

## Trieste hosts marine biology congress



Trieste's city hall is one of the majestic buildings in the Piazza dell'Unità d'Italia, one of Italy's finest squares

Recently I was privileged to be the first Maltese to take part in the annual congress of the Società Italiana di Biologia Marina (SIBM), which this year was held in Trieste.

SIBM, founded on June 4, 1969, in Leghorn, aims to enhance and promote the development of marine biology, not just in Italy, but also in the Mediterranean. It is organised into five interest groups or 'committees': Aquaculture, Benthos, Nekton and Fisheries, Plankton and Management of Coastal Resources. Its current president is Angelo Tursi.

From just 110 members in 1969, SIBM now has 830, including some in Monaco, France, Spain and Malta.

During SIBM's annual congress members present the results of their most recent research for evaluation and discussion. Such presentations are written up as scientific papers which, after peer review, are published in SIBM's scientific journal, *Biologia Marina Mediterranea*.

The congress proceedings fell under three main themes: historical reviews of marine ecosystems; the impact of aquaculture on coastal ecosystems, and safeguarding and managing coastal resources.

This year's congress was held on the water's edge within the Stazione Marittima, a stone's throw away from Trieste's aquarium.

A cursory look at some of the presentations and posters submitted at the congress reveals topics with a large bearing on issue of current concern also in our islands, such as the study of microbial indicators of aquaculture's impact on sea quality, a study on 'new' species used for bioremediation to mitigate such an impact, cutting-edge proposals for the sustainable development of aquaculture in coastal waters, the monitoring of benthic habitats' response to protection measures, a detailed case study on the management of the Miramare Marine Protected Area, monitoring the state of health of *Posidonia* meadows, a study focusing on the management of *Paracentrotus lividus* (a commonly farmed sea urchin) populations to prevent their over-exploitation, a study on the biology of the swimming crab *Portunus pelagicus*, a Lessepsian migrant (i.e. a Red Sea species which has recently colonised also the Mediterranean Sea), the use of macroalgal species as ecological indicators and a welter of others.

At the congress I presented a study entitled "The composition of the nocturnal motile fauna from the upper infralittoral fringe of sandy beaches in the Central Mediterranean: are there any implications for conservation?", part of an ongoing Ph.D. study in which shallow water faunal assemblages from around sandy beaches of several Central Mediterranean islands like Malta, Gozo, Lampedusa, Sicily and Favignana were sampled over a two-year period as a comparative study and also to identify any overriding arguments for the conservation of this poorly-studied environment - i.e. the surf zone of sandy beaches. The paper, co-authored by Professor Patrick J. Schembri, has been submitted for publication to *Biologia Marina Mediterranea*.

One particular comment from the floor after my presentation, from none other than world-renowned French biologist Denise Bellan-Santini, made me cringe. She wondered why Maltese authorities persevered in the clearing of *Posidonia* banquettes from the shoreline in the winter months and from non-frequented areas despite research underpinning the ecological significance of such transient habitats. I was quite at a loss for words and referred her to the MTA, which is responsible for such practice.

## **Fascinating Trieste**

You might be forgiven for inherently associating Trieste with the infamous cold bora (NE) wind, blowing from the Balkans. But Trieste is certainly more than this, boasting a whole kaleidoscope of different cultures.

Rising over Trieste is the majestic Faro della Vittoria (1937) which besides being a far from obsolete lighthouse is also a memorial to the sailors who died in World War I.

The earliest buildings in Trieste date back to the fifth and sixth centuries, like the San Giusto Basilica. Trieste was subsequently part of the Eastern Roman Empire and then came under Charlemagne's Holy Roman Empire. It eventually became part of the Austrian Empire, and it was only after the end of World War I in 1918 that it became part of Italy.

The Austrian influence is still felt in every nook and cranny of the city, especially in its architecture.

The allure of Trieste is also due to the natural landscapes near the city itself. Many wonderful sites can be reached by bus from Trieste, two of which I have listed below.

The Rosandra Valley, in the extreme south of the Friuli-Venezia-Giulia region on the border with Slovenia, has been formed by erosion by the Torrente Rosandra which attains its most spectacular expression as a 60 m-high waterfall. The whole valley sides are punctuated with caves and cravices, making it an ideal training ground for aspiring rock-climbers and mountaineers. Recently, black pine has been transplanted within the valley, hence splattering it with a greener look.

One can easily stroll into Slovenia by walking past the quaint, languid village of Bottazzo.

No visit to Trieste is complete without a visit to the stunning Miramare castle, which abuts on the sea at the tip of a promontory. The area's innate beauty captivated Archduke Ferdinand Maximilian who chose it, together with his consort Charlotte, to build his castle. It was opened on Christmas Day, 1860, but the archduke lived there for just three years since he left for Mexico in 1864, where he was offered the crown at the urging of Napoleon III of France, only to be shot by the rebel troops led by Benito Juarez.

The area has been under the management of World Wildlife Fund Italy since 1986. The Castelletto (little castle) is used by WWF as an environmental education centre and for displays.

Although there are 25 Marine Protected Areas in Italy, Miramare is one of just three fully functional ones. Just a dive into the park's 30 hectares of protected waters in the core area (plus another 91 hectares of buffer) regales one with views of a welter of different fish species and different marine habitats, which makes you wonder why in Malta we are dragging our feet to have our own first MPA (Dwejra).

The park's terrestrial part is not to be overlooked, however, since it is endowed with such jewels of flora as the rare Ginkgo, considered by some as a living fossil. No wonder this part of the park is always teeming with groups of schoolchildren on educational visits.

Certainly worth a visit too are the karso park (a typical example of Dolomite karstland and its associated lush vegetation) and the Giant Cave at Sgonico, reputedly the world's largest underground cave with a width of 65 m, a length of 130 m and a height of 107 m. The Trieste area is endowed with over 2,000 caves.

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