat, Sharks AC	Final version agreed. Process for adoption (regional consensus or formal adoption at COP14) agreed.