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GEOGRAPHICAL HANDBOOK
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DODECANESE

NAVAL INTELLIGENCE DIVISION

Rhodes: The Street of the Knights

B.R. 500

GEOGRAPHICAL HANDBOOK SERIES

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DODECANESE

2ND EDITION 1943

NAVAL INTELLIGENCE DIVISION

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PREFACE

IN 1915 a Geographical Section was formed in the Naval Intelligence Division of the Admiralty to write Geographical Handbooks on various parts of the world. The purpose of these handbooks was to supply, by scientific research and skilled arrangement, material for the discussion of naval, military, and political problems, as distinct from the examination of the problems themselves. Many distinguished collaborators assisted in their production, and by the end of 1918 upwards of fifty volumes had been produced in Handbook and Manual form, as well as numerous short-term geographical reports. The demand for these books increased rapidly with each new issue, and they acquired a high reputation for accuracy and impartiality. They are now to be found in Service Establishments and Embassies throughout the world, and in the early years after the last war were much used by the League of Nations.

The old Handbooks have been extensively used in the present war, and experience has disclosed both their value and their limitations. On the one hand they have proved, beyond all question, how greatly the work of the fighting services and of Government Departments is facilitated if countries of strategic or political importance are covered by handbooks which deal, in a convenient and easily digested form, with their geography, ethnology, administration, and resources. On the other hand it has become apparent that something more is required to meet present-day requirements. The old series does not cover many of the countries closely affected by the present war (e.g. Germany, France, Poland, Spain, Portugal, to name only a few); its books are somewhat uneven in quality, and they are inadequately equipped with maps, diagrams, and photographic illustrations.

The present series of Handbooks, while owing its inspiration largely to the former series, is in no sense an attempt to revise or re-edit that series. It is an entirely new set of books, produced in the Naval Intelligence Division by trained geographers drawn largely from the Universities, and working at sub-centres established at Oxford and Cambridge, and is printed by the Oxford and Cambridge University Presses. The books follow, in general, a uniform scheme, though minor modifications will be found in particular cases; and they are illustrated by numerous maps and photographs. At the

present time (October 1941) books covering twenty-five countries are in course of preparation, and this list will be substantially extended by the end of 1942.

The purpose of the books is primarily naval. They are designed first to provide, for the use of Commanding Officers, information in a comprehensive and convenient form about countries which they may be called upon to visit, not only in war but in peace-time; secondly, to maintain the high standard of education in the Navy and, by supplying officers with material for lectures to naval personnel ashore and afloat, to ensure for all ranks that visits to a new country shall be both interesting and profitable.

Their contents are, however, by no means confined to matters of purely naval interest. For many purposes (e.g. history, administration, resources, communications, &c.) countries must necessarily be treated as a whole, and no attempt is made to limit their treatment exclusively to coastal zones. It is hoped therefore that the Army, the Royal Air Force, and other Government Departments (many of whom have given great assistance in the production of the series) will find these handbooks even more valuable than their predecessors proved to be both during and after the last war.

This volume has been prepared by the Oxford sub-centre of the Naval Intelligence Division, under the direction of Professor K. Mason, M.C., M.A. (late R.E.), of the School of Geography, University of Oxford, and has been mainly written by Professor J. L. Myres, O.B.E., F.B.A., of New College, Oxford, whose services are gratefully acknowledged.

J. H. GODFREY
Director of Naval Intelligence
OCTOBER 1941

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GENERAL DESCRIPTION

CHAPTER I

INTRODUCTORY

THE arrangement of this volume is in general accordance with that of the whole series. But in a very small region, of which so large a part is under water, the 'detailed topographical description' is necessarily discontinuous, and the 'immediate hinterland' of the coasts includes all the land-surfaces, except in Rhodes. Chapter III (*Detailed Topographical Description*) has therefore been transferred to a later Part II and expanded into a separate geographical account of each island in all aspects, including both coast and interior. In the same way, most of the substance of Chapter IX (*Distribution of Population*), in other volumes of the series, has been distributed between Chapter VI (*The People*) and the separate descriptions of the islands (Part II. *The Islands in Detail*, pp. 71 ff.).

THE AEGEAN ISLANDS

The islands of the Aegean Sea may be divided geographically into groups, according to their structure, configuration, and relation to the continental foreshores.

In the north, Thasos, an isolated and prominent block of old marbles and other crystalline rocks, repeats the structure of Mount Athos and the highland between the Struma and the Mesta valleys. Samothrace is an extinct volcano, deeply submerged; Lemnos also is largely volcanic; Imbros and Tenedos are outliers of north-west Anatolia.

Eastward, the three large coastal islands, Lesbos, Chios, and Samos, continue oversea the structure and composition of the mainland promontories off which they lie, and are economically associated with them.

On the western side, also, the northern Sporades, including Scyros, are sunken continuation of the coast range south of Mount Olympus, and Euboea similarly continues the successive ranges of central Greece, as they swerve eastward into the archipelago.

In the centre, similar mainland ridges, more deeply submerged, form the Cyclades (regarded in ancient times as forming an 'island ring' around the central sanctuary of Delos): a northern chain continuing south Euboea as far as Myconos, and reappearing in Nikaria, Furni, and Samos; a southern one prolonging Attica southward as far as Siphnos, and then trending eastward to Amorgos and the Levitha islets, with Anaphi, Astypalaea, and a few islets farther south. Between these marginal chains stand the massive central islands Paros and Naxos: and outside the southern, two volcanic islands, Melos and Thera (Santorin), deeply sunk between the volcanic promontory Methana, north of Argolis, and Nisyros far to the south-east.

Crete is best regarded as the remainder of a former mountain barrier between the submerged Aegean and the main basin of the eastern Mediterranean; it is continued towards peninsular Greece by Cerigotto and Cerigo (Cythera), and towards Anatolia by Casos, Carpathos, and Rhodes.

The remaining islands (including the three last-named) which prolong the mountain ridges of Anatolia seaward, south of Samos, are more dispersed and less interconnected than the Cyclades, and in ancient times were known as the 'scattered islands' (*Sporades*). Their history has always been different, and it is only by a series of historical accidents that they have acquired their political name of the 'twelve islands' (*Dodecanese*).

The Dodecanese

Position. Lat. 35° 20′–37° 30′ N.; Long. 26° 15′–28° 40′ E. In the Dodecanese are here included all islands and islets between the south-west coast of Asia Minor and those islands of the Aegean which are in the Greek Kingdom—Samos, Furni, Nikaria, Amorgos, Anaphi, and Crete; together with Castellorizo (*Castello Rosso*) off the Anatolian coast, north-east of Rhodes. Besides the inhabited islands there are many islets, rocks, and reefs, of which Kalolimno, Levitha, and Kandeliusa are provided with lighthouses. The combined area is 1,022 sq. m., of which Rhodes has 564 sq. m.

The region is traversed by about 150 miles of the normal course of shipping between Aegean ports and those of the eastern Mediterranean, in Syria, Egypt, and Cyrenaica. Rhodes, Carpathos, and

Casos command the straits between Asia Minor and Crete. Rhodes, Leros, and Astypalaea provide bases for aggression against south-west Asia Minor and for exploitation of it, such as was reserved to Italy in 1919 by the First Treaty with Turkey at Sèvres, and they have been treated by Italy as such. Leros has been heavily fortified and equipped as naval base and air base; Astypalaea has accommodation for surface-craft and sea-planes; Rhodes, though its only natural port, Lindos, is small, has centres for aviation at Maritza, Kalatho, and Katavia, and a considerable garrison. Distances are as follows (approx. nautical miles):

Rhodes to Beirut	390 m.	Leros to Dardanelles	200 m.
Port Said	434 m.	Salonika	320 m.
Alexandria	378 m.	Athens	190 m.
Athens	279 m.	Suda Bay	200 m.
Smyrna	250 m.	Carpathos to Alexandria	300 m.
Istanbul	450 m.	Cyprus	300 m.
Limassol	275 m.	Haifa	500 m.
Tobruk	390 m.		

Principal *heights* are as follows:

Calymnos (Parasiva)	2,250 ft.
Carpathos (Kalolimni)	3,965 ft.
Caso (Kapsalo)	1,895 ft.
Chalki (Meravigli)	1,836 ft.
Cos (Dikeo)	2,870 ft.
Leros (Klidi)	1,140 ft.
Rhodes (Atairo)	4,068 ft.

The name 'Dodecanese'

The title of the 'Twelve Islands' has been differently applied in medieval and in modern times.

Under Leo III, the Isaurian Emperor of Byzantium (A.D. 717–40), the three naval commands were Cibyra (the Lycian District), Samos, and the 'Dodecanese or Aigaion Pelagos'.

In Byzantine historians of the ninth century, referring to events of A.D. 780 and A.D. 802, a group of islands within the Cyclades was under naval command of the '*Drungarios* of the Dodecanese' or 'of the *Aigaion Pelagos*', from which the later word 'Archipelago' is corrupted; and the 'Twelve Islands of the Cyclades' formed a civil and ecclesiastical province. But in the tenth century Rhodes and Symi were under Cibyra (*Thema XIV*), and the Aegean *Thema* was

divided between Cyclades and Sporades: here the 'Dodecanese' is quite dissolved. When the Emperor Baldwin II of Constantinople gave 'Dodecanese' to his son-in-law, the context shows that the Cycladic 'Duchy of Naxos' was meant, because the Sporades were not in his power. Later, when the Emperor Henry gave 'Dodecanese' to Marco Sanudo, he became thereby 'Duke of Naxos', 'of the Cyclades', or 'of the Archipelago', and his successor in 1227 was 'Duke of the Dodecanese'. This duchy was extinguished by Turkish conquest.

In Turkish times, however, the name 'Dodecanese' came to be applied popularly to those 'privileged islands' between Samos and Rhodes which had belonged to the Knights of the Hospital (p. 35). Sometimes Nikaria was included, sometimes Castellorizo. Rhodes and Cos, which had Turkish inhabitants as well as Greeks, were not strictly 'privileged islands', but had Turkish governors and garrisons. In 1908 the term 'Dodecanese' became the collective official title of the 'privileged islands' in their resistance to Turkish encroachments.

Since 1912 Italian usage has varied. At first the official designation was the 'Thirteen Islands' (*Tredeci Isole*, including Lipsos), or the 'Southern Sporades', or 'Rhodes and the Sporades', or 'Rhodes and the Aegean Islands'. Later still, the official phrase has been 'Rhodes and Dodecanese'; though Cos was never a 'privileged' island, and is administered by a *regente*, not by a *delegato* of the Governor.

Note on the spelling of place-names

As most of the place-names in these islands are of Greek origin, and intelligible to the modern Greek-speaking inhabitants, the spelling of them in this book is an approximation to the Greek spelling, with some concessions to classical usage for ancient names, and to the modern pronunciation of Greek.

In modern Greek, *d* (Greek Δ, δ) is pronounced like *th* in *then*, and *b* (Β, β) like *v*; for *b* as in *boat*, the Greeks write *mp* (μπ). Greek Θ, θ is represented by *th* as in *thin*, and in Italian renderings of Greek words by *t*. The vowel *i* is here used for Greek *oi*, *ei*, long *ē* (as in *he*) and *y*, as these are now indistinguishable; but in ancient names *y* is retained for Greek Υ, υ; *c* for Greek Κ, κ; and *ph* (instead of *f*) for Φ, φ to conform to English usage for classical words like *Symi*, *C. Phoca*.

The spelling of the Admiralty Charts varies, but is usually close enough to Greek pronunciation to be recognized by a modern Greek; but classical *y* has been restored, as in *Calymnos*, where it does not affect the pronunciation. When the Admiralty Chart spelling differs greatly, it is given (in parenthesis) after the Greek name: e.g. in Leros, 'Patella Hill (Adm. *Konasmata*)'.

Italians seldom hear or repeat Greek names correctly; their corrupt spellings are given in parenthesis. When they translate Greek descriptive place-names into Italian, the Greek word is printed, with the Italian substitute appended: e.g. Asprokephalo ('white headland'; It. *Testa bianca*); Palaeonisi (*Isola vecchia*); Vigla (*Vedetta*); Cavo Vrysi (*Punta della Fonte*); C. Psalida ('scissors': *P. delle Forbici*); Steno ('narrows': *Stretto*).

Every part of the islands being intimately known to the shepherds and fishermen, there is a profusion of descriptive names. Peaks which command a wide view are often called *Vigla* (or *Viglia*; Latin *vigilia*, 'watch-post') or *Meravigli* ('day-watch') because formerly watchmen were set there against pirates: similar names are *Skopia*, *Episkopi*, *Varda* ('ward'; It. *guardia*). The highest peak of an island is usually dedicated to the prophet Elijah (*Prophetis* or *Elias*) and crowned with his white chapel: and other saints have their chapels on hill-tops. Other descriptive names are:

agios: saint (Ag. Elias).
akrotiri: 'point': cape.
halépa: barren ground.
kephála, *képhalo*: headland.
khalí: 'claw': a low cape.
liváda: meadow.
mandra, *mandráki*: 'sheepfold': an enclosed port.
monastíri: lonely chapel.
muti, *myti*: 'nose': peak or cape.
nisí, *níso*: island.
palaeo-: 'old', means 'useless' or desolate: e.g. *Palaeonisi* = 'desert-island': *gaídaro*, 'donkey' is another word of contempt.
patella: 'bowl': dome-shaped hill.
pezunda: cliff: steep descent.
revma: torrent.
skála: 'steps'; pier, landing-place.
tigáni: 'frying-pan': land-locked cove.
vaiá: palm tree.
vlikháda, *glypháda*: 'groove', narrow creek.
vunó: hill.
yaló: beach.

In the second part of the book, in which the islands have been treated in detail, the accented syllable of place-names has been marked, in order to assist pronunciation.

CHAPTER II

GENERAL PHYSICAL AND GEOLOGICAL DESCRIPTION

Structure and Relief

THE whole region, from Rhodes and eastern Crete to Samos and Nikaria, continues the structure and configuration of south-western Anatolia, but it has been partly submerged since its main features were shaped as a rugged and complicated highland. There are thus great heights (see list in Chapter I) and great depths: 10,600 feet east of Rhodes; 8,216 feet north-west of Carpathos; 2,600 feet in the strait between Rhodes and Marmarice; and 1,600 feet between Cos and Astypalaea. But between Rhodes, Carpathos, and Crete the straits are hardly 1,500 feet deep; and between the other islands, and as far north as Samos, there is no deeper water than 350 feet, with a coast-line of promontories and gulfs, beset westward with islands and reefs. Consequently, as in many other Mediterranean regions, almost all those parts which are now above sea-level are mountainous; and the great lowlands and valleys, and much of the foot-hill country, are submerged.

The effect of this highland relief on the conditions of human life is very marked. The natural divisions are small and abruptly separated by high ridges or barren moorland; the submerged valleys bring the sea deep into the land area, offering numerous small ports and easy means of intercourse by sea; the sinking of alluvium and denudation of soil (especially since the destruction of the ancient forests) restrict cultivation and settlement and enforce emigration; though much has been done to conserve soil on hill-sides by laborious terracing, which is extended or renewed in all periods of prosperity. Conversely, the high ratio of uncultivable to cultivable land increases that of pastoral activities to agricultural; but except in Rhodes and Astypalaea (q.v.) there is little shift of flocks from winter to summer pastures.

There are here four principal types of rocks, of which the geological age is as different as their mineral components:

I. *Old Crystalline Rocks*—schists and marbles—of uncertain but pre-Cretaceous age, only exposed in the core of the greatest folded

structures, and less frequent than in the Cyclades and northern Sporades. They are converted by exposure into light sandy soils, of small fertility except where they are well watered, as at Linaria in Calymnos and in central Leros. They contain most of the mineral resources: marble (Cos); emery, chrome-iron, and hematite (Carpathos); silver (Gumushlu in Anatolia, opposite Calymnos); but some of these have been exhausted and others are not yet worked. Their natural vegetation is dense evergreen scrub, rising to forest where there is moisture enough, and they offer some pasture, but they are seldom populous; wood-cutting, goat-keeping, and in some places bee-keeping are principal occupations. The hill-wash in their valleys is often fertile. The Kephalo promontory of Cos consists of pre-Cretaceous schists, much contorted, but not much altered in structure.

II. *Massive Limestones, of Cretaceous and Eocene Age*, of great thickness, and much folded and dislocated in the subsequent mountain-building. Being almost pure limestone, they yield little soil, except a tenacious red clay which collects in hollows of the surface and is fertile: most of their surface is bare and arid, since surface-water dissolves the rock and opens swallow-holes and caves through which the whole rainfall is engulfed, to feed perennial springs at lower levels, often under the sea. There is little vegetation, poor pasture, and hardly any population. Formerly there were forests, as in Calymnos and Symi, now the barest of these islands; but once devastated, they are not easily restored. These massive limestones are represented in all the islands except Nisyros, but are best exemplified in Leros, Calymnos, Symi, and Telos.

III. *Softer Beds, of Tertiary Age*. It was after the formation of the massive limestones that the first mountain-building movements occurred, throughout the great mountain-zone which includes the Pyrenees, Alps, Carpathian and Balkan highlands, and the marginal ranges of Asia Minor, Armenia, and Persia. In the troughs between the folds, gulfs of the Mediterranean extended far into the mountain-zone; in others, fresh-water lakes were formed from inland drainage, and occasionally these evaporated, leaving deposits of gypsum and fresh-water marls. This period of mountain-building is not yet ended: perceptible changes of sea-level have occurred within historic times, and earthquakes are fairly frequent. To phases of

more violent disturbance belong the volcanic eruptions noted below (IV).

Principal varieties of deposit attributable to these are as follows:

i. *Eocene* ('flysch') conglomerates and shales mark the first subsidences in Rhodes, Carpathos, and Astypalaea: they occur also in Leros, Cos, Telos, Symi, and Casos, capping the massive limestones.

ii. *Oligocene* gravels and conglomerates, the coast-debris of gulfs of the southern sea, extend as far north as Cos, and are well represented in Rhodes by serpentine-conglomerates and sandstones; beyond this there was then solid land.

iii. *Miocene* lake-deposits, usually marls and soft limestones, were formed, north of Cos, in separate enclosed basins and are therefore of various quality: examples are in Cos, Calymnos, Leros, and Lipsos.

iv. *Early Pliocene* lake-deposits, extending farther south, as the land rose out of the southern sea, form the 'levantine series' of clays, sands, and gravels in Cos and the northern half of Rhodes, and may be compared with contemporary beds in Cyprus and other eastern areas.

v. *Middle and Later Pliocene* marine deposits were formed as the land sank again and the southern sea encroached on the Aegean, and surrounded some masses of high ground, not identical, however, with the present islands. These are among the variable clays, marls, sands, and gravels of Rhodes, Cos, Carpathos, and Casos.

vi. *Quaternary deposits* gradually became exposed and eroded; for the land now rose considerably above its lowest level. Examples are the coastal plateaux of Cos, Rhodes, and Carpathos, the terraced edges of which are successive coast-lines, with frontage of sandy beaches, dunes, and marshy deltas, especially in Cos and Rhodes.

These geological conditions still continue: the gulfs of the Aegean are accumulating marine limestones and marls; clays and sands are being spread off the larger estuaries; and fresh-water deposits in the few lake-basins which still remain in the interior of Asia Minor.

All these tertiary and later rocks, though of many different qualities, are much less resistant than the secondary limestones, and break up into more or less deep and fertile soils. All except a few stiffer clays are porous and absorb surface-moisture; the impervious clays, too, pass subsoil water over their surface to springs along their outcrop in valley-sides or escarpments. These beds form therefore the

chief cultivable districts; they are usually maritime lowlands, intersected by steep-sided ravines, which indicate recent elevation and erosion.

IV. *Volcanic Rocks*. It was in the Tertiary period that the Aegean depression was formed, by faulting and collapse; with many volcanic vents, represented by the craters of Nisyros and Patmos; weathered 'necks' of lava, in Telos, in the west end of Cos, and at Chifut Kale on the mainland opposite; obsidian (volcanic glass) in Yali island between Nisyros and Cos; hot springs in Nisyros and Calymnos; and pumice gravels on valley-sides in Calymnos and extensively opposite Cos. This phase of collapse and subsidence continues. The Levitha islands west of Leros are the sunken north end of Amorgos, fractured along the present cliff-line. Other fractured coasts, with very little subsequent erosion, are seen in Calymnos, Cos, Rhodes, and Castellorizo. Volcanic rocks, though some are very hard, usually weather easily into red or black soil, exceedingly rich and very fertile as they retain much water. They yield sulphur (in Nisyros, not now worked) and have mineral springs (some still warm) which are frequented for their medicinal effects, in Calymnos, Cos, Nisyros, and Rhodes.

Water-supply

There are no perennial streams, except in Rhodes (q.v.); but oleanders and other shrubs, along watercourses apparently dry, indicate that water may be found below the shingle. Deep-seated perennial springs are noted in the islands where they occur, usually at the base of massive limestones or in volcanic areas. Wells are sunk in the lowlands, but seldom to great depth; and may suffice for irrigation by wooden machines worked by mules, and (recently) by European pumps driven by windmills or oil-engines. On alluvial coasts there is often quite good water close to the beach and a few feet from the surface.

CHAPTER III

DETAILED TOPOGRAPHICAL DESCRIPTION

[*See* PART II. THE ISLANDS IN DETAIL (*pp.* 71 ff.)]

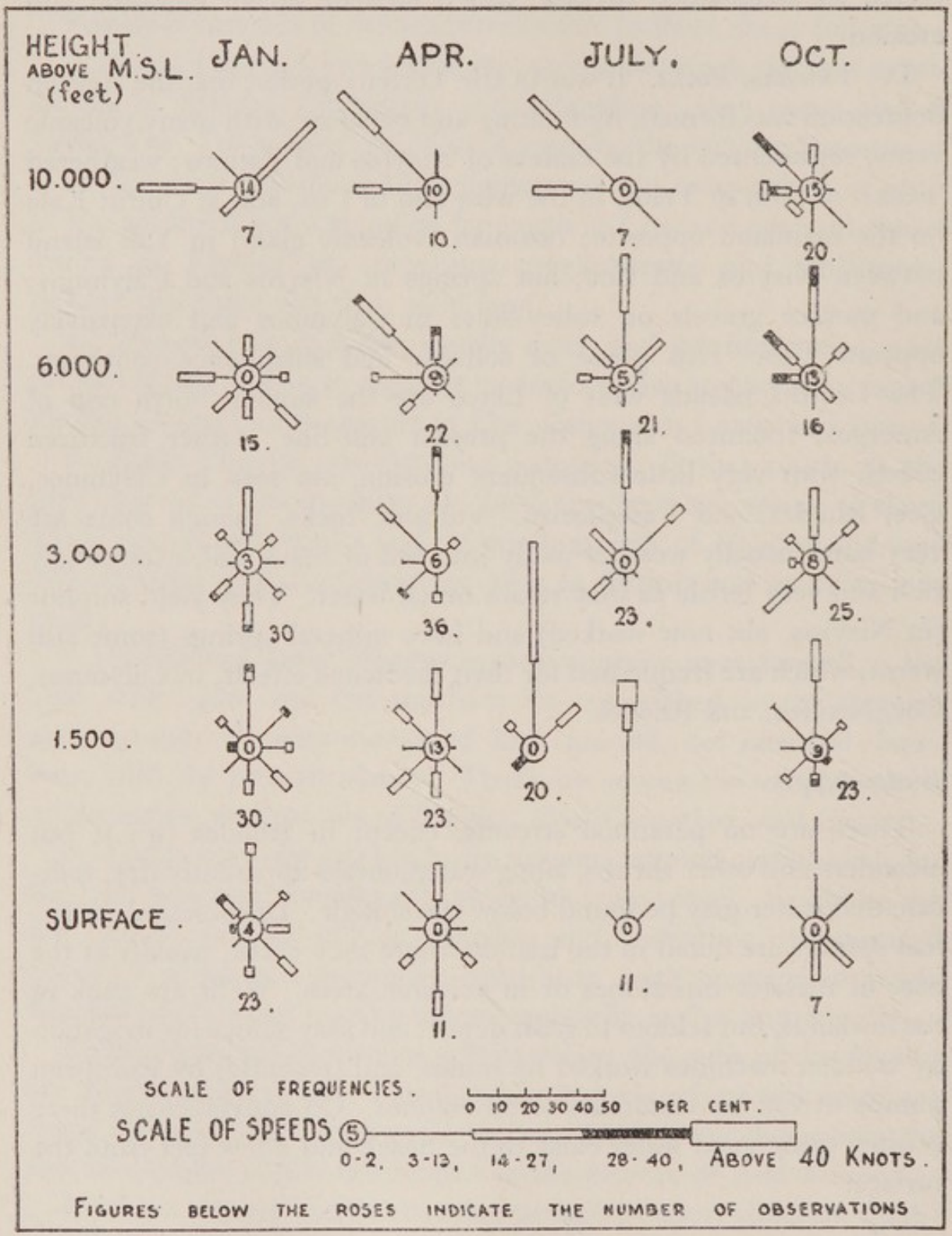


Diagram showing wind-speeds and wind-frequencies in the upper air over Leros

CHAPTER IV

CLIMATE, FLORA, AND FAUNA

CLIMATE

THE Dodecanese lies on the margin of two distinct regions of weather, characteristic of the Aegean Sea and of the eastern Mediterranean, and is also affected, like both of these, by its proximity to the continental highlands of south-western Anatolia. Characteristic of both the Aegean and the eastern Mediterranean are the 'etesian' (Turkish *meltem*) north winds from the high-pressure area of eastern Europe which eventually supply both the intense summer depression over Persia and north-west India and also the Saharan depression. But both the Aegean and the eastern Mediterranean are disturbed, especially in winter, by cyclonic depressions which originate in the central and western Mediterranean and move south-westwards along the west coast of peninsular Greece. Within the Aegean, local and seasonal conditions modify still further the direction and the force of both these systems of winds, which affect also the climate of the eastern Mediterranean, while undergoing further modifications in their passage through it.

The Aegean has the prevalent north winds modified off the Greek and Anatolian mainlands and the numerous islands by the highland barriers and the daily land and sea breezes, which become strong in summer. In winter and in the north Aegean, north winds predominate; farther south they are liable to interruption by south and south-west winds due to the depressions from the Adriatic, which usually enter the Aegean north-west of Crete. In spring north and north-east winds increase in strength, but in April they are light and variable, and in the south Aegean west winds are common till June, when the depressions cease to interfere and the 'etesian' north winds attain their full force. In September they begin to fail and are once more interrupted by winds from the south-west, and also from the east, more and more frequently till November.

At all seasons, however, local winds off adjacent mainlands may be strong. The daily '*imbat*' alternation of land and sea breezes becomes regular in May or June, especially along the Anatolian coast, and

lasts till autumn: the sea breeze rises about 10.00 hours and drops at sunset, the land breeze follows about 23.00 hours and lasts till early morning, followed by calm till the sea breeze rises again. These local breezes cease at about 1,500–2,000 feet, merging in the prevalent wind.

The coldest month in the Aegean is January, and February is colder than December. Even in March temperature may rise above 80° F., but it seldom exceeds 100° F. even in places sheltered from the cooler winds. The daily range of temperature is large—from 10° F. in small islands to 20° F. at Smyrna, far up a land-locked gulf. The hottest days are in July and August.

Frost is rare and local sea temperature in the north Aegean is lowered by cold inflow from the Black Sea to 53° F. in February at the Dardanelles, but raised to 59° F. by warm inflow from the eastern Mediterranean (*v.* below) along the Anatolian coast; but in summer the north-easterly wind drives cool water far to the south-east, though never preventing the flow of warmer water from beyond Rhodes (*v.* below).

Humidity varies with the season near the mainlands, but less in the islands and at sea, where the daily variation is also less.

Rainfall diminishes from north to south, as the cool season becomes shorter. Rains begin in October, or earlier, and increase during November and December. Rain accompanies depressions and falls on a south-east or south wind, continuing when it veers to south-west: it is sometimes very heavy for a short time. Snow falls on a north wind, following a depression: it is heaviest in January and February, but seldom lies more than a day or two.

Thunderstorms are fairly frequent, but vary in number from place to place and from year to year: in the open sea and the islands they are cold-front storms and occur in autumn and winter. Local heat-storms occur in late spring and early summer.

Water-spouts occur during storms, off high lee-shores.

The Eastern Mediterranean has less disturbed weather than the Aegean; its seasonal air currents are more continuous, its rainfall is smaller, and its temperature higher than regions farther north or farther west. In late autumn, depressions begin to move south-westward from the Adriatic and some of them pass south of Crete

and Anatolia; they cease about mid-spring. Until June, other depressions, less intense and more local, originate in north Africa and move eastwards from Tunis along the coast of Libya and Egypt. But in summer the 'etesian' winds are as persistent as in the Aegean. They are, however, north-westerly here, because the influence of the Asiatic depression over Iran is greater; south of Crete the north-west winds of December change to west winds in February; on the coast of Palestine and Syria, and in Cyprus, the summer winds, reinforced by diurnal sea breezes, are westerly and even south-westerly. The winter winds are made variable and more southerly by the frequent depressions which move eastward south of Anatolia. On the Karamanian coast, however, north-east winds off the high interior predominate in winter, and daily land and sea breezes (*imbat*) are strong, especially in summer, but do not disturb the general circulation above 3,000 feet.

Rainfall decreases and temperature increases eastward and southward, and rainfall is more closely confined to winter months; its onset and cessation are accompanied by marked changes of temperature. Spring and autumn are therefore transitional seasons, and both summer and winter are retarded. September is often warmer than June, and winter is from November to March.

The prevalent westerly winds of spring and summer supplement the general water-circulation of the eastern Mediterranean, driving eastward along the African coast a surface current of warm water about 79° F. in summer, rising to 86° F. between Cyprus and the Gulf of Alexandretta. This current returns along the south coast of Anatolia as far as Rhodes and even enters the Aegean, which is perceptibly cooler even in summer (77°–70° F.). On the other hand, the northerly winds of the Aegean drive cool surface-water—some of it of Pontic origin—between Crete and Cythera into the eastern Mediterranean, and hasten its assimilation to the temperature of the central basin, which is usually 4°–5° F. lower.

The mean temperature of the surface-water of the eastern Mediterranean is lowest (61°–62° F.) between January and March, and highest (78°–80° F.) in August. From October to February the water is warmer than the air—by about 3° in December. From May to September it is about 1° F. cooler; and as the sea is usually warmer near the coast, it has a moderating effect on

the maritime climate both in summer and in winter, in contrary directions.

Temperature rises rapidly from March to May or June, but is irregular in April, with relapses to winter cold. The hottest month is usually August, but July is as hot as August in Cyprus, and hotter in Karamania. In October temperature becomes variable again and falls rapidly till January, which is usually the coldest month, but frost is almost unknown, except on high ground. The maximum reaches 100° F. almost every year on the coast, and even higher temperatures are recorded inland. Much depends on direction of wind and distance from open sea. Diurnal range varies according to local surroundings: it is greatest in spring and least in summer, increasing again as the sea winds fall off in autumn. It always increases rapidly inland.

Humidity has considerable diurnal variation; hence the heavy dews in many places, especially on the coast. Though the air is usually dry, visibility varies greatly. Mist and fog are very local, and commonest from May to August. In very hot weather there is often haze and poor visibility at sea-level. Mirage elevates, depresses, or distorts the horizon in warm weather, especially inshore, and is often accompanied by exceptional visibility, causing errors in fixing position.

Cloud decreases from winter to summer, and from north to south.

Rain almost all falls between October and early May; the rainy season is earlier and longer to north and to west. Most of the rain falls in showers and in short spells of stormy weather, almost exclusively in the rear of depressions, and is therefore variable from place to place and from year to year. Hail occurs in winter thunderstorms. Snow is very rare except on high ground and inland. Dew is heavy in summer, especially on the coast.

The Dodecanese, which is marginal between the Aegean and the eastern Mediterranean, has the fundamental régime common to both, but with modifications peculiar to itself due (1) to the proximity of the high continental mass of Anatolia and (2) to the inflow, into the south-east Aegean, of warm surface-water from the sea between Rhodes and Cyprus. These modifications account for the differences between the records of the three meteorological stations (1) at the east end of Cos, (2) at the north end of Rhodes, (3) in southern

Carpathos. The stations at Cos and Rhodes lie inshore (4 miles and 12 miles respectively from the nearest mainland), but Cos is within the Aegean, with open sea to the west, whereas Rhodes is on the structural limit between island-strewn water westward, and the main expanse of the east Mediterranean eastward. This situation Rhodes shares with Carpathos; but Carpathos lies far out into open water on both sides, and is in the track of eastward-moving depressions. Both in Rhodes and in Carpathos the highest land lies athwart the prevalent and rain-bearing winds—hence the better preservation of their forests—and in Rhodes rainfall is increased by proximity of high mainland to leeward. But the depressions are fickle, and in 1936 Carpathos had no rain from May to December inclusive. Carpathos, far out to sea, has higher average temperatures, and smaller variation, than stations nearer the continent. Cos, lying inshore, and exposed to the north, has five rainless months and a sixth when rain is rare; but at other seasons much rain falls on the high ridge above the line of great springs. Both winter and summer are cooler on the average than at the other two stations, but extreme day-heats are greater, so near the mainland.

Annual Cycle. Conformably to these meteorological conditions the annual cycle of weather begins after the rainless summer. The strong 'etesian' wind, northerly in Cos, north-westerly in Rhodes and Carpathos, which prevails all through the sailing season, fails in September and is succeeded by calms, high temperature, and very clear skies.

In October haze and light clouds announce the autumn showers, and the first cyclonic storms of the winter season sometimes arrive suddenly; a light south wind veering right round to north-east—the 'Euroclydon' of S. Paul (Acts xxvii. 7–15, 20, 27, xxviii. 1–2). They arrive at intervals of about a week. A north-east breeze which brings clouds is followed by a warm breeze from the south-east, which veers to south-west and brings heavy rain, then passes to west with more rain, is strongest in the north-west, and dies down in the north, followed by a few bright dry days, with cloud masses over the highest land. These storms continue till April or May with lengthening intervals and diminished force, but, as the sun gains power, there is usually a period of calm in April, and intermittent spells of the north wind of summer with cool brilliant days and cold nights. After early May rain is almost unknown till October.

Temperatures range from 32° F. to 100° F., the greatest heats being in enclosed harbours and other places screened from the north wind. February is the coldest month; but frost is rare, and snow only falls in hard winters, even on M. Ataïro in Rhodes (4,068 feet). But there may be cool nights and heavy dew far into the summer. The hottest and driest months are July and August.

Radiation is so rapid in clear weather that it is easy to take cold, expecially after exercise or exposure to rain, or after sunset. The natives clothe themselves warmly at all seasons. European visitors are advised to carry an overcoat except in the warmest weather, and to be provided with blankets. Fuel being scarce, houses are not warmed. The daily *imbat* wind, landward before noon and seaward thereafter, is strongest near the mainland, but is perceptible beyond the island screen and modifies the seasonal summer wind; but in summer there is often flat calm between midnight and dawn.

Currents. In the absence of oceanic swell, the sudden rise of the gales lashes up steep and violent seas and causes local surface-currents. There is no appreciable tide, except in the strait between Carpathos and Crete; but southerly winds drive Aegean water towards the north, whence it escapes southward in surface-currents, behind the screen of inshore islands, and (conversely) northerly winds set up inshore currents from the south. These may be traced by the muddy outflow from the Maeander (*Turk.* Büyük Menderes) river, as far as Samos and Cavo Crio respectively. The cumulative sand-spits at the landward extremity of Rhodes and of Cos result from similar alternation of 'wind-rip' currents.

Hydrography. In these limited land-areas with a seasonal rainfall there are no large rivers and very few perennial streams, but many steep torrent-beds, violently flooded by winter rains, yet usually dry in summer, though there is often water beneath the gravel. These streams bring down much debris, especially after the dry season, and form wide boulder-strewn flood-beds in the low ground, which are liable to become choked and to change their course, while most of the finer silt is lost in the deep waters inshore; consequently there are few shoals except the sand-spits already noted. Deep-seated springs occur where the water-bearing limestones or sands rest on impervious clays or marls. Well-water is common in the stratified sands and shales, especially in the neighbourhood of high ground.

There are medicinal and hot springs near the volcanic areas, in Nisyros, Cos, and Calymnos, and also at Kalithea in the north-east of Rhodes. In Cos the town is fully supplied from the Burina spring through a Hellenic well-house and medieval aqueduct. In Rhodes the Roman aqueduct has been repaired. But at Leros, though there are local springs, drinking-water for the naval base was brought till lately from Cos.

FLORA AND FAUNA

THE characteristic vegetation is the evergreen scrub common to all lands with Mediterranean climate, but the plants which compose it vary with soil and aspect. Formerly most of the islands had forests, but long neglect and devastation by fire and goats have almost completely destroyed them, except in Rhodes, Carpathos, and Cos, which are lofty enough to catch sufficient rain, and offer shelter from the stronger winds. Timber for constructions is almost all imported, and even fuel is scarce in most of the islands. Formerly it was imported freely from Anatolia. Principal forest trees are pines (*P. brutia* and *halepensis*); cypresses (*C. sempervirens* and *horizontalis*); oaks (*Quercus aegilops, coccifera, infectoria, robur, lanuginosa*); junipers (*J. macrocarpa, phoenicia* (in Rhodes), *excelsa* (in Carpathos)). The plane (*Platanus orientalis*) grows both wild and cultivated where there is moisture enough; and a few very old planes, in Cos and elsewhere, are of great size. Wild species of pear, medlar (*Crataegus azarolus*), and carob are common; in Rhodes *Liquidambar orientalis* and *integriloba* grow in the Gadara valley, and *Pistacia mutica* near the city. The composition of the flora of Rhodes illustrates its geographical situation: out of 728 recorded species, of which 557 are widespread throughout the Mediterranean, 88 are at home in the eastern basin, 58 are shared with Anatolia and Syria, 11 with Anatolia and Crete, and 20 species and varieties are peculiar to Rhodes. Of 515 species recorded from Carpathos, 18 reappear only in Crete.

Of lower growth are myrtle (*M. communis*), genista (*G. acanthoclada*), lentisk (*Pistacia lentiscus*), several kinds of cistus, lavender (*L. stoechas*), thyme (*Th. capitatus*), and other aromatic shrubs; in Rhodes *Styrax officinalis* is collected (on M. Profita especially) for its fragrant turpentine. In moist places *Nerium oleander* and *Vitex agnuscastus* thrive. A fragrant sage (Greek *phlomos* or *phaskomiliá*) is dried to make an agreeable 'Greek tea', and the peasant women

prepare many household remedies and herb-flavourings from wild plants.

Very characteristic is the rich spring-flowering season for annuals, bulbs, and corms, which are dormant during the summer heat and germinate with the first winter rains. Grassland hardly exists, but in the few marshes and brackish deltas grow tall reeds, which are harvested for thatch and trellis-work.

Wild animals are rare. The deer (*Dama dama*) in Rhodian forests are said to have been introduced by the Knights; the wild asses on M. Atairo in Rhodes, the wild goats in Telos, and the rabbits in some of the smaller islands have probably escaped. Hares, on the other hand, are common, and Cos, Carpathos, and Astypalaea have local varieties. Badgers are found, the fox and hedgehog are reported in Cos, and the polecat in Carpathos.

The vulture (*Gyps fulvus*), carrion crow (*Corvus corone*), and a local jay (*Garrulus rhodius*) are to be seen; the wild pigeons may have escaped. In so arid a region reptiles are few except the common lizard and land tortoise, but the large grey lizard (*Agama stellio*) with rough skin is found in all the islands except Astypalaea and Carpathos. Rhodes and Cos have the water-tortoise (*Chlemmys caspica*) and fresh-water crab (*Potamon edulis*) which occurs also in Carpathos. Several kinds of snail are eaten. Nisyros is infested with a gay butterfly (*Callimorpha*): the fine *Danais Chrysippus* has been noted everywhere except in Carpathos. There are wild bees, as well as many in hives, which are either wooden boxes or clay tubes like drain-tiles, laid horizontally. During the spring flower-season mainland bees used to be ferried over to Calymnos, and bees from Nisyros to Cavo Crio: the attractive pasture seems to be the drought-resistant flora of the massive limestones. In Astypalaea medieval raiders were repelled by dropping beehives from the walls. The production of honey and of wax is considerable, and much is exported.

Home breeds of oxen, horses, and pigs are undersized; asses, sheep, and goats vary from island to island; and sturdy mules are bred. Camels, though common on the mainland, are not used, except occasionally in Rhodes and Cos. Meat is seldom eaten, except lamb at Easter: but bacon (*siglinó*) is cured in Calymnos, probably for the sponge-fishers. Fowls and eggs are common, and many kinds of fish, as well as octopus, both fresh and dried.

CHAPTER V

DISEASES, PESTS, HYGIENE

THOUGH the standard of living is not high, the islanders are well developed and well nourished. As in all Mediterranean countries, the infant death-rate is reputed to be high, and very old persons are not common.

The standard of cleanliness varies especially with the supply of water. Most houses have flat roofs, which are kept clean and supply a cistern in the basement. Drinking-water is usually brought from a spring or deep well, and good water is recognized and esteemed. Water is always served with wine and coffee. The larger and more modern houses have a cesspool; but there are no public sewerage systems, and baths are few. Increasing use is made of the hot springs, for rheumatism and other ailments, and latterly for recreation. In Rhodes the Italians have popularized sea-bathing.

Wine and local liqueurs are drunk very moderately, and excess is rare and disgraceful.

Visitors must take precautions against chills, because changes of temperature are rapid, and winter winds very cold. Mosquito-curtains are commonly used in summer; strangers should invariably use them from June to November. Unripe and over-ripe fruit should be avoided; but, though good meat is not easy to find, the local cooking is wholesome and varied. Some visitors suffer from a mild dysentery; and it is prudent for intending residents to be inoculated for typhoid, as well as for small-pox, since intercourse with Anatolia is not completely cut off, and epidemics occur occasionally.

The only endemic disease is malaria, but something has been done by reclaiming marsh, and observing modern precautions, to restrict the breeding-places of mosquitoes.

Malaria

Though much of the land surface is rocky and too dry for dense vegetation, there is water enough in coast marshes, torrent-beds, irrigation-tanks, house-cisterns, and around springs and leaky aqueducts for mosquitoes to breed locally in large numbers. The position of most villages is determined by water-supply; and even where the

houses lie high, the inhabitants frequent low-lying fields and irrigated gardens, and many camp out on their farms during the summer. Malaria is therefore fairly common, though its distribution is irregular. There is a well-defined malaria season from May to October, with maximum in July and August; but there may be transmission at all seasons, because mosquitoes winter in the houses and stables.

Malaria is transmitted by the bite of *Anopheles* mosquitoes, of which two Mediterranean species are carriers:

(1) *Anopheles maculipennis* breeds in stagnant and slow-moving water—even in small leaks from irrigation-channels. In this area it is probable that it breeds in brackish water. The mosquitoes themselves are most abundant in July and August, but live through the winter indoors, and the females bite at all seasons. They can fly at least three miles from their breeding-place. Principal methods of control are drainage, and the use of Paris green and of oil during the breeding-season. All possible breeding-places should be under control from the end of May. The adults must be killed by spraying.

(2) *Anopheles superpictus* is found in the haunts of *A. maculipennis*, but more commonly along mountain streams, not in the water but among boulders and in moist patches, and in irrigation-channels and mill-races. It bites cattle and horses as well as man. It must be controlled by clearing channels and providing alternative courses which can be dried in turn.

The common brown mosquito, *Culex pipiens*, is very common, especially in towns and villages. It breeds in small bodies of water, such as barrels, and in cess-pits. Though a nuisance, it does not transmit disease.

The bed-bug, *Cimex lectarius*, is abundant in the villages and meaner town houses.

Sandfly fever, Leishmaniasis, Oriental sore

The sandflies, *Phlebotomus major* and *papatasii*, are carriers of Leishmaniasis and of sandfly fever. The former, which affects children, occurs locally on the Greek mainland and at Canea in Crete. Sandfly fever is widespread.

Oriental sore also occurs on the mainland and in northern Crete, and there may be undetected foci of all these sandfly diseases.

Other diseases

The common diseases of Mediterranean countries are undulant fever, the enterics and dysenteries, conjunctivitis and trachoma, small-pox, and relapsing fever (either in epidemics carried by lice, or possibly sporadic and carried by ticks). Typhus, carried by lice, is less likely to occur, as there are few places where the Greek population is crowded; but murine typhus and the Mediterranean eruptive fever (*fièvre boutonneuse*) may be encountered.

Dengue has caused severe epidemics in the Aegean, in Crete, and in Syria in 1881, and in Athens and Piraeus in 1928. Dengue is transmitted by *Aëdes aegypti*, which is abundant in summer and autumn in some places, breeding in very small bodies of water such as pails, barrels, flower-vases, around houses, and even within them.

Cerebrospinal fever, another disease of crowded communities, may be encountered.

CHAPTER VI

THE PEOPLE

Population. The majority (about 87 per cent.) of the population are descendants of ancient and medieval Greeks; they vary perceptibly in temperament, and even in appearance, from island to island, in consequence of long inbreeding; but they are healthy, sturdy, and well favoured, and many are handsome, with traits reminiscent of classical types. They live by agriculture and herding, by sponge-diving and other fishing, and by seafaring; they are travelling masons, builders, and woodworkers; and they emigrate to keep cafés, restaurants, and confectioneries, to market the sponges, fruit, and other island produce, and to trade in European goods. When the islands are prosperous and untroubled, many who have prospered retire to their birth-place, or spend the summer on small country properties.

There are survivals of Frankish and Italian surnames, but no such Catholic congregations as in Thera, Naxos, and Syra. The Turkish conquerors are represented by small compact urban communities in Rhodes and in Cos, with a few suburban village settlements; but there is no Moslem peasantry such as remains in some parts of Cyprus. These Turks are industrious cultivators and artisans. Islam is represented by the Mufti in Rhodes. The Cretan Moslems, who settled about 1900 on the suburban beaches in Rhodes and Cos, are not Turkish, but descendants of Greek Christians who joined the Turks, on specific terms as to language and customs, to expel the Venetians; they speak Greek, do not veil their women, and do not mix with their Turkish neighbours. They are said to be passing over gradually to the mainland. The Jewish communities, also confined to Rhodes and Cos, were expelled from Spain, like those of Salonica, in the sixteenth century, and still speak Spanish. They are town-dwellers, living on a few urban industries, especially textiles and hotel-service, and on trade and money-lending. Their confessional head is their Rabbi in Rhodes. The Italian occupation has brought officials, soldiers, priests, and school teachers, but not many business men or industrials. There has, however, been organized immigration of peasants on

expropriated lands, carefully supervised and subsidized by *Azienda* associations like those of the Roman Campagna and the Po valley, and in 1936 about 7,000 Italians and other foreigners appeared in Leros, probably engaged on fortifications. Excluding these, there were about 6,000 Italian residents. There was a large and increasing tourist traffic in Rhodes and Cos (60,000 in 1934 against 700 in 1922), closely restricted as to routes and residences; and a few visitors spent the winter in the hotels of Rhodes and the summer in the subsidized resort at Apollona in the central highland.

Languages. The Greek population speaks dialects of modern Greek, which vary very little from island to island, but Astypalaea, which was repopulated from Tenos in 1413, has a marked local dialect. Educated persons can speak and write the 'pure' language of the newspapers and Greek official publications; but since the Italian occupation these are excluded, and the use of Greek, even colloquially, is discouraged (*see* pp. 41–2).

The Turks in Rhodes and Cos speak Turkish, but usually understand Greek. The Jews, being descendants of refugees from Spain, speak a dialect of Spanish. The Cretan Moslems speak a Greek dialect and usually talk Turkish also. The official language since 1912 is Italian.

Religions. The Greek population professes membership of the Orthodox Church and has been hitherto under the direct authority of the Greek Patriarch in Constantinople. The Italian administration has made persistent efforts to sever this connexion and to bring an autonomous Dodecanesian Church under state control. This interference, which reverses the consistent policy of the Ottoman Empire from 1522 to 1912, is deeply resented (*see* p. 40). The Moslems have their Mufti, and the Jews their Rabbi, in Rhodes. Churches have been built for Italian Catholics, and there is intense Catholic propaganda.

Culture and mode of life. All these islands have essentially the same type of community and settlement, which reflects medieval rather than old Hellenic conditions of life. There are, however, many survivals in detail, and other features may be more ancient than can be proved; while others were necessary adaptations to the general insecurity of Byzantine, Frankish, and Turkish rule, and are being outlived since piracy disappeared.

Every island, and in the larger islands—Rhodes, Cos, and Carpathos —every distinct natural and economic area, forms a distinct community. But of 90 larger settlements 45 are in Rhodes and 6 in Cos, because the land is more fertile and more interconnected. Except for a few suburban communities in Rhodes, and one in Cos, these rural settlements are essentially Greek. The typical settlement is a single close-built village (*khóra* or *khorió*) of 200–2,000 inhabitants, on a defensible site, usually a detached hill or abrupt spur of the main mountain-mass, at some distance from the sea, whereas the Hellenic city was more often near the shore. Usually the village clusters round the Byzantine or Frankish castle (*kastro*), but in Calymnos the Knights' fortress is on the other side of the valley from the walled village.

At the nearest convenient anchorage is a port-settlement (*skála* or *emporió*), which has usually grown in recent times at the expense of the older hill-village. Extreme instances are in Calymnos and Symi. Where the fertile land (*livádia*, 'pasture') is at a distance from both village and port there may be summer-houses or villas among the gardens and plantations: e.g. Prosta in Calymnos, Pethi in Symi, Kampo in Patmos, most of central Leros, and the suburbs of Rhodes City towards Kalithea. These resorts are the more frequented because the harbour towns, lying low, and screened from the wind, are very hot in summer.

In the oldest villages the streets are narrow and irregular, often rising with stone steps from one terrace of houses to another. In Telos people pass from one house to another by the roofs and external stairs. In Lindos and the older quarters of Rhodes houses are carried over the streets on arches, and there are projecting upper stories. There is usually a small open space (*agorá*; *platéa*) surrounded with shops and cafés, one or more churches and schools, and a public hall (*sýllogos*, *lésche*) maintained like a club for social occasions. Some large villages have a town hall (*demarcheíon*), but in the smaller the mayor (*démarchos*) is to be found at his own place of business.

In Astypalaea the outermost houses face inwards, as in some Cycladic villages, forming a continuous circuit with a single fortified gateway. The streets are roughly paved, but usually undrained, and become torrents in winter. Many older houses (even small ones) are built on two or three sides of a court, with a blank wall and gate on

the street. There is not always an upper story; more often the living-rooms are on a terrace-basement, partly rock-cut in the hill-side, to contain cistern, stable, store-room, and often the kitchen. In Calymnos, Symi, and Castellorizo several houses share such a terrace, with approach by stairs at one end. Outside stairs are common, of stone or occasionally of wood. But wood is rare, and rickety: roofs are often supported by a light arch, with few joists and a layer of reeds supporting a thick bed of pumice-gravel (*pozzolána*), which collects water for the cistern. In summer, when there is no rain, people sleep and even live on the roof, repairing it with lime-wash before the winter. There are no fire-places, except in the kitchen; living-rooms are warmed with charcoal in a brazier; the oven is a separate construction, vaulted with rubble or mud-brick. There are few passages; at most a vestibule admits to rooms right and left and to the stairs; many inner rooms are entered through the outer. All windows have shutters, well secured at night against mosquitoes and men. There is usually little furniture. The old cupboard-beds in the wall, and the bed-tents which preceded mosquito-curtains, are being replaced by European bedsteads of iron or painted wood; candles and olive-oil lamps by paraffin lamps, and these by electric light; but a tumbler of water with wick floating on half an inch of oil burns all night in the house, before the *ikon* of the patron saint, to reveal intruders. Clothes and bedding are stored in wooden chests with carved or painted fronts. Chairs and stools are rush-seated. The picturesque costumes peculiar to each island are now only seen at festivals, and more rarely as they pass into museums and private collections abroad; the museum in Rhodes has a good series. But peasants and fishermen often wear the traditional top-boots, baggy trousers, voluminous belt, and broad-brimmed straw hat, or soft red cap with tassel, and the women a full skirt and apron, low bodice, and brightly coloured kerchief, derived from the old dress of daily life. In Calymnos a long white chemise within an open-fronted gown of dark blue, with coloured girdle, was common till recently. The Rhodian and other characteristic embroideries on dresses, bedspreads, and towels are becoming rare, and modern imitations are coarse and garish; in Calymnos the kerchiefs are painted or stamped instead of embroidered.

Both in the villages and on the country-side small churches are numerous. Many are old, and some have medieval frescoes and

carved woodwork of the seventeenth and later centuries, but most of them are whitewashed, and some are neglected. But, in all, the feast day of the patron saint is celebrated, and most of them have their own priest; a few have endowments in land; others are dependent on a monastery. The term *monastíri*, applied (as it often is) to lonely chapels, recalls the former use of these places by hermits.

Characteristic of country where water-power is lacking are the numerous windmills, built where there is most wind, usually on a headland or a col between valleys. A low round tower, roofed with reeds or tiles, contains the millstones, stores the grain and flour, and supports the sails, which are of canvas rigged on spars, furled like the foresails of a ship, and eight to twelve in number. Occasionally windmills are used for irrigation, but water is usually raised from surface wells by wooden water-wheels of the Persian pattern, worked by an ox or a mule. European windmill pumps of iron are coming into use.

Olives are pressed under a vertical screw, but the classical lever-press was in use within living memory. Grapes are trodden with the feet in the villages, but European processes are used in Italian factories in Rhodes. Grain is threshed on a floor of beaten earth, under a sledge drawn by oxen or asses, and is winnowed with a shovel. Figs, raisins, and tomatoes are dried in the sun; tobacco is cured in sheds thatched and screened with reeds. Besides apricots, mandarin oranges, and cherries, rose-leaves and violets are candied and conserved with sugar. In Leros half-ripe dates are made into jam with honey.

Food. In all the islands—country-side and town alike—the normal diet rests, in principle, on what the district itself supplies. But bread, the essential food, requires that foreign flour be purchased with the local surplus of oil, wine, fruit, and sponges. This is the traditional Greek economy since ancient times. The household bread is excellent, except in times of scarcity, when pea, bean, and carob meal supplements wheat and barley. Slices of bread baked hard (*paximádi*, Turkish *peksimet*) keep long and are eaten at sea or on journeys. Cheese and other milk products, eggs, olives, and stews or salads of garden produce or wild herbs (*chortária*) are supplemented at festivals by fish, octopus, fowl, lamb, or kid. In Calymnos pig's flesh is dried or smoked (*siglinó*) or made into sausages (*loukánika*). Fresh and dried fruits, almonds, walnuts, and confections made with honey, under

Turkish names (*loukoúmi*, *halvá*, *baklavá*), complete the bill of fare. Spirits from grapes, citron, or mulberries, or flavoured with mastic or anise, are offered as an appetizer, with a morsel of tasty food (*meséri*). Wine is drunk sparingly and usually with water; coffee is served in the Turkish fashion in very small cups. Cigarettes are smoked, the older men take snuff, and use the *narghilé* water-pipe with its special tobacco (*tumbéki*). A local sage (*phaskomiliá*) is dried and infused like tea. The women do not usually eat with the men, but afterwards. In Advent, Lent, and similar periods in summer, there is general abstinence from all food except bread.

The farms are usually small freeholds, or tenancies under a local landlord, usually himself a farmer: for the varieties of land-tenure see Ch. XIII. They often lie far from the village, though many houses have garden plots adjacent. If there is a dwelling on a distant farm, it is essentially for summer use: the country-side has long been unsafe for scattered habitations; almost everyone lives in the *khorió*, or *kástro*, except a few shepherds. Much of the cultivated land has been terraced, especially for the tree crops, which are more important than the cereals; for with the old two-field system, yielding a crop only every second year, some islands only produce a few months' supply of grain, and trade their surplus of oil, wine, or figs for the remainder. There is therefore everywhere a small indispensable class of traders and merchants who often own their boats, but usually have their own land as well. Similarly oil, wine, and tobacco require presses, drying-sheds, and warehouses, with expert labour and supervision: but there are hardly the rudiments of an industrial class. Even sponge-trimming and cigarette-making, which employ women and girls, are supplementary to domestic life and home industries, and are essentially seasonal. Boat-building at Rhodes, Symi, Cos, and Leros, pottery at Patmos, Cos, and Calymnos and revived at Rhodes with medieval models, shoe-making, and tailoring are no less simply organized among the men (*see also* Ch. XII).

The strenuous conditions of life in these islands, due partly to the persistence of primitive methods of agriculture, have long resulted in emigration, either temporary, on shipboard, or for seasonal work in ports or on railways abroad; or permanent establishment in business. But often the emigrant returns to marry and establish a household, which he maintains by remittances from overseas; and many, whether

they have prospered or not, return at last to their birth-place. Statistics of the resident population may therefore mislead, especially in a period of depression, or when there are exceptional occasions of employment abroad, e.g. when the Suez Canal was being cut.

The Italian administration has introduced new methods of exploitation and spent large sums in development; but it has also encouraged and subsidized immigration from Italy, with the explicit intention of setting a good example to the natives; and the islanders have profited by these opportunities, so far as they have been allowed to do so. But encroachment of forest on pasture and even on arable land restricts the numbers of flocks and the village food-supplies, and drives country folk into the towns and abroad. There has also been positive expropriation of native cultivators on various pretexts, resulting in more emigration; consequently the net increase has not been large even in the more fertile islands; and in the rest the populations are stationary or decrease (*see* Table, p. 49).

The remedy would seem to be systematic reclamation, such as has been attempted in Rhodes and Cos, restoration of flocks on pasturable areas, and improvement of country-side conditions of life.

The fortified towns. In complete contrast with the Greek villages are the walled towns of Rhodes and Cos, both occupying seaboard sites, established in periods of comparative security and naval power, continuously inhabited since ancient days, and refortified in Byzantine times against pirates and Saracens, and by the Knights of the Hospital against the Turks. Long confined within their walls and gates, dominating artificial harbours, and distinct in population and manners from the country folk—on whom neither the Knights nor the Turks had much influence—they are now surrounded by suburbs of European fashion, and have become the bazaar and business-centre for their whole island. Leros, under Italian rule, has become a modern arsenal, as Rhodes became a medieval fortress, superseding the native population more completely, since the habitable area is smaller. For the Turks and Jews of these towns see p. 22.

CHAPTER VII

HISTORY

THOUGH there are traces of Stone Age occupation in the Aspri Petra cave at the west end of Cos, the islands received the Aegean culture of the Bronze Age quite in its later phases, when the site of Ialysus in the north-east of Rhodes became very prosperous and there were smaller settlements in Carpathos and Calymnos. In Homeric times all the islands, except Astypalaea, are represented as aiding the Achaean attack on Troy, grouped in three contingents, from the three cities of Rhodes—Ialysus, Camirus, and Lindus—from Symi, and from Casos, Carpathos, Cos, and the 'Calydnian Islands', Calymnos, Leros, and probably Patmos.

Later the island-world was overrun by piratical Carians from the mainland; but in the eleventh century the islands and many important sites on the Anatolian coast were reoccupied by Greek-speaking emigrants from peninsular Greece. Of these, three main streams are distinguished by antecedents and dialect. From northern Greece, through the strait north of Euboea, *Aeolic* Greeks reached Lesbos and occupied the mainland opposite, from the Straits to the Gulf of Smyrna. From central Greece, Attica, and north-eastern Peloponnese came a very mixed flood of *Ionians*, to Chios, Samos, and the coast from Smyrna to Miletus south of the Maeander river, forming a Pan-Ionian league of twelve cities, with common sanctuary and meeting-place in the Mycale promontory. Southward again from Iasos on the Gulf of Mandelyah, *Dorians* from the Gulf of Argos, who also colonized eastern Crete, founded six principal cities: Halicarnassus and Cnidus on the Carian mainland, Cos off the gulf between them, and the three old cities of Rhodes. This 'hexapolis' had a similar league-sanctuary on the Triopian promontory at Cnidus, to which the smaller islands from Casos and Carpathos to Calymnos seem to have adhered. Leros and Patmos were colonized from Miletus. Inland of Halicarnassus there was a strong native dynasty at Mylasa, but farther south Carians gave place to Caunians, and Lycia began at the Xanthus river, fifty miles east of Rhodes. Halicarnassus passed out of the Dorian League; in the fifth century it had Ionian connexions and even

dialect; in the fourth it became the capital and naval base of the princes of Mylasa. The early 'sea-power' attributed to Rhodes was probably exercised on behalf of the Triopian League, which colonized Gela on the south coast of Sicily in 690 B.C. and helped Gela to found Acragas (*Girgenti*) in 582 B.C. That there was no such colonization of the coast of Caria is a symptom of the deep contrast between the Triopian Greeks and their mainland neighbours. But what had been a barrier to settlement, at first, became an effective mainland screen against Persian aggression, and later a dangerous rival to Rhodes (p. 31).

Primacy of Rhodes. Though the islands, like Halicarnassus and Cnidus, had submitted to Persia at first, they became members of the defensive league of Delos after 480: but they had little interest in quarrels between Athens and Sparta, and when belligerent forces reached the Sporades in 412 the three Rhodian cities merged their resources in a new City of Rhodes at the north end of the island, commanding both the strait and the easiest landing-beaches. Of the old cities, Ialysus and Camirus faded, but Lindus was too valuable a fortress to be neglected in face of the Persian danger, and too useful a port of call, and it remained a considerable town throughout ancient times. The new Rhodes, founded in 408, and designed by the first town-planner, Hippodamus of Miletus, was more spacious and impressive than any contemporary city, except Syracuse and Athens; it had eight miles of landward wall and five artificial harbours, of which two are still in use. With the resources of its island estate, and of a mainland domain, long contested with Halicarnassus, it created wide trade and became very wealthy. After two generations of internal feud it achieved also unusual political stability, a reputation for just dealing which brought frequent invitations to arbitrate between other states, and eminent distinction in learning, art, and science, which outlasted its political independence. The 'Sea Law of the Rhodians' was still generally observed in Byzantine times.

The example of Rhodes was followed in 367 by Cos, on a new site facing the mainland, commanding the strait, and adjacent to the healing-shrine of Asklepios (Aesculapius). Though never a serious rival to Rhodes, and usually friendly, Cos became very prosperous, produced poets, painters, and textile artists, and established the first school of scientific medicine. Cnidus, though prosperous as a port

of call and market for wines, had not the territorial resources of Cos or of Rhodes. Halicarnassus, on the other hand, merged its fortunes with those of the native dynasty of Mylasa, thirty miles inland, and became the capital and naval arsenal of a mainland vassal-state which Persia sanctioned but could not entirely control. These various fortunes of the six Triopian cities illustrate the principal aspects of their geographical and economic relations with the Asiatic mainland and with each other.

Meanwhile, early dissension among the Rhodians themselves involved them in the general party-warfare of the Greek world, which they had united to avoid, and also enabled the Carian princes and their Persian overlord to interfere disastrously in Rhodian affairs. Short periods of accord with Sparta (408–395), and Athens (after 395, and again 358–356) were followed by the domination of Maussolus of Halicarnassus and (after his death in 353) of his queen, Artemisia. In 340 a Persian force occupied the city; and two Rhodians, Mentes and Mentor, were among the ablest generals of Darius III. But when Alexander invaded Asia Minor in 335 B.C., and Halicarnassus became the advanced base of the Persian fleet, Rhodes held aloof; and when he captured Halicarnassus it was rewarded with a wide mainland dominion.

On Alexander's death Rhodes expelled his garrison and entered on a long period of independence, prosperity, and political influence as defender of the freedom of the seas against his successors, the Greek kings of Egypt, Syria, and Macedon. It was the resistance of Rhodes to Demetrius the Besieger (305) that turned the tide against Syria and enabled Egypt to establish a defensive sea-power of its own; and it was the Rhodian grip on seaborne trade, and on the coastwise outlets of western Asia Minor, that compelled the Greek kings of Pergamum, who dominated the Marmara and the coast-lands opposite Lesbos, Chios, and Samos, to establish eventually their own transcontinental outlet at Adalia,[1] which bears the name of its founder Attalus II (159–138). Thus Rhodes established, first the leadership among adjacent islands, for which it was qualified by its size and varied resources, then its control over the neighbouring mainland, and then a sea-power and commercial connexions which enabled it to influence the general course of events. The Rhodians stood for two principles:

[1] Now known to the Turks as Antalya.

the freedom of the seas, against kings and pirates alike, and the freedom of the Greeks in their own waters and home-lands. And as the freedom of seas and Greeks was imperilled by any change in the balance of power, the Rhodians stood also for the maintenance of peace, and the settlement of political quarrels, like commercial quarrels, by discussion and agreement. With their wide experience and high record of straight dealing, they were often invited to arbitrate, and sometimes offered to do so. When their city was shattered by earthquake in 225, its fabric and fortunes were restored by contributions from all parts of the Greek world. But they became strong enough to meet aggression with force, and to bring other Greek states and leagues into concerted action.

When Rome began to intervene, about 200 B.C., in Eastern Mediterranean affairs, Rhodes and Pergamum, then co-operating to defend Greek freedom against a coalition of the kings of Macedon and Syria, were their earliest and most useful allies. Rhodian sea-power, defeating the fleet of Antiochus III in 189 after a hard-fought struggle, made possible Rome's invasion of Asia Minor and the land victory of Magnesia; and thereafter Rhodes shared with Pergamum the dominion of the coast-lands north and south of the Maeander river.

Rhodes was neither too near to Rome, nor the head of a rival land-empire like Carthage, nor like Corinth the rallying-point and citadel of fanatical nationalism, nor even engaged, like the princes of Pergamum, in exploiting a considerable continental region. The mainland protectorate of Rhodes was limited geographically and politically; it subserved elementary needs of the Rhodians—corn, cattle, and timber—and secured them against sudden violence.

But the prosperity of the Rhodians themselves, the jealousy of the kings of Pergamum, and their untimely intervention between Rome and Macedon in 167, lost them the confidence of their great ally and their own mainland dominion; and in 164 the new treaty of 'alliance' with Rome deprived them of political initiative. Their commercial freedom, too, was impaired by Rome's economic interest in the rival trading-centre at Delos. Material prosperity, however, and intellectual distinction long remained, both in science and in the liberal arts, especially in rhetoric and in sculpture. When the Empire began to take shape, Rhodes owed once more to its situation a new administrative function: both Antony and Augustus restored parts of its insular

dominion, Augustus confirmed its former status as a 'free and allied city', and Vespasian made it the capital of a new 'province of the islands', which was subordinated later to Diocletian's 'province of Asia' (A.D. 284–305), and included in the Byzantine *thema* of Cibyra —maritime south-west Asia Minor from Miletus to Seleucia. But severe earthquakes in A.D. 155 and again in A.D. 575 and about 650, and attacks by the Isaurians (A.D. 470), the Persians of Chosroes II (A.D. 620–2), and the Saracens (A.D. 653, 658, 717, 867) brought the ancient history of Rhodes to a pitiful end, the Saracens' raids inflicting as severe a blow on Byzantine prestige as their foundation of Candia in Crete in A.D. 840.

This ancient history of the chief city-state of the Dodecanese illustrates, in every detail, the geographical situation and economic and strategical significance of the whole district; and in more recent times the same main features reappear; though in a larger field of operations the part played by these civic communities becomes relatively smaller. But as administrative centre for the Sporades, and at times also for the Cyclades, as mandatory and coast-guard for south-western Asia Minor, and as outer guard of the Aegean towards the Levant, its geographical function remains essentially the same.

Of the other islands, during this long primacy of Rhodes, little is recorded. Cos remained prosperous and a centre of learning and art. But it was the remote and hitherto inhospitable Patmos which was chosen in A.D. 1088 by the Emperor Alexius Comnenus to be the seat of a monastery to be founded by Christodoulos, a Bithynian monk from Cos, in honour of Saint John the Evangelist (*Theológos*), who had been interned there by Domitian in A.D. 95–6. For security against pirates, the monastery stands high on the ridge and some distance from the landing-place; but the reputed 'Cave of the Apocalypse' is lower on the hill-side. The monastery, always rich, became famous also for its learning and its school, and being under the direct supervision of the Orthodox Patriarch in Constantinople, became a centre of Greek life and aspirations when the Empire fell to the Turks.

As early as 1082 the Venetians obtained from Alexius Comnenus commercial privileges in the islands. After the Crusaders' conquest of Constantinople in 1204 the Aegean islands were seized

indiscriminately by those western states, Venice, Genoa, and Pisa, who could best defend them, or adventurers patronized by one or other of them. The southern Sporades were not included in the Duchy of Naxos—the medieval 'Dodecanese' (p. 4)—nor in the chain of Venetian posts from Corfu to Crete, nor in the Genoese islands, Lesbos, Chios, and Samos. In Rhodes a Byzantine vassal, Leon Gabalas, had made himself independent before 1204, but Rhodes was a vassal of Byzantium in 1224, when his successor was expelled by the Genoese and protected by Venice; and this rivalry enabled Rhodes to reassert its independence. Then in 1248 Genoa leased it from the restored Byzantine Emperor, Michael Palaeologus, and it was a Genoese vassal, Vignola, who arranged its transfer under Papal sanction to the Knights of the Hospital of Saint John of Jerusalem.

The Knights of the Hospital had been founded to take care of pilgrims, and became enriched both by benefactions and by the profits of what became an organized travel-agency between Palestine and west Mediterranean ports as far as Venice, Genoa, and Marseilles, but was exposed to the raids of Barbary corsairs until the Knights' ships gave safer convoy. When Acre, the last Frankish fortress in Palestine, surrendered to the Moslems in 1291, the Knights of the Hospital, like those of the Temple, who had had charge of the Holy Places, took refuge first in Cyprus; but they were unwelcome there and were completely reorganized in 1300. In 1306 their Grand Master Foulques de Villaret led an attack on Rhodes, and after visiting Europe, where the Knights of the Temple were being persecuted by Philip IV of France, he returned in 1309 with authority and resources to take over the island, and he occupied the city in 1310. On the dissolution of the Order of Templars in 1314, their property was assigned to the Hospitallers.

Protected by vassals of Genoa and of Venice on the north and south, and in rear, the Knights became a powerful partner in the Frankish domination over Greek waters. With the sanction of Pope John XXII, and in conjunction with Genoa, Venice, and Cyprus, they attacked Smyrna in 1344 and took it in 1348. In 1365 they stormed Alexandria, then an eastern rendezvous of the pirates; in 1367 they joined Cyprus and Genoa in an ambitious but unsuccessful attack on Tarsus, Tripoli, and Latakia; in 1396 they supported King Sigismund of

Hungary against the Turks. Only after the loss of Smyrna in 1412 and the surrender of the Giustiniani trading-company of Chios in 1415, had the masters of Rhodes to look to their own rearguard, building the castle of S. Peter the Liberator at Budrum, with its outer guards in Leros, Calymnos, and Cos, and minor forts at Astypalaea, Nisyros, Episkopi, and Symi; and refortifying Lindos and the Palaeokastro near Kattavia, to close the back doors into Rhodes itself. Castellorizo served to signal danger from the east and to cover raids on Egypt. But it was the City of Rhodes that was their stronghold, and is their monument.

As long as the two Moslem powers, Saracens in Egypt and Turks in Western Asia, could be kept apart or at war, Rhodes maintained itself without difficulty, though it was besieged by an Egyptian force in 1444. But the Turkish capture of Constantinople in 1453 took the position in rear. The first Turkish sieges, by Mohammed II in 1470 and 1480, failed because the outposts in the northern islands held firm. But the Turkish conquest of Egypt in 1517 changed the position again. On the accession of Suleiman II in 1520, simultaneous Turkish attacks on Mytilene, Chios, Crete, and Cyprus cut off all near allies; European help could not be summoned in time; and after six months' siege Rhodes was surrendered in 1523. The Knights, and all who wished to follow them, were allowed to withdraw, and settled temporarily in Tripoli, but by 1530 had installed themselves in Malta under grant from the Emperor Charles V. The Turkish losses, 90,000 out of 200,000 men, account for the vast cemeteries which still encircle the Walls of the Knights.

Dodecanese under the Turks. After vigorous resistance, in the last struggles of the Order in Rhodes, the islanders surrendered to Suleiman the Magnificent, as they had surrendered to Rome, and to the Knights, on condition that their 'ancient privileges' should be confirmed. Included in the *vilayet* of the islands, of which the seat of government was in Chios, and under the supervision of a Turkish *mutessarif* in Rhodes, and the protection of Turkish garrisons there and in Cos, they were to govern themselves, to tax themselves with a collective tribute (*maktu*) which was not heavy (£2,000 in 1830) and was mostly spent on local Moslem institutions. They were to have freedom for trade, and especially for import of wood from the

mainland. They were to observe their own religion, like other Orthodox communities, under the Patriarch in Constantinople and their archbishops in Rhodes, Cos, Leros, and Casos; and to retain their own language, culture, and mode of life. The monastery in Patmos remained wholly free, and both there and in Calymnos and Symi endowed schools were maintained, which were attended by pupils from afar, until the National University at Athens was founded in 1837. These privileges were formally confirmed in 1644, in 1813, and in 1856.

As there was no Moslem or other alien element except in Rhodes and Cos, where there was room and maintenance for all, there was no cause for friction, and the 'privileged islands' hardly appear in history. Nevertheless, in the Greek National Movement the islanders took active part, especially the seamen of Casos, who suffered severe reprisals in 1824. It was to build ships for the Greek patriots that Symi sacrificed the last of its forests, and therewith a chief source of wealth. In 1832 the privileged islands were at first included in the new Greek kingdom, but were afterwards exchanged for Euboea, which had been retained for the Turks—a reasonable bargain, if the new state might not include both, for Euboea, a strong Turkish fortress and source of supplies, within a stone's throw of the Greek mainland, was as essential to Greek independence now as against the kings of Macedon. The 'privileged islands', on the other hand, might seem to be protected by their charters, and by the 'protecting powers' who negotiated the exchange. How much the 'protecting powers' knew about the islands was revealed when another treaty had to be negotiated, to exchange the Turkish half of Amorgos for the Greek half of Astypalaea, both islands being found to be bisected by the agreed frontier when it was drawn on a map. In this chance fashion Astypalaea became once more a 'privileged island' and a Turkish vassal.

The next generation was a time of great prosperity, because, over and above the traditional exports of fruit, wine, and oil, industrial countries had begun to need all the sponges that could be found, and the sponge-fishing benefited most those islands which had least work ashore for their menfolk. By 1840 the islanders, especially from Calymnos and Symi, were exploring distant sponge-beds off the Libyan coast, as well as exhausting their own; later, Calymnos had

a colony at Tarpon Springs in Florida, with fifty-seven sponge-boats in 1936, and Symi men worked in the Bahamas and along the coast of South America.

This exceptional prosperity coincided in time with changes in the political situation in central Europe, with a nationalist movement in Turkey, and with the new policy of encroachment on the privileges of the islands, under the pretext of 'assimilation' to unprivileged districts. A British protest in 1866 was without effect. Turkish troops were sent twice to Calymnos in connexion with the Cretan revolt of 1867; and Turkish administrators were sent to Calymnos and Symi, some of the island *demogerontiai* were suppressed, Turkish courts were established in 1871, customs and harbour-control in 1874. In 1885 Turkish police were sent to Symi to 'restore order' and the island was blockaded against its own fishing-grounds and its mainland farms and pasture. The 'Young Turk Movement' in 1908 was doctrinaire as well as nationalist, while the islands were small, wealthy, and Hellenist; 'assimilation' was found to necessitate heavy direct taxation; 'abolition of religious distinctions' was found to mean the withdrawal of the privileges of the Orthodox Church; 'uniformity of civil status' involved liability of able-bodied men to conscription, and disorganized the sponge-fishery. As the 'protecting powers' omitted to protect, and the protest of the Patriarch in Constantinople was disregarded, the only remedy was for the men to fish sponges elsewhere (as already described), maintaining their families at home by remittances. In 1909 there were vigorous protests, and rapid increase of emigration, and some rioting in Symi, and in March 1910 the 'ancient privileges' were abrogated altogether.

The Italian Occupation. In the Balkan War of 1912 the Greek fleet liberated from Turkish rule the northern islands, Lesbos, Chios, and Samos with Nikaria, and the liberation of the 'privileged islands' seemed imminent. But Italy was independently at war with Turkey. Early in 1912 an Italian expeditionary force had assembled at Astypalaea and occupied the other islands without resistance, except in Rhodes, where the Turkish garrison withdrew from the city to Psithos, and surrendered after a few hours' fighting. As it seemed inconceivable that liberation from Turkish rule would not be followed by transfer to the Greek kingdom, the Italian occupation was welcomed

and actively supported by the islanders. Italian assurances of 'the greatest possible proofs of goodwill', of 'the respect of your religion, your customs and your tradition', and of 'complete autonomy in the future' after a 'provisional occupation', were accepted with joy, and delegates met in Patmos to give effect to them by the establishment of an 'Aegean State', whose first duty would be to give effect to the permanent national wish of all Greeks; for on Greek lips 'autonomy' means nothing else but freedom to incorporate oneself in the 'Kingdom of the Hellenes'.

Those Italian promises were not mere local fair-speaking. The Italian Premier, Giolitti, repudiated the notion of 'annexing territories of Greek nationality', and Sir Edward Grey in 1913 said that the fate of the islands 'interested all the Great Powers'. It was explained that the islands were occupied 'to check contraband between Turkey and Cyrenaica', where (it was asserted) Turkish armed forces still held out.

By the First Treaty of Lausanne on 15 October 1912, though the islands were to be restored to Turkey, Italy was confirmed in occupation of them until the Turks should evacuate Libya. But before this happened—or was admitted to have happened—Turkey came into the War of 1914–18, and by the secret treaty of London (26 April 1915, clause 8) Italy was guaranteed 'full possession of the twelve islands now occupied'; the Italians claiming that on the resumption of hostilities the Treaty of Lausanne lapsed, and that their actual occupation must be treated as a conquest.

On 29 July 1919 agreement was reached between M. Venezelos and M. Tittoni, the Italian Foreign Minister, for the renunciation, in favour of Greece, of all rights and titles in the islands of the Aegean Sea occupied by Italy, while Rhodes was to have 'local autonomy'. This agreement was to become effective when the Treaty of Sèvres should be ratified between Turkey and the Allies. On 10 August 1920 it was further agreed at Sèvres between M. Venezelos and Count Bonin that Rhodes should have wide local autonomy within two months of the ratification, and that after fifteen years, if Great Britain ceded Cyprus to Greece—as was widely advocated at this time—Rhodes should be ceded by Italy, provided that by a plebiscite under the supervision of the League of Nations the Rhodians should have decided in favour of union with Greece.

But the Treaty of Sèvres was not ratified, and in 1922 Count Sforza denounced the agreement with M. Venezelos, contributing thereby directly to his fall from power. On 15 October 1922 Lord Curzon reminded Italy that the cession of Jubaland by Great Britain to Italy was conditional on Italian settlement of the question of the Dodecanese with Greece; but his successor, Mr. Ramsay Macdonald, abandoned this stipulation, and by the Second Treaty of Lausanne in 1924 Italy obtained 'full possession of the islands now occupied', which included Castellorizo since its cession by France to Italy in 1920.

What has happened in the islands since 1924 is difficult to ascertain, since the Italian administration controls communications, and excludes visitors except from well-defined tourist-routes in Rhodes and Cos. In September 1928, when a Pact of Friendship was concluded between Italy and Greece, Mussolini assured Venezelos that Italy would not follow a policy of denationalization in the Dodecanese, and this assurance has been repeated on several occasions. What is beyond dispute is the declaration of the new Governor, Senator de Vecchi, on his arrival in 1937, that he had come 'to bring Fascist life and the Fascist spirit to the islands'; and the decline of the population, most marked in the most independent and progressive islands: in Calymnos from 25,000 (1912) to 8,312 (1917), recovering to 15,247 (1936); in Symi from 23,000 to 7,000 (1917) and 6,195 (1936); in Leros from 8,000 to 2,500, with later introduction of Italian labour for military works; in Castellorizo from 12,000 (Turkish estimate) to 1,800 (1917) and 2,238 (1936). In Nisyros the decline is reported as 50 per cent. and in Casos as 72 per cent. (*See also* p. 49.)

But with so many of the islanders abroad, much information has been collected which illustrates the practical working of administrative measures which are themselves official and beyond dispute.

From the Italian point of view the islands have been administered with scientific skill and lavish expenditure, especially in Rhodes and Cos, where there are Turks and Jews as well as Greeks, the best opportunity for Italian immigrants, and a tourist-traffic which has become copious and profitable; about 60,000 visitors come to Rhodes annually, chiefly from Italy and Egypt. In 1923 the Governor, Senatore Mario Lago, initiated a policy of intensive development of Rhodes as a commercial centre and health-resort, for which it is well

suited. The ports and city have been cleaned and materially improved, roads have been built, antiquities conserved and exposed, and a large hotel has been established in a forested health-resort and game-preserve at Apollona. Italian culture has been commended, and indeed imposed on a reluctant people, which had remained essentially Greek under Roman, Frankish, and Turkish masters. Religion is nominally free, and the Turks, and till recently the Jews, in Rhodes and Cos, have been treated with consideration. But the Greek 'minority' —about 87 per cent. of the population—has been denied the autonomy promised when the islands were seized, and has found it difficult to live as Greeks at all.

Among a people so widely distributed outside the political boundaries of the National State, the consciousness of national unity and the patriotic sentiment which it inspires are sustained by traditional institutions, of which the chief are local self-government, the Orthodox Church, the Greek language and the teaching of it, the traditional ownership or occupancy of the land, and free intercourse between Greek communities. On all these matters Italian policy has become more and more repressive.

Local Autonomy, from the first, was infringed by interference in local questions against the more liberal parties. On 8 March 1937 the ancient municipal council of the City of Rhodes, which the Turks never molested, was dissolved, and other municipalities (*demogerontiai*) were replaced by State Commissioners. There is therefore now no authorized means of conference on local affairs.

The Orthodox Church in the Dodecanese, of which the head is the Metropolitan of Rhodes, has always been dependent on the Oecumenical Patriarch in Constantinople. From 1919 onwards this connexion has been persistently attacked, on the pretext that ministers of religion in Italian territory must not be dependent on foreign ecclesiastical authorities. But this is the reverse of the policy of Great Britain formerly in the Ionian Islands, of Austria-Hungary in Bosnia-Herzegovina, and of the Roman Church in Protestant, Orthodox, and non-Christian countries; and there is no analogy with the Orthodox Church in Cyprus, which has always been 'autocephalous'.

In 1921 the Metropolitan of Rhodes was expelled. After three years he was allowed to return on condition that he severed all con-

nexion with the Patriarch. But this was constitutionally not in his power, and he died before his undertaking could be ratified by the Church. Subsequent attempts to proclaim the independence of the Orthodox Church have led to rioting, and in Calymnos in 1935 to bloodshed.

There have been other strong attempts to assimilate the Orthodox Church in the islands to the Uniate Church, which resulted from similar persecution in Frankish times, and is ill regarded by the Orthodox.

On 18 January 1930 the mixed lay and ecclesiastical courts, which had been charged under Turkish rule with religious questions and the personal status of members of the Orthodox Church (and similarly of Moslems and Jews), were suppressed, and these cases are henceforth submitted to the civil courts, which are Italian.

The appointment of bishops, and even the ordination of priests, has been made conditional on government permission. There has been interference with Orthodox ritual; local church festivals and pilgrimages, which are very popular, have been prohibited; and since 1936 the Orthodox rites for weddings and funerals have been forbidden. As a result many Greek deaths are concealed, and funerals take place secretly to avoid the obnoxious Catholic rites.

Education in traditional subjects, and especially religious instruction, has always been a principal care of the Church, and even in the municipal and endowed schools—founded as new subjects and methods emerged, to supplement older institutions such as the monastery school in Patmos—the priests customarily supervise the teaching of religion. Most of the municipalities maintained their own schools, some of which were ancient and well known, and many well endowed by private benefactors.

On 1 January 1926 these municipal and endowed schools were brought under the Italian educational authority. Their teaching was 'assimilated' to that of the Italian state schools (*scuole regie*, pp. 44–5), and Greek bishops were forbidden to concern themselves with religious teaching in them. In 1931 (decree 200) the municipal school-managers were deprived of all control over the teachers they employed. Allusions to Greece in school were forbidden, and teachers who made them were deported or imprisoned. No school teachers were allowed to visit Greece. In 1937 the Greek municipal

secondary schools (*gymnasie*) were closed, and their buildings occupied by military offices or fascist organizations. In the state schools, which were the only alternative to the *gymnasie*, the language is Italian, the courses are those of Italian schools, and since 1937 Greek is only taught, like Turkish, as an optional 'modern language' for two or three hours a week and may not be taught at all in the four lowest classes. Children are ordered to speak Italian even out of school, and there are public notices requesting visitors to speak to the inhabitants in Italian. Only Italian teaching diplomas were recognized; Greek teachers were replaced by Italians. The religious teaching is that of the Roman Church, which the Orthodox do not accept.

The land system (p. 57) shows how close is the traditional tie between the cultivator and his land, even where it is not strictly freehold; and this close association is inherited from ancient times. It has been Italian policy to break this association and derange the social structure of the Greek peasantry. Under pretext of afforestation, farmers are prevented from cleaning their fallows, and then expropriated for neglecting their fields. Other lands are expropriated as 'military areas', but found suitable for Italian immigrants, subsidized by semi-official syndicates. Forced sales at arbitrary prices ruin the native cultivator, as well as separate him from inherited property.

The freedom of the sea is essential to the maintenance of island communities which are engaged in trade, and must obtain most of their foodstuffs from abroad, in exchange for local products; and one of the most important of these, the sponges, are won from the sea itself over long distances. Under Italian rule there has been rigid control of intercourse with Greece, with the adjacent mainland, where islanders had acquired large interests, and between island and island. Even fishing from small craft to supply local demand has been restricted to a few boats at a time. There has been vexatious restriction of trade, and competition by state-aided Italian agencies for production, transport, and disposal of commodities. The sponge-fishing (pp. 60–2) has been disorganized since 1912 by Italian monopoly of the Libyan sponge-grounds, which the men of Calymnos and Symi discovered and exploited so long, and of which a great part lies outside territorial waters.

CHAPTER VIII

ADMINISTRATION

SINCE the Italian occupation of the islands in 1912, all the inhabitants have had the legal status (confirmed by royal decree 15 Oct. 1925) of Italian protected subjects, exempt from conscription, but liable to taxation and without political rights. By voluntary enlistment, however, or other special service to the state, they may acquire full Italian nationality. Until 1938 they were subject to the special statutes which regulated their personal status as Christians, Turks, or Jews, and their access to their confessional court; but these courts have been abolished.

The Civil and Military Governor resides in Rhodes, and is represented in Cos by a Regent, and in Calymnos, Leros, Symi, Carpathos, and Castellorizo by Deputies. The Governor's decrees have the force of law.

The General Secretary is chief of the administrative staff, which consists of four departments (*divizioni*) for (1) administration, including customs, posts, and telegraphs, finance (Ch. XIII), and the supervision of the finance guards (*guardie di finanze*). (2) Commerce, in ports and custom-houses (Ch. XIII). (3) Public works, including buildings and constructions, services and communications, and water-supply. (4) Justice (*v. below*).

There are services for lands, forests, and reclamation, and for agriculture and labour (p. 58). The inspectors of education, and of monuments and excavations, are also under the General Secretary.

The commandants of military and naval forces are subordinate to the Governor. A council of heads of communes (*sindachi*) meets annually. The naval commandant maintains communications by sea.

In normal times the garrison consists of a regiment of infantry, with headquarters and one battalion in Rhodes and the other battalion in Cos. There are a naval establishment in Rhodes, a fortified naval base in Leros, and air stations in Rhodes, Carpathos, Leros, and Astypalaea.

The Italian penal code is in force, and the Ottoman civil code, with modifications especially in regard to land-tenure (p. 57). Under the judicial department there are (1) courts of first instance at Rhodes for

the southern islands and Castellorizo, and at Cos for the remainder; (2) a court of appeal (tribunal of second instance) at Rhodes; (3) assize court consisting of the president of the court of appeal, with four assessors of the religion of the accused; and (4) a court of appeal from the decisions of Italian consular courts in the Levant. For confessional disputes there were (until 1938) Orthodox, Moslem, and Jewish ecclesiastical courts.

The military police (one company of carabinieri) have many functions besides the preservation of order. They collect taxes, conduct the postal services, supervise the schools, control passports, and

	Total	*Rhodes*	*Cos*	*Calymnos*	*Elsewhere*	*Pupils*	*Teachers*
Intermediate Schools							
State Schools	5	..	..	..	..	640	47
Municipal Schools (Orthodox)	2	..	..	..	..	194	16
Private School (Orthodox)	1	..	..	..	..	31	4
	8	3	2	1	2	865	67
Elementary Schools							
State Schools (*scuole regie*)	19	..	..	..	..	3,270	93
Municipal Schools (*scuole communali*)	84	..	..	..	..	8,733	267
Private School (Orthodox)	1	..	..	..	..	421	5
Private School (Catholic)	1	..	..	..	..	145	6
	105	59	10	6	30	12,569	371
Infant Schools							
State Schools	10	..	..	..	..	1,257	26
Private Schools (Moslem)	2	..	..	..	..	113	2
Private School (Orthodox)	1	..	..	..	..	45	1
	13	7	4	1	1	1,415	29
Total Number of Schools	126	..	..	..	..	14,849	467

What is remarkable is the very small proportion of children (1 : 14·4, in Calymnos 1 : 8·3, but in Rhodes only 1 : 10·4, and in Cos as few as 1 : 32·3) who pass beyond the elementary stage and have any opportunity for the study of the mother tongue of the great majority of them (87 per cent.); for the Greek language is not taught in the four lowest classes, even in the municipal schools, which are maintained by essentially Greek communities.

serve as magistrates for minor cases. For port and customs duties they are supplemented by the finance guards (*guardie di finanze*).

Education. The inspector of public instruction (p. 43) supervises all schools. (*a*) The state schools (*scuole regie*) are maintained by the National Association for Missions, and are the equivalent of the public 'foreign schools' for Italians residing abroad, in constitution, curriculum, and certificates. In Rhodes there are high schools (*instituti*) for boys and for girls, elementary and intermediate schools, a technical institute, a high school for science (*liceo*), and a training college (*instituto magistrale*) for teachers in the islands. There are state schools also in Cos.

(*b*) Assisted schools (*scuole communali*) are maintained by the municipalities (p. 41); they receive state subsidies, and their teaching must now conform to that of the state schools. All municipal secondary schools (*gymnasie*), however, were closed in 1937.

(*c*) Private schools are conducted by the religious communities for their own children. The Turks in particular object to mixed schools. All private schools must teach Italian. For recent restrictions on language teaching see p. 41.

Physical training is encouraged by the National Ballilla Association. There is a state-aided school of agriculture, popular and practical; a commercial school, attended almost exclusively by Jews; and since 1929 a Rabbinical College at Rhodes trains Jewish priests. The training of Orthodox priests is in the hands of the monasteries.

Religion is nominally free, but Moslems and (until recently) Jews are conciliated, whereas there has been frequent friction between the administration and the Orthodox Church (pp. 40–1).

Public health. As in Italy, the Port Officer of Health (*sanità marittima*) administers quarantine and inspects persons coming from abroad. A large hospital has been built in Rhodes by the National Association for Missions, and smaller hospitals at Cos, Calymnos, and Leros. In the villages local doctors act as officers of health. In Rhodes the *Ospizio degli Innocenti* receives foundlings, and provision is made for maternity and infant welfare. There is a veterinary service, and a quarantine station in Rhodes for cattle in transit or imported for slaughter.

Public works. Principal enterprises, reported in working-days for 1936, were buildings (84,985), roads (52,617), and reclamation

(48,503): no statement is published of the large military constructions in recent years.

In Rhodes the government offices, law-courts, barracks, and public market stand together on the Mandraki harbour quay. The Governor's residence is in an old garden inland. The municipal offices are in the Palazzo del Armeria within the Walls. The Roman aqueduct has been repaired and new reservoirs built. The medieval harbours—the Mandraki (*Il Mandracchio*) north of the city and the *Porto Commerciale* within the Walls—have been dredged and repaired. In the commercial port the fast steamers for Italy and Egypt go alongside the quay (about 20 ft.). The City within the Knights' Walls has been cleaned, and Turkish debris is being removed from the Grand Master's Palace on the citadel—a very laborious task. The medieval infirmary and some of the medieval houses in the Street of the Knights have been restored.

Outside the Walls, along the western harbour, and on the sand-spit beyond it, a modern quarter for officials, residents, and tourists is enveloping the Greek village (*Neochóri*) and spreading also up the long slopes of Monte Smith, though still far within the boundaries of the Hellenic city. The broad belt of Turkish cemeteries, the memorial of the great siege, and the Jewish cemetery east of it, remains open, but is becoming overgrown with trees, and completely separates the medieval city from the residential suburbs on the slopes of Monte Smith (*S. Stefano*).

For roads and other communications see Ch. XIV.

In Cos and Calymnos the ports have been improved, and in Leros large naval and military constructions are in progress.

Administration of antiquities. As in Italy, there is official inspection and maintenance of ancient and medieval monuments, and state monopoly of excavation. In 1914 an archaeological mission was sent to the islands, and in 1916 the Inspectorate of Monuments and Excavations was entrusted to it. An archaeological museum was at once established in the Infirmary of the Knights, and in 1927 an institute of history and archaeology in the Palazzo del Armeria. The walls and principal buildings of the Knights have been restored; and the Byzantine remains, the 'monumental' area of Rhodes itself, the stadium, temples of Zeus Polieus, Athena Polias, Dionysus, Aphrodite, and the Nymphs, have been exposed; at Ialysus the acropolis,

temple of Athena, medieval monastery, Greek fountain, and Mycenaean and archaic tombs. At Lindos the acropolis and cemetery, already partly excavated by a Danish mission when the Italian occupation intervened, have been further examined. In Cos, since the earthquake of 1929 the whole of the devastated area within the medieval wall has been cleared to the Roman level; the castle has been restored and is used as a museum; the theatres at Cos itself, Kephalo, and Kardamina have been cleared, Hellenic mosaics have been uncovered, the prehistoric cave of Aspri Petra has been examined, and Roman baths at the sanctuary of Asklepios have been further cleared, to supplement the Austrian excavation of 1902. In Calymnos tombs have been explored at Vathy, Khiromandres, and Agia Barbara. From Carpathos a Byzantine mosaic of the church of Agia Sophia at Arkassa has been transferred to the museum in Rhodes.

Cartography. All the islands have been mapped on 1 : 25,000 scale; Rhodes City on 1 : 4,000; and Cos town on 1 : 1,000. There is also a geological map of Rhodes.

CHAPTER IX

DISTRIBUTION OF THE POPULATION

FROM the account given in Chapter VI of the inhabitants of these islands it will be clear that the population is distributed between regional communities (p. 24), essentially Greek by descent, language, religion, and culture, and the medieval fortresses (p. 28), where alone alien elements, medieval or modern, have become acclimatized, while altering profoundly, and complicating, the life of these mixed settlements.

Until the Italian occupation of the islands there were no trustworthy estimates of the population, and the census of 1912 was not accurate in detail. Subsequent figures for most of the islands are more precise and coherent; but those for Calymnos, Symi, and Leros show great unsettlement, and even greater discrepancy with estimates from Greek sources, based on information from exiles and refugees.

Distribution of population

The Greek population being about 87 per cent. of the whole, and the Turkish, Jewish, and Cretan Moslem inhabitants forming small compact and mainly urban or suburban communities, no serious difficulty has arisen from their distribution, nor from their social relations with each other. The contrast is obvious with Cyprus, where the Turkish minority is much larger and occupies many villages, as well as separate quarters in Nicosia, Famagusta, and other towns; and with Crete before 1900, where the Greek-speaking Moslems either reverted to Orthodoxy when Moslem rule ended, or left the island for Rhodes, Cos, and Anatolia.

The only difficulties result from Italian encouragement of the Turkish and Jewish, and repression of the Greek elements, and from the introduction of subsidized Italian settlers, on public lands and properties from which Greeks have been expropriated on various pretexts (p. 42). Since 1937, however, it has apparently been realized that there is not room for a larger population, even under artificial economic conditions, and that it is not desirable to increase the very large number of expelled or emigrated islanders who live in Greece, Egypt, and America.

POPULATION

Name	*sq. m.*	*1912*	*1918*	*1922*	*1927*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*
Astypalaea .	44	2,500	1,200	1,400	1,370	1,610	1,676	1,752	1,731	1,752	2,006	1,799
Calymnos .	49	26,000	18,000*	24,000*	24,000*	16,512	16,736	16,921	17,024	17,069	15,247	15,815
Carpathos .	118	10,800	8,527	7,500	7,500	6,514	6,675	6,758	6,830	6,908	7,700	7,711
Casos . .	27	7,000	5,700	1,700	1,760	1,925	1,941	1,961	1,973	1,972	1,830	1,935
Castellorizo .	4	..	..	..	2,740	2,230	2,242	2,267	2,281	2,187	2,238	2,218
Chalki . .	12	4,000	2,740	1,300	1,300	1,788	1,786	1,791	1,797	1,790	1,461	1,484
Cos . . .	111	17,000†	14,570†	16,000	16,000	21,169	21,580	21,696	22,011	22,291	19,731	20,169
Leros . .	21	8,000	6,000*	4,000	4,000	6,150	6,298	6,229	6,555	6,638	7,298	7,607
Lipsos . .	7	..	..	560	560	962	999	1,029	1,046	1,063	977	1,015
Nisyros . .	18	7,000	5,000	3,160	3,160	3,436	3,447	3,478	3,511	3,523	3,391	3,497
Patmos . .	22	3,700	2,720	2,550	2,550	2,990	3,048	3,080	3,113	3,147	3,184	3,324
Rhodes . .	545	45,000‡	37,080	45,000	49,000	54,818	55,643	56,332	56,998	57,659	61,886	61,252‡
Symi . .	25	23,000	16,000*	7,000	7,000	9,462	9,601	9,689	9,751	9,789	6,195	6,303
Telos . .	23	2,000	1,300	1,158	1,160	1,228	1,247	1,252	1,263	1,264	1,215	1,229
Total . .	1,025	150,000	110,445	102,669	118,100	130,855	132,919	134,384	135,884	137,161	140,848	135,622

* These figures are suspect: unofficial but contemporary figures for 1917 are: Calymnos 8,312 (5,688); Leros, 2,500; Symi 7,000.

† Greeks 15,000. Turks 2,000 (1912): Greeks 10,550. Turks 4,000. Jews 20 (1918).

‡ Greeks 38,000. Turks 4,500. Jews 2,500 (1912): Greeks 25,010. Turks 7,960. Jews 3,930. Various 150 (1937).

CHAPTER X

PORTS

EACH island has its natural landing-place, with very primitive mole affording shelter for fishing-boats, and usually an open beach on which these and the smaller sailing-vessels are drawn up on shore for the winter. But the only harbours which afford shelter at all seasons are those of Rhodes and Cos (but not the roadsteads), and P. Griko in Patmos; the ports of Alinda in Leros, Pothaea in Calymnos, Yalo in Symi, and Lindos (Vlikha) on the east coast of Rhodes, are less commodious. Port Laki in Leros is exclusively a naval base and airport. These are described in the topography of those islands (Part II).

CHAPTER XI

MINING AND INDUSTRIES

(*a*) THE *mineral resources* of the islands are small, and not much exploited as yet. Carpathos has ores of iron and zinc; Carpathos and Cos have lignite ('brown coal') in small quantities and of poor quality. Salt is obtained from a lagoon at Timgachi on the north coast of Cos; gypsum in Casos and adjacent islets. Lime is burned in all limestone districts; the best is from Levitha island between Leros and Amorgos. Lime-burners from Castellorizo exploit the limestone and fuel of the mainland near Antiphelo. The softer marls and sandstones are quarried in the neighbourhood of Rhodes City and in Cos, but are not much exported, even to the neighbouring islands. Till recently the chief source of hard stone has been ancient sites such as Lindos, and the Asclepieum in Cos; but these are now protected. Pumice-gravel (*pozzolana*) is exported, from Calymnos and Pserimo, for house roofs and concrete floors.

(*b*) *Industries*. All towns and villages have blacksmiths; some also tinsmiths and other metal-workers; but increasing use is made of European metal-work.

Woollen, linen, and cotton textiles are still woven on domestic looms, with homespun yarn, for domestic use; but European textiles are imported. The peasantry wear home-made clothes, but even in small communities there are tailors for men's apparel, and ready-made clothes from Europe are sold in the larger stores.

Other industries depend essentially on agriculture, for they utilize agricultural produce, either local or imported from the mainland, whither manufactured goods are re-exported. Principal industries are as follows (see also export statistics, p. 66):

The preparation of sponges for export provides employment ashore in Calymnos and Symi (p. 61).

Olive-oil of good quality is refined for export. The recovery of low-grade olive-oil for soap-making is a new industry financed from Italy.

High-grade wines are exported duty-free to Italy. The Industrial Agricultural Company of Rhodes has modern wine-factories in

Rhodes and Cos, and makes white and red table-wines, and also dessert-wines from raisins under local or fancy labels, *Passito*, *Porto-Acandia*, *Moscato*, *Malvasia*. Alcohol is distilled from wine-press refuse, for local liqueurs, and for perfumes from roses, jasmine, and other local flowers.

Macaroni and other forms of *pasta alimentaria* are made from local wheat. Preserved fruit and vegetables, especially apricots and peaches, are a new enterprise of the *Società Fruttindustria*.

Tobacco, grown locally, is worked up by the *Soc. Anonima degli Tabacchi Egei* (*Manufattura Italiana*) affiliated to the *Azienda degli Tabacchi Italiana*. After supplying local needs, a growing surplus is exported to Italy, but much foreign tobacco is imported.

Tanning, especially of goat-skins and sheep-skins, local and Anatolian, utilizes the vallonia oaks of Rhodes, Carpathos, and Leros.

Carpet-weaving is encouraged since 1936 by subsidy and bonus, and by expert supervision. This is still a household industry, confined to Rhodes, Cos, and Calymnos; local wool is used; the models are the 'Turkey-carpets' of Ushak, Isbarta, and Bokhara.

Silk, an ancient industry in Rhodes and Cos, is similarly encouraged, and therewith imitation of the local hand-made embroideries; but export of silk has almost ceased.

For other local industries there are limited companies (*Società anonima*) composed of small capitalists, money-lenders, owners of factories or equipment, and employers of labour.

Ship-building, for local and Anatolian needs, persists in Rhodes, Symi, Cos, and Leros; but, except in Rhodes and Carpathos, local supplies of timber are exhausted. Small ships are still efficiently repaired in Symi.

Pottery and tiles are made in Patmos, Calymnos, Cos, and Rhodes. In Patmos there is a special fabric of cooking-pots, in Calymnos of water-jars, in Cos of large store jars (*pithária*), and in Rhodes the revival of medieval glazed and painted jugs and plates has been attempted.

Silver filigree jewellery of medieval design, such as forms part of the local costumes, is still made in Castellorizo, and also in Rhodes and Cos.

Power and labour

Animal power is in general use for agricultural processes and for transport.

Windmills are common (p. 26) for pumping and draining as well as for corn-milling. *Gasoline engines* are coming into use for agricultural and industrial power, as well as for small vessels. Motor-cars are rare, except in Rhodes, Cos, and Leros, where there are roads, and level ground; but there are bus-services in Calymnos between Pothaea and Prosta, and in Carpathos between Pegadia and Arcassa.

Mineral oil is imported chiefly from Egypt and Russia. The only large stocks are in Rhodes and Leros, whence oil is distributed to local dealers.

Agricultural labour being seasonal, men and transport-animals can usually be found except at seed-time or harvest, for road-making, excavations, and other tasks within peasant capacity. Hours are long, wages low, and output small, compared with western standards, but the peasants have intelligence and experience; they understand team work on their own lines, and will learn new methods and processes when their interest is aroused. Fishermen and sailors handle their vessels with skill and discretion, and know their own waters intimately. From the peasantry, accustomed to older processes of oil- and wine-making, labour is easily found for larger factories of European design.

CHAPTER XII

AGRICULTURE, FORESTRY AND FISHING

AEGEAN agriculture is essentially a combination of arable grain-crops, deep-rooted tree-crops, garden-produce, and pasture on the scrubland or in the rare marshes.

Animals and pasture. Though flocks and herds range widely, they are tended and observe boundaries; pasture is everywhere subordinate to agriculture. Sheep and goats are penned in a fold (*mandra*) at night. The shepherds form a class apart, as indeed their solitary work requires; they lease the flock from the owner, receiving part of the increase for their services, and paying a small head-tax to the government. Sheep and goats are numerous, grazing the open waste and the fallows; quite small islets have their summer flocks. In Calymnos the fig-leaves are harvested in November for winter fodder. Besides cheese—of which there are several varieties—butter, yiaourt, misíthra, halúm, and other milk products are popular in their season. Wool and goat-hair, like sheep-skins and goat-skins, barely suffice for local needs, except in the smallest islands. The abrupt variations in the official figures need explanation.

Oxen are bred for ploughing and transport only, though veal is to be had in hotels and large households. Hides are imported from Anatolia, and tanned where there are supplies of vallonia or oak-bark; pine-bark is brought from the mainland. Under Turkish rule, however, the rich sponge-fishing islands invested much of their wealth in lands and grazing rights on the mainland, importing the produce and exporting sponges and European goods. The interruption of this intercourse since the Italian occupation imposed grave hardship on these islands.

Asses and mules are bred everywhere for local use, and for export from Telos; horses only in the Turkish villages near Rhodes City.

Crops and cultivation. The cultivated lands, about 65 per cent. of the total area (85 per cent. lie in Rhodes and Cos), are usually small freeholds reclaimed from the waste, or tenancies under a local landlord, usually himself a farmer. They are often far from the village, though there are sometimes garden-plots around it. Much

Production	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*
Cereals						
Wheat	23,415	25,569	26,196	30,149	20,169	21,470
Barley	22,692	27,660	23,658	23,455	13,820	16,329
Oats	6,006	5,597	4,406	5,477	5,101	4,562
Vetch	8,096	17,865	9,288	10,746	6,176	6,353
Vine						
Grapes	18,715	53,000	33,265	51,477	30,589	32,854
Wine	5,754	15,369	13,500	15,998	6,047	11,670
Olive						
Olives	19,895	17,670	30,876	18,114	44,775	36,058
Oil	3,286	3,053	2,219	6,109	4,216	4,215
Fruits						
Oranges	11,211	14,327	11,786	10,286	20,622	20,622*
Apricots	2,354	2,832	1,848	1,782	2,194	2,194
Figs	4,576	7,572	7,269	12,306	10,053	10,053
Other crops						
Potatoes	3,286	3,053	2,219	6,109	4,216	4,216
Onions	2,859	6,642	6,141	5,677	2,250	2,250
Tomatoes	2,876	2,530	2,655	5,507	3,286	3,286
Sesame	176	210	220	168	204	204
Tobacco	2,874	2,530	2,655	5,507	3,286	3,286

N.B. Figures are in *quintals* except for wine and oil, which are in *hectolitres*.
* Fruits and Other Crops: the figures for 1936 appear to be repeated.

Animals: total numbers						
Oxen	6,709	4,525	4,423	4,859	4,859	6,519
Horses	7,427	5,822	5,713	5,733	5,518	8,978
Sheep	63,418	58,431	51,616	50,448	48,715	66,735
Goats	60,383	58,660	59,505	64,741	60,266	62,735
Pigs	2,806	1,792	1,642	1,885	1,938	..

of the land is terraced, especially for the tree-crops. Grain-crops, beans, and lentils are sown every other year. Some islands only produce a few months' supply, and trade oil, wine, fruit, and vegetables for the remainder. There is therefore everywhere a small but indispensable class of traders and merchants who usually own their own shops, stores, and cargo boats, like the fishermen.

Principal economic trees are the olive, fig, carob, almond, and vallonia oak, all improved from indigenous plants, with imported grafts; the vine also may have had a native ancestor, but if so, it is extinct here; the better varieties are Syrian or Persian. The tall cypress (*C. fastigiata*), mulberry, apricot, and walnut have been introduced from the mainland; citrus-fruits from Palestine or beyond.

The methods of cultivation, though primitive hitherto, are appropriate to their surroundings. Where so much of the surface is rocky and steep, fields and farms must be small, and terraces are better suited to hoe-tillage than to ploughing. But in the soft marls of Rhodes and Cos continuous ploughing has cut very large 'linchet' terraces. Though barley and wheat are grown in all the islands, they nowhere supply the demand; and any windfall of capital is better spent in terracing, deep-digging, and tree-planting, than in fertilizers which the winter rains leach out prematurely. Grain and flour are therefore obtained, as in classical times, by exchange for the numerous crops from deep-rooted trees, which evade the summer drought and bring deep supplies of moisture to the surface; most copious are vine, olive, almond, fig, carob, mulberry, and apricot—the small Anatolian variety. Orange, lemon, and citron flourish in sheltered valleys in Leros, Calymnos, and Rhodes. In Leros even dates ripen sufficiently to be preserved with honey, and give their name (*vaia*) to a locality, as in Rhodes. Between the trees annual catch-crops are sown, especially potatoes, tomatoes, and various beans.

To the traditional exports of dried fruits (raisins, figs, almonds), are now added other kinds of preserved fruit, especially peach and apricot, and in Rhodes even vegetables are tinned. The fresh fruit and vegetables—table grapes and apricots, beans, tomatoes, cucumbers, and melons—go chiefly to Egypt, in sailing-vessels from Cos and Rhodes, some also to Turkey and to Greece. There is considerable production of honey and wax.

The best grapes are sent fresh to Alexandria in swift sailing-vessels, specially built and fitted; others are exported as raisins, or half-dried for muscatel-wine. Vines are pruned in February–March, and the vintage is in August–September.

In the general lack of forest-timber, outworn fruit-trees, and scrub from the waste and the terrace-walls, are the sole native fuel. Under Turkish rule one of the 'privileges' was the free import of wood from Anatolia. In Leros and the forest districts of Rhodes much has been done recently for reafforestation, by merely excluding the goats.

Arable land is worked on a 'two-field' system, alternately sown and fallow; in Calymnos the whole of the east and the west halves of the island are under crops in turn, while the flocks graze over

alternate fallows. There is no regular supply of manure except occasional dung from sheep-folds, but lime is applied on the few limeless soils. Lime is burned from the massive limestones; the best comes from Levitha, whither fuel is brought for the purpose. Barley is a better crop than wheat; maize does well where there is water. Where irrigation is possible, many garden-crops are raised and exported in large quantities to Egypt, in the same sailing-vessels as the fresh fruits of summer: this trade is best developed in Cos, which has its own strains of lettuce, radish, and broccoli: the succession of crops goes almost round the year. In summer tomatoes, cucumbers, and various melons have the largest yield.

Tobacco is grown, but not on a large scale except in Rhodes and Cos. The cigarette factories of Leros, Calymnos, and Symi employ the women and girls of the sponge-fishers on tobacco imported from Anatolia or from Thrace.

Cotton is only grown for home use, and on the better lands is giving place to vines.

Land-tenure. Under Italian administration the Ottoman land-system has been progressively modified, after economic and scientific survey of the resources of the islands; land-tenure and taxation have been simplified, and facilities provided for better use of the land.

There are five categories of ownership:

(1) *Mulk* includes all forms of freehold, in land or in fruit-trees on it, and pays direct taxes; most of the highly cultivated fruit-farms and market-gardens of the Turks near Rhodes City are *mulk*. *Mulk*-land may be worked by the owner, or leased, or worked by owner and tenant jointly, the landlord providing and reserving the seed-corn, paying the taxes, and taking half of the profit (= Greek *metokhi* tenure).

Agricultural land and land-occupancy descend from father to son; houses belong to the women, especially in the sponge-fishing islands, and descend from a mother to her daughters, whom she has trained in house-management: they are often built in a row or terrace with party-walls.

(2) *Miri* is domain-land, the property of the State, usually leased for cultivation with provisions for inheritance, transfer, and conversion into *mulk* by the leaseholder; but if the land is neglected, the State resumes ownership.

(3) *Mevkoufi* is land held in trust for religious or charitable uses (*vakuf*); it is usually leased like *miri*-land, and is administered by a Moslem commission (*evkaf*).

(4) *Metroukhi* is land in communal ownership, mostly pasture on which individuals acquire grazing rights; it is administered by the municipal or district authority.

(5) *Mevat* is 'dead' land, without economic use or specific control. When use is found for *mevat*, it merges in one of the preceding categories.

Much has been done in recent years to improve agricultural procedure. Under the old two-field system, without fertilizers except what is supplied by flocks grazing the fallows, only one harvest is reaped in two, three, or even four years, and there is no rotation of crops. But the Rhodian peasants are intelligent and adaptable, and the trained immigrant labourers from Italy have stimulated curiosity and imitation. The government departments concerned are two:

(*a*) *Domains, forests, and reclamation* (*Servizio Demanio, Foreste, e Bonificio*), responsible for:

(1) Survey and administration of domain-land.
(2) Reclamation of waste land, reorganization of backward highland areas in the interior, drainage of marshes.
(3) Protection and propagation of forests.
(4) Tree-planting along roads and in public places.

(*b*) *Agriculture, labour, and research* (*Servizio Agricultura, Lavoro, e Sperimentazione Agraria*), responsible for:

(1) Propaganda and training of cultivators.
(2) Study of plant pests and diseases; bacteriology.
(3) Meteorological stations in Cos and Carpathos, and at S. Stephano close to Rhodes City.
(4) Man-power and statistics.
(5) Acclimatization of new species and varieties.
(6) Experimental farming, with Institutes in Rhodes at Villanova and Deremenderesi, and a large-scale model farm with Italian personnel at Kattavia.

There is a society for agricultural industry (*Soc. Agricultura industriale*), incorporating the older *Oleificio Italiano* and *Stabilimento enologico* for oil and wine; a society for Aegean tobacco of Italian make (*Soc. Tabacchi Egei Manufattura Italiana*), an *Ufficio agricolo*

commerciale to import machinery and materials, a society for fruit-growing, with large properties at Damatria, Tolo, and Calamona, and an agricultural bank (*Cassa de credito agrario*), affiliated since 1920 to the *Banco di Sicilia*.

Attention is also given to flower-growing and ornamental shrubs (*Nerium oleander*, *Pittosporum tobira*, *Hibiscus rosa-sinensis*, *Jasminum sambac* (locally called *fulla*), *Genista monospermum*, *Poinsettia pulcherrima*, *Bougainvillia glabra*).

Above and below the limits of normal village agriculture are the subsidiary resources of forestry and fishing.

Forestry. Though there is evidence that some (and perhaps all) of the larger islands were well furnished with timber in ancient and even in medieval times, the demands for fuel in the more populous islands, and for ship-timber, especially in Symi, Leros, and Patmos, have been less disastrous than devastation by reckless goatherds. Even the remaining forest areas, chiefly in Rhodes and Carpathos, have been progressively reduced by fires started by peasants to increase the pasture area, and by charcoal-burning, since there is no other local fuel-supply. Under Turkish rule one of the most valued 'privileges' was unrestricted import of wood from the mainland. The Italian administration strictly conserves whatever forests are capable of improvement, while releasing certain forest areas for cultivation, and proclaiming others as forest, which did not repay cultivation. The area devastated in 1936 was only one-third that of 1922; and the growth of scrub (*macchia bassa*) and even of trees (*macchia alta*) in some districts, especially in Leros, which were proclaimed soon after the occupation, has been remarkable. In Rhodes and Carpathos, in 1938, 490,000 hectares of forest furnished 21,000 cubic metres of timber.

Fishing is practised everywhere, and there are regular fishermen who, however, have usually a small holding of land as well. Casting-nets and seine-nets are used along-shore, drift-nets from row-boats and small sailing-vessels, and lines for deep-sea fishing: there is a floating contrivance (*paragádi*) with hundreds of baited hooks. For the shy but gregarious rock-fish *skaros*, a decoy is tethered within a tow-net. Octopus may be attracted by a bait of looking-glass. The

use of explosives is illegal but profitable. Lobsters, large crayfish (*astako*), octopus, and squid are taken. There is, however, no fishing industry, except in Lipsos, where octopus is caught and dried for export as far as Greece and Egypt. In particular there is here no tunny-fishing.

Sponge-fishing, on the other hand, was formerly a major occupation, especially in Calymnos and Symi, and still employs many persons in both islands. The use of sponges in remote antiquity is attested by sponge-impressions on painted pottery at Cnossus in Crete, of the Early Bronze Age. There is a legend that the sea-god Glaucus married the nymph of Symi and made his home there. In classical times sponges were widely used and traded, and when Calymnos surrendered to Suleiman II in 1521, it sent homage of sponges and white loaves; for the sponge-diver does not grow corn, but buys flour, and buys of the best. The Symi women also were rewarded for providing bread for the Turkish besiegers of Rhodes. But it was the Industrial Revolution that multiplied the demand for sponges and made the fortune of the sponge islands. In Calymnos the people, moving down from their medieval rock-castle, were building the new church at Khora, close below it, in 1794–1804. By 1840 about sixty houses had been erected by the 'stores' (*magaziá*) on the beach at Pothaea; and before 1900 building-plots in the modern town were selling for sums that would be ample in European cities. In 1912 the population of Calymnos had risen to about 25,000 and that of Symi to 23,000. For the local sponge-grounds were already becoming depleted, when (about 1840) Calymnos and Symi almost simultaneously discovered those on the African coast off Derna, and later (1860–80) along the whole length of the 'quicksands' from Benghazi to Tunis; to these were added later those of Pantellaria and Lampedusa. Till the Italian occupation in 1912 of Tripoli and of the Dodecanese, these fisheries were almost wholly worked by the discoverers and the men of Castellorizo. Then an Italian monopoly of the Libyan grounds was established, and the 'foreign' divers had to fish elsewhere, in eastern grounds off Egyptian territory, and westward off Sfax beyond the Franco-Italian border. In 1915, some while before Italy entered the war, all sponge-fishing from Dodecanese was forbidden 'for military reasons', while Italian sponge-boats worked as before.

Already many divers from Calymnos had migrated to Florida, where Tarpon Springs became a sponge-fishing township of some 3,000 persons. Other families stayed in their own islands and were sustained by remittance; mail-day, in fact, took the place of pay-day elsewhere, till the postal service became disorganized in the war-years.

A century of this exceptional prosperity developed exceptionally vigorous, intelligent stocks, curiously different in build and temperament, in the two main communities; while they have adopted different varieties of sailing-craft, and are prepared, like good seamen, to defend their choice.

Sponges of many species are found at all depths which are within reach, but only a few varieties are of commercial value. Several methods are employed to collect them:

(1) The traditional method is to dive naked from a small sailing-vessel with a sinking-stone and a cord; the sponges are detached with a knife and collected in a net girt to the waist. The divers have remarkable capacity for deep and prolonged descent. The catch and profits are divided among the boat-owner and crew in customary shares.

(2) Diving-dresses, supplied with air by a pump, permit access to greater depths, but are liable to accidents and to derangement of the blood-circulation by too rapid return to the surface; a recent innovation is a respirator covering the head only, which makes movement easier.

(3) The diving-bell (*scaphandron*) was introduced over fifty years ago by capitalist employers; like the diving-dress it extends the range of collection and increases output, at the risk of devastating the sponge-grounds; and it is unpopular with the divers.

The sponges are brought ashore saturated with the slimy mass of living cells which produce their tissue. On exposure to sun and air this decays: the sponges are washed in the sea, graded, trimmed, and packed for export by the women and older men. Formerly the export trade was in the hands of a few family firms in Calymnos and Symi, with agencies in London and Frankfurt and more recently in Basle. About half the crop went to London, 25 per cent. to France, 20 per cent. to Germany, and 5 per cent. to Italy, which had its own fisheries. After the Italian occupation, the Libyan sponge-

grounds were closed to the island fishermen. There was severe distress in the sponge islands, and many of the divers and crews went abroad. In 1936, however, was established the *Societá anonima degli Spugne di Rodi*, with Italian capital, and the recent annual output is stated to be 75,000–100,000 kg., valued at 9–15,000,000 Italian *lire*; though it is not separately given in official reports.

CHAPTER XIII

COMMERCE: REVENUE

It has been Italian policy to create in Rhodes a centre of Levantine trade, replacing Smyrna after its destruction in 1922. Though the regions nearest to the Dodecanese are not so rich as those north of the Maeander river, there are fertile lands for agricultural development in south-western Anatolia, and mineral deposits not yet exploited. These will require implements and machinery, which Italy can supply and deliver in its own ships. Rhodes had already served this function in antiquity and in less degree under the Knights and under Turkish rule, using the facilities represented in antiquity by Miletus, Halicarnassus, and Lycian ports such as Xanthus and Myra, and in recent times by Adalia (*Antálya*), Makri, Budrum, Scalanóva, and Kiuluk, where branch-stores are established by Rhodian firms. The principal mainland products are cattle, hides and leather, timber, dried fruits, tobacco, sesame, and storax; and latterly emery. Internal trade grows with improved roads, and local steamer services operated from Rhodes.

Commercial policy is closely controlled by a department of the government (*Direzione degli affari commerciali*) which has its representative (*fiduciario commerciale*) in Rhodes.

From a review of the resources of the islands it will be evident (1) that there is not much occasion for local interchange; (2) that the prosperity of the port of Rhodes results from its function as market for island produce destined for export, and for foreign goods destined to be distributed among the islands, and through the small adjacent ports of Anatolia. The sponges, however, are so bulky that they are usually sent direct from the sponge-fishing islands to European depots, and the fresh-fruit crop of Cos saves time and escapes damage by going in local vessels straight to Alexandria. For other produce, what the smaller islands contribute only supplements the large crops of Rhodes itself, especially under recent special conditions of interference. Much of the external trade passes through the port of Rhodes and is redistributed to the other islands. Nevertheless, large imports go direct to destination, in steamers which call at

IMPORTS: TOTALS (1,000 *lire*)

Principal classes	*1929*	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*
Spirits, wine, oil	8,537	15,607	6,588	7,377	6,809	8,564	13,105	9,274	13,044
Tobacco, drugs, &c.	4,919	6,729	4,238	3,294	2,834	2,073	2,543	3,065	4,326
Chemicals, medicines	1,720	3,320	1,851	1,317	1,140	1,287	2,123	1,735	2,683
Colours, dyes	830	350	341	230	213	340	408	266	614
Jute, manilla, &c.	208	240	148	97	23	57	55	68	127
Cotton, flax, hemp	6,264	9,024	6,293	3,841	3,376	3,744	4,624	3,789	6,862
Wool	2,565	3,300	3,427	2,173	1,377	1,536	1,717	1,404	3,344
Silk	1,028	1,130	1,790	916	612	716	1,394	965	1,821
Wood, straw	2,817	3,220	2,155	2,400	1,575	2,122	2,739	224	4,449
Paper	1,421	1,966	1,577	1,066	936	908	1,672	1,087	3,227
Leather, shoes	1,367	1,528	1,390	1,019	753	601	934	680	1,683
Metal goods	4,441	4,219	7,910	4,734	4,225	10,929	24,251	7,555	24,881
Vehicles	1,734	4,130	1,351	907	610	896	2,979	1,326	2,660
Stone, clay, glass, &c.	4,077	6,320	2,994	2,209	454	2,949	5,871	4,228	8,077
Rubber, &c.	577	3,446	658	470	530	318	346	483	755
Cereals	20,324	9,617	12,774	11,130	8,035	7,086	15,363	12,091	24,262
Animal products	9,505	10,050	15,321	10,980	7,845	8,786	10,938	8,054	13,870
Total, all classes	75,200	89,621	75,964	56,350	48,427	56,217	111,030	62,113	122,374
Imports from Italy	20,972	23,554	18,083	16,714	21,015	16,099	78,216	24,128	88,439
Greece	4,786	4,797	7,092	5,615	5,174	6,035	1,193	2,884	822
Turkey	9,382	13,576	10,392	9,858	7,868	7,545	3,872	9,147	4,698
Egypt	3,132	6,567	3,874	2,797	2,424	3,646	2,206	244	1,331
Elsewhere	36,948	41,127	22,823	21,366	18,716	14,102	25,543	22,430	25,543

EXPORTS: TOTALS (1,000 *lire*)

Principal classes	*1929*	*1930*	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*	*1937*
Spirits, wine, oil	1,348	3,000	1,445	3,848	5,036	5,212	7,465	3,586	3,526
Tobacco, drugs, &c.	4,431	3,100	884	682	1,283	388	1,065	1,231	2,693
Chemicals, medicines	59	9	19	19	18	8	16	24	54
Colours, dyes	35	7	21	16	27	20	6	56	10
Jute, manilla, &c.	58	7	45	28	15	28	22	168	274
Cotton, flax, hemp	204	1,000	70	22	27	8	2	3	..
Wool	1,081	2,942	667	159	394	203	355	443	816
Silk	33	241	2	1	..	..	..	..	1
Wood, straw	84	120	194	227	183	248	323	298	250
Paper	540	750	417	240	245	42	36	70	97
Leather, shoes	254	180	54	116	82	40	27	66	121
Metal goods	81	40	444	644	890	5,776	169	148	1,170
Vehicles	106	326	44	2	62	40	12	225	125
Stone, clay, glass, &c.	109	89	90	70	90	43	52	40	82
Rubber, &c.	2	1	17	153	12	17	21	4	19
Cereals	1,490	1,450	835	607	554	526	301	2,066	1,786
Animal products	3,146	260	6,399	4,880	4,279	3,551	3,444	2,005	6,854
Total, all classes	16,240	15,916	12,488	12,713	14,892	17,714	15,154	13,093	19,705
Exports to Italy	3,265	5,752	3,690	6,402	9,281	12,975	8,730	10,113	11,605
Greece	1,424	191	1,060	486	402	374	1,284	111	135
Turkey	887	1,341	545	136	61	30	32	264	6
Elsewhere, including Egypt	8,194	8,632	7,183	5,689	5,148	4,356	5,108	2,605	7,959

local ports on the way to Rhodes; and the same applies to exports. Principal imports, in order of importance, are metal goods, cereals, animal products (especially cheese and preserved meats), oils, wines, and spirits, pottery and glass, cotton and woollen goods, tobacco and drugs, paper, motor-cars, leather, silk (*see* p. 65).

There is an import duty of 11 per cent. on all goods, but goods in transit remain in bond. There is no preferential tariff for Italian goods; and 'Italian' imports include a large transit-traffic from central Europe. The following points may be noted: the very high totals in 1935–7, and especially some of the larger imports from Italy, probably represent military constructions and the needs of labourers employed on them: compare the increased population of Læros (p. 49). An unofficial estimate (*Daily Telegraph*, 11 June 1938) is much larger: 133,000 (1935), 500,000 (1936)—of which 'metals', exclusive of guns and munitions, represent 83,300 and 266,000. Imports from Italy have risen from 20 per cent. to 58·8 per cent. of the total. The large import of dye-stuffs is due to local textile industry. In the returns, no distinction is made between raw cotton, wool, and other fibres, and the textiles made therefrom; nor between mineral and other oil; nor is there any mention of sponges.

The official returns before 1929, being differently classified, are not comparable with those included in the table.

Principal exports, which are small except the sponges, garden-crops, and fresh fruit (for which no official figures are given), are, in order of importance: sponges; garden-crops, fresh fruit, raisins, and figs; oil, wine, and spirit; animal products, especially wool and leather; tobacco, cereals, and carpets. Some metal goods and other European commodities are re-exported. There is no rebate on local goods exported to Italy, but there is a general tariff of duty-free goods, e.g. wine, oil, fruit, carpets, and in these classes 75 per cent. of the exports are to Italy.

Note the marked rise both in absolute amount of exports and in relative amount of export to Italy, from 20 per cent. (1929) to 58·8 per cent. (1937); and the fall in exports to Turkey and Greece. The decrease in export of cotton, wool, silk, and some other commodities may result from increased local consumption. Increased export of wood may be due to reafforestation. Some considerable items—e.g. paper, metal goods, vehicles, and rubber—which are not

produced locally must be due to re-exportation of local stocks, as they do not appear to agree with those for 'goods in transit'.

Revenue

There is a direct annual subsidy from Italy (3,000,000 *lire* on a budget of 48,000,000 *lire*) and liberal grants are made for specific capital expenditure, Italian policy being to put the islands into a condition to maintain themselves; and already the local administration is not far from achieving this. Principal revenues are from customs; from taxes on land, manufactures, and other sources of profit; stamp duty on business transactions; tithe on agricultural produce; and a poll-tax commutable for four days' work. Besides postal services there are other government monopolies. In the smaller islands the old Turkish fixed-assessment (*maktu*) is still levied and applied to local purposes. The currency is Italian *lire*, and the metric system is official, though some old units are in popular use: *oka* (about 1 *kilo*); *kantar* (100 *kilo*); *pekh* (= cubit, about 16 inches).

There are branches of the Banca d'Italia, Banca di Roma, Banca di Sicilia (as a land-bank (*credito agrario*) to displace native usurers), and other banks; as well as the old Jewish banks of Alkadeff and of Notrica and Menasheh. Land-bank loans for capital improvements or working-costs rose from 875,000 *lire* (1934) to 1,230,000 *lire* (1937).

CHAPTER XIV

TRANSPORT: COMMUNICATIONS

Land communications

In the smaller islands, and even in most parts of Rhodes and Cos, land transport is by mules and asses, on unpaved bridle-paths. Where there is much traffic, and in soft ground, these often consist of several alternative tracks. There are a few remnants of Turkish roads, paved with boulders or shapeless blocks of stone. The Italian administration has improved about 300 miles of roads in Rhodes (of which about 100 are motor highways), about 20 miles in Cos, and short sections in Calymnos, Leros, and elsewhere. The highways have bridges and culverts of stone or concrete and are well maintained and gradually extended (details s.v. Part II below, *Rhodes* and *Cos*). They are used by motor-cars and omnibuses, and also by country carts and pack animals. In Rhodes there are 23 motor-services, covering 720 miles and conveying annually 300,000 passengers: elsewhere there are 6 services, covering 80 miles, with 85,000 passengers. There are garages in Rhodes City and in the town of Cos; mechanics and petrol are to be found in some of the larger villages.

There are no railways or tramways.

Shipping

There are no waterways except the open sea, but there is constant communication between islands in small sailing-vessels. Also the oil-driven motor-vessel (*gasolina*) is coming into use for local traffic, and some sailing-vessels have been fitted with auxiliary motor. But sailing-craft still carry 73 per cent. of the cargoes, and motor-vessels are mainly used for passenger traffic.

Sailing-vessels are of all sizes, from a fishing-boat (*várka*) with single removable mast, to a capacious two-masted cargo boat (*kaïk*, *trechandéri*) with deck and cargo-hatch. Most of these carry lateen sails; some also one or more foresails. Having shallow draught and little keel, they have small hold on the water, and sail to windward with difficulty. There are a few topsail schooners of European design, greater draught, and higher sailing efficiency.

Steamships are almost all Italian or foreign, and bring their own

bunker-coal from abroad. When coal is not to be had, the refuse from oil-presses (*pyrína*) is used, but its heat-value is low.

Vessels of all sorts registered in the Dodecanese in 1937 were 1,091 with total tonnage 12,500. Some large steamers owned by emigrant Greeks are registered in Leros, but they trade from Alexandria or Greek ports, not in home waters.

There is regular communication by steamship between Rhodes and the following ports:

(1) Brindisi and Adriatic ports, to Venice and Trieste; calling at Piraeus and either (*a*) using the Corinth Canal, or (*b*) calling also at Candia.

(2) Alexandria, Port Said, Haifa, Beirut, Alexandretta, Mersine, Cyprus ports, Adalia; usually by the same vessels as in service (1).

(3) Naples and Genoa, calling at Piraeus.

Principal steamship agencies are the Italian *Lloyd Triestino* (*servizii maritimi*), the *Puglie San Marco*, and (for local services) the *Nautica Fiumana* lines; the French *Messageries Maritimes*; the Turkish *Seir Sefari* and *Naim Bey* lines; the Greek *Samos* and *Yannoulatos* lines.

Aviation

There is regular Italian air service (1) between Rhodes, Athens, and Brindisi, for Rome or Trieste; (2) between Rhodes and Beirut. Other services calling at Rhodes are between Berlin via Brindisi and Athens, and Baghdad via Damascus. In 1937, 454 aircraft arrived or left, carrying 2,049 passengers.

Postal services and telephones

In 1937 there were 45 post offices; 15 telegraph offices on 275 miles of land lines and 213 miles of cable; 744 miles of telephone trunk-lines and 93 miles of urban lines.

Telegraph and radio

Rhodes is connected by cable (1) with the Eastern Telegraph Company system through Crete and Smyrna, (2) with the Turkish system through Marmaris, and (3) with Cos, Carpathos, and Leros by Italian cables; supplemented for the other islands by heliograph through Telos (Episkopi), and by radio.

SUMMARY

THE political significance of the Dodecanese has been sufficiently illustrated in its long and varied history, but certain aspects may be summarized. While it is physically marginal to Anatolia, and has naval facilities which make it a valuable screen when held by a strong power in Anatolia, its Greek population associates it intimately with the rest of the Aegean island world and thereby with peninsular Greece. Unless that bond is broken, any other dominion over the Dodecanese cannot but be a rule of force.

Lying on the flank of main sea-routes between the Levant and the Aegean—indeed between the Red Sea, the Black Sea, and the Adriatic—its naval bases and air-ports are of strategical value to any power which can defend them and its own access to them. But they are a liability otherwise; for even Rhodes cannot sustain its garrison, and the arsenal of Leros is still partly dependent on Cos for drinking-water. Moreover, without command of Melos, even Astypalaea does not control access to the Cyclades from the south.

Long oppression by a succession of alien conquerors, devastation of natural resources, and lack of capital for improvements and equipment have reduced the fertility of the islands and depressed the standard of living in most of them. In some respects the damage is irreparable; much soil on the limestones, in particular, has been totally destroyed. Elsewhere recuperation, under scientific management, has been cumulative; but the islands are not yet able to maintain themselves in these artificial conditions.

PART II

THE ISLANDS IN DETAIL

PART II

THE ISLANDS IN DETAIL

FROM the detailed description of each island of the Dodecanese which follows, and from a comparison of their resources and facilities, it will be seen that these islands fall into five main categories:

(*a*) *Astypalaea* does not belong geographically to the coastal islands at all, but is the easternmost of the Cyclades, and not so far east as the islets which prolong the structure of Amorgos as far as Levitha. Ethnologically, it was repopulated from Tenos in 1413; economically, it is little more than a cattle ranch; strategically, it is outclassed by Leros for naval purposes and for aircraft, and not easy to defend or maintain. It was by a geographical accident that it was restored to Turkey after 1832. Its high moments were when the Romans in 103 B.C., the Knights from Malta, and the Italians in 1912 used it to attack, not to defend, the region of which Rhodes is the citadel.

(*b*) *Carpathos and Casos*, like Astypalaea, lie so remote from the coastal islands that they have little in common with them. They are so near to Crete, and so similar in structure, that it is easy to regard them as its eastern satellites, like Cythera and Anticythera westward. In a very real sense, they are not islands of the Aegean, but part of its outer rim, like Crete itself, and in a quite different context from Rhodes. When Rhodes fell in 1522 they remained in Venetian hands till 1537, as Astypalaea did in Genoese till 1540. In the Greek National Movement their deep-sea navigators were eminent among the island squadrons; and when Egypt was the enemy, their position was cardinal. But though they breed hardy sailors and tough workmen, they cannot maintain them; and they have not amenities, as Leros has, to recall those who prosper abroad. There are probably more Casians in Port Said alone than in Casos; and the standard history of Carpathos is published through the munificence of a Carpathian Mayor of Gwelo in S. Rhodesia.

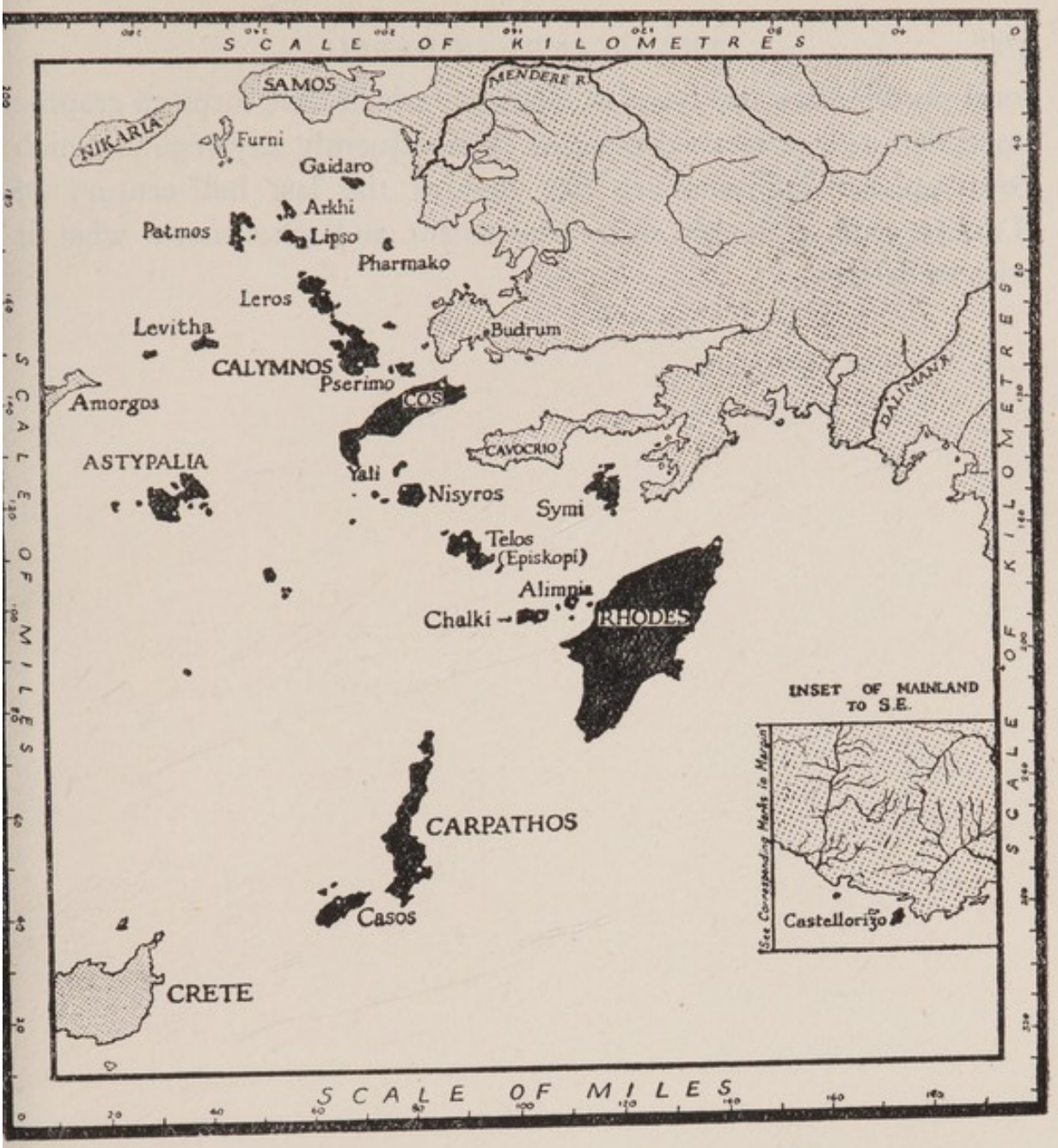
(*c*) *Rhodes and Cos* resemble each other, and differ from all the rest (except perhaps Nisyros), in their natural fertility and resources,

sufficiently varied to maintain a larger population in greater comfort than elsewhere, and to contribute further to their wealth by export, especially to Egypt, and latterly also to Italy. As these exports are partly paid for by western manufactures and eastern commodities such as rice and coffee, the two islands are able to trade them in turn through Anatolian ports—e.g. Budrum and Marmaris—in return for timber and other mainland commodities. This economic position favoured the settlement of mainland Turks and Jewish refugees from Spain, who in turn have contributed to their prosperity; and the wealth of these islands, as well as the presence of non-Greek elements, has made garrisons necessary, and increased both the number and importance of the Turkish—and latterly of the Italian—settlers. Conversely, Rhodians have acquired interests in the rich cattle-grazing lowlands of the Dalaman foreshore of Anatolia, and Cos has settlers and estates round Budrum and up the gulf, like those from Calymnos.

(*d*) *Nisyros, Patmos, and Leros* approximate to this self-sufficient economy, in their relative fertility, but they are too small for large-scale production, and their foreign contacts are accidental—in Nisyros, the medicinal springs; in Patmos, the monastery revenue from estates abroad; in Leros, the amenities of the central district as a summer resort for rich Lerians from Alexandria. With the mainland, with Europe, or even with Greece, they have little intercourse, for Patmos is not a pilgrim-shrine like Tenos. The recent establishment of a naval base in Leros expropriates more natives than it benefits.

(*e*) *Calymnos and Symi*, at the other extreme, are so barren, since the exhaustion of their timber, that it is only by special skill in sponge-fishing that they have maintained themselves at all. With their large profits, under Turkish rule, they acquired farms, pastures, and timber rights on the mainland; and the interruption of mainland intercourse has aggravated the distress caused by interference with the sponge-fishery. They depend now in great measure on remittances from sponge-fishers far away. In their prosperous days they established schools, attracted pupils from other islands, and became the centres of higher culture in the region.

Telos, like Calymnos and Symi, is naturally infertile, though it has pasture; lying remote, harbourless, and defenceless against piracy,



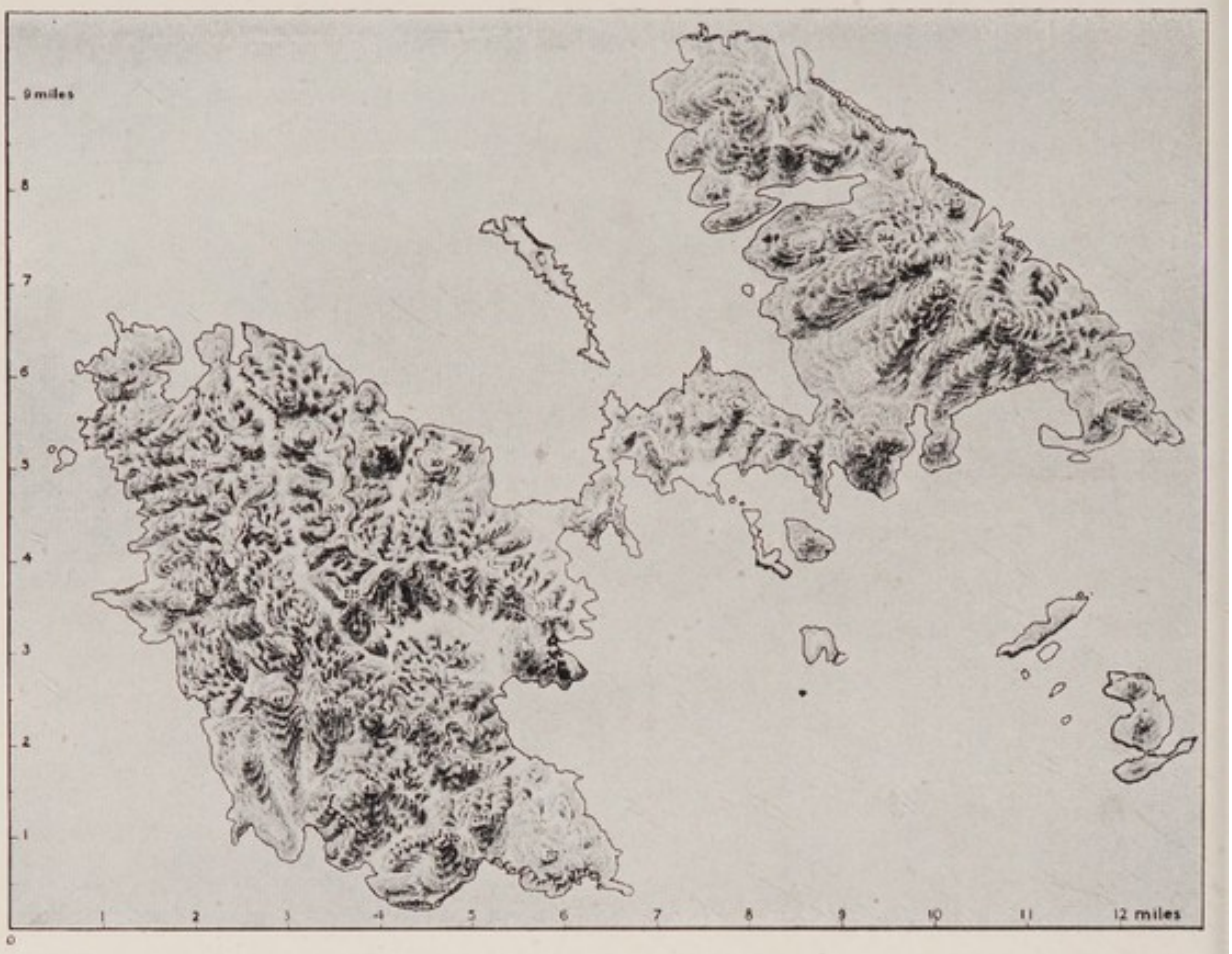
The Dodecanese. The islands now occupied by the Italians are in black

it has remained unspecialized, undeveloped, and undistinguished. As its other name (Episkopi) implies, it has had value as a look-out and signal-station for Rhodes and Cos, and should probably rank as a dependency of Rhodes, like *Chalki* and *Alimnia*, its nearer satellites.

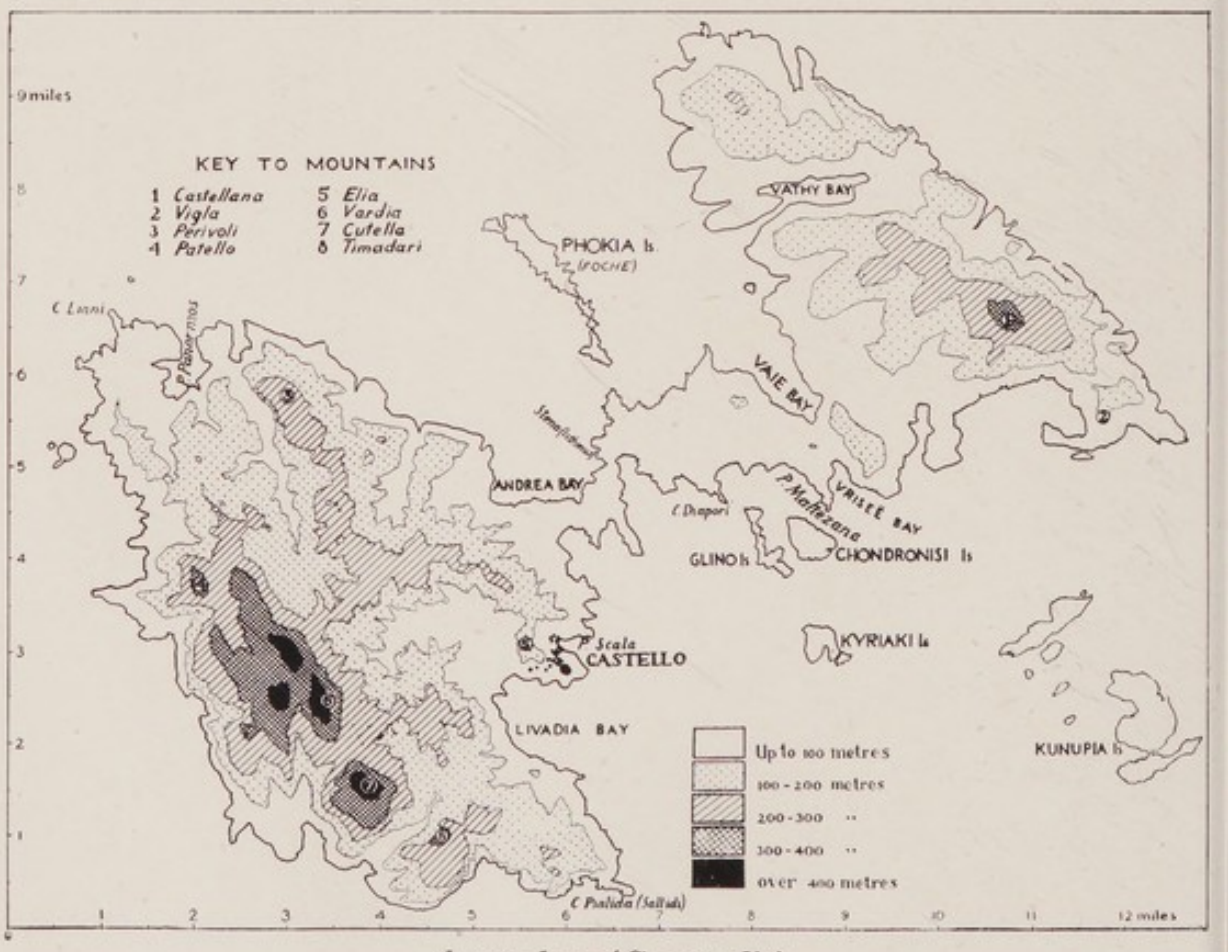
Castellorizo, though not strictly one of the 'Twelve Islands', is nevertheless thoroughly Greek, and resembles Calymnos and Symi in its economy, having no resources except its sponge-fishing and carrying trade (both now ruined) and its exploitation of mainland timber and lime.

Thus, though its scale is small, the Dodecanese is a little world of its own, with complementary resources, habitual intercourse, and strong

local peculiarities and types of character which have inspired graphic anecdotes and proverbial phrases. Consequently any régime which contemplates 'assimilation', like that of the last half-century of Turkish rule, provokes deep resentment and accentuates what it tries to destroy.



Astypalaea (Stampalia)



Astypalaea (Stampalia)

ASTYPALAEÁ[1]

(It. *Stampália*; Turk. *Astropalya*)

Lat. 36° 30′ to 36° 39′ N., *long.* 26° 15′ to 26° 29′ E.; *length*, E.–W., 6 miles; *breadth*, 1¾ miles; *area*, 44 square miles.

Description

The island lies 30 miles west of Cos and 30 miles south of Amorgos, and belongs geographically to the Cyclades, not to the Sporades. It consists of two masses of rocky land, deeply submerged and only connected by a low isthmus (Stenó; It. *Stretto*) between S. Andréa bay to north and Maltezána bay to south. Much of the coast is steep or precipitous.

The western half is composed of two parallel ridges of hard (cretaceous) limestone running north-west to south-east with deep valleys descending into gulfs between them. The western ridge, from C. Liáni to C. Psalída (*Sallídi*), rises to M. Várdia (1,660 ft.), Elía (1,644 ft.), Cutella (1,525 ft.), and Timadári (*Attimadári*: 1,132 ft.), which are separated by ravines. The eastern ridge, with M. Perivóli (*Pervole:* 1,641 ft.) and Vígla (1,018 ft.), is more continuous; at its south-east end it forms the precipitous headland on which stands the town, Castello, with the landing-place, Scala, in a deep cove on its north-east side, and the modern suburb and principal area of cultivation westward behind Livádia bay, where there is anchorage for larger vessels. Except around the town, this half of the island is uncultivated and almost uninhabited.

The eastern half, of rather softer (eocene) sands and shales, has subsided and forms deep gulfs and bays, with inshore islands. It is less rugged than the western, and has more soil and vegetation. In the east M. Castelláno reaches 1,299 feet. North of the main watershed Port Vathý, a deep inlet eastward from S. Andréa bay, comes within 1,000 yards of the east coast. On the south coast Port Ag. Phokás (*Santa Foka*) and Port Agrielídi (*Agrelithi*) are sheltered by high spurs. There is little cultivated land or population.

The isthmus between these two masses of higher ground consists

[1] In these detailed descriptions the accented syllable of Greek words has been indicated in order to assist correct pronunciation. Italian names are in *italic*.

of softer rocks, rising to 300–400 feet eastward, between Vaïe bay and Vrýsi (*Vriseë*: *Della Fonte*) bay, and sinking in S. Andréa bay to a few feet above sea-level at the Stenó (*Stretto*) ridge, which is only about 100 yards wide. Between these two necks of land a chain of islands on the north side bisects S. Andréa bay, and on the south side another—the islands Glinó and Khondró—curving eastward, encloses Port Maltezána (v. below). Farther south-east is a wide submerged area studded with the Kunúpia islets; and there are other small islands farther offshore—Adelphí (2), Sirína (Ag. Ioannis), Tria-nisiá (3), Zafraná, Disakki (Karávi), Avgó—uninhabited except by a few sheep and goats in summer.

Lying so far from the mainland, Astypalaeá has a milder and moister climate, and consequently better grazing and more honey than others; but there is little cultivable soil.

History

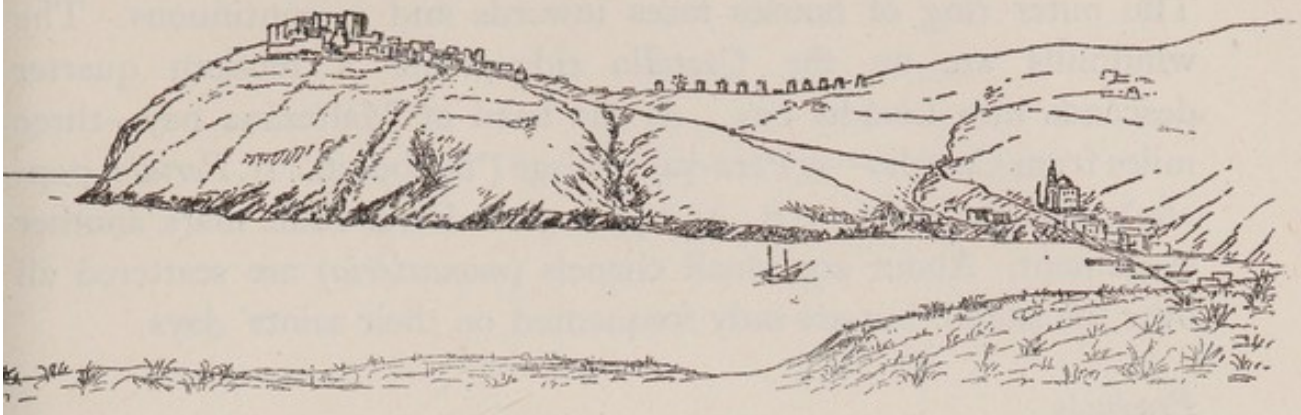
The Querini family from Venice ruled Astypalaeá from A.D. 1207 to 1522, enlarged the Byzantine castle, and at one time held Calymnos and Leros also. In 1413, after a pestilence, the island was repopulated from Tenos, and preserves a north Cycladic dialect and style of embroidery. Twelve 'Ninfi' families, descended from the Querini, still form an exclusive nobility, with characteristic dress and social privileges.

Ports and landing-places

(1) Astypalaeá port (Scala) is in a deep cove, north-east of the Castello ridge, with a steep ascent to the town from the landing-place west of the open beach. Ships anchor at 325 yards from the shore, in about 32 feet. The holding is bad during north and north-west winds, when strong gusts come down from the near summits. Vessels up to 30 tons can approach close inshore. There are two 36-foot jetties, one for sailing-boats, the other (25 yds. closer inshore) for motor-launches. This is the only port for commerce. Large vessels anchor south of Castello point, in Livádia bay, which lies open to the east, and has landing-place and beach, with cultivated ground, olives, and walled gardens inland.

(2) Port Maltezána is enclosed between the isthmus and Glinó and Khondró islands. The bay is $1\frac{1}{4}$ miles long by nearly half a mile

ASTYPALAEA PORT and VILLAGE



wide, and is sheltered to north-east by hills rising to 200–400 feet. In good weather ships may anchor outside, between Glinonisi and Makria Punta (*Lunga*; 100 ft. : sand and mud).

The west and south entrances, between Diapóri point, Glinonisi, and Chondroníси, are narrow and difficult, but the latter is the main entrance (*canale di bocca* or *passagio di porto*). The eastern, between Chondroníси and C. Vrysi (*Punta della fonte*), is wider but is avoided because Baráka reef and the rocks off C. Vódi (*Foca*) are dangerous. Port Maltezána is exclusively a base for naval vessels, submarines, and seaplanes: it is well defended, and has barracks, fuel-stores, two 15-ton sheers, and some lighters: a dockyard is being constructed.

(3) Port Vathý (*Vati*) is a deep narrow inlet east of S. Andréa bay. It is steep-to, and without beach or water. The anchorage is about one mile long and 2 cables wide, with a uniform depth of about 30 feet on sand and mud. The leading channel (*canale di bocca*) is cut by a sandy ridge which prevents entrance to ships of more than 11-foot draught; but this has been dredged to admit destroyers and submarines.

(4) *Port Pánormo* is a deep bay on the north side of the western part of the island; open to the north, with depths of 260 feet in the entrance, decreasing to 52 feet in its southern part.

(5) A small boat-canal cut through the Stenó isthmus has been blocked up.

(6) There are landing-places at Agrielídi, Marmári, Livádia, and Pánormo bays: but most of the coast of Astypalaeá is steep-to, with small torrent-beds descending into open coves.

Population

The population is Greek (1,400 in 1922; 1,799 in 1937): almost everyone lives in or around the old town, on the steep Castello ridge.

The outer ring of houses faces inwards and is continuous. The windmills are on the Castello ridge, and a modern quarter descends into Livádia bay. At the head of Maltezána bay—three miles from Castello—is Pera-yaló village ('far-beach': It. *Perialo*, pop. 160); and at Catafí on S. Andréa bay medieval ruins mark another settlement. About 200 small chapels (*monastéria*) are scattered all over the island, but are only frequented on their saints' days.

Products

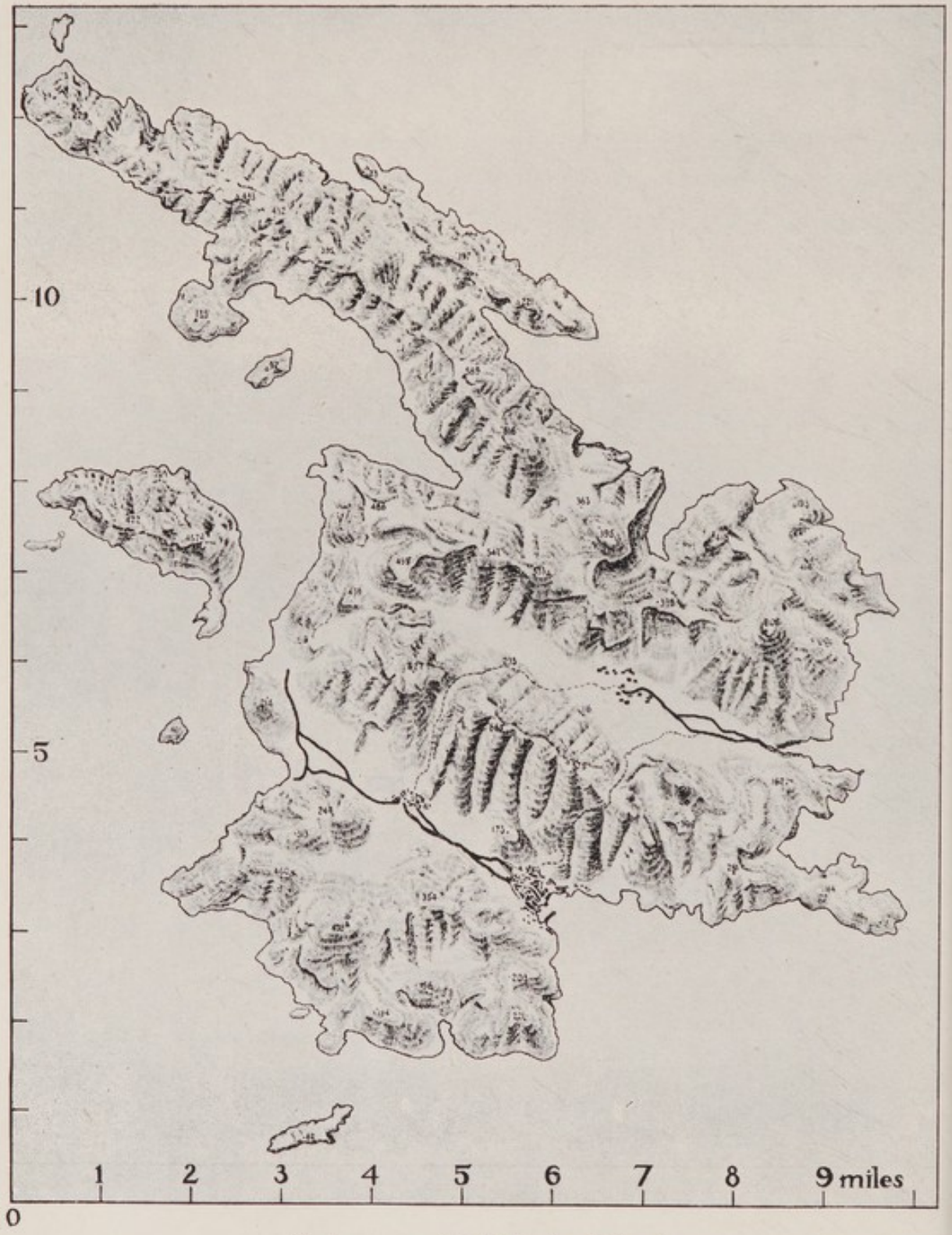
The principal source of subsistence is pastoral; there is a local breed of sheep, and cattle are sent hither from inshore islands to graze. Barley, wheat, vines (for raisins), and garden-produce are grown, and there is some fishing and sponge-diving, but little intercourse with the other islands.

Communications

There is a steep track from Scala to the town and from Livádia to forts at M. Perivoli (*Pervole*) and M. Attimadári, a metalled road from Scala to Maltezána and thence to Pera-yaló and Fort M. Castellána; and a mule track to C. Pulári. Steamers call occasionally from Rhodes, and motor-schooners and sailing-vessels from the nearer islands. There is a radio station at Port Scala (lat. 36° 32′ 50″ N.; long. 26° 22′ 16″ E.) which is also the telephonic centre for the whole island: other wireless stations are west of L'Ascensione, at Pera-yaló, M. Attimadári, M. Perivóli, and M. Castellána. A heliograph station is on the roof of a monastery.

Water-supply

There are wells in the low ground, a spring near C. Vrýsi, and the houses have rain-cisterns.

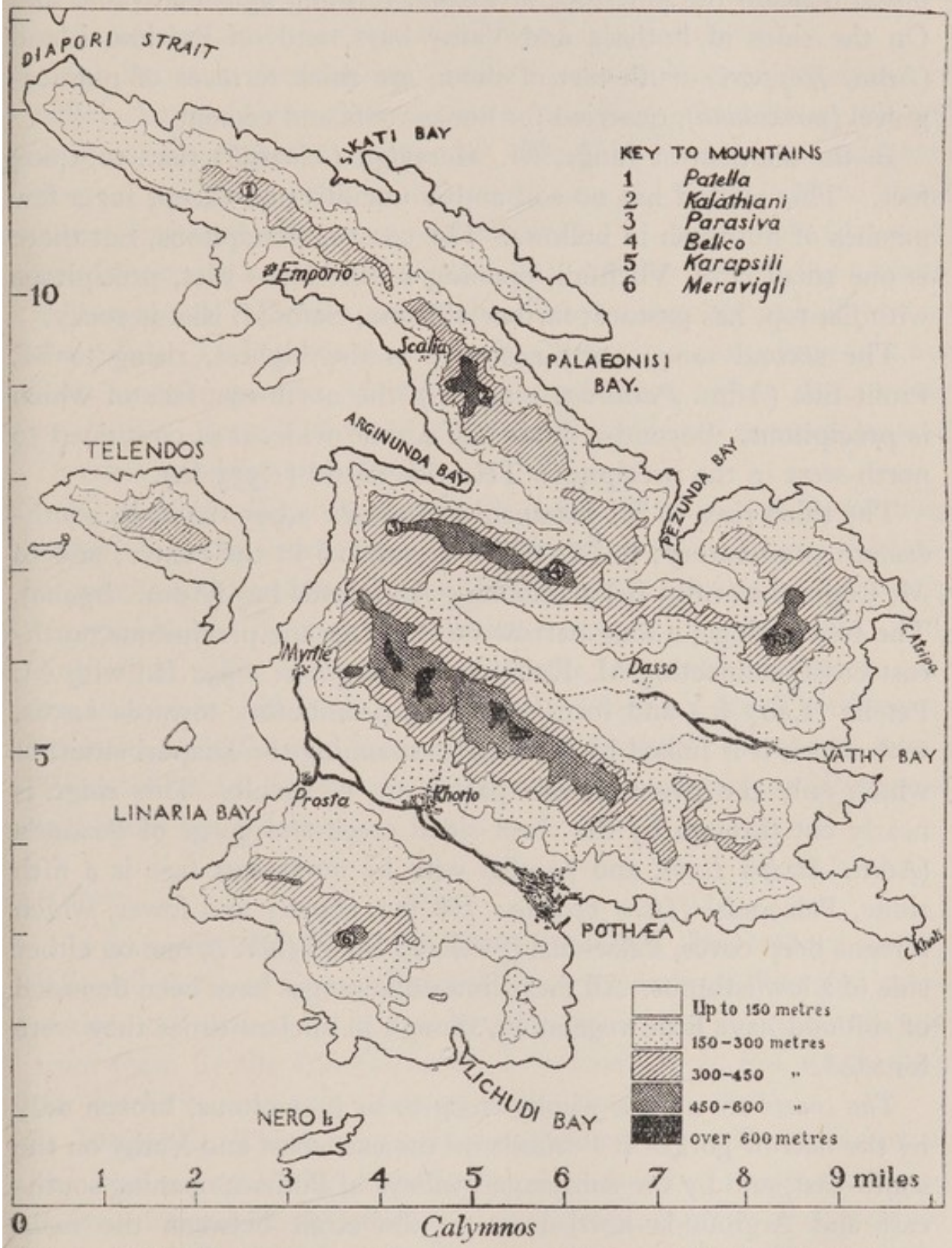


Calymnos, with Telendos Island

CALYMNOS

(Med. *Calamo*; It. *Calino*; Turk. *Kalimnos*)

Lat. 36° 55′ to 37° 05′ N., *long.* 26° 53′ to 27° 04′ E.; *length*, NW.–SE., 13 miles; *breadth*, NE.–SW., 8 miles; *area*, 49 square miles.



Calymnos

The peak (3) is Corazzina, not Parasiva which is between Khorió and Dassó.

Description

Mountains. The island consists of four ranges of hard limestone mountains, running north-west to south-east, with deep valleys between, partly submerged in gulfs. Older but softer schists are exposed beneath the limestone at Prostá, forming light cultivable soil. On the sides of Pothaéa and Vathý bays, and on Psérimo island (Adm. *Káppari*) south-east of them, are thick terraces of pumice-gravel (*pozzolána*), quarried for house-roofs and cement.

In the south-west range, M. Meravígli (*Miroigli*) rises to 1,604 feet. This section has no soil and is uncultivated except for a few patches of hill-wash in hollows. The coast is precipitous, but there is one small cove, Vlichúdi, opening south; Neró islet, precipitous with flat top, has pasture; farther offshore, Safonídi islet is rocky.

The second range north-eastward is the highest, rising to M. Profit-Elía (Adm. *Parasíva*: 2,250 ft.), the north-east face of which is precipitous. Beyond a strait half a mile wide, it is continued to north-west in the precipitous Télendos island (1,553 ft.).

The third rises to M. Karapsilí (*Chirassili*: 1,995 ft.) in its south-eastern promontory; to M. Bélico (1,749 ft.) in the centre; and to M. Corazzína (1,893 ft.) overlooking Arginúnda bay (Adm. *Argano*). The fourth ridge, a long narrow crest, forms the precipitous north-east coast, connecting M. Kalathianí (*Calagiani*: 1,932 ft.) with M. Patélla (1,407 ft.) and forming a long promontory towards Leros, with which it is linked by three islets spanning the Diapóri strait, of which only the two northern passes are navigable. This ridge is nearly cut through by the sheer-sided creek and gorge of Pezúnda (Adm. *Atzípa Bay*), and parallel with its north-east face is a fifth ridge, Palaeoníси (*Isola vecchia:* 718 ft.), shorter and lower, which screens deep coves, Palaeoníси (SE.) and Sikáti (NW.), one on either side of a low isthmus. All these limestone ranges have been denuded of soil and have little vegetation, though in ancient times they were forested.

The coasts are almost wholly steep-to or precipitous, broken only by the narrow gorges at Pezúnda on the east coast and Vathý on the south-east, and by the submerged valleys of Pothaéa opening south-east and Arginúnda north-west on the strait between the main island and Télendos island. From Myrtié to Linária softer rocks are

terraced steeply down to the shore, but the only beach, at Linária, is obstructed by houses and walled enclosures.

Lowlands. (1) Between Meravígli and Parasíva ranges, a deep valley connects Pothaéa bay (*Porto Kalino*, Adm. *Port Kalimno*) with Linária (also called Prostá) facing Télendos island. This is the principal inhabited area, and the whole valley-bottom is cultivated with terraces on either side as high as there is any soil.

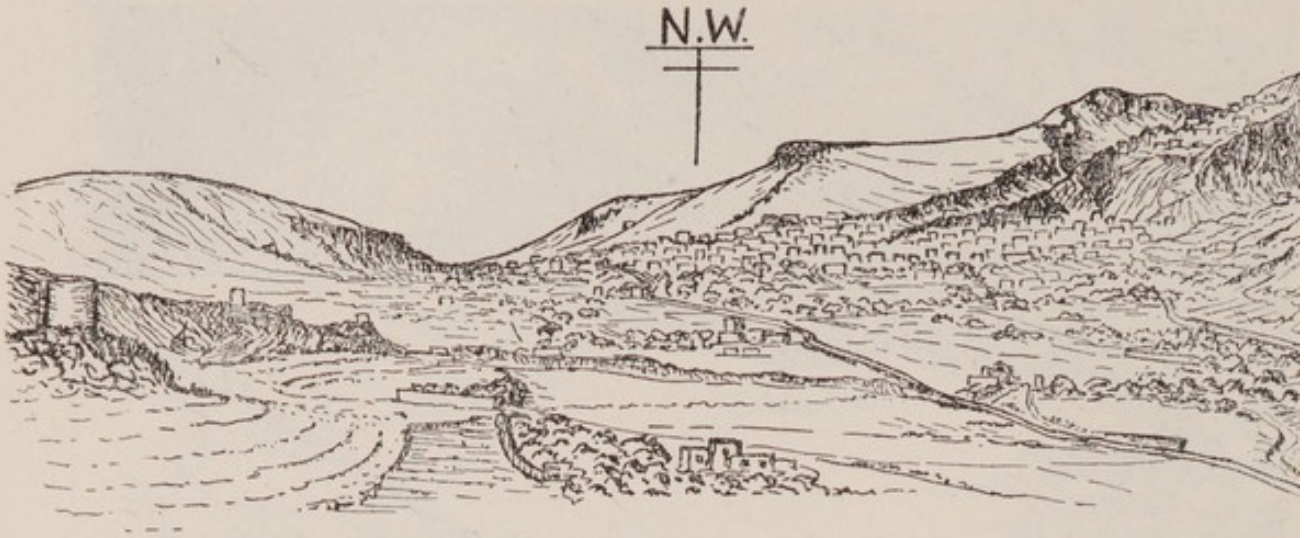
(2) Between Parasíva and Bélico-Karapsilí ranges a similar deep valley, Vathý (*Vati*), does not reach the Télendos strait at all, and only communicates to south-east with Vathý bay by a submerged gorge a few yards wide, with a small cove and beach within. Small vessels can enter, but turn with difficulty. A motor-boat (*gazolina*) provides transport from Pothaéa in fair weather. From the harbour settlement at Vathý a road reaches Dassó village about half-way up the valley. To Pothaéa there is only a mountain-path rising to 1,250 feet; another goes to Khorió village and has a well at the summit (1,462 ft.). From Vathý to Dassó are plantations of oranges; beyond Dassó is cornland and pasture.

(3) Between Bélico and Kalathianí ranges there is no continuous valley, but the strait between Télendos island and the Akrotíri promontory is prolonged beyond Arginúnda (Arganó) into a deep trough blocked by the ridges which overhang Pezúnda cove. This Arginúnda valley is sheltered and fertile; accessible, however, only by sea and by hill-track from Myrtié. There are small settlements at Scalía (*Scaglia*) and Emporió on the Akrotíri promontory facing Télendos island. On the north-east coast the deep coves of Palaeonísi and Sikáti are desolate.

History

In antiquity Calymnos was heavily forested. Its fortunes usually followed those of Cos. After A.D. 1204 it became a Venetian naval station, but was ceded to the Knights of Rhodes in 1310 and held from them by the Querini lords of Astypalaeá. It was attacked by the Turks in 1457 and 1460 and taken in 1522.

Antiquities. There is a prehistoric deposit in the Dascalió cave at the entrance to Vathý; and Bronze Age chamber-tombs are found in the pumice-beds at Pothaéa. In the Kástro are many small frescoed churches. The Knights' Castle near Khorió village, but on the



Calymnos: looking up the valley inland of Pothaéa Port

The medieval walled town lies high on the steep spur on the right; Khorió village, from the foot of the spur to the road; the Castle of the Knights on the spur to the left, beyond a ruined windmill. Beyond the pass, the road descends to Linária Bay.

even before the Italian occupation, in Greece, France, Russia, and America, especially in a large township of sponge-fishers at Tarpon Springs in Florida; since 1912 emigration has greatly increased (pp. 48–9). Most of the inhabitants live round the harbour at Pothaéa (pop. 11,000), a few in Khorió (pop. 500) and the Vathý valley (pop. 1,100); Linária (pop. 500), Myrtié, Arginúnda, and Emporió (*Borió*) (pop. 200) are essentially summer resorts.

The old village, Khorió (*Corio*, Adm. *Kalimno*), is on the water-shed, about half-way between Pothaéa and Linária, and about 400 feet high, at the foot of the medieval fortress (Kástro, now deserted) on a spur of the Parasíva ridge.

The modern business-town is round Pothaéa port. On the quay are the government offices, town hall, cathedral, churches of S. Nicolas and S. Stephanos, and principal sponge-warehouses; behind are rows of houses terraced high on the steep hill-sides. The medicinal hot-springs north-east of the bay are accessible by boat, but a road has been projected.

Round Linária bay, and along the terraced spurs of Myrtié and Masúri, overlooking Télendos strait, are many fig-trees, olives, and gardens with summer dwellings. At the north end of Linária beach is a small landing-place.

Products

Barley, wheat, vines, olives, and vegetables are grown for home use, but most of the grain-supply is imported. Only 18 per cent. of the surface is cultivable; but figs and very fine oranges are exported. Sheep and asses are bred. Under Turkish rule many farms and summer-houses were owned on the adjacent mainland, and supplemented the food supply of the island; but these are now out of reach.

Industries. Calymnos has been a principal centre of sponge-fishing (pp. 60–1) and in the half-century following the discovery of new sponge-grounds about 1840 became very prosperous, with almost wholly native capital, and depots in London, Frankfurt, and latterly Basle. The grading and preparation of the sponges occupied the women, girls, and old men. Italian competition and interference have caused great distress and much emigration.

Cigarette-making, from imported tobacco, occupies about 800 persons; and the women paint coloured kerchiefs for sale, a cheap substitute for embroidery. Recently carpet-weaving and embroideries have been revived, for the tourist-traffic in Rhodes.

Water-supply

There are many steep winter torrents, but no streams and few springs. Pothaéa has one deep well of good water, but otherwise uses rain-cisterns; there are wells at Linária and Dassó, and warm medicinal springs on the east side of Pothaéa bay.

Communications

There is a motor-road from Pothaéa to Linária and beyond towards Myrtié with motor-bus service from Pothaéa to Khorió; and cart-track from Port Vathý to Dassó. Otherwise intercourse is by rough hill-tracks. There is local steamer service as far as Patmos and Rhodes; and cargo-vessels ship sponges direct to foreign ports. There is telegraphic cable to Leros and to Cos; telephone from the observation-post on M. Profit-Elía to Leros; local telephone service in Pothaéa, with exchange at the gendarmerie station on the *Cordóni* quay. An aerodrome has been reported to be under construction.

Islands adjacent to Calymnos

Kalólimno island is a low tabular mass of hard limestone, 3 miles east of Atzipa point of Calymnos. It has a lighthouse, lime-kilns, and a little pasture. There is a landing-cove on the south side. The Italian map appears to assign Kalólimno to Turkey.

Pserimo island (Adm. *Kappari*) lies in the strait between Calymnos and Cos, and depends on Calymnos. It consists of limestones and marls, with deposits of pumice shingle (*pozzolána*) which are quarried, as in Calymnos. The island lies low and is mostly rough pasture, but there are patches of cultivation near the landing-place in a cove on the west coast, and above a smaller creek on the north coast. The inhabitants belong to Calymnos.

Télendos island is a rugged ridge of hard limestone, separated from Calymnos by a strait of about 500 yards north-west of Linária. It is barren and uninhabited, but landing is possible on a low spur at the south end (view facing p. 133).

CÁRPATHOS

(Adm., It. *Scarpanto*; Turk. *Karpatos*)

Lat. 35° 24′ to 35° 54′ N., *long.* 27° 5′ to 27° 16′ E.; *length*, N.–S., 30 miles; *breadth*, max. E.–W., 7 miles; *area*, 118 square miles. *Distance* from Rhodes, 28 miles; from Crete, 46 miles.

Description

Almost as large as Cos, Cárpathos consists of a single rugged ridge of hard limestones and other old rocks, with spurs forming C. Sókastro on the west coast, and on the east coast the Vúthia headland and C. Vrontós (Goniá Vrontís: It. *G. di Vronte*), which enclose Pegádia bay. At the north end, Sária island (4½ m. by 1½ m.: 1,853 ft. high) is completely detached by a strait only 100 feet wide at the head of Armyró bay; and a little south of this, the deep Trístoma creek, obstructed by two islets, cuts deep into the high land. The highest points are M. Kalolímni (3,965 ft. Adm. 4,000) on the Lástro plateau 14 miles from the south end; M. Malios (1,956 ft.) south of Trístomo; and Khómalis, at the base of the Vúthia spur. At the south end a peak of 1,487 feet ends the range abruptly, overlooking the Platý Acrotéri ('flat promontory') of softer rocks and some fertility, with beaches. There are other low coasts at Kástello and Makrý-yaló ('long beach'), where there is anchorage. Elsewhere the coast is almost all steep, with a few open coves but little access to the interior. There are no perennial streams, but steep winter torrents. As there is ample rainfall, there are remains of forest, pines predominating in the north. Cultivation is only extensive on the soft moist soils of the southern lowland, especially about Phoenikí. There are beds of lignite, iron ore, and gypsum, but the island is ill explored.

History and antiquities

Cárpathos is remote, not widely fertile, and well protected by its rugged coast. In antiquity it had three (and at one time four) independent states, as well as an up-country tribe of aborigines. Sometimes dominated by Rhodes, sometimes by Crete, it shares an orthodox metropolitan bishop with Casos. From Byzantine rule it

passed after 1204 to Genoese adventurers, Andrea and Lodovico Moresco, and from them in 1306 to the Carneri of Venice, and was annexed by the Turks in 1538. Its sailors fought well in the Greek National Movement, and in 1821 it was occupied by the Greeks. On its restoration to Turkey in 1832 Mahmud II granted the privilege of self-assessment (*maktu*, p. 35).

There are remains of a Hellenic fort at S. Elias church, east of Pegádia, and traces of a temple of Poseidon on C. Cávo: other temple-ruins at Vergúnda and Palátia. From S. Sophia church at Arkássa a mosaic floor of the sixth century A.D. with names of donors has been transferred to the museum in Rhodes. There are medieval frescoes in S. Irene at Mesokhóri, Panagía near Élymbo, S. Antonio and S. Mámas at Menéti, and S. Sophia at Palátia. Voláda village has a medieval fort (*Castello*).

Ports and landing-places

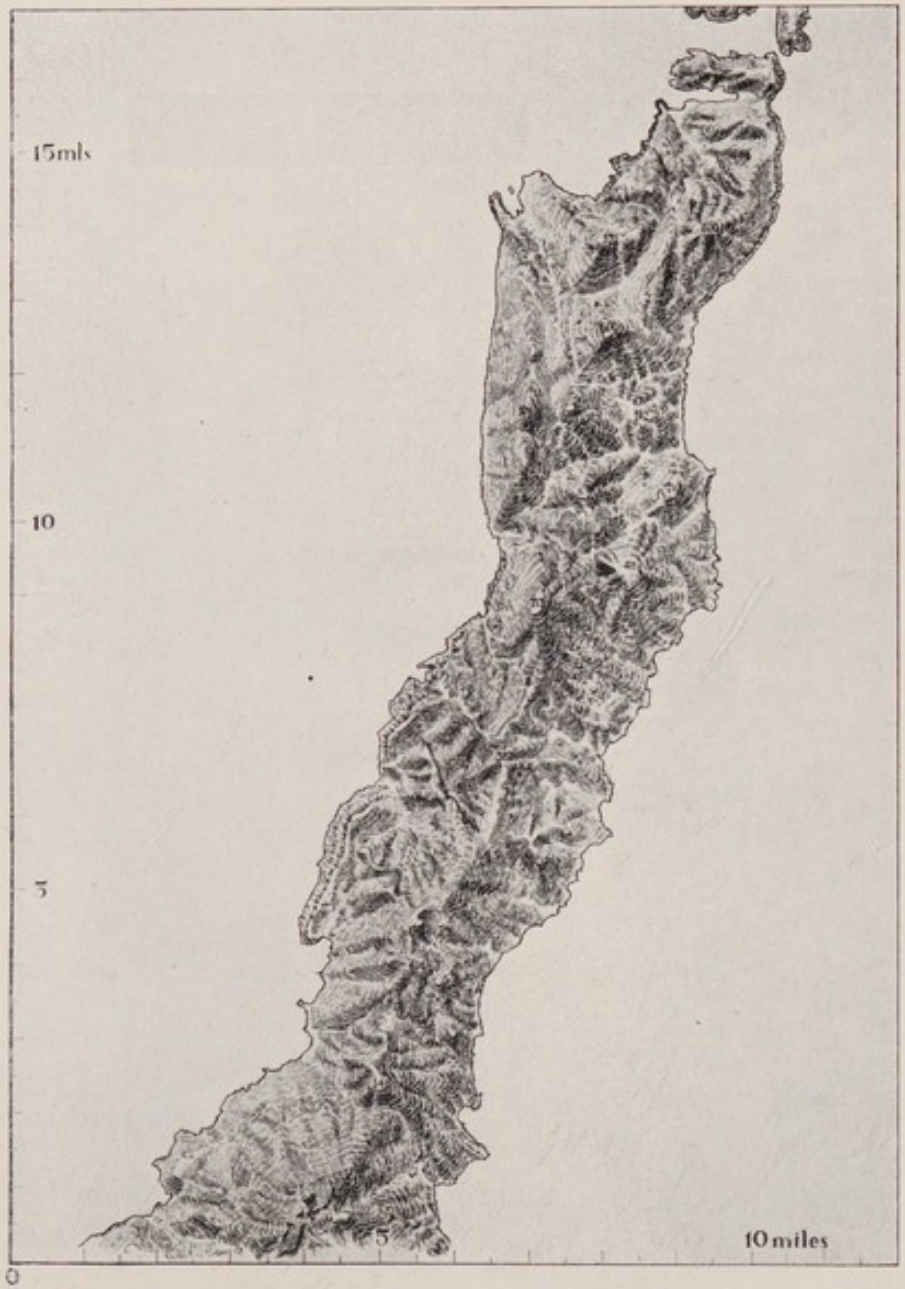
(1) The port, Pegádia, on the east coast, is on the south side of an open bay, sheltered from the north-west by C. Vrontós (Goniá-Vrontís: *G. di Vronti*) and also from the south, but exposed to the north-east and east. The anchorage is off C. Vrontós in 15 fathoms; in bad weather there is anchorage farther south in Amorpho bay. The beach is lined with houses, but there is a landing-place with a quay 100 feet by 18 feet and a small boat-harbour; other harbour works have been projected. A motor-road connects with the air-port at Menéti in the interior, and with Arkássa on the west coast. At Pegádia there is a station for aeroplanes and seaplanes, with hangars for seaplanes, and a breakwater is projected.

(2) Amorpho bay, opening south, has anchorage when Pegádia bay is unsafe.

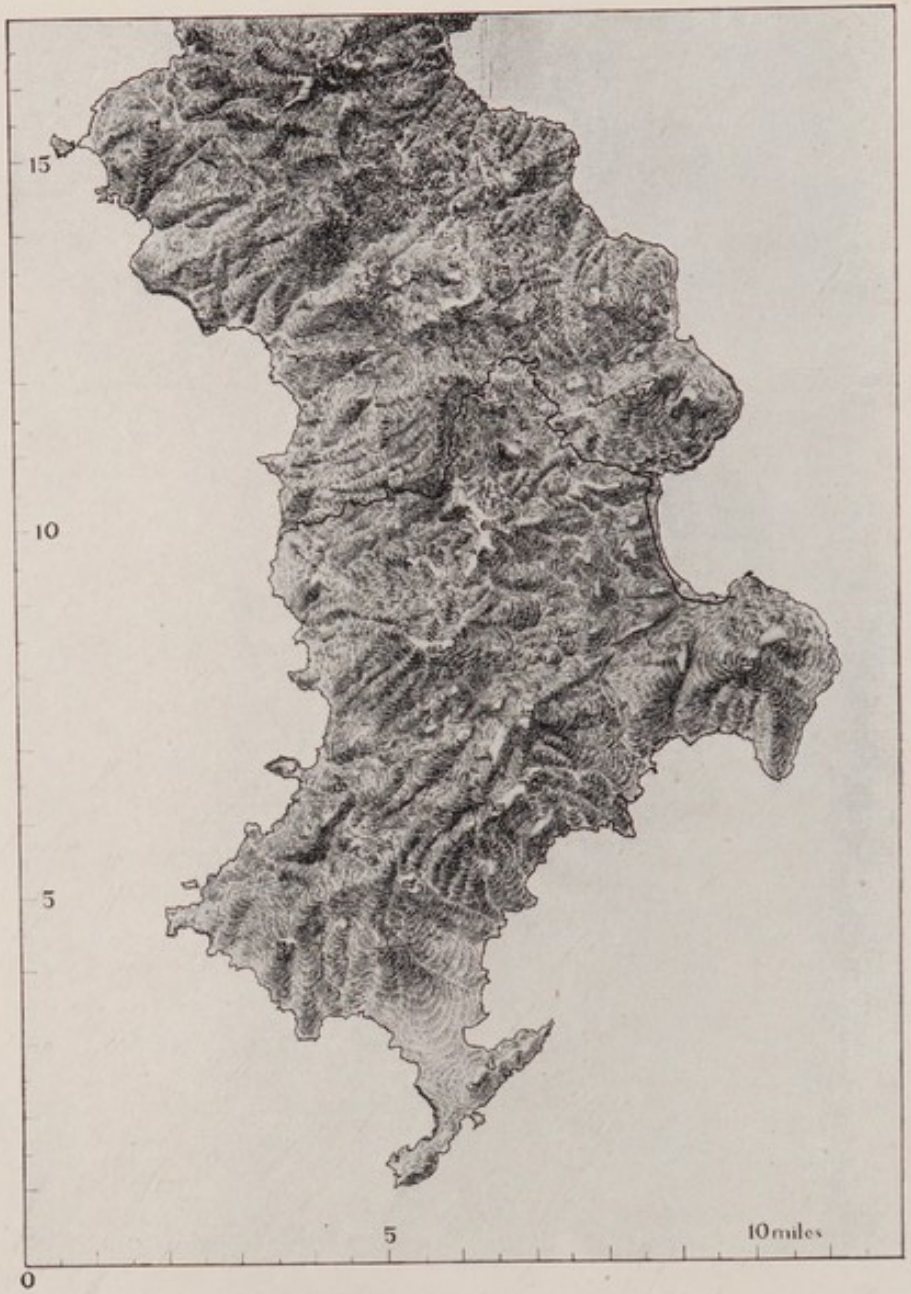
(3) Makrý-yalós bay is sheltered from the south-east by C. Likhi (Adm. *Legi*), but is open to north-east; it has anchorage and stretches of beach, and a mule-track through the Afiartis (*Efialti*) lowland to Arkássa.

(4) West of Kastello point there is anchorage in a bay opening to south-west and a beach in Midi cove. Here there is an aerodrome with underground stores.

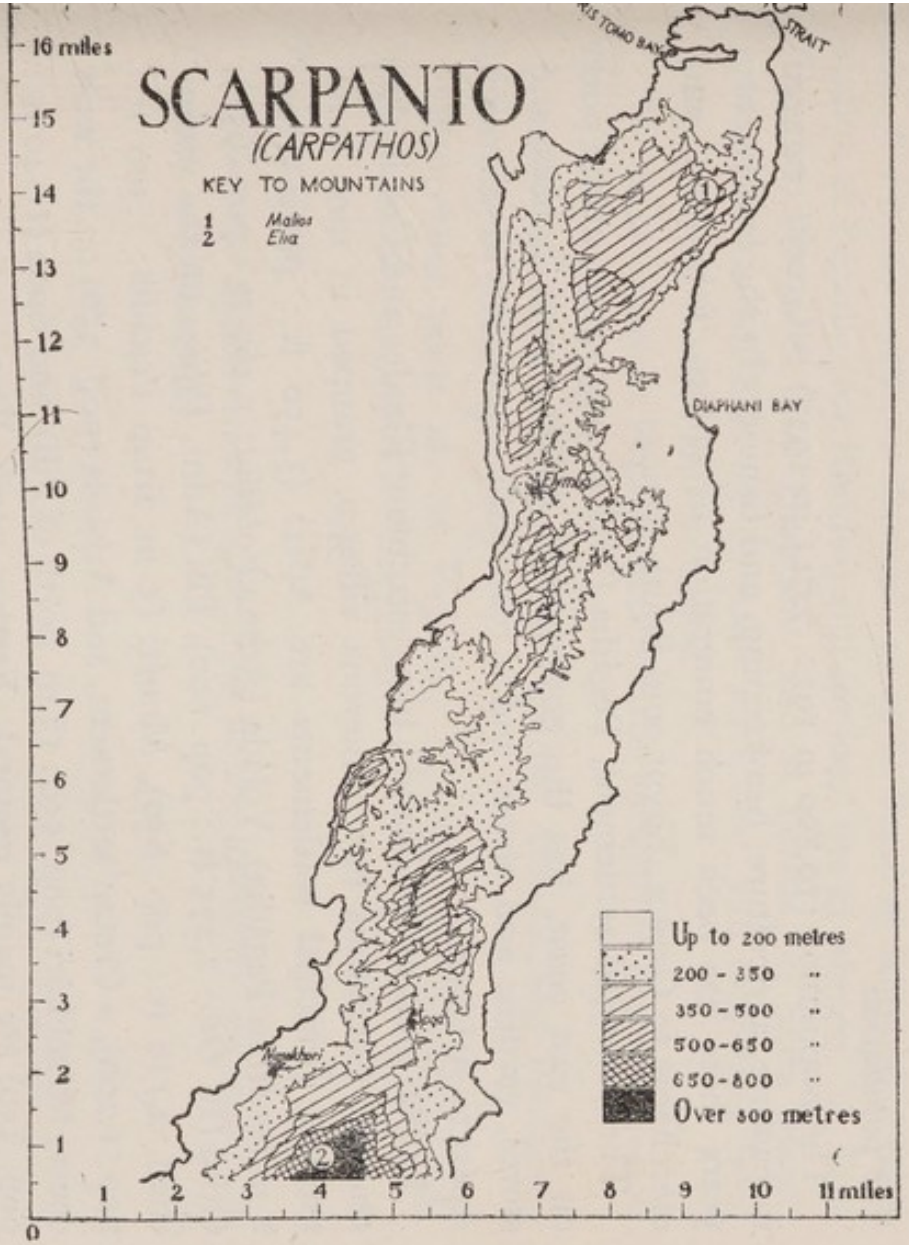
(5) At Arkássa in an open bay on the west coast is a small naval depot and landing-place for the air-port at Menéti. There is a landing-



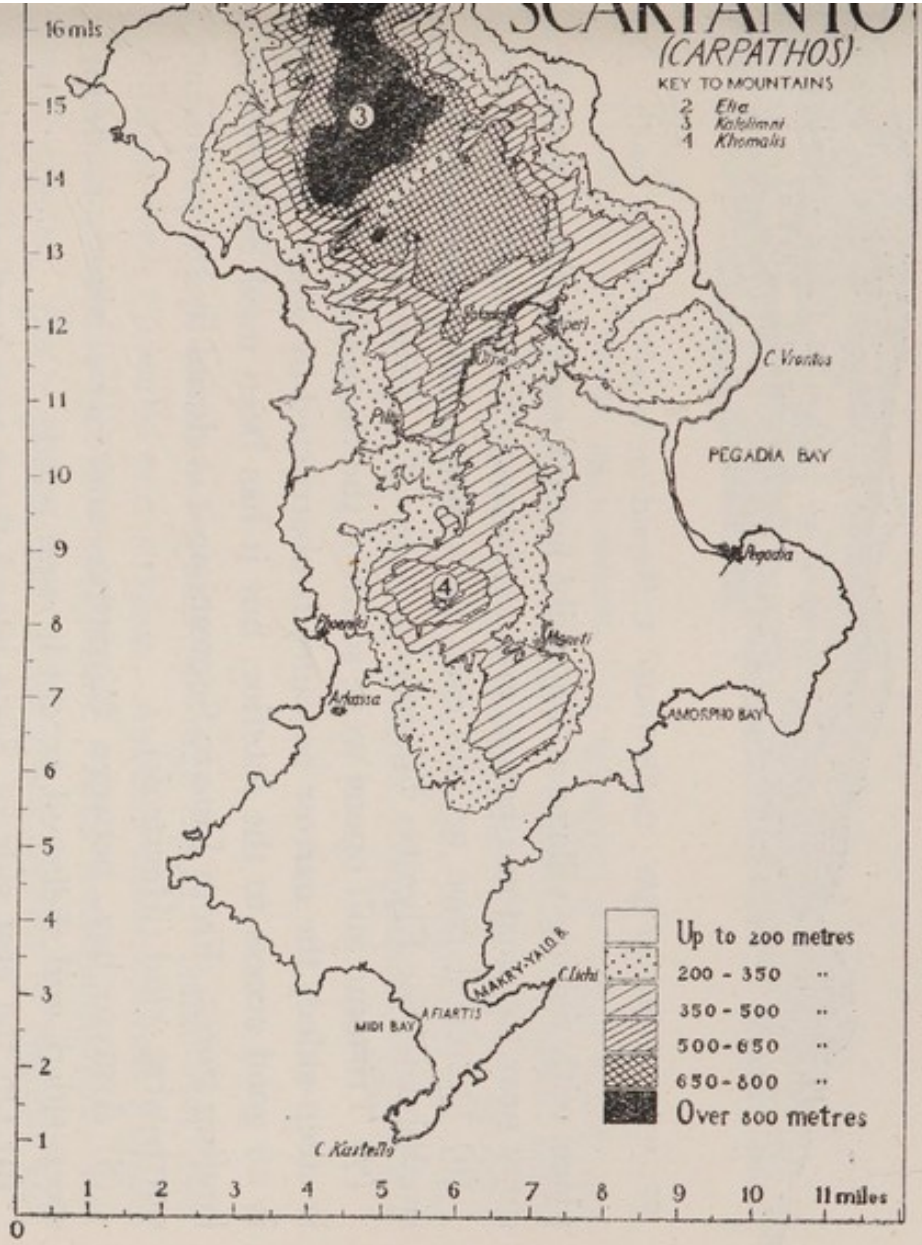
Carpathos (Scarpanto): north half



Carpathos (Scarpanto): south half



Cárpathos (N. half)



Cárpathos (S. half)

PEGADIA TOWN and BAY, CARPATHOS: C. Poseidion to left, looking South.

place with fishing-village at Phoenikí farther north, with a 60-foot quay near the customs-house, and 2½ fathoms alongside.

(6) Diapháni cove on the east coast is the landing-place (from small boats) for Élymbo village.

(7) Trístomo gulf opens west, south of the Saria (Steno) strait. It is steep-sided, the narrow entrance is obstructed by islets, and there is no good access to the interior, but it has been used recently for landing stores. From June to September it is closed by the prevalent north-west wind (*Maestrale*).

(8) Armyro bay, between Cárpathos and Sária island, is deep, steep-sided, and sheltered except in west winds.

(9) On the east side of Sária island there is a small sandy bay 1½ miles south of C. Alimúnda.

The population

The population (10,800 in 1912, 7,711 in 1937) is Greek, engaged in pasture, agriculture, bee-keeping, and fishing. In the last twenty years there has been much emigration of sailors, fishermen, and merchants to Greece, Egypt, and South Africa.

The principal settlement, Pegádia ('wells', pop. 500), at the port on the east coast, has the government offices, good houses and stores, gardens and olives, and a road with motor service through Apéri to Arkássa.

Unlike most of the islands, but resembling Rhodes and Cos in this respect, Cárpathos has numerous villages, grouped in nine communes: principal settlements are Apéri (1,450 ft.: pop. 1,100: 8 miles from Pegádia), Voláda (Adm. *Volátha*: 1,460 ft.: pop. 650), Ótho (It. *Oto*: 2,275 ft.: pop. 600), Pilí (Adm. *Piliés*: on the watershed, 2,110 ft.: pop. 650), Menéti (5 m. from Pegádia, 1,300 ft.: pop. 1,200), a Cretan settlement, and Arkássa (pop. 350) on the west coast; Mesochóri (pop. 550: 12 m. north of Pilí) and Spóa (1,140 ft.: pop. 550) are mainly pastoral. Farther north, Élymbo (pop. 1,100)

looks down on the west coast, three hours south of Trístomo; it has some agriculture and 40 windmills, an archaic dialect, picturesque costumes, and a classical type of wooden door-lock (*mandalos*). On Sária island there is only summer pasture.

Products

There is not much agriculture, but oranges and other fruits and vegetables are exported from Phoenikí to Rhodes and Casos. Some timber is exported. Oxen, mules, and asses are bred, but the demand for animals has been checked by motor-traffic. Formerly there was some sponge-fishing. At Menéti there is a household industry of painted straw baskets.

Communications

A motor-road connects Pegádia, through Apéri, Voláda, and other villages, with Phoenikí and Arkássa. Another road connects Pegádia with the aerodrome at Afiartis (*Efialti*). Other settlements have only mule-tracks. There is steamer service from Rhodes to Pegádia and occasionally to Arkássa. Sailing-vessels collect fruit and vegetables from Phoenikí. There is a telegraph cable from C. Gonia-Vrontís (*G. di Vronti*) north of Pegádia bay to C. Prasó in Rhodes: a radio station at Pegádia (for Rhodes) and for local use at Menéti, M. Elia, Élymbo, Phoenikí, and Diapháni, and at Palatia on Sária island; heliograph on M. Elia for C. Aktís in Casos, and telephone from Pegádia to all villages and to Casos.

Aerodromes are at Pegádia and Afiartis (*Efialti*) in the low ground near Makrý-yaló bay.

Anchorages for seaplanes are at Pegádia, Arkássa, and Trístomo; and a slip at Makrý-yaló bay.

Observation-posts are at Pegádia, M. Elia, C. Kastello, Ag. Theódoro, M. Archili, C. Palaeócastro.

Water-supply

There are many streams and wells in the lowlands, especially at Pegádia and Phoenikí.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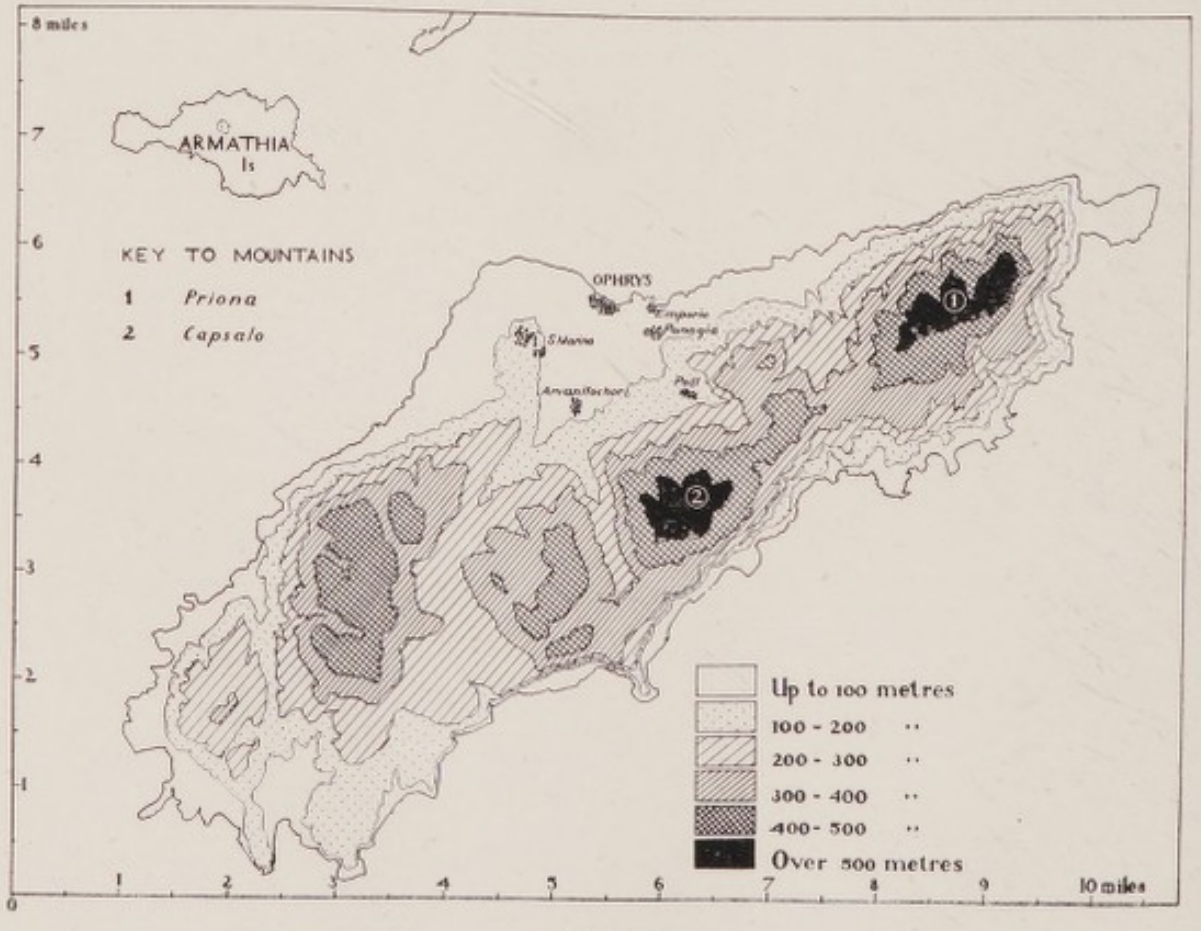
2
3
4
5
6
7
8
9
10 miles

Casos


8 miles
ARMATHIA
Is
KEY TO MOUNTAINS
1 Priona
2 Capsalo
OPHRYS
S Marina
Up to 100 metres
100 - 200 ..
200 - 300 ..
300 - 400 ..
400 - 500 ..
Over 500 metres
10 miles

Casos

CASOS

(It. *Caso*: Turk. *Casiot*)

Lat. 35° 20′ to 35° 26′ N., *long.* 26° 51′ to 27° 00′ E.; *length*, SW.–NE., 10 miles; *breadth*, N.–S., 4 miles; *area*, 27 square miles.

Description

The island is a single ridge of hard limestone, running from east to west, rising in the centre to M. Kápsalo (1,895 ft.: Adm. *Priona*) and to M. Aktís (1,700 ft.) in the east,[1] and overlaid round Ophrýs and Emporió with patches of marl and gypsum, quarried formerly on Armáthia islet in the half-submerged ridge which lies parallel with the north coast. On Stachída islet[2] older rocks are exposed. The north-east end is deeply scored with torrent-beds descending into small rocky coves. The south coast is precipitous. The west half is less rugged, but has high cliffs to the south. At the greatest breadth a lowland in softer beds with more fertile soil, facing north-east but accessible also from the north-west, contains the town Ophrýs (Phrý) above the landing-place, and four other villages (v. below). In this lowland is almost all the cultivated area; the rest of the island is pasture and scrub.

History

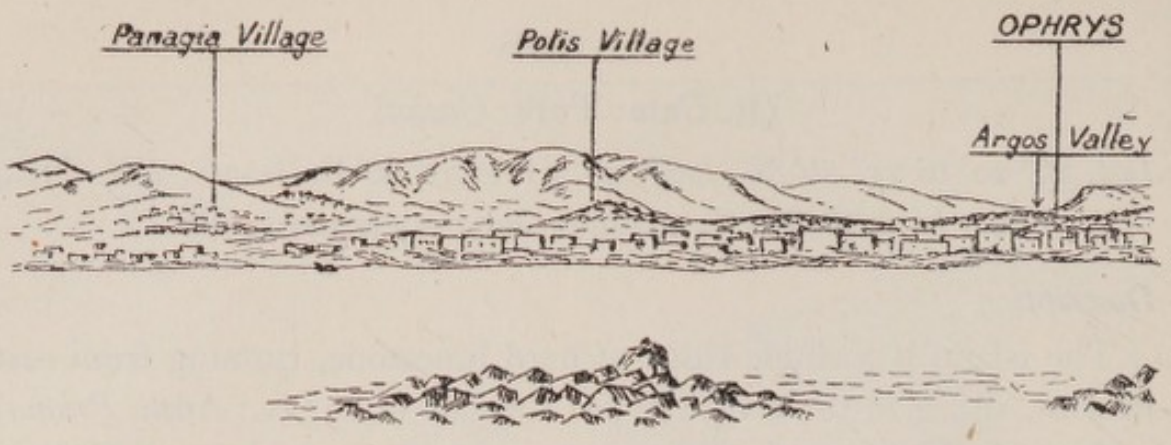
Casos has little history, except what it shares with Cárpathos. The Hellenic city was at Póli; the Byzantine cathedral of S. Spiridion is at Ophrýs; there is medieval mosaic at Emporió (S. Michael). In the Greek National Movement the sailors of Casos rendered conspicuous service, like those of Cárpathos: but in 1824 the island was blockaded and devastated by the Egyptian fleet.

Ports and landing-places

The only port is on the north coast at Ophrýs in an open bay exposed to north-eastward, but protected to north-westward by a rocky promontory in which is a small boat-harbour enclosed by a stone mole with a pier 75 feet by 15 feet. Large vessels anchor in the strait between this promontory and the line of islets to northward, which break the heavy swell.

From Ophrýs eastward Yaló bay has open beach as far as Emporió, where there is anchorage and landing-place. There are anchorages

[1] The name Priona ('saw-edge') has been used of both these peaks, but seems to be appropriate to M. Cápsalo. [2] Stachída is 1½ miles north-east of Armáthia.



CASOS. Emporio Bay, looking S.E.

also off Amunda east of C. Agios Georgios, and in Khelatros bay. The rest of the coast is precipitous or steep-to, with a few torrent-beds into which some shingle drifts, as at C. Agios Ioannis; and a pebbly beach under the lee of C. Trussália.

Population

The population (7,000 in 1912, 1,935 in 1937) is Greek. Most of the men are sailors and traders. Many emigrated to Egypt when the Suez Canal was built, and settled in the Canal Zone. About 5,000 now live abroad, in Constantinople, Greece, South Africa, and America; and some return to summer quarters, as formerly in Léros (p. 116); but of 2,300 houses only 400 are permanently inhabited. The business settlement and residence of the governor are at Ophrýs (Ofrí (1927): pop. 570) above the port: in the lowland are four other villages, Emporió (*Panagía*: pop. 140), Póli (pop. 120) around the ancient citadel, S. Marina (pop. 700), which is pastoral, and Arvanítokhóri (pop. 200), evidently once an Albanian settlement.

Products

Exports are figs, almonds, oil and wine, honey, butter, and wool.

Communications

There are mule-tracks between the villages. Steamers call occasionally from Rhodes, and sailing-vessels ply to and from Rhodes City and C. Kopriá. There is heliograph at C. Aktís: radio stations at Ophrýs and at the observation-posts at C. Aktís, C. Trussália, and Khardies: telephone to Pegádia in Cárpathos.

Water-supply

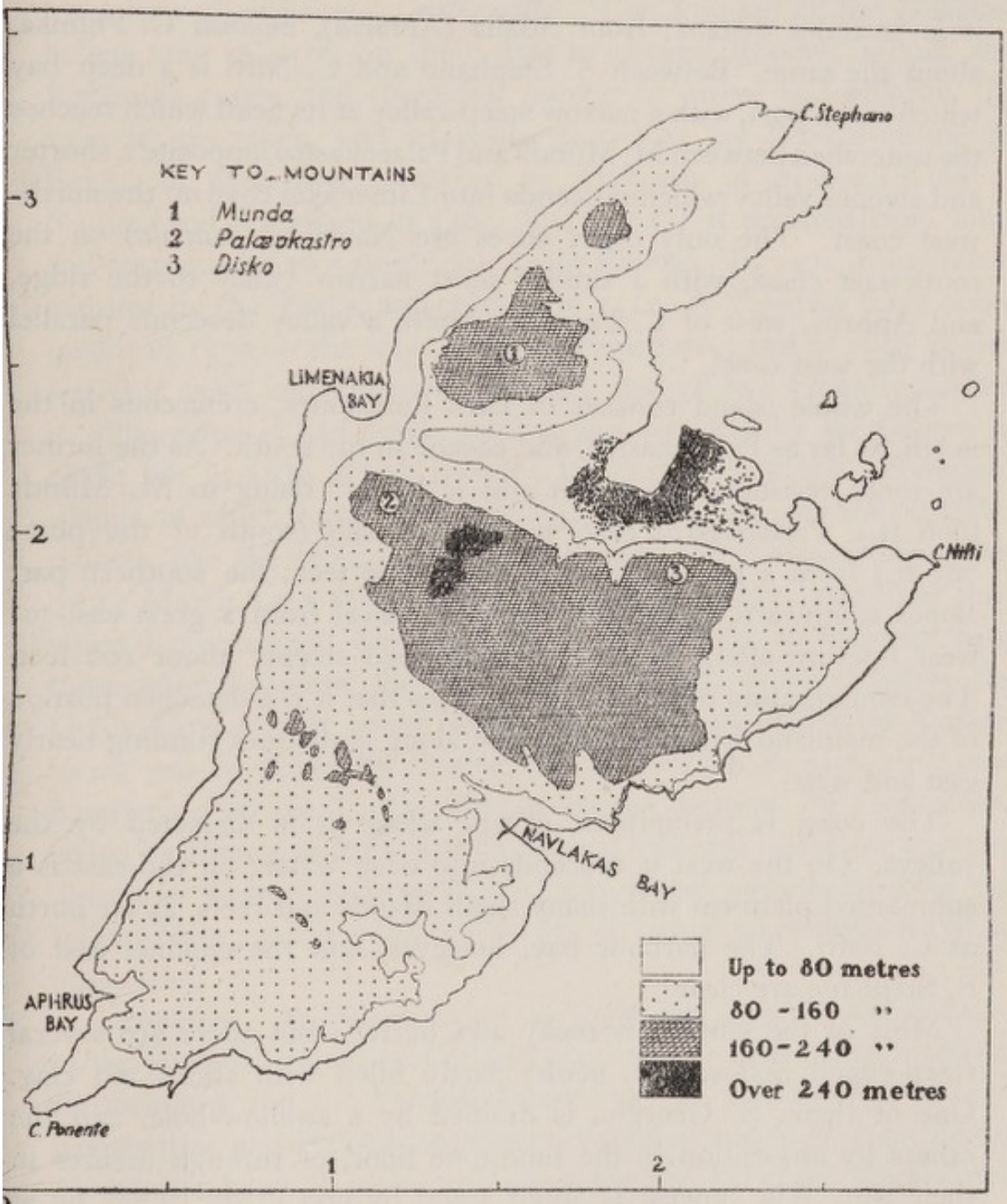
There are no streams or springs, but sufficient wells in the softer rock, and the houses have rain-cisterns.

Castellorizo

CASTELLÓRIZO

(Anc. *Megiste*; Med. *Castello-Ruggio*; Turk. *Meïs*; It. *Castelrosso*; Fr. *Château-Rouge*)

Lat. 36° 10′ N., *long.* 28° 38′ E.; *length*, NE.–SW., 3½ miles; *breadth*, 1¾ miles; *area*, 4 square miles.



Castellórizo

Description

The island lies south of Antíphelo (*Turk.* Andifli) bay on the south coast of Asia Minor, and its northern and eastern promontories are about 1½ miles from the Paindir promontory of the mainland. It is roughly triangular, with its longer sides facing west-north-west and south-east, from C. Ponente in the south to S. Stephano in the north, and from C. Ponente to C. Nífti, the most easterly point. From Rhodes it is 70 miles distant; from Adalia (Antalya), beyond C. Phínika, about the same. Between S. Stephano and C. Nífti is a deep bay which is the port, with a narrow steep valley at its head which reaches the watershed between M. Múnda and Palaeókastro, opposite a shorter and steeper valley which descends into Limenákia cove on the north-west coast. The only other coves are Návlakas (*Navala*) on the south-east coast, with a similar short narrow valley to the ridge, and Aphrús, west of C. Ponente, where a valley descends parallel with the west coast.

The whole island consists of hard limestones, cretaceous in the north, as far as Palaeókastro, and eocene in the south. As the former are more resistant, the north end is loftier, rising to M. Múnda (666 ft.), Palaeókastro (880 ft.), and Dísko (south of the port: 705 ft.) from a general level of about 600 feet; the southern part slopes southward to 200 feet above sea-level from a great east-to-west fracture along which it has dropped steeply about 100 feet. The configuration of the island indicates that it is a detached portion of the mainland which has subsided along fault-lines running nearly east and west.

The coast is precipitous, except where it is dissected by the valleys. On the west it descends into deep water; on the east is a submerged platform with many small islands and reefs, as far north as C. Nífti. The harbour bay, however, and the channel east of S. Stephano are clear.

Most of the surface is rocky and barren; but there are several steep-edged hollows (It. *uvale*) partly filled with sticky red clay. One of them, S. Georgio, is drained by a swallow-hole, and the others by absorption in the limestone floor, or through fissures in their rim. The longest is about 1,200 by 900 yards. They lie at various heights from 300 to 150 feet, and are fertile. On the south

side of the port a bed of limestone debris has determined the site of the town, which rises from the quay in abrupt terraces connected by steps between the houses.

History

The ancient name was Kisthene, but it was commonly called Megíste (the 'largest' island of the group); its medieval name comes from its red rocks and castle-walls. The Knights of the Hospital halted here in 1306 on their way to occupy Rhodes, rebuilt the Byzantine castle, and thereafter used it to intern bad knights. In 1440 it was taken, and its castle destroyed, by Djemal-ed-din of Egypt; in 1450 it was retaken by Alphonso of Aragon, King of Naples, and refortified in 1461: but in 1471 it revolted from him, and surrendered to a single ship from Rhodes. In 1471 it was taken and lost by the Turks, and retaken in 1512. A Venetian force occupied it in 1570 on the way to relieve Famagusta; and in 1659 Venice seized it again and destroyed the fort, though the Turks recovered it. Thereafter it had peace, until it was occupied by the Greeks in 1828; but in 1832 it was restored to Turkey with the 'privileged' islands, of which, however, it is not strictly one. In 1912 the Castellorizotes, like the other islanders, welcomed the Italians at first, but on 14 March 1913 they joined the Greek Kingdom, and their provisional government was annexed to Samos. On 20 October 1915 there were disorders, the Greek governor was expelled before the Greek Government could intervene, and on 28 December Castellórizo was occupied by France. In the winter of 1916–17 it was bombarded by the Turks, without serious damage. In 1920 it was ceded by France to Italy, and so became included under the abortive Treaty of Sèvres; from 1 March 1921 it was administered by the Italian Navy; and in 1924 the Treaty of Lausanne confirmed Italian possession.

Antiquities. At Palaeókastro on Vígla hill (880 ft.) are remains of the Hellenic citadel (3rd to 2nd cent. B.C.) overlaid with medieval fortifications and the Panagia monastery. In the cathedral of SS. Constantine and Helena are classical columns said to be from Pátara on the mainland. A rock-tomb above the town is of the Lycian type common at Antíphelo.

Ports and landing-places

The port, Mandráki, is in the deep bay which opens eastward between C. Stephano and C. Nífti; it is narrow with steep rocky sides, but there is a patch of shingle where a valley torrent enters its inner end. The town is on the south side, terraced from water's edge to the medieval castle on the ridge. There is a narrow stone quay, and small vessels can go alongside. Beyond C. Nífti southward there is anchorage for larger vessels. (For other coves see p. 98.) The rest of the coast is precipitous or steep-to.

The population

The people are Greek; formerly very numerous, but reduced to 2,218 in 1937, with some 8,000 colonists in Egypt, South Africa, Australia, and America, as well as Greece. Many of them are sailors, but they form compact settlements, from which they return (when that is permitted) to spend the summer at home or on retirement. Others are engaged in coastal trade and in furnishing supplies to vessels touching at Castellórizo, which is the only safe port between Beirut and Makry opposite Rhodes. Of the houses in the town in 1927, 730 were occupied and 675 were unfinished, unoccupied, or ruinous.

Products

There is a brisk interchange of produce from Antíphelo—wood, charcoal, vallonia, pine-bark—for rice, sugar, coffee, and textiles mainly from Egypt, and for corn from other mainland ports. Charcoal-burners from the island work on the mainland and are skilled in producing the fine quality used by *narghile*-smokers. Sponge-fishing, formerly extensive, has almost ceased; there were only two boats left in 1929.

Communications

There are no roads; only rough mule-tracks to outlying patches of cultivation. Steamers from Rhodes call occasionally, and there is traffic with the mainland in small sailing-vessels. There is a telegraph cable to the mainland, and a radio station north of the port.

Water-supply

There are no streams or springs, and few wells; in dry seasons the house-cisterns are supplemented by water-boats from springs at Antíphelo, and there are reported to be large reservoirs west of the town.

Islands adjacent to Castellórizo

The Italians claim all inshore islands from Volo, off the Turkish port of Kalamáki, to Karavola off Kékova. They are small, rocky, barren, and without permanent inhabitants.

COS

(It. *Coo*; Turk. *Istanköy*, formerly *Neranzia*: 'orange island')

Lat. 36° 40′ to 36° 55′ N., *long.* 26° 55′ to 27° 21½′ E.; *length*, E.–W., 26 miles; *breadth*, N.–S., 6 miles (between C. Andemaki and Mastikari); *area*, 111 square miles.

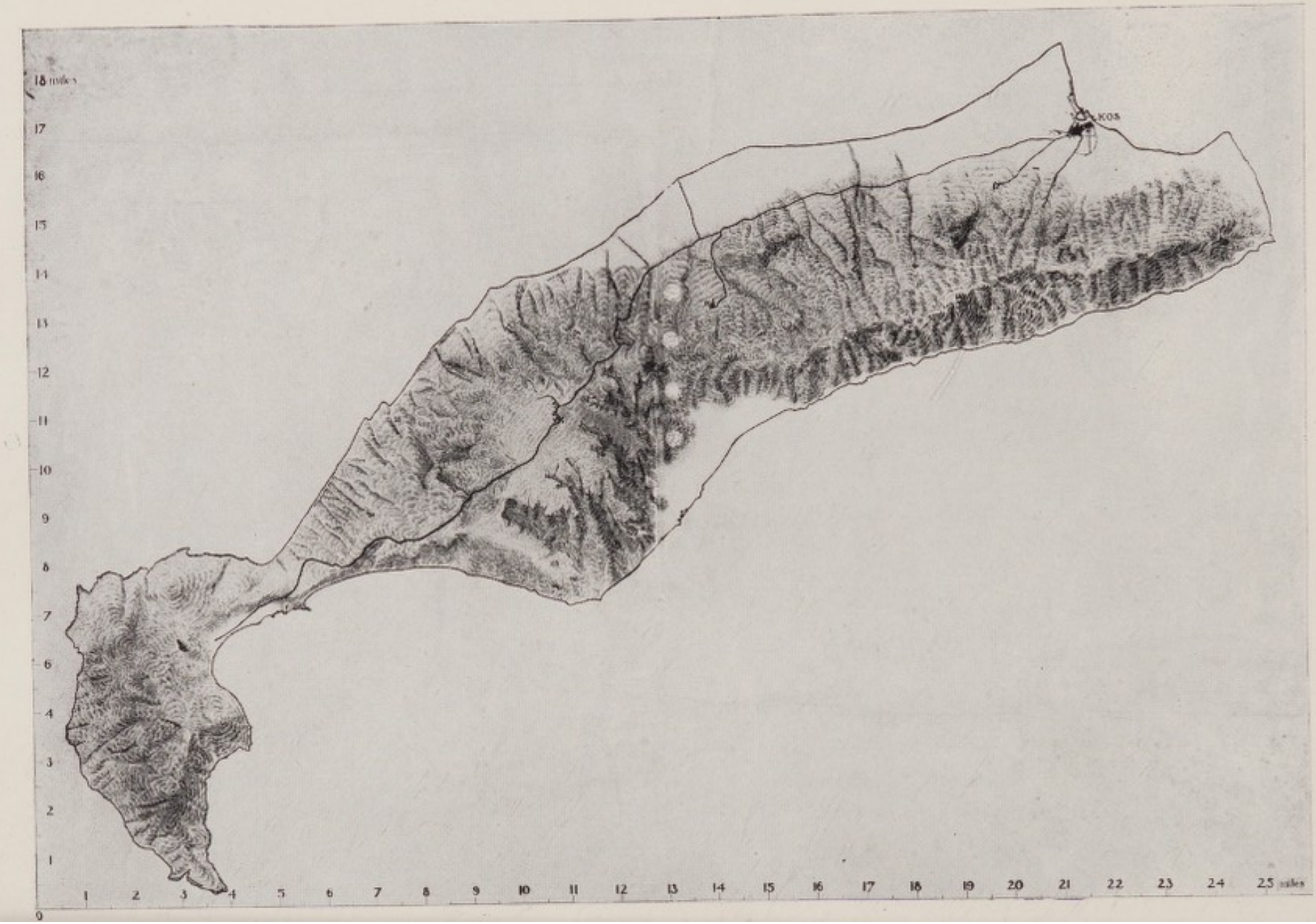
Description

The island lies opposite the gulf of Ceramus (Giova). Its eastern end, C. Phóca (It. *Foca*), is 10 miles north of Cavo Crio, and its northern promontory, Kumburnu ('sand point'), is 3½ miles south of Kephalukha (Hussein point) on the Myndus or Budrum peninsula.

Its structure is simple and threefold: (1) An abrupt ridge of hard limestone (overlying schists and marble) extends from C. Phóca ('seal-point') at the eastern end nearly to Antimáchia (*Andemakia*) village. Its highest points are M. Díkeo (2,870 ft.) and M. Elía (2,760 ft.) in the centre; M. Pipéria (1,530 ft.) and Eremíti (1,400 ft.) near the east end, and the peak above Pýlli village (1,300 ft.). It is very steep and rugged on its south face, except the deep sheltered valleys which converge on the landing-place at Kardámena. Northward the steep crest is soon covered by soft marls and sandstones, which slope more and more gently into an alluvial coast-plain intersected by torrent-beds. At the base of the limestone ridge are numerous deep-seated springs. The classical well-house at Borína supplies the aqueduct of Cos town; others determine the principal village-sites, Asfendiú, Kargióti, and Pýlli. The limestone ridge and the south side have pasture; the upper slopes of the soft rocks are terraced for olives and vines, and are fertile because watered. The rolling country below is cornland and vineyard. Its coast has open beaches, patches of fen, and a salt lagoon at Alikí ('salt-pan').

(2) Before reaching Antimáchia the limestone ridge disappears, and the soft marls form continuous rolling upland from sea to sea, with steeper slopes southward, and a small cove east of C. Tigáni (Adm. *Polema point*). Northward the gentler slope is intersected by deep torrent-beds. Most of this district is under corn and vines.

(3) West of these lowlands, beyond an isthmus one mile wide, the rugged Képhalo 'headland' consists of a north–south ridge of


18 miles
17
16
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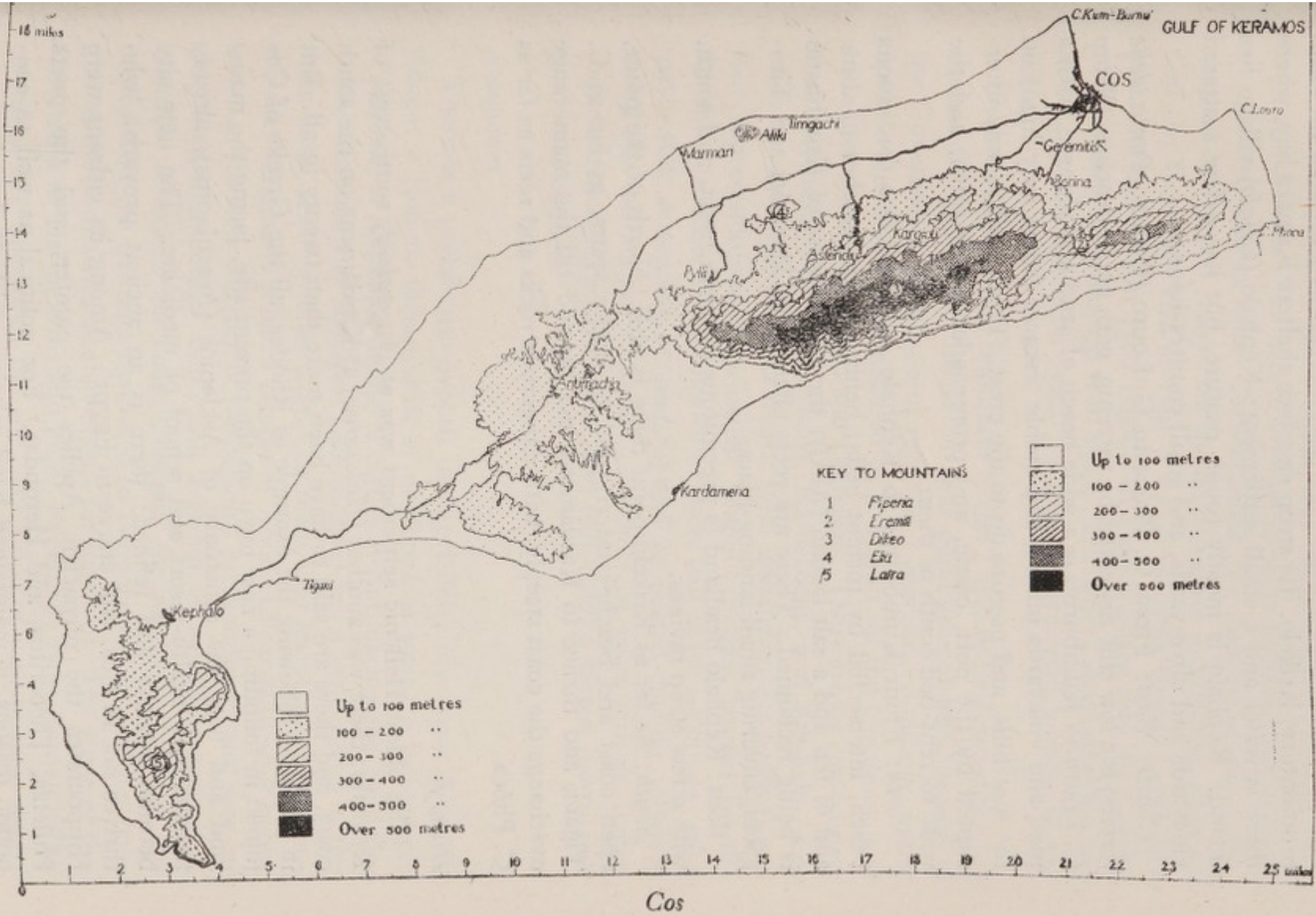
KOS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 miles


GULF OF KERAMOS
C.Kum-Burnu
COS
C.Loyro
Timgachi
Alliki
Mukman
Ceramitó
Marina
Asfendiu
Kargudi
Pyli
Limnaria
Kardamena
Tigaki
Kephalo
KEY TO MOUNTAINS
1 Pipenia
2 Eremi
3 Dikeo
4 Ely
5 Latra
Up to 100 metres
100 – 200 ..
200 – 300 ..
300 – 400 ..
400 – 500 ..
Over 500 metres
Up to 100 metres
100 – 200 ..
200 – 300 ..
300 – 400 ..
400 – 500 ..
Over 500 metres
18 miles
25 miles

Cos

various hard rocks, rising to M. Látra (1,300 ft.) towards its south promontory, Kríkelo. Its steep east face shelters Kamára bay, where there is water and a small settlement: Képhalo (*Cefalo*) village lies inland. Képhalo is mostly rough pasture, but has a few scattered vineyards and olive-yards, and small country-houses.

Coasts. *East*: From C. Phóca to C. Louro (Psalídi, *Punta delle forbici*) is a low cliff dissected by torrents, with small beaches. From C. Louro to Kumburnu is a wide beach of sand and shingle, with a road and vineyards inland, and arable terraces (some very high) on the foot-hills, and pasture up to the crest. This beach is only interrupted by the port, castle, and promenade of Cos town, and the wide torrent-bed south of them.

North: From Kumburnu to Képhalo headland is a continuous beach, intersected by torrent-beds; behind it are patches of dune and of fen and a salt lagoon (Alikí): the marsh west of Kumburnu is being reclaimed. There are reefs offshore at Marmári and Timgáchi, covering small landing-places.

West: Képhalo headland is precipitous to north, west, and south, with a few steep ravines.

South: As far as Kríkelo point there is cliff. North of the point, open coast and beaches interrupted by rocky spurs, as far as C. Tigáni, and thence to Kardámena and beyond till the main range overhangs the coast steeply, with dangerous rocks and reefs as far as C. Phóca.

History

The oldest Hellenic settlement was at *Astypalaeá*, south-west of Képhalo; there was another (*Halasarna*) at Kardámena on the south coast, and there are said to have been more than twenty in all. But in 367 B.C., following the example of Rhodes, all the Greeks of Cos joined in founding a new town on the present site, facing the mainland and near the sanctuary of Asklepios (Aesculapius), already famous as a health-resort and school of medicine. The new city became wealthy and refined: there is an ancient proverb: 'who thrives not in Cos, will starve in Egypt'. Among its citizens were Hippocrates the physician, Apelles the painter, and the poets Philetas, Theocritus, and Herondas. For political as well as economic reasons, it maintained good relations with Ptolemaic Egypt

but frequent rivalry with Rhodes, and became one of Rome's 'free and allied cities'. It had a Byzantine metropolitan, and a noted monastery, whence came Christodoulos, the founder of the monastery of Patmos (p. 126). Its wealth attracted in turn the Saracens and the Genoese: and in 1307 it was granted by Genoa to the Zaccaria family. But in 1306 Vignola di Vignoli ceded it to the Knights of Rhodes, who occupied it in 1315. The Turks attacked it in 1457 and 1477 and took it in 1522. In 1648 Venice tried to seize it, but failed.

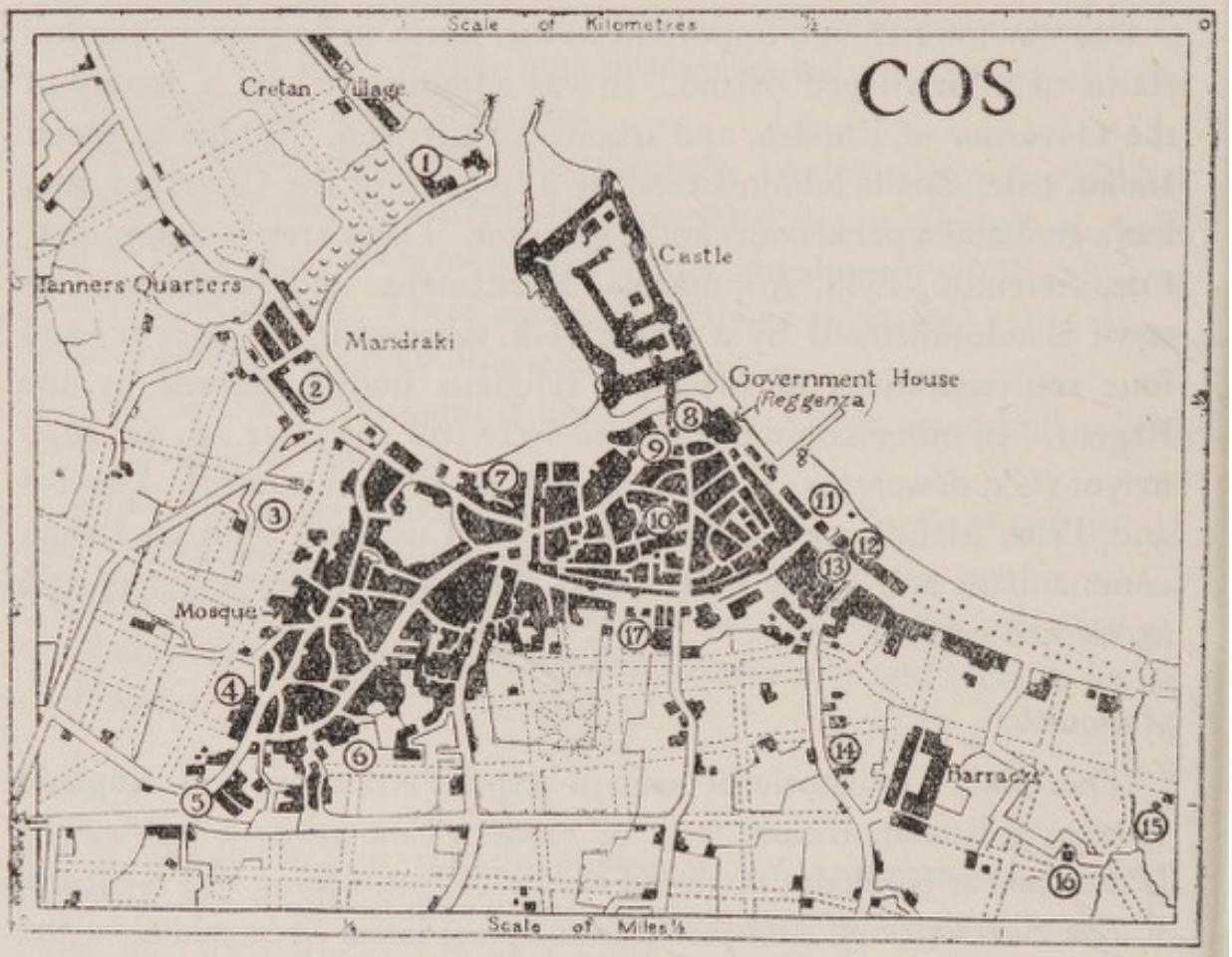
Cos was too rich and important to the Turks to be granted the full status of a 'privileged' island. It was administered by a deputy of the Governor of Rhodes, and received a garrison. Similarly, under Italian rule, Cos is administered by a 'regent' of the Governor, and has a civil and a penal court and a garrison. There are six communes: Cos, Asfendiú, Pýlli, Antimáchia, Kardámena, and Képhalo. Cos town is administered by a mayor (Gk. *démarchos*, It. *podestá*) and four representatives of principal religious bodies, named by the Regent. In other communes there were (till 1937; *see* pp. 24, 40) a mayor (Gk. *démarchos*, It. *sindaco*) and an elected council. Nísyros and Télos islands are administered from Cos, each with an Italian commandant and police officer, and (till 1937) a Greek mayor and an elected council.

Antiquities

There is a prehistoric deposit in Aspri Pétra cave, near Képhalo village; a Roman theatre west of modern Cos town; a hill-temple (*Palatiani*) at Képhalo; medieval castles at Antimáchia and Képhalo.

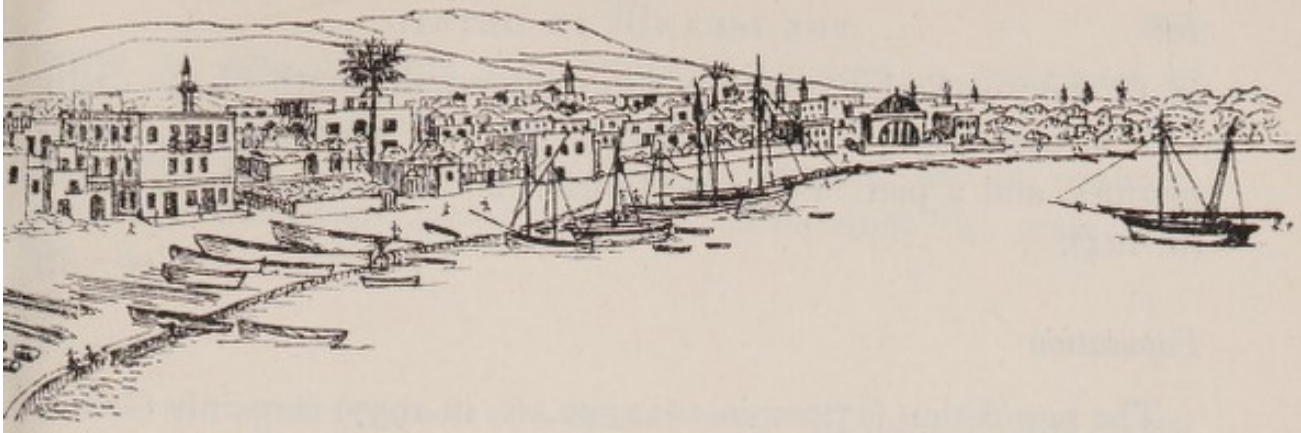
The Sanctuary of Asklepios (*Aesculapius*) lies a little inland of the main road, about 3 miles from Cos town, and about 300 feet above the sea. Originally it had a temple of Apollo Cyparissius, but about 400 B.C. the new worship of Aesculapius predominated, and side by side with 'miraculous' cures and a group of medicinal springs a scientific school of medicine emerged, the methods of which are recorded in the writings attributed to Hippocrates. Like other holy places, the shrine was also an *asylum* for fugitives. The scene of the fifth *Mime* of Herondas is laid here. Eventually large Roman baths extended and disfigured the site. By A.D. 554 earthquakes, flood, and invasion had devastated the sanctuary, and the Knights quarried

here for their castle. It was rediscovered by a local antiquary, G. E. Zaraftis, and excavated by R. Herzog of Vienna in 1902: the Italian mission has cleared the Roman baths. On a gentle slope facing north are three terraces, connected by broad central steps. On the uppermost terrace, which is rock-cut, stood the temple; on the second, several smaller temples and chapels; round the lowest, a colonnade on three sides, backed by offices on either side of the entrance, with shops and the Roman baths to the north.



Plan of Cos Town, Castle, and Port

1. Electrical Station.
2. Ali Fountain.
3. S. Anna Church.
4. S. Pantaleon Church.
5. New Gate (*Porta nuova*).
6. Old Mosque.
7. Municipal Office (*Podesteria*).
8. Ancient Plane-tree.
9. Mosque Hassan Haji-Pasha.
10. Medieval Town.
11. Hotel.
12. Italian Club: the open promenade is the *Foro Italico*.
13. Agnus Dei Church (R.C.).
14. S. Antonio Church.
15. S. Nicola Church.
16. S. Marina Church.
17. Greek High-school (*Ginnasio ortodosso*).



COS. Harbour from the Castle, looking S.W. towards M. Díkeo.

The Castle of the Knights, overlooking the harbour of Cos town, occupies the north end of the Hellenic citadel, and many ancient blocks, columns, and tombstones are built into its walls. The oblong inner circuit was built first, between A.D. 1450 and 1478, and bears the arms of Fantino Querini (preceptor of the family which long held Astypalaeá (p. 78)), the Grand Masters de Lastic, Milly, Carmadino, d'Aubusson, and other knights, Orsini, Elltru, d'Avanti, Dupuy. This fort withstood the Turkish attack in A.D. 1480. The outer walls, enclosing a broader rectangle, with prominent corner-towers, are the work of d'Aubusson (1495), d'Amboise (1510), and del Carretto (1514). The Knights' Castle of S. Peter the Liberator (Petronianum) at Budrum on the mainland opposite Cos was built with that of Cos after 1450, and served as asylum for Christian fugitives from Anatolia. It was wrecked by the Turks, further damaged by gun-fire in 1915, and repaired by the Italians in 1919–20. Into it are built many fragments of the famous Mausoleum, built about 350 B.C. by Artemisia of Halicarnassus in memory of her husband. The principal relics are in the British Museum.

Ports and landing-places

The only port is the medieval harbour of Cos town, a small four-sided basin, opening north-east along a sandy beach, and protected seawards by the Castle of the Knights and a platform of masonry at its north end. This basin has a stone quay-wall, to which small craft can make fast, but not go alongside: it is much silted, and about 10–12 feet deep in the middle and entrance. East of the town and castle is open anchorage with shingle beach, as far

as C. Louro (Psalídi), with a short quay-wall south of the castle and a stone jetty. At C. Louro there is anchorage for submarines, and a pier. For other beaches and coves see *Coasts* above (p. 104).

Population

The population (17,000 in 1912; 20,169 in 1937) is mainly Greek, but there are 4,000 Moslems in Cos town and its suburb Geremítis (It., Turk. *Gherme*); 1,000 Spanish Jews and Italian Catholics, also in the town, and a small suburb of Cretan Moslems.

Cos town

Cos town, the capital (lat. 36° 53′ N.; long. 27° 20′ E.: pop. 9,852 in 1936, about half Greek, half Turk, with Jews, Catholics, and Cretan Moslems), is on the north-east coast in an open roadstead, with good anchorage between C. Louro and Kumburnu. Here a low bluff of soft rock interrupts the long beach and screens the small land-locked port (v. above), opening to north-east. On the north end of this bluff is the Knights' Castle (A.D. 1450–78; v. above), commanding the entrance to the port. South of the rock-cut moat, which was designed to admit the sea, lies the public square, with the government offices, principal mosque (Hassan Haji-Pasha), a fountain, and the great plane-tree traditionally associated with Hippocrates (4th cent. B.C.). But planes rarely live 500 years, and this tree stands on the Knights' counterscarp. From the square there is access southwards to the promenade (*foro italico*) with stone jetty, Catholic church, Italian club, and hotel. Farther south, and a little inland, are the barracks. A passage westward, under the mosque, leads to the medieval town, till recently the Greek quarter, but entirely excavated as far as its walls after the earthquake of 1933, to expose the Roman (but not the Hellenic) stratum of ancient Cos. The Knights' Church stood within this medieval town. Beyond the west gate are the bazaar, modern market, and business-quarter, with the municipal buildings (Gk. *demarcheíon*; It. *podesteria*) facing the port on the north. The power-stations are (*a*) in the centre of the town, (*b*) west of the harbour entrance. On the sand-spit

north of the port are the medieval cemetery, a settlement of Cretan Moslems (since 1900), and a row of windmills. Southward the whole site is bounded by a wide torrent-bed, dry in summer. Modern suburbs are growing up westwards along the main road (p. 109).

Products

The principal products are grain, wine, oil, tobacco, and much fresh fruit and garden produce—especially 'Cos' lettuces and radishes—which go to Egypt at all seasons in special sailing-vessels, owned in Cos. There is still some silk—an industry of long standing—for domestic use. Oxen and sheep, asses and mules, pigs, turkeys, and poultry are bred, and there is much honey.

Communications

A motor-road, now (1943) fully furnished with bridges, traverses the island from Cos town, skirting the foot-hills about a mile from the north coast, and then rising, beyond the detached hill S. Elía (680 ft.), towards Antimáchia village (pop. 1,836) on the watershed. Steep by-roads serve the hill-villages Asfendiú (1½ miles) and Pýlli (2 miles), and a poor landing-place Marmári (Adm. 'reefs', 1 mile west of Alikí lagoon). From Antimáchia the main road follows the watershed, descends to Tigáni cove on the south coast, and so reaches Képhalo village (pop. 1,412). A side-track descends from Antimáchia to Kardámena landing-place (pop. 1,103) on the south coast.

There is local steamer-service as far as Leros and Rhodes, and cargo-vessels call for island produce; but much of the fruit and vegetables is sent to Egypt in local sailing-vessels.

The aerodrome is 2,000 yds. south-west of Antimáchia, and there is a landing-ground north of Cos town.

The radio stations are south and west of the town, and there is heliograph from Képhalo to the lighthouse on Kandeliusa island.

Water-supplies

High on the north face of the Díkeo range are copious springs, which supply the villages and plantations of Pýlli and Asfendiú: another farther east, which keeps its ancient name Borína, supplies Cos town by aqueduct. Antimáchia is supplied by wells. There is

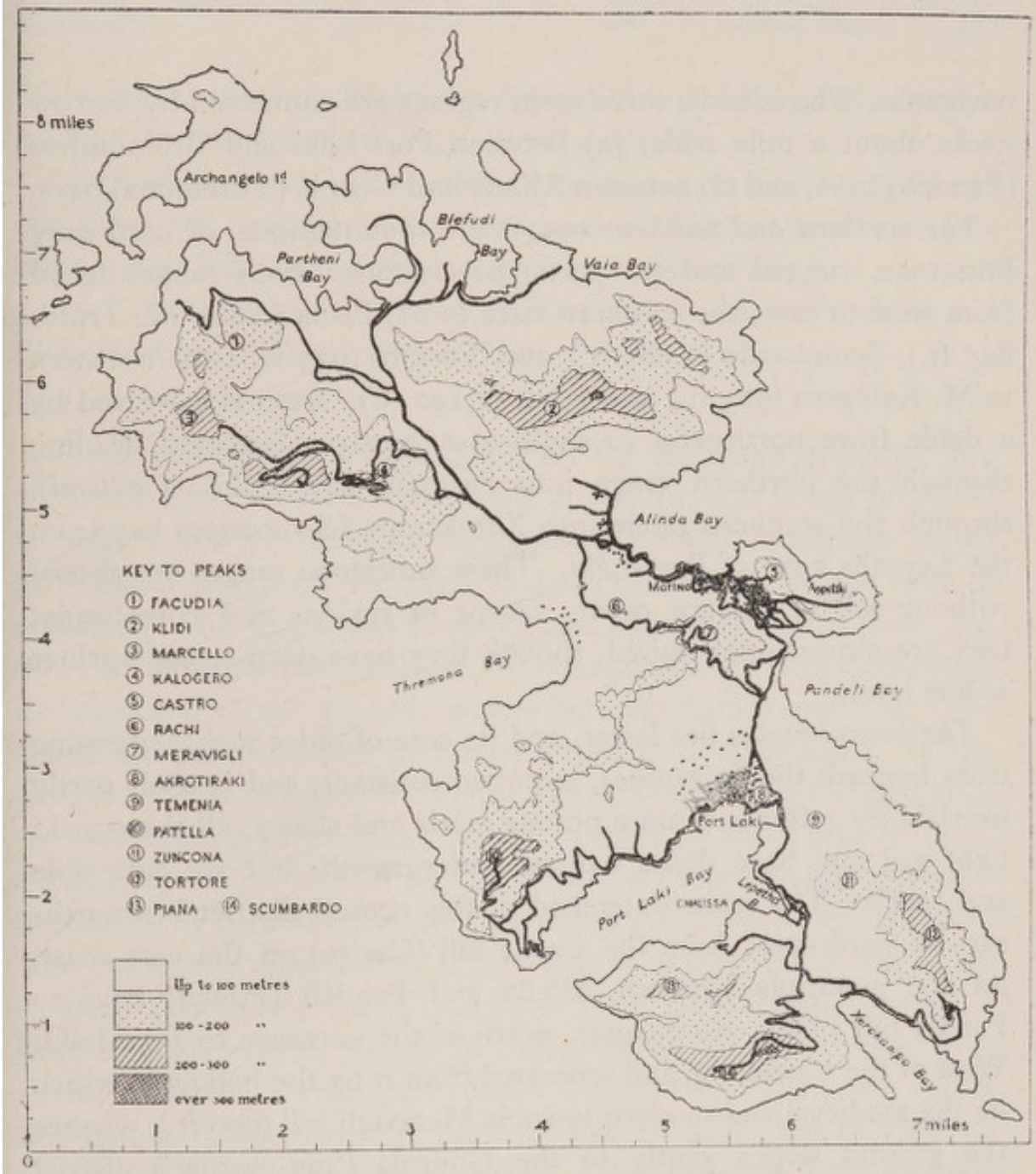
water at small depths under the alluvial northern plain; it is raised by water-wheels worked by animals, and by windmill-pumps. The reputed medicinal springs at the Asclepieum, of small flow, are not now in use; but there are warm baths at C. Phóca and Kardámena.

Leros

LEROS

(It. *Lero*; Turk. *Leros*)

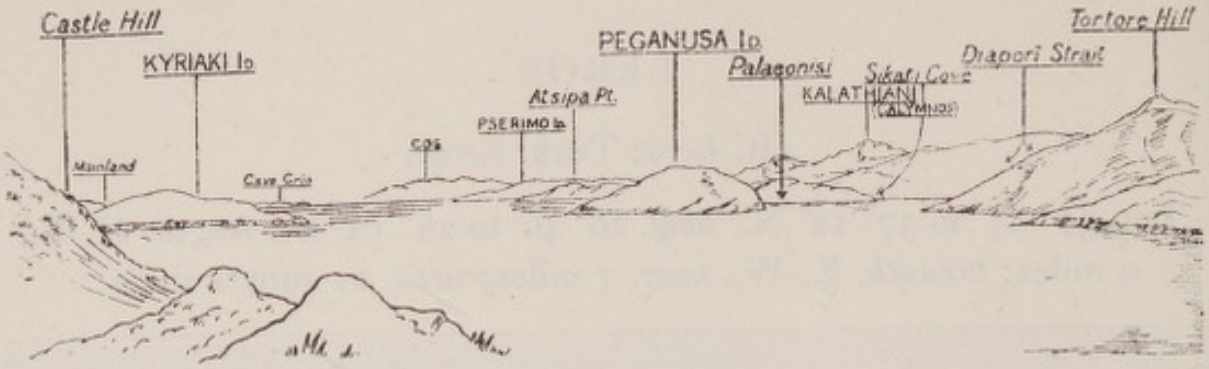
Lat. 37° 5½′ to 37° 12′ N., *long.* 26° 46′ to 26° 54′ E.; *length*, N.–S., 9 miles; *breadth*, E.–W., *max.* 5 miles; *area*, 21 square miles.



Leros

Description

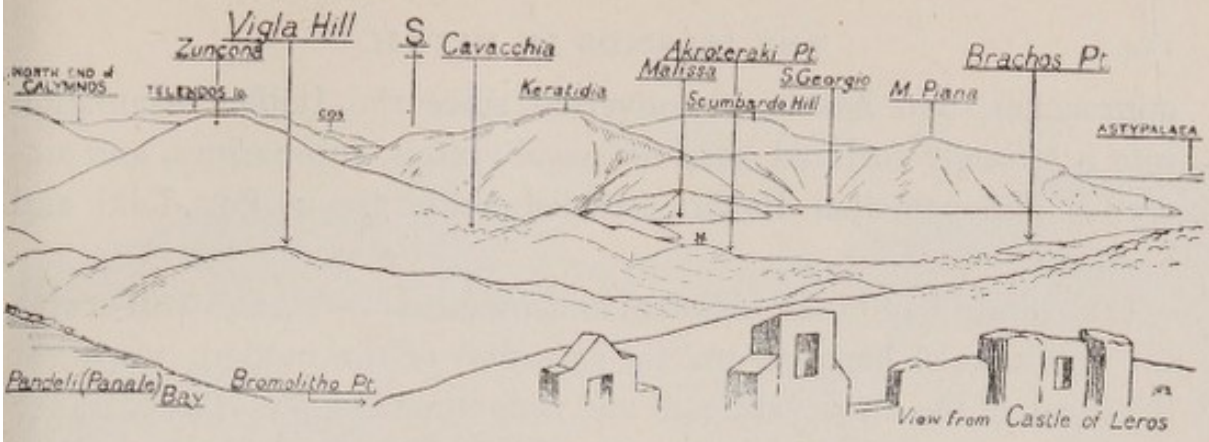
The island lies north of Calymnos, from which it is separated by a narrow strait closed by three islets; only the two northern channels are



navigable. The island's three main regions are connected by narrow necks about a mile wide, (*a*) between Port-Láki and Bromólithos (Pandéli) bays, and (*b*) between Alínda and Gurniá (Thremóna) bays.

The northern and southern regions are mountainous, of hard grey limestone, rugged and (in parts) precipitous. Both ranges trend from west to east; the southern rises to M. Piána (Adm. *M. Triad*: 845 ft.), Scumbardo (1,085 ft.), and Tortóre (935 ft.); the northern to M. Kalógero (923 ft.) and Klidí (1,140 ft.). Each is traversed by a defile from north-west to south-east, partly submerged, leading through the northern range into Parthéni bay (Adm. *Parthani*), through the southern range into Xerókampo (*Serocampo*) bay from the Lépetha cove of Port-Láki. These limestone ranges are almost without soil or surface cover, except in ravines and cove-heads; they are almost uninhabited, though they have deep-seated springs at low levels.

The central region lies lower, and its core of older rocks, emerging from beneath the limestones, is not so resistant, and is itself partly overlaid by softer and more porous marls and shales; all these yield light soil and have dense natural undergrowth, but are cultivable and fertile. The main watershed of this central district lies north-east to south-west from the Castle hill (Castro) on the east coast, on the peninsula between Alínda and Pandéli (*Panali*) bays to Patella hill (Adm. *Konísmata*), north of the entrance to Port-Láki. West of the Castle hill, and separated from it by the hollow in which lie the medieval and modern town, is Meravígli hill (600 ft.), whence the ground slopes gently to the Gourniá ('pig-pasture') district round Thremóna bay, and to the Teménia lowland at the head of Port-Láki: these districts are marshy in winter. This central region has many small homesteads and walled fields and orchards. Between Alínda and Thremóna bays the Rakhí ridge falls away rapidly from



Meravígli; the low neck between Pandéli bay and Port-Láki is commanded by the detached Vígla ('look-out') hill.

Much of the coast, even in the central region, is low cliff or rocky; but there are beaches in the bay-heads of Alínda, Pandéli, Xerócampo, and Thremóna; the last is full of reefs. There is also soft ground north-east of the head of Port-Láki, and in Parthéni and Blefúdi bays, which are land-locked.

History

Leros was colonized by Miletus on the mainland opposite, and when the latter revolted from Persia in 500–494 B.C. it was proposed to make Leros an oversea refuge and naval base. Otherwise it had little fame, except for its quails and honey, and its people were ill regarded. The Castle has Hellenic and Byzantine foundations, but only became important to Venice, to Genoa, and to the Knights through its command of the in-shore waters between Samos and Cos. The Castle was reconstructed by Fantino Querini of Astypalaeá. It was assigned to the Knights of Rhodes in A.D. 1310, and refortified after the loss of Smyrna in 1412. It was attacked by the Turks in 1457, 1460, 1501, and 1505; on the last occasion Paolo Simeoni deceived the enemy by parading women in the cloak and badge of the Knights. The castle was enlarged by d'Amboise in 1509–11, but was taken by the Turks on the fall of Rhodes in 1522. There was, however, a brief reoccupation by Venice in 1648, during the last struggle over Crete. In 1916–18 Port-Láki became a British naval outpost. When the Italian occupation was confirmed in 1923 it became first an air-port, then a fortified naval station. On 3 February 1926 Admiral de Pinedo ended here his flight from Australia.

Ports and landing facilities

Leros is provided, by its natural features, with unusual variety of

approaches, and has been converted since the Italian occupation into a strongly fortified base for naval vessels, submarines, and aircraft. The principal Italian establishments are at Port-Láki and Parthéni.

(1) Alínda bay is the classical and medieval port, and still serves the commercial harbour-quarter (*Marina*) of the modern town. It lies north of the medieval Castle and is dominated by it. The entrance opens eastward, and is steep-to on both hands. Within, the bay widens, with a nearly circular sandy beach (about 700 yds.), and the road from Marina to Parthéni follows the beach for about 400 yards and then turns inland. Most of the foreshore is filled with detached houses and walled gardens. On the north shore, a few feet above sea-level, is the copious Nerómylo spring, which drives a corn-mill. The landing-place at Marina, on the south shore, is sheltered from the east by the steep Castle hill; there is a stone quay, basin for small boats, and custom-house; the old roughly paved street for pack-animals mounts directly to the Plátanos square, but there is a modern motor-road farther south on the slope of Meravígli hill, clear of the older settlements, and this is continuous to Port-Láki.

(2) Pandéli bay, south of the town, lies deep between the southern Appetíki spur of the Castle hill and the Bromólithos spur of Meravígli. It is steep-to, except a shingle beach at the head of the bay, with steep tracks to the Plátanos square and the road to Port-Láki, which lies high on the west slope. It is only used as shelter for small craft. South of this cove is a shingle beach of about 800 yards, with alluvial ground for about 500 yards inland, between spurs of Meravígli and Vígla.

(3) Xerókampo bay (*Serocampo*) opens south-east into the strait between Leros and Calymnos, and communicates with Lépetha cove of Port-Láki over a low pass (60 ft.) traversed by a motor-road. Both sides of this bay are steep-to and commanded by M. Scumbárdo and M. Tortóre. At the head of the bay is a sandy beach of about 300 yards.

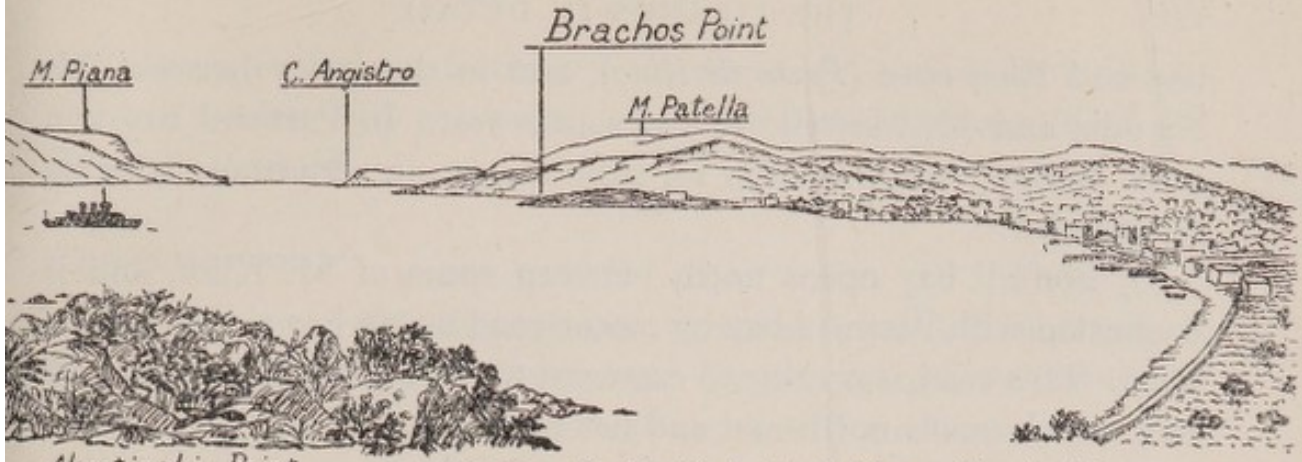
(4) Port-Láki (*Porto Lago*) opens to west-south-west between the high southern mass of M. Piána and the lower central district which rises south-westward to M. Patella (Adm. *Konísmata*). The bay is 4,000 yards from south-west to north-east, by about 1,500 yards

Leros: Castle, S. Marina Port, and Meravigli Hill, looking south over Alinda Bay

Leros: Alinda Bay and S. Marina Port, looking north-west from the Castle

Leros: Partheni Bay, looking west

Leros: Gournai Bay, looking north-east



LEROS. Port Laki looking W. from Akrotiraki

wide, except at the entrance, which is only 450 yards wide; from Lépetha cove to Bráchos point the width is 1,700 yards. The south side from Angistro point to Málissa point is precipitous or rugged; round Lépetha cove and on the north shore from Cazzúni point to Bráchos point the slopes are gentler, but steep-to, with few patches of beach in the coves; but east of Bráchos point there is alluvial ground and sandy beach as far as Akrotiráki point (*Crotiraccio*) and again south of the latter towards the foot of M. Zuncóna. The distance from the head of the bay to the east coast is only 1,500 yards, rising to about 150 feet near the latter. The anchorage is off Lépetha cove. The principal Italian establishments are (*a*) the head-quarters on the level ground at Goniá cove between Bráchos point and Akrotiráki, with quay, jetties, and motor-road to the town, Alínda bay, and Parthéni (5 below); (*b*) the hydroplane base at Lépetha and Málissa point; and (*c*) the submarine station and naval base at San Georgio, with T-shaped mole and large cranes. There are power stations (*d*) at Teménia, and (*e*) underground between Málissa point and San Georgio. The watering quay (*f*) is at Akrotiráki, supplied from a pumping-station at Theológos in the low ground north of the head-quarters. All these establishments are carefully disguised with natural rocks and shrubs.

(5) Parthéni bay opens north-west into the channel between the north end of Leros and Archangelo island, which conceals and shelters the entrance. The entrance is about 800 yards wide; the sides are steep-to, but at the head of the bay there is level ground for 1,000 yards to the foot of the pass through the northern range, by which the motor-road reaches Alínda bay and the town. There are copious springs at Kalopigádi (*Buonafonte*) between the main

bay and Rína cove (*Porto di Rina*), and in the valley between M. Facúdia and M. Marcello to the south-west. In Parthéni bay is a naval station, with provision for submarines: an aerodrome is being constructed.

(6) Blefúdi bay opens north between spurs of M. Klidí, and is connected with Parthéni bay by motor-road over a low ridge to westward. This road is continued eastward to Vaiá (*Palma*) bay, a small cove which opens north-east and has no beach.

(7) Gourniá (*Gurna*) bay opens west and is separated from Alínda bay by about 1,500 yards of quite low ground, between the Rakhí spur of Meraviglí hill and the rolling moorland at the foot of the north range. There is marsh and silted beach to the foot of Rakhí, and sandy beach farther west as far as S. Isídoro islet. But Gourniá bay is obstructed by islets and reefs, and is also exposed to the south-westerly winds. Its other name, Thremóna, comes from the small spur and promontory at the base of S. Petro hill, on the south side.

Population

The population was formerly all Greek (8,000 in 1912, 7,607 in 1937), but there are now many Italians (pop. 13,657 in 1940) and the Greeks (4,500 in 1940) have been encouraged or compelled to leave their homes. Many of them (estimated at 1,000 in 1922) live abroad, especially in Egypt, as sailors or merchants, but retain their lands in Leros, and return for the summer to country houses.

The town (pop. 3,300 in 1922) has spread from the Plátano square on the saddle west of the Castle hill into the Marína harbour-quarter on Alínda bay, and southwards into Pandéli and Bromólithos bays, along the road to Port-Láki. There is no other village, but there are stores and offices at Port-Láki, and many country houses and cottages throughout the central region.

Cultivation is in small freeholds divided by rubble walls into fields and terraces. Much waste land, reserved for afforestation, has become densely overgrown and full of the Lerian 'partridges' (*Meleagris*), which are tamed as house pets. There is little cornland, but many vineyards and plantations of olives, figs, carobs, and other fruit-trees; little is exported, however, as the normal summer demand is great, and recent consumption abnormal. Some tobacco is grown,

and cigarettes and confectionery are made. There are factories for aerated waters, and a brewery, for local consumption, all in the Teménia lowland.

Communications

Roads connect the town (1) with Parthéni bay and Blefúdi village, (2) with Port-Láki and Xerókampo bay, meeting a military road along the coast from Pandéli bay southward to Xerókampo bay; and a modern road, skirting the old town, connects the Láki road with the Marína quay. But the natives use mules and asses, on unpaved tracks, usually narrow and bounded by the stone walls of the fields and plantations. There is steamer service to Patmos and southward as far as Rhodes. There are telegraph cables (*a*) to Patmos, (*b*) by Xerókampo to Calymnos for Cos and Rhodes; radio stations at Port-Láki, S. Giovanni, M. Tortóre, and S. Nicola; heliograph, on high ground west of Parthéni, to Patmos, Calymnos, and Astypalaeá; telephone between the town and Port-Láki and all important defence-points.

Water-supply

In the high ground there are no perennial springs, only winter torrents. But lower down there are four copious springs: (1) at Nerómylo close to sea-level on the north shore of Alínda bay, from which water can be led by a hose direct into a small ship's hold; (2) at sea-level in the Lépetha cove in Port-Láki, similarly used; (3) beside the main road from the town to Port-Láki, on the east face of Meravígli hill; (4) on both sides of Parthéni, also near sea-level. There are many wells in the low ground, and most houses have cisterns for rain-water. Until recently, drinking-water for the garrison was brought from Cos; but water for Port-Láki is now pumped from Theológos to the water quay at Akroteráki and to the town.

Adjacent Islands dependent on Leros

Lipsos (It. *Lisso*): *lat.* 37° 16′ to 37° 20′ N., *long.* 26° 44′ to 26° 49′ E.; *length*, 5 miles; *breadth*, ¾ mile; *area*, 7 square miles.

Lipsos, lying between Leros and Patmos, consists of two irregular

ridges of limestone, overlying schists and rising to 886 feet, with patches of white marls, which are cultivable, and a village, with wells but no spring, in the deep and sheltered Socoro bay opening south-west and 100 feet deep. There is a small medieval castle. The people are Greeks; they are shepherds, farmers, and fishermen, with a considerable export of dried octopus; many live abroad and return occasionally.

ARKI (It. *Archi*): *lat.* 37° 21½′ to 37° 24½′ N., *long.* 26° 43′ to 26° 46′ E.; *length*, 3 miles; *breadth*, 1½ miles; *area*, *c.* 4 square miles.

Description. The island consists of two parts: (1) An irregular ridge, running from M. Asprokephalo (It. *Testa-bianca*, 340 ft.) at the north-west end to M. Vardia (It. *Guardia*, 340 ft.) in the south-east, of which a spur forms C. Lero. The highest point is M. Kálatho (It. *Calato*, 350 ft.), which forms a precipitous cape (It. *Calaraci*) on the west coast, with coves (Sikia to north-west and Kalamiki to south-east) which give shelter from north-east winds; and Sikia has access inland.

(2) Broken and half-submerged hill-country, to the south-west of the main ridge, is dissected by three deep inlets (It. *Augusta*, *Stretto*, *Glipapa*, probably Gk. *Glyphάda* 'cove'), and prolonged seaward into many islets to south-west and south-east. Of these Grilússa, the largest, and Maráti are inhabited; Grilússa has a deep inlet facing north-west. The village, S. Nicóla, lies on a north-west spur of M. Vardia. Most of the island is pasture, divided by rubble walls into grazing-grounds with sheepfolds (*mándres*).

Landing-places. There is a landing-place in Porto Augusta opening to south-west, and an open cove to north-east. Between Glyphάda (It. *Glipapa*) and Bambigia bays there is beach (200 yds.) opening to south-east, with cultivable land behind.

Communications. There are no roads or wheeled traffic. Steamers call occasionally from Leros or Patmos. There is a telegraph cable to Leros.

GAIDARO: *lat.* 37° 26½′ to 37° 28½′ N., *long.* 26° 56′ to 27° 01′ E.; *length* E.–W., 5 miles; *breadth* N.–S., 2 miles; *area*, *c.* 8 square miles.

Gaídaro island[1] lies about 10 miles south of Samos and 10 miles east of Patmos. It is a low irregular mass of hard limestone and schists, with a main watershed from east to west, rising to 620 feet near the west coast and sinking into long spurs and islets to north-east, with a detached hill (Gk. *Stífio Vouno*, It. *Monte Acerbo*) to south-west.

The north coast is steep at the west end, but less abrupt round Porto Maestro to north-east, where there are anchorages, and landing-places among the rocks. The west coast is more indented, but all rocky and steep-to. On the south coast three narrow valleys converge on a deep bay, with landing-places. The deep Póro inlet farther east is rocky and without access to the interior.

The village (Khorió) is on the ridge between M. Castello and M. Guardia, overlooking S. Georgio cove. There are a few houses also half a mile farther west, on a similar ridge north of M. Vigla (It. *Vedetta*).

The population is Greek, and has come from Patmos in recent times: the island formerly belonged to Samos and was more prosperous, for there are three medieval churches and some fifteenth-century houses in the village. The whole island is covered with evergreen scrub and is pasture. There is some export of sheep, goats, and cheese, in exchange for other foodstuffs.

The small islands Neró, Platý (It. *Piatta*), and Strongiló, off the north coast, and to the south Kounelli ('rabbits'; It. *Conigli*), are grazed in summer.

PHARMÁKO (PHARMACOÚSA): *lat.* 37° 18′ N.; *long.* 27° 8′ E.; *length*, 1 mile; *breadth*, ¾ mile; *area*, *c.* ½ square mile.

The island lies between Leros and C. Monodendri, north of the gulf of Mandelýa. It is a low mass of limestone with a small cove on the east side, formerly haunted by pirates. Plutarch, *Life of Caesar*, 1–2, tells how Julius Caesar, in early life, was captured by pirates and detained thirty-eight days in Pharmacoúsa till his ransom arrived; after release he chartered ships, caught the pirates, and executed them.

[1] The name *Gaidaro*, 'donkey', is a term of contempt. The friends of Gaidaro call it *Agathonisi*, 'good island'.

Pharmáko is 14 miles from Leros, and is occupied by a Lerian family. There is a well at the farm, above the landing cove.

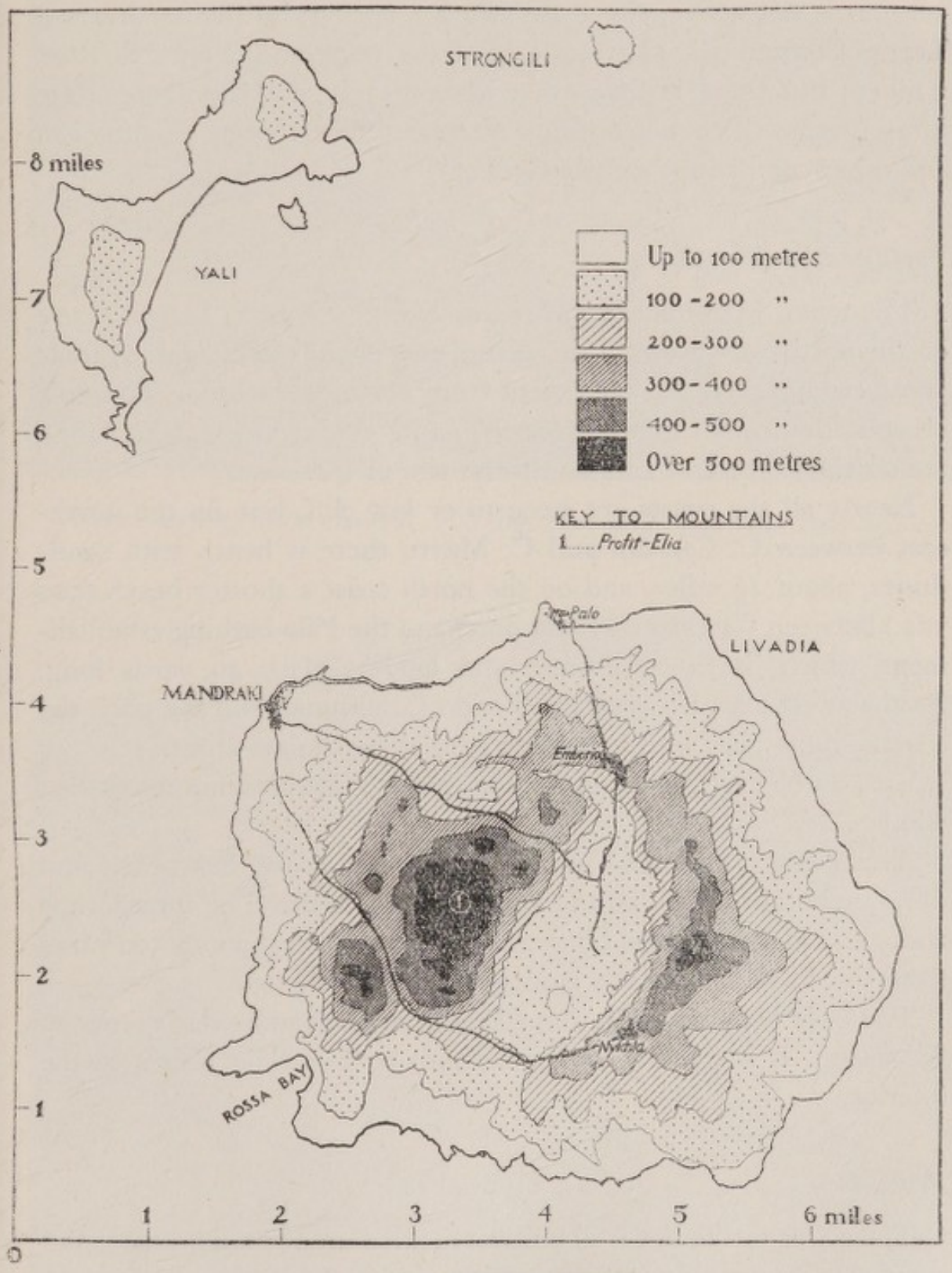
LÉVITHA island and its chain of smaller islands (*lat.* 37° 0′ N., *long.* 26° 30′ E.; *height*, 550 ft.) lie between Leros and Amorgós: Kínaros, the most westerly of this chain, is in the Greek Kingdom. Only the lighthouse-keeper and a few other families live on Lévitha, but it is visited from Leros and Calymnos by lime-burners.

Nisyros, with Yali Island

NISYROS

(Adm. *Niseros*; It. *Nisiro*; Turk. *Nisiros*)

Lat. 36° 33′ to 36° 37′ N., *long.* 27° 9′ to 27° 15′ E.; *length and breadth*, about 6 miles; *area*, 18 square miles.



Nisyros, with Yali Island.

Description

The island lies 9 miles south of Cos and consists of the lava flows of an extinct volcano, the crater of which (rising to 1,874 ft.) encloses a smaller cone, M. Prophéta-Elía, 2,270 feet high. Though the volcano is not active, there are two hot springs on the north coast, Terme Communali, 1½ miles east of the port, and Terme di Palo, 2 miles; but there is little other water-supply, and the houses have rain-cisterns. The hot springs attract sufferers from rheumatism and other complaints, mostly Greeks.

Ports and landing-places

The town, Mandráki (It. *Mandracchio*: pop. 1,860), lies in a cove on the north-west point of the island, east of the old citadel. A mole 300 feet long gives shelter except from north-east winds. The only other settlements, Emporió (*Imbori*) and Nykhia (*Nichia*) (pop. 480), are on the north-east and south-east rim of the crater.

Nearly all the coasts are steep-to or low cliff, but on the north-east between C. Cazzúni and C. Mávro there is beach with sand-dunes, about 1½ miles, and on the north coast a shorter beach (500 yds.) between C. Akrotéri (Palo port) and the Palo bathing establishment, which has a breakwater and landing-place 40 yards long. Farther west also, between the Terme Communali and the port, the coast is quite low, with a carriage road along the sea-front.

Livádia bay has good anchorage, but no shelter from north-east winds.

Avláki (Port Apératos), on the south-east coast, has beach and deep anchorage off C. Grano with sandy bottom. The foreshore is rocky and is commanded by ground rising to 60 feet about 500 yards from the coast. There is a landing-pier 33 feet long.

The only deep cove (It. *Baia Rossa*), at the south-west corner of the island, is sheltered, but precipitous and without access to the interior.

Products

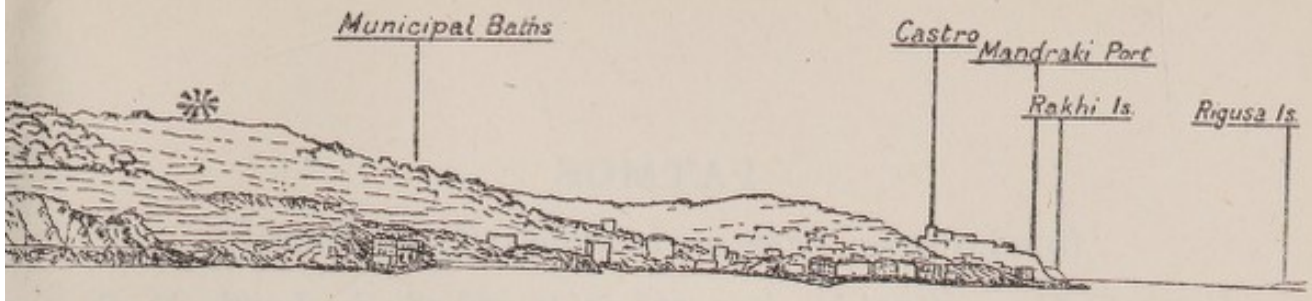
The soil is fertile but is ill cultivated; tree-crops predominate, and some almonds and dried fruits are exported.

Nisyros: looking north towards Yali and Cos, over Mandraki Port and Castle

Telos (Episkopi): Mikrokhorio Village, looking east

Patmos: Harbour Entrance, looking north-east

Patmos: Harbour and Scala-quarter, looking north-west



NISYROS 1s, looking S.W.

Communications

There is a road from Mandráki eastward along the coast to the hot springs at Palo, and thence to Emporió, but only a hill-track to Nykhia (*Nichia*). There is occasional steamer-service to Rhodes and to Cos; heliograph to Cos and Telos.

Islets off Nisyros

Yalí island (Adm. *Ialos*), 3 miles north of Mandráki port, consists of two oval masses of volcanic rock with much obsidian (a natural glass, hence the island's name) rising to 500 and 530 feet, connected by a shingle bank with beaches or shallow coves opening north-west and south-east. The northern mass is steep-to with low cliff; the southern is fringed with sand and shingle, with an older steep shoreline behind. Here there is a breakwater (450 ft. by 18 ft.), a jetty (300 ft.), and provision for submarines and seaplanes: the civil population was expelled in 1935, and access is limited to military or naval personnel. There is fresh water near the breakwater.

Kandeliusa (330 ft.), Rakhia (350 ft.), and Rigúsa (235 ft.) are rocky islets south and west of Nísyros. There is a lighthouse on Kandeliusa, and shelter for small vessels east of Rigúsa.

PATMOS

(Med. *Patino*, *Palmosa*; It. *Patmo*; Turk. *Patmos*)

Lat. 37° 16′ to 37° 23′ N., *long.* 26° 33′ to 26° 38′ E.; *length*, N.–S., $7\frac{1}{2}$ miles; *breadth*, E.–W., greatest, $4\frac{1}{2}$ miles; least, 100 yards; *area*, 22 square miles.

Description

The island consists of the north and west margins of a volcanic crater, like Nísyros, but shattered and submerged; fragments of the south and east margins are the islets Skláves, Chéla (Chiliomódi), Kavuroníси, and Tragoníси. There are patches of later tuffs and pumice-gravels, and an outcrop of older marble beds at Yenúpa. Of the three main masses of hard volcanic rock, the northern and the central are separated by the deep and narrow port (Scala) and connected only by shingle beaches at its head, 100 and 300 yards wide, on either side of the detached Kastro hill, on which stood the ancient city. A similar low isthmus connects the central with the southern mass. All the high land is dissected by ravines, which descend into deep coves and bays, with inshore islets and reefs.

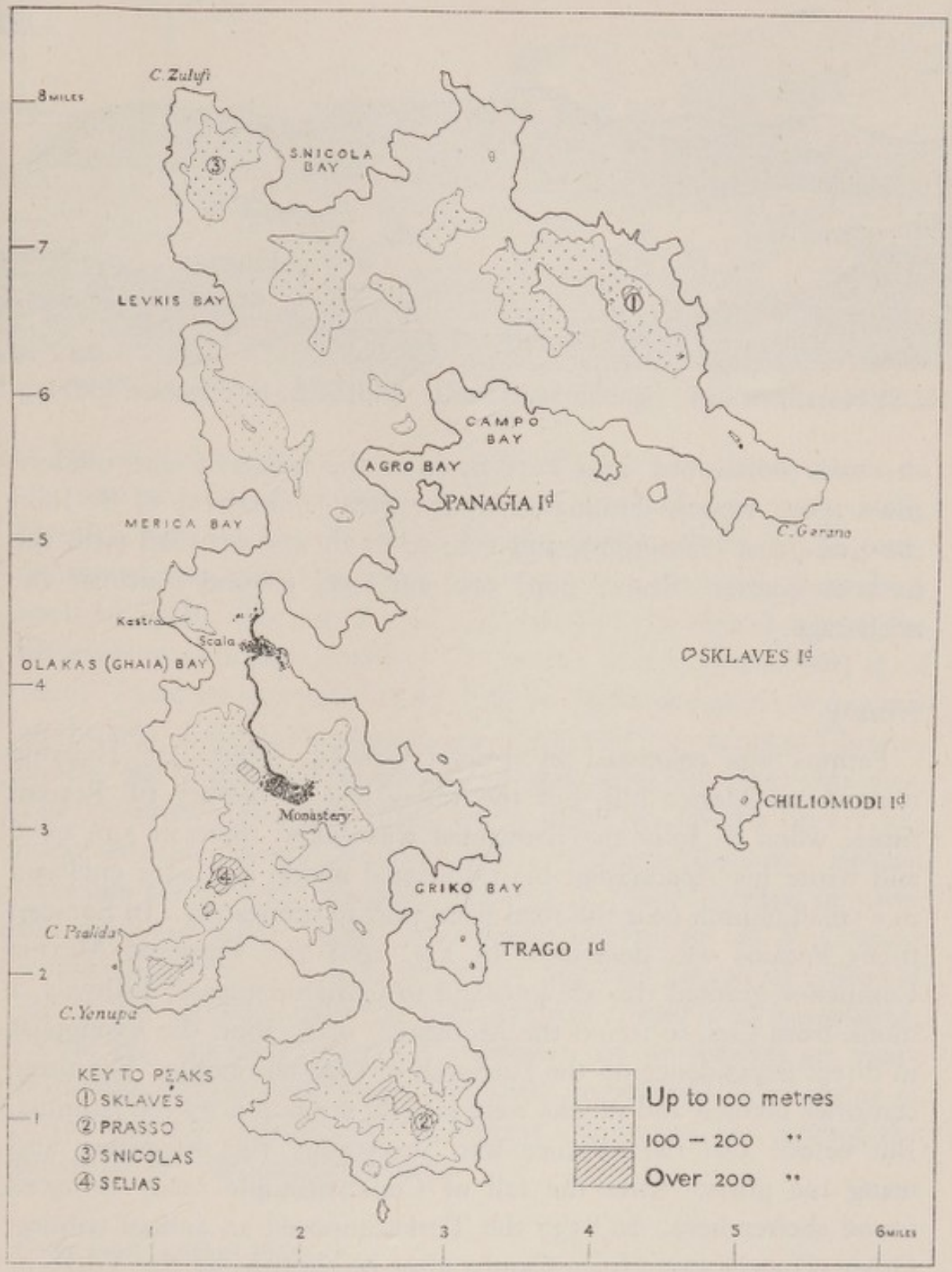
The natural vegetation is dense evergreen scrub; but where there is soil enough there are enclosed vineyards and gardens, and even small cornfields. Much of the better land is terraced, especially between the monastery and the port. There are no perennial streams, but well-water is ample in the low ground, and the houses have flat roofs and rain-cisterns. There is a warm spring at Forbici, on the south-west coast.

The southern mass rises eastward to M. Prassó (780 ft.): it is pasture and uninhabited: the coast is precipitous.

The northern mass is less mountainous, but rises to M. Skláves (*Monte Grosso*: 760 ft.) at the east end, and M. Mérica (693 ft.) overlooking the isthmus and Mérica bay; M. S. Nicóla (*Guardia*: 693 ft.) forms the north-west promontory. In the valleys converging on Campo bay and Levkís bay (Adm. *Lephkis*; It. *Lefichi*) are scattered farms and homesteads.

The central mass forms a north–south ridge, rising to M. Elias (*Profit-Elia*, 874 ft.) in the centre. Overlooking the valley which

Patmos


C. Zulyi
8 MILES
S. NICOLA BAY
LEVKIS BAY
CAMPO BAY
AGRO BAY
PANAGIA Id
MERICA BAY
C. Garano
Kastro
Scala
OLAKAS (GHAIA) BAY
SKLAVES Id
Monastery
CHILIOMODI Id
GRIKO BAY
C. Psalida
TRAGO Id
C. Yenupa
KEY TO PEAKS
① SKLAVES
② PRASSO
③ SNICOLAS
④ SELIAS
Up to 100 metres
100 – 200 ''
Over 200 ''
1 2 3 4 5 6 MILES

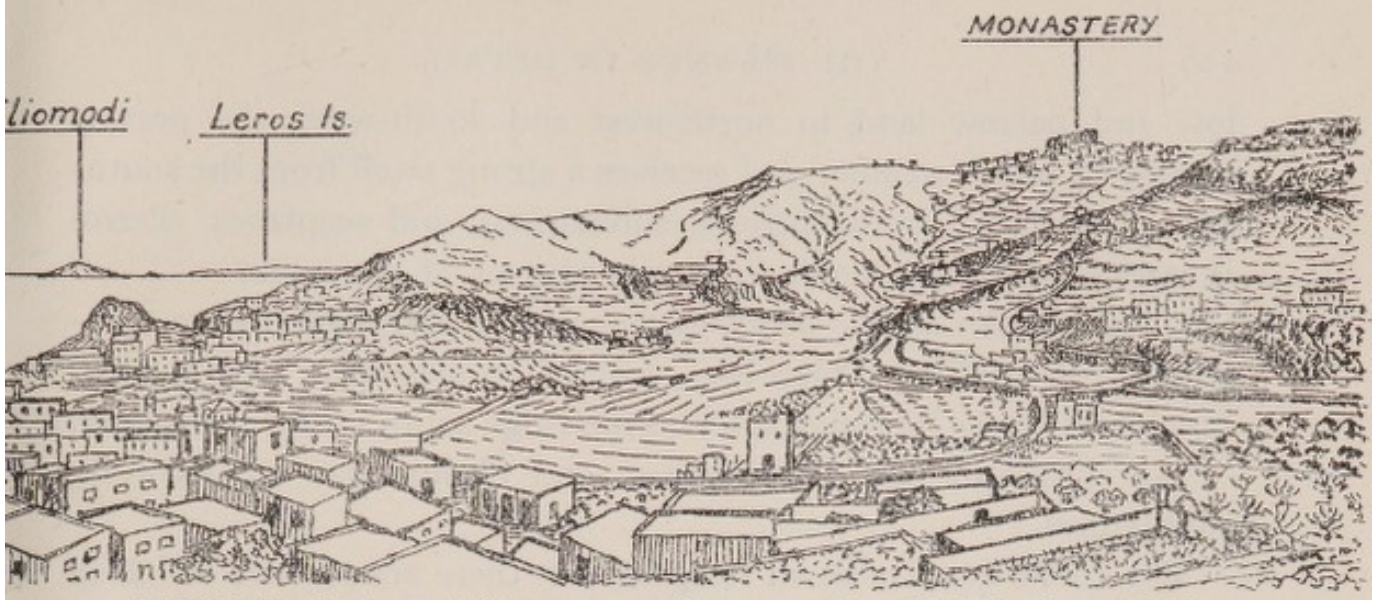
Patmos

PATMOS: Northern half; Harbour and Scala. Lipsos Is. in distance, looking NE-

descends northward into Port Scala is the medieval and modern town (pop. 1,700), dominated by the great monastery of S. John the Evangelist (*Theológos*), and connected by a steep road with the harbour-quarter (Scala: pop. 500) on level ground south of the anchorage.

History

Patmos was colonized by Ionian Greeks. There are Hellenic remains on Mérica hill, but the valley has no history till Roman times, when S. John the Evangelist was exiled there in A.D. 95–6 and wrote his *Apocalypse*: his traditional abode is a cave enclosed in a small church near the road from port to monastery. In Saracen times Patmos was deserted. In A.D. 1088 the Emperor Alexius Comnenus granted the whole island to Christodoulos of Bithynia, a monk from Cos, to found the Monastery of S. John the Evangelist in direct dependence on the Patriarch of Constantinople. For three centuries laymen and monks were strictly separated by the isthmus. But before A.D. 1200 Venice was 'protecting' the monastery and using the ports. After the fall of Constantinople many refugees found shelter here. In 1537 the Turks imposed an annual tribute. Other refugees came from Candia after its capture by the Turks in 1664. In 1737 the monk Makarios founded a school, long prosperous, but now in ruins. The monastery received from Alexius, and from other benefactors, many estates in other Greek lands, and accumulated a valuable library and other treasures. There are 350 small chapels in the island.



PATMOS: Scala and Monastery: (continued to left) looking E-SE

The Monastery of S. John the Evangelist (Gk. *Theológos*) stands on the watershed overlooking the harbour and Scala. It was securely fortified between the eleventh and sixteenth centuries. The outer courtyard was added in 1698, and the entrance to the monastery itself in 1738. The carved wooden doors of the church are of the fifteenth to sixteenth century; the carved screen (*iconostasis*) is of 1820. The altar is reputed to be that of a Hellenic temple of Artemis on the site. Besides the church of S. John, and the chapel of Christodoulos, the founder, there are in the monastery five other churches. The refectory has thirteenth-century frescoes. In the library are many valuable manuscripts and about 3,000 printed books. Special treasures are a fourth-century *Gospel of S. Mark*, written in silver and gold on purple vellum; an Italian manuscript of *S. Gregory Nazianzenus* dated A.D. 941, the gift of Alexius Comnenus; a *Book of Job* of the eighth century; a ninth-century *Gospel* with miniatures; a *Diodorus*, and the *Hymns of S. Romanus*. In the treasury are many vestments, church ornaments, and other dedications. The statue of S. John in the church, a gift of Alexius Comnenus, has escaped the usual fate of orthodox sculpture.

Ports and landing-places

1. The port of Scala is $\frac{3}{4}$ mile long and 400 yards wide at the entrance, which is steep-sided and opens east. The depth decreases from 120 feet to 10, and the south, north, and most of the west shores are open beach. There is a stone jetty on the south side, with a light-tower on the quay by the custom-house. As there is only

low and narrow land to north-west and south-west, the port is squally in rough weather and receives a strong swell from the south-east, but is used by destroyers, submarines, and seaplanes. Petrol is stored on the north side, one mile west of M. Cumano.

2. Port Griko on the south-east coast is a steep-sided cove completely protected by Trágo islet, and 50–30 feet deep, with a small beach and access by rough track to the ridge south of the monastery.

3–5. Diakópti bay, Mérica bay, and Campo bay are used by submarines.

The coasts are almost all steep-to, but there are patches of beach in the coves, and on the north-west (Mérica) and south-west (It. Ghiaia) bays along the neck west of the port.

Population

The population (3,700 in 1912; 3,324 in 1937, of whom about 1,700 reside in the town and 500 in Scala) lives by agriculture and fishing, by making cooking-pots and tiles in the clay ground west of Scala, and by the profits of a few coasting-vessels. Formerly merchant ships were built here, and traded as far as Baltic ports, but latterly only come to be broken up. The monastery, which has large estates oversea, spends much of its revenue in local supplies and services; the people are therefore well grown and prosperous, and their cultivation is productive, but little is available for export.

Communications

There is a roughly paved road from Scala to the monastery, but transport is by pack animals. There is occasional steamer-service to Leros and other islands as far as Rhodes; anchorage for seaplanes at Scala and Porto Griko; telegraph cable and heliograph to Leros; radio-station on M. Elias.

Water-supply

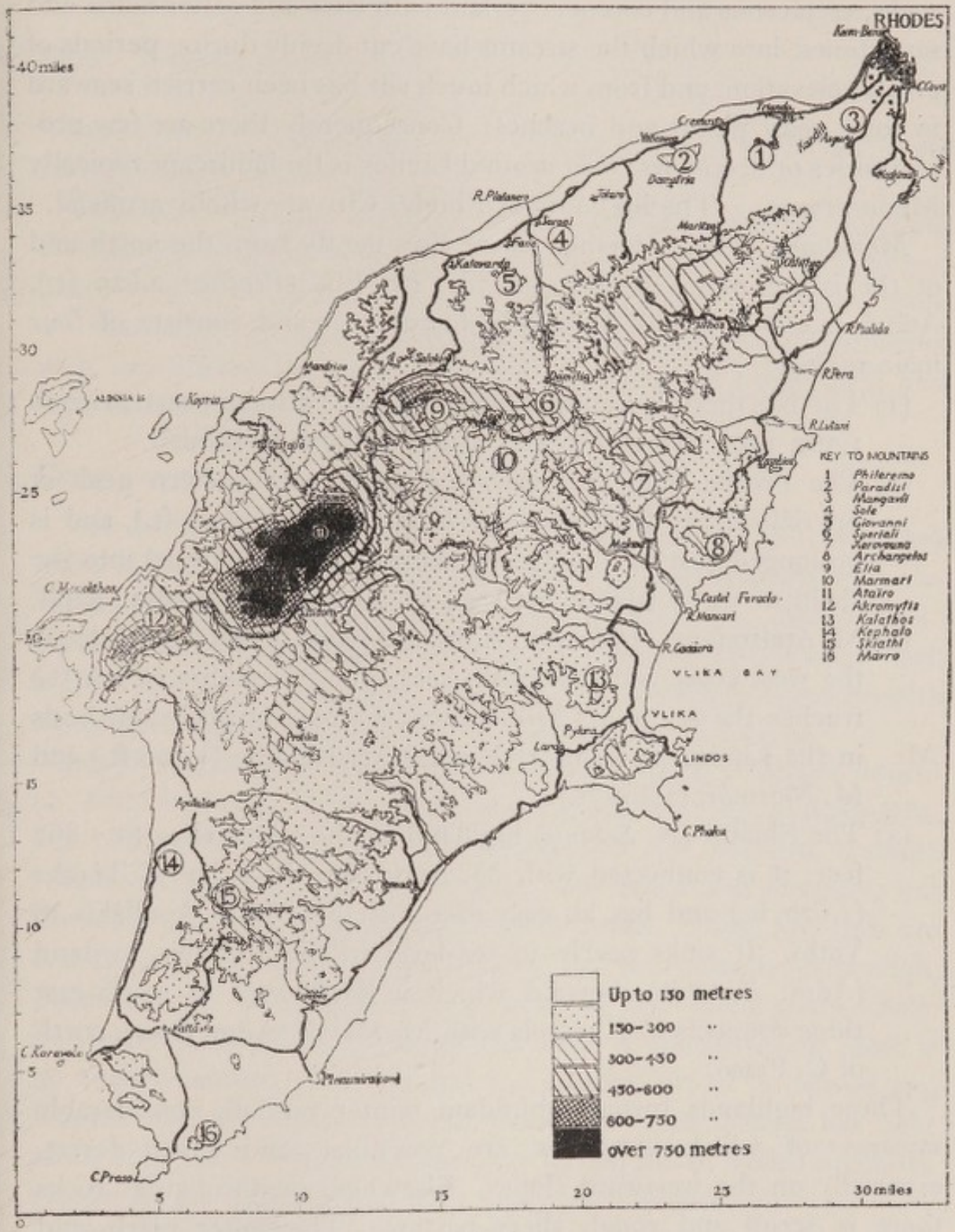
Springs are few, but there are wells in the low ground, and the monastery and houses have rain-cisterns.

Rhodes

RHODES

(Gr. *Rhodos*; It. *Rodi*; Turk. *Rodos*)

Lat. 35° 52′ to 36° 27′ N., *long.* 27° 35′ to 27° 15′ E.; *length*, NE.–SW., 46 miles; *breadth* (C. Monólithos to C. Fóka), 24 miles; *area*, 545 square miles.



Rhodes

Description

The island is of oval shape, narrowing to a point at the north and at the south end: the northern promontory, Kumburnu, is 10 miles south of C. Alupo in Anatolia. It consists of a massive core of hard rocks, cretaceous and eocene, overlaid with later and softer marls and sandstones, into which the streams have cut deeply during periods of greater elevation, and from which much silt has been carried seaward to form coast plains and beaches. Consequently there are few promontories or deep bays; only around Lindos is the landscape typically Mediterranean. The harbours of Rhodes City are wholly artificial.

Mountains. The watershed range rises gently from the north end of the island to its greatest heights, M. Elía (*Profíta*: 2,620 ft.), Atáïro (4,068 ft.), and Akromýtis (2,706 ft.); and consists of four main masses:

(1) The Northern Uplands, nearly midway between coasts, rise to 1,300–1500 feet with passes at Psithos and Koscinistí.

(2) The Profíta range lies east and west, with eastern peak at Speriáli (2,121 ft.) and western at M. Elía (2,620 ft.), and is prolonged eastward to M. Archángelos, and westward into the chain of rocky islands between C. Kopriá and Chalkí island.

(3) M. Atáïro (anc. *Atabyrion*: Adm. *Attayaro*: 4,068 ft.) overlooks the west coast, and its south-west spur Akromýtis (2,706 ft.) reaches the sea at C. Monólithos; a long eastward ridge ends in the Lindos promontory beyond M. Kálatho (1,200 ft.) and M. Marmári (1,400 ft.).

(4) The Skiáthi (It. *Schiati*) highland in the south rises to 1,862 feet; it is connected with M. Atáïro by the ridge of Teráka (1,620 ft.) and has an easy east–west pass from Apollákia to Vathí. It sinks nearly to sea-level in the Kattávia lowland (Adm. *Katabia*), beyond which a north-west to south-east ridge connects C. Karavola with M. Mavro (Adm. *Oros*), north of C. Prasó.

These highlands furnish abundant winter rainfall, considerable streams—of which very few are perennial—and much forest, especially on the westward slopes. Elsewhere on the harder rocks there is scrub and rough sheep-pasture. The softer marls and sandstones are extensively terraced for grain-crops, cotton, and

RHODES. Trianda Beach, looking N.E.

tobacco, and for vines, olives, and other fruit-trees. In the moist valley bottoms there is cattle-pasture.

Though the rainfall is mostly from the north-west, the principal drainage runs eastward, cutting back deep into the watershed ranges. Since some parts of the coast have sunk and some have risen, there are both alluvial coast plains and swampy river-outlets; plateaux with escarpments at various heights, marking old coast-lines; and sand-dunes along low coasts.

Coast areas

The habitable districts nearly all lie near the sea, and form five main regions: (*a*) the north-west coast from Rhodes City to Kalavárda; (*b*) the north-east coast, from the city to C. Archángelos; (*c*) the east coast from C. Archángelos to Lindos; (*d*) the south-east, and (*e*) the south-west coast, south of the island's greatest breadth along the transverse range from C. Monólithos to Lindos.

(*a*) *The north-west coast*, from the steep sea-front of Monte Smith[1] (*S. Stephano*) and M. Meravígli, south of Rhodes City, to Kalavárda, has continuous coast plain, often with low cliff seaward, through which streams have cut deep gullies, now silted and swampy; but there are sandy beaches and occasional dunes. These lowlands are commanded by table-topped outliers of the plateau—Meravígli, Philéremo, Paradísi—and farther west by prominent spurs—Sole, S. Giovanni, Képhalo. Though the coast is unobstructed, there is no shelter between the city and the small coves at S. Minas and Kopriá, and the wind is usually on-shore. This district has light sandy soil, but it is populous and very fertile, full of walled orchards, vineyards, and homesteads, with many old forest-trees.

From the highway, usually less than a mile from the coast, branch

[1] Named from Admiral Sir Sidney Smith (1764–1840), who retired to settle here.

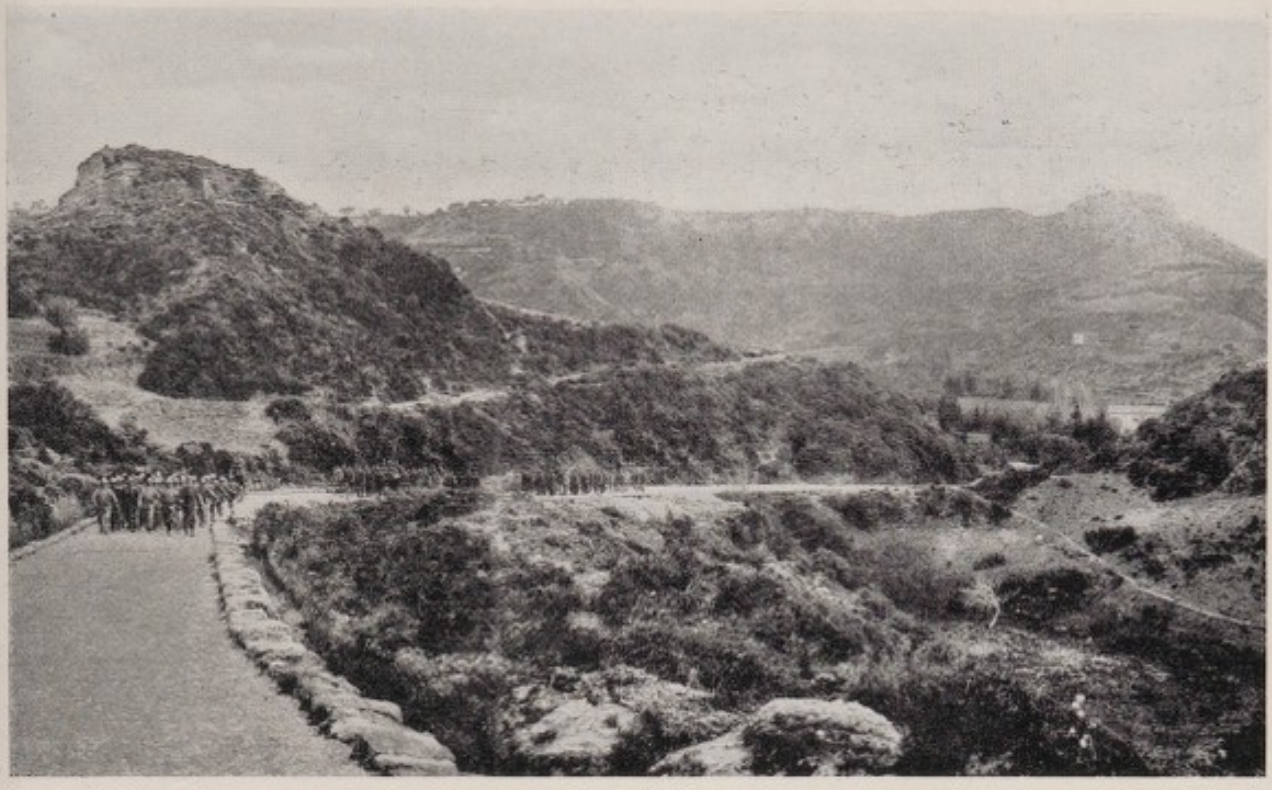
roads from Cremastó and Tolaro traverse the watershed and join an east coast road at Psíthos (*Psito*), where the last Turkish forces surrendered in 1912 (views opposite).

West of Kalavárda, spurs of the main ranges reach the coast, the valleys become deeper, and the highway turns inland and mounts high round the west end of M. Elia, crosses the watershed to the east flank of M. Atáïro; receives at S. Isídoro a cross-road from Lárdo on the east coast; then turns west into the Siána valley between Atáïro and Akromýtis, and so reaches Monólithos, whence it descends to Apollákia in the south-western region. Beyond Kalavárda there are only detached coast plains round Mandríko and a coast track as far as C. Kopriá: from C. Kopriá to C. Monólithos the coast is rugged, with one inaccessible cove at Glipháda. Castello village, inland of C. Kopriá, is served by a branch road from the highway at Embóna, the nearest village to the peak of Atáïro (4,068 ft.)—an easy climb of two hours.

(*b*) *The north-east coast from Rhodes City to C. Archángelos.* South of the city, the watershed plateau slopes gently eastward from the steep sea-front of Monte Smith (*S. Stephano*) overlooking Triánda bay, to C. Cóva, south of which a fertile tree-covered coast plain is closed abruptly by the Petzulla ridge, ending in C. Vódi, steep-fronted southwards and intersected by ravines and quarries. This ridge, which is traversed by the eastern highway at Koskino about 2 miles inland, is the outer line of the city's defences, and is continued west of the plateau by M. Meravígli.

From C. Vódi to Zambíka (982 ft.) and the Archángelos uplands (1,726 ft.), the coast plains of Kalithéa and Áphandos are hardly interrupted by the detached hill Psalída (1,130 ft.) and C. Ládiko, nor by the considerable streams—Psalída, Péra, Lutáni—which have marshy courses and open beaches (view facing p. 140) and are highly cultivated. Archángelos bay, south of Zambíka, has a similar but smaller plain, and shelter from north winds. To traverse the Zambíka-Archángelos uplands, the highway rises inland to an irrigated plain round Archángelos village, and thence descends steeply to Malóna, where a medieval castle guards the crossing of the Platanéro river, above its marshy lower reaches.

(*c*) *The east coast from Archángelos to Lindos.* From Malóna to Vlícha, a single coast plain, about 2 miles wide, is formed by the silt



Rhodes: Inland Scenery along the medieval road from Monte Smith to Trianda

Rhodes: Inland Scenery around Psithos Village

Rhodes: The Harbour of Lindos, looking north-east

Calymnos: Telendos Island, looking north-west over Linaria

LINDOS Port and Castle looking E.S.E.

of the Platanéro, Mankári, and Gáddara rivers, which drain the eastern slopes of the Profíta and Atáïro ranges and traverse a large upland, with forest and pasture above considerable areas of cultivation around Klémata and Kukúmes. The lower reaches are wide and marshy; so the new highway turns inland and crosses the Gáddara by a bridge; the old direct road can, however, be used in summer. The shore from Castel Feráclo to Vlícha (Víglika) is open beach, interrupted by the river-mouths. The only villages are Massári, Malóna, and Kálatho, on the margin of the plain, with Apóllona and Alaĕrma far inland. This lowland is bounded southward by the precipitous Kálatho ridge, which the highway traverses by the Pylóna pass to Lardo, while the by-pass to Lindos traverses rough ground behind Vlícha cove.

Lindos lies between the Marmári outlier of the Kálatho ridge and its own steep Castle Rock, north of which is the ancient harbour (*Porto Grande*), land-locked and obstructed by reefs in the entrance; south of the castle is a smaller cove under C. Sumáni, and shelter also on both sides of C. Phóka.

(*d*) *The south-eastern coast* beyond the Kálatho–Marmári ridge begins with the long sandy beaches of the rich Lardos valley, which rises inland to Alaĕrma and thence has a rough road through forested hills to S. Isídoro on the western highway. South of the Órti ridge (950 ft.), which reaches the coast, there is intermittent beach and coast plain as far as Kattávia, with a cove at Kiotári (*Chiotári*) and a landing-stage at Plémmira which serves the air-base at Kattávia (Adm. *Katabia*). The flooded lower course of the Asklepianó stream traverses fertile country, and its wide upper valley cuts back deep among the spurs of Atáïro near S. Isídoro. Through the enclosed valley of Vathý a rough road connects Yannádi with Apollákia and the western highway. Farther south the coast plain lies very low;

Plémmira is liable to sea-flood in stormy weather, and the Kattávia depression is naturally swamp. This lowland between the Skiáthi (*Schiati*) mountains and the Vígla–Stavrotí–Óros ridge between C. Karavólos and M. Mávro is commanded by the medieval castle Palaeókastro. The seaward face of Stavrotí is steep, but C. Prasó or Prasoníси ('green island') is connected with the mainland by sand-spit and silt.

(*e*) *The south-western coast* north of C. Karavólos is low and open, with sandy beach, dunes, scrub, and some cultivation, the foot-hills of Kattávia and Skiáthi nowhere reaching the sea. The large stream which rises above Siána, between Atáïro and Akromýtis, has a wide upper basin and has silted its lower course; so the highway descending from Monólithos crosses it about 3 miles inland, at Apollákia village, where the cross-road comes in from Vathí and Yannádi.

North of the Siána–Apollákia outfall, a southern spur of Akromýtis, tabular, and precipitous seaward, isolates the small coves about C. Phúrni. The highway, after the crossing at Apollákia, ascends the landward face of this spur to Monólithos village, and passes through scrub and pine by Siána to S. Isídoro (v. above).

Climate

Lying close beneath the continental highland of Anatolia, Rhodes has only a modified north wind, dry at all seasons, and hot also in summer. The atmosphere is therefore usually clear, especially in the northern districts. The rainfall, on west winds, is intercepted by the watershed range and absorbed by porous rocks and deep soils.

The annual rainfall does not exceed 40 inches; the winter rain-storms are frequent, brief, but often heavy. Hail is rare; snow falls occasionally on M. Atáïro; hoar-frost is unknown, but there is heavy dew in summer. There is sunshine nearly every day; day temperatures rise to 85–90° F. and fall to 50° F. But the mean annual temperature is 62° F.; hence the amount and high quality of the characteristic produce (p. 135) and the repute of the island as a health-resort.

Vegetation

Rhodes is distinguished from the other islands by its wide extent of highland forest, and by the ease with which lowland areas, formerly

forested, have been converted into plantations of vine, olive, and fruit-trees, especially carob, fig, apricot, and peach. There is also an unusually large area of arable land, especially in the north-west and north-east, though not large enough to supply the island with grain. The deficit is met, as elsewhere, by export of tree-fruits and their products, wine and oil. This exceptional fertility mainly results from the climate. South of Lindos and C. Monólithos it is less, and the distance from ports and markets greater.

Cultivation, pasture, and forest

The principal cultivated areas (about 75 per cent. of the total surface) are as follows:

In the immediate neighbourhood of the city are market-gardens, vineyards, olives, oranges, and other fruit-trees, mostly private properties (*mulk*: p. 57) owned both by Greeks and by Turks around Kóskino; at Asgúru and Kandíli by Turks only, who grow also fig and vallonea, breed oxen, and sell *yaourt* and other dairy produce: Chiáïr, also Turkish, has copious water, and tree-crops. Around Kalithéa (*Calitea*) Turkish owners disappear; Greeks grow sultanas and apricots, with some grain; and there are many goats on the hills. The inland basin of Psíthos is partly irrigated, and has olives, grain, and pasture. At Áfando are olives, oranges, and apricots, with vines along the coast, and pasture inland.

Archángelos, though it lies high, has fewer goats and much arable, as well as tree-crops in the Kasse valley: Jaffa oranges grow well at Mallóna, and irrigated tree-crops at Massári and S. Mercurio. Kálatho, Pilóna, and Lindos are well cultivated, but are populous and export nothing. A different régime begins at Lardos, Yannádi, and Lacánia, with grain-crops, tobacco, and white *rasaki* grapes for local wine and for Egypt. The inland villages, Messanágro, Vathý, Ístria, Profília, and Arníta, grow some grain, but are mainly pastoral. There is a large reclamation project in connexion with the aerodrome at Kattávia. Apollákia, having abundant water and shelter from the north, grows tobacco, cotton, and sesame. Monólithos, Siána, and S. Isídoro are barren and very poor; in the interior, Alaërma, Archípolis, Apóllona, and Platánia are mainly occupied with their forests, and begin to control their goats.

In the north-west, Castello is wholly pastoral: Embóna grows

white *athíri* grapes for wine; Sálako has a copious spring, and is capable of irrigation. Kalavárda, Fané (Adm. *Phanez*), Soróni, and Thólo (It. *Tolo*) have olives, figs, and *amorghinó* grapes for wine, with tobacco and grain-crops, but no oranges. Round Dimília, tobacco, cotton, sesame, and garden produce are prosperous, but there is much land for development, as there are springs. Damátria, Maritzá, and Bastída have mixed farming. At Villanóva, Kremastó, Triánda, and Míxi oranges and olives are grown, with water raised by windmills, and there is room for improvement, so near to the city.

Pasture and forest. About a fifth of the total area ranks as *macchia alta* and is being conserved as forest; another fifth is *macchia bassa*, scrub and waste, used only for pasture; of the remaining three-fifths, though registered as *coltura*, only one-twelfth is intensively farmed, and one-quarter is under the old two-field system (p. 56).

Domestic animals include two breeds of oxen, the better of which is bred by the Turks of Asgúru and Kandíli for slaughter and dairy; two breeds of asses, few horses, and many mules—carts being little used—20,000 fat-tailed sheep and 40,000 goats.

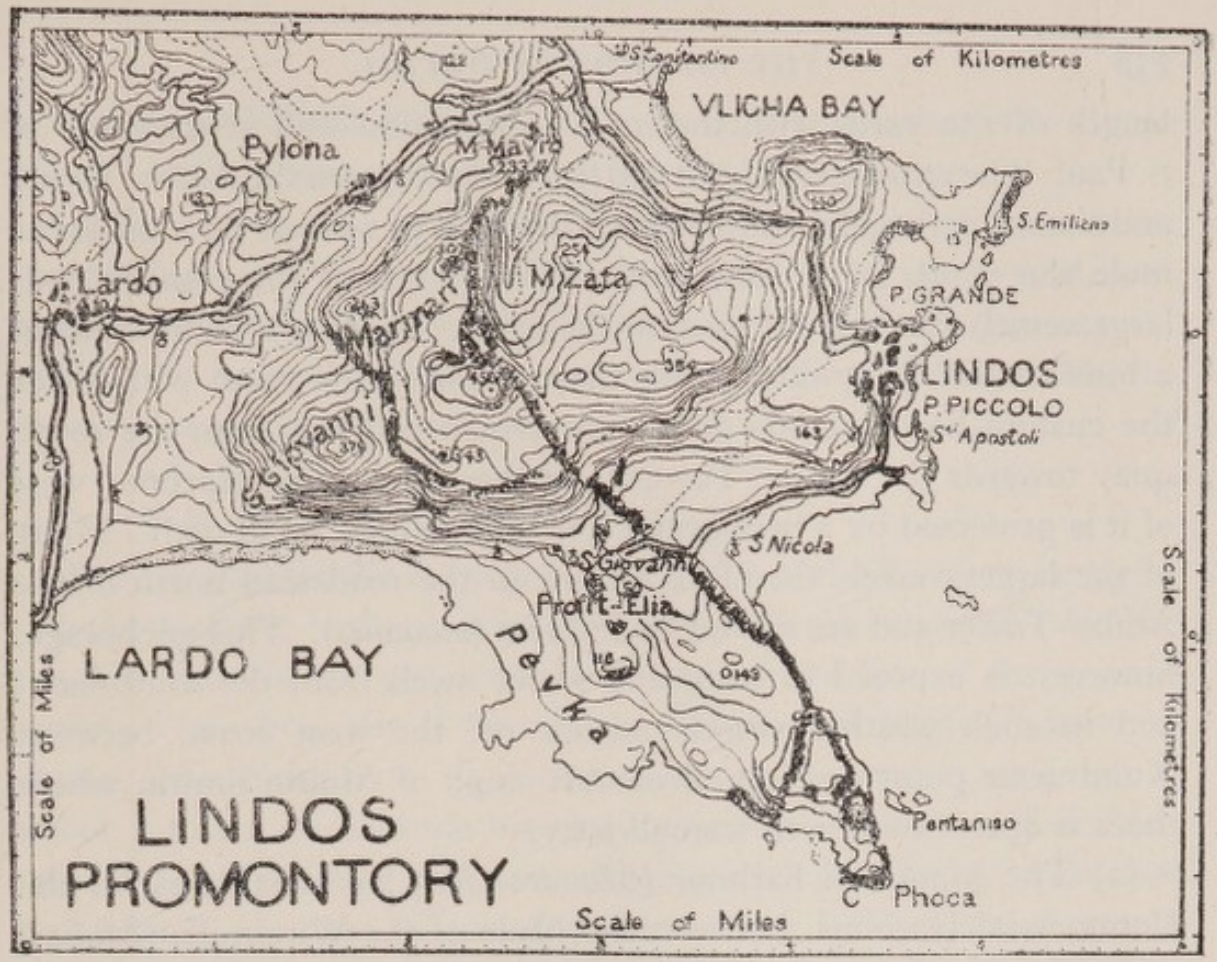
There are 1,500 beehives, yielding 45 tons of honey and 15 tons of wax, gathered in spring and autumn. The breeding of silk-worms, formerly flourishing, has ceased, but an attempt is being made to reorganize it.

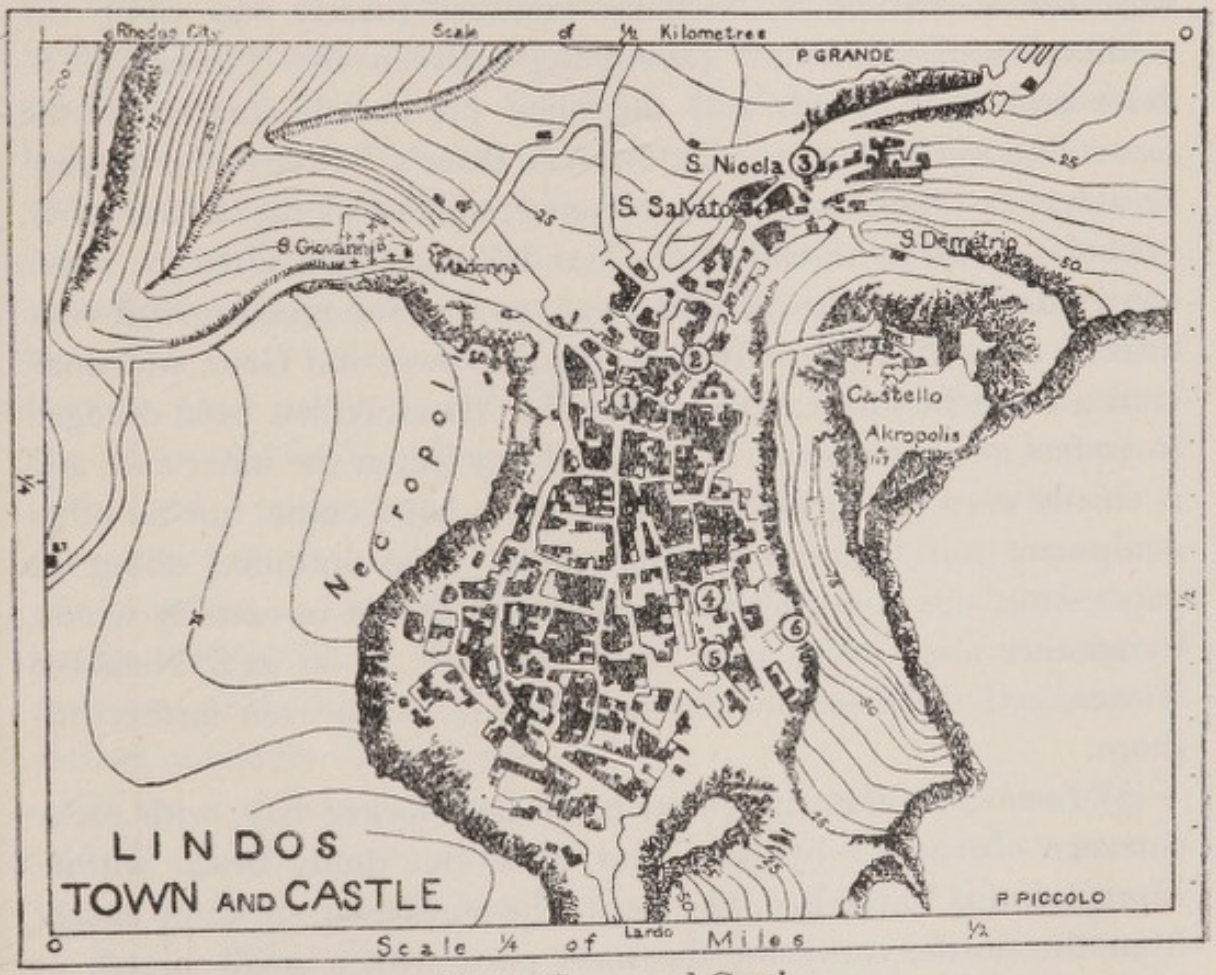
History

For the history of ancient and medieval Rhodes, as the dominant community and administrative centre of the Dodecanese, see Chapter VII above (pp. 29–37).

Ports and landing-places

(1) Of the five ancient harbours of the City of Rhodes (p. 139) only two are still in use: they have been dredged and repaired since the Italian occupation. The more easterly is the Commercial Harbour (*Porto Commerciale*) enclosed between the mole of S. Angelo (700 ft.) eastward, the harbour wall of the medieval city with two gates (of S. Catharine and of the Arsenal) southwards, and the Arabs' Tower (Tower of de Naillac) westward, connected at a total





Lindos Town and Castle

1. S. Theodore Church.
2. S. George Church.
3. S. Nicholas Church.
4. S. Stephen Church.
5. Greek Temple.
6. Greek Theatre.

length of 130 yards with the main fortification-wall at the Gate of S. Paul. The entrance is about 650 feet wide between the Arabs' Tower and that of S. Angelo, and has been dredged to 25 feet. Alongside the mole the depth is 20 feet, reduced to 15 feet at the inshore end; large vessels can therefore come alongside. There is a hand-crane of 2 tons travelling 15 yards. But there is not much room within, for the custom-house stands on a mole which projects from the south quay towards the Arabs' Tower, and the old Arsenal Harbour west of it is protected by a breakwater and admits only small craft. Many of the larger vessels therefore anchor in the roadstead north of the Arabs' Tower and are served by lighters (*maoúnes*). This anchorage, however, is exposed to wind and heavy swell from the south-east; and in such weather vessels anchor off the west coast, between Kumburnu point and the Broussali slope of Monte Smith, where there is open beach with a small jetty.

(2) The Mandráki harbour (*Mandracchio*) lies north-west of the Commercial Harbour, between the Mole of the Windmills (*Molini*) with the Tower of S. Nicholas eastward (nearly 600 yds.), the medieval wall southward (200 yds.) between the Towers of S. Peter and of S. Paul, and the open promenade known as the *foro italico* westward (650 yds.) from S. Peter's Tower to the modern breakwaters which narrow the entrance, abreast of the Tower of S. Nicholas. The south end of the Mandráki has been silted for about 100 yards north of the medieval wall, so that the modern road runs directly from the *foro italico* to S. Paul's Tower and Gate, and small craft are beached to seaward of it. The Mandráki has been dredged to 30 feet at the entrance, but has only 15 feet at the inner end, and is chiefly used for small craft. There is a hand-crane, but no other equipment nor organized water-supply. The entrance, about 40 yards wide, opens north, but is sheltered, except in easterly winds, by another mole which runs eastward nearly as far as S. Nicholas' Tower, and there are ancient foundations awash even farther off-shore.

(3) *Lindos*, on the east coast, has a land-locked bay, with rocky entrance obstructed by islets and reefs, but sandy beach within. More useful is Vlícha bay, 1½ miles to the north-east, sheltered except from the north; rocky for the most part, with a small stretch of beach: this port is used by small vessels to supply Lindos and the

aerodrome at Kálatho (*Cálato*). The small cove south of the Castle hill at Lindos opens eastward and has not much shelter.

(4) At *Kopriá* bay on the north-west coast is a stone pier about 100 yards long. There is shelter except from the north-west, and small vessels set out hence for Alimnia and Chalkí islands (pp. 145–8).

For the numerous beaches and other landing-places of Rhodes see the description of *Coast areas* above (p. 131).

The City of Rhodes (*see views facing p. 141*).

The city, within the massive fortifications of the Knights, occupies only part of the harbour quarter of the Hellenic city, and even the modern suburbs do not extend far beyond the line of the ancient walls. The whole site is triangular, with the sand-spit (*Kumburnu, Punta della Sabbia*) to the north between a straight sea-front of about 3 miles, on Triánda bay, facing west-north-west, and another sea-front, broken by the three remaining harbours, facing north-east as far as S. Georgio village, and thereafter a little south of east to C. Vódi. The third and landward side includes the north-facing frontage of a plateau which slopes gently eastward from the precipitous western face of Monte Smith (*S. Stephano*) to low cliffs broken by small coves. Southward, this plateau is separated from the main watershed ridge of M. Lúca, Cúmuli, and Tavrólitho by two valleys, which reach the sea respectively east of Triánda village and north-east of Kóskino, each about 4 miles from the sand-spit. The northern slopes of both valleys are fairly steep, but there is open ground between their heads, south of Asgúru village. The highest point of the whole site is M. Mangávli (440 ft.), overlooking the westward valley and Triánda bay. The Hellenic walls may be traced across the plateau at the foot of its northern slope. The Roman aqueduct, now restored and supplemented, collects from the headwaters of a stream which bisects the plateau; it runs from south to north a little east of the highest point, and distributes from the S. Giovanni section of the northern slope.

Of the five ancient harbours, which were constructed in echelon, and all opened north, only three are preserved, and of these only two were used by the Knights, or later. Beyond the S. Angelo mole, the easternmost, now Acandia bay, and useless, bounds the medieval city nearly as far as the Del Carretto bastion; next, the Com-

mercial Harbour lies between the S. Angelo mole and the Arabs' Tower; to the north-west, the Mandráki (*Mandracchio*) port lies (like Acandia) outside the walls, and north of them; eastward it has always been bounded by the great mole on which the Tower of S. Nicholas stands, but it probably extended westward beyond the modern Mercato and Foro Italico: for details see *Ports* (1 and 2) above. North and west of this, all ancient works are obliterated by the sand-spit, which is still extending northward beyond the Greek quarter, Neokhóri (*Borgo nuovo*), and probably began to accumulate (as the levels show) as far south as Brussalí at the base of Monte Smith. Thus the famous Colossus, of which the precise site is uncertain—the site of S. Nicholas' Tower and the Colonna rock north of it have been suggested—served as sea-mark at the extreme north of the ancient shore-line for vessels arriving from all quarters. For the present condition of the Port of Rhodes, v. below.

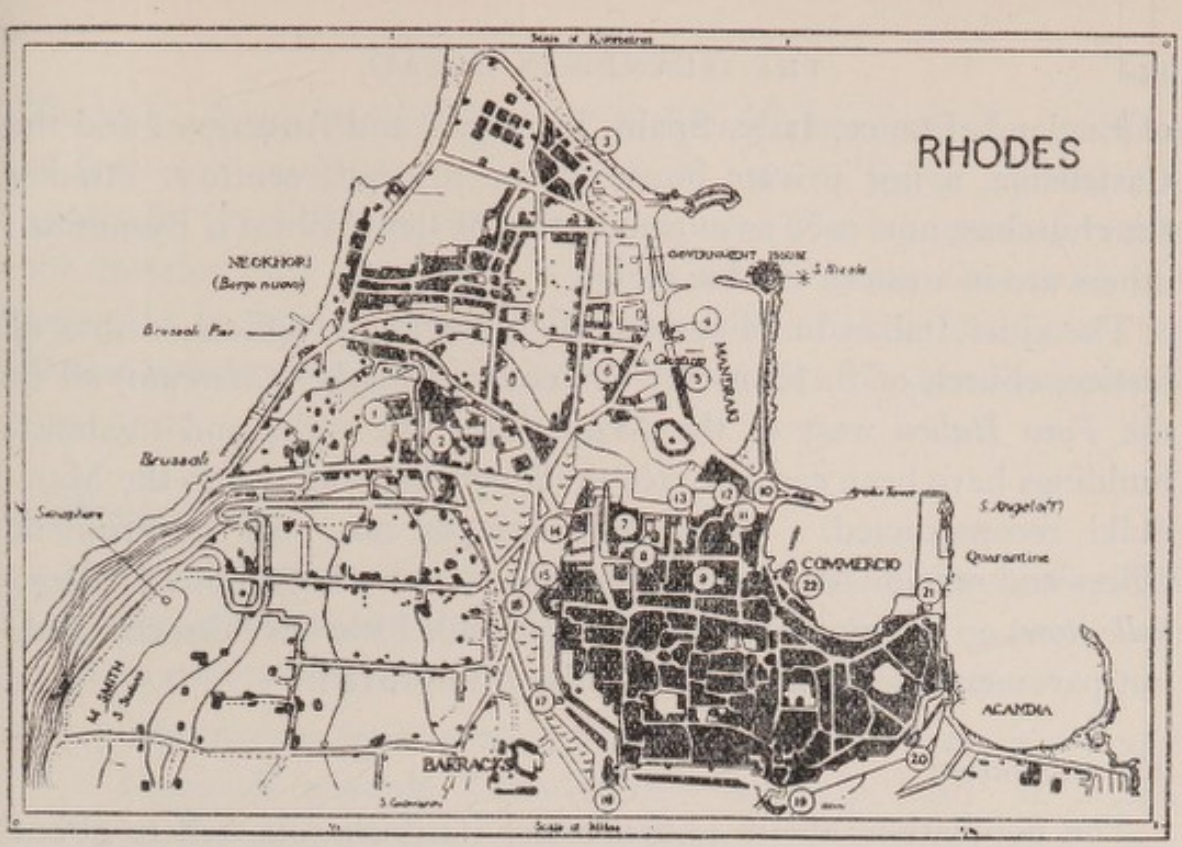
The Knights' Walls are designed to enclose an area roughly four-sided, between the Tower of S. Angelo, on the east mole of the Commercial Port, the bastions of Del Carretto and of Spain, and the d'Amboise Gate. The north side is interrupted by the entrance to the Commercial Port between the Tower of S. Angelo and the Arabs' Tower, and by a smaller recess overlooking the Mandráki port between the Tower of S. Peter and the north-west angle bastion. The southern side is thrown forward by the great Towers of S. John, covering the Kóskino Gate, and of S. Mary outside the Gate of the English. Of the space thus enclosed, the Commercial Port to the north-east occupies nearly one-quarter; to the south-east is the Jewish quarter; in the north-west quarter on rather higher ground is the Citadel (It. *Collachio*) on the Hellenic acropolis, with the remains of the Cathedral of S. John and the Grand Master's Palace. South of this, and west of the Jewish quarter, is the Turkish quarter, with the principal mosques and several small open spaces. The Commercial Port is separated from the city by a strong curtain-wall, with S. Catharine's Gate (*Marina*) midway, near the custom-house, and the Arsenal Gate at the west end, opening on the earlier war-harbour of the Knights; later, the war galleys lay in the Mandráki. From the Grand Master's Palace towards the harbour, the famous Street of the Knights descends for 200 yards, lined with the Hostels (*Auberges*) of the principal 'Languages' (*Langues*) under which the

Rhodes: Kalithea Bay, looking north

Rhodes: Trianda Bay, looking south from Brusali Beach, towards Phileremo

Rhodes City: General View from the Citadel, looking east over the Commercial Harbour

Rhodes City: the Arsenal Section of the Commercial Harbour, looking south-east, between St. Catharine's Gate and St. Paul's Gate



1. Hospital.
2. Residency.
3. Hotel (*Albergo delle Rose*).
4. Post-office.
5. Law-courts (*Giustizia*).
6. Italian Club.
7. Grand Master's Palace.
8. Street of the Knights (E.–W.).
9. Museum (*Infirmeria*).
10. S. Paul's Tower.
11. Arsenal.
12. Cervi Gate.
13. S. Peter's Tower.
14. D'Amboise Gate.
15. Cannon Gate (*Cannoni*).
16. S. George's Tower.
17. Spanish Tower (*T. di Spagna*).
18. S. Mary's (English) Gate.
19. S. John's (Kóskino) Gate.
20. Del Carretto Tower.
21. Windmills (*Molini*).
22. S. Catharine's Gate.

Knights were enrolled (see frontispiece). At its lower end is the Infirmary, built around a cloister court of two stories.

Outside the walls, from Acandia bay to the d'Amboise Gate, a continuous belt of Turkish and Jewish cemeteries full of tombstones and flowering trees separates the city from its suburbs, which cover the low ground south of Neokhóri (*Borgo nuovo*) and the converging slopes of Monte Smith, Ag. Joannis (*S. Giovanni*), and S. Anastasía, on the frontage of the plateau, full of gardens and houses, large and small, from sea to sea, and on either hand of the highway to Kóskino.

Principal monuments within the walls are the Palace of the Grand Master, destroyed by explosion in 1856 and recently excavated; the Latin Cathedral and Loggia of S. John, adjoining it, also ruinous; the Palaces of the Admiral, of the Armoury (now the municipal offices and public library), of the Arsenal, and of St. Catharine's Hospital; the Infirmary (now the museum); the Hostels (*Auberges*)

of England, France, Italy, Spain, Provence, and Auvergne; and the Castellania, a fine private house of the fifteenth century. Among the churches, now used as mosques, that of Ilch-Mihrat is Byzantine; others are in western Gothic styles.

The chief Italian buildings are the government offices, courts of justice, church of S. John, and the covered market (*Mercato*) all in the *Foro Italico* west of the Mandráki. The walls and medieval buildings have been carefully repaired, and the entrance to the Mandráki reconstructed. There are barracks near the government offices and outside the S. Athanasio Gate, and a large hotel (*Albergo delle Rose*) on the sand-spit. Within the walls little has been changed, but pavements and sanitation have been improved.

The population

The population, about 45,000 under Turkish rule, fell to about 37,000 in 1918, of whom 25,000 were Christians, 7,960 Moslems, and 3,960 Jews; but rose to 61,252 in 1937, including Alimnia island. The population of the city was 38,000 in 1912, including 4,500 Moslems and 2,500 Jews, but was only 17,466 in 1936.

The country population is Greek, except in the immediate neighbourhood of the city, where Asgúru, Kandíli, and a few smaller settlements are Turkish, and have their own economy and interests, subsidiary to the urban Turks. The Jews are practically confined to the city; Greeks and Italians occupy the suburbs Neokhóri (*Borgo nuovo*) and Ag. Joannis (*S. Giovanni*) west and south of it.

As in Cos and Carpathos, the country population is concentrated in large villages (of which six have 1,000–1,600 inhabitants), each the economic centre of a natural district, with its own combination of principal products and home industries. The villages are not much affected by official efforts to spread European and specifically Italian notions; but recent educational changes (pp. 41, 145) may influence the children, and better roads with motor transport make intercourse easier with the city. The principal villages are described under '*Habitable districts*' above (pp. 131–4).

Products

The country population is occupied in pasture and agriculture, especially vine, olive, and other fruit-crops and products. The

Turkish villages around the City of Rhodes have extensive gardens of fruit and vegetables, of which much goes to Egypt. Tobacco is grown for local use and sesame for export. There is much forest in the interior, and this, after long neglect, is being conserved and extended (p. 59). The manufactures and other industries of the Dodecanese are mostly in Rhodes, and are described in Chapter XI (pp. 51–2).

Communications

Roads. There are about 450 miles of road in the island, of which 375 are metalled and fit for motor-traffic.

Main routes from the City of Rhodes into the interior are:

(1) *The western highway* along the beach below Monte Smith and Mangávli towards Triánda (view facing p. 140); an inland road, running south from the d'Amboise Gate serves the Ag. Joannis suburb, rising on to the plateau, and joins this western highway through a gap in the escarpment about half-way to Triánda village (view facing p. 132).

(2) *The eastern highway* runs high on the eastern side of the plateau, crosses the head of the eastward valley (p. 139), south of Asgúru, and thence runs nearly straight south to Kalithéa village (8 m.).

(3) *The east coast road* serves the baths of Kalithéa south of C. Vódi and has a side-road to Kalithéa. The further course of these highways is described on pp. 131–4. The larger villages are served by unpaved roads, but wheeled transport is rare except near the city, and most of the tracks are for pack animals only.

Overseas routes. The Port of Rhodes is the principal centre of oversea communications for the whole of the Dodecanese and for foreign countries; see Chapter XIV (pp. 68–9) and the statistics in Chapter XIII (pp. 65–6).

Aviation. There are air-bases at Maritza, overlooking the north-west coast, at Kálathos north of Lindos, and at Kattávia, north of C. Prasó at the south end of the island. Others are projected (1939) at Massári, at S. Isídoro, south-east of M. Atáïro, and at Kremastó, north of Maritza. A seaplane base at Marras near the city has three

benzine tanks and a pipe-line to the pier for fuelling alongside. Other fuel stores are at Sálako (underground) and Kremastó.

There are telegraph cables from the city to Symi (for other islands); to Marmaris for the Turkish telegraph system in Anatolia; to Sitia in Crete for the Eastern Telegraph Company's system; and from C. Prasó to Carpathos.

Radio. The radio station is at Rodinó, south-east of the city, and a naval reception station is in Via dell' Immaculata in the Neokhóri (*Borgo nuovo*) west of the city. There is a signal-station at Castello for Alimnia.

The telephone system connects the city with the principal villages, but the only private lines are in and near the city itself.

Water-supply

The city is well supplied by the Roman aqueduct, repaired and improved, from a reservoir on the Rodinó upland, a few miles to the south-east. All the principal villages are supplied by wells and springs, and the houses usually have rain-cisterns. But there are few perennial streams, and those which flow in summer are precarious. In winter the streams are turbulent and muddy. There are warm medicinal springs at Kalithéa, and a bathing establishment.

Islands adjacent to Rhodes

West of C. Minas and north-west of C. Monólithos a chain of islands continues the mountain-range of Atáïro and Akromýtis. Of these the most westerly, Chalkí, was an independent state in antiquity, and was one of the privileged 'Twelve Islands'. Alimnia, lying nearer to Rhodes, is dependent on it. The two straits are each 4 miles wide.

Chalki

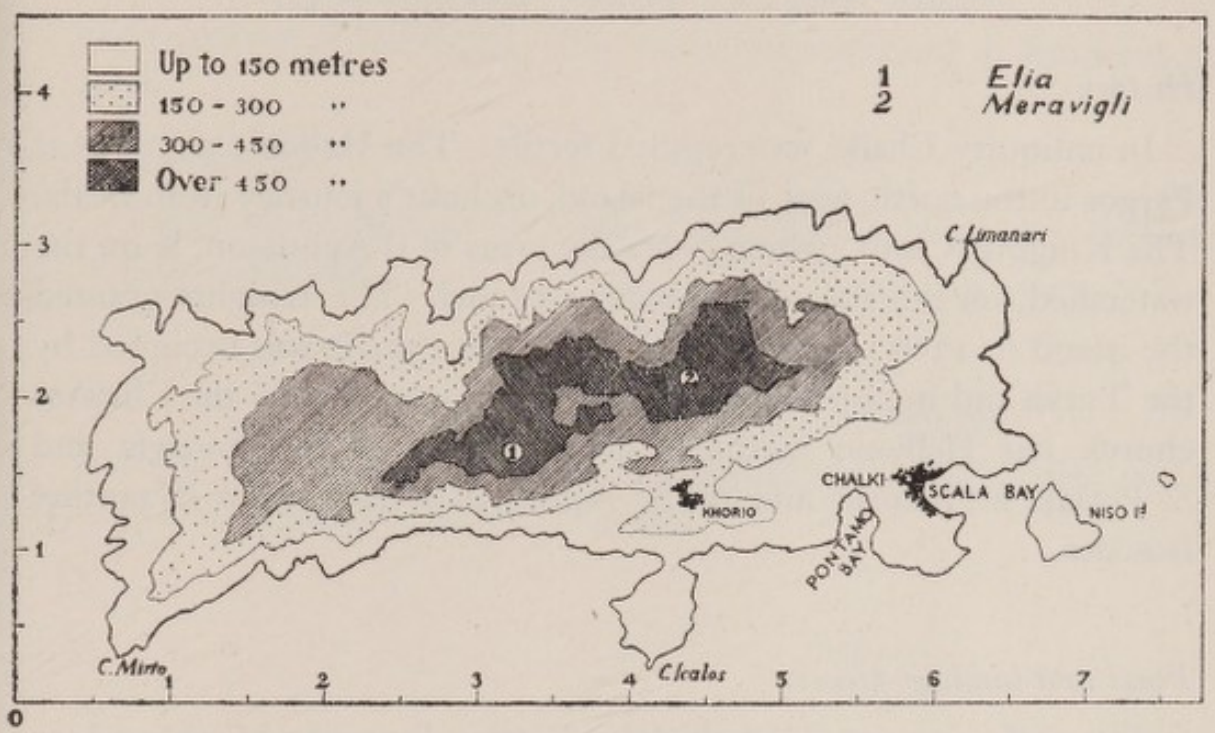
Alimnia

Compare the layered map on p. 147

CHALKI

(It. *Calchi*; Turk. *Harki*)

Lat. 36° 12′ to 36° 14½′ N., *long.* 27° 31′ to 27° 38′ E.; *length*, E.–W., 7 miles; *breadth*, N.–S., 3 miles; *area*, 12 square miles.



Chalki

Description

The island is rectangular, hilly, and barren. It consists of hard limestone overlaid with softer marls and shales, with some rough building-stone (*poros*). The watershed ridge runs obliquely from C. Mýrto in the south-west to C. Limanári in the north-east, rising to M. Elía (1,880 ft.) in the centre, and M. Meravígli (It. *Miroigli*: 1,950 ft.) farther east. The south coast is very steep, except a low peninsula ending in C. Ícalos, and connected by a low isthmus (25 ft.) and short beaches difficult of access, with the medieval fortress and village on the ridge (900 ft.). The north coast also is steep, but more indented, with several coves opening north. The west coast is more open, with small coves but no inhabitants. The east end of the island lies lower and is prolonged seaward in Nisó island and two islets, which screen the port (p. 146) in Scála bay opening south-east.

CHALKI PORT, looking N.E.

History

In antiquity Chalkí was reputed fertile. The Hellenic city was at Pyrgos in the north-west of the island, an hour's journey from Scála. The Knights' Castle, which bears the arms of d'Aubusson, is on the watershed, on the site of the ancient citadel. The Knights granted the island in 1366 to the Assanti family; in 1522 it was occupied by the Turks and became a 'privileged' island. At Khorió the Christos church has Hellenic marbles; the churches of the Panagía and S. Pelágia at Khorió and of S. Nicóla at Pyrgos have Byzantine frescoes.

Ports and landing-places

The *scala* or port of Chalkí (It. *Calchi*; formerly Nimborgió or Emporió) is at the east end of the island, in a bay opening south-east, and screened by Nisó island and two islets. West of this, beyond the modern village and a low neck of cultivated land (80 ft.), is another port (It. *Pontamo*, probably Gk. *Potamó*, 'river') opening south.

There are coves in the north and west coasts, but no other access, except the short beaches at C. Ícalos (p. 145).

Population

The population is Greek (4,000 (1912); 1,484 (1937); recently about 1,300, and now included in the census of Rhodes). Most of the men are sponge-fishers, frequenting Cyrenaic and Egyptian sponge-grounds. The old village, Khorió (It. *Corio*), is on the ridge, with mule-tracks to C. Ícalos and Potamó bay. The modern village, Chalki, is at Scála between the ports (v. above).

Products

Barley, wheat, olives, and almonds are grown, but most of the island is under pasture for sheep and goats.

Communications

There is a rough road between the two ports and a mule-track up to Khorió. Steamers call occasionally from Rhodes. There is a radio station at the Scála. There are radio stations at Emporió and Mýli.

Water-supply

There are no springs and only three wells; rain-water is collected in house-cisterns.

ALIMNIA

(*Limnióna*: It. *Alimnia*; Turk. *Alimniya*)

Lat. 36° 14′ to 36° 17′ N., *long.* 27° 41′ to 27° 44′ E.; *length*, N.–S., $2\frac{1}{2}$ miles; *breadth*, E.–W., 2 miles.

Alimnia

(3) *M. Vouni*; (4) *M. Vounaraki. Compare the hachured map facing p. 145.*

Description

The island lies 4 miles west of C. Minas on the west coast of Rhodes and 4 miles north-west of C. Monólithos, with two islets, Makri and Strongylí, midway in the strait. With these, and Chalkí (p. 145), 4 miles farther west, it prolongs the Atáïro-Akromýtis range in Rhodes, and consists of two parts:

(1) On the north a continuous ridge runs from C. Cazzúni (? Gk. *Kantouni*, 'corner') to west-south-west to C. Mérminga ('the ant', from the sprawling spit in which it ends, It. *Mermica*). This range rises to M. Voúni ('the hill': 870 ft.), in the centre, and Vounaráki (Gk. 'little hill': It. *Vounaragi*: 700 ft.). It is precipitous to south-east and slopes steeply into deep water to north-west, with rocky shore and one small open cove. This part of the island is uncultivated. The medieval castle on the east slope of M. Voúni is ruinous and uninhabited.

(2) To south-east and south, a lower ridge with hummocks not exceeding 300 feet, and rocky shores, is nearly divided near its south end by deep coves and a narrow isthmus of a few yards. On a wider neck, rising to 100 feet between Emporió cove with a short beach opening east, and Alimnia bay opening south-west, is Alimnia village, on the hill-side facing east, with a beach of 400 yards, behind which are gardens and plantations.

Ports and landing-places

Between these two parts of the island is Alimnia bay, 1½ miles from north-east to south-west, opening south-west with a channel about 500 yards wide: the south-east point, and the inner spur with S. Minas' chapel, are foul. There is anchorage and landing for boats at Emporió as well as in Alimnia bay. Destroyers and submarines anchor in the bight on the east side of Alimnia bay, where there are underground fuel-tanks.

Population

The population (included in the total for Rhodes, p. 142) is Greek, and maintains itself by pasture, farming, and fishing.

Communications

There are no roads. Sailing-vessels go to and from the landing-place at C. Kopriá in Rhodes. Steamers from Rhodes call occasionally. There is a radio station, and heliograph to Kastello in Rhodes.

Water-supply

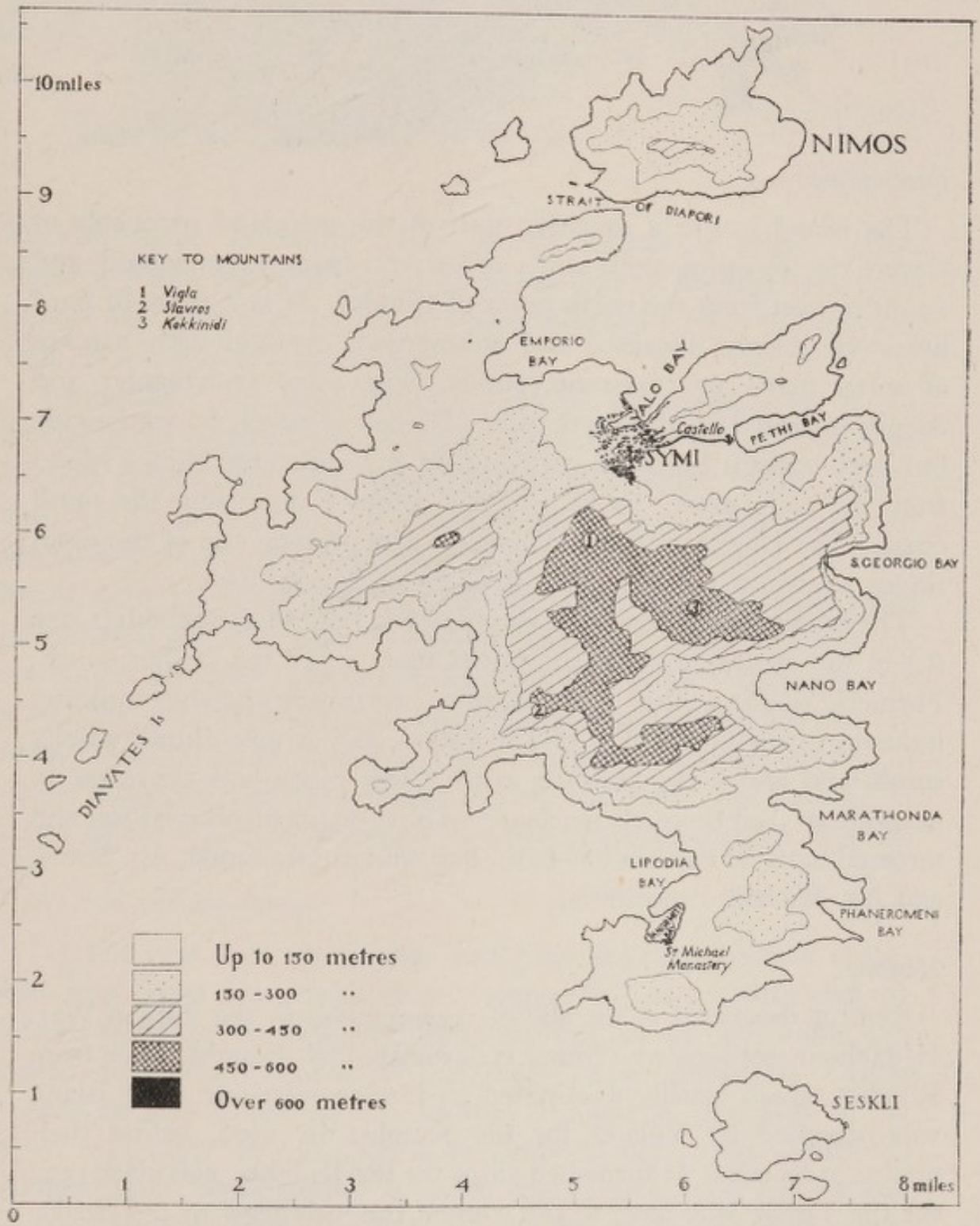
There are no streams or springs, but the houses have rain-cisterns.

Symi

SYMI

(It. *Simi*; Turk. *Sömbeki*)

Lat. 36° 32′ to 36° 40′ N., *long.* 27° 46′ to 27° 53′ E.; *length*, N.–S., 8 miles; *breadth*, E.–W., 7 miles; *area*, 25 square miles.



Symi

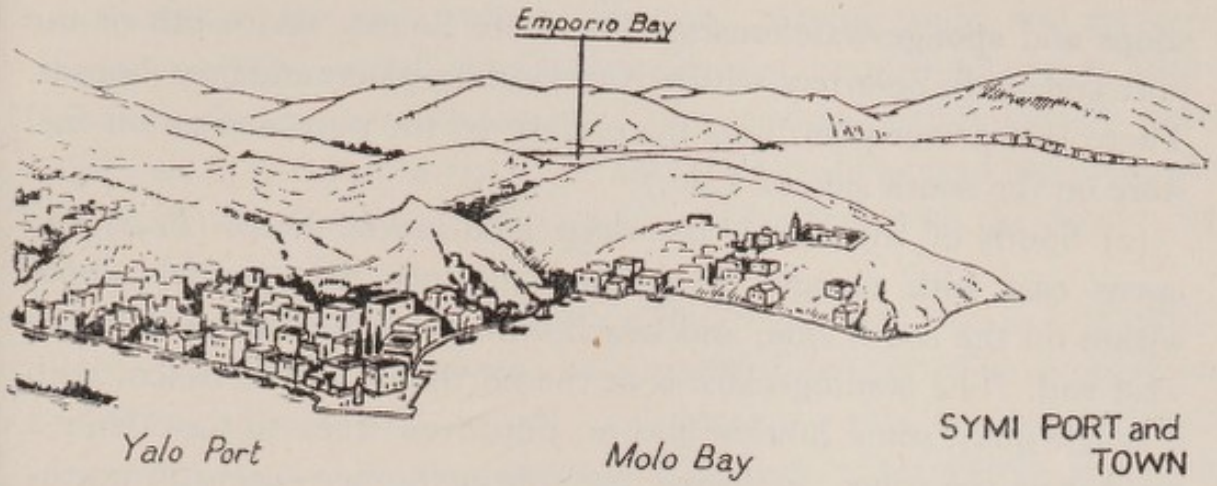
Description

The island lies in a southern gulf of the mainland peninsula of Cavo Crio, 4½ miles south and 4 miles west from the mainland, and 15 miles west from the north point of Rhodes. It is a mass of hard limestone deeply dissected and submerged, overlaid with patches of softer marls and ragstone (*poros*). The coast is irregular and deeply indented on the north side. Diapóri channel, 60 yards wide but deep enough for small craft (12–15 ft.), separates Nímos island from the main mass. Seskli island is about ½ mile from the south coast. The Diavátes (Adm. *Navales*) islets prolong one of the main ridges westward for two miles in front of Lipóra bay.

The highest points are M. Vígla (2,053 ft.) and M. Kokkinídi (1,949 ft.) in the centre, and M. Stavros (*Croce*: 1,755 ft.) farther south. Formerly rich in timber, Symi sacrificed its forests and ship-building industry in the Greek War of Liberation, and is now almost wholly scrub-land and rocky pasture, with a few pines and cypresses in deep glens. But there are gardens and olive-yards on alluvial soil and terraced marl, at the head of Péthi bay, and at Drakunda, Ag. Sotiri, and Ag. Michael Panormítis.

History

Symi is described as an ally of Agamemnon in the Trojan War. Its Hellenic settlers, who found it devastated by drought, came from Rhodes, which usually dominated its foreign relations. The island was occupied by Villaret for the Knights in 1309, before their arrival in Rhodes. It furnished ships for the Knights, and after 1522 for the Turks, who gave to the women the 'privilege' of red cloaks, because they had provided bread for the besiegers of Rhodes. The



Turkish name Sömbeki refers to its output of ships. When Turkish policy changed (p. 37) Symi was one of the first islands to protest and give trouble, and it was occupied by force in 1855 and 1909; it has troubled the Italians also.

Antiquities. The only Hellenic remains are foundations of the citadel in the medieval Castello, and of a temple of Athena under the Panagía church; there are also early Hellenic tombs. The Castello was rebuilt or enlarged by d'Aubusson in 1507. The Panormíti monastery-church, founded by two brothers, Neophytus and Callistus, in the eighteenth century, has one of the three wooden screens (*ikonostasis*) carved by Maestro Diaco Tagliaduro of Cos: the others are one in Jerusalem and one in a church in Russia. The monastery now belongs to the municipality of Symi, and the school-teachers are maintained out of its revenues. Votive objects, especially models of ships, dedicated and thrown into the sea elsewhere, are believed to come ashore in Panormíti bay, as its name ('harbour for all') suggests.

Ports and landing-places

(1) The port is in the narrow Yaló ('beach') inlet opening north-east into Symi bay. It is deep, steep-sided, and surrounded by houses from the water's edge upwards: but on the north side is a paved quay where vessels of 300 tons can go alongside. Larger vessels anchor outside and are secured to bollards, or anchor in the open cove north of the port, or in Emporió bay (Adm. *Nemborió*) farther north, where there is some open beach, with houses and gardens inland. At the head of the port is a beach and open space, formerly occupied by a dockyard (*tarsana*), and surrounded by repair

shops and sponge-warehouses. There are houses also south of the port, and on the open bay, with private landing-places and boat-houses. There is a power-plant near the church by the port, and an oil-fuel store on the south side of Yaló.

(2) South of Symi bay, the deep land-locked Péthi (*Pedi*) bay opens east with narrow precipitous entrance, but gentler slopes within on the south side, and beach with some level ground at the west end. The landing-place is at the north end of the beach, with a rough quay, some houses, and an improved track to the Alemína quarter on the ridge. Péthi bay has safe anchorage except in north-east winds, which bring squalls.

(3) Panieró (*Panormíti*) bay is a land-locked cove opening north-west into Lipódia bay, and safe for small vessels except in north-west winds. The holding-ground is not good. There is open beach in the cove and along Lipódia bay northward.

Population

The population is Greek (23,000 in 1912; 6,303 in 1937) and lives almost wholly in the town, which occupies the steep sides of the port. The oldest quarter, Alemína, is around the medieval castle (500 ft.) on the narrow ridge between the port of Yaló and Péthi bay. Other suburbs spread north to Emporió anchorage. At the head of Yaló port is the Tarsaná dockyard area with the sponge-warehouses.

The only other settlement is around the monastery of Ag. Michael Panormítis in Lipódia bay. This is frequented, chiefly in summer, by people from the town, and formerly also from oversea; for there are many emigrants from Symi in Greece, Egypt, and South America.

There are also homesteads and gardens in Marathónda (*Maratonda*) bay, opening east in the southern promontory of the island; and Italian barracks at Kampos, Drakónda, between Yaló and Emporió, and Ag. Vasíli (*Basilio*) bay on the west coast.

Products

In so barren an island there is little cultivation, but honey, butter, and cheese are made, and imported tobacco is worked. When fuel is to be had, there is lime-burning. The people of Symi very largely

depended in the past on ship-building, carrying-trade, and sponge-fishing, which employed some hundreds of persons ashore, in addition to the divers and crews. Five hundred sailing-vessels were still owned in Symi in 1922. While the ships belong to the men, the house is the woman's portion and is inherited, with the dowry, by the eldest daughter.

Under Turkish rule, and probably long before, the lack of cultivable soil in the island was compensated by extensive acquisition of farms, plantations, woods, and grazing rights on the mainland opposite. Under Italian administration, intercourse with these estates has been suspended, and great hardship has ensued.

Communications

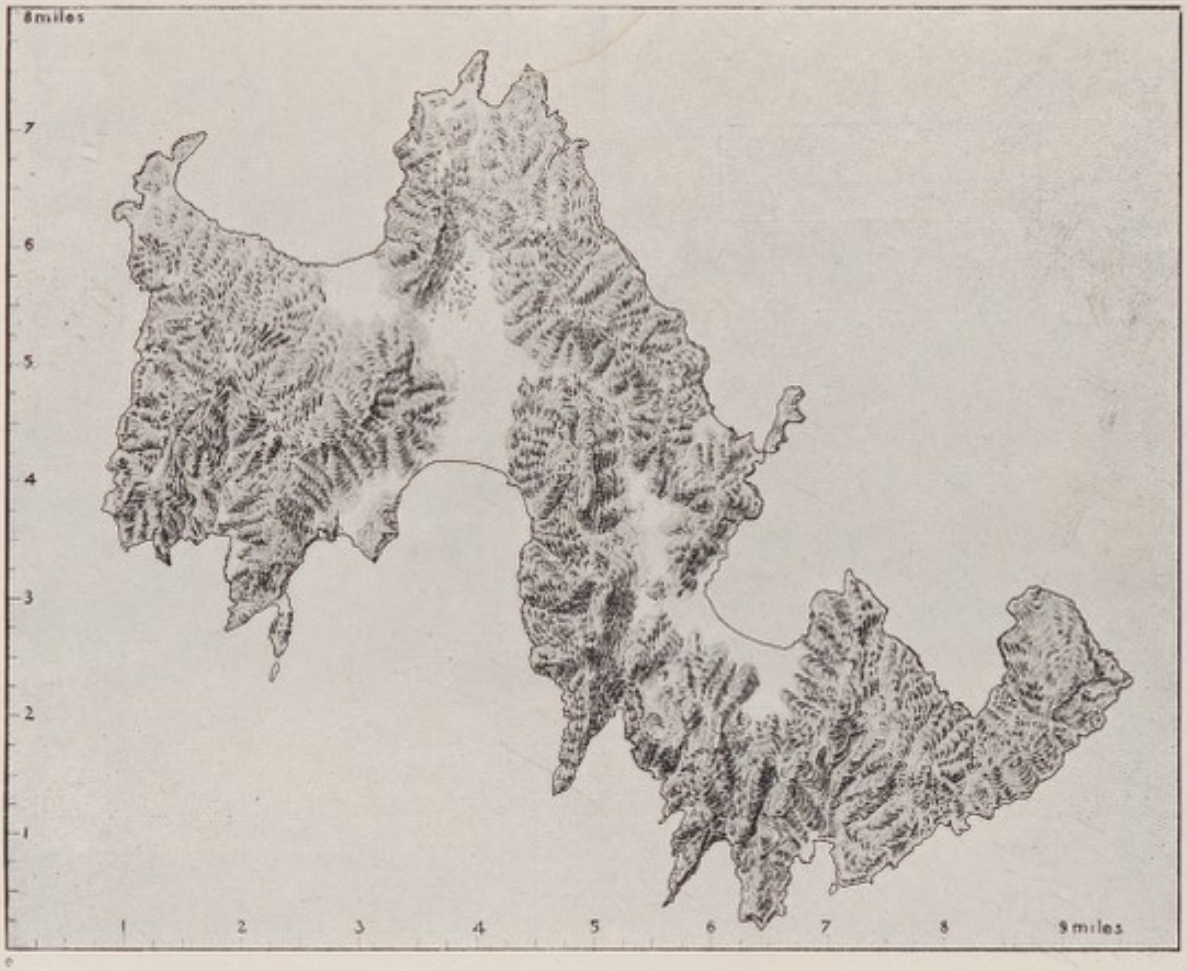
There are no roads except round Symi bay, but mule-tracks between Emporió, Yaló, and Péthi, and from the town to Ag. Michael Panormítis monastery.

Steamers call from Rhodes and Cos, and as required to load sponges for Egypt and Europe. There are seaplane stations at Emporió and in Symi bay, but no equipment.

There is a cable landing at Panormíti to Rhodes and to Telos: radio stations at Symi port and at Panormíti, south of the harbour: heliograph, for Rhodes and other islands, at Platí island, Seskli island, and Ag. Joannis tis Schistis on a height overlooking Seskli strait.

Water-supply

There are no streams or important springs, but the houses have rain-cisterns.

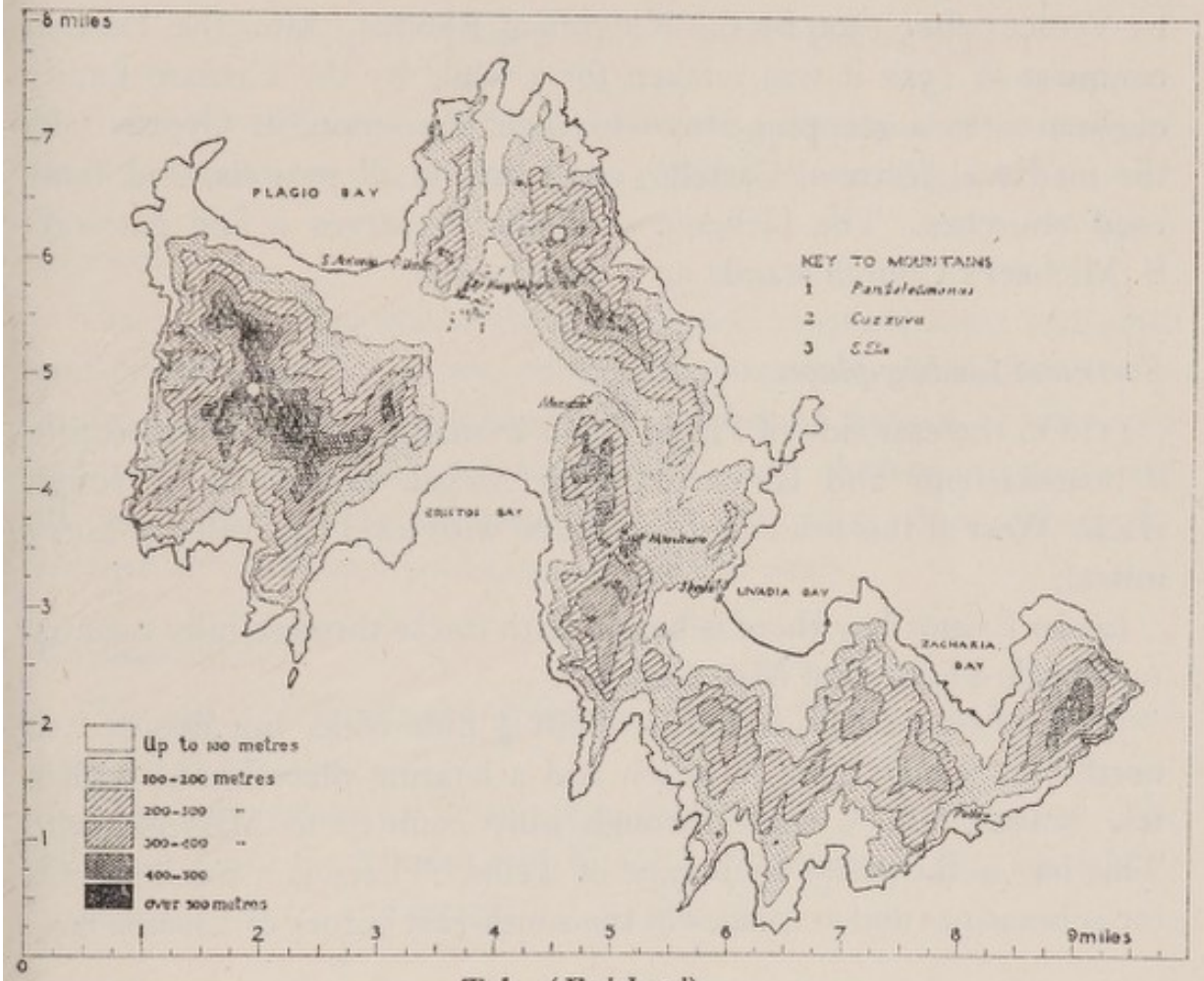


Telos (Episkopi)

TELOS

(Med. *Episkopi*, 'look-out'; It. *Piskopi*; Turk. *Tilos*)

Lat. 36° 22′ to 36° 29′ N., *long.* 27° 18′ to 27° 27′ E.; *length*, NE.–SW., 9 miles; *breadth*, N.–S., 5 miles (max.); *area*, 23 square miles.



Telos (*Episkopi*)

Description

The island is an irregular mass of hard limestone, with patches of softer limestones and volcanic deposits in the fertile lowlands between Plagió (Ag. Antonios) and Éristos bays, and round Livádia bay. The remainder is mountainous, rising to M. Ag. Elias (*Profít-Elía*: 2,136 ft.) in the extreme west, M. Panteleémonas (1,860 ft.) in the centre, another M. Profít-Elía east of Megálo-khorió village (1,558 ft.), and M. Kutsilitsúmba (*Cuzzuva*) in the extreme east.

The coast is indented with many bays, but much is high cliff,

especially in the north-west; the only beaches are in Éristos, Plagió, and Livádia bays, with landing-coves at the two latter.

Offshore lie the islets of Gaídaro to north-west and Anti-Tílo to south-east and some smaller ones.

History

In antiquity Telos was unimportant. After A.D. 1204 it was occupied by Venice; after 1300 by the Knights of Rhodes. After the Turkish conquest in 1522 it was retaken for a while by the Carnaro family of Venice as a stepping-stone to their dominion in Cyprus. In the medieval fortress, Castello, are ruins of all periods, and frescoed churches. The Hellenic acropolis preserves a fine gateway. S. Michael's Church stands on a temple-site.

Ports and landing-places

(1) On the east side of Plagió bay is a small jetty (*scála*) protecting a boat-harbour and connected with Megálo-khorió by a rough track. West of this is a long open beach with level cultivated country inland.

(2) In Éristos bay there is beach, with tracks through hilly country to Megálo-khorió and Mikró-khorió.

(3) In Livádia bay, which is about ¾ mile wide, but exposed to north-east winds, there is beach and a landing-place (*scála*) with a few houses, and a track through hilly country to Mikró-khorió. This bay is the safest anchorage of Telos. There is a small station for submarines and seaplanes in the south-east corner of Livádia bay.

Population

The population (2,000 in 1912; 1,229 in 1937) is Greek. Of the two villages, Megálo-khorió, the residence of the local authorities, lies at 328 feet on the hill-side looking south toward Éristos bay, at 1¼ miles from the Scála landing-place in Plagió bay, from which it is invisible. Mikró-khorió, at 492 feet, lies east of the ridge which separates Éristos bay from Livádia, 1½ miles from the *scála* in the latter. At this landing-place, and along the beach, are a few houses; also a small summer settlement at Ierá-Póthi in Ag. Zacharías (*San Zaccaría*) bay, in the valley west of M. Cúzzuva. The garrison

TELOS. Megalokhorio village and Castle, looking N.E.

has barracks at Éristos village, and there is a naval guardhouse opposite the monastery of Ag. Antonios at the Scála in Plagió bay.

Products

The island raises goats, sheep, and cows; exports asses and pigs, and produces grain, grapes, olives, almonds, figs, and honey, mostly in the plain between the villages. There is some fishing. The people live more or less in economic isolation; even clothes and shoes are made locally. In the crowded villages the rocky lanes are supplemented by stairs and paths over the house-roofs.

Communications

There is a carriage road, from the Scála in Plagió bay, by Megálokhorió, to Livádia.

There are occasional steamers to Rhodes and to Nisyros and Cos: cable to Symi for Rhodes and Cos: radio station at Ag. Elías; and heliograph there, and south of Livádia bay.

Water-supply

Water is supplied by springs and cisterns: it is not abundant. Good drinking-water is found at the Messariá spring, off the track half-way to Mikró-khorió.

INDEXES

I. GENERAL

II. PLACE-NAMES

B. = bay or cove; C. = cape; M. = mountain or hill; Mon. = monastery; V. = village. Where two or more places bear the same name, they are distinguished by the names of their islands. Italian map-names are printed in *italic*.

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