

The Medical History of the Maltese Islands: Introduction

The Maltese Islands: Geography

The Maltese Archipelago comprises a group of small low islands aligned in a NW-SE direction. At their extreme points the Maltese Islands fall within the following points: Northern latitude 36°05'00", Southern latitude 35°48'28", Eastern longitude 14°11'04", Western longitude 14°34'37", placing them in the central Mediterranean.

In this position, Malta is 96 km (60 miles) away from Sicily and 290 km (180 miles) from North Africa. Gibraltar is 1836 km (980 miles) to the west and Alexandria is 1519 km to the east (940 miles). The Mediterranean Sea, which is bound on the north by Europe, on the south by Africa and to the east by Asia, occupies a deep trench between the continents. The Mediterranean Sea is almost entirely enclosed by land. Its only connections with other seas are through the narrow Strait of Gibraltar where it connects with the North Atlantic Ocean, and through the man-made Suez Canal which connects the Eastern Mediterranean to the Red Sea. From Gibraltar to Syria the maximum length is about 200 miles. The maximum width, from north to south, between France and Algeria, is 488 miles.

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The Mediterranean Basin [satellite picture]

Shaped somewhat like a horizontal sea horse, the Mediterranean has at its northeastern extremity the oyster-shaped appendage of the Black Sea connected by way of the Bosphorus. Including the latter, the total area is 1,158,300 square miles. The Mediterranean has an average depth of 1500 m, but a maximum depth in the Hellenic Trough of 5092 m. The average tidal range in the Mediterranean is about 30 cm, which is less than changes in sea-level brought about by wave action and atmospheric conditions. Tides are thus not important in the

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Mediterranean except for the Northern Adriatic and the Gulf of Gabes where the tidal range reaches about 1 m.

The Mediterranean Sea is divided into two deep trenches - the Western basin and the Eastern Basin by a submarine shallow sill across the Strait of Messina. The Maltese Islands geographically belong to the Eastern Basin and are situated on the submarine ridge about 60 miles to the south of Sicily and about 60 miles to the eastern side of the ridge. Maltese territorial waters extend to 9.65 km (6 miles) from the coast, comprehending an area of about 3000 km² (about 1500 sq miles). Malta's fishing limits extends to 19.3 km (12 miles). In 1978, an amendment to the Territorial Waters and Contiguous Act extended the fishing limits to 40.2 km (25 miles) from the Maltese coastline. The close vicinity of the Maltese Islands to other countries has resulted in disputes with neighbouring lands, particularly Libya, over the division of the sea-bed. Malta initially claimed equal division of the sea areas on the south and south-east of the Islands irrespective of Libya's longer coastline. This claim included an area extending to 160 km (100 miles) southwards. This dispute was settled by the International Court at Le Have in Holland, which set the new median line by taking a line equidistant from the low-water mark off the coast of the two countries and moved it to 28.8 km (18 miles) closer to Malta. Thus the Maltese seabed in the south extends to 131.2 km (82

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miles). The Maltese sea-bed to the north extend to the median line between Malta and the Sicilian coast, thus extending to 46.5 km (30 miles) north.



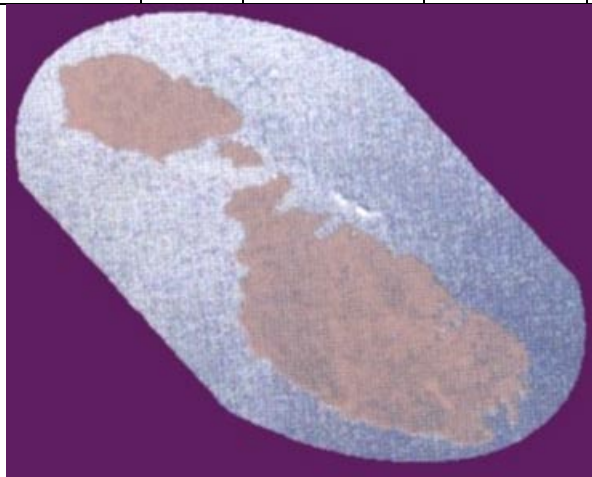
Maltese Territorial Waters

The Archipelago consists of three main inhabited islands - Malta, Gozo and Comino - together with some very small barren and uninhabited islets and rocks. The total area is 315.6 km² (122 sq miles). The larger island - Malta has an area of 245.7 km², and is made up of a low plateau that descends gradually to the plain in the south-eastern part of the island. The longest distance in Malta from the south-east to the north-west is 27.3 km, and the widest distance is 14.5 km in an eastern-westerly direction. The coastline is well indented

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with harbours, bays, creeks, sandy beaches and rocky coves. The length of the Maltese shoreline is 136.8 km.

MALTESE ARCHIPELAGO	Area	Max.Length km	Max.Width km	Shoreline km
<i>Malta</i>	245.7 km ²	27.3	14.5	136.8
<i>Gozo (Ghawdex)</i>	67.1 km ²	14.5	7.2	45
<i>Comino (Kemmuna)</i>	2.8 km ²	2.75	2.25	7.5
<i>Cominotto (Kemmunett)</i>	9.9 ha	0.45	0.225	-
<i>St. Paul's Is. (Il-Gzejjer ta' Selmun)</i>	10.1 ha	~1.0	0.2	-
<i>Manoel Is. (Gżira ta' L-Isqof)</i>	-	1.25	0.45	2.8
<i>Filfla</i>	2.0 ha	0.4	0.25	-



*The Maltese Archipelago
[satellite picture at 228 km above sea-level]*

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Malta's sister island - Gozo or Ghawdex - lying just 8 km to the north-west covers about 67.1 km², and has a maximum distance and width of 14.5 km and 7.2 km respectively. The shoreline length measures 45 km. Comino or Kemmuna is about 2.8 km². The small uninhabited islets are each less than 10 ha. Both main islands are tilted seawards to the north-east. There are no mountains, the highest point in the west of Malta near Dingli Cliffs being 253 m above sea level. In Gozo the highest point is in the north-western part near Ta' Dbiegi at 191 m. There are also no lakes, rivers or streams, but only minor springs. A series of low hills with terraced fields on the slopes characterise the islands.

The terrain of the islands of Malta is comparatively low, the highest point being about 239 m (about 785 ft) above sea level. The Maltese Islands are composed of a block of Oligo-Miocene limestones and marls with very subsidiary Quaternary deposits. The Oligo-Miocene succession is a simple "layer-cake" arrangement of Lower and Upper Coralline Limestones with intervening layers of soft Globigerina Limestone, Greensand and Blue Clay. The Tertiary sequence represents a succession of sediments deposited within a variety of shallow water marine environments.

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Geological sequence

The Archipelago probably emerged from below sea-level at the end of the early Pliocene period. Palaeogeographical evidence suggests that throughout the Quaternary [Pleistocene] period, the Maltese Archipelago was connected at various stages to Sicily, east Mediterranean lands, Sardinia, Libya and Tunisia.

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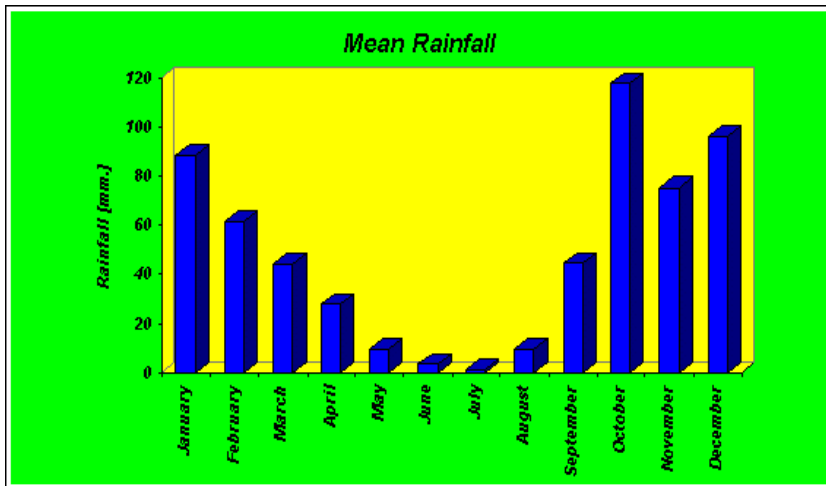
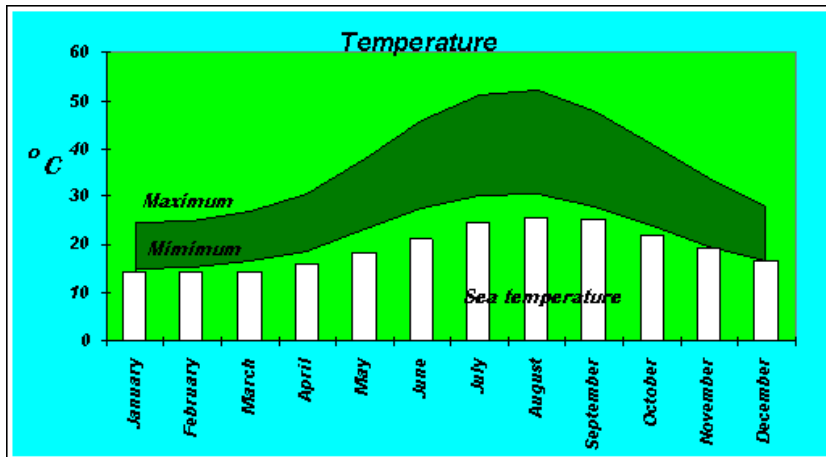
The Mediterranean Basin- Pleistocene Period

Evidence - archaeological, in the form of man-made structures situated presently below sea-level, and biogeographical, particularly the endemic species *Podarcis filfolensis* - suggests that the Archipelago constituted a larger landmass including the Pelagic Islands during the post-Pleistocene period, a situation that persisted into historical times. This has led several authors to propose the Archipelago area as a likely candidate for Plato's Atlantis.

The climate prevalent in Malta is typically central Mediterranean, being temperate with no extremes either of heat or cold. January and February are usually the coldest months, while July and August are the hottest. The mean temperature is 19° C (66° F). The average

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yearly rainfall is around 560 mm being most marked in late autumn and early winter.



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The Islands are extensively cultivated, and the uncultivated environment can be described as garrigue with areas of steppe where the soil layer has been almost completely eroded. The ecology of the Islands has deteriorated as a result of man's influence.



Garrigue habitat

Malta has no mountains, rivers or forests and a series of low hills with terraced fields on the slopes characterise the islands. About 16.5% of

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the land-mass is built-up and the agricultural land area amounts to about 13017 hectares. Natural resources in Malta are scanty and no traces of mineral or metal deposits have ever been found. The same can be said for oil and coal.



Agricultural land