

Red-letter day for marine education



Some of the innovative exhibits and interpretation panels at the Panacea environmental centre recently inaugurated at Dwejra in Gozo. Photos: Adam Gauci

Much headway has been achieved in recent years in terms of local marine conservation, particularly the designation of Marine Protected Areas (MPAs). There are currently five such areas – Rđum Majjiesa, Dwejra, Filfla-Għar Lapsi, Mgarr ix-Xini and the North-East MPA. They encompass 18,000 hectares or five per cent of our territorial waters and include vast swathes of *Posidonia oceanica* (Neptune Grass) meadows.

Monitoring of indicator and protected marine species, notably the Noble Pen Shell (*Pinna nobilis*) has also been embarked upon.

*The sea, once it casts its spell,
holds one in its net of wonder
forever*

- Jacques Cousteau

However, three notable lacunae that inhibit effective marine conservation are the lack of marine environmental education, the lack of enforcement at sea and the lack of approved and implemented management plans. For example, the management and action plans compiled for the Rđum Majjiesa and Dwejra MPAs speak volumes about zoning and regulation of fishing activities in these areas but they are still on hold awaiting the green light.

Last Tuesday was a red letter day for marine education in Malta with the inauguration of the Panacea (Promotion of Marine Protected Areas through Environmental Education Centres) environmental education centre at Dwejra. This is the first such centre exclusively dedicated to marine biodiversity on our islands and includes innovative teaching resources.

These include interactive interpretation panels, an audio-visual panel which features a quiz on marine biodiversity for children, two underwater documentaries and resin replicas and models of a large number of underwater landscapes and marine species.

The centre also has a room, equipped with visual projection facilities, to host small groups of students or visitors for talks on topics related to the marine environment. This will be made available to any NGO involved in the management of the local marine environment. Three other similar centres should be opening in Sicily in the coming months.

The centres may be seen as providers of edutainment, where visitors enjoy an educational experience through a kaleidoscopic overview of marine life and habitats in the six MPAs included in the Panacea project. The centres present scientific marine issues in layman's terms so even visitors with no scientific background can understand the complexity of marine environments, their links with land ecosystems and the role of MPAs.

Marine biodiversity is an important asset of the Mediterranean where an estimated 15,000 to 20,000 species have been recorded to date, of which about 25 per cent are considered to be endemic to the area. The relationship between this diversity and fishing has also been made at

The Dwejra centre where a small model of a kannizzata (the float-and-palm leaves contraption used to catch dolphin fish or lampuki) is also featured.

The main goal of the Panacea project, which is part-financed by the EU under the Operational Programme I Italia-Malta 2007-2013 programme, is to promote biodiversity and the marine assets of four Sicilian (Capo Gallo/Isole delle Femmine, Ustica, Plemmirio and Isole Pelagie) and two Maltese (Dwejra and Rdum Majjiesa) MPAs.

The two Maltese partners taking part in the project are the University of Malta (International Ocean Institute – Malta Operational Centre) and San Lawrenz local council. This project aims to promote a code of best practice through the setting up of environmental educational centres in four of these MPAs.

Hopefully these centres will lead to a greater appreciation of the value of and scope behind the six MPAs among different stakeholders, including students, divers, fishermen, boat owners and the public. At the same time, the Panacea project will promote the continued monitoring of these protected areas.

In fact, despite being spread over hundreds of kilometres (the islands of Ustica and Lampedusa are, in fact, over 350 kilometres from each other), the six project MPAs share some common problems, including unregulated human activities within their confines, lack of resources and manpower and their relatively small size. In fact, the area of all six MPAs combined extends for less than 50 square kilometres, with the smallest being that of Dwejra and the largest being that of Lampedusa/Linosa (Isole Pelagie).

The sea's appeal is all-embracing. Jacques Cousteau once said "The sea, once it casts its spell, holds one in its net of wonder forever", while John F Kennedy also famously stated: "We are tied to the ocean. And when we go back to the sea, whether it is to sail or to watch – we are going back from whence we came."

Entrance to the Dwejra environmental education centre is free until the end of the project and thereafter will be against a small/nominal entrance fee to cover the centre's running costs. Any queries about group and school visits and the centre's opening hours should be addressed to San Lawrenz local council on e-mail sanlawrenz.lc@gov.mt or tel. 2156 3556.

For further information regarding the project visit www.panaceaproject.net. Additional online resources for educators may be found at the National Marine Educators Association website www.marine-ed.org and at the IOI Kids website www.ioikids.net.