## **Phreatic Organisation**

## **GUE PROJECT BRIEF - 2023**

Phreatic is a non-profit organisation based in Cala Gonone (Sardinia, Italy); founded by a group of extreme environment explorers, scientists, and researchers. We started our operations in 2014, and are active in the Mediterranean basin. Our projects cover an ever-growing spectrum of scientific subjects such as environmental processes, geology speleology, marine biology, and the conservation of delicate ecosystems / marine caves.





We study a diversity of subjects, such as hypogene environments, groundwater resources, marine caves, and their integration with coastal environments. Projects include: Map the Gulf (traditional and digital cartography), cave photogrammetry (developing methodologies), citizen science weeks, and sediment eDNA sampling in collaboration with the "Marine Genome Project". Specific projects include:

- Grotta del Fico Activities Survey and cartography of Sump One (using mNemo and SUEX Sinapsi DPVs to systematically gather polygon line data). The team has also created photogrammetric models of one the most geologically complex caves, which now has its own website section.
- Utopia System surveying and mapping the largest and deepest cave in the Gulf of Orosei.
- Phreatic Science Week testing new procedures for sampling water, sponge, and sediments, investigating the health of seagrass meadows, and identifying ghost nets on wrecks.
- Bue Marino Monitoring Project researching tidal influences on the dynamics and habitats using water sensors, data loggers, and temperature sensors. The mission also involved sampling aquatic cave fauna from the Middle Branch (discovering Blue American Crabs).
- Sa Conce e Locoli Project the exploration of the Monte Albo cave system, producing a documentary, checking dry leads, and expanding capacity for new team divers. Research activities included: placing traps and probes to collect biological and water samples respectively, and a dye-trace container to be capsized during the upcoming winter floods, to indicate timing of the changes in the water levels.

## STATUS: ACTIVE. We organise projects and citizen science initiatives each year, open to diverse backgrounds.



## HOW TO BE PART OF THIS PROJECT / CONTACT

• Contact us at <u>info@phreatic.org</u> for the current project calendar, to join an existing project as a volunteer, or to propose your own project.

LOCATION: Cala Gonone, Sardinia, Italy

SPONSORS / PARTNERS: see below

SCALE

