

EXPLORE



The 2024 collection of Global Underwater Explorers featured diving projects



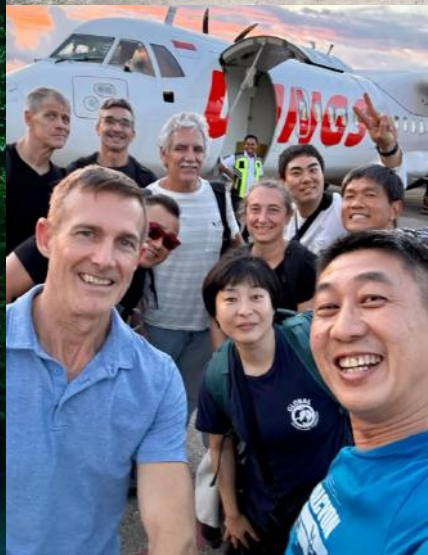
THIS YEAR: project briefs from projects in the UAE, Mexico, Indonesia, Brazil, Sweden, Croatia, Italy and more

BauBau Exploration



GUE PROJECT BRIEF - 2024

From the 15th – 20th April 2024, a team of highly experienced divers set foot in BauBau Indonesia in Muna Island, to conduct a mix of deep cave exploration and survey of caves that are largely unsurveyed officially. Hosted by Rock and Roll divers and supported by Halcyon Dive Systems. Team of Jarrod Jablonski, Mark Messersmith, Chris Maillot and Sam Meacham from CINDAQ, Gideon Liew, Su Eun Kim, Gemma Thomas, Jimmy Choo, and the team from Rock and Roll diving. Below is a selection of photos from the survey and exploration.



LOCATION:
Boeton, Indonesia,
Southeast Sulawesi

PARTNERS
Rock and Roll Divers

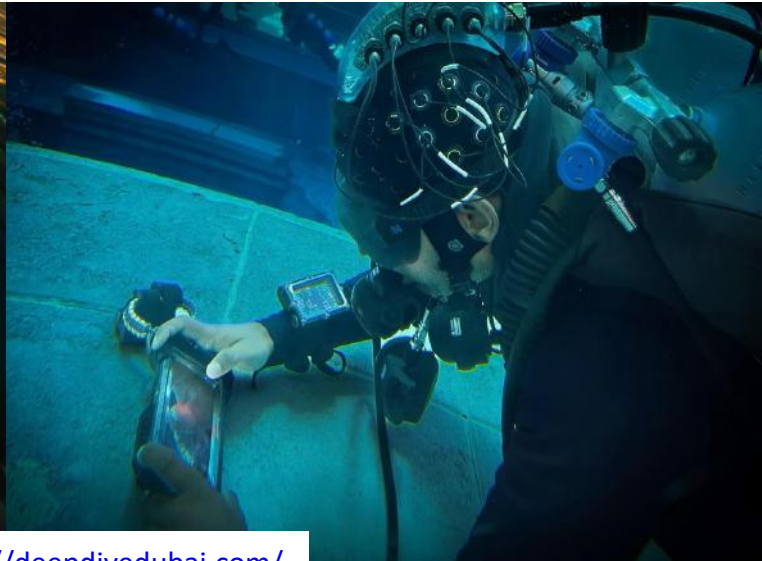
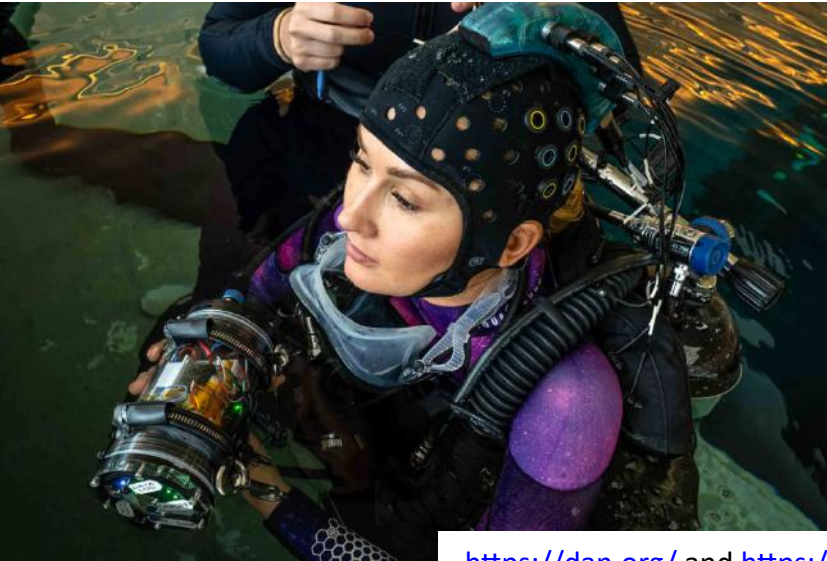
<https://www.facebook.com/rocknrolldiver>

Measuring brain activity Underwater: DAN x DDD



GUE PROJECT BRIEF - 2024

Maintaining unaltered mental function is crucial for dive safety. Supported by the Office of Naval Research, (@usnavyresearch), DAN is investigating the effectiveness of a head-mounted fNIRS device in assessing the neurological effects of diving.



<https://dan.org/> and <https://deepdivedubai.com/>

A research team from DAN (*Divers Alert Network*) spent a week at Deep Dive Dubai in June to conduct a series of experiments measuring brain activity during diving at different depths and breathing different gases. Our staff acted as test subjects and went through the three hour protocol.

Maintaining mental function is vital for safety and efficiency in advanced diving operations, but various underwater conditions can affect it. Currently, brain activity can't be directly measured underwater. This study aims to test a head-mounted fNIRS wearable device for measuring brain activity underwater while performing cognitive tests on a waterproof smartphone. The results will aid the development of underwater brain scanning techniques and identify limitations for research, commercial, and military applications.

Supported by the Office of Naval Research, (@usnavyresearch).

STATUS: results pending!

Research Disclaimer: This material is based upon work supported by the Department of Defense (DoD) Small Business Innovation Research (SBIR) Program under Contract No. W81XWH21C0061. Any opinions, findings and conclusions or recommendations expressed in this material are those of DAN and do not necessarily reflect the views of the DoD SBIR Program or the US Army Medical Research (USAMRDC).



LOCATION –
Deep Dive Dubai, UAE

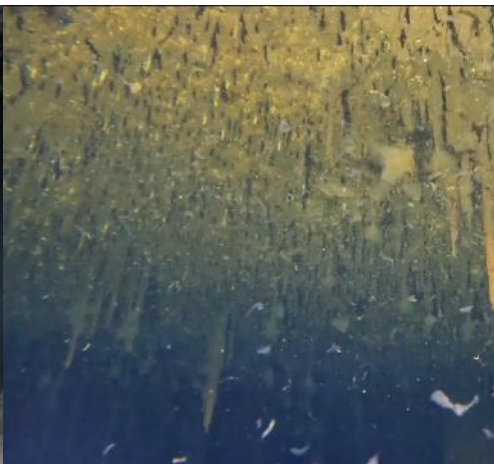
PARTNERS:
DAN and its collaborators, including many members / divers from @guehq recently tested the Triton Systems device at @deepdivedubai, the worlds deepest diving pool

Resurvey & Exploration of Cenote Cocom



GUE PROJECT BRIEF - 2024

A project from the group GoDiveMEX, a group of likeminded divers from the Playa del Carmen area, Mexico. Cenote Cocom is located in the north of Playa del Carmen in a rural area called 'El Cristo Rey'. The cave entrance is named after the landowners (Cocom), and the cave system was primarily explored by Spanish cave instructor and explorer Vicente Fito in 2019.



<https://www.emokegue.com/projects>

While the explored passages of Cenote Cocom are stretching approximately over 10kms distance, the cave system has both up and downstream entry points, although the upstream section is very short and much deeper. We have done multiple fun diving in the cave in the past years but we haven't had any detailed knowledge of how far the cave tunnels are going.

In the spring on 2024, we decided (with the permission of Vicente) to resurvey the entire system to create a map and also potentially explore new tunnels as well. The cave on the downstream section is characterized by dark tunnels, with tannic water, lots of sediment, frequent depth changes and restrictions.

These dives require very solid cave skills, good awareness and precise equipment handling. This project is helping to grow the local GUE community. As part of the project, our focus is shifts also on raising more awareness in terms of conservation around the Cenote area, as the contamination is clearly visible on many remote sections on the downstream part of the cave system.

STATUS ACTIVE:

The upstream section resurvey was finished in July 2024. Still working on the resurvey of the downstream section close to the section with Tren Maya.

HOW TO BE PART OF THIS PROJECT

This project is exclusive for GUE divers only. Min. GUE certification level is: GUE Cave 2. (GUE Cave Sidemount, GUE Cave DPV or GUE Cave Survey certification is a plus)

SPONSORS / PARTNERS:

GoDiveMEX



LOCATION:

Cenote Cocom, Playa del Carmen, Mexico.
20.759165262910667, -
87.07709427153453

CONTACT

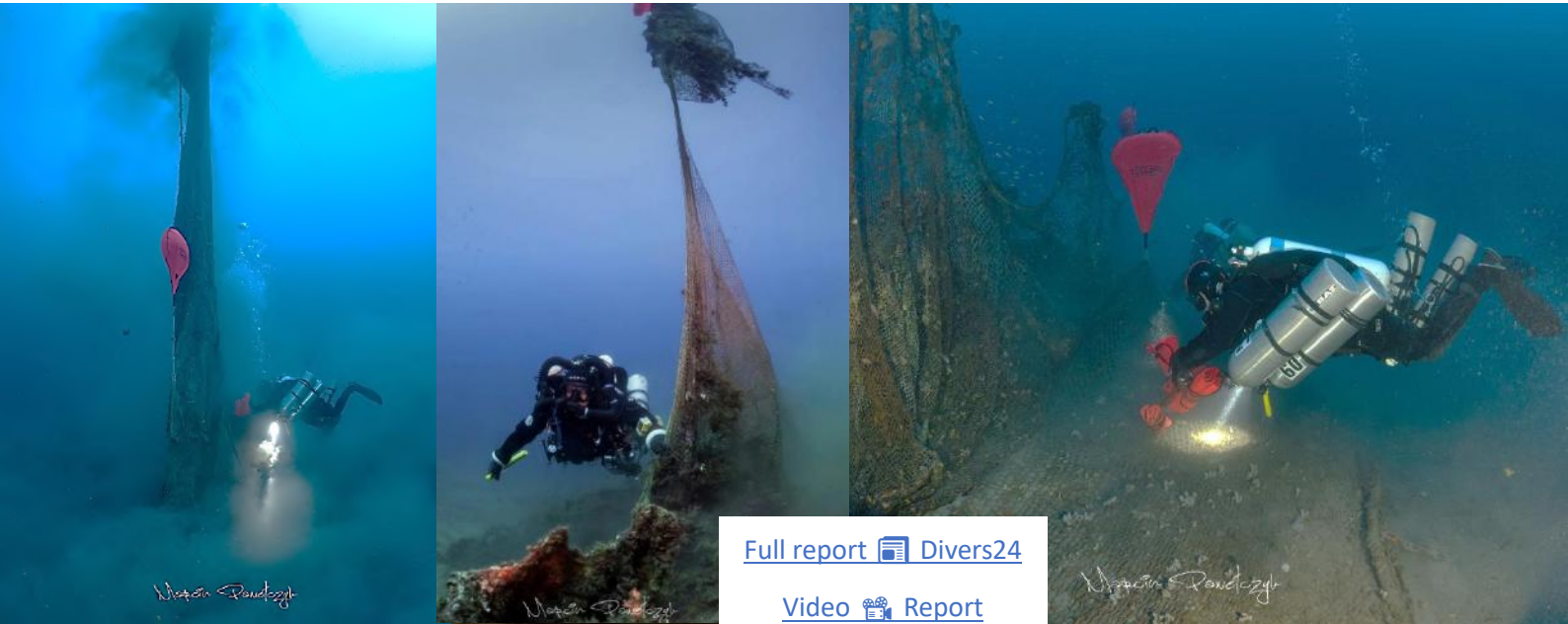
emoke@gue.com or
fran@godivemex.com

Clean the Gulf Project



GUE PROJECT BRIEF - 2024

The Gulf of Orosei is very well known for its' stunning cave systems and beautiful landscapes. This project was focused on the open water dives. Ghost fishing gear can be found everywhere – also in crystal clear waters of Sardinia. The goal of this project was to document the ghost fishing gear found in the area, clean it up and send for recycling.



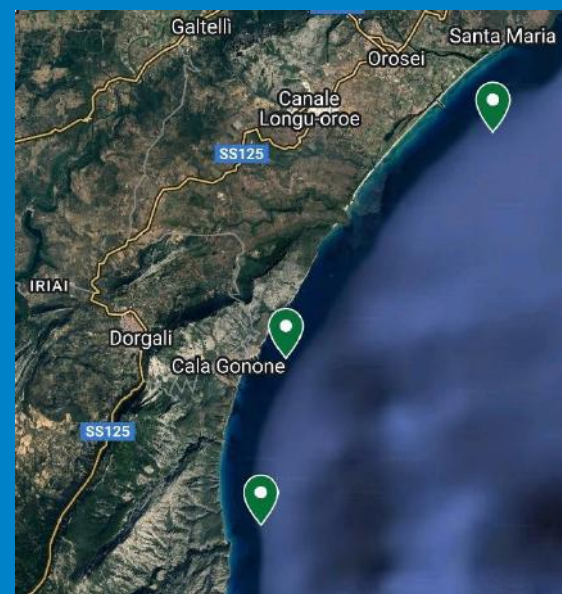
[Full report](#)  [Divers24](#)

[Video](#)  [Report](#)

Between October 7th and 11th, 2024, we conducted a series of cleanup dives at depths ranging from 30 to 60 meters. With the involvement of only five divers, we managed to achieve most of our objectives. We started with removing old gill nets and cages from a reef located about 300m north from the popular wreck Nasello. Afterwards we tackled a trawl net reported by the local fishermen. It got entangled on a small reef at a depth of 60 meters and was abandoned there about 30 years ago. Despite a slow decay over these years, the nylon and ropes were still strong enough to allow us retrieving the whole 400kg net in one piece.

Another outcome of this project is a **3D model** of the bow section of the KT12 shipwreck. We created this model after carefully removing fragments of ghost nets hanging on the anchor windlass. We were fortunate that, in parallel with our project, Daniel Ortega was running another edition of his scientific [Marine Genome Project](#). Thanks to his team's knowledge and equipment, we were able to observe microplastics in the water samples collected from the ghost nets on the KT12 shipwreck.

All the operations were discussed with our local representative – Fabio Sagghe du and approved by the local authorities - [Harbour Office](#) in Cala Gonone. With support from the [Municipality of Dorgali](#), all the waste we recovered was collected and disposed for further recycling.



PARTNERS

- [Ghost Diving Poland](#)
- [Divers24](#)
- [Base1 Sardinia](#)
- [Comune di Dorgali](#)
- [Cala Gonone Harbour Office](#)

LOCATION

Gulf of Orosei, Sardinia

CONTACT

Bartek Trzcinski
bat@gue.com

Coral Soul

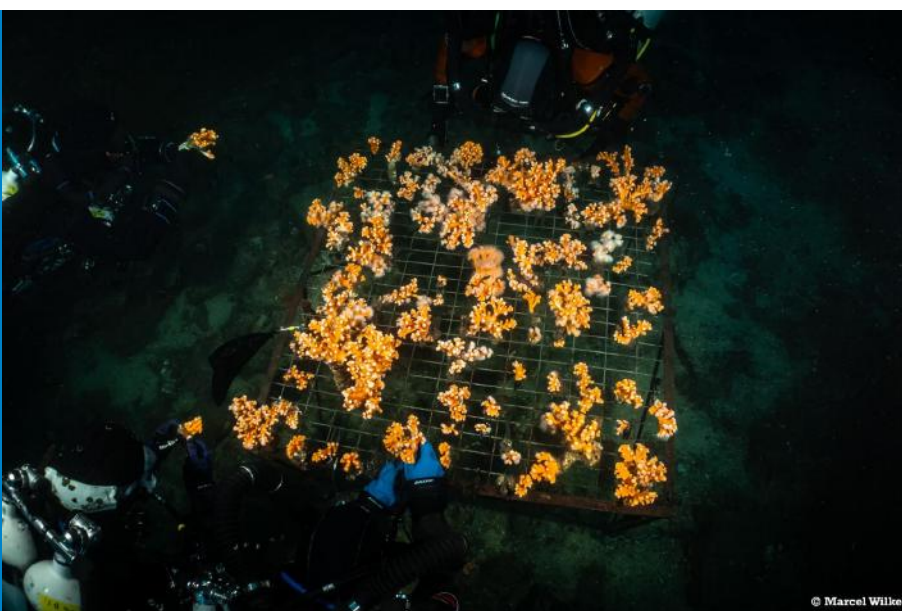
GUE PROJECT BRIEF - 2024

From the 01-10.10 a group of GUE divers supported the deep-sea coral restoration project "Coral Soul" in La Herradura Spain.



© Marcel Wilke

<https://differentscubaschool.com/> and <https://www.coralsoul.org/>



© Marcel Wilke

The Coral Soul Deep Core Project is a conservation effort in Punta de la Mona, La Herradura, Spain, focusing on the cold-water coral, *Dendrophyllia ramea*. This area's unique coastal upwelling zone offers ideal conditions for sustaining the local marine biodiversity. However, the coral population here has been severely impacted by human activities such as fishing and pollution, which can create infections amongst the coral as well. Tasks on this project include:

- Coral cleaning (removing epibiont parasites) and trash removal
- Coral repopulation (planting with epoxy)
- Nursey structure removal (or relocation, often using lift bags and DPVs)

With the working depth between 30-46 metres, environmental considerations such as currents, and the task loading, the complexities of this project are enhanced. However, this year, the 2024 iteration was even more of a success: 9 intense days of diving, 16 reef restoration dives, and a cumulative 400 minutes of decompression time.

There has been a 42% increase in species diversity in the restored area than the control, but there is still a long way to go to advocate for a Marine Protect Area status in this fragile part of the world.

STATUS: ACTIVE. future iterations are yearly in October. Contact erik@gue.com for more info.

HOW TO BE PART OF THIS PROJECT

Tech1/CCR1 divers. Ideally you have collected some experience in doing research underwater with GUE's scientific diver program.

PARTNERS:

Coral Soul / Coral Guardian / Differentscubaschool



LOCATION:

La Herradura Spain

CONTACT

erik@gue.com

Ghost Diving Poland



GUE PROJECT BRIEF - 2024

We spot, document and remove ghost fishing gear from the Baltic Sea. Our primary focus is on shipwrecks off the Polish coast, particularly in the areas around Gdańsk and Łeba..



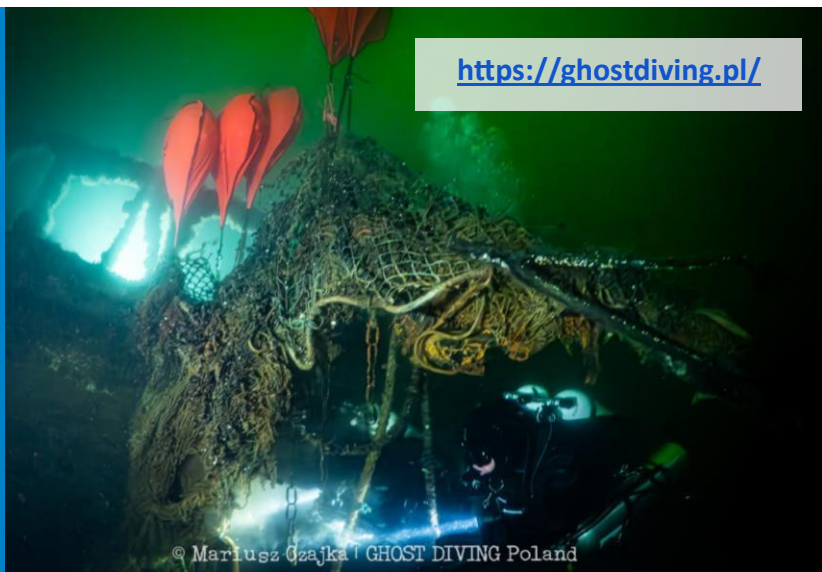
In 2024, the volunteer divers of Ghost Diving Poland completed 15 cleanup project days, with dives ranging from 20 to 55 meters in depth.

Some highlights of this year are:

- Documenting new sites for cleanup operations planned in 2025.
- Completing cleanup missions on three shipwrecks that were started in 2023.
- Participating in a harbor cleanup in Gdynia.
- Implementing an ROV to improve efficiency and safety of the project dives.

The headquarters of Ghost Diving Poland is located in Gdańsk. Diving conditions in the region are challenging and often dynamic, with divers frequently facing cold water, low visibility, and strong currents. Thanks to the dedication of local volunteers, most shipwrecks within the 0–25 meter depth range have been cleaned. We are now shifting our focus to deeper targets, which are more heavily entangled with ghost nets.

STATUS: ACTIVE. Running on average one clean-up per month



© Mariusz Czajka | GHOST DIVING Poland



© Mariusz Czajka | GHOST DIVING Poland

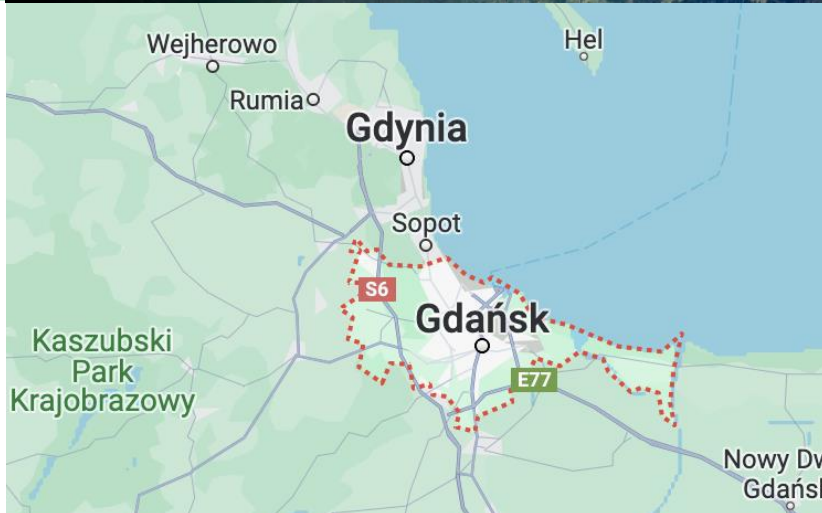
HOW TO BE PART OF THIS PROJECT

- Contact: kontakt@ghostdiving.pl for more info.

PARTNERS

This project couldn't take place without support of partners:

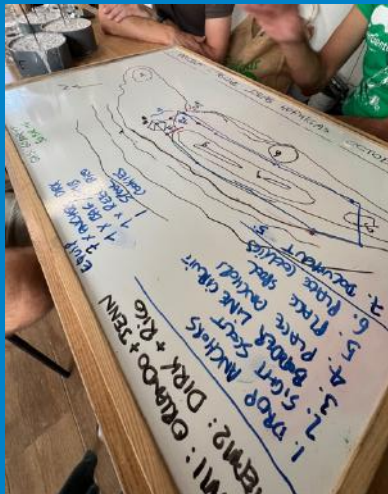
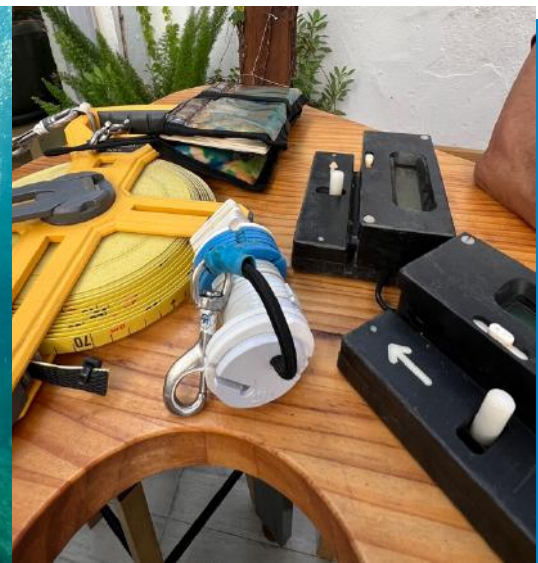
- Healthy Seas (the foundation that takes care that the ghost nets that we recover are introduced in circular economy and re-used in a better way).
- Hapag-Lloyd Polska (the Polish branch of Hapag Lloyd - an international shipping and container transportation company).



PB - Islas Hormigas

GUE PROJECT BRIEF - 2024

Islas Hormigas is the name of the marine reserve in Cabo de Palos, Spain. It is rated as one of the top diving destinations on the Mediterranean for the quantity and diversity of sea life and the excellent diving conditions (good viz and warm water). There are reefs and wrecks at all depths. This project is integrated with PB (ProjectBaseline.org) and collects data from several fixed stations. One of the main objectives of the project is to develop a complete 3D model of one of the reefs, Bajo de Fuera (probably one of the most beautiful and interesting locations on the Med), incorporating the many wrecks that lie between 30m/100ft and 70m/230ft depth.



After the Bajo de Fuera dive site was inaccessible due to bad weather conditions, the team made good use of the time in the nearby Descadagor Wreck site, starting photogrammetry the entire site, testing protocols, conducting MNemo surveys, and introducing new team members to Project Diving!

The project makes use of line laying, surveying with MNemo tools, photo and video for photogrammetry, 3D modelling with Agisoft and integration/modelling with Blender.org tool. There are also numerous project and training opportunities in the shallower reefs closer to the shore.

STATUS: ACTIVE. This project is ongoing and 2 project weeks are scheduled each year, normally April/May and September/October. Additional dives are conducted throughout the year.

HOW TO BE PART OF THIS PROJECT

- This project is open to all GUE trained divers, starting from GUE Rec 1.
- Normal project teams include GUE Fundamentals divers, Tech 1 and Tech 2 OC divers
- There is also RB80 and CCR divers.
- This is a unique opportunity to get exposure to project diving in all dimensions and depth ranges and experiences.



LOCATION

- Cabo de Palos, Murcia, Spain

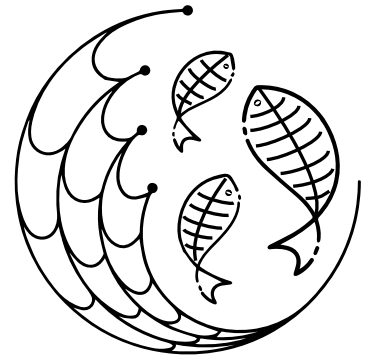
SPONSORS / PARTNERS

- GUE Premium Facility
www.IslasHormigas.com

CONTACT

- Email [islashormigas-@IslasHormigas.com](mailto:islashormigas@IslasHormigas.com) for more info
- Contact rico@gue.com

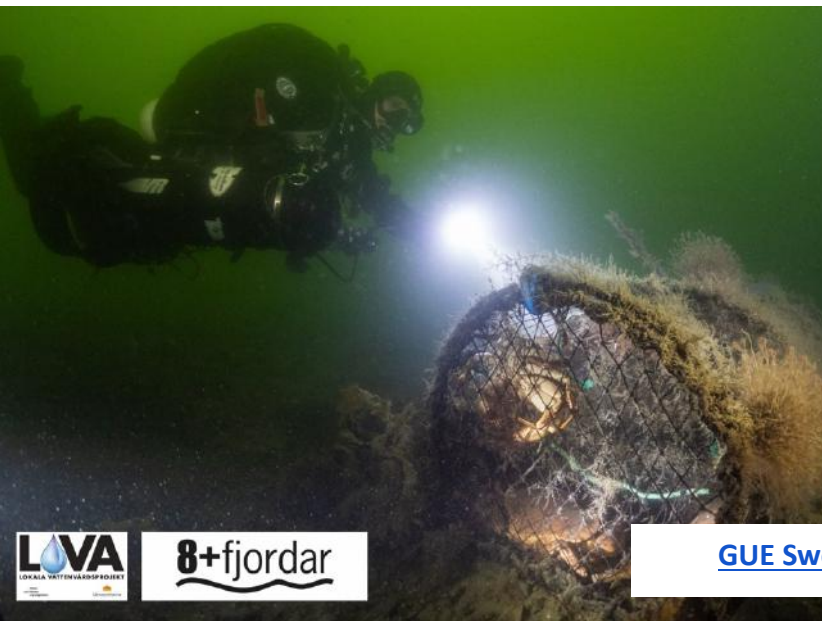
Operation Spöknät – Lobster Pots



Operation Spöknät

GUE PROJECT BRIEF - 2024

Operation Ghost Net - Lobster Pots is an initiative by GUE Sweden aimed at locating and recovering lost lobster pots, which would otherwise continue to cause ghost fishing and environmental issues in Swedish waters. Contact: spoknat@guesweden.se for more info.



GUE Sweden

We are pleased to share with you our ongoing project where we are surveying and recovering lobster pots together with 8+Fjords, a project run by the local authorities. With the help of DPVs, we can cover large areas and effectively find and map ghost pots for future recovery. Ghosts nets are abandoned or lost fishing gear that continues to fish and damage marine life. Through our work, we help to preserve our marine ecosystems and reduce the negative effects of these pots along the coast of Bohuslän on the Swedish west coast. Indeed, over one weekend in May, over 30 lobster pots were retrieved from the sea floor, along with other fishing gear that harm our marine life.

We used a boat as surface support, which can effectively collect the pots that the divers send up to the surface using lift bags. **STATUS: ACTIVE. Regular iterations**



PARTNER

- 8+fjordar
- Lova

Dolina Pai João Exploration Project



GUE PROJECT BRIEF - 2024

GUE divers @sergio.rhein.schirato, @egoroffk and @alexgarden returned to Dolina Pai João to continue the exploration efforts started in 2023.



[For more media, see here](#)

Given the previous experience, this year's logistics were prepared to support longer exposures, and safety plans were made accordingly, including, for the first time in an exploration project, a fully assembled hyperbaric chamber at site, and full support from Grupo de Bombeiros do Estado do Mato Grosso (@cbmmt).

Access to the cave is challenging, requiring a 2km hike, with a final descent of 100m in a very steep and rocky terrain. The presence of @cbmmt was essential to assure the removal of a diver out of the water in case of an emergency evacuation. Our friend Roberto Trindade (@trindade1817) was invited to elaborate safety plans and coordinate the on-site operations with @cbmmt.

As a result of this expedition, Dolina Pai João has now approximately 700 meters of passages explored and surveyed, at an average depth of 75 meters. The main tunnels seem to develop in a SW-NE orientation, at an average depth of 100 meters at the ceiling. Exploration files and maps, as well as a formal report, will be shared with local authorities, as they were in previous projects. Total dive times averaged 4.5 hours every day, and fortunately none of the safety apparatus present was ever used, except for bringing everyone peace of mind.

The project was approved by Secretaria do Meio Ambiente do Estado do Mato Grosso. UW images: @egoroffk

THANK YOU

A special thanks to Governo do Estado do Mato Grosso (@estadodematogrosso), Grupo de Bombeiros do Estado do Mato Grosso, Casa de Rocha (@casaderochahotel), @carlarochaitaly, @emmatogrossooficial, @bruno.dbarreto, and to the local community for all the support.



LOCATION

Nobres, Mato Grosso, Brazil

CONTACT

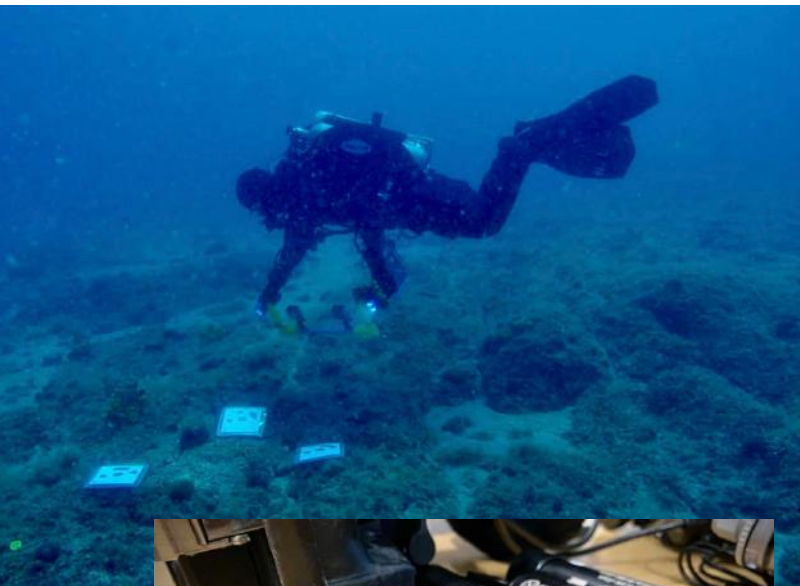
Contact Sergio Rhein Schirato directly

GUE Rec/Science Week



GUE PROJECT BRIEF - 2024

Exploring the Hidden Depths of Krk Island: From June 11th to 16th, an enthusiastic team of GUE divers gathered on the beautiful island of Krk in Croatia for an exciting citizen science project week. Our mission was to explore and document the underwater world off the shores of the small village of Glavotok.



www.correct-diving.com



Over the week, we:

- Mapped a thriving seagrass meadow
- Generated detailed 3D models of coralligenous reef habitats
- Deployed sensors and hydrophones to monitor environmental changes

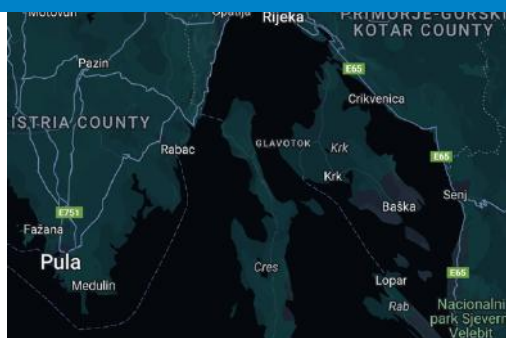
These efforts are crucial for the protection of these shallow water habitats and hopefully the data we collected will play a vital role in ensuring the preservation of these beautiful marine environments.

The energy and dedication of the team were truly inspiring. This initiative brought together 15 dedicated divers from diverse professional and diving backgrounds, marking the largest gathering of GUE scientific divers ever. CCR as well as Rec1 and Fundamentals divers played a key role in our mission's success, proving that passion and teamwork can achieve great things.

HOW TO BE PART OF THIS PROJECT

Accessible for anyone in GUE from Rec1 / Fundies to CCR. Scientific divers welcome!

Contact erik@gue.com for more information directly and how to get involved for further iterations.



LOCATION:

Glavotok, Krk,
Croatia

CONTACT

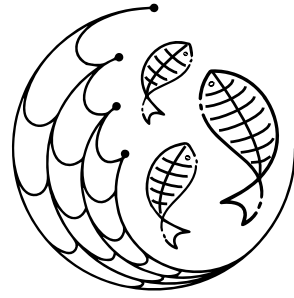
erik@gue.com

Operation Spöknät

GUE PROJECT BRIEF - 2024

Operation Spöknät (Ghost Net) by GUE Sweden ran over five weeks with teams of CCR1, Tech1, and Fundamental levels from several different countries. The weeks were busy with retrieving ghost nets. A selection of photos are below:

**THE RESULT: +1000kg nets retrieved!!
With more missions planned in 2025**



Operation Spöknät



[GUE Sweden](#)

STATUS: ACTIVE. future iterations are yearly in July. Dates are on the Event Calendar.

HOW TO BE PART OF THIS PROJECT

The minimum requirement is T1 and DPV1, but preferably CCR. In connection with the start of separate weeks, retrieval training will be offered for all divers. Contact GUE Sweden for more info spoknat@guesweden.se

PARTNERS

After finalising mapping and documenting ghost nets in the Baltic Sea in 2023, **Operation Spöknät/Ghost Net** started retrieving nets in Blekinge and Kalmar regions with support from the relevant Regional Administrative Boards through a **Lova financial contribution**.

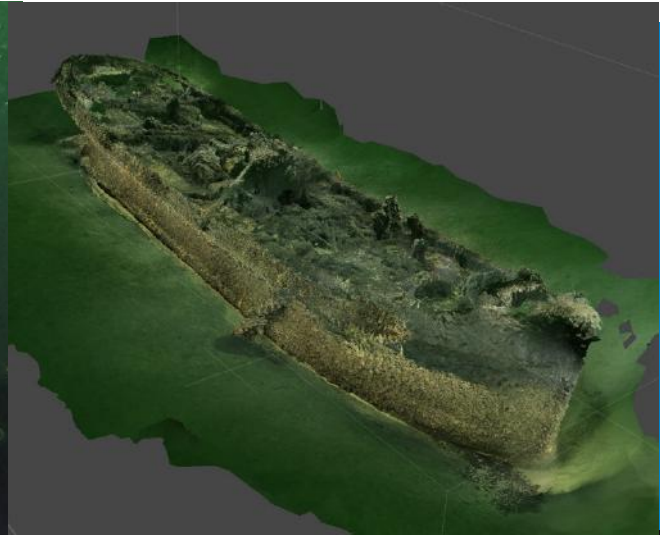
Baltic Wreck Week

GUE PROJECT BRIEF - 2024

5 days, 9 dives, 8 wrecks, 12 divers from 5 different countries, wreck diving workshops, photogrammetry training, ghost nets documentation, and FUN, FUN, FUN! During this year's edition of GUE Baltic Wreck Week we managed to dive on eight wrecks in the vicinity of Władysławowo, Hel and Jastarnia (Poland).



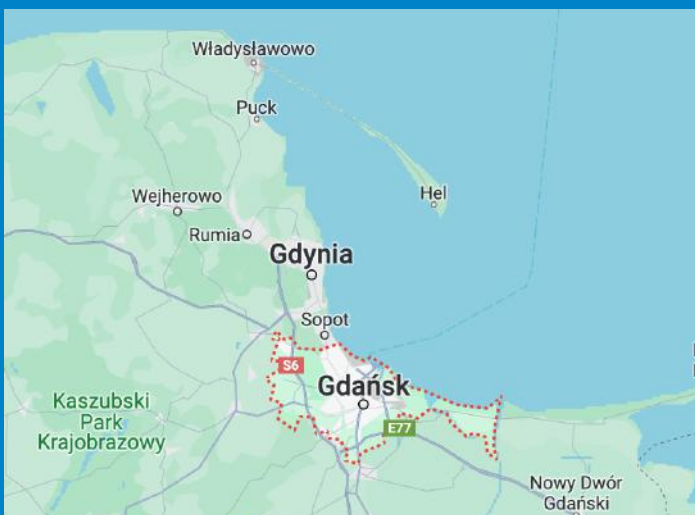
<https://divehouse.pl/en/gue-baltic-wreck-week-2024/>



Baltic Wreck Week 2024 had some elements of project activities although it was also just a fun diving trip. During the dives, participants had the opportunity to practice and improve their skills in the areas of wreck diving techniques, linework and underwater photogrammetry.

The volunteers managed to scan some of the wrecks like the Tugboat Strażak. See the link to the model [here](#). We also scanned some smaller fragments of other wrecks, and took photos of ghost nets.

STATUS: ACTIVE: YEARLY ITERATIONS



TAKE PART / PARTNERS:

- Contact bat@gue.com directly for more information and how to get involved
- We used the boat "THORR". It is a former patrol boat from the Maritime Coast Guard Department.

LOCATION

Port of Gdańsk / Władysławowo