

Falcon Explores Mountain



The ocean conservation organisation Oceana, headquartered in the USA, has explored a number of undersea mountains in the Atlantic and Mediterranean using the small, deep-swimming Falcon DR ROV. The 1,000 metre-rated Saab Seaeye ROV enabled the organisation to record many species and habitats needing protection and conservation, ranging from carnivorous sponges to lobsters and sharks.

This was the first time that such an enterprise has been undertaken by an NGO, according to executive director of Oceana in Europe, Xavier Pastor, who explained that efforts to preserve biodiversity have so far overlooked deep-sea areas.

Oceana started the current project some 240 kilometres off the Portuguese coast in the range of marine mountains called the Gorringe Bank. Scientists filmed algae forests and hundreds of species, and noted the ecological value that undersea mountains, called seamounts, offer to many species including whales, dolphins and swordfish.

Deploying the Falcon for hundreds of hours of filming has enabled Oceana to gather essential scientific data. Being able to use transects – the more complex operation of moving the ROV along a path, rather than directly up and down – has given a more comprehensive view of the area.

Its five thrusters make precise manoeuvrability possible and keep the vehicle steady in strong currents whilst filming and collecting samples when needed.

Oceana also benefit from having an ROV that is small enough to be manhandled from its vessel, yet has advanced distributed intelligence technology that allows a host of advanced systems to be fitted. These include systems such as video and the high definition cameras manufactured and supplied by Marine Vision, who also supplied the ROVs.

The Falcon DR, operated by Instalsub for Oceana, came over from the Gulf of Mexico where Oceana used it to assess the long-term impact of the *Deepwater Horizon* spill on marine ecology in the area.