

DATA DIVE

Our Correspondent, October 15, 2008



Dr Matthias Hammer is reminiscent of a comic book hero. Educated in England at Oxford and Cambridge universities, this German-born biologist is also an action man, a former member of the German Parachute Regiment and an avid diver.

His current occupation, as managing director of Biosphere Expeditions, brilliantly fuses his passions for science and adventure and has taken him round the globe – most recently, to Oman – in pursuit of data to aid conservation.

Matthias founded Biosphere Expeditions in 1999 in response to a suggestion, towards the end of his PhD, that he take paying guests on the type of expeditions he was already arranging. "It was a revelation – the idea I'd been looking for," he said on October 9, a day after he returned from a reconnaissance diving expedition in Musandam that is being sponsored by HSBC.

Biosphere Expeditions arranges wildlife research and conservation expeditions that allow paying guests (ie non-scientists) to get hands-on experience of wildlife conservation, working out in the field with local scientists.

The Musandam reef project is not the company's first venture in Oman – for several years it has run expeditions to Dhofar to ascertain the status of the Arabian leopard – nor is it the first related to coral reefs. Biosphere Expeditions also runs projects on reefs in Honduras.

Like the Honduras project, the Musandam reef expeditions are part of an international coral reef monitoring programme called Reef Check. The Oman studies aim to track reef health and the human impact on the Musandam penin-sula, and the results will be made available to the government in support of sustainable eco-tourism and conservation policies.

The data recorded during the recent expedition, and hopefully those to follow, reveal the health of the reefs. In order to obtain this data, divers initially lay a 100m tape across a reef. After a pause of 15 minutes (to allow the fish to settle), they return to the reef to count the fish along the length of the transect line.

Each diver carries a 2.5m-long pipe, which sets the boundary for the area to be studied; since they work in pairs, the divers record the fish, invertebrates and substrate that occupy the area 2.5m to either side of the transect tape.

Volunteers and experts on the inaugural project in Musandam logged sightings of a limited number of indicator species – underwater creatures that are simple to identify and count and which can indicate the health of a reef. Lobsters, for example, are easy to spot and, if absent, suggest overfishing.

In fact, the Musandam reefs do not appear to be overfished. "What we saw was incredible," Matthias said, adding that the diversity of corals in Musandam is one of the best in the world, with over 200 species present.

Oman is fortunate, he said, because in addition to relatively few divers, the country is not burdened by the grinding poverty in existence elsewhere in the world, which can put pressure on reefs. He noted, too, that flamingo tongues and coral banded shrimps were plentiful, two species that elsewhere are widely collected for the aquarium trade.

HSBC's sponsorship of this reef study reflects its commitment to the Equator Principles and also its pledge to support local schools, according to Ghada al Yousef, manager, corporate communications, HSBC. On October 11, Matthias gave lectures about the reefs to students of two schools, the hope being that the pupils will gain an awareness of what he described at Jaber bin Zaid School as the "paradise of life under the waves".