

THE AUSTRALIAN PALIOCHORA–KYTHERA  
ARCHAEOLOGICAL SURVEY FIELD SEASONS 1999-2000\*

INTRODUCTION

The island of Kythera, situated south of the Peloponnese and north of Crete (**fig.1**), boasts no great antiquities or famous historical figures. As a result, the island has received, until

\* APKAS operates under the auspices of the Australian Archaeological Institute in Athens, with survey permits from the Greek Ministry of Culture through the Second Ephoreia of Prehistoric and Classical Antiquities, the First Ephoreia of Byzantine and Post-Byzantine Antiquities, and the First Ephoreia of Modern Monuments. Special thanks are due to Emeritus Professor Alexander Cambitoglou, Director of the AAI, and to Aris Tsaravopoulos of the Second Ephoreia of Prehistoric and Classical Antiquities as well as to Elene Gini-Tsophopoulou, Marina Papademetriou, and Nicholas Vardas of the First Ephoreia of Byzantine and Post-Byzantine Antiquities. Funding was provided by the Sydney-based Nicholas Anthony Aroney Trust and Dumbarton Oaks Center for Byzantine Studies of Washington, D.C. In Kythera we

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The project was originally conceived by Timothy E. Gregory, Lita Diacopoulos, and Cosmos Coroneos. The director (1999–2001) is Ian Johnson, and the project receives infrastructural support from the Sydney University Archaeological Computing Laboratory and from the Ohio State University Excavations at Isthmia.

Field season volunteers were Lara Bosi, Kris Farrant, Kate Fraser, Andrew Kirkwood, Fiona Leslie, Gerry McArdle, Suzanna Pembroke, Carol Robinson, and Gina Scheer for 1999; Anthony Miller and Gina Scheer for 2000.

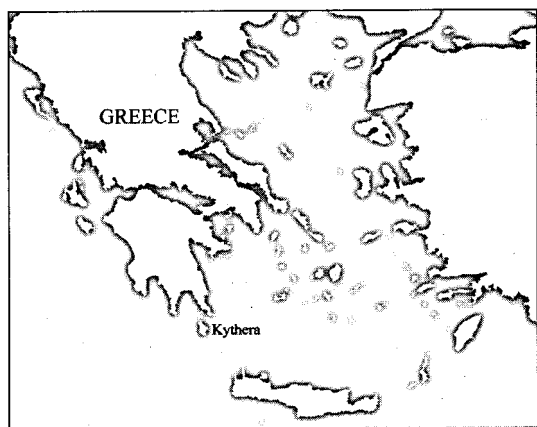


Figure 1. Greece and the Aegean, with Kythera south of the Peloponnese. Not to scale.

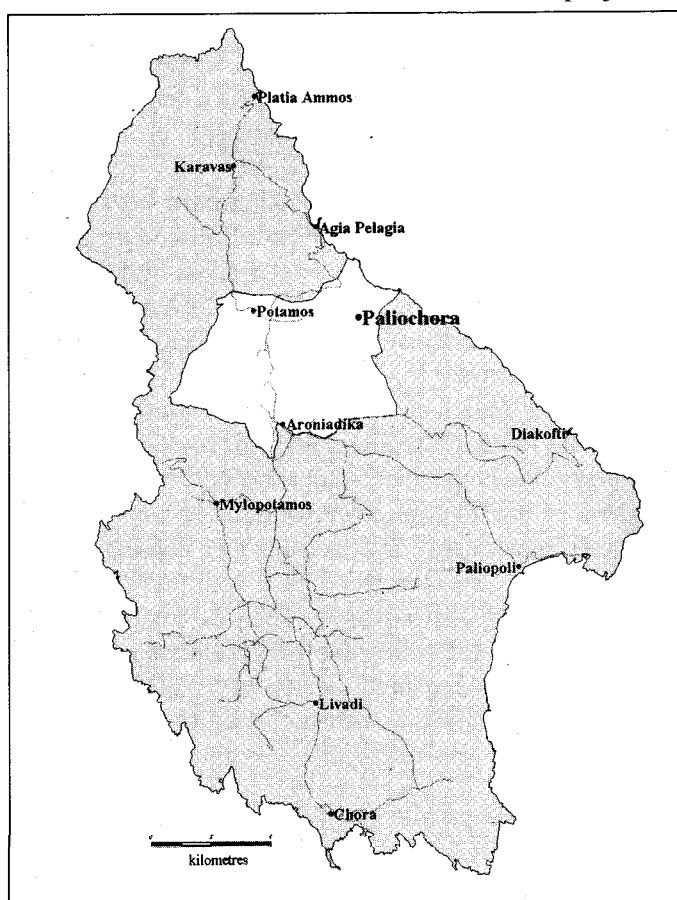


Figure 2. Kythera, with original survey area. 1:250,000.

recently, only limited archaeological and historical attention. New discoveries, however, and a realization of Kythera's importance as a cultural and commercial crossroads have led to an increased interest in the study of human interaction with the natural environment of Kythera.<sup>1</sup>

The Australian Paliochora-Kythera Archaeological Survey (APKAS) is designed to investigate the broad question of the relationship between fortified centres and their hinterlands, testing alternative hypotheses for site location and the factors influencing occupation and abandonment of sites. The project focuses on the area surrounding the

abandoned site of Paliochora (medieval Ayios Demetrios), in the north-eastern part of the island (fig. 2).<sup>2</sup>

Traditionally it has been assumed that fortified centres, particularly medieval castles, existed primarily for purposes of defence, and that military considerations were the pre-eminent concerns for their location and existence. Our project is designed to test this hypothesis against other possible explanations of fortified settlements, especially in the island environments of the Aegean area, but with ramifications for other parts of the world.

The project seeks to address fundamental theoretical questions relating to factors affecting settlement location and to challenge simplistic notions of static landscape optima and the primacy of specific events. It examines the settlement and surrounding landscape as a

<sup>1</sup> For the history and the archaeology of Kythera, see J. N. Coldstream-G. L. Huxley, *Kythera: Excavations and Studies conducted by the University of Pennsylvania Museum and the British School at Athens* (1972); I. Petrocheilos, *Τά Κύθηρα από τήν Προϊστορική*

*Έποχή ως τή Ρωμαιοκρατία* (1984); p. Tsitsiliās, *Η Ιστορία των Κυθήρων* 2 vols., *Εταιρεία Κυθηραϊκών Μελετών* 22 (1993-94).

<sup>2</sup> The best introduction to the medieval history of Kythera is J. Herrin, 'Byzantine Kythera', in: Coldstream-Huxley

system, the reasons for establishing this system, the structure of the system at its prime, and investigates its decline in the context of instability induced by a catastrophic event (in this case the sack of Paliochora in 1537).

The present study complements an archaeological investigation carried out by the British School of Archaeology at Athens within the site of Paliochora.<sup>3</sup> While that study consisted primarily of an architectural survey of the primary site of Paliochora (Ayios Demetrios), our project focuses on the territory surrounding the site. In addition, APKAS complements the Kythera Island Project, the archaeological survey currently being conducted by the British School under the direction of Cyprian Broodbank.<sup>4</sup> While the Kythera Island Project investigates the east-central part of Kythera, with a primary focus on the Minoan period, the APKAS survey area is to the north (the two surveys share a common border along the road between Aroniadika and the Kythera airport) and the focus is more particularly on the medieval/modern periods. The two surveys are, of course, both diachronic, despite their period-based primary research questions.

## OBJECTIVES

The primary objective of APKAS is to analyse the settlement history of northern Kythera, from remotest antiquity until the present. This area is of particular importance since it forms a natural borderland between the Peloponnese and Crete on one hand and, on the other, between the Aegean and the western Mediterranean.

Kythera belongs to the Ionian Islands, a group of seven islands dominated between the 13th and the 18th century by Venice; these include Kerkyra, Kephallonia, Zakynthos, Lephkas, Ithaka, and Paxos, along with Kythera. Geographically isolated from these islands, Kythera is situated approximately 70 km west of Cape Malea, the south-eastern tip of the Peloponnese. Given its location, the island displays characteristics reminiscent of both the verdant Ionian islands and the barren Cyclades, but excels in neither attribute.

Kythera straddles the sea passage between the mainland and Crete. This stretch of water forms the passage between the Aegean and the Ionian Sea, and is a major route, linking the eastern and western Mediterranean. Its strategic location is such that for much of its recorded history the island has been under the control of one foreign power or another, and when no such power existed Kythera dropped out of the historical record, perhaps as a consequence of its being totally abandoned.

One of the largest of the Greek islands, measuring approximately 30 by 20 km, Kythera is hilly and scrubby with modern population centres reflecting the distinct physiographical zones.<sup>5</sup> The relationship of human activity with environment is evident throughout the study area. Northern Kythera in particular is extensively terraced, with both ruined and occupied

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op. cit. 41–51; cf. Ch. Maltezos, 'A Contribution to the Historical Geography of the Island of Kythira during the Venetian Occupation', in: A. E. Laiou-Thomadakis (ed.), *Charanis Studies. Essays in Honor of Peter Charanis* (1980) 161–75; E. Gkine-Tsophopoulou, 'Σχόλια σε εικόνα από νότο του Κάστρου της Χώρας Κυθήρων', *ADelt* 44–46, 1989–1991, A'-Meletes, esp. 184–9; M. Chatzidakis–I. Bitha, *Ευρετήριο Βυζαντινών Τοιχογραφιών Ελλάδος. Κύθηρα* (1997).

<sup>3</sup> G. E. Ince *et al.*, 'Paliochora: Survey of a Byzantine City on the Island of Kythera. Preliminary Report', *BSA* 82, 1987,

95–106; id., 'Paliochora: Survey of a Byzantine City on the Island of Kythera. Second Report', *BSA* 84, 1989, 407–16; Th. Koukoulis, 'A Late Byzantine Windmill at Kythera', in: J. M. Sanders (ed.), *ΦΙΛΟΛΑΚΩΝ: Lakonian Studies in Honour of Hector Catling* (1992) 155–63.

<sup>4</sup> C. Broodbank, 'Kythera Survey: Preliminary Report on the 1998 Season', *BSA* 94, 1999, 191–214. Cf. C. Broodbank, *An Island Archaeology of the Early Cyclades* (2000) 308–9, 317, 354–5, 359.

<sup>5</sup> R. Leonhard, *Die Insel Kythera: eine geographische Monographie* (1898, repr. 1983).

hamlets, farmsteads, and field houses observed on top of almost every spur, the size of the settlement being limited, and hence determined, by the development space—the width of the spur-top: the narrower the spur-top, the smaller the settlement. Much of the island is densely vegetated, having reverted to a 'natural' state following abandonment of the cultural land uses. Spiny plants (ἀσπάλθος) now dominate the land cover, although outlier patches of cleared ground are cultivated, primarily for olives.

South of Potamos and north of Aroniadika, the central divide is today the most heavily cultivated region within the study area. This region abounds in field walls, with terrace walls spaced far apart due to the shallow gradient. Cultural activity is most evident east of the divide and south of Potamos. Along the scalloped edges of the plateau, where the gullies begin to form, and are therefore still broad and shallow, check dams (terrace walls built across a gully) are the rule rather than the exception. Remains of water mills are present in valleys on both sides of the central ridge north of Potamos, but are not as common to the south.

Most of the present-day villages and towns are situated at the interface between the plateau and the spur/gully complexes. The siting and existence of sizable settlements along the periphery of the plateau is no doubt due to the desire to exploit the diverse economic opportunities provided by the dramatic changes in topography. As observed in the northern half of the study area, the settlements along the spur-tops decrease in size, from hamlets to farmsteads to field houses, with distance from the central plateau, a consequence of the narrowing of the tops of the spurs. This trend is much more elongated west of the plateau, as the spurs tend to retain their broad-topped nature for greater distances downstream. The frequency of isolated or field churches built along the ridge tops appears to be much greater in the southern half of the study area than in the northern half.

The only exception to this observation on currently visible settlement siting is Paliochora. Paliochora is comparable in size to the larger of the villages scattered along the edge of the central plateau, but it was built on a knoll at the extreme end of a spur that extends from the eastern edge of the plateau. This is but one of the many peculiarities that sets Paliochora apart from existing settlements in the study area. The site, however, does share one characteristic with that of other known settlements; it is positioned at the cusp of a dramatic change in topography. Paliochora and the small knoll it rests on are dwarfed by the gorge and its sheer limestone cliffs rising on the east. These cliffs are part of a hard limestone massif that commences from outside the south-east corner of the study area, extending toward the north-west, ending at Vythoulas, the main hill overlooking Ayia Pelagia. In the past this limestone 'wall' obstructed communication between the central plateau and the sea, as the eastern, or shore, side of this limestone zone forms a precipitous barrier. This barrier is breached in only a few places, Paliochora being perched at the entrance to the most spectacular of these chasms, Kako Lagadi. It is through this breach that the streams of the central plateau drain toward the sea.

The western plateaux, located north and east of Paliochora, appear to be essentially barren limestone outcrops. Closer inspection reveals the common pockets of red soil. The soil pockets were terraced and cultivated in the past and are of uncertain antiquity. The most common cultural activity played out on this landscape today is that of animal husbandry, although the maze of field walls, limekilns, and watermills suggest different and more intensive uses in the past.

The less precipitous nature of the ridge complex in the north-eastern quadrant of the study area gives way to low hillocks and a very narrow coastal plain behind and around the present-day town of Ayia Pelagia. This nucleated settlement is a contemporary phenomenon, and the visible building remains suggest a sparse and temporary habitation in this coastal area in the more distant past.

## HISTORY OF KYTHERA

The earliest recorded sites on the island date back to the Early Helladic period. These have been found in the northern part of the island, at Pyreatides and Vythoulas.<sup>6</sup> The most significant site from Bronze Age Kythera, however, is the Minoan colony of Kastri, partly excavated by J. N. Coldstream and G. L. Huxley in the 1960s,<sup>7</sup> whose environs have now been surveyed by Broodbank. Established perhaps as early as the start of the second millennium BC, the town reached its peak during the Middle Minoan period. Study of the Kastri area has contributed greatly to an understanding of Minoan mercantile activities in the middle of the second millennium as well as Kythera's place within the wider trade and political system of the Aegean and Mediterranean world during the Bronze Age. In 1993, I. Sakellarakis carried out excavations on the Minoan peak-top sanctuary at Ayios Georgios tou Vounou, adding considerably to our knowledge of Cretan influence on the island and stirring greater interest in the prehistoric period on Kythera.<sup>8</sup> Late Bronze Age settlement was not confined to the immediate hinterland around Kastri. Sites of that age have been recorded at Lioni and Kalamos,<sup>9</sup> and a Minoan tomb at Karavas has been recently excavated by the Archaeological Service.<sup>10</sup>

The settlement of Kastri, and possibly the whole island, appears to have been abandoned sometime towards the end of the Late Bronze Age.<sup>11</sup> Recent work by I. Petrocheilos at Paliokastro has revealed traces of an important sanctuary of Geometric date, possibly the temple identified by Herodotus (I 105) as having been built by the Phoenicians,<sup>12</sup> but there is little other evidence of activity on the island in the Geometric–Archaic periods. From about 600 BC information becomes somewhat more plentiful.<sup>13</sup> It was in this period that Herodotus (I 82) states that Kythera belonged to Argos.<sup>14</sup> Afterwards Kythera fell under Spartan influence. Thucydides (IV 53) states that the island's population at this time was Lacedaemonian, and perioecic in status. The island, he says, was a port for merchant ships from Egypt and Libya and also served to protect Laconia from attacks by pirates. A recent find of a cache of coins, approximately 220 in number, from various Mediterranean and Black Sea mints, ranging in date from the late 4th century BC to the beginning of the 1st century AD, on the islet of Antidragonara off the central eastern coast of Kythera, as well as a possible altar site on the islet, indicate that this was a popular location for passing mariners and a safe

<sup>6</sup> H. Waterhouse–R. Hope-Simpson, 'Prehistoric Laconia, Part II', *BSA* 56, 1961, 149; Petrocheilos *op. cit.* (n. 1) 55–6.

<sup>7</sup> *Seen. 1.*

<sup>8</sup> I. Sakellarakis, 'Minoan Religious Influence in the Aegean: the Case of Kythera', *BSA* 91, 1996, 81–99; 'Τό μινωικό ιερό κορυφής των Κυθήρων', in: Λοιβή: Τογος εις μνήμην Α. Γ. Καλοκαιρινού (1994) 195–203; 'Μινωικό χάλκινο ειδώλιο σκορπιού από τὰ Κύθηρα', in: B. Chr. Petrakos (ed.), *Exatvos 'Iωάννου Κ. Παπαδημητρίου* (1997) 423–72; Y. Sakellarakis–J.-P. Olivier, 'Un vase en pierre avec inscription en linéaire A du sanctuaire de sommet minoen de Cythère', *BCH* 118, 1994, 353–1; A. Banou, 'Τα λίθινα αντικείμενα από το μινωικό τερο κορυφής στον Άη-Γιώργη στο Βουνό', *Πεπραγμένα Η' Διεθνούς Κρητολογικού Συνεδρίου*, 9–14 Σεπτεμβρίου 1996. Προϊστορική και Αρχαία Ελληνική Περίοδος, *Topos A2* (2002) 383–94; I. Tournavitou, 'Μινωικό ιερό κορυφής στα Κύθηρα: Η κεραμεική', *Πεπραγμένα Η Διεθνούς Κρητο-*

*λογικού Συνεδρίου*, 9–14 Σεπτεμβρίου 1996. Προϊστορική και Αρχαία Ελληνική Περίοδος, *Topos A3* (2002) 297–316.

<sup>9</sup> S. Benton, 'The Ionian Islands', *BSA* 32, 1931–2, 213–46; Waterhouse–Hope-Simpson *art. cit.* 114–75; Petrocheilos *op. cit.* (n. 1) 89–90.

<sup>10</sup> A. Tsaravopoulos, *pers. comm.*

<sup>11</sup> Huxley in Coldstream–Huxley *op. cit.* 37, 309.

<sup>12</sup> For preliminary reports, see I. Petrocheilos, 'Κύθηρα. Παλιόκαστρο', *Ergon* 40, 1993, 77–80; 'Επιφανειακή έρευνα στο Παλιόκαστρο Κυθήρων', *Prakt* 148, 1993, 154–61; further information on finds was given by Petrocheilos at the First International Congress of Kytherian Studies in 2000.

<sup>13</sup> Tsitsilias *op. cit.* (n. 1) I 89–120; Petrocheilos *op. cit.* (n. 1) 115–21.

<sup>14</sup> *Ibid.* 114–5.

spot to wait before attempting to round the infamous Cape Malea.<sup>15</sup> Although any authoritative suggestions regarding this coin find must await its final publication, it may be noted that its earliest pieces are dated to approximately the same period that saw mariners from various cities, mainly in the eastern Aegean, inscribe pleas for safe sailing (euploia) on the cliff face of a sheltered bay on Prote, a small islet off the south-western coast of the Peloponnese. D. Henning has recently drawn attention to this corpus of mariners' inscriptions, and while he notes that most date to the Roman period, the most ancient are contemporary with the earliest coins reported from Antidragonara.<sup>16</sup> These inscriptions along with the evidence provided by the wrecks along the coast of the southern Peloponnese and now the Antidragonara coins—dedications to Poseidon Gaieochos according to a suggestion of their excavator, A. N. Tsaravopoulos<sup>17</sup>—all point to the importance of the sea channel immediately to the north-east of the APKAS survey area as a corridor of movement of both people and goods. The discovery of stone anchors of the Classical period from around the Dragonares islets in 1993 confirms this assessment.<sup>18</sup>

Like the rest of Greece, Kythera was not spared in the conflicts between Sparta and Athens. The island changed hands at least six times during the Peloponnesian War, which underscores its critical strategic position, especially when the Athenians used it as a base from which to raid Laconia, an event foreseen by the Spartan Chilon who, according to Herodotus (VII 235), had said that it would be better for the Spartans if Kythera were to sink beneath the sea.<sup>19</sup>

The traces of a cart-road which its discoverer, Y. A. Pikoulas, interprets as part of the Laconian system dating to the Classical period is eloquent evidence of the Spartan interest in the island. The course of the road has been reconstructed as running from Skandeia (present-day Palaiopolis), the port of the Classical centre of Kythera, to a port on the north-east coast. While traces of this road have not as yet been found within the survey area, if the suggested course were to prove correct, a substantial part of the road ran through this very area.<sup>20</sup> The recent discovery at Chorokambos (Palaiopolis) of mid-5th century pottery sherds with graffiti that testify to the worship of Alea Athena, an Arkadian and Laconian deity, only reinforces the links of the island, especially its northern and north-eastern sectors, with the Peloponnese.<sup>21</sup>

The Hellenistic and Roman periods seem to have been a time of peace and prosperity for the island, as a number of sites from the periods have been recorded: at Vythoulas, Ellinika, Gonies, and Galati at Mitata.<sup>22</sup>

<sup>15</sup> A. N. Tsaravopoulos, 'Graffiti από τα Κύθηρα', *Horos* 13, 1999, 263 n. 5.

<sup>16</sup> 'Die antike Seehandelsroute um Kap Malea', *Münstersche Beiträge zur antiken Handelsgeschichte* 20, 2001, 23–37 (pp. 27 and 33 for dating of inscriptions), where the relevant shipwreck evidence is also noted.

<sup>17</sup> See above, n. 15.

<sup>18</sup> D. Kourkoumelis, 'Αναγνωριστική υποβρύχια έρευνα στη θαλάσσια περιοχή Αυλέμωνα Κυθήρων, περίοδος 1993', *Enalia* 4, 1992/1996, 6–11; id., 'Ανασκαφική έρευνα στη νησίδα Αντιδραγονέρα Κυθήρων (1994–5)', *Enalia* 5, 1993/1998, 3241; id., 'Les ancrés pyramidales en pierre. Problèmes et techniques d'ancrage des navires au IV<sup>e</sup> siècle av. J.-C.', in: J.-P. Brun-P. Jockey (eds.), *Τέχναι. Techniques et sociétés en Méditerranée. Hommage h Marie-Claire Amouretti* (2001)

649–61. The Dragonares passage appears to have also been important in the early modern period, as highlighted by the Ottoman admiral Piri Reis: see most recently D. Loupis, *Ο Πιρί Ρεΐς (1465–1553) Χαρτογραφεί το Αιγαίο. Η Οθωμανική Χαρτογραφία και η Λίμνη του Αιγαίου* (1999) 301 (MS Sileymaniye, Aya Sofya 2612 146a–146b).

<sup>19</sup> Huxley in: *Coldstream–Huxley op. cit.* (n. 1) 37–9.

<sup>20</sup> Y. A. Pikoulas, 'Κυθηραϊκά', *Horos* 13, 1999, 75 proposes either Plateia Ammos or Agia Pelagia as the northern terminus of the road, though he prefers the former.

<sup>21</sup> Tsaravopoulos art. cit. 261–3, where other sites which have been identified as loci of cult activity in the Classical period are also noted.

<sup>22</sup> *Waterhouse–Hope–Simpson art. cit.* (n. 6) 157; Huxley in: *Coldstream–Huxley op. cit.* (n. 1) 239; *Petrocheilos op. cit.* (n. 1) 121–4.

Early in the Byzantine period Kythera apparently underwent a catastrophic decline. It appears that Kastri and its hinterland started losing population from around the 4th century AD. The area was finally abandoned in the 7th century.<sup>23</sup> This appears to be the case also with the other sites on the island. This turn of events was reflected elsewhere in southern Greece during this period, as the Byzantine empire virtually abandoned southern Greece.

The resurgence of Byzantine military power in the 10th century, culminating in the recapture of Crete in 961, created conditions favourable for the repopulation of Kythera and its reintegration into the Byzantine empire.<sup>24</sup> The initial resettlement was begun by one man. According to his biography, Osios Theodoros arrived on the abandoned island in the middle of the 10th century and chose to live the rest of his hermitic life amongst the ruins of the Late Antique church of Sergios and Bakchos near Logothetianika.<sup>25</sup> Other immigrants followed after his death. It was in this period that the shadowy figure of Georgios Pachys emerged. Alternatively described as the Despot of Sparta or a Monemvasian citizen, Pachys appears to have encouraged the colonization of the island with Laconian immigrants.<sup>26</sup> For reasons that remain unclear Pachys handed over his interests to the powerful Monemvasian family of the Eudaimonoianis and retired to Mitata. A Eudaimonoianis governor meanwhile established himself in the Potamos area, where he built a tower.<sup>27</sup>

Paliochora, or Ayios Demetrios, was established at about this time. Throughout the 11th and 12th centuries the town developed into the administrative capital of the island.<sup>28</sup> The strategic position of Kythera was never made more apparent than in the division of the Byzantine empire amongst the victors of the Fourth Crusade, when the island was awarded to the Venetians.<sup>29</sup> Kythera was of critical importance to the Venetian sea empire, serving as a staging post between Venice and its possessions in the Levant.

Throughout the 13th century the political status of Kythera fluctuated, as the Venieri family (the appointed Venetian overlords of the island) and the Eudiamonoianis clan struggled for control.<sup>30</sup> A semblance of stability was achieved when the Venetian government took direct control of the island in 1363.<sup>31</sup> The Venetians established their power base on the island in the south, at Avlemonas and Chora. This was a logical choice, as both these locations had immediate access to fertile land, strong natural defences, and excellent harbours nearby, three critical characteristics that Ayios Demetrios appears to lack.

With this shift in the political and economic geography within the island it could be expected that Ayios Demetrios would fade away. In fact, the opposite happened. Ayios Demetrios retained its role as the focus for Greek culture on the island, and the obvious wealth of the settlement is displayed in the number of private churches located within its walls.<sup>32</sup> During the 15th century the Byzantine empire was crumbling under the onslaught of the Ottomans. Some refugees presumably found their way to Kythera, especially after the fall

<sup>23</sup> Herrin *art. cit.* (n. 2) 43–4.

<sup>24</sup> On the Byzantine monuments of Kythera, see G. A. Soteriou, 'Μεσαιωνικά Μνημεία Κυθήρων', *Κυθηραϊκή Επιθεώρησις* 1, 1923, 313–32; Chatzidakis–Bitha *op. cit.* (n. 2), and the many reports of the First Ephoreia of Byzantine Monuments in the *Archaeologikon Deltion*.

<sup>25</sup> N. Oikonomidis, 'Ο βίος τοῦ Ἀγίου Θεοδώρου Κυθήρων', *Proceedings of the Third Panionian Congress* (1967) 264–91; Herrin *art. cit.* 45; G. N. Leontsinis, *The Island of Kythera: A Social History (1700–1863)* (1987) 4.

<sup>26</sup> Herrin *art. cit.* 46–7; Leontsinis *op. cit.* 34.

<sup>27</sup> Herrin *loc. cit.*; Ince *et al.*, *art. cit.* (n. 3), 97.

<sup>28</sup> Leontsinis *op. cit.* 43–4.

<sup>29</sup> *Ibid.* 33.

<sup>30</sup> Herrin *art. cit.* 48–9; Leontsinis *op. cit.* 36; *id.*, 'Τα Κύθηρα κατά τη βυζαντινή περίοδο', in: G. N. Leontsinis (ed.), *Ζητήματα Νεότερης Ελληνικής Ιστορίας και Εκπαίδευσης* 3 (2000) 261–8.

<sup>31</sup> See the many works of Ch. Maltezou on the Venetian period on Kythera, several of them collected in her book, *Venetian Influence on Kythera* (1997); Herrin *art. cit.* 50.

<sup>32</sup> Ince *et al.* *art. cit.* (n. 3).

of the Despotate of Mystras in 1458. Many family names on the island may be derived from the titles of Byzantine officials who found refuge on Kythera (e.g. Strategos and Oikonomos).<sup>33</sup>

Ayios Demetrios appears to have been first fortified in the 13th century by the Eudaimonoian family, with later additions made by the Venetians.<sup>34</sup> These efforts proved futile, as Ayios Demetrios was captured and sacked with remarkable ease by the Ottoman Admiral Khar ed din Barbarossa in 1537. Contrary to popular belief, Barbarossa was not engaged in opportunistic piracy, but was leading the Ottoman navy against Venice.<sup>35</sup> In the same year Barbarossa destroyed Venetian and Frankish settlements on Amorgos, Astypalaia, Ios, Anaphe, Seriphos, Antiparos, Paros, Skyros, Skiathos, and Skopelos.<sup>36</sup>

The sacking of Paliochora was a catastrophe for Kythera. The Venetians claimed that 7,000 people were killed or enslaved.<sup>37</sup> The magnitude of these events is evident when the first Venetian census taken on Kythera records the population at 1,850.<sup>38</sup> The figure of 7,000 taken in the raid cannot possibly all have come from Ayios Demetrios since the site could have housed only a tenth of that number. It seems more likely that Barbarossa's captives came from the satellite settlements around Paliochora, or that the number of victims has been seriously exaggerated by later tradition.

The sack had a significant effect on the development of the island for the next few hundred years. The remaining population contracted to the southern half of the island where the forts at Milopotamos, Avlemonas, and Chora afforded some measure of security. The population of the island may not have reached its pre-1537 levels until the start of the 19th century.<sup>39</sup> This, coupled with the neglect effected by the decaying Venetian government throughout the 16th–18th centuries led to another Dark Age for Kythera.

In 1798 the moribund Venetian administration effectively collapsed. There was a short period of self-rule, but for almost twenty years Kythera was controlled by the French, the British, and, for a brief time, a Russo-Turkish condominium.<sup>40</sup>

In 1815 Kythera was formally acquired by the British empire.<sup>41</sup> The period of the British protectorate witnessed growth on the island, as the occupiers went to considerable effort to promote education and agriculture as well as establish a transport infrastructure of roads and bridges, many of which are still in use today. The demographics of the island underwent considerable change at this time and the northern section surpassed the southern half both in population and commercial enterprise. The site of Ayios Demetrios, however, was never reoccupied.

In 1864 Kythera was ceded to the Greek Government and from then on the island's fortunes followed those of modern Greece. The incorporation of Kythera into a large modern state did not insulate it from the most recurring theme in its history: depopulation. Starting from the end of the 19th century up to the 1960s thousands of Kytherians emigrated to America and Australia. By the 1970s the permanent population had dwindled to 3,000, a quarter of what it had been a century before.<sup>42</sup> Only recently, in the 1990s, has a reverse trend

<sup>33</sup> Leontsinis op. cit. (n. 25) 45.

<sup>34</sup> Ibid. 36.

<sup>35</sup> P. Kemp, *The Oxford Companion to Ships and the Sea* (1988) 57; for an introduction to piracy, and other shipping activity, in Kytherian waters as revealed by three early 17th-century letters, see: G. S. Ploumidis, 'Πειρατές και ναυάγια στα Κύθηρα (1603–1605)', *Δωδώνη (Ιστορία και Αρχαιολογία)* 21, 1997, 164–74; Loupis op. cit. (n. 18) esp. 82–4, 299–308.

<sup>36</sup> N. Cheetham, *Mediaeval Greece* (1981) 253.

<sup>37</sup> Leontsinis op. cit. (n. 25) 43.

<sup>38</sup> Maltezou art. cit. (n. 2) 156.

<sup>39</sup> Leontsinis op. cit. Table. 1

<sup>40</sup> Ibid. 19.

<sup>41</sup> Ibid. 20.

<sup>42</sup> Ibid. Table 1.



begun to take place, with relatively wealthy dispersed Kytherians (from Athens-Piraeus and overseas) and some foreigners coming to the island either to settle permanently or to establish their summer homes.

### THE RESEARCH DESIGN

As a basic framework, APKAS seeks to examine the tension between extrinsic and intrinsic forces operating within the Paliochora region throughout time. By extrinsic forces we mean conquest and colonization, the need for defence, external trade, and control from the exterior. By intrinsic forces we mean the interrelationships among individuals and institutions within Kythera more broadly and in the Paliochora region in particular. The study will investigate the degree to which extrinsic versus intrinsic forces dominated the settlement system in the Paliochora region.

P. N. Kardulias, T. E. Gregory, and J. Sawmiller have argued that 'desert island settlements' were not founded primarily for military reasons, but rather to exploit marginal areas in response to specific economic and political realities.<sup>43</sup> They further argue that the key to the understanding of these settlements is to examine their hinterland and the resources they could control. They do not deny that refugee communities may have existed on the islands at different times, but they do not see this as being the main reason for occupation. The case of settlement in the Paliochora region is a good potential parallel or contrast in part because a brief examination of the history of Kythera seems to support the hypothesis that outside forces shaped the island's history, and that the northern part of the island ought to have been the place where the tension between north and south would have been particularly felt.

### THE 1999–2000 FIELD SEASONS

#### OBJECTIVES

The 1999 APKAS preliminary field season had a number of distinct objectives. In essence this field season was a reconnaissance or feasibility study, with the principal aim of assessing the resources at the project's disposal. Furthermore it was intended to improvise and test the field survey methodology and logistics, which would lead to the refining and consequently increased efficiency of the information-gathering processes of the project.

#### THE STUDY AREA

The study area conceived for our preliminary field season is shown in figure 2. The boundaries were determined by the following considerations:

1. by the inclusion of territory that might realistically have been controlled by Paliochora, including the bulk of the 18th-century Venetian *distretti* of Potamos and Kastrisianika;
2. by following drainage and sub-drainage boundaries, with the central north/south ridge from Potamos in the north to Aroniadika in the south, and deep gorges running roughly east and west from the ridge; and
3. by the limits of the British Kythera Island Project area to the south (bounded by the Aroniadika/Diakophti road).

The 29 km<sup>2</sup> area defined in 1999 was expanded in 2000 to 64 km<sup>2</sup>, in order to include all of the coasts, both east and west (although most of these are completely unsurveyable) and the area north of Potamos up to the modern settlement of Ayia Anastasia (figs. 3–4).

<sup>43</sup> 'Bronze Age and Late Antique Exploitation of an Islet in the Saronic Gulf, Greece'; *JFieldA* 22, 1995, 4

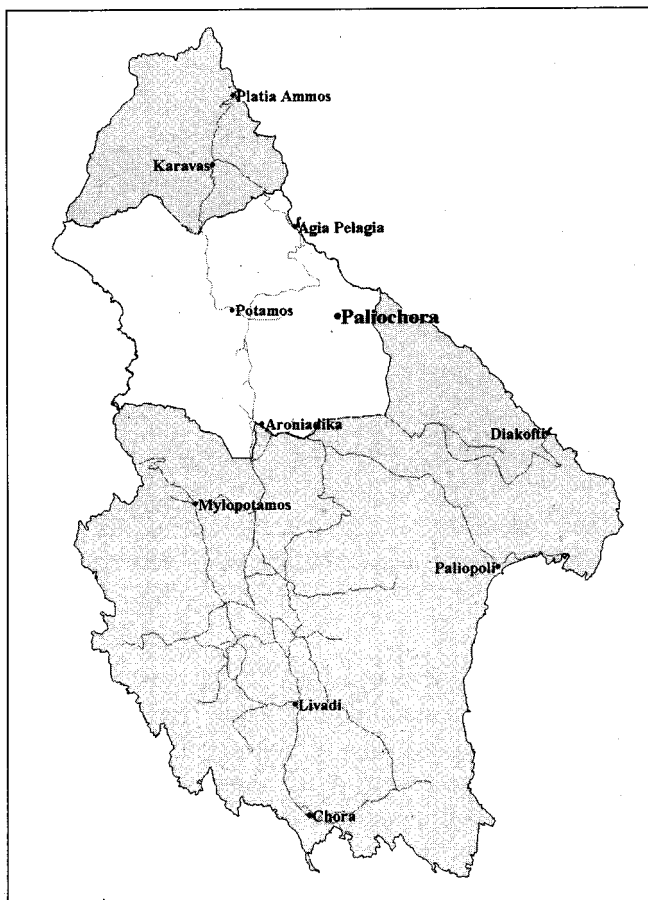


Figure 3. Kythera, with expanded survey area. 1:250,000.

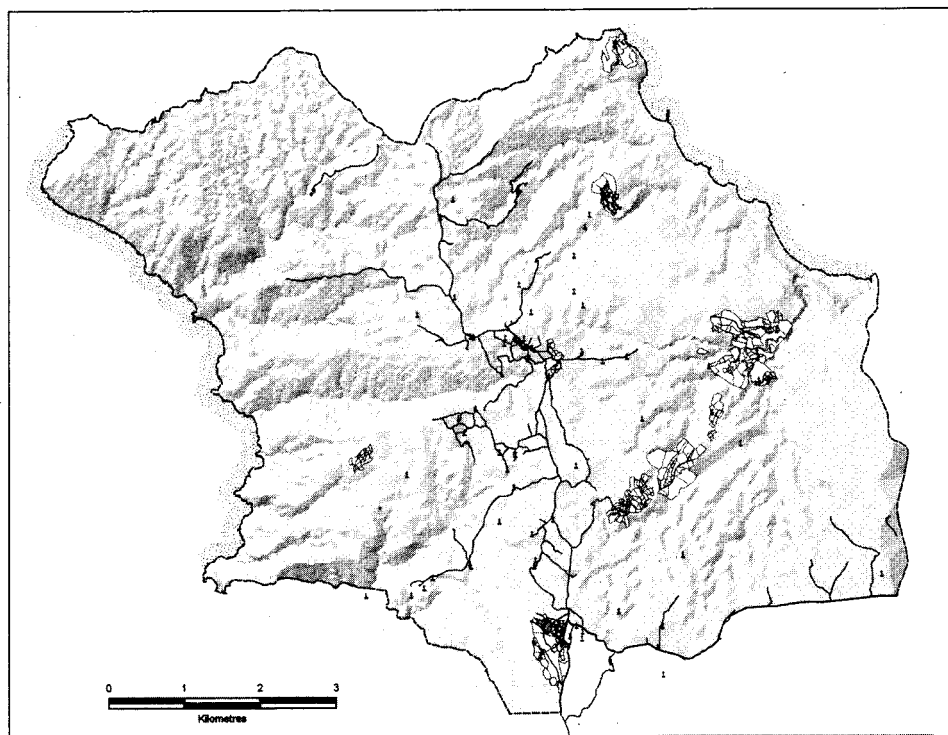


Figure 4. Expanded survey area, showing the location of churches and major roads. 1:100,000.

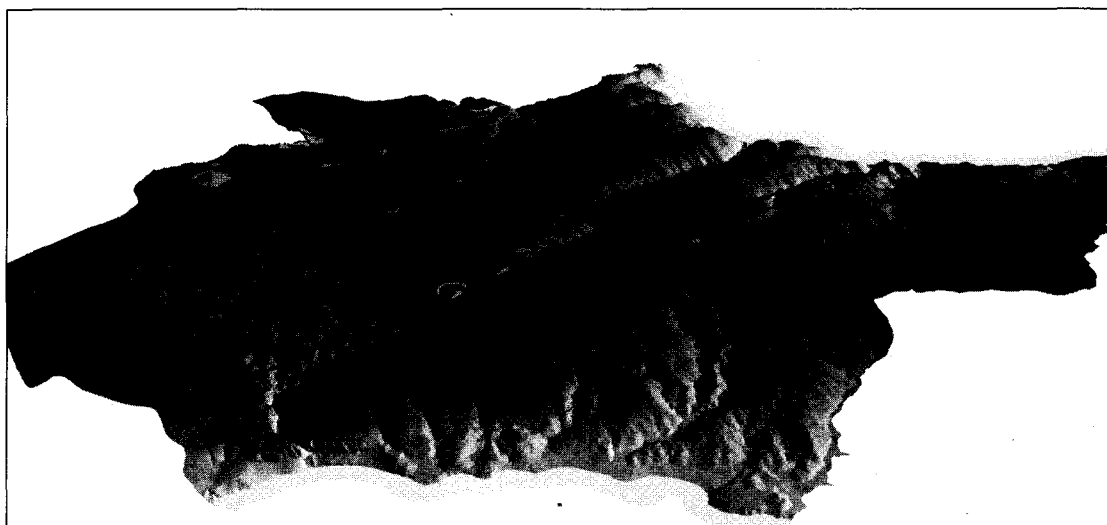


Figure 5. Kythera, digital elevation model. Not to scale.

#### RESOURCES AND INFORMATION

Prior to the 1999 season APKAS developed a GIS database, based on the 1:5,000 scale topographic maps of the area and on aerial photographs (from 1967). The project uses a wide range of GIS software, including systems which permit accurate registration of aerial photographs into the GIS database (using much improved techniques compared to those pioneered by members of the team as part of the Sydney Cyprus Survey Project).<sup>44</sup> The 1:5,000 maps provide topographic information that is being digitized to create a Digital Elevation Model of the landscape (**fig. 5**). These maps also provide an intensive record of cultural features (walls, terraces, wells, limekilns, etc.). From the beginning, APKAS was designed around the use of differential GPS (DGPS) for the delineation of survey units and features.

A significant component of the project involves the detailed examination of the modern and contemporary landscape. Such an examination incorporates the physical recording of modern settlements and cemeteries as well as rural/agricultural features within the survey area, along with oral information about these features obtained from local residents.<sup>45</sup>

#### Archival Information

Kythera, unlike most of the Aegean islands, has a wealth of archival material, most of it preserved in the archives in the Kastro of Chora.<sup>46</sup> These contain documents from the period of Venetian domination, but they have not yet been fully catalogued or studied.<sup>47</sup> The unpublished manuscript materials require specialized skills, and it is hoped that APKAS will be able to acquire the services of a trained archival researcher.

<sup>44</sup> A. B. Knapp–I. Johnson, 'Quantifying Survey Data from Cyprus: The Use of Aerial Photos for Field Recording and GIS Input', in: I. Johnson (ed.), *Methods in the Mountains: Proceedings of the UISPP Committee IV Meeting (1994)* 157–64; M. Given *et al.*, 'The Sydney Cyprus Survey Project: An Interdisciplinary Investigation of Long-Term Change in the North Central Troodos, Cyprus', *JFieldA* 26, 1999, 19–39.

<sup>45</sup> In the case of the present research, 'modem' refers to the

period stretching from AD 1798—marking the end of the Venetian domination of the island—to the present.

<sup>46</sup> Ch. Maltezou, 'Ειδήσεις για ναούς και μόνες στα Κύθηρα από αρχαιακές πηγές', *Πρακτικά 3ου Ε Διεθνούς Παντιονίου Συνεδρίου, Αργοστόλι-Ληξούρι*, 1986, I (1989) 269–88.

<sup>47</sup> *Απογραφές Πληθυσμού Κυθήρων 1805 αιώνας*, 3 vols. (1997); E. G. Drakakis, *Εμμανουήλ Κασσιμάτης Νοζαπτος Κυθήρων (1560–1582)* (1999).

### Survey Strategy

The survey employs the standard pedestrian archaeological survey used in the Mediterranean area, developed in Greece especially by Cherry and Davis, with important contributions by A. B. Knapp in Cyprus.<sup>48</sup> The rough landscape of the survey area in Kythera, however, and the fact that most of the fields have been abandoned and are covered with virtually impenetrable thorn bushes (*ασπάλαθος*) require considerable modification of the technique. Thus, it is certainly not possible to survey intensively anything approaching a 50% sample of the territory. This is not necessarily a serious shortcoming, since our primary goals focus on the identification of settlements (probably villages) that will have been relatively large. Given this constraint a systematic probabilistic sampling strategy has been devised to determine the chronology of the present villages in the area, along with their presumed predecessors. All evidence of ancient or medieval activity, even when it is isolated at a single spot, are recorded, but our method focuses on the examination of larger settlements and their relationships with each other and with Paliochora.

In order to carry out informed planning of more extensive field seasons in the coming years it was first necessary to assess the nature of the study area terrain and develop realistic estimates of the amount of ground that could be covered, and the intensity of coverage appropriate, with a small survey team.

This aim was achieved in 1999 through a detailed survey of two areas: the ridges and valley system immediately adjacent to Paliochora itself, characterized by impoverished plateaux and steep valleys with abandoned field and terrace systems; and the route of a new road bypassing the villages of Potamos and Aroniadika, characterized by intensive land-use with many small fields, terracing, wells, threshing floors, and dwellings, both abandoned and occupied.

The approach taken in 1999 with regard to the documentation of cultural features was holistic in that all cultural features observed were recorded. This non-discriminatory approach was taken in order to discover and describe the range of types of cultural features found within the study area. Clearly, it was not possible to record all archaeological features with the same intensity, while at the same time covering a reasonably extensive territory. For that reason, we wished to devise techniques to gather the most valuable information while not bogging down the system with endless detail. Thus, because the field walls were perceived as important features in the built environment of Kythera, procedures were derived to record information about the walls in a quick and simple manner (height, width, type of construction, etc.). Other features, especially modern buildings and rubbish dumps, were recorded in a more streamlined fashion. From this information assessments could be made after the field season, with regards to the relative importance of cultural features relating to the testing of hypotheses, as well as what additional information might be required from each cultural feature type in future field seasons.

During the landscape survey, ceramic densities and typological information were also recorded. This was done at a most basic level with the intention to flag areas of interest for pottery identification and collection (see below). Special attention was paid to recording observations of vegetation cover, which could be correlated with density and texture on the aerial photographs, as well as general observations on the character of the landscape, distribution of cultural features, and vegetation.

<sup>48</sup> See, for example, J. F. Cherry *et al.*, 'The Survey Methods', in: Cherry *et al.*, *Landscape Archaeology as Long-term History* (1991) 35; J. L. Davis *et al.*, 'The Pylos

Regional Archaeological Project, Part I: Overview and the Archaeological Survey', *Hesperia* 66, 1997, 400–2; Given *et al.* loc. cit.

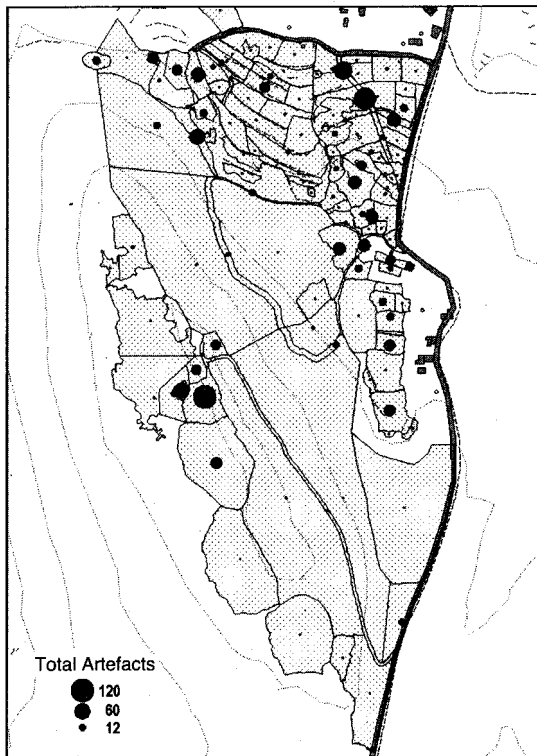


Figure 6. Aroniadika area 1999. Surveyed area with raw artefact density. 1:20,000.

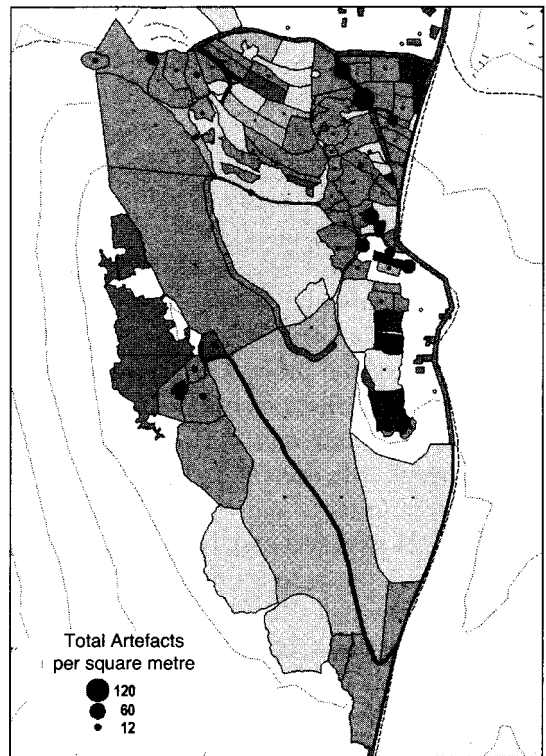


Figure 7. Aroniadika area 1999. Surveyed area with weighted artefact density. 1:20,000.

These observations enabled the study area to be stratified according to vegetation type in order to eliminate zones which are virtually unsurveyable because of the density of the vegetation cover or the steepness of slope. Underpinning the landscape survey in 1999 was the development and testing of a highly accurate spatial recording system based on the intensive use of differential GPS, the recording and analysis of survey data using a desktop mapping system and database (MapInfo and Access) and the generation of printed maps from the updated data on a daily basis for use in the field. This aspect of the project involved the development of strategies for GPS surveying, field-walking, and management of field teams; the design and refinement of descriptive categories, field recording forms, and a database to capture the information collected. Maps generated by this process show the densities of artefacts from 1999 in the Aroniadika area, both as simple 'raw' densities (artefacts per square metre) (**fig. 6**), and as densities weighted by the observed visibility in survey units (**fig. 7**).

#### Artefact collection 1999

The artefact collection strategy was based on three premises:

- 1) to collect as little as possible, and thus have minimum impact on the archaeological record;
- 2) to collect artefacts that reflect the types and the numbers of artefacts originally on the surface in each survey unit, and
- 3) to encourage resurvey and repeatability studies in the same areas.

This strategy is based on those developed by the Sydney Cyprus Survey Project and the Eastern Korinthia Archaeological Survey. In part because of the emphasis on recording archaeological features such as field walls and in part because artefacts are relatively few on the surface on Kythera (and those tend to be 'modern' in date—especially from the last 100 years), a strategy was adopted whereby the archaeological teams carried out their work quickly, mapping the visible archaeological features and recording gross artefact densities in

each survey unit. Only when the densities were reasonably high and where archaeological teams indicated the presence of significant pre-modern artefacts was a decision made to collect artefacts for more detailed examination and record.

In 1999 time permitted the examination of only eight areas of such special interest, all in the area just west of Aroniadika (**fig. 8**). Altogether, 553 artefacts were collected in 1999. Not surprisingly, 19.7% of these are modern, and the vast majority of the sherds (306 or 68.6% of the total) are of 'unknown' period, which is a phenomenon common to most survey projects.

#### Field Survey 2000

Field survey in 2000 continued that of 1999 except that a shift was made in allocation of resources for different aspects of the project. Thus, while in 1999 the major investment was in terms of recording archaeological features (walls, threshing floors, etc.), and little investment was made in examination of finds (such as pottery), in 2000 these proportions were altered significantly. This was, in part, because we had already learned a great deal about the traditional agricultural landscape and we could move forward to provide greater chronological control over the information encountered on the ground.

Nonetheless, as in 1999, the project was committed to a low-impact artefact processing regime and to a system that focused on the broader landscape rather than a search for significant 'sites' (whatever that term might mean in a Kytherian environment). For those reasons we carried out a full implementation of the so-called ChronoType system, used in the Sydney Cyprus Survey Project and the Eastern Korinthia Archaeological Survey mentioned above.<sup>49</sup> During 1999 and 2000 some 9,700 artefacts were counted in the field. Of those, 3,173 were picked up and described (in the field), representing 49.6% of the total observed (medium recording). Finally, 642 artefacts were collected and are now in the museum in Chora, available for later study. The breakdown of the artefacts is shown in the following tables, both as simply counted in the field (minimum recording) (table 1), and by periods (from medium recording) (table 2).

Figures below show the density of several classes of artefacts from the 2000 season (**figs. 9–12**). Obviously, this information will be studied more fully, but the data already provide some information on the periods encountered in the survey area. Perhaps most importantly, they reveal significant quantities of prehistoric (1.1%), Classical/Hellenistic (14.0%), and medieval (2.6%) material. The prehistoric sherds date particularly from the Early Helladic and Middle Minoan 111–Late Minoan I periods, reflecting the broad chronology of material discovered previously in excavations at Kastri in the south. This suggests, at least at this preliminary stage, that the Minoan influence on the island, noted

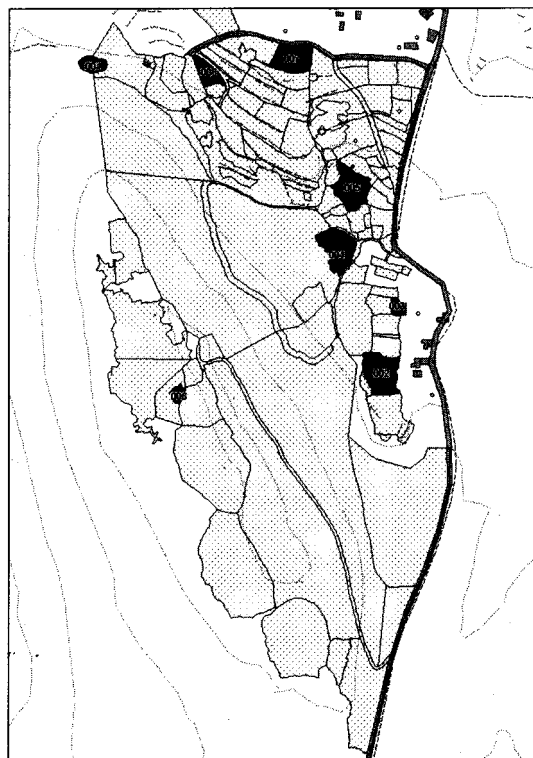


Figure 8. Aroniadika area 1999. Ceramic collection areas. 1:20,000.

<sup>49</sup> Ibid. 24–5.

Category <sup>50</sup>	Count	Percentage
Tiles	1,531	16.0%
Pithoi	144	1.5%
Undecorated pottery	6,202	64.0%
Slipped pottery	126	1.3%
Glazed pottery	317	3.3%
China	118	1.2%
Slate	943	9.7%
Slag	67	0.7%
Lithics	21	0.2%
Glass	223	2.3%
Grindstones	8	0.1%
Total	9,700	

Table 1. Objects counted during field survey, 1999–2000.

Category	Count	Percentage
Ancient (otherwise unspecified)	509	15.0%
Prehistoric	36	1.1%
Protogeometric/Archaic	11	0.3%
Classical/Hellenistic	468	14.0%
Roman	42	1.3%
Medieval (to 1537)	87	2.6%
Venetian (1537–1800)	33	1.0%
Medieval/Modern	700	21.0%
Modern	512	16.0%
Uncertain (ceramic age)	709	22.0%
Non-ceramic	173	5.3%
Total	3,280	

Table 2. Objects described, by period, 1999–2000.

previously in the south by Sakellarakis and Broodbank, reached into the northern part of Kythera. Little can yet be said about the spatial patterning of this prehistoric material, although it does seem as though sites on ridge-tops were preferred. Noteworthy is the large quantity of material associated with the **Classical/Hellenistic** period, mainly belonging to the 4th–3rd centuries BC. It is spread broadly through the survey area, suggesting that it might have been intensively occupied in this period. One site, however, stands out strikingly: Vythoulas, a broad steep slope under a prominent acropolis, which sits precisely on the divide between the central plateau and the coast and harbour at Ayia Pelagia. The size of this site and the density and nature of finds strongly suggest that this was a settlement in Late Classical

<sup>50</sup> These categories were designed for ease of identification in the field and to provide very basic indications of periods and types of materials. Thus the pottery categories serve to

provide some indication of chronology: slipped pottery will normally have been ancient, glazed pottery medieval and modern, and china is from the modern period.

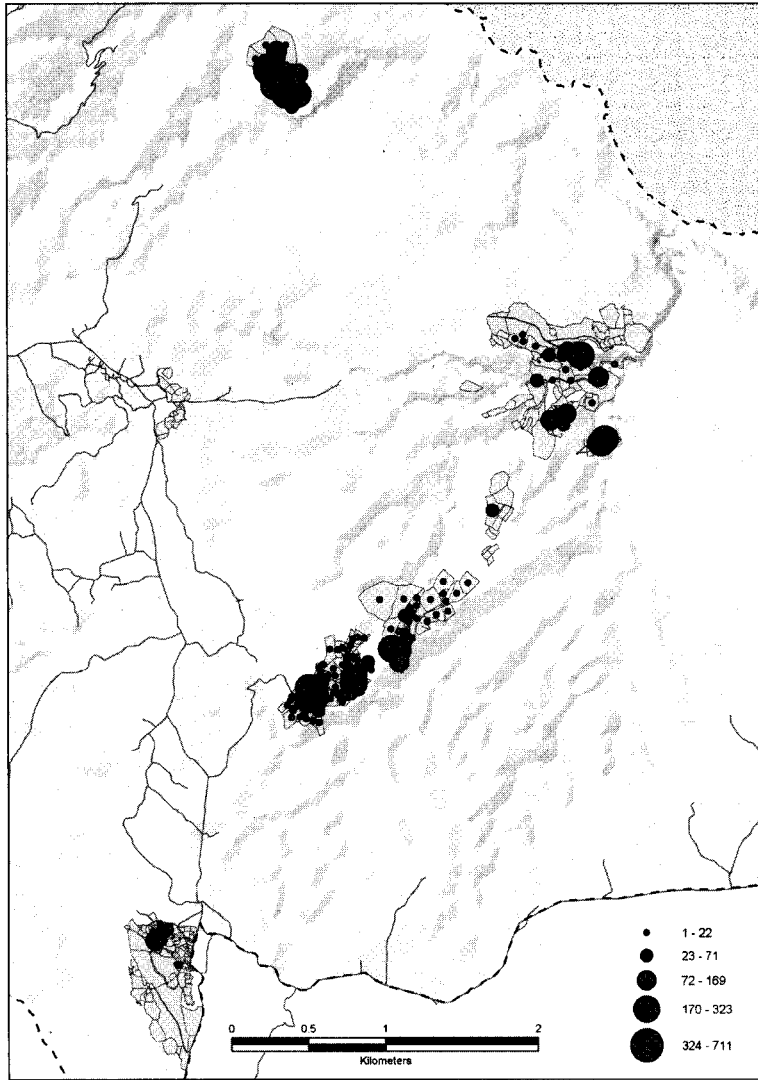


Figure 9. Distribution of undecorated pottery, 2000 season. 1:50,000.

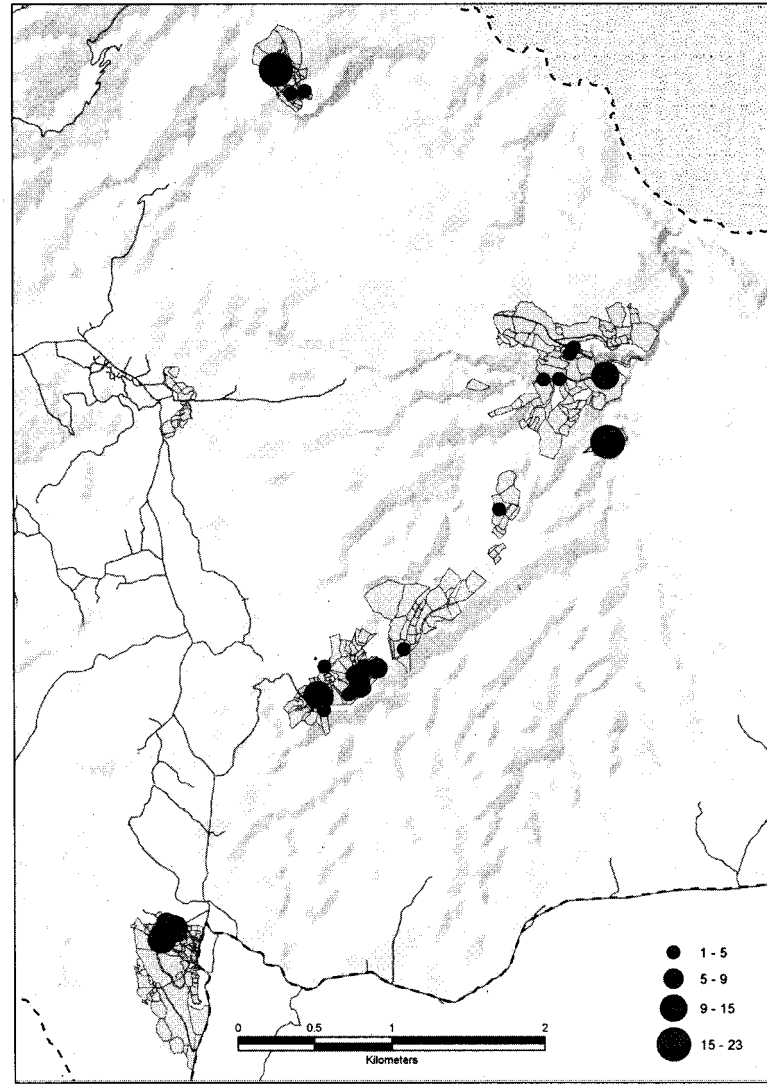


Figure 10. Distribution of glazed pottery, 2000 season. 1:50,000.



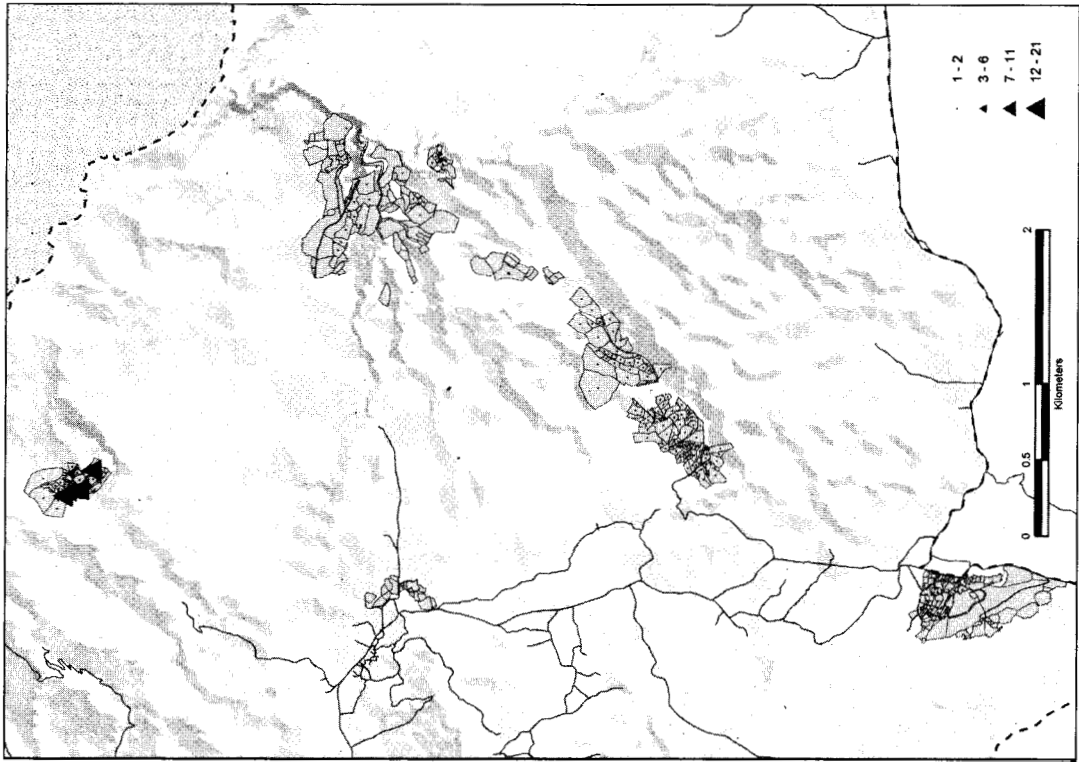


Figure 12. Distribution of slag, 2000 season. 1:50,000.

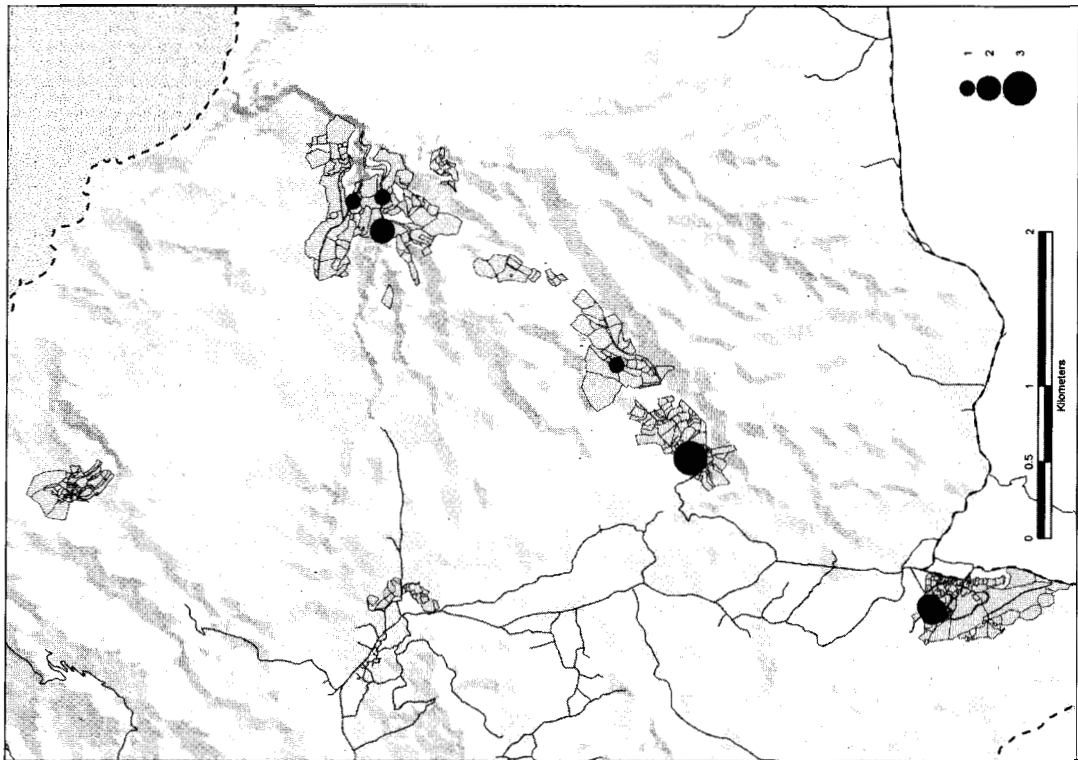


Figure 11. Distribution of modern tableware, 2000 season. 1:50,000.

and Hellenistic times and that it included at least one sanctuary. Among the medieval sites was a fortified eminence (Ayios Demetrios) south-west of Aroniadika, as well as significant concentrations from the 13th to the 16th centuries at Ayia Aikaterine on the ridge west of Paliochora, and at Ayios Demetrios just to the south-west of the medieval centre, all of these testifying to the broader settlement in the survey area contemporary with the known site at Paliochora.

#### CONCLUSION

The 1999 and 2000 field seasons were successful in accomplishing the basic goals set for this phase of the project. Procedures and systems were established for the investigation of the survey area and the first steps were made in the testing of the hypotheses concerning settlement in the region. The data clearly need further refinement, but they seem to suggest that the broader region around Paliochora was utilized in several different periods, most heavily in the Classical/Hellenistic (and here we may note the primary position of Vythoulas in the data so far collected and its location above the port of Ayia Pelagia, while remembering Pikoulas' reconstruction of the Classical cart-road that terminates at a port on the north-eastern coast) and the medieval/modern.

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