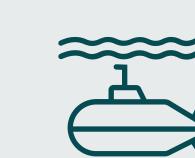


From seabed to surface: a journey of discovery



Zones of the ocean

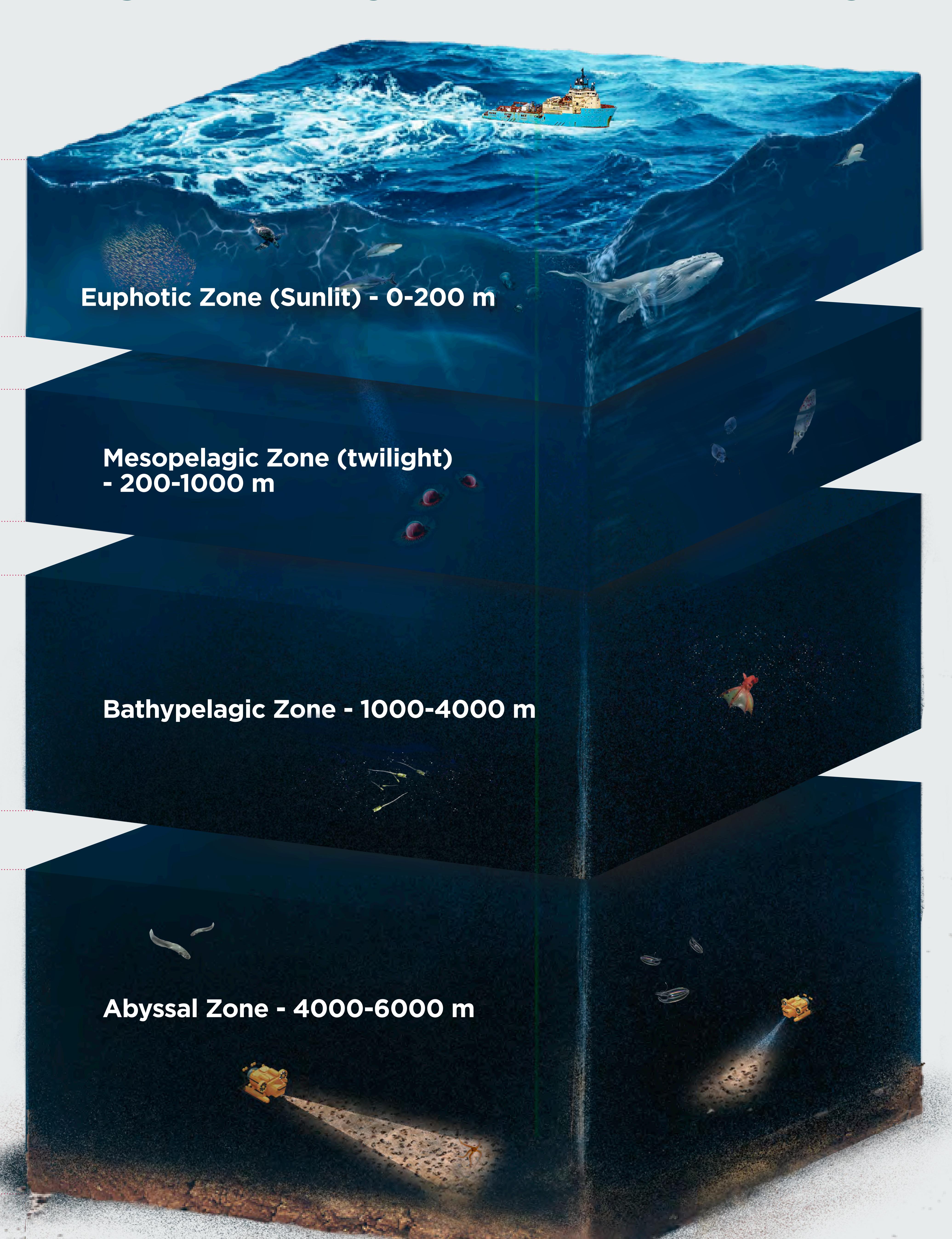
The top layer of the ocean, nearest the surface (also called the sunlight layer) where photosynthesis occurs. Life here includes diverse microbes to whales and seabirds.

This zone is home to a diverse and abundant fauna of microbes and communities of zooplankton and micronekton that migrate to the euphotic zone every night. Many species such as tunas, whales and swordfish feed in this zone.

Known as the 'midnight zone' the only light here is from from biolumenesence. At these depths the communities of animals are the least explored on the planet. Inhabitants such as gelatinous filter feeders, anglerfishes, squids and a diversity of plankton reside.

Benthos

The Abyssal Zone alone makes up over 83% of the ocean and covers 60% of the Earth. 'Benthos' means near, on or in the seabed. Demersal scavengers, suspension feeders, filter feeders, crustaceans, echinoderms, worms, microbes, porifera (sponges), cephalopods (e.g. octopus).



ASPECTS OF THE DEEP-SEA DISCOVERY PROGRAM

Through dozens of independent studies we are building a more complete picture of habitat connectivity, and how it relates to the distribution and function of deep-sea organisms and the overall structure of their communities. Our studies will look comprehensively at:

Surface Biology
Pelagic Biology
Benthic Biology
Bathymetry
Seabed Function

as well as:

Physical & Chemical Oceanography
Collector Test Impact Monitoring
Plume Modeling
Habitat Mapping
Database Development
Digital Twin and Adaptive
Management System Development

Contributions to science

Beyond analyzing the impact of our operations, we will make important contributions to science, medicine and technology. We are partnering

with researchers, sharing our deepsea biological specimens and sediment samples with researchers, and increasing humanity's knowledge of the deep sea.



Our Science and Research Partners



















Our Science and Research Partners