

Project Gaia

The Integrated Management of Specially Protected Coastal Areas in Malta

Report for the period January to June, 2005, on activities carried out by The Gaia Foundation as Project Manager of Ghajn Tuffieha, Malta and Ramla Bay, Gozo.

Introduction

Project Gaia is the name given to The Gaia Foundation's work on the integrated management of specially protected areas in the Maltese Islands. The project covered a number of initiatives in the management of 2 sites between 2000 and 2003, namely Ghajn Tuffieha and Ramla, Gozo. The management agreements for the sites expired in July and December 2003 respectively. A renewed contract for Ghajn Tuffieha was signed in June, 2004. A renewal of the Ramla contract is pending. The Foundation's work in this project period included the continued management and protection of the Ramla site in the absence of the said contract and related funds, in order to ensure continuity and protection of the site and the progress that has been achieved since the Manager took on the site in 2000.

Background

The management of Ghajn Tuffieha and Ramla formed part of a LIFE project, that included the management of Ramla Bay, Gozo, namely TCY99/M/95, which fell under the direction of IcoD and the management of The Gaia Foundation. This project commenced in 2000 and was brought to a successful conclusion in July 2003. The management of both sites has continued at a steady pace by the Gaia Foundation.

Project Overview

The main arms of the project that formed part of the integrated approach to coastal management were:

Project Olympus:	coastal conservation
Project Elysium	tree planting and biodiversity
Project Dionysus	beach management
Project Persephone	sustainable agriculture
Project Apollo	operation of a visitor centre
Project Hermes	dissemination of information
Project Phoenix	waste management.
Project Pegasus	photo monitoring of coastal areas.
Project Odysseus	sustainable tourism
Project Poseidon	marine conservation and safety

These projects were all active in the project report period.

Project Gaia has included other arms, which were however not active during this period, namely:

Project Galatea	cultural heritage
Project Hercules	assistance in landfill restoration

Milestones.

A number of important milestones were reached in this project period. These included:

January:	Sticking of 8,000 Tamarisk africana cuttings at the Elysium nursery
Feb/Mar	Persephone club continued operations from the Elysium Visitor Centre
February	Completion of tree planting season with over 2,000 trees and shrubs planted at Ghajn Tuffieha and 500 planted around Ramla Bay.
February	organization of visits to the centre by culture and outdoor tours during the Spring.
March	Visit to Ghajn Tuffieha by US representatives of the People to people programme to assess the quality of workshops to be given to 1,600 US students.
April	Application submitted to the Malta Standards Authority (MSA) for organic certification of Gaia's agricultural produce.
May	Launch of new Project Midas on Fair Trade
June	Organisation of the first environment festival at the Elysium Visitor Centre.
June	Issue of certification of conversion to organic produce, by the MSA.
June	Commencement of workshops for 1,600 students from the USA People to People Programme.
	MTA issues an operating license for the Kiosk at Ghajn Tuffieha Car Park.
	The proceeds are pooled back into the management of the sites.
	Commencement of beach management work, patrols, coordination of waste management with Mgarr Council and MTA, and the placing of safety lines in the bay.

Project activities

Project Dionysius -Beach Management

- 1. A system of safety lines for Ghajn Tuffieha that were reintroduced in past years for the summer months were instrumental once again in maintaining high levels of safety. The advantage of the system is its availability 24 hours a day, 7 days a week, and does not require personnel to manage it.**
- 2. The control of vehicular access to Ghajn Tuffieha Bay, to the tower and to Ramla Bay was carried out successfully through the use of bollards, made of thick steel, and filled with concrete, placed 1 metre below ground.**
- 3. Gaia personnel carried out regular patrols of the protected sites. Wardens were used throughout the week and longer hours on weekends. Their main tasks were to provide information on the site as well as to secure implementation of environmental as well as maritime regulations (safety for bathers). In the case of Ramla, the most sensitive part of the site, namely the sand dunes, were kept at a high level of conservation by ensuring that the public limited its access to the main footpaths around the dunes, and that bathers refrained from placing towels and other personal belongings in the sand dune areas.**
- 4. The planning permit for the construction of a snack bar for at Ghajn Tuffieha car park, was obtained in December, 2001 and issued in January, 2002. An application was subsequently made to the Malta Tourism Authority for an operating license. This license was finally obtained in June, 2005.**

Project Poseidon – Marine Conservation and Safety.

- 5. In June a seminar was organized in collaboration with BICREF at the Elysium Centre in order to introduce persons to marine life and conservation issues, followed by a snorkeling session at Ghajn Tuffieha Bay.**

Project Olympus – Coastal Conservation

- 6. Regular wardening was carried out to control breaches of regulations in connection with offroading, bikes and campers. The number of breaches of these regulations has declined sharply since the public is more aware of the protected and important status of Ghajn Tuffieha, and the presence of patrols in the area. Those that attempt to defy the regulations are mainly off road motor bikes, many of them without registration plates.**

Project Hermes – Dissemination of Information

- 7. In 2003 a series of 3 documentaries was produced under the LIFE Project**
 - 1. The first is named Project Persephone, covers sustainable agriculture in the coastal zone. It is meant for students, consumers and farmers alike, and forms part of the initiative to organize a sustainable agriculture zone around Ghajn Tuffieha.**
 - 2. The second is named Project Elysium, and covers the biodiversity aspect of the project and the natural habitats found in the Maltese Islands, many of which are essential to the coastal areas of ecological importance.**
 - 3. The third is named Project Olympus, and covers the general subject of coastal conservation and management of the coastal zone.**

All documentaries are approximately 15 minutes in length and have been produced in both English and Maltese versions. During this project period these were disseminated to schools and shown on a regular basis at the Elysium Visitor Centre.

- 8. The project's website, located at www.projectgaia.org, included web pages on each project, as well as downloadable documents covering all activity and financial reports, management plans, studies and surveys. The website had been available in English, French, German and Spanish. In 2004 it was also translated into Italian by an Italian national carrying out an internship at Gaia. This translation was uploaded in June 2005.**
- 9. Throughout the year a number of school trips were made to the Ghajn Tuffieha site. The students were exposed to the Project Gaia and were given information on the habitats of the Maltese Islands and the Indigenous and endemic plants being propagated at the nursery. The said nursery has become a very useful educational tool for young and old alike, as well as providing a supply for a large number of native trees, many of which are not available elsewhere.**
- 10. Starting in June, series of one day workshops were organized for foreign visitors, namely school groups from the People to People Programme in the USA. These included hands on work at the centre, a presentation on Project Gaia, and a workshop on "Becoming an eco citizen". Students participating were given certificates and encouraged to make a similar presentation to their school colleagues at home.**

11. In 2003 a number of information boards were produced covering various aspects of Project Gaia, from waste management to organic farming and marine conservation, providing useful tools for the visitors to the site. In 2004 these were increased to cover new environmentally related topics such as nutrition, organic farming and fair trade. Each board is weather resistant and is mounted on a mobile structure, which allows for the organisation of a mobile exhibition of 20 information panels. During the project period another 4 boards were designed, the topics being a. indigenous trees, b. indigenous shrubs, c. forests of the world and d. composting organic waste.

Project Phoenix – Waste management

12. The first separation at source system was set up at Ghajn Tuffieha Bay in the summer of 1997. This was carried on through the Spring and Summer months every year. In 2002 the Foundation started cooperation work with “progett skart” (project waste), that provided skips for glass, metal and plastic at Ghajn Tuffieha Carpark. The Foundation’s separated waste bins located at Ghajn Tuffieha were being serviced by the tourism department beach waste personnel. The response of the beach cleaning team was however poor, and its work had to be constantly overseen and supplemented by Gaia Staff. In summer 2004 Progett Skart did not provide the skips that had been made available in the previous 2 seasons, and therefore for the first time since 1997 the separated waste system at Ghajn Tuffieha could not operate. Many members of the public complained that the separated waste system was not available. This was positive feedback from an increasingly aware public, especially amongst the patrons of the protected site. The bring in site was briefly reintroduced by Wasteserve in June 2005.

13. In October a new organic composting unit was put together at the Elysium Nursery to cope with an increase in garden and vegetable waste. The capacity has grown 500%. The composting section is now a special feature at the Centre, and is equipped with 3 information boards. Members who pick up their vegetables are encouraged to bring their organic waste. A fourth information board is in the pipeline.

14. The Elysium Centre has also been equipped with a separated system to store waste fractions generated by the Centre’s activities. Paper is reused, while metal, plastic and glass are stored for removal to Sant Antnin Plant.

15. Packaging at the centre has been reduced to a minimum. Members are given cotton carrier bags, reused boxes and nylon bags. While the former are purchased, the latter two are supplied with a returnable deposit. Food processed by Gaia is supplied in returnable glass containers.

Project Persephone – Sustainable Agriculture

- 16. A mixture of mushroom compost and Posidonia Meadows compost was once again added to the fields prior to planting in August. The Posidonia was removed from Ghajn Tuffieha Bay during the summer season and deposited outside the Persephone fields. It was washed thoroughly to remove the salinity. These fertilizers are added on a yearly basis to the fields which, upon soil analysis, are known to be low in organic content.**
- 17. The sustainable agriculture project commenced in March, 2001. It has carried on into this project period, with sowing of a number of crops, as detailed in the annexed document 1, which is based upon the crop rotation plan that forms the basis of the organic certification .**
- 18. Once again problems related to pest control have been minimal. Snails taking shelter in the rubble walls have been kept at bay with a line of lime at the perimeter of the fields, while chicken wire was used to protect against rabbit attacks. Onions and garlic, sticky Fleabane and Marigolds were planted amongst vegetable crops as repellents. A spray mix of onions garlic and chili peppers was also used. The buffer zone around the fields are approximately 2 metres wide, and are covered with trees and wild vegetation, including squirting cucumber, which makes a good habitat for ladybirds and other friendly predators.**
- 19. The crop rotation cycle is based upon a minimum of 4 seasons over 2 years. The fields are divided into 4 sections. Each year a different crop family is sown in each section and moves down to the next section in the following year (see annex 1).**
- 20. Intercropping techniques are also used.**
- 21. A series of meetings were held with the producers who form part of the Persephone club with a view to prepare the way for organic certification. Mario Grech, who works land adjacent to the Ramla protected site, worked with the Manager in order to apply for certification. The said farmer was also encouraged to do so by entering into an agreement with the Manager to sell his summer crop of tomatoes to it at a very premium price. This is seen as an important step to encourage such farmers, since the marketing of their products is a vital link in the conversion chain.**

Project Elysium – Biodiversity and Tree Planting

- 22. Biodiversity and tree planting: work at the nursery focused on the sowing, sticking and repotting of various indigenous and endemic species, detailed in the annexed document 2. Soil was also moved for repotting, and weeding and cleaning was carried out throughout the nursery.**
- 23. The trees and shrubs planted at Ghajn Tuffieha were irrigated by drip from the water sources at the Nursery from March to June. Areas irrigated were the Golden Bay Headland, Hotba l-Bajda and the clay slopes above Ghajn Tuffieha Bay. The sites were irrigated twice a week. Despite the fairly extensive water storage facilities situated at the Elysium Centre, water was required from outside sources to maintain irrigation through the dry months. Saplings are irrigated for at least 2 years.**
- 24. A number of tamarisk trees were also planted along the clay slopes above the Belancourt Battery at Ramla Bay. This was made possible with the assistance of the Xaghra Local Council. The Council also took the initiative to finance the planting of some trees and shrubs in the valley leading down to Ramla, which were provided by the Manager. A list of trees and shrubs planted in both sites is provided in the annexed document 3.**

Project Odysseus – Sustainable Tourism

- 25. The Foundation's volunteer programme for foreigners got underway in earnest in 2004 and developed further in the project period between January and June. The Foundation sought to provide a setup whereby foreign students and other persons could come to Malta to carry out internships as part of Project Gaia. Persons interested in combining an eco friendly visit to the Island with a practical training session ensured high standards of sustainable tourism. These were due to the nature of the trip. These visiting interns showed a healthy disposition to traveling lightly, reducing their ecological footprint by reducing and separating their waste at the Centre, eating local and healthy foods with reduced packaging, traveling by bicycle and public transport to and from work, or car pooling in the manager's vehicle run on bio diesel. They assisted in the environmental management projects with the Foundation, gaining practical experience in environmental management in the process. The internship/sustainable tourism programme in the report period amounted to over 500 visiting days to the Maltese Islands. Most of the interns hailed from Germany, while others hailed from France, Spain, the UK and Switzerland.**

**Rudolf Ragonesi
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Documents annexed to the activities report for the management of Ghajn Tuffieha and Ramla, January to June, 2005:

Annex 1

Persephone organic farm propagation Jan-June 2005

Annex 2

Propagation of plants at the Elysium Nursery, Jan-June 2005

Annex 3

Tree Planting records Jan-June 2005

Annex 4

Projected Activities July-Dec 2005.