

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

Annex IV

Tools and Guidelines to Support Implementation



Annex IV

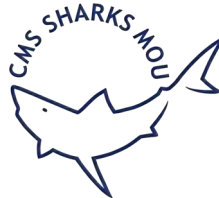
Notes to reader:

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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Section 1: Identification

Global ID Guide	4
Mediterranean ID Materials	6

Section 2: Management

Eastern Atlantic and Mediterranean	7
Angel Shark Conservation Strategy	7
Mediterranean Angel Sharks: Regional Action Plan	8
Wales Angelshark Action Plan	9
Angel Shark Action Plan for the Canary Islands	10
SubRegional Action Plans for the Mediterranean	11
Flat Shark Showcase	12

Section 3: Safe Release and Code of Conduct

Shark Trust Angel Shark Safe Release Animation	13
Angel Shark Project Wales: Best Practice Leaflet	14
Angel Shark Project Canaries: Best Practice for Commercial Fishers	15
Angel Shark Project Canaries: Best Practice for Recreational Fishers	16
Angel Shark Project Wales: Code of Conduct for Scuba and Snorkel	17
Angel Shark Project Canaries Code of Conduct for Diving with Angelsharks	18

Section 4: Sightings and Reporting

Angel Shark Sightings Map	19
QR Code Reporting Stickers	20

Section 5: Miscellaneous

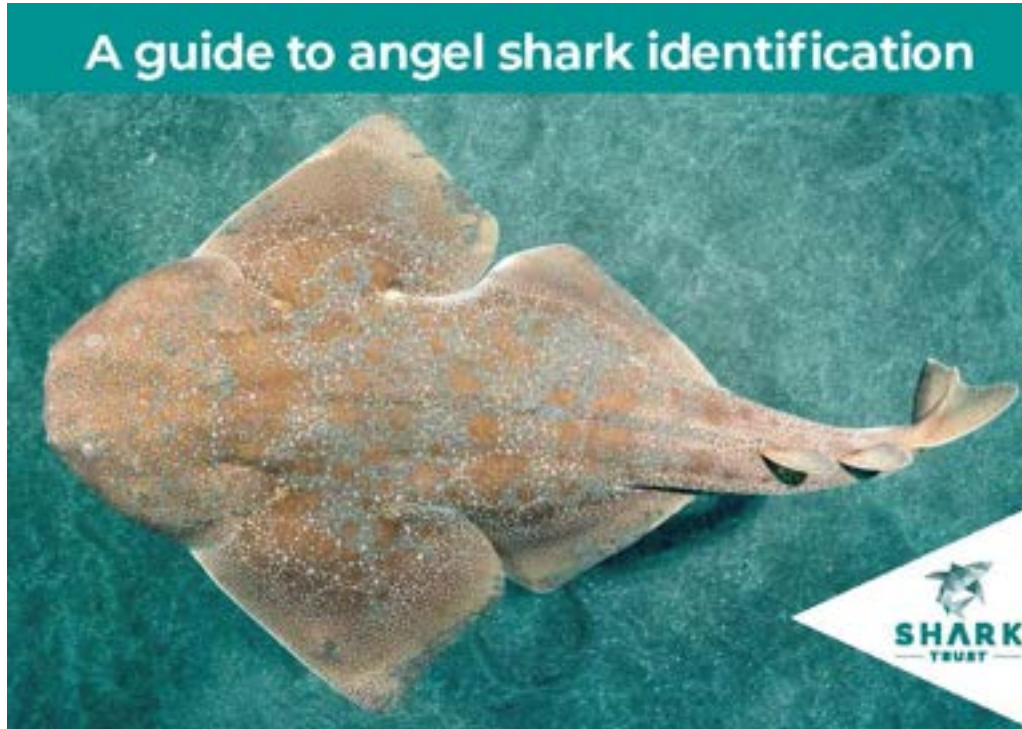
Angels of Wales eBook	21
Guidance Document for Juvenile Angelshark Habitat	22

Annex IV Materials corresponding SSAP objectives	23
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Section 1: Identification



Global ID Guide





Mediterranean ID Materials

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

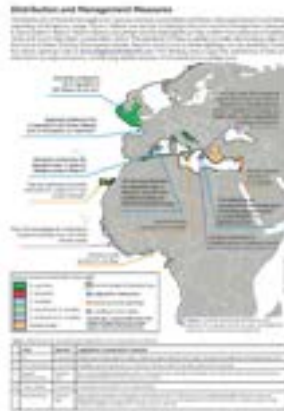


Section 2: Management



Eastern Atlantic and Mediterranean Angel Shark Conservation Strategy

ENGLISH | FRENCH | SPANISH



Angelshark *Squatina squatina* Sawback Angelshark *Squatina aculeata* Smoothback Angelshark *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, ecology, life history, and their body shape and performance, as well as their role in their marine systems.

The family Squatinidae contains at least 15 species, but if we look at distribution, they are primarily found in the Atlantic and Mediterranean. Currently, many species in this family have suffered steep population declines and are facing a significant risk of extinction.

Here we look at the biology, ecology, and distribution of the smoothback, sawback, and angel sharks. We also look at the status of these species in the Eastern Atlantic and Mediterranean. We also look at the status of these species in the Eastern Atlantic and Mediterranean. We also look at the status of these species in the Eastern Atlantic and Mediterranean.

About this Strategy

This Angel Shark Conservation Strategy provides a framework for improved understanding of the biology, ecology, and distribution of the Eastern Atlantic and Mediterranean Angel Sharks. The Strategy aims to improve the status of Angel Sharks, reduce the number of sightings, and provide a better understanding of current distribution patterns in the Eastern Atlantic and Mediterranean. It also provides a framework for improved understanding of the biology, ecology, and distribution of the Eastern Atlantic and Mediterranean Angel Sharks.

Some of the key threats to these species and actions to address them are outlined in this Strategy. These priority goals and measures provide a framework for improved understanding of the biology, ecology, and distribution of the Eastern Atlantic and Mediterranean Angel Sharks. The Strategy also provides a framework for improved understanding of the biology, ecology, and distribution of the Eastern Atlantic and Mediterranean Angel Sharks.

More information is being gathered on the biology, ecology, and distribution of the Eastern Atlantic and Mediterranean Angel Sharks. We also look at the status of these species in the Eastern Atlantic and Mediterranean.



Mediterranean Angel Sharks: Regional Action Plan

ENGLISH | FRENCH | SPANISH | ARABIC





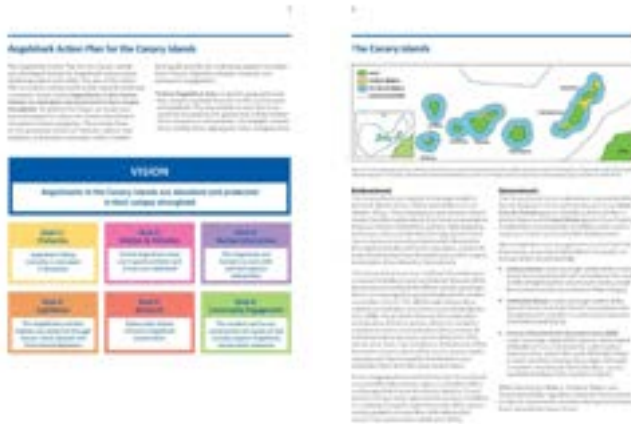
Wales Angelshark Action Plan





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 Northern Cyprus:

ENGLISH | 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



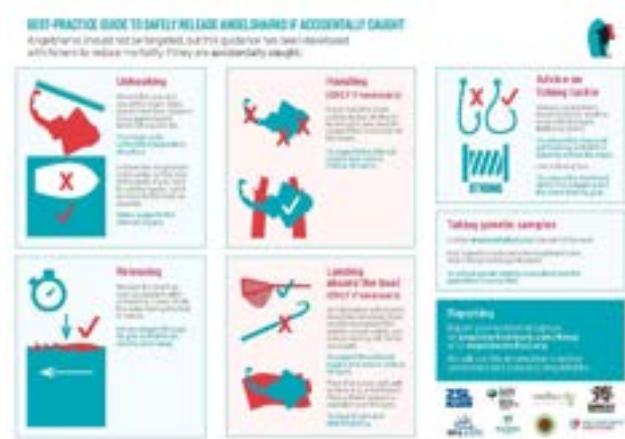
*Translation into French, Spanish, Italian, Greek, Turkish and Arabic underway



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 anguila no debe ser un objetivo de captura, sin embargo es vital para los ecosistemas marinos y el bienestar de las comunidades pesqueras.

- 1. Desengancha y desvenena**
 La intención de desenganchar debe ser liberar al animal lo más pronto posible en un ambiente lo más seguro posible de contaminación.
 El factor que controla el éxito, depende más de cómo se libera al animal.
 Desvenena el anguila de todas las partes, sin perder el tiempo e intentando que no se le dañe en los apuñales.
 El agua debe ser lo más limpia posible.
- 2. Liberación**
 Libera al Escudador pronto como sea posible después de desengancharlo. Círculo de liberación en el agua donde el agua fluye en la dirección de su liberación.
 Esto ayudará a asegurar que el animal sea capaz de escapar de cualquier red o línea de pesca.
- 3. Reportar**
 Registra la captura accidental en www.angelsharkproject.com. Para más información de las mejores prácticas de conservación, también puedes contactar con el equipo de investigación de la Universidad de las Islas Canarias, IUIIC, o nuestro teléfono de contacto al 928 828 828.
 Descubre más información sobre cómo proteger al animal de la pesca.

ANGEL SHARK PROJECT: CANARY ISLANDS

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



Angel Shark Project: Canaries

Best Practice for Recreational Fishers

ENGLISH | SPANISH

ANGEL SHARK CYCLOGY

- Males mature faster than females
- Males are polygamous and can mate with several females
- Males are larger than females and have a longer lifespan
- Males are more likely to be caught by recreational fishers

DISTRIBUTION

• The angel shark is found in the Atlantic Ocean, the Mediterranean Sea, and the Black Sea

BREEDING AREAS

• The angel shark breeds in shallow waters, typically between 10 and 20 meters deep

FEEDING

• The angel shark is a bottom-dwelling predator that feeds on small fish, crustaceans, and mollusks

SUBSTRATE PREFERENCE

• The angel shark prefers sandy and silty substrates

OUR WORK WITH RECREATIONAL FISHERMEN

• We work with recreational fishers to develop best practices for catching and releasing angel sharks

• We provide training and education on the biology and behavior of angel sharks

• We provide gear and techniques for safe and effective releases

• We monitor the status of the angel shark population and the impact of recreational fishing

• We work with local authorities to develop and enforce regulations that protect angel sharks

• We work with the media and the public to raise awareness of the angel shark and the importance of sustainable fishing

• We work with the fishing industry to develop and promote sustainable fishing practices

• We work with the tourism industry to develop and promote responsible tourism practices

• We work with the academic community to advance our understanding of the angel shark and its ecology

• We work with the general public to promote the conservation of the angel shark and its habitat

• We work with the fishing community to develop and promote sustainable fishing practices

• We work with the tourism industry to develop and promote responsible tourism practices

• We work with the academic community to advance our understanding of the angel shark and its ecology

• We work with the general public to promote the conservation of the angel shark and its habitat

ANGEL SHARK PROJECT
CANARY ISLANDS

**ANGELSHARKS AND RECREATIONAL FISHERIES:
BEST PRACTICE GUIDE FOR
THE CANARY ISLANDS**

GOVERNMENT OF THE CANARY ISLANDS
UNIVERSITY OF THE CANARY ISLANDS
ZSL



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 crowd around the Angelshark.
- Do not use flash photography.
- Do not use a net or other gear.

If multiple people see the Angelshark:

- Do not crowd around the Angelshark.
- Do not touch them.
- Do not feed them.
- Do not use flash photography.
- Do not use a net or other gear.

Section 4: Sightings and Reporting



Angel Shark Sightings Map



Please note: low resolution image due to live website



QR Code Reporting Stickers

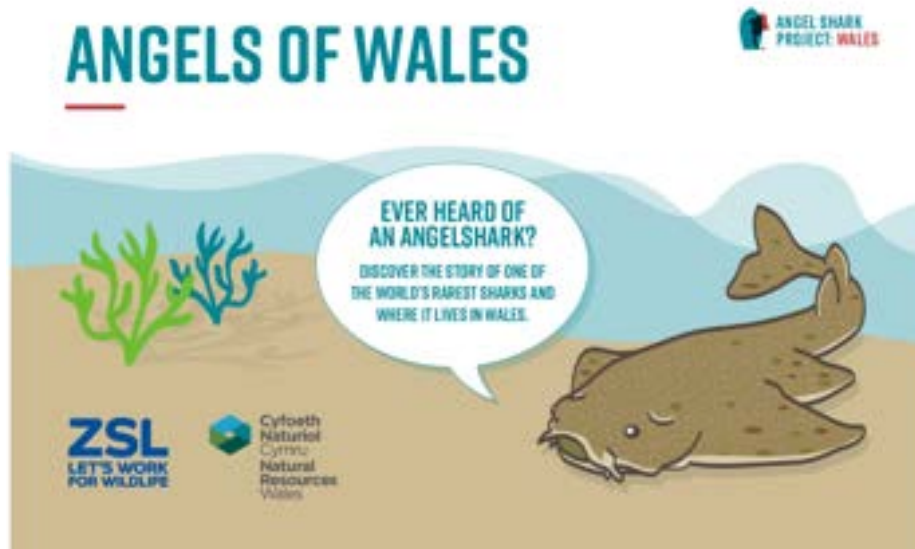
ARABIC | FRENCH | GREEK (Enalia Physis) | GREEK (iSea)
| TURKISH (Mersea) | TURKISH (SPOT)



Section 5: Miscellaneous



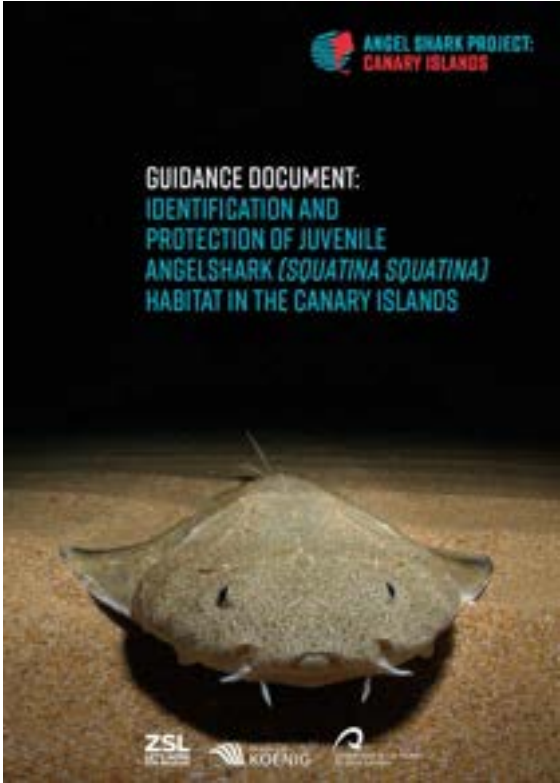
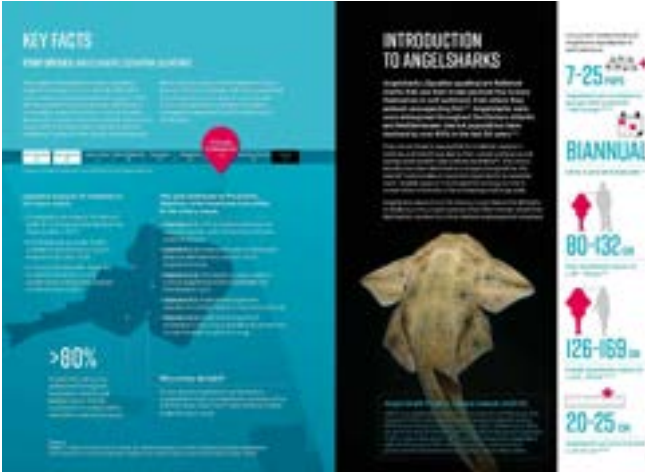
Angels of Wales eBook





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	Angel Shark Sightings Map 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	Angel Shark Sightings Map 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