

REPORT ON THE CONSERVATION STATUS OF CETACEANS AND RELEVANT ACTIVITIES IN EASTERN MEDITERRANEAN

Introduction: The aim of this report is to give a global vision of what occurred in the Region, regarding cetacean conservation, since the previous report, and what is important to address for the next period/in a near future. So, the regional representative will synthetize the main studies (species, topics) led in the region, concerning research, monitoring and conservation, also the main "hot" topics or threats that need to be addressed and what is awaited from the Scientific Committee (and ACCOBAMS) for the next triennium as recommendations.

ACCOBAMS Parties of the Eastern Mediterranean region:

Cyprus, Egypt,

Greece,

Lebanon,

Syria,

Türkiye (Mediterranean coast)

Overview of activities in the Region since the previous report:

Cyprus:

- <u>National Roadmap for Marine Action Plan (MAP)</u>: The Department of Fisheries and Marine Research (DFMR), the national authority in Cyprus for the protection and preservation of the marine environment and biodiversity, submitted to DG MARE, a national roadmap in relation to the implementation of the Marine Action Plan (MAP) in Cyprus, in August 2023. Cyprus is participating in the meetings of the Joint Special Group to support the implementation of the EU Action Plan and has designated as focal point Mr Lavrentios Vasiliades who is also the focal point to ACCOBAMS. Information on the MAP can be found in: https://tinyurl.com/bdexw3sz
- <u>IWC Contracting government financial contributions 2024</u>: DFMR has submitted its financial update to the International Whaling Commission for the 2024 financial year. Mr Lavrentios Vasiliades has designated as the IWC Commissioner for Cyprus.
- <u>THETIS Database</u>: DFMR has developed and maintains the THETIS national database system for reporting cetacean sightings and strandings. All new sighting and stranding data of cetaceans, are incorporated in this database.

- <u>Surveys</u>: The National Program for the Acoustic and Visual Survey of Cetaceans in the EEZ of the Republic of Cyprus is expected to be implemented in 2025. It will follow the guidelines and areas of the survey that was completed in 2016-2017 and will be funded through EMFAF budget.
- <u>Strandings</u>:
 - A national report on the atypical mass stranding of *Ziphius cavirostris* along the north-western coastline of Cyprus in February 2023, was submitted to the ACCOBAMS Secretariat. The national report included the results of the post-mortem examinations, a description of the anthropogenic activities carried out in the region for the period leading up to the strandings, and an examination of the oceanographic conditions in the region.
 - A single individual of the species *Ziphius cavirostris* stranded in the south-eastern coast of Cyprus on September 9, 2024. The individual was found dead in the area of Perivolia - Larnaca District. It was estimated that the individual was a newborn or very young individual, as its total length was 2.44m. A post-mortem examination was conducted by the Department of Veterinary Service (CVS) staff, veterinarian Dr. Evridiki Kontemeniotou, member of "ARION Veterinary Stranding Network" and DVM/PhD candidate student at the Exotic and Wildlife Medicine Unit of the School of Veterinary Medicine of Aristotle University of Thessaloniki (AUTh) in Greece, and DFMR. Tissue samples collected during the post-mortem examination, were sent for laboratory analyses and investigation to the Exotic and Wildlife Medicine Unit of the School of Veterinary Medicine of AUTh (Prof. Komnenou). Results from the analyses are pending.
- Underwater noise:
 - Regarding underwater noise offshore activities, the ACCOBAMS guidelines "Methodological Guide: Guidance on Underwater Noise Mitigation Measures, ACCOBAMS" are Implemented and are being provided related to QUIETMED.
 - In alignment with the EU's Marine Strategy Framework Directive (MSFD), DFMR participates in the Technical Group on Noise (TG NOISE) meetings.
 - Cyprus has planned a project, in 2025, to install hydrophones and perform models both continuous and impulsive underwater noise levels to create noise maps, which will support for mitigation measures and guide further actions.
- <u>Development of Cetacean Information Network</u>: In 2024, DFMR established a cetacean information network with local aquaculture industries. This initiative will enhance data collection on cetacean populations and distribution in Cyprus's Exclusive Economic Zone (EEZ).
- <u>By-catch Reduction initiatives</u>: Under the National Data Collection Framework (DCF) of the EU Common Fisheries Policy, Cyprus implements a research program to evaluate and mitigate bycatch of protected species, including marine mammals, reptiles and birds.
- <u>Public awareness initiatives</u>: To raise public awareness about cetaceans in Cypriot waters, in 2023, DFMR produced educational/informative materials, including a booklet and poster, which highlight the local cetacean species. Furthermore, the LIFE IP-Physis Project (LIFE18 IPE/CY/000006) continuously promotes public engagement through workshops/seminars/environmental education and campaigns, helping community involvement in marine biodiversity conservation. Additional information on the project is available here: https://tinyurl.com/26ecrt3x

• <u>ACCOBAMS MOP9</u>: Cyprus will be hosting the 9th Meeting of the Parties (MOP9) of ACCOBAMS between the 18th and the 21st of November, 2025.

Egypt: NO REPORT PROVIDED

Greece:

- The Hellenic Ministry of Environment and Energy along with the Hellenic Ministry of Rural Development and Food have signed and put in action the legal framework entitled "Measures for the operation of a Nationally Coordinated Network for the Monitoring and Management of Marine Wildlife Species Strandings." (GOVERNMENT GAZETTE Issue B' 3376/19.05.2023-DECISIONS No.YPEN/DDFPBB/55417/1958. In the articles is described in detail the management of the four major marine species strandings in Greece (Cetaceans, Monk Seals, Marine turtles and Sharks/Rays). For the Cetaceans Stranding Network Management the coordinating Group among the related authorities and NGOs is the "ARION"-Cetacean Rescue and Rehabilitation Research Center along with the School of Veterinary Medicine of the Aristotle's University of Thessaloniki (AUTh). The coordination will last for the next three years. Also, a digital, Georeferenced National Strandings and Sightings Databank is under construction for the coding and recording all the marine species strandings. Also, a National Tissue and DNA Databank will be established at the Veterinary Medicine School of AUTh and other academic institutions.
- ENLARGEMENT OF THE MARINE PROTECTED AREAS' NETWORK OF GREECE TO MEET THE 30% TARGET BY 2024. Marine protected areas (MPAs) in Greece currently occupy an area of 22,796 km2 and cover 18.3% of the country's marine waters. According to par. 1 of Art. 174 of Law 5037/2023, MPAs have to expand to 30% of Greek territorial waters by 2030. To meet this target, Greece will establish in 2024 two additional marine national parks (as per point a, par. 2 of Art. 19 of Law 1650/1986) covering OVER 32% of the country's territorial waters:
 - THE AEGEAN MARINE NATIONAL PARK with a total area of over 8,000 km² (including the existing 0 Natura 2000 areas of 545 km²). The park covers 6.61% of Greek territorial waters, (a net increase of Greek MPAs of over 6%). The core of the marine park is the small rocky islets, almost all of them being already designated as Important Bird and Biodiversity Areas (IBAs) and the surrounding marine environment. It builds on 13 existing Natura 2000 areas (GR3000011, GR4210011, GR4220007, GR4220030, GR4220023, GR4210009, GR4210022, GR4210007, GR4210032, GR4210023, GR4220022, GR4220036 and GR4210021) to expand the protection towards the sea. The main objective is to protect the wild birds that are in abundance in the area, i.e. sea birds such as Phalacrocorax aristotelis desmarestii, Larus audouinii and Calonectris diomedea as well as Puffinus yelkouan that use the sea as a feeding ground. In most of the islets there are also colonies of Falco eleonorae, whereas in Antimilos the Aquila fasciata is reproduced. The islets of the proposed park are also used by many migratory bird species for food and as a resting station during the spring and autumn migration. Furthermore, there is significant presence of seals Monachus monachus as well as dolphins such as Delphinus delphis and Tursiops truncatus, whereas, at deeper waters, there are cetaceans such as Physeter macrocephalus, Stenella coeruleoalba and Ziphius cavirostris.
 - THE IONIAN MARINE NATIONAL PARK (from north of Kefallonia to south of Antikythira) with a total area of over 14,000 km² (including the existing Natura 2000 areas of 3,668.86 km²). The park covers over 11% of Greek territorial waters, the Ionian segment of the Hellenic trench being its core (a net

increase of Greek MPAs of more than 8%) building on 13 existing Natura 2000 areas (GR222003, GR2220004, GR2220005, GR2220007, GR2210001, GR2210002, GR2210004, GR2550010, GR2330008, GR2540009, GR2540003, GR3000008 and GR3000019). The park is established because the area is very important for marine mammals such as *Physeter macrocephalus, Ziphius cavirostris and Stenella coeruleoalba*. Furthermore, there is significant presence of seals *Monachus monachus* as well as, dolphins *Grampus griseus, Delphinus delphis* and *Tursiops truncatus*. The area includes one of the most important areas for the nesting of *Caretta caretta*, areas with Posidonia oceanic and *Cystoseira sp.* as well as, the natural habitat type of reefs. In deep waters, there are also coral formations, and deep-sea corals are marine biogenic habitats of high conservation value.

To further develop scientific knowledge about these MPAs and proceed with their detailed demarcation, ecological surveys will be carried out, through The LIFE MareNatura (2023-2029) both from refining/updating the available data for marine habitats from various sources and also by carrying out extensive ecological surveys covering 228,000 km of aerial survey transects, and 10,000 n.m. of boat survey transects.

The project LIFE22-NAT-EL-LIFE MareNatura "Conservation of priority species of marine megafauna in Greece and Italy", commenced in July 2023 and is projected to conclude in June 2029. The project aims to mitigate the threats confronting nine priority species of the European marine megafauna, the sperm whale, the Cuvier's beaked whale, the harbor porpoise, the common dolphin, the Mediterranean monk seal, the loggerhead sea turtle, the green turtle, the yelkouan shearwater and the Audouin's gull, within the Ionian and Aegean Seas. A primary objective of the project is to identify critical habitats for these species within the Greek territorial waters and the Greek Exclusive Economic Zone (EEZ), which will be proposed for inclusion in the Natura 2000 network of protected areas. This effort is anticipated to significantly aid Greece in fulfilling the EU Biodiversity Strategy for 2030, specifically the "30 by 30" target. Over the initial three years of the project, extensive field surveys will be conducted to pinpoint biodiversity hotspots for the species of interest. For cetaceans, these surveys will encompass aerial and boat visual surveys, bio-acoustic assessments utilizing towed hydrophones and fixed acoustic stations, telemetry involving the deployment of 20 transdermal Argos satellite tags, and environmental DNA (eDNA) surveys." In addition, potential feeding grounds of the sperm whale, Cuvier's beaked dolphin, harbour porpoise and common dolphin will be determined based on fisheries related information (e.g. Fish distribution from bottom trawl surveys, hydroacoustic surveys). Moreover, cetacean strandings information will be explored aiming to identify any interactions between fishing activities (mainly small-scale fisheries) and marine megafauna.

IMPLEMENTING BODY/BENEFICIARY: NECCA.

BUDGET: statutory measure + €10,707,187.54 from EU funds (LIFE program) and Green Fund

• Project "SAVE Whales". Update about progress of conservation efforts in line with ACCOBAMS Resolution 8.18 oper.par.4. ESTABLISH MONITORING AND EARLY WARNING SYSTEM FOR PASSING BY SHIPS TO IDENTIFY ON TIME LARGEMARINE MAMMALS so that the ships that are in the Greek territorial waters slow down and avoid collision with them in the area between Kythira, Cape Tainaro and Cape Maleas.

Ship strikes are recognized as the main threat to sperm whales in the Eastern Mediterranean. The Hellenic Trench is a core habitat for this species and a high-risk area for ships colliding with whales. "SAVE Whales" (System for the Avoidance of ship-strikes with Endangered Whales) technology is an innovative technology designed as a complementary tool to protect the endangered sperm whales from collision with ships in areas where re-routing of vessel traffic is not possible. Originally conceived by PELAGOS Cetacean Research Institute, it was developed by the Institute of Applied and Computational Mathematics at FORTH and PELAGOS with funding by OceanCare and successfully tested during a pilot phase in 2020 and 2021. The results and potential impact were presented by OceanCare and the Green Tank to the Greek authorities in 2022 and 2023. During

the 9th Our Ocean Conference, held in Athens from 15-17 April 2024, a collaboration between OceanCare, The Green Tank, the Greek Ministry of Environment and Energy (MEEN), and the Natural Environment and Climate Change Agency of Greece (NECCA) – involving the Pelagos Cetacean Research Institute and the Institute of Applied and Computational Mathematics (FORTH) – was announced. The collaboration aims to scale up the "SAvE Whales" system so that it can ultimately become an official mitigation and warning tool that will alert mariners about the presence of sperm whales in the Strait of Kythira, South Peloponnese, Greece. The collaboration that aims at the scaling up, development and full time (365 days) and continuous (24/7) operation of the tested system is jointly funded by OceanCare, and Greece's NECCA and the Green Fund with a total budget of 3 million euros. It is foreseen that the system is operational by 2028. Following the announcement of the commitment at the Our Ocean Conference, a Memorandum of Understanding (MoU) was signed in June 2024, by MEEN, NECCA, OceanCare and the Green Tank and a Steering Committee was set up to oversee its implementation. Following the formalization of the collaboration, researchers from PELAGOS and FORTH undertook field activities to collect data that will guide the upscaling of the system in the specific area.

IMPLEMENTING BODY: Ministry of Environment and Energy/NECCA BENEFICIARY: NECCA with the assistance of the Ministry of Maritime Affairs and Insular Policy BUDGET: 3 million € from private sponsors, NECCA and the Green Fund.

- Marine Mammal Strandings Responders: Education, training and certified team formation of local Marine Mammal Stranding Responders in the Ionian Sea focusing on the proposed Important Marine Mammal Areas (IMMAs) to assist the National Marine Mammal Stranding Network. "ARION" project aims in the formation of local teams of Marine Mammal Stranding Responders in the Ionian Sea via education (theoretical and practical methods) that will be carried out by qualified and certified marine mammal biologists and marine mammals' veterinarians from national institutions, academia, and other relative marine research bodies. The trained/certified teams consisted of residents of Corfu, Paxoi, Lefkada, Ithaca Kefalonia, and Zakynthos islands in the Ionian Sea. These local responders will be able to comprehend how to manage marine mammal stranding scenes and make decisions involving local authorities, municipalities, public and private sectors. This Project is funded by the Ionian Environmental Fund (IEF). A similar project is taking place by ARION on 2023-2024 at the Cyclades Island region (Syros, Naxos, Paros, Milos, Kimolos, Santorini, Andros, Tinos, Mykonos) and is funded by the CPF in Greece.
- National Action Plan for the harbour porpoise (Phocoena phocoena) and the bottlenose dolphin (Tursiops truncatus) (2019-2021). "ARION" has already delivered a LIFE-IP 4 NATURA Action Plan up to 2026 for the Integrated actions for the conservation and management of the two marine mammal species (the harbour porpoise and the bottlenose dolphin) of Natura 2000 sites, species, habitats and ecosystems in Greece (LIFE16 IPE/GR/000002). Deliverable Action A.1. ARION. Chalkidiki, p. 109 and IV Annexes. This is a national action plan (hereinafter AP) for the coordination of conservation actions for the harbour porpoise species belonging to the common species *Phocoena phocoena* and for the bottlenose dolphin belonging to the species *Tursiops truncatus*.
 - The harbour porpoise is a rare and endangered species of the Northeast Aegean. Specifically, the species *Phocoena phocoena relicta* is a migratory or a subspecies with a spread in northeastern Greece; the southwestern extent of distribution is the North Evoikos Gulf, and the southeastern extent is the western area of Kos Island. *P. phocoena* has been observed or stranded dead or alive in the Strymonikos Gulf and Thracian Sea (Halkidiki peninsula, Kavala, Thassos island, Alexandroupolis and, Evros). The species is listed in Annex II and IV of the Directive 92/43 / EEC. Based on the 4th National Report under Article 17 of the Habitats Directive 92/43/EEC for the period 2013-2018, the conservation status of this species is rated as unfavourable bad (U2) with decreasing (-) trend. The population of the species *Phocoena phocoena* in Black Sea has been estimated to be approximately

500 individuals, while it is believed that in the Northern Aegean there is a small isolated subpopulation (*Phocoena phocoena relicta* ssp) with an estimated population of <100 individuals. The species *Phocoena phocoena* is classified as Endangered in the Red Book of Endangered Animals of Greece. The population of the Black Sea (which is considered to include the sub-population of the Aegean Sea) has been characterized as "Endangered", although it has been proposed to be considered as "critically endangered" due to its numerical rarity and extremely restricted distribution. The species has also been categorized in CITES Appendix II. The common feature of all this species is its small population sizes and its restricted distribution. Several populations have declined and, in some cases, even vanished because of pressures and threats associated with human exploitation. These are qualitative and quantitative habitat degradation, habitat loss or fragmentation by the presence of barriers, irreversible modifications in physicochemical, hydrological and geomorphological characteristics of marine ecosystems, overfishing, diseases and competition and / or hybridization with non-native harbor porpoise species. The above mentioned, in combination with changes caused by natural causes and in the light of climate change may be intensified in frequency and / or duration. Consequently, they require conservation and protection measures for the species.

The bottlenose dolphin is a rare and endangered species of the Northeast and Central Aegean. Specifically, the species Tursiops truncatus is a migratory species with a spread in most Mediterranean seas. T. truncatus has been observed or stranded all over Greece. The species is listed in Annex II of the Directive 92/43/EEC. In addition, the species *T. truncatus* is characterized as a Vulnerable in the Red Book of Endangered Animals of Greece and in the National Red List of Endangered Animals in the Mediterranean, Mediterranean level. The species has also been categorized in CITES Appendix II. The common feature of all this species is its population sizes and its distribution. Several populations have declined and, in some cases, even vanished because of pressures and threats associated with human exploitation. These are qualitative and quantitative habitat degradation, habitat loss or fragmentation by the presence of barriers, irreversible modifications in physicochemical, hydrological and geomorphological characteristics of marine ecosystems, overfishing, diseases and competition and / or hybridization with non-native bottlenose dolphin species. The above-mentioned, in combination with changes caused by natural causes and in the light of climate change may be intensified in frequency and / or duration. Consequently, they require conservation and protection measures for the species. The goal of this AP is to improve the conservation status of the two species in Greece through the improvement of their populations, the improvement of their viability in their marine habitats, and the improvement of the conditions to co-exist with human activities.

The implementation of the above goal will be carried out through several management actions for the populations and habitats of the two cetaceans aiming at: (a) gaining knowledge regarding the ecology, the pressures and threats for the harbour porpoises and bottlenose dolphins in Greece, (b) the improvement and strengthening the legal framework for the two species, c) the management and maintenance of the populations and their habitats of the two species, (d) enhancing awareness, information and capacity building regarding the species' conservation and protection and 6) international cooperation for the protection of two cetaceans. The strategy proposed to address the recovery goal and objectives creates a structure consisting of forty-five (45) for the harbour porpoise and fifty-two (52) for the bottlenose dolphin conservation measures/actions. The success of design and implementation of the action plan is dependent on the actions of many different stakeholders and requires their commitment and cooperation towards the direction of the two cetacean's species conservation and protection.

 «CETUS RESCUE VET» TRAINING. "ARION" along with the School of Veterinary Medicine of Aristotle's University of Thessaloniki (AUTH), Greece has established since 2002 the "Cetacean Rescue Vet" comprehensive training program for Veterinarians and biologists on marine mammals' biology and habitat ecology as well as stranding rescues, rehabilitation techniques, necropsy, and tissue sampling procedures following international protocols. The trainees become accredited experts for the marine mammal strandings network of local response teams. Project was funded by the Green Fund/Ministry of Environment and Energy and Pelargos LTD. Coordinated by the School of Veterinary Medicine of the Aristotle's University of Thessaloniki, Greece.

- Educational training programs (through Center for Lifelong Learning-UTH), research PhDs programs, and undergraduate courses in subjects related to Marine Mammal Conservation Biology and Genetics as well as health are held by the Dept. of Ichthyology and Aquatic Environment, University of Thessaly and School of Veterinary Medicine, Aristotle University of Thessaloniki (AUTH), Greece. Research methods in cutting-edge and innovative areas for the Conservation and Protection of marine mammal populations in the Greek territory, are carried out using both classical methods in the field and molecular analysis using bioinformatics/computational biology. The Departments investigate the population distribution and behavior of the marine mammals that permanently or occasionally occur in the Greek Seas' territory, for the recording of their behavior in their natural environment with significant biodiversity (e.g. Natura) as well as their health status and threats. Also, the Depts. have state-of-the art facilities to conduct studies of molecular identification, population genomics, species phylogenomics and wide-genome association studies, histopathological, virological and several other relevant studies with respect to the health status of populations. Also, findings are correlated with fisheries activities, local ecological knowledge and climate change through neural networks and ecological modelling.
- Establishment of the "National Marine Mammal Care Center (NMMCC)". "ARION" has proposed to establish and operate a "National Marine Mammal Care Center" that will provide care to stranded marine mammals (cetaceans) with the ultimate goal of their reintroduction into the natural environment, by 24-hour veterinary support and hosting practical training/accreditation of scientists and volunteers through a lifelong learning program.

• Other Projects for Marine Mammals in Greece, in progress:

- Systematic monitoring of bottlenose dolphins, striped dolphins, common dolphins and monk seals as well as other marine megafauna, using visual and environmental DNA (eDNA),
- The association of fitness related-traits to genetic diversity of mediterranean monk seals.
- The population dynamics of striped dolphins with respect to susceptibility of parasites and viruses.
- \circ $\,$ Impact of convergent evolution on echolocation as an evolutionary mechanism between different taxa.
- **Citizen Science**, a non-funded program entitled "Abundance and distribution of marine mammals in the Pagasitikos and Thermaikos Gulf" by collecting data from various social groups, such as fishermen, ecotourism companies, diving tourism, etc., through the CITIZEN SCIENCE method (Citizen Science).
- Investigation of the morbidity, mortality, and population dynamics of the striped dolphin (*Stenella coeruleoalba*), in the Eastern Mediterranean Sea" to investigate parameters that have impacts on the morbidity, mortality, and dynamics of the species of dolphins, applying a model of systematic health monitoring (health screening) and population dynamics assessment for cetaceans in the Greek seas. Tissue samples are obtained from strandings of a particular species of cetacean, e.g. the striped dolphin, that has been reported stranded with remarkably high frequency the past years, according to the records of "Hellenic Stranding Network of "ARION"-Cetacean Rescue and Rehabilitation Research Center".
- One of the main outputs is the awareness of the society, promotion of biodiversity, creation of a permanent communication network of science with the wider society (Citizen Science), marine

mammal stranding management knowledge transfer to aware Greek society to the usefulness of marine mammals, presentation in particular of new, alternative ways of ecotourism through the protection of marine mammals and the perpetuation of the transfer of knowledge and research results to Greek society.

Lebanon:

 The National Centre for Marine Sciences (NCMS) of the National Council for Scientific Research – Lebanon (CNRS-L), undertook field surveys during November 2023 to contribute to the implementation of the National Integrated Monitoring and Evaluation Program (IMAP) for Biodiversity in Lebanon under the framework of the EcAp MEDIII project. Hence, field surveys covering North, Centre and South of Lebanon aimed at fulfilling the Common Indicator CI3 species distributional range of marine mammals and CI4 population abundance of selected species under the Ecological objective 1 (EO1: Biodiversity).

Syria: NO REPORT PROVIDED

Türkiye (Mediterranean coast):

- <u>Surveys</u>:
 - Giant Guardians of The Deep Seas II "Visual surveys combined with passive acoustic monitoring between Marmaris and Anamur". Designed around the need to fill the vast data gaps in the Eastern Mediterranean and decrease the disparity between research levels in the Eastern and Western basins. The expedition spans a huge area (~22,000 km²) between Marmaris and Anamur in the Eastern Mediterranean Sea. Contact: DMAD Marine Mammals Research Association. During the surveys, rough-toothed dolphin (*Steno bradenesis*) first time recorded in the Turkish eastern Mediterranean waters (Akkaya, A unpublished data)
- <u>Publications</u>:
 - Akkaya, A., Awbery, T., Lyne, P., Nease, K., Haas, C., Murray, B., ... & Hannah Research Association. (2023). Short-beaked common dolphins of Dilek Peninsula National Park, South Aegean Sea: Preliminary results on group structure, spatial distribution, behavioural patterns, whistle characteristics and behavioural context. Journal of Cetacean Research and Management, 24(1), 77-93.
 - Çanakcı, T., Özden, Ö., Fuller, W., Erkol, I. L., & Tonay, A. M. (2023). Plastic lure ingestion by roughtoothed dolphin Steno bredanensis stranded on the northern coast of Cyprus. Journal of the Black Sea/Mediterranean Environment, 29(1).
 - Gnone, G., Bellingeri, M., Airoldi, S., Gonzalvo, J., David, L., Di-Méglio, N., ... & Azzellino, A. (2023).
 Cetaceans in the Mediterranean Sea: encounter rate, dominant species, and diversity hotspots.
 Diversity, 15(3), 321.
 - Herben, Y., White, E., Huisjes, I., Israpilova, L., & Akkaya, A. (2023, October). The Comparison of whistle characteristics of bottlenose dolphins (Tursiops truncatus) in the coast of Montenegro and the eastern Mediterranean Sea of Turkey: A Preliminary study. In 2023 IEEE International Workshop on Metrology for the Sea; Learning to Measure Sea Health Parameters (MetroSea) (pp. 346-350). IEEE.

- Tonay, A. M., Danyer, I. A., Taşkaya, İ., Danyer, E., Öznur, N., Dede, A., ... & Öztürk, A. A. (2024).
 Preliminary findings on Cuvier's beaked whale mass stranding in Northern Cyprus. Journal of the Black Sea/Mediterranean Environment, 30(1).
- Tonay, A. M., Karaman, K., Dede, A., Danyer, E., Danyer, I. A., Uzun, B., ... & Bilgin, R. (2024). Genetic investigation of Cuvier's beaked whale, *Ziphius cavirostris*, along the coast of Türkiye and Northern Cyprus, based on mtDNA sequences. Journal of the Marine Biological Association of the United Kingdom, 104, e14.

Major issue(s) or main threats or "hot" topics that have emerged during the said period for the Region:

Cyprus:

- Extensive underwater activities in the eastern Mediterranean region, and within the EEZ of Cyprus that may have a possible impact on cetaceans in the region. These activities include, but are not limited to military exercises, sonar testing, hydrocarbon exploration and exploitation activities.
- Lack of trained personnel, or permanent stranding network, to handle possible future mass strandings.
- Lack of infrastructure and knowledge on the island to hold and treat injured cetaceans found stranded or at sea.
- Lacking of baseline information on the characteristics of the underwater noise profile (both from anthropogenic as well as from natural sources).
- Lack of officially trained and certified MMO and PAM personnel in Cyprus.

Egypt: NO REPORT PROVIDED

Greece:

- Into the new proposed era, the anthropocene one, wild-life populations and species are forced to nearextinction due to the significant human impact. The populations of marine mammals in the eastern Mediterranean Sea have been affected by a series of threats, such as fisheries, shipping collisions, pollution to name a few. Some species census sizes recover rapidly (e.g. the monk seal), where others do not (e.g. the common dolphin), which their population remains unclear.
- One of the major impacts on populations is inbreeding, where despite a potential relatively large census size, a possible small population effective size (crucial for species survival) could lead to loss of fitness. It is important to understand their potential for survival, which can be influenced by genomic diversity.
- The quantification of health-status of marine wildlife and the assessment of main drivers of change, are critical
 steps towards implementation of appropriate management plans for protecting diversity. This research
 investigates the role of marine wildlife health in the context of disease cross-species transmission, in relation
 to conservation and evolutionary processes in marine mammals. To what extent the environment influences
 associated-pathological events and to what level the behavioral variability is correlated with certain pathogens
 and genotypes in marine mammals, are key-questions.

Lebanon: NONE

Syria: NO REPORT PROVIDED

Türkiye (Mediterranean coast):

- At the beginning of 2023, there was a case of mass beaked whale strandings in Cyprus (Tonay et al. 2024; Kontemeniotou et al. 2024).
- Continuous oil and gas related activities (seismic surveys, drilling) in the region have been observed with no concrete mitigation and legislation in place (e.g., obligation to hire an MMO during their activities) at a national level in order to assure the monitoring and conservation of cetaceans. It is critically important to develop noise monitoring and increase the capacity of relevant organizations and people in terms of measuring underwater noise. It is also important to assess the noise impact on aquatic organisms, including marine mammals, by low frequency sonars used during military training and activities.

Recommendations / suggestions for Improvement of the conservation:

Cyprus:

- Capacity building for the establishment of a stranding network and proper infrastructure to handle injured individuals.
- Scientific research in the fields of population and cetacean and environmental acoustic monitoring.

Egypt: NO REPORT PROVIDED

Greece:

- At what level does the environmental pressure, such as that imposed by rapid environmental change and direct human effects, remain a threat to the survival of marine mammals in the eastern Mediterranean?
- Create a data-base about all components of marine mammal's genomic disease vulnerability.
- Establish new insights and protocols on the existing stranded-network to map habitat diversity using novel, non-invasive methods, such is eDNA.

Lebanon: NONE

Syria: NO REPORT PROVIDED

Türkiye (Mediterranean coast):

As known, during their 5th Meeting (Tangiers, 2013), the ACCOBAMS Parties resolved that during naval exercises involving sonar or underwater explosions, all areas designated as 'Areas of Special Concern for Beaked Whales' in the Mediterranean Sea should be avoided completely within a 50 nautical mile buffer zone. In this regard, it may be recommended to put pressure on military forces and to question what they are doing about this issue. Especially companies (countries) carrying out seismic activities in the region should be advised to work with MMOs and to conduct PAMs on board.