

NEWSLETTER

LIFE CONCEPTU MARIS

LIFE20 NAT/IT/001371
"CONservation of CEtaceans and
Pelagic sea TUrtles in Med:
Managing Actions for their
Recovery In Sustainability",

The project is supported by the
financial instrument of the
European Union, for the
environment:
the LIFE Programme.



Partnership: ISPRA, Capo Carbonara
MPA, CIMA Research Foundation,
CMCC Climate, ÉcoOcéan Institut,
Anton Dohrn Zoological Station,
Triton Research, University of
Milano-Bicocca, University of
Palermo, Universitat de València,
University of Turin.

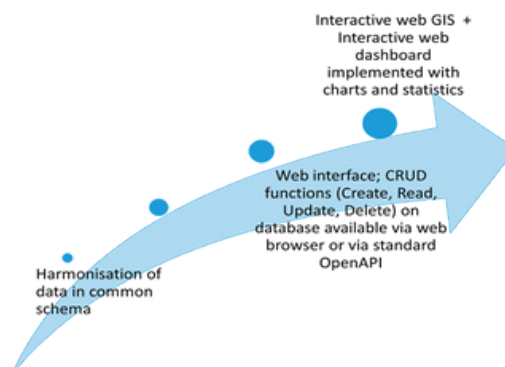


LAST UPDATES

- Creation of a common DATA BASE and data management
- Test, implement and fine-tune of integrated data collection approach
- New publication on "Frontiers in Marine Science"
- Participation in National Meeting on Citizen Science in Italy

ACTION A2.2, C1.1, E2.2: COMMON DATA BASE AND DATA MANAGEMENT

The dedicated SQL-based database with a Web-GIS user-friendly interface was set up to guarantee dataset harmonization, fasten database search and data extraction, guarantee interoperability with different GIS-platform and external databases. The system hosting the infrastructure is the National Biodiversity Network and it is OGC and INSPIRE compliant, and Open-API compliant for interoperability. Dedicated tools to visualize summary statistics and basic reports will be accessible to all users, while more specific functions are open to data-providers and managers.



On the **22nd of November at 10.30 to the 24th at 15.00**, 3 days practice on the Common Data Base, took place in presence at the ISPRA offices in Rome.



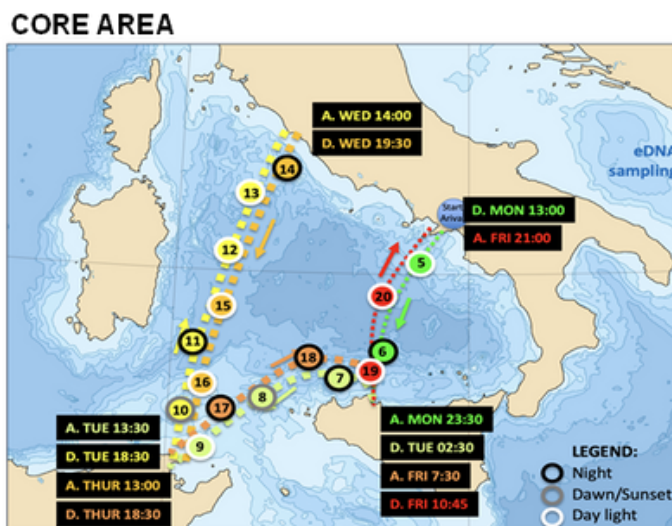
Next steps

- Guidelines and video-tutorials on data preparation and Database consultation;
- Database updated with 2022-2023 data;
- Marine Litter data harmonisation and inclusion in the new common DB
- Linked Milestones and their status: Milestone C1.1, Milestone E2.2 (31/12/2024) "Data acquisition on CEPTU species, food web, marine litter and maritime traffic".

A SPECIAL SUMMER

During the summer, more than 40 scientists from LIFE Conceptu Maris, together with dozens of specially trained volunteers, embarked in the central and western Mediterranean on the ferries of Balearia, Corsica and Sardinia Ferries, Grandi Navi Veloci, Grimaldi Lines, Minoan Lines and Tirrenia for the CEPTU visual monitoring, water samples collection for chemical and environmental DNA analysis.

ACTION C1.1. Test, implement and fine-tune of integrated data collection approach in the core area



CRUISE SMERALDA

3-7 OCTOBER 2022



CATANIA

7-11 NOVEMBER 2022

22-26 MAY 2023

16-20 OCTOBER 2023

27 NOVEMBER-1 DECEMBER 2023

ACTION E2.2 REPLICATION

The sighting data shows a high frequency of fin whales, sighted especially in the Pelagos Sanctuary, with up to 30 individuals in a single day. Striped dolphins and bottlenose dolphins were almost omnipresent, with hundreds of individuals observed along all routes. An increase in pilot whale was observed in the Ligurian Sea and along the French and Spanish coasts. High number of loggerhead turtle sightings were also recorded along the Italian and French coasts, and even in the usually less frequented areas of the Pelagos Sanctuary.

The data collected will be used over the next year to build much more accurate distribution models of these localised species and to identify any trends compared to past years.

ADRIATICO

20-22 June 2023.

Onboard Minoan - Grimaldi lines



**SPANISH CETACEAN
CORRIDOR**

2-5 July 2023. Onboard GNV



PELAGOS

1-2 September 2023.

Onboard Corsica-Sardinia Ferries



With the experiences of this summer 2023, the first phase of Conceptu Maris was successfully concluded, which saw the development of new sampling techniques, with a multidisciplinary approach. The skills and procedures tested and transferred to key areas of the Mediterranean, such as the Pelagos Sanctuary, the Spanish cetacean migration corridor and the Adriatic region, will now be systematically replicated during next autumn and in 2024.



This year almost twice the number of sightings of loggerhead turtles have been recorded at sea between French continental and Corsican or Balearic coasts compared to usual (ÉcoOcéan Institut). This species might have been frequenting more and more the northern part of the Mediterranean Sea. The increase in nests and their movement, in the western basin, to increasingly northern latitudes (this year for the first time a nest was also found in Emilia Romagna, ed.), it might be due to the combined effect of climate change, which makes previously inhospitable environments thermally suitable for the incubation of eggs and expands the general geographical range of the species towards north, and of the positive trend of the Mediterranean population due to over 40 years of active conservation at the main nesting beaches of the Eastern Mediterranean, in Greece, Turkey, Cyprus (Anton Dohrn Zoological Station).

Continue reading the summer report on the project website:

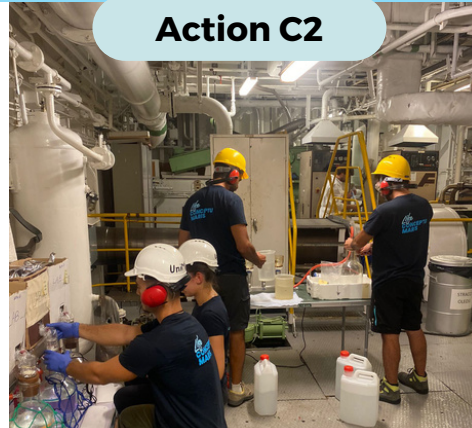
[CONCEPTU SUMMER REPORT](#)



ACTION C1.1 -E2.2 TEST, IMPLEMENT AND FINE-TUNE OF INTEGRATED DATA COLLECTION APPROACH

Linked to the development of the **Decision Support System (DSS)**

SAMPLES COLLECTED UP TODAY (coloured cells):	87 (of which 6 during sightings)
SAMPLES EXPECTED TO BE COLLECTED FROM TODAY UNTIL THE END 2023 (dark grey):	58 (at least)
SAMPLES EXPECTED TO BE COLLECTED IN 2024 (light grey):	216 (at least)
361+ OVERALL SAMPLES	



To date, **60.823 points of environmental variables** (temperature, dissolved oxygen, pH, and salinity) from real-time sensing have been sampled in the core and replication areas

Overall, more than 2500 litres of seawater were filtered;

- 600 samples were collected for the characterization of other key environmental variables, including 120 of Chlorophyll-a, 120 of TSM (Total Suspended Matter) and 360 of LGP (Latitudinal Gradient Project), all gathered from the 40 core area sampled stations;
- 492 SIA (Stable Isotop Analysis) samples were collected across 82 sampled stations, including sightings.

ACTION E4 CITIZEN SCIENCE

 Guidelines for citizen science involvement on ferry and Training Material

SUBMITTED

 Report on the results of the citizen science campaign

IN PROGRESS
09/2025

Since June 2023, with the support of shipping companies (Balearia, Corsica & Sardinia Ferries, Grandi Navi Veloci, Grimaldi Lines, Minoan Lines, Tirrenia) along 16 different routes in the Mediterranean, the interested public have actively participated as volunteers in the visual monitoring tasks on board the ferries together with CM biologists and researchers. After the theoretical training, followed online, and the open session with researchers to review the course contents, solve doubts and curiosities, citizens move on board the ferries for the practical experience.

To date, **263 applications** have been received, **96 citizens** have been involved in theoretical training and **49 have already embarked** for the training on-board. Soon there will be a second call for new volunteers, planning to reach by the end of the project at least 60 citizens to embark.



NEW PUBLICATION

LIFE Conceptu Maris researchers, through an in-depth review of past observations, have identified new potential statistical indicators. They tested these indicators to analyze the extensive dataset collected between 2008 and 2019 along various fixed cross-border transects in the Mediterranean. This data was gathered through the Fixed Line Transect Mediterranean monitoring Network (FLT Med Net) program, which is coordinated by ISPRA.

In the article titled "**Testing Indicators for Assessing Trends in the Range and Habitat of Low-Density Cetacean Species in the Mediterranean Sea**," recently published in the scientific journal *Frontiers in Marine Science*, the researchers compare the historical data on the distribution of three species: Risso's dolphins, pilot whales, and beaked whales. These species are concentrated in specific regions within the Mediterranean. The prediction models developed within Conceptu Maris have been validated by field observations, which likely underestimate the actual distribution of these animals. Nevertheless, some key findings have already emerged: the known important sites for the species confirmed the persistence over time, especially in the Western-Mediterranean. All species, however, exhibit changes in the distribution extent (contraction or expansion) and an offshore shift, possibly indicating exploitation of new areas or avoidance of more impacted ones.



[DISCOVER THE ARTICLE](#)



Arcangeli A., Atzori F., Azzolin M., Babey L., Campana I., Carosso L., Crosti R., Garcia-Garin O., Gregoriotti M., Orasi A., Scuderi A., Tepsich P., Vighi M. and David L. (2023) Testing indicators for trend assessment of range and habitat of low-density cetacean species in the Mediterranean Sea. *Frontiers in Marine Science*, 10, 893.

THE SECOND PHOTO CONTEST OF CONCEPTU MARIS ✨

"Deep Blue. Whales, dolphins and sea turtles in the offshore"

The 2023 photo contest of the LIFE CONCEPTU MARIS "Profondo blu" ("Deep blue") has the winners!

More than **two hundred images** were received. The selection of the winners was very difficult, given the quality of the material received. The evaluation criteria considered were the relevance to the theme of the competition (priority was therefore given to cetaceans and sea turtles), the "difficulty" of the documented scene (uncommon species, particular behaviors, action images) and the quality of the sent file.



AIXA MORATA with the pilot whale in "spyhopping". This term refers to the behavior of a cetacean that takes the head out of the water, in vertical position, to observe the surrounding environment above the surface of the water. The image is amazing, because it documents a particular behavior of a species, such as the pilot whale, which is not so easy to observe in the Mediterranean.





DIEGO BONAFÈ with an adult striped dolphin jumping, accompanied by a young one, the moment he breaks the wave to dive into the next. This cetacean is one of the easiest to observe in the open sea, but getting a photograph like this requires many skills, good equipment and even a little luck. The value of the image lies in the beautiful composition and the chiseling sharpness, which freezes the activity of the striped dolphins.



ELIA BIASSISI with a large loggerhead turtle, surrounded by pilot fish in the open sea. On the carapace of the reptilian grew tufts of algae. The image is interesting, because it documents the animal underwater, without you can see the bottom, as often happens with the photos of sea turtles. This is why it fits perfectly with the theme of the open sea promoted by the competition.





From 26 October to 3 November, the shots awarded in the 2023 edition of the LIFE Conceptu Maris photography competition were exhibited at the "Blue District" of Genoa on the occasion of the Science Festival, one of the most important European events for the promotion of scientific culture. The images were hosted in the exhibition space of the LIFE PINNA project, the European project that aims to protect and monitor the surviving populations of *Pinna nobilis*, the largest bivalve mollusk in the Mediterranean.

CONCEPTU MARIS AT NATIONAL MEETING ON CITIZEN SCIENCE IN PISA (ITALY)

From 24 to 26 November 2023, an important national conference dedicated to participatory science was held in Pisa, which involves the involvement of citizens in the collection of scientific data. At the Arsenals of the Republic of the Tuscan city, "The first steps of the national network" took place, the first conference of the Citizen Science Italia Ets association, founded a few months ago with the aim of enhancing this research approach.

At the event, LIFE Conceptu Maris participated with an information point, with images and videos created by Triton Research in collaboration with the project partners. Furthermore, during the morning of November 24, the researchers from the Marine Protected Area of Capo Carbonara, the partner responsible for the guidelines for the training of volunteers, presented the intervention "Get on board with the researchers", where some of the results of the Citizen Science marine campaign, launched in 2023 and still ongoing.



Follow us!



LIFE CONCEPTU MARIS

CONservation of CETaceans and Pelagic sea TURtles in Med: Managing Actions for their Recovery In Sustainability



*PSSA - Particularly Sensitive Sea Area

Proposed associated protective measures (APM):

In presence of Large - Medium Cetaceans

Recommendation to:

1. Navigate with particular caution
2. Voluntary speed reduction (VSR) between 10 and 13 knots
3. Keep an appropriate safety distance or speed reduction measure when observed or detected in close quarter situation.
4. Report their position to a designed coastal Authority;
5. Report any collision and near miss collision to a designated coastal Authority or directly here [qr code report iwc]
6. Watchkeeping arrangements for cetaceans surveillance – including the use of detection systems



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Coordinating Beneficiary:



Associated Beneficiaries:



Stazione Zoologica Anton Dohrn Napoli

