

Dwejra Heritage Park: A Distinctive Natural Setting in the Island of Gozo

MARIA THERESA FARRUGIA

Background

Located on the western shore of the island of Gozo, Dwejra is a site which has always been close to the heart of all environmentalists. The agglomeration of geology, geomorphology, flora, fauna, archaeology, history and ecology along this site presents an experience which is not easy to forget and contributes in making Dwejra a site of extraordinary scientific importance and heritage value.

A Geological and Ecological Haven

The most prominent geological features at Dwejra Bay include Ħaġret il-Ġeneral or, as it is popularly known, Fungus Rock, the Azure Window (Tieqa Żerqa) and the Inland Sea.

Fungus Rock is a precipitous rocky islet which stands at the mouth of the circular basin of Dwejra

Bay and rises to around 50 metres above sea-level. For a long time it was thought to be the only home of the parasitic flowering plant “fungus melitensis” (*Cynomorium coccineum*) which was considered to be a sovereign remedy against a host of medical conditions. During the Knights’ period access to the rock was strictly forbidden and the sides were scarped to render it inaccessible. Severe penalties, such as rowing on the Order’s galleys, were inflicted to trespassers or others found in possession of the plant. However, during the eighteenth century and up to the 1830’s the rock was connected to the mainland, leading to a revival of interest in the plant’s medicinal properties.

The Azure Window is another spectacular natural landmark in Dwejra. This huge natural arch of Lower Coralline Limestone formed as a result of wave erosion is, one of the best examples of such a feature present in the Maltese Islands.



Environmental and geomorphological features at Dwejra Bay



The Azure Window at Dwejra Bay

The Inland Sea is an inland lagoon at Dwejra, which was probably created millions of years ago when a limestone cave collapsed. The shallow inland lagoon is linked to the sea via a 100 metre cave in the cliff. The sea is used by fishermen and bathers, and is also a very popular diving spot. On calm days, small fishing boats carry visitors out to sea through this cave in order to view both Fungus Rock and the Azure Window.

Dwejra also features many typical ecological systems of the Maltese Islands which support a rich biota that includes several species or subspecies that are endemic, rare or that have a restricted distribution in the Maltese Islands. Moreover, its topography and location attracts migratory birds of various species seeking a sheltered place. The cliffs provide good nesting sites for the Cory's Shearwater and the Yelkouan Shearwater as well as for Malta's National Bird – the Blue Rock Thrush.

The sea around the Dwejra area also supports a

wide range of habitat types and a high biodiversity concentrated along a relatively short stretch of coastline. A number of the habitats present in this area are of high ecological value, while others are rare and/or protected. These include a large variety of assemblages of photophilic algae that require ample light for survival. In shallow waters at the head of bays and inlets, seagrass species also occur. Furthermore, a rich fish fauna occurs in the Dwejra area that includes both species of the water column (pelagic fish) as well as those that live close to the bottom (demersal fish).

All the features, habitats and the species that Dwejra supports, have throughout the years faced adverse pressures from pollution and other forms of human disturbance.

Cultural, Historical and Archeological Landmarks

The area surrounding Dwejra has truly witnessed human activity in one form or another for more than

7000 years. This has induced to the development of various cultural, historical and archeological landmarks.

Pottery shreds recovered from the Ghajn Abdul site have indeed indicated the presence of the first known Neolithic culture of the Maltese islands together with evidence of activity in the Bronze Age. Moreover, the site at Ras il-Wardija, with its rock-cut rectangular chamber, cistern and reservoir has been securely dated to 300 B.C. – 200 A.D. The dating of a pair of deeply incised cart-ruts cutting across the rocky outcrop overlooking the Inland Sea is far from secure but they are evidence of great activity at a particular time. The same can be said of the salt pans, the surface quarries and a system of rock cut pans.

Contrastingly, the Dwejra coastal watch-tower was built in 1652 during the Grandmastership of Lascaris. Its building was financed by the Università` of Gozo. It had the aim of rendering Dwejra Bay secure against an enemy landing and that of preventing unauthorized persons from landing on Fungus Rock to collect the “fungus melitensis”. The tower was armed by the Order with guns and ammunition. It was occupied on and off by the military until recent times. From 1839 to 1876, it was garrisoned by the Royal Malta Fencible Artillery and then it was abandoned until the First World War when the garrison was provided from the Royal Malta Artillery and the King’s Own Malta Regiment. Its last military role was played in World War II when it served as an Observation Post. In 1956 it was leased for 50 years to a private individual. Din l-Art Helwa, now holding the trusteeship of the building, took the initiative to restore the tower which by the nineties had suffered serious deterioration.

The Cost of Attractiveness

Truly, the attractiveness of Dwejra has in some ways contributed to its own degradation over the years, due to heavy human traffic, tourism activities and quarry activities. The site has also seen illegal buildings mushroom in the area together with illegal dumping and other irresponsible activities, all of which have contributed to irreparable damage to the area.

Dwejra itself is open to the public without any sort

of control and management of visitors. Thousands of tourists arrive in coaches whilst locals visit Dwejra with cars which are parked in various sections of the area. Once on site, people roam the area without any proper management or supervision. This results in heavy trampling over the fossil beds and the flora and fauna of the site. The habitual picking of rare flora found on site further exacerbates the negative effects. Moreover, with no surveillance of the area in force, illegal dumping of waste was also on the increase.

In addition, heavy human activity has contributed to increased marine erosion together with damage to the marine ecology and the fossil beds. Furthermore, the quarries found near the site, emit fine particles generated by their activities which are often the cause of ecological harm to the area. These quarries are also a stark eyesore and in general have a very negative effect on the value of Dwejra.

The Dwejra LIFE Project

The Dwejra LIFE Project started in April 2004 with the aims of reversing the degradation of the area, conserving the environment, providing a better tourist product and aiding the local economy. More specifically the project aimed at developing a restoration and conservation plan and establishing a framework for environmental management. Following these objectives, it sought at strengthening the current administrative and enforcement capacities and carrying out environmental education through the creation of an eco-tourism and an environmental education site. In so doing, the project served as a demonstration for the creation of further coastal nature reserves.

The main partners in the LIFE project were Nature Trust (Malta) together with MEPA and WWF (Italy). Apart from the main partners, a number of stakeholders were involved including the Ministry for Gozo, San Lawrenz Local Council, The Tourism Authorities of Gozo and Malta, the Diving associations, the boat people, the fishermen, Din L-Art Helwa, the tour operators, the boat house people, the church and various other stakeholders identified in the course of the task towards the creation of a Natural Park.

This project has succeeded in establishing Malta’s

first coastal nature reserve. The protected area covers around 8 km² of marine and terrestrial environment, which is now managed in a sustainable and controlled manner. Good working relations were developed with the local fishing industry that plays an important role in the nature reserve's management plans. New marine protection measures were adopted (such as removal of abandoned fish-traps and introduction of access rules) which have helped contribute to the return of seahorses in the area. Planning regulations were strengthened leading to regulations on illegal structures. Native plant species were also introduced to boost natural heritage resources and alien species were cleared from the site.



The logo in connection with the LIFE programme

In addition to natural heritage work, prominent investments included a new visitor centre at the historical Dwejra Tower and smaller scale measures covered improvements to an access road, plus equipment for a regulated parking area. These new visitor facilities help to manage public access within sensitive areas of the reserve and encourage more tourists to visit the site, which in turn has created more economic opportunities for local communities. An "Eco-warden" was appointed at the reserve and an environmental education programme was also launched.

Conclusion

All these positive results not only led to the upgrading and safekeeping of the area but also to further promotion. Through this promotion, Dwejra is gaining recognition on both the local

and international level, whilst setting an example to other localities and natural environments.

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Maria Theresa Farrugia, B.A (Hons.) (Geography), worked as a Project Administrator for the European Destinations of Excellence: Best Emerging Rural Zone pilot project at the EU Affairs, Policy Development and Programme Implementation Directorate within the Ministry for Tourism and Culture. Currently she is working as an EU Fund Officer within the Programme Implementation Section at the Ministry for Infrastructure, Transport and Communications.