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Malta, 22-24 May 2023

Agenda Item 4: Progress report on the activities carried out to implement SPA/RAC activities under the UNEP/MAP Programme of Work for the biennium 2022-2023

Results of MedBycatch project (2017-2022)

Note:

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Note by the Secretariat

- 1- This report includes a summary description and main results of the MedBycatch project, related to the bycatch of the vulnerable species in the Mediterranean and its mitigation measures trials.
- 2- This report is hereby presented to the Sixteenth Meeting of SPA/BD Focal Points for information.

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Results of MedBycatch project (2017-2022)

A. Project background and objectives

The MedBycatch project, 'Understanding Mediterranean Multi-Taxa Bycatch of Vulnerable Species and Testing Mitigation - A Collaborative Approach', was launched in 2017 and concluded in October 2022 with funding from MAVA. The project was a partnership between several organizations, including the Secretariat of the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS), the Secretariat of the General Fisheries Commission for the Mediterranean (GFCM) of the Food and Agriculture Organization of the United Nations (FAO), the Specially Protected Areas Regional Activity Centre (SPA/RAC) of the United Nations Environment Programme/Mediterranean Action Plan (UN Environment Programme/MAP), the International Union for Conservation of Nature - Centre for Mediterranean Cooperation (IUCN-Med), BirdLife Europe and Central Asia (BLI ECA), the Mediterranean Association to Save the Sea Turtles (MEDASSET) and the World Wildlife Fund (WWF).

The project aimed to address gaps in knowledge concerning the bycatch of vulnerable species during fishing operations in the Mediterranean, support potential testing of mitigation measures, and provide elements for the formulation of national/regional strategies to reduce incidental catches and promote the sustainability of fisheries. The project involved field observation programmes, including on-board observations, landing site observations, and self-sampling, across various fishing gears, such as bottom trawls, gillnets, demersal longlines, and purse seines. In addition, the project included training, awareness raising, and identification and testing of mitigation techniques.

The project was implemented in five countries, with Phase 1 (2017-2019) carried out in Morocco, Tunisia, and Türkiye, and Phase 2 (2020-2022) in Italy and Croatia in addition to the original three countries.

To ensure a harmonised approach, the project was coordinated by a steering committee, with activities implemented at a local level by national partners and technical advice from a Scientific Committee (Fig 1). During the first phase, national observer teams were trained and mobilised to collect bycatch data through on-board observations and port-based questionnaires. The observer programmes were developed by national focal points in close collaboration with direct partners, taking into account the methodology elaborated under the project. The second phase continued with data collection, focusing on testing bycatch mitigation measures.

MAVA Med Bycatch

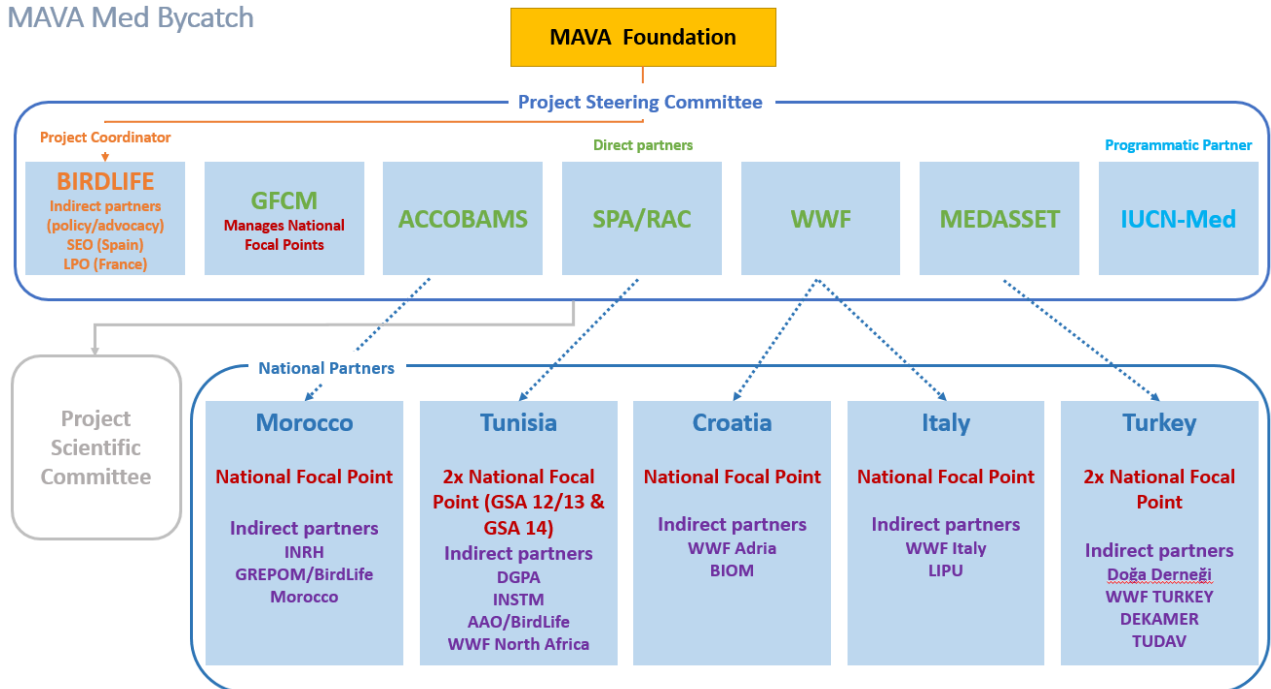


Figure 1 | Organogram for the coordination of the MedBycatch project Phase 2.

B. Summary of Key Accomplishments

The following is an overview of the primary achievements made since the start of the MedBycatch project, which are grouped into three strategic components of the project:

- Assessing incidental catches of vulnerable species in selected fisheries
- Identifying and testing of mitigation techniques
- Raising awareness on the incidental catches of vulnerable species and supporting policy advocacy

B.1. Assessing incidental catches of vulnerable species in selected fisheries

a. *Development of a standardised methodology for multi-taxa data collection*

The “[Monitoring incidental catch of vulnerable species in the Mediterranean and the Black Sea – methodology for data collection](#)” was developed by the GFCM in collaboration with the other project partners. The goal of this methodology is to support regional monitoring programs and establish a standardized data collection and monitoring system for all vulnerable species in the Mediterranean and Black Sea, including elasmobranchs, marine mammals, seabirds, sea turtles, and macrobenthic invertebrates. It also includes data collection of macro marine litter.

The methodology incorporates on-board observations, questionnaires at landing sites, and self-sampling activities, ensuring the collection of data on these species is conducted to a minimum common standard. This approach allows for replicability and comparisons of data collected from different fisheries across the region, providing a harmonized basis of knowledge, information, and evidence for decision-making.

In addition to its use in the Medbycatch project, this protocol and methodology aligns with existing instruments and regulations established by the GFCM (such as the Data Collection Reference

Framework and binding recommendations) and other relevant instruments, such as the EU Data Collection Framework and the Integrated Monitoring and Assessment Programme (IMAP) of the Barcelona convention.

b. Regional review on incidental catches of vulnerable species in the Mediterranean and Black Sea

The main objective of [the Regional review on incidental catches of vulnerable species in the Mediterranean and Black Sea report](#) was to provide comprehensive baseline information, earmark the main data gaps, as well as identify the most impacting types of fishing gear by taxonomic group. This work underscores the significance of standardized data collection and emphasizes the need for fundamental information to guide decision-making, including the identification and assessment of appropriate bycatch mitigation measures, facilitating comparisons over time and space, and enabling the implementation of relevant conservation and management measures at the national, subregional, and regional levels.

c. Development of Identification Guide and Identification Sheets

Identification of vulnerable marine species is sometimes difficult, in particular when it has to be done during fishing operations before fishers discard the non-commercial catches. In order to support the work of the observers and to complement the data collection methodology, an [Identification Guide of vulnerable species incidentally caught in Mediterranean fisheries](#) was developed to provide observers on board fishing vessels and fishers with identification assistance and general information about vulnerable species potentially caught as bycatch. Each species description contains photographs, illustrations and narrative descriptions to highlight important anatomical structures and features of a particular species. The guide was translated into Croatian, French, Italian, Spanish and Turkish.

Based on this guide, pocket guides were also developed for each project country to provide observers and fishers with a practical tool that could be used in the field, at ports and landing sites for example.

The process of identifying vulnerable marine species during fishing operations can be challenging, especially when it needs to be done quickly before non-commercial catches are discarded. To assist the observers and complement the data collection methodology, an [Identification Guide of vulnerable species incidentally caught in Mediterranean fisheries](#) was developed and is available in several languages ([Arabic](#), [English](#), [French](#), [Spanish](#), [Italian](#), [Turkish](#) & [Croatian](#)). This guide aims to provide observers on board fishing vessels and fishers with identification assistance and general information about vulnerable species that could potentially be caught as bycatch. Each species description contains photographs, illustrations, and narrative descriptions that highlight important anatomical structures and features. The guide was translated into Croatian, French, Italian, Spanish and Turkish.

In addition to the main guide, pocket guides were also developed for each project country.

- Pocket identification guide of main vulnerable species incidentally caught in Croatian fisheries (Available in [English](#) and [Croatian](#))
- Pocket identification guide of main vulnerable species incidentally caught in Italian fisheries (Available in [English](#) and [Italian](#))
- Pocket identification guide of main vulnerable species incidentally caught in Moroccan fisheries (Available in [English](#) and [French](#), both with Arabic species names)

- Pocket identification guide of main vulnerable species incidentally caught in Tunisian fisheries (Available in [English](#) and [French](#), both with Arabic species names)
- Pocket identification guide of main vulnerable species incidentally caught in Turkish fisheries (Available in [English](#) and [Turkish](#))

These pocket guides provide observers and fishers with a practical tool that can be used in the field, at ports, and landing sites. The aim is to facilitate the identification of vulnerable species in the Mediterranean and to improve the quality and standardization of data collection.

d. Multi-Taxa Data Collection to Enhance Understanding of Bycatch Issues in Fisheries

As part of this activity, multi-taxa bycatch data were collected according to the GFCM Protocol through observation programs in Croatia, Italy, Morocco, Tunisia, and Türkiye. The collection efforts focused on high-risk fleet segments/areas or gaps from Phase 1 in Morocco, Tunisia, and Türkiye. Additionally, activities were undertaken to evaluate the post-release mortality of bycaught individuals, with a particular focus on sea turtles and elasmobranchs.

The following are the key findings from these activities:

- In Croatia:
 - A total of 133 port-based questionnaires was collected and 38 on-board observations
 - WWF Adria also initiated the collection of data on elasmobranch bycatch through a Facebook group Sharks & rays of Adriatic Sea
- In Italy:
 - Bycatch data has been collected in the fishing fleet operating in Lampedusa (Pelagic Archipelago, Sicilian Channel, GSA 16) between June and October 2021 (9 fishing trips).
 - In Monopoli (Apulia) 21 fishing trips were monitored, 5 trips with onboard observations, 13 with self-sampling and 3 with questionnaires at landings, for a total of 89 fishing days. The fishing days monitored in GSA 18 represent 2.3%, 4.7% and 6.3% respectively for 2019, 2020 and 2021.
 - In Porto Cesareo, despite having positive initial meetings and the repeated distribution of self-sampling sheets, only one fisher reported bycatch.
 - Assessment of post-release mortality: 13 blue shark specimens were tagged during 4 fishing trips. Condition at capture was assessed for all captured Blue sharks during 6 fishing trips. A map was produced with the migration route of the tagged specimen confirming the southern Adriatic as a key area for this species.
- In Morocco:
 - 4 ports were surveyed across GSA 3: Tangier, M'Diq, Al Hoceima and Nador
 - 15 observers during Phase 1 and 2
 - Fishing fleets monitored: trawlers, longliners and purse seiners.

The total number of on-board observations and port questionnaires completed during Phases 1 and 2 is as follow:

Phase 1 (March 2019-March 2020):

Ports	On-board observation	Questionnaires
Tangier	194	436
M'Diq	245	649
Al Hoceima	154	424
Nador	316	381
Total	909	1 890

Fleets	On-board observation	Questionnaires
Trawlers	339	889
Longliners	246	436
Purse-seiners	324	565
Total	909	1890

Phase 2 (August 2020-June 2022):

Ports	On-board observation	Questionnaires
Tangier	218	663
M'Diq	355	1219
Al Hoceima	200	943
Nador	521	1 077
Total	1 294	3 902

Main results:

- In both phases the highest bycaught taxa recorded was Elasmobranchs (more than 90% of the total number of bycaught individuals were sharks and rays - all vessel groups considered)
- Some individuals of *Delphinus delphis* were bycaught by purse seiners (12 individuals reported during Phase 1; 13 individuals during Phase 2)
- All dolphins caught during observer's trips were released alive at sea by fishermen during Phase 1 and 2
- During Phase 2, around 28% of all bycaught individuals (all species considered) were realised alive.

➤ In Tunisia:

- During Phase 1 (March 2019-June 2020): implemented in 22 fishing ports distributed in the 3 Tunisian GSA 12, 13 and 14; 3 fishing gears: trawlers, longlines and nets (trammel, gillnet and combined) under the supervision of 2 National focal points, 2 coordinators, 3 supervisors, 23 observers.
- During Phase 2 (November 2020-January 2022): implemented in 25 fishing ports distributed in the 3 GSA 12, 13 and 14; 4 fishing gears: trawl, longlines, nets (trammel, gillnet and combined) and purse seine under the supervision 2 focal points, 2 coordinators, 3 supervisors, 18 observers.

The total number of on-board observations and port questionnaires completed during Phases 1 and 2 is:

Phase 1 (March 2019 to March 2020)

Fleet	On-board observation	Questionnaires
Trawlers	174	288
Polyvalents	306	1290
Total	480	1578

Phase 2 (November 2020 to January 2022)

Fleet	On-board observation	Questionnaires	Self-Reporting
Trawlers	214	257	
Polyvalents	632	1005	27
Purse Seine	38	127	1
Total	884	1389	28

Phase 1 + phase 2

Bycatch/Standing Data in Tunisia	Phase 1 (March 2019-June 2020)	Phase 2 (November 2020-January 2022)	TOTAL
GSA 12/13			
Onboard observation	253	434	687
Questionnaires	939	709	1648
Stranding data	7	109	116
Bycatch Self-reporting	0	19	19
GSA 14			
Onboard observation	304	438	742
Questionnaires	923	741	1664
Stranding data	24	26	50
Bycatch Self-reporting	0	9	9
All GSA			
Onboard observation	557	872	1429
Questionnaires	1862	1450	3312
Stranding data	31	135	166
Bycatch Self-reporting	0	28	28

Main results:

- More than 1400 onboard observation
- More than 3300 questionnaires with fishers
- More than 1600 collaborating fishing vessels.
- Bycatch self-reporting started.
- Main bycaught species identified including the bycatch occurrence and its spatio-temporal distribution.
- Trainings and awareness campaign at large scale implemented, and results promoted at regional and international level.
- 2 National Data analysis reports elaborated.

- Elaboration of a draft National Strategy to reduce Bycatch of vulnerable species.

➤ In Türkiye:

- 19 ports are surveyed (across GSA 22 and 24) during both Phases.
- Phase 1: 13 observers, Phase 2: 24 observers
- Fishing fleets: trawlers and polyvalents (longliners and static nets)

The total number of on-board observations and port questionnaires completed during Phases 1 and 2 is:

Fleet	On-board observation	Questionnaires
Trawlers	212	none
Polyvalents	240	4412
Total	452	4412

Main results:

- In both phases the highest bycaught taxa recorded was Elasmobranchs. No marine mammal neither seabird bycatch reported.
- In both Phases, trawl fleet segment recorded the highest percentage of the presence of vulnerable benthic species at both GSAs.
- In both Phases, the highest percentage of marine litter at both GSAs is by far plastics, followed by glass, metal, fishing gear and others.
- Various trainings and awareness campaign were organized at national level.

e. Regional bycatch database

The GFCM has created a regional database to store data obtained from the MedBycatch project as well as other upcoming projects and monitoring initiatives related to incidental catches of vulnerable species in the region. Additionally, a dedicated bycatch observer program database has been developed and is set to be integrated into the regional bycatch database hosted by GFCM.

B.2. Identifying and testing of mitigation techniques

During MedBycatch Phase 2, the focus shifted to testing mitigation techniques to address the key issues identified through the monitoring programs conducted from 2019-2020. Thanks to the extensive data collected, a deeper understanding of bycatch was obtained, and over 16 science-based mitigation measures were directly tested with fishers. Additionally, WWF-Med produced a report on the Local Ecological Knowledge of Mediterranean fishers regarding mitigation techniques. The trials were carried out in each country, and the results are summarized below. Results were published within national reports and presented in different events.

Croatia:

- Mitigation was focused on longlines through:
 - change in the soak time.
 - circle hook trials.

Italy:

- Circular hooks were purchased and tested in mitigation trials. While they showed no significant difference in bycatch rate an effect could be found for the condition of the animals which was better with circle hooks than without, increasing the chances of post-release survival.
- Trials tested a different fishing strategy where fishing lines were set during daylight. Results were analyzed and summarised in a report in December. Preliminary data of the fisheries strategy change showed a clear effect of day/night fishing on catch amount of the blue shark (bycatch) for the swordfish longline fishery, showing that the fishing strategy is a very important driver to reduce the bycatch of blue sharks.

Morocco:

- Pingers were tested in purse seine fisheries.
- A Bycatch Reduction Device for trawlers was also developed and tested based on the model developed in Tunisia, thanks to the support of INSTM Tunisian expert.

Tunisia:

- In GSA 14, Mitigation trials started in August 2021 and ended in December 2021 under the supervision of a team of experts and observers. The trials were implemented by two fishing vessels at Zarzis port for >55 fishing days. The trials consisted of:
 - Analysis of the effect of soak time and depth on catches/mortality, mainly of cartilaginous fish and sea turtles. Different nets were used: experimental nets for 12 hours as soak time and control nets usually used by the fisherman with a 24-hour soak time.
 - Analysis of the effect of two combined parameters: depth and bait on catches/mortality, mainly of cartilaginous fish and sea turtles. Different bait and depths are used: (Number of traps) number of hooks (+ 500h experimentation/+500h control) + two different depths
- In GSA 12 & 13 modified fishing gears were elaborated by a fishing gear expert and purchased. Mitigation trials started in November 2021 October 2022. The trials were implemented with 5 fishing vessels and a Scientific vessel in 6 ports (Cap Zebib, Ghar El Melh, Kelibia, Teboulba, Mahdia and Bizerte) and included:
 - CAP Zebib: 20 days at sea with 10 fishing operations for each type of net; 42 experimental trammel nets and 30 experimental gillnets.
 - Ghar El Melh: 10 days at sea with a minimum of 10 effective fishing operations for each type of longline; 2 complete rigged longline baskets with “J” hooks. 2 complete rigged longline baskets fitted with “G” (circular) hooks.
 - Kelibia (1 fisher): 10 days at sea with a minimum of 10 effective fishing operations for each type of fishing gear; 2 longline baskets with 200 hooks each, fully assembled. 21 fully assembled experimental trammel nets. 15 fully assembled experimental trammel nets
 - Kelibia (2 fishers): 10 days at sea with a minimum of 10 effective fishing operations for each type of fishing gear; 02 longline baskets with 200 hooks each, fully

assembled. 21 fully assembled experimental trammel nets. 15 fully assembled experimental trammel nets.

- Teboulba: 20 effective days at sea. During these days at sea, a minimum of 10 effective fishing operations will be carried out for each type of fishing gear; 04 baskets of longlines with 200 hooks each, fully assembled. 42 experimental trammel nets, complete. 30 experimental gillnets rigged complete.
- Additional mitigation trials related to the use of grid in the trawler to reduce the bycatch of the vulnerable species was implemented via the INSTM Scientific vessel, and two fishing boats (at Mahdia (GSA 13) and Bizerte (GSA 12) ports; more than 10 Fishing days per vessel)). An exchange visits with the Morocco team about the Bycatch Reducing Device were also done coordinated by ACCOBAMS and SPA/RAC with INRH and INSTM.

Türkiye :

Grid	2 Types	2 Angle	3 Diif Fish.	1 Area	1 boats
Lights	2 Types			5 Areas	8 boats
C Hooks	4 Types			6 Areas	9 boats

Grid Trials

- Commercial Bottom trawl, Legal fishing time and area; 30 days
 - Equal 10 hauls each (Test and Control). Duration, Direction and Time
- Depth range 50-600m
 - Two periods: Fall, Spring
- Two bar spacing
 - 40 mm shrimp
 - 95mm fish
- Two angles
 - 45 Degrees Top Escape opening
 - 135 Degrees Bottom Escape opening
- Alternative Haul methods

4 trainings for fishers have been organized to 4 different ports for safe releases as a mitigation tool.

B.3. Raising awareness on the incidental catches of vulnerable species and supporting policy advocacy

This MedBycatch project component comprises two main sets of activities:

- The first set involves communication-related tasks concerning the project itself.
- The second set focuses on promoting future changes in fisheries management policies by raising awareness among decision-makers and fishers. The latter aims to achieve this objective by providing reliable assessments and practical technical solutions to mitigate incidental catches.

a. Communicating on the project and creating awareness on bycatch issues

MEDASSET took the lead in communication efforts for the project and developed a Communication Strategy and a detailed Action Plan. A distinctive logo was created for the project and adapted to each country to establish a recognizable brand identity.

Various printed materials, such as leaflets and roll-ups, were produced to introduce and provide information about the project, and were disseminated during regional meetings, conferences, and forums. Communication materials, including T-shirts and windbreakers, were also created for stakeholders, such as fishers collaborating with observers.

Regular updates on project activities were shared via social media by project partners, using a common hashtag to identify the project. Press releases and web stories were also created for national events. A virtual photo exhibition was also done : [MEDBYCATCH PROJECT: WORKING TOGETHER TO REDUCE BYCATCH IN THE MEDITERRANEAN - 3D virtual exhibition by Curated by Photographos Magazine | art.spaces | KUNSTMATRIX](#)

In addition, the project team produced several videos and infographics to showcase the project and the incidental catch issue. Main examples are presented below:

The MedBycatch [Infographics Video](#):



CNN Greece also produced a reportage “[Mission to Tunisia: Saving dolphins, sea turtles and other vulnerable species through the MedBycatch project](#)” on the project in Tunisia. This documentary won the gold price as the best international documentary in 2022:



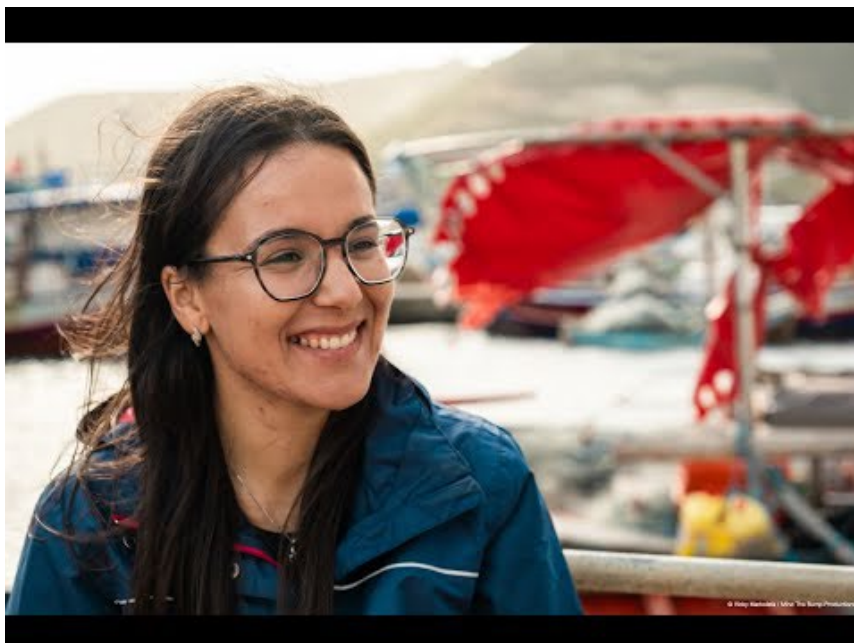
A short fiction film “[An Important Job – A Story of Change from the Mediterranean](#)” was produced and screened in Festivals & Cosmote TV paid platform:



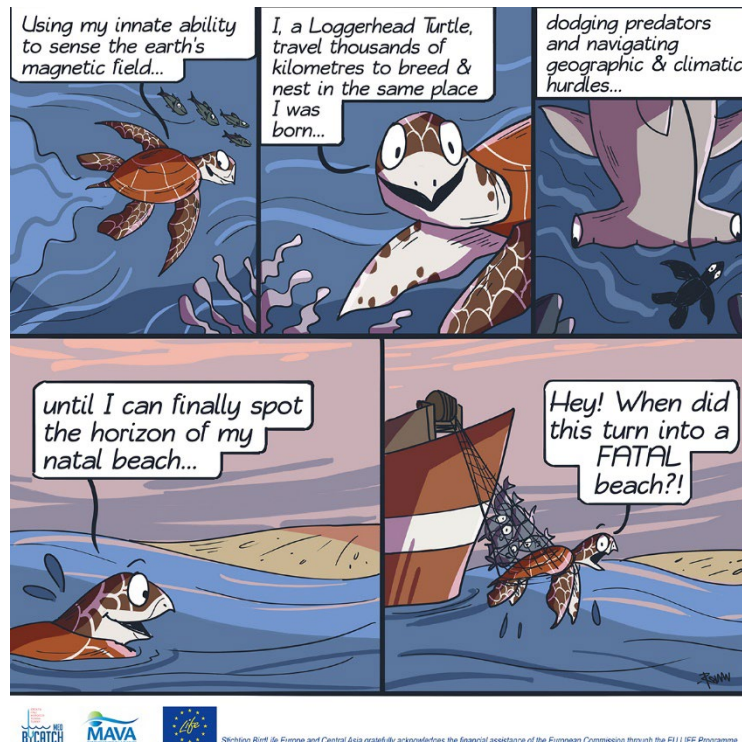
The relationship between observers and fishers determined the success of the MedBycatch project. The reportage “**Protecting What’s Precious**” highlights the story of Ezgi, a MedBycatch observer, and her vital role to reduce bycatch. It is displayed on WaterBear Platform.



The short film “[Amal: Hope for Mediterranean Fisheries](#)” was produced to highlight the female involvement within fisheries through the story of Amal - a woman observer of the Medbycatch project in Tunisia - who gained fishers trust and changed their perception on vulnerable species.



Bycatch comics (translated to Arabic, French and Turkish) <https://www.medasset.org/medbycatch-cartoons/>



b. Raising awareness of decision makers on the incidental catches of vulnerable species

Various activities were implemented in different countries to raise awareness on the issue of incidental catch. These initiatives included national photo exhibitions to highlight the problem, the development of factsheets containing information on legal and technical aspects of fisheries management, bycatch data collection, and the conservation of vulnerable species for each country. Furthermore, dedicated meetings, conferences, and roundtables were organized at the national level, involving competent authorities to raise awareness among decision makers. Additionally, local NGOs contributed to disseminating project results and promoting awareness on bycatch in various settings such as fish ports, fish markets, schools, universities, and national events.

The project also engaged with the EU to promote its objectives and specific deliverables, including the protocol and the GFCM database.

c. Developing policy instruments

The project facilitated the development of regional and national policy instruments, including the creation of national action plans. In Morocco, for instance, the project collaborated with the Maritime Fisheries Department (DPM) to draft a national strategy that aims to reduce the impact of fishing on vulnerable species and, in Tunisia, elements for a national strategy to mitigate bycatch were provided.

d. Disseminating good practices

The Good Practices guides for handling marine vulnerable species that are incidentally caught in Mediterranean fisheries (Cartilaginous fishes, Sea turtles, sea birds and cetaceans), developed by the FAO-ACCOBAMS with SPA/RAC contribution, were initially created in English and French. Subsequently, these guides were translated into other languages including Arabic, Croatian, Italian, Turkish, and Spanish. These guides were used in several trainings including with bycatch observers and fishers.

e. The International Bycatch Meeting, 4-6 October 2022, Malaga (Spain)

The International Bycatch Meeting was held from October 4th to 6th, 2022, organized by the IUCN-Centre for Mediterranean Collaboration (IUCN-Med) in partnership with BirdLife Europe & Central Asia, ACCOBAMS, FAO-GFCM, MEDASSET, UNEP/MAP SPA/RAC, and WWF Mediterranean Marine Initiative. This hybrid event was held both in-person at La Noria in Málaga, Spain and online, aimed at experts and stakeholders interested in bycatch monitoring and mitigation approaches, including scientists, managers, fishing gear manufacturers, conservation organizations, and representatives of the fisheries sector. The event fostered constructive dialogue among a broad range of actors and offered an opportunity to share key findings and communication activities developed within the context of the “Medbycatch project”.

The event saw the participation of more than 90 in-person attendees and roughly 50 online participants over the course of the three-day meeting. Moreover, the event was livestreamed, providing an additional platform for engagement and dissemination of information.

The International Bycatch Meeting underscored the crucial role of collaboration among various stakeholders in the fisheries sector, including fishers, in effectively mitigating bycatch. Discussions highlighted the importance of time and closure areas, and the prohibition of specific gears or practices to minimize bycatch. However, the complexity of bycatch mitigation was also recognized, as measures for one species may negatively impact other species. Addressing this requires alignment of diverse interests and motivations, and collaboration among different actors.

Despite progress made on standardized methodologies and protocols, such as those developed within the "Medbycatch project," data collection remains challenging to ensure consistency and comparability across countries and fisheries. Nevertheless, the event showcased the opportunities for sharing technical knowledge among stakeholders and the need for implementation across different sea basins.

The meeting also raised concerns regarding addressing Illegal, Unreported and Unregulated (IUU) fishing and the potential role of financial incentives in supporting bycatch mitigation within the fisheries sector.

Throughout the event, collaboration emerged as the key factor for understanding, addressing, and mitigating bycatch in a meaningful, long-term manner. For example, experience exchanges among diverse small-scale fisheries can help identify suitable mitigation measures in each situation. Closer collaboration between fishers and researchers is also needed to find scalable solutions that support sustainable livelihoods and the marine environment's well-being. More details are available in annex 1.

The MAVA Sharing and Learning grant.

The MAVA Foundation provided funding for a side-project, "Building Strong and Maintaining Collaborations between Fishery Observers and the Fishing Community," under the "Learning & Sharing Grants" program. The main objective of this project was to bring together national observer teams and fishers who participated in the MedBycatch project to share their experiences and knowledge gained from working together in the field. The aim was to transfer this wealth of knowledge to new researchers and organizations, highlighting successes and challenges encountered.

Testimonies were collected from observers and fishers who participated in the monitoring programs to showcase the project and highlight the challenges that need to be addressed including within national workshops and an international online workshop.



An [infographic highlighting best practices and a report for collaboration with fishers](#) was developed, and a video titled "Salt in the eyes" (It is displayed on WaterBear Platform. <https://www.waterbear.com/watch/salt-in-the-eyes>) was produced to showcase successful collaborations between fishers and observers.



C. Conclusion and next steps

Thanks to the generous financial support from the MAVA Foundation, the MedBycatch project was successfully implemented, creating unprecedented positive momentum. The project provided the first regional insights into the bycatch of vulnerable species in the Mediterranean, based on reliable scientific data collected through standardized methodologies. The project also established collaborations with over 3000 fishers and reached more than one million people through digital communication and awareness materials such as best practice guidelines. These efforts expanded knowledge, capacity building, and policy engagement at the national and regional level.

The collaborative work of the network demonstrated the strength of complementarity and expertise of the involved organizations. The project addressed bycatch from a multidisciplinary, science-based, and multi-taxa approach through technical and inter-institutional cooperation, engaging and getting buy-in from fishers. This led to a change in mindsets and practices, creating strong advocates for healthy marine ecosystems.

The progress achieved laid the foundations for scaling-up action and solutions for bycatch and depredation in the Mediterranean, increasing the commitment of decision-makers in the target countries to address bycatch and leading to policy developments at the GFCM and EU levels. In addition to the SPA/RAC regional action plans for vulnerable species and the POST 2020 SAPBIO of the SPA/BD protocol, the GFCM adopted four binding recommendations in 2021 aimed at improving the conservation of vulnerable species through monitoring and mitigation pilot projects, and the GFCM 2030 Strategy provides for the development of a regional plan of action to mitigate bycatch and depredation.

Following the success of the MedBycatch project, regional and national partners remain committed to maintaining the positive momentum and building on the achievements through future projects. Efforts are underway to identify potential sources of funding to continue this important work.

**ANNEX I: International Bycatch Meeting, 4-6 October 2022, Malaga
(Spain)**



International Bycatch Meeting

Dates: 4th to 6th October 2022

Venue: La Noria (Málaga, Spain) and online

EVENT REPORT

Report prepared by: IUCN Med

Background

From the 4th to 6th October 2022, IUCN-Centre for Mediterranean Collaboration (IUCN-Med), in collaboration with BirdLife Europe & Central Asia, ACCOBAMS, FAO-GFCM, MEDASSET, UNEP/MAP-SPA/RAC and WWF Mediterranean Marine Initiative, organised the **International Bycatch Meeting**, which was held as a hybrid event taking place at La Noria in Málaga, Spain, as well as online.

The event was aimed at interested experts and stakeholders, including scientists, managers, fishing gear manufacturers, conservation organisations and representatives of the fisheries sector to encourage constructive dialogue across a broad range of actors. The event also provided an opportunity to share key findings regarding bycatch monitoring and mitigation approaches as well as communication activities developed within the context of the "[Medbycatch project](#)".

Over 90 participants attended the event in person and roughly 50 participants joined online over the course of the three days. Furthermore, the event was livestreamed on IUCN-Med's Facebook (<https://www.facebook.com/IUCNMed/>) and LinkedIn (<https://es.linkedin.com/company/iucn-med>) pages, where it reached a total of 1,800 and 2,100 views, respectively. At least 23 countries across five continents were represented among the participants of the event, including North and South America, Europe, Asia and (North) Africa. The main working language of the event was English, with simultaneous interpretation available in French, Spanish and Turkish.

International Bycatch Meeting



4th - 6th October 2022
La Noria, Málaga, Spain and online



Over 140 participants in person and online



23+ countries represented

Aims and objectives:

The event aimed to demonstrate the current state-of-the-art in addressing bycatch worldwide, with a particular emphasis on the needs and challenges associated with the implementation of bycatch



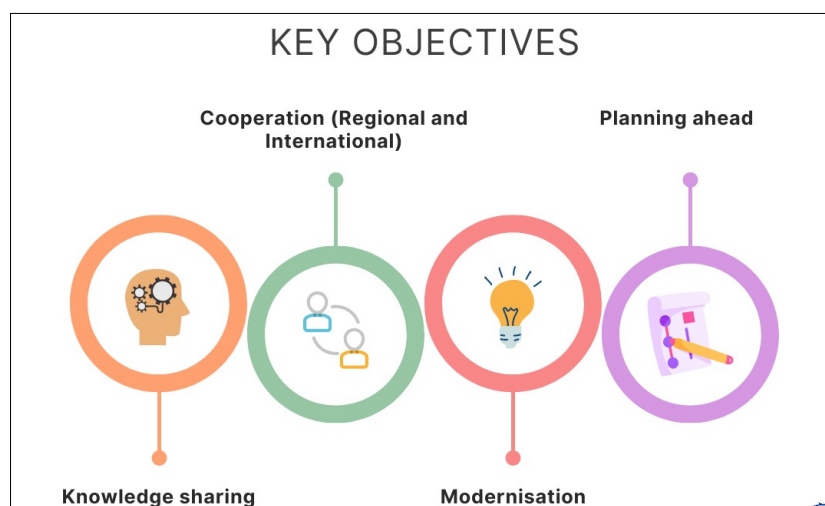
programmes in different geographical locations and fisheries. During three days, participants shared experiences on bycatch data collection, identifying effective solutions towards reducing bycatch, defining methods for replicating best practices and discussing future directions with the goal of supporting the establishment of a greater network of technical experts in the Mediterranean and beyond.

The International Bycatch Meeting aimed to:

- Address bycatch worldwide, with particular emphasis on the needs and challenges associated with the implementation of bycatch programmes in different areas and fisheries
- Share knowledge and experience on bycatch data collection
- Identify effective solutions toward reducing bycatch, highlighting both technological and communication-based approaches
- Define ways to replicate best practices and discuss future directions
- Establish a greater network of people working on bycatch issues, with various types of expertise from fishers, observers, scientists, technologists, conservationists and policy-makers and artists.

The key objectives of the event included:

- **Knowledge sharing:** Pooling together fishers, observers, scientists, technologists, conservationists and policy-makers. Each perspective offers an opportunity for improved bycatch monitoring and mitigation.
- **Cooperation (Regional and International):** Building relationships with different stakeholders and continuing to work together to identify practical, affordable and effective next steps.
- **Modernisation:** Exploring accessible technology and innovative solutions for practical bycatch monitoring and mitigation.
- **Planning ahead:** Developing strong, clear recommendations based on science and local knowledge to ensure effective monitoring and reduction of bycatch.





Through presentations from expert speakers as well as panel discussions and open dialogue sessions, participants discussed issues relevant to:

- Monitoring bycatch and discards
- Capacity building and practical local knowledge for mitigation
- Successful solutions, Bycatch Reduction Technologies (BRTs) and novel applications for mitigation measures
- Potential management approaches, institutional settings, policy and compliance
- Raising awareness on bycatch through targeted and inspiring communication
- Fishers and citizen science supporting bycatch mitigation

At the heart of the event was to offer fishers a platform to promote their involvement in the monitoring and reduction of bycatch, including testimonies from fishers involved in the “Medbycatch2” project and experiences and lessons learnt from the field.

The event also reached wide audiences on social media with over 880,000 impressions on Facebook, 32,700 impressions on Twitter and 7,000 impressions on LinkedIn through 46 collective posts posted on IUCN-Med’s social media channels. The event was also widely publicised and shared through partners’ social media platforms with active feedback from participants worldwide.





Key outcomes:

The event highlighted the importance of collaboration among different actors within the fisheries sector – particularly fishers themselves – as a key component for successful bycatch mitigation. Furthermore, discussions underlined the role of time and closure areas for bycatch mitigation as well as the prohibition of specific gears or practices. However, it was also noted that bycatch mitigation is indeed a complex issues as mitigation measures for one taxa may negatively impact bycatch of another taxa. Indeed, effective action to address the complexity of bycatch of vulnerable species requires collaboration between many different actors as well as the aligning of diverse interests and motivations.

Regarding data collection, despite progress made on standardized methodologies and protocols (e.g. within the framework of the “Medbycatch project”), it is still challenging to ensure data collection is happening in a standardised and systematic manner. As a result, data sets collected among different countries and fisheries are often not comparable. However, the event highlighted the many existing opportunities for sharing technical knowledge among different stakeholders and the push for this implementation to happen across the different sea basins.

The meeting also raised the questions regarding addressing Illegal, Unreported and Unregulated (IUU) fishing as well as the role of financial incentives within the fisheries sector, specifically which if any are suitable in supporting bycatch mitigation.

The common thread throughout the event was the importance of collaboration as key factor for understanding, addressing and mitigating bycatch in a meaningful, long-term manner. Experience exchanges for example among highly diversified small-scale fisheries can play an important role in identifying the most suitable mitigation measures to be implemented in each situation (e.g. with the support of a toolkit). There is also a clear need for closer collaboration between fishers and researchers to find scaling solutions that simultaneously support sustainable livelihoods and the well-being of the marine environment.

