

Single Species Action Plan for the Angelshark in the Mediterranean Sea & CMS Decision 14.104

Annex IV

Tools and Guidelines to Support Implementation



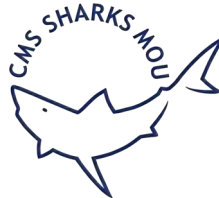
Notes to reader:

This document represents the materials which contribute to the Annex IV archive. The archive is intended to be a living document, to be updated as new products develop. This will be hosted on the Angel Shark Conservation Network (ASCN) website.

Not all of the products displayed in this document have been produced for Mediterranean. Despite this, these additional products represent examples of positive resources which could be adapted to further support the delivery of the Mediterranean SSAP.

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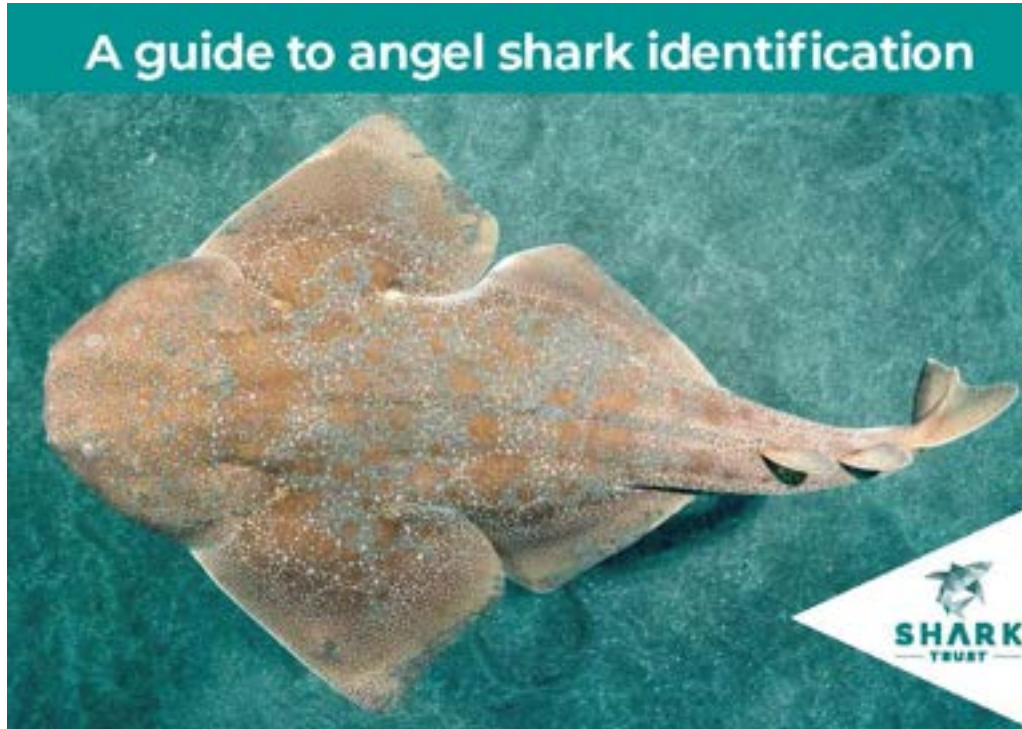
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Section 1: Identification



Global ID Guide





Mediterranean ID Materials

ARABIC | GREEK | TURKISH (Türkiye) | TURKISH (Cyprus)



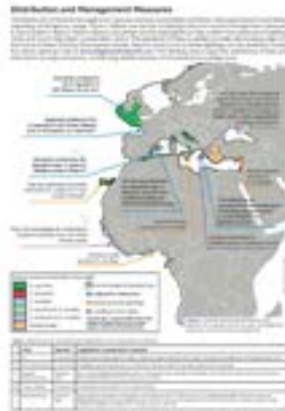
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Section 2: Management



Eastern Atlantic and Mediterranean Angel Shark Conservation Strategy

ENGLISH | FRENCH | SPANISH



Species	Status	Distribution
Angel shark <i>Squatina squatina</i>	Least Concern	Eastern Atlantic and Mediterranean
Sawback Angel shark <i>Squatina oculinata</i>	Least Concern	Eastern Atlantic
Smoothback Angel shark <i>Squatina oculata</i>	Least Concern	Eastern Atlantic and Mediterranean



Eastern Atlantic and Mediterranean Angel Shark Conservation Strategy

Angel shark *Squatina squatina* Sawback Angel shark *Squatina oculinata* Smoothback Angel shark *Squatina oculata*

Species Background

Angel sharks exist in the poorest most threatened state of sharks with limited status and very little scientific information about their biology, distribution, and population status.

The family Squatinidae contains at least 15 species, but of which we have only a few species in the Eastern Atlantic and Mediterranean. Many species in this family have suffered steep population declines and are facing a high risk of extinction.

Here we focus on the three species of the Eastern Atlantic, Mediterranean and Black Seas, Angel shark, Sawback Angel shark and Smoothback Angel shark. Of these three species the Angel shark is the most widespread and the Smoothback Angel shark is the most threatened. The distribution, biology and taxonomy of Squatinidae species are currently being revised.

About this Strategy

This Angel Shark Conservation Strategy provides a framework for improved understanding of the three vulnerable Angel shark species in the Eastern Atlantic and Mediterranean. The Strategy aims to improve the understanding of Angel sharks, reduce the number of sightings reported, generate a better understanding of current distribution patterns and habitat use, and identify and address the most significant threats to their conservation.

Some of the key threats to these species and outlined within this Strategy. These priority goals and measures provided important first steps towards addressing the issues that Angel sharks in the Eastern Atlantic and Mediterranean are facing to reduce populations and safeguard throughout their range.

The recommended next steps outlined in this document are a guideline for further conservation actions necessary and advocated in all regions are needed to contribute additional information to support the Strategy's strategic actions, which are highlighted through ongoing activities.

More work is still needed to address gaps in the knowledge of these species and their status in the Eastern Atlantic and Mediterranean. We will continue to work to improve our understanding.



Mediterranean Angel Sharks: Regional Action Plan

ENGLISH | FRENCH | SPANISH | ARABIC





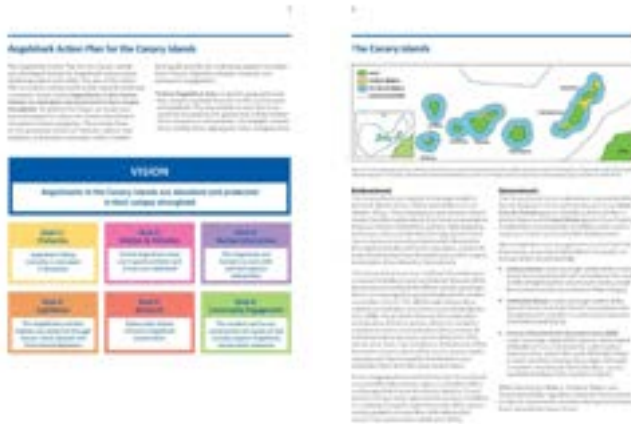
Wales Angelshark Action Plan





Angel Shark Action Plan for the Canary Islands

ENGLISH | SPANISH





SubRegional Action Plans for the Mediterranean

SubRegional Action Plan for Aegean Sea & Crete:

[ENGLISH](#) | [GREEK](#) | [TURKISH](#)

SubRegional Action Plan for Republic of Cyprus:

[ENGLISH](#) | [CYPRIOT GREEK](#)

SubRegional Action Plan for Southern Ionian Sea:

[ENGLISH](#) | [ARABIC](#)

SubRegional Action Plan for Northern Levant Sea: [ENGLISH](#) | [TURKISH](#)





Flat Shark Showcase

The [Flat Shark Showcase](#) presents the breadth of work being delivered across the Mediterranean by a diversity of partners and organisations, collaborating across multiple countries.

Flat sharks: sawfish, giant guitarfishes, guitarfish, angel sharks and rays, rank as the most threatened families of elasmobranchs on the IUCN Red List. Flat sharks represent over 50% of the elasmobranchs listed on Annex II of the Barcelona Convention & GFCM/42/2018/2. Yet conservation action in the Mediterranean is still urgently required for: three species of Critically Endangered angel shark; the Blackchin Guitarfish; Common Guitarfish, and a host of rays – from the sizeable Endangered Giant Devil Rays to Butterfly Rays, and the endemic skates.

This online content will signpost delegates to opportunities, resources, and willing project partners. Facilitating efforts for countries to honour existing conservation commitments, and establish - and implement - domestic and regional regulations to better protect highly threatened flat sharks across the region and beyond.



Section 3: Safe Release and Code of Conduct



Shark Trust Angel Shark Safe Release Animation



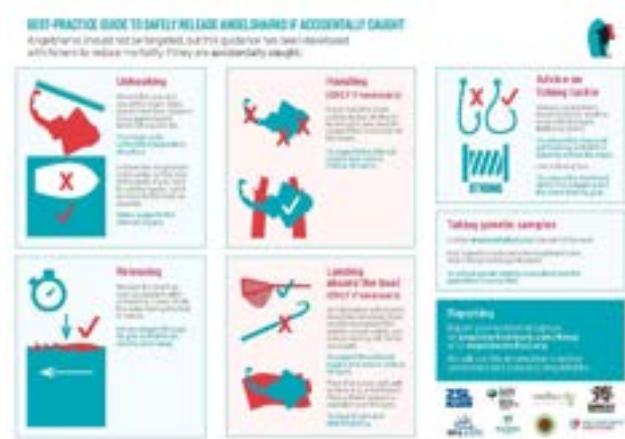
*Translation into French, Spanish, Italian, Greek, Turkish and Arabic underway



Angel Shark Project: Wales

Best Practice Leaflet

ENGLISH | WELSH





Angel Shark Project: Canaries

Best Practice for Commercial Fishers

SPANISH

GUÍA DE BUENAS PRÁCTICAS PARA LIBERAR UN ANGELOTE CORRECTAMENTE EN CASO DE SU CAPTURA ACCIDENTAL

El angelote no debe ser un objetivo de captura, sino un riesgo por evitar para los profesionales que se desempeñan en la pesca de mar abierto. En el caso de que sea capturado accidentalmente:

- 1. Desenganche y desvenenar**
 La intención de desenganchar debe ser liberar al animal lo antes posible en un ambiente lo más seguro de su entorno.
 El factor que condiciona el éxito, depende más de la rapidez que de la fuerza.
 Desvenenar al angelote de todas formas, sin perder el tiempo e independientemente de si se liberará en los aparcos.
 El agua salada de los depósitos hidrantes.
- 2. Liberación**
 La zona del Escudo (o) puede ser una posible zona de desenganche. Cerciorarse de la liberación en el agua o en el agua. No se debe de usar botiquín.
 Sólo cuando se va a transportar el animal para que el liberador se retire y se libere en el fondo.
- 3. Reportar**
 Reportar la captura accidental al www.angelsharkproject.com. Para la entrega de toda la información posible (coordenadas, tamaño, profundidad de captura, foto) se sugiere contactar con el Observatorio, SAGSI o Selegrom (tel: +34 928 809 000).
 Consultar toda la información para conocer mejor al angelote de las Islas Canarias.

ANGEL SHARK PROJECT: CANARY ISLANDS

ANGELOTES Y PESCADORES PROFESIONALES: GUÍA DE BUENAS PRÁCTICAS PARA LAS ISLAS CANARIAS



Angel Shark Project: Wales

Code of Conduct for Scuba and Snorkel

ENGLISH | WELSH



ANGEL SHARK PROJECT: WALES

ANGEL SHARK CODE OF CONDUCT FOR SCUBA AND SNORKEL

If the Angelshark is buried in the sand:

- Keep a minimum distance of 1.5m between you and the Angelshark.
- Do not touch them.
- Do not remove the sand or sediment covering them.
- Do not try and feed them.

If the Angelshark is swimming:

- Do not touch them.
- Do not feed them.
- Do not harass them.

If multiple people see the Angelshark:

- Do not crowd around the Angelshark.
- Do not stay close to the Angelshark, keeping a minimum distance of 1.5m and making sure you are in line with the Angelshark's swimming direction.

Logos: ZSL, British Divers Marine Life Rescue, Marine Conservation Society, Wales Wildlife Trust, RSPB, British Ecological Society, British Society for Animal Conservation, British Society for the Study of Amphibians and Reptiles, British Society for the Study of Invertebrates, British Society for the Study of Mammals, British Society for the Study of Birds, British Society for the Study of Fishes, British Society for the Study of Plants, British Society for the Study of Trees, British Society for the Study of Insects, British Society for the Study of Fungi, British Society for the Study of Bacteria, British Society for the Study of Viruses, British Society for the Study of Parasitology, British Society for the Study of Zoology, British Society for the Study of Botany, British Society for the Study of Geology, British Society for the Study of Meteorology and Climatology, British Society for the Study of Oceanography, British Society for the Study of Earth and Planetary Sciences, British Society for the Study of Space Science, British Society for the Study of Planetary Science, British Society for the Study of Interplanetary Science, British Society for the Study of Interstellar Science, British Society for the Study of Cosmology, British Society for the Study of Astrophysics, British Society for the Study of Space Exploration, British Society for the Study of Space Technology, British Society for the Study of Space Policy, British Society for the Study of Space Law, British Society for the Study of Space Ethics, British Society for the Study of Space Education, British Society for the Study of Space Research, British Society for the Study of Space Innovation, British Society for the Study of Space Entrepreneurship, British Society for the Study of Space Investment, British Society for the Study of Space Finance, British Society for the Study of Space Insurance, British Society for the Study of Space Marketing, British Society for the Study of Space Sales, British Society for the Study of Space Distribution, British Society for the Study of Space Retail, British Society for the Study of Space Wholesale, British Society for the Study of Space Import, British Society for the Study of Space Export, British Society for the Study of Space Trade, British Society for the Study of Space Commerce, British Society for the Study of Space Industry, British Society for the Study of Space Economy, British Society for the Study of Space Society, British Society for the Study of Space Culture, British Society for the Study of Space Arts, British Society for the Study of Space Literature, British Society for the Study of Space Music, British Society for the Study of Space Film, British Society for the Study of Space Television, British Society for the Study of Space Radio, British Society for the Study of Space Internet, British Society for the Study of Space Mobile, British Society for the Study of Space Computing, British Society for the Study of Space Software, British Society for the Study of Space Hardware, British Society for the Study of Space Services, British Society for the Study of Space Support, British Society for the Study of Space Infrastructure, British Society for the Study of Space Facilities, British Society for the Study of Space Equipment, British Society for the Study of Space Supplies, British Society for the Study of Space Materials, British Society for the Study of Space Components, British Society for the Study of Space Systems, British Society for the Study of Space Networks, British Society for the Study of Space Operations, British Society for the Study of Space Management, British Society for the Study of Space Maintenance, British Society for the Study of Space Repairs, British Society for the Study of Space Upgrades, British Society for the Study of Space Replacements, British Society for the Study of Space Repairs, British Society for the Study of Space Upgrades, British Society for the Study of Space Replacements.



QR Code Reporting Stickers

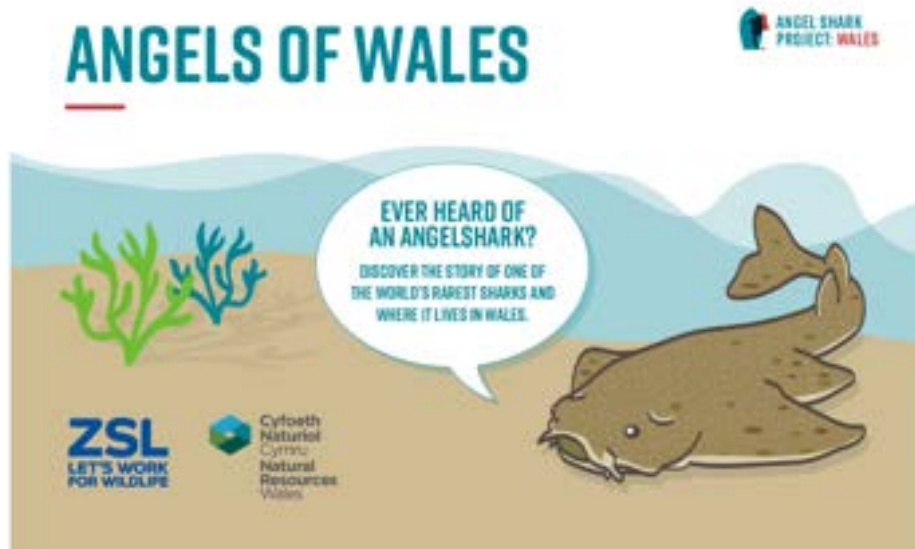
ARABIC | FRENCH | GREEK (Enalia Physis) | GREEK (iSea)
| TURKISH (Mersea) | TURKISH (SPOT)



Section 5: Miscellaneous



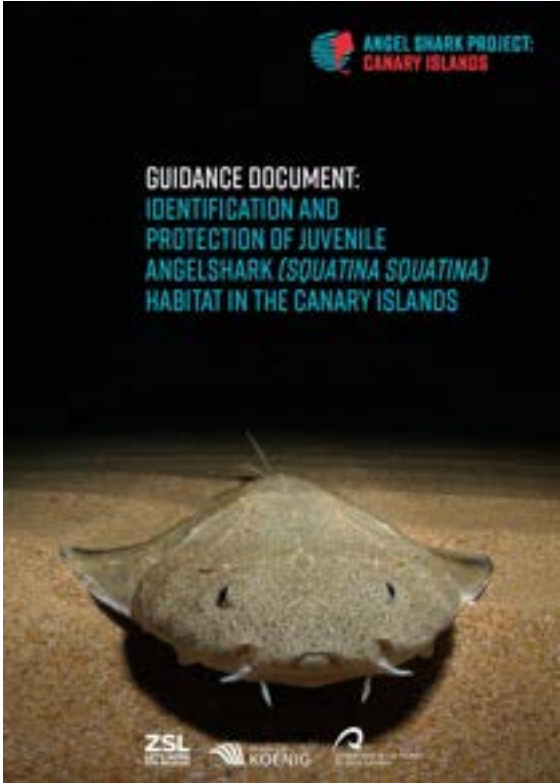
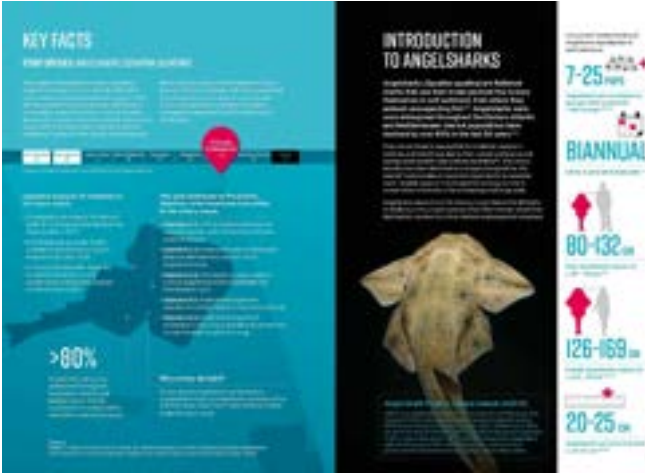
Angels of Wales eBook





Guidance Document for Juvenile Angelshark Habitat

ENGLISH | SPANISH



Annex IV Materials corresponding to the objectives of the SSAP

Objective 1 – Ensure appropriate species-level protection for Angelshark *Squatina squatina*

Action	Supporting Annex IV Materials
1.1 Prohibition in fisheries regulations	Flat Shark Showcase
1.2 Species-protection	
1.3 Awareness programmes	Shark Trust Global ID Guide Shark Trust Mediterranean ID Guides Shark Trust Safe Release Animation ASP Canaries Commercial Best Practice Materials ASP Canaries Recreational Best Practice Materials Wales Best Practice Leaflet
1.4 Monitoring and enforcement	QR Code Reporting Stickers

Objective 2 – Identification of sites and habitats of Angelshark *Squatina squatina*

Action	Supporting Annex IV Materials
2.1 Data collation	Guidance document: Identification and Protection of Juvenile Angelshark (<i>Squatina squatina</i>) habitat in the Canary Islands
2.2 Habitat modelling	
2.3 Environmental DNA (eDNA) sampling	
2.4 Non-destructive site sampling	
2.5 Role of current MPA network	

Objective 3 – Support and undertake scientific studies, including data collection and liaison with the fishing sectors, to improve scientific knowledge of Angelsharks *Squatina squatina*, including population trends.

Action	Supporting Annex IV Materials
3.1 Scientific monitoring	
3.2 Commercial fishery-dependent catch-per-unit-effort data	
3.3 Recreational fishery	Shark Trust QR Code Reporting Stickers
3.4 Citizen science	ASP Canaries Code of Conduct (Divers) ASP Wales Code of Conduct
3.5 Fishery-independent survey trends	
3.6 Quantification and characterization of discarded Angelshark survival and options for minimising discard mortality	
3.7 Tagging	Guidance document: Identification and Protection of Juvenile Angelshark (<i>Squatina squatina</i>) habitat in the Canary Islands
3.8 Population structure and connectivity	
3.9 Life-history studies	
3.10 Longer-term, historical population dynamics	

Objective 4 – Sufficient resources secured for long-term Angelshark *Squatina squatina* conservation actions

Action	Supporting Annex IV Materials
4.1 Provide Resources	Strategic Conservation Planning Documents: <ul style="list-style-type: none"> • Eastern Atlantic and Mediterranean Angel Shark Conservation Strategy • Mediterranean Angel Sharks: Regional Action Plan • Wales Angelshark Action Plan • Angel Shark Action Plan for the Canary Islands • Mediterranean Angel Sharks: Sub-Regional Action Plans
4.2 Establish an international working group (IntWG) for the Mediterranean region	
4.3 Appraise protected areas	



Compiled by the Shark Trust on behalf of the Angel Shark Conservation Network. If you have resources to contribute to this document, please contact angels@sharktrust.org