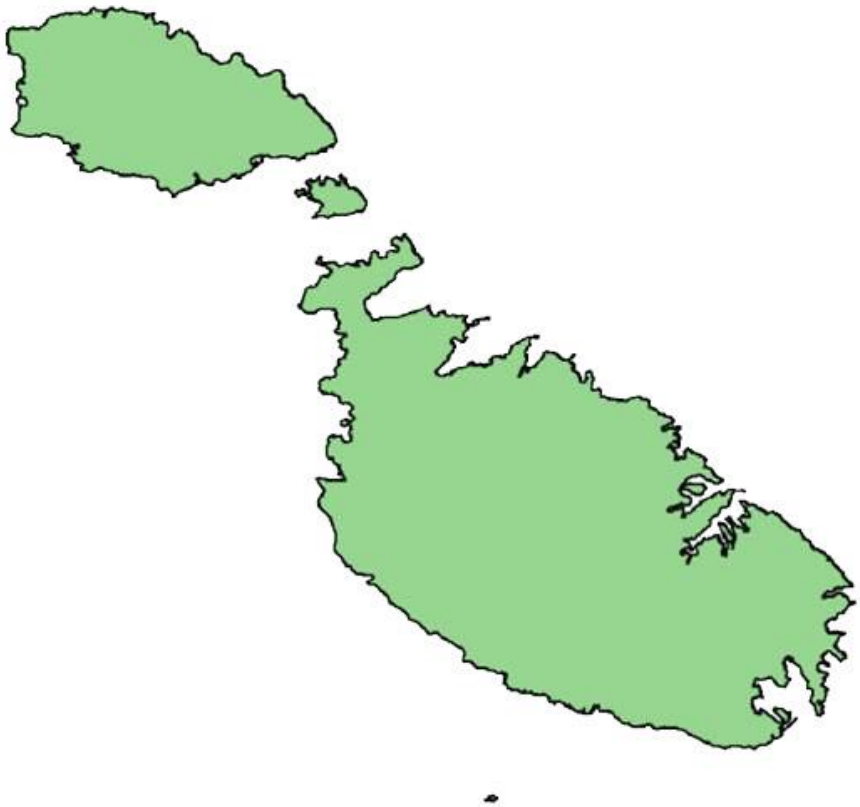
Fourth National Report to the Convention on Biological Diversity

Republic of Malta
2010



2010 International Year of Biodiversity

NBSAP malta

CBD

MEPA

Compiled by the
Malta Environment and Planning Authority

Executive Summary

Malta has been a Party to the United Nations (UN) Convention on Biological Diversity (CBD) since 29 December 2000. It is also a Party to other UN Conventions, a member of the Council of Europe and a Member State of the European Union, amongst others. As a Party to the CBD, Malta is required to contribute to the achievement of the Convention's three objectives at a national level. These three objectives which underpin the principles of sustainable development are: the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources (Article 1 of CBD Convention text). Malta has made several efforts, especially in the last decade, in order to protect the natural heritage that it is bestowed with. Such efforts also positively contribute to achieving the CBD's objectives at a national level as further expounded of this report.

Maltese people share their islands and surrounding marine environment with a remarkable variety of species and also depend on various ecosystem services for their day-to-day comfort and security. Such ecological services are driven by biodiversity and the functioning of healthy ecosystems. Indeed, the myriad of species of flora and fauna that inhabit the Maltese Islands interact with biotic (living) and abiotic (non-living) factors to form inexorably complex communities that play an important role in ecosystem functioning and in the associated ecological services that are indispensable for supporting the Maltese community. Ecosystem functions and associated services include carbon sequestration and production of oxygen during photosynthesis, regulation of soil erosion and hence maintenance of soil fertility and agriculture productivity, screening of certain pollutants, as well as the provision of food and other raw materials. Habitats provide an important refuge for particular organisms, such as mammals, birds, reptiles and insects, including species that have a commercially important role as exemplified by bees, which are crucial for plant pollination and honey production. The natural environment is also of scenic, scientific, educational and recreational value.

Natural and semi-natural plant communities are also intrinsically important from a biodiversity aspect and contribute immensely to Malta's natural heritage. Unfortunately, human activities can threaten this natural heritage and undermine efforts to safeguard it. Protecting Malta's natural heritage is a very challenging task more so when considering the very high population density (1,309 persons per square kilometre - NSO Demographic Review 2008), the limited assimilative and carrying capacity, and the small overall size of the islands, apart from other environmental concerns that are associated with such insular systems. The land constrained characteristics combined with the various conflicting land uses, poses considerable pressure on Malta's biodiversity and the ecosystem functioning and services upon which a number of sectors and quality of life depend. Malta's State of the Environment Report (SOER) for 2005 stated that the "three principal threats to Malta's biodiversity are development in rural and marine areas, introduction of invasive species and exploitation of wildlife". These pressures are also identified in the 2008 SOER. The 2005 and 2008 reports and accompanying state of environment indicators (SOEI) for 2005, 2006, 2007 and 2008 deliver clear messages on the state of biodiversity and its drivers of change. A key message that is of concern is that many rare and indigenous species are threatened and continue to decline.

The dire need to protect and conserve nature, unfortunately, is not understood by all members of society. In fact, environmental impacts may only become apparent when adverse effects are felt by various sectors of society, and when impacts have socio-economic repercussions. When this happens remedial action can be financially taxing and consequences of certain impacts can even be irreversible. To this end, conservation action must be pro-active, while policy integration of biodiversity concerns across relevant sectors is also crucial.

A number of sectoral measures are being implemented or are in the pipeline, with the aim of harmonising various sectoral/cross-sectoral aspects with environmental protection. Such measures do positively impact, whether direct or directly, biodiversity in Malta. The following statements, documented via the 2005 SOER and accompanying SOEIs for 2006, 2007 and 20082007, illustrate this:

- An enhanced legal framework has been put in place to ensure the protection of ecologically important sites in the Maltese Islands, including marine protected areas (SOER 2005 – Key message delivered by the Sub-report on Biodiversity).
- Trees planted in afforestation projects increased by 14% between 2006 and 2007, with over 33,200 trees planted in 2007 (SOEI 2007 – Indicator PR4).
- A total of 54 schools, involving 24,500 students, participated in the EkoSkola environmental education programme during the 2006/07 scholastic year (SOEI 2007 – Indicator PR3)
- Progress has been achieved in setting-up waste management systems such as permitting, improved landfill management, and better enforcement. (SOER 2005 – Key message delivered by the Sub-report on Waste). A key instrument in Malta's recycling policy is the use of bring-in sites by the public. By end 2007, 197 bring-in sites had been set up in various localities in Malta and Gozo, and the amount of material collected had risen by 24.6% between 2006 and 2007, from 2,255 to 2,810 tonnes (SOEI 2007 – Indicator WS3).
- There have been significant decreases in the levels of sulphur dioxide and benzene in the air, due to switches to cleaner fuels. Annual average sulphur dioxide concentrations decreased by 41% between 2005 and 2006 (SOEI 2007 – Indicator A5).
- In 2006 33% of the Maltese landscape was legally protected[1], almost three times more than in 2000 (SOEI 2006 - Indicator LS1).
- By end 2008, 13% of the Maltese Islands formed part of the Natura 2000 network of protected sites for habitats and species of European Community interest (SOEI 2008 – Indicator B3).

Areas for priority action have also been identified in the 2005 SOER and are mentioned hereunder.

- Focusing on environmental impacts that have a serious effect on human health, such as air pollution from particulates;
- Protecting renewable natural resources such as the water table;
- Promoting eco-efficient economic growth by decoupling growth from material resource use and waste generation, and in particular addressing environmentally-damaging trends in the energy and transport sectors;
- Promoting formal as well as community-based environmental education;
- Drawing on public environmental concern to gain support for public and private initiatives, particularly to address countryside and coastal issues;
- Improving the knowledge base to support the development of environmental policy, particularly in the areas of biodiversity, waste and environmental health, by building up a structured ambient monitoring information system for state of the environment reporting;
- Leveraging finance to fund environmental improvements across government and the private sector;
- Better coordination between government ministries and agencies to improve the coherence and effectiveness of policy, by means of early integration of environmental considerations into all government policies and plans;
- Improving capacity for implementation and enforcement;
- Setting up a multi-actor process to develop a government-led environmental action plan to coordinate the activities of the principal players and identify investment priorities and short and medium term objectives and targets in the environmental field.

Although major milestones have been achieved such as in strengthening legislative frameworks, raising awareness, designating protected areas and in building partnerships between entities, future efforts now need to be directed *inter alia* to:

- resource mobilisation in order to address capacity needs of sectoral governmental departments, research institutions, and NGOs that all play a role in the protection of Malta's natural environment;
- coordinated action that drives forth conservation and sustainable use of biological resources; and

[1] Designated as Areas of High Landscape Value (AHLV) under the provisions of the Development Planning Act

- the need to bridge policy making and scientific research.

A biodiversity monitoring regime needs to be further developed in order to assess the conservation status of species of European Community Importance with an unknown status, and also to assess the status of species of national importance; this will require investing in additional resources. Research is needed to further evaluate the effects of climate change on local biodiversity. Findings of scientific research should also be well publicised and presented in a format that can be used by policy makers. The development of additional indicators to help elucidate habitat and species trends, as well as trends of drivers of biodiversity change, is warranted. The promotion of incentive-driven and community-based conservation can also be encouraged further.

Major leaps have been made in building a national network of protected areas, including Malta's contribution to the EU Natura 2000 network and the Council of Europe's Emerald Network. Instances though arise when legal status and establishment of protected areas do not suffice in guaranteeing the conservation and recovery of endangered species. Ongoing conservation efforts include the restoration of degraded habitats and the removal of invasive species. Agri-environment measures and cross-compliance requirements, as well as Structure Plan policies contribute towards safeguarding biodiversity in the wider countryside. While various forms of public awareness have been considered throughout the years (*e.g.* publication of posters, leaflets, workshops, talks broadcasted on mass media, and so forth) it is acknowledged by entities involved in nature conservation that more needs to be done in this field. The 2005 SOER noted that the protected area management process will need to be significantly accelerated if Malta is to reach its target to halt the loss of its biodiversity by 2010. To this end, the Malta Environment and Planning Authority (MEPA) as the competent authority that *inter alia* administers the Environment Protection Act (CAP. 435 as amended) and functions thereto, has submitted an application for funds under the European Agricultural Fund for Rural Development (EAFRD) for a proposed project to establish a framework for the management of terrestrial Natura 2000 sites in the Maltese Islands and to increase awareness of Natura 2000 amongst the general public and stakeholders..

Malta shares the concerns expressed in the "Mid-term Assessment of Implementing the EC Biodiversity Action Plan" (COM/2008/864 final) that it is unlikely - on the basis of current efforts - that the overall goal of halting biodiversity loss in the EU by 2010 will be achieved. Malta has taken up various actions that provide for the protection and conservation of biodiversity. Although the process for developing Malta's National Biodiversity Strategy and Action Plan (NBSAP) is still ongoing, it is evident that sectors are becoming more environmentally conscious. Nonetheless, the NBSAP, once developed and formally adopted, will aim to yield results in terms of increased awareness on, and stewardship of, biodiversity, besides driving forth direct biodiversity action across sectors via an integrated approach. The participation of all relevant stakeholders is deemed of essence in order to achieve this.

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List of Commonly Used Abbreviations in the Report

4NR	Fourth National Report
AA	Appropriate Assessment
ABS	Access and Benefit Sharing
AFRD	Agriculture and Fisheries Regulation Division
AEI	Area of Ecological Importance
AIA	Advanced Informed Agreement
AU	Apiculture Unit
BCC	Biosafety Coordinating Committee
CA	Competent Authority
CAMP	Coastal Area Management Programme
CAP	Common Agricultural Policy
CBD	Convention on Biological Diversity
DCC	Development Control Commission
DPA	Development Planning Act
EAFRD	European Agricultural Fund for Rural Development
EIA	Environment Impact Assessment
EMU	Ecosystems Management Unit (within MEPA)
EPA	Environment Protection Act
ERDF	European Regional Development Fund
FMZ	Fisheries Management Zone
GN	Government Notice
GSPC	Global Strategy for Plant Conservation
ICZM	Integrated Coastal Zone Management
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
LN	Legal Notice
MAT	Mutually Agreed Terms
MEA	Multilateral Environmental Agreement
MELP	Malta Embellishment and Landscaping Project
MEPA	Malta Environment and Planning Authority
MCFS	Malta Centre for Fisheries Sciences
MMA	Malta Maritime Authority
MoU	Memorandum of Understanding
MPA	Marine Protected Area
MPASC	Marine Protected Area Steering Committee
MRA	Malta Resources Authority
MRRA	Ministry for Resources and Rural Affairs
NBF	National Biosafety Framework
NBSAP	National Biodiversity Strategy and Action Plan
NCSD	National Commission for Sustainable Development
nm	Nautical mile
NMPAS	National Marine Protected Area Strategy

NGO	Non-governmental organisation
NRP	National Reform Plan
NSSD	National Strategy for Sustainable Development
ODZ	Outside Development Zone
PA	Protected Area
P.A.R.C.	Department of Parks, Afforestation and Restoration of the Countryside
PIC	Prior Informed Consent
PIM	Petites Iles de Méditerranée
PoW	Programme of Work
RAC/SPA	Regional Activity Centre for Specially Protected Areas
RDB	Red Data Book
SAC	Special Area of Conservation
SAP	Species Action Plan
SEA	Strategic Environment Assessment
SOE	State of the Environment
SOEI	State of the Environment Indicator
SOER	State of the Environment Report
SPA	Special Protection Area
SSI	Site of Scientific Importance
UCA	Urban Conservation Area
UN	United Nations
UoM	University of Malta
WFD	Water Framework Directive
WSC	Water Services Corporation

1.0 Overview of Biodiversity Status, Trends and Threats

This chapter provides an overview of the status and trends of biodiversity in the Republic of Malta (or the Maltese Islands), with the main aim being to inform decision-makers. References used for building this chapter and other chapters of this report are listed in Appendix II unless otherwise indicated (as hyperlinks or sources for further information). These publications should be referred to for obtaining any further information on the subject of interest.

1.1 Biodiversity of the Maltese Islands

The Maltese archipelago is located in the central Mediterranean and is approximately 93 km south of Sicily and 290 km north of the African Continent. The archipelago consists of a group of three islands aligned in a north west - south east direction: Malta and the two smaller islands of Gozo (Maltese: *Għawdex*) and Comino (Maltese: *Kemmuna*), together with a series of smaller uninhabited islets, which are found scattered around the 271 km coastline of the islands. Islets such as Filfla, St Paul's Islands (Maltese: *Il-Gżejjer ta' San Pawl/Selmunett*) and Fungus Rock (Maltese: *Ħaġret il-Ġeneral*) are of a very high conservation value in that each harbours endemic species as well as distinct plant communities that are solely restricted to these islets. For instance, a species of giant leek (*Allium* sp. nov. aff. *commutatum*) which may be endemic but remains to be studied, is essentially confined to the small islets. Filfla supports the largest breeding colony (between 5,000 to 8,000 pairs) of the European Storm-Petrel (*Hydrobates pelagicus melitensis*). The Maltese Islands are sloping towards the north east. This has created two types of Maltese coastlines – the sheer cliffs and screes bordering the south west and west of Malta and Gozo in contrast to the gently sloping shores to the north east of Malta.

The Maltese Islands form part of the semi-arid region of the Mediterranean and hence exhibit a bi-seasonal climate, which is typical of the region. The Maltese Islands are heavily influenced by the strength and frequency of winds namely the north-westerly and north-easterly winds. The geology of the Maltese Islands is mainly constituted by different types of limestone deposited during Oligo-Miocene era, with some marls and clays. Limestone is Malta's principal non-renewable mineral resource, whereby Globigerina Limestone (softstone), is used for the manufacture of limestone blocks and other products for use in the construction industry, while Lower and Upper Coralline Limestone is mainly used for road construction and in the production of concrete. The topography of the islands is pretty much low-lying with only low hills and terraced slopes; there are no mountains, rivers or lakes present. The dearth of freshwater has contributed to the overall rarity of freshwater flora and fauna in the Maltese Islands, especially when considering those species that are dependent on a relatively constant supply of water.

A limited, yet diverse, array of ecosystems is found in the islands and its surrounding waters. One can appreciate an interesting variety of flora and fauna, especially when considering the relatively small land area (316km^2), the limited number of habitat types and the intense human pressure.