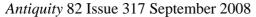
# Supplementary information: field guide to geology and botany of temples in Greece and Cyprus

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**Acropolis, Athens.** The principal temple of Athena in the ancient world was the Parthenon (N37.971233° E23.726017°) on the cliff-girt rocky hill within the city of Athens (modern Athinai), Attica (Stillwell et al., 1976; Hurwit, 1999; Olalla, 2002). It faces northeast, and has a commanding view on all sides of the lower city, and of ridgelines and the coastal plain south to the ancient port of Piraeus. The measured soil profile (Figure 1A) is at the foot of the southwestern corner of the Parthenon (N37.971233° E23.726017°), in rubble over limestone bedrock. Bedrock of the Acropolis here is Late Cretaceous limestone within the Athens "Schist" of the Sub-Pelagonian terrane (Higgins and Higgins, 1996). The shales here are not sufficiently deformed or metamorphosed to be regarded as schist. The limestone and associated marl shows gypsum pseudomorphs, ferruginized clastic dikes, spar-filled stromatactis, tepee structures and fossil scleractinian corals suggestive of a fossil reef and lagoon. Vegetation of the Acropolis is primarily gardens and weeds. The following list of plants supplements that of Thompson (1963), with my own observations

Acanthus mollis (bear's breech, Acanthaceae, indigenous weed) Acanthus spinosus (spiny bear's breech, Acanthaceae, indigenous weed) Amaranthus retroflexus (pigweed, Amaranthaceae, American weed) Anemone coronaria (anemone, Ranunculaceae, wildflower) Arbutus unedo (strawberry bush, Ericaceae, indigenous shrub) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Bellis perennis (white daisy, Compositae, wildflower weed) Calicotome villosa (gorse, Leguminosae, indigenous shrub) Calluna vulgaris (heather, Ericaceae, indigenous low shrub) Capparis sicula (capers, Capparidaceae, indigenous weed) *Chamaecytisus supinus* (clustered broom, Leguminosae, indigenous thornbush) *Chamaerops humilis* (fan palm, Palmae, indigenous palm) Chrysanthemum coronarium (chrysanthemum, Ranunculaceae, wildflower) *Cistus incanus* (rock rose, Cistaceae, indigenous shrub) Conium maculatum (poison hemlock, Umbelliferae, indigenous weed) Crocus hadriaticus (crocus, Iridaceae, wildflower) Crocus sativus (saffron, Iridaceae, indigenous herb) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Cyclamen graecum (Greek cyclamen, Primulaceae, wildflower) *Eryngium campestre* (field eryngo, Compositae, indigenous weed) *Eucalyptus camaldulensis* (river red gum, Myrtaceae, Australian tree) Euphrasia nemorosa (woodland eyebright, Scrophulariaceae, wildflower) *Ferula communis* (giant fennel, Umbelliferae, indigenous herb) *Festuca ovina* (sheep fescue, Gramineae, indigenous grass) Ficus caricus (fig, Moraceae, indigenous fruit)



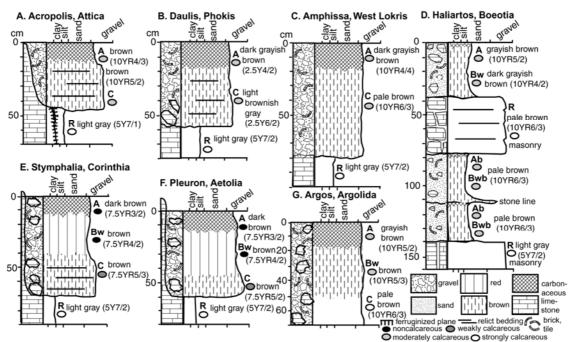


Figure 1. Soil profiles at temples of Athena.

Fragaria vesca (wild strawberry, Rosaceae, indigenous fruit) Hedera helix (ivy, Araliaceae, indigenous vine) Iris germanicum (iris, Iridaceae, German flower) Laurus nobilis (laurel, Lauraceae, indigenous tree) Lavandula angustifolia (lavender, Labiatae, indigenous herb) Lilium candidum (lily, Liliaceae, wildflower) Macfaydena unguis-cati (cat-claw ivy, Bignoniaceae, American ornamental) *Malus pyrus* (apple, Rosaceae, indigenous fruit tree) *Melilotus officinalis* (sweet clover, Leguminosae, indigenous weed) Mespilus germanica (medlar, Rosaceae, indigenous fruit) *Muscari commutatum* (grape hyacinth, Liliaceae, wildflower) Myrtus communis (myrtle, Myrtaceae, indigenous tree) Narcissus tazeta (daffodil, Liliaceae, Turkish flower) Nerium oleander (oleander, Apocynaceae, indigenous shrub) Ocimum basilicum (basil, Labiatae, indigenous herb) Olea europea (olive, Oleaceae, indigenous fruit tree) Origanum majorana (marjoram, Labiatae, indigenous herb) Origanum vulgare (oregano, Labiatae, indigenous herb) Ornithogalum umbellatum (Star of Bethlehem, Liliaceae, wildflower) *Phoenix dactylifera* (date palm, Palmae, African palm) *Pinus halepensis* (Aleppo pine, Pinaceae, indigenous tree) Plantago lanceolata (ribwort plantain, Plantaginaceae, indigenous weed) *Platanus orientalis* (plane tree, Platanaceae, indigenous tree) *Populus alba* (white poplar, Salicaceae, indigenous tree) Populus nigra (black poplar, Salicaceae, indigenous tree) *Prunus domestica* (plum, Rosaceae, Chinese fruit tree) Prunus dulcis (almond, Rosaceae, Iranian fruit tree)

Prunus laurocerasus (cherry laurel, Rosaceae, indigenous tree) Prunus persica (peach, Rosaceae, Iranian fruit tree) Punica granata (pomegranate, Punicaceae, indigenous fruit tree) *Pyrus communis* (pear, Rosaceae, indigenous fruit tree) *Quercus coccifera* (kermes oak, Fagaceae, indigenous shrub) *Quercus ilex* (evergreen oak, Fagacaeae, indigenous tree) Quercus robur (cork oak, Fagaceae, indigenous tree) Rhamnus catharticus (purging buckthorn, Rhamnaceae, indigenous shrub) Rhaphanus rhaphanastrum (wild radish, Cruciferae, indigenous weed) Rosa canina (dog rose, Rosaceae, wildflower) Rosa centifolia (cabbage rose, Rosaceae, wildflower) Rosmarinus officinalis (rosemary, Labiatae, indigenous herb) Salvia trilobe (sage, Labiatae, indigenous herb) Satureja thymbra (savory, Labiatae, indigenous herb) Sinapis alba (white mustard, Cruciferae, indigenous weed) Solanum nigrum (deadly nightshade, Solanaceae, Chinese weed) Sonchus asper (prickly sow thistle, Compositae, indigenous weed) Taraxacum officinale (dandelion, Compositae, indigenous weed) *Thymus capitatus* (white thyme, Labiatae, indigenous herb) *Thymus serpyllus* (purple thyme, Labiatae, indigenous herb) Tulipa clusiana (tulip, Liliaceae, Iranian flower) Urtica urens (nettle, Urticaeae, indigenous weed) Valerianella discoidea (lamb's lettuce, Valerianaceae, indigenous weed) *Viola odorata* (sweet violet, Violaceae, wildflower) Vitis vinifera (grape, Vitaceae, Turkish fruit vine)

Action, Epirus. The temple of Apollo at Action was probably on the site of the Frankish ruin 1 km north of the marina across the bay from the modern town of Preveza (Barber, 2001). Only the Frankish remains are visible now in a swampy spit largely within the intertidal zone (N38.9564° E20.76521° 0 m). This is a Pleistocene marine terrace of gravel and sand. Soil was examined (Figure 1I) on the western side of the spit 5 m south of the ruins (N38.95635° E20.76527° 0 m), and is an Orthent (of Soil Survey Staff, 2000). Vegetation is salt marsh and littoral.

Asphodelus aestivus (asphodel, Liliaceae, wildflower) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) Cichorium intybus (chicory, Compositae, indigenous weed) Conyza canadensis (horseweed, Compositae, Amercan weed) Cynodon dactylon (Bermuda grass, Gramineae, African grass) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Echinops spinosissumus (spiny globe thistle, Compositae, indigenous weed) Inula crithmoides (golden samphire, Compositae, indigenous succulent) Olea europea (olive, Oleaceae, indigenous tree) Robinia pseudoacacia (black locust, Leguminosae, American tree) Rubus fruticosus (bramble, Rosaceae, indigenous spiny vine) Salsola kali (saltwort, Chenmopodiaceae, indigenous succulent)

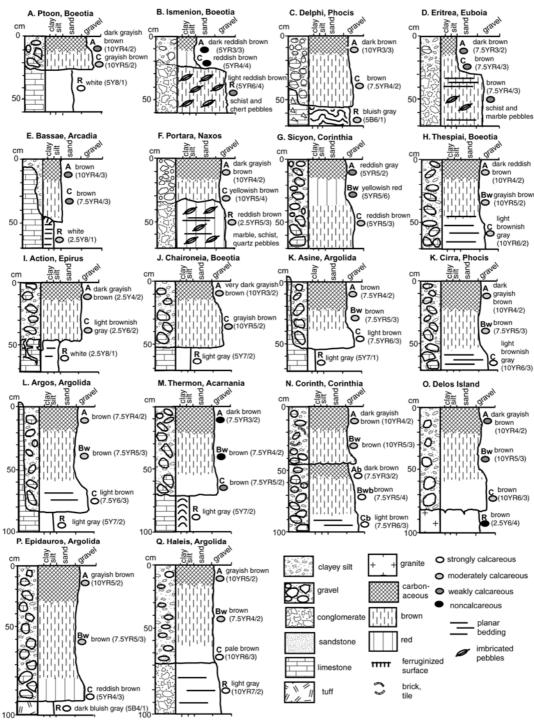
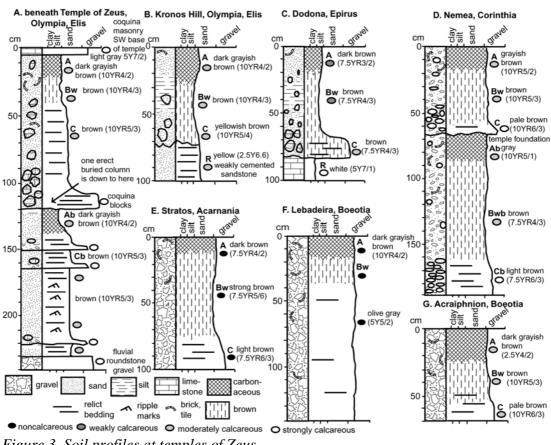


Figure 2. Soil profiles at temples of Apollo.

*Scirpus mucronatus* (bog bulrush, Cyperaceae, indigenous sedge) *Verbascum graecum* (Greek mullein, Scrophulariaceae, indigenous weed) *Xanthium spinosum* (Bathurst burr, Compositae, American weed)



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*Figure 3. Soil profiles at temples of Zeus.* 

Acraiphnion, Boeotia. Modern Acraphnion village, fomerly Kharditsa, in a gorge north of Lake Copais had an altar to Zeus in the agora and a temple of Dionysos under the present church of Hagios Dionysios (Stillwell et al., 1976). The market is around a cathedral on a low spur high in the gorge, where it divides into steep eastern and western branches (N38.45611° E23.22078° 201 m). Soil was examined here (Figure 3G) in a vacant lot east of the parking are for the cathedral (N38.45586° E23.22106° 190m), and is an Anthrept on cultural debris including brick and tile. Both sacred sites are developed on late Cretaceous (Maastrichtian) rudist limestone of the Sub-Pelagonian terrane (Higgins and Higgins, 1996; Steuber, 1999). Vegetation downtown near the altar of Zeus is garden.

Amaranthus retroflexus (pigweed, Amaranthaceae, American weed) *Calvstegia sylvatica* (greater bindweeed, Convolvulaceae, indigenous vine) Digitaria sanguinalis (crab grass, Gramineae, American grass) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Laurus nobilis (laurel, Lauraceae, indigenous tree) *Morus nigra* (mulberry, Moraceae, Middle Eastern tree) *Nerium oleander* (oleander, Apocynaceae, indigenous tree) *Phoenix dactylifera* (date palm, Palmae, African palm) Rosa chinensis (rose, Rosaceae, Chinese ornamental) Setaria viridis (green bristle grass, Gramineae, indigenous grass) Sonchus arvensis (cow thistle, Compositae, indigenous weed)

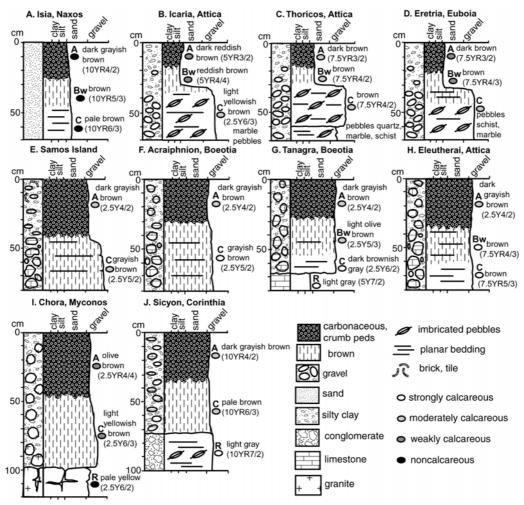


Figure 4. Soil profiles at temples of Dionysos.

The church of Haghios Giorgios, on the former temple of Dionysos, is now abandoned, but on a ridge on the low spur 0.5 km to the southeast (N38.45406° E23.21986° 205 m), with good views down the footslopes toward Lake Copais. Soil was examined (Figure 4F) in the roadcut south and slightly uphill across the road from the church (N38.45388° E23.21962° 184 m), where it is a Xeroll developed on colluvium and bedrock. Vegetation around the church of Haghios Giorgios and former temple of Dionysos is garden, but beyond the walled precinct is pasture.

Acanthus spinosus (spiny bear's breech, Acanthaceae, indigenous weed) Agrostis gigantea (bent grass, Gramineae, indigenous grass) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weed) Avena fatua (wild oats, Gramineae, indigenous grass) Ballota acetabularis (horehound, Labiatae, wildflower) Bilderdykia dumetorum (copse bindweed, Polygonaceae, indigenous vine) Carduus nutans (musk thistle, Compositae, indigenous weed) Cerastium arvense (chickweed, Caryophyllaceae, American weed) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) Cichorium intybus (chicory, Compositae, indigenous thornbush)

*Cirsium arvense* (Canadian thistle, Compositae, indigenous weed) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Digitaria sanguinalis (crab grass, Gramineae, American grass) Ficus carica (fig, Moraceae, indigenous fruit tree) *Foeniculum vulgare* (fennel, Umbelliferae, indigenous weed) Geranium rotundifolium (roundleaf cranesbill, Geraniaceae, indigenous weed) Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Malus domesticus (apple, Rosaceae, indigenous fruit tree) Medicago arborea (moon trefoil, Leguminosae, indigenous weed) *Mentha spicata* (spearmint, Labiatae, indigenous herb) *Olea europea* (olive, Oleaceae, indigenous fruit tree) Pastinaca sativa (wild parsnip, Umbelliferae, indigenous weed) Philadelphus coronarius (mock orange, Saxifragaceae, Austrian shrub) *Phleum paniculatum* (rough cat's tail grass, Gramineae, indigenous grass) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub) Quercus ilex (evergreen oak, Fagaceae, indigenous tree) Reseda lutea (yellow mignonette, Resedaceae, wildflower) Rubus fruticosa (bramble, Rosaceae, indigenous vine) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower) *Silene alba* (white campion, Caryophyllaceae, wildflower) Vitis vinifera (grape, Vitaceae, Turkish fruit vine) Zizyphus jujuba (jujube, Rhamnaceae, Chinese fruit vine)

**Amphissa, West Locris.** Pausanias (Jones, 1935, p. 599) saw a temple of Athena on the high and imposing acropolis, later built over by the Frankish citadel of Salona, high to the west of modern Amfissa (Stillwell et al., 1976). The exact location of the temple is unknown, but the large blocks likely to be near the ancient temple are in the area of the keep tower (N38.53159° E22.37379° 296 m). The acropolis is a narrow spur and knoll from mountains to the west, and has a commanding view of Amfissa below and the Crisean Plain to the east. Bedrock is Cretaceous limestone and marble of the Parnassos Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 1C) in a cutting 10 m west of the southwest entrance through cyclopean walls, 200 m south of the Frankish keep (N38.53108° E22.37257° 281 m). Vegetation is garden and park.

Asparagus acutifolius (spiny asparagus, Liliaceae, weedy vine) Avena fatua (wild oats, Gramineae, indigenous grass) Ballota acetabulosa (horehound, Labiatae, wildflower) Capsella bursa-pastoris (shepherd's purse, Cruciferae, indigenous weed) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) Cupressus sempervirens (funeral cypress, Cupressaceae, indigenous tree) Erigeron acer (blue fleabane, Compositae, indigenous weed) Eryngium amethystinum (blue eryngo, Compositae, indigenous weed) Eryngium campestre (field eryngo, Compositae, indigenous weed) Euphorbia characias (large spurge, Euphorbiaceae, indigenous weed) Geranium rotundifolium (roundleaf cranesbill, Geraniaceae, indigenous weed)

*Hordeum vulgare* (barley, Gramineae, Turkish grain) Jurinea mollis (oriental thistle, Compositae, indigenous weed) *Lagurus ovatus* (hare's tail grass, Gramineae, indigenous grass) Lepidium campestre (common pepperwort, Cruciferae, indigenous weed) Micromeria juliana (savory, Labiatae, indigenous herb) *Minuartia setacea* (sandwort, Caryophyllaceae, wildflower) Morus nigra (mulberry, Moraceae, Iranian fruit tree) Phalaris minor (dwarf Canary grass, Gramineae, African grass) Picris hieracioides (ox-tongue hawkweed, Compositae, indigenous weed) Prunus dulcis (almond, Rosaceae, Iranian fruit tree) Setaria pumila (yellow bristle tail grass, Gramineae, indigenous grass) Sisymbrium officinalis (hedge mustard, Cruciferae, indigenous weed) *Tordylium maximum* (hartwort, Umbelliferae, indigenous weed) *Trifolium campestre* (hop trefoil, Leguminosae, indigenous weed) Verbascum graecum (Greek mullein, Scrophulariaceae, indigneous weed) Zizyphus jujuba (jujube, Rhamnaceae, Chinese fruit vine)

**Anticyra, Phocis.** Pausanias (Jones, 1935, p. 591) identified this port town (modern Andikira) with Homeric Cyparissos and mentions a sanctuary of Poseidon near the harbor (Stillwell et al., 1976). Excavations at the corner of Irakleos and Omirous Streets have revealed Hellenistic-Roman baths, but no indication of the sanctuary. A likely site is the church on the coastal terrace at the west end of the town, 100 m west of the excavations (N38.37573° E22.62755° 10 m). The narrow Pleistocene marine terrace of the town is hedged about by the high coastal promontory of the Kephale and hills to the north, both of Cretaceous limestones of the Parnassos Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 5E) in the roadcut into the coastal terrace on Omirou street at the western end of Andikira above the airforce base (N38.3717° E22.62672° 5m), where it is a Calcid (of Soil Survey Staff, 2000). Vegetation is olive grove and littoral.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Carduus nutans (musk thistle, Compositae, indigenous weed) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) Chrysanthemum segetum (corn marigold, Compositae, wildflower) Cupressus sempervirens (funeral cypress, Cupressaceae, indigenous tree) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Erica manipuliflora (heather, Ericaceae, indigenous low shrub) Eryngium amethystinum (blue eryngo, Compositae, indigenous weed) Ficus carica (fig, Moraceae, indigenous fruit tree) Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed) Inula ensifolia (eleacampine, Compositae, wildflower) Inula salicina (willow leaved inula, Compositae, indigenous weed) Olea europea (olive, Oleaceae, indigenous fruit tree) Papaver rhoeas (corn poppy, Papaveraceae, indigenous weed) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree)

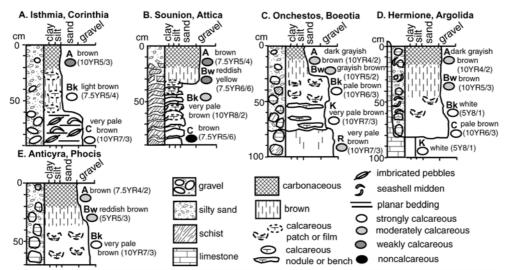


Figure 5. Soil profiles at temples of Poseidon.

Psoralea bituminosa (pitch trefoil, Leguminosae, indigenous weed)
Raphanus raphanistrum (wild radish, Cruciferae, indigenous weed)
Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower)
Scabiosa atropurpurea (sweet scabious, Dipsacaceae, indigenous weed)
Sonchus arvensis (cow thistle, Compositae, indigenous weed)
Sonchus asper (prickly cow thistle, Compositae, indigenous weed)
Spiranthes aestivalis (autumn lady's tresses, Orchidaceae, wildflower)
Tordylium maximum (hartwort, Umbelliferae, indigenous weed)
Verbascum nigrum (black mullein, Scrophulariaceae, indigenous weed)
Vitis vinifera (grape, Vitaceae, Turkish fruit vine)
Zizyphus jujuba (jujube, Rhamnaceae, Chinese fruit vine)

**Argos, Argolida.** A large temple to Apollo is cut into bedrock facing southwest on the south west flank of the Aspis, a low hill on a spur below and to the north of Larissa Castle, and above and to the north of modern Argos (N37.64203° E22.72111° 84 m). Downslope 100 m to the southwest and on rubbly colluvium is a temple of Athena also facing southwest (N37.64176° E22.72065° 73 m). Both sites are reached by car from the road to the saddle between the Apsis and Larissa Castle, below the Dieras archeological site at the summit of the Apsis. The view from the temples is blocked to the east by the summit of the Apsis, to the south by Larissa castle and mountains behind. To the north are floodplains and lowlands of the road to Corinth. Bedrock is massive Cretaceous limestone of the Pindos Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 2L) in the cutting 4 m north of the Temple of Apollo (N37.64191° E22.72107° 80 m), where it is an Orthent (of Soils Survey Staff, 2000). Another soil profile was examined in the ditch 3 m below the Temple of Athena (N37.64176° E22.72065° 73 m), where it is an Anthrept on cultural debris. Vegetation of both sites is open grassy pine woodland.

Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weed) Bromus diandrus (great brome grass, Gramineae, indigenous grass) Clypeola jonthlaspi (disk cress, Cruciferae, indigenous weed) Conyza canadensis (horseweed, Compositae, indigenous weed)

Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed)
Medicago polymorpha (hairy medick, Leguminosae, indigenous weed)
Nerium oleander (olenader, Apocynaceae, indigenous shrub)
Papaver dubium (long-pod poppy, Papaveraceae, indigenous weed)
Phalaris minor (dwark Canary grass, Gramineae, African grass)
Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree)
Pulicaria vulgaris (fleabane, Compositae, indigenous weed)
Senecio viscosus (sticky ragwort, Compositae, indigenous weed)
Setaria pumila (yellow bristletail grass, Gramineae, indigenous grass)
Tordylium maximum (hartwort, Umbelliferae, indigenous weed)
Verbascum graecum (Greek mullain, Scrophulariaceae)
Vitis vinifera (grape, Vitaceae, Turkish fruit vine)

**Artemisio, Arcadia.** This village dedicated to Artemis is on a rocky knoll at the foot of Lurkeio Mountain, 14 km north of Tripoli (N37.67650 E22.3810330 655 m). The village is called Mukhli by Scully (1979), who considers twin peaks of Mt Artemisio as horns significant to the goddess. Pausanias (Jones, 1939, p. 375) mentioned a mountaintop sanctuary to the goddess. The village is within ravine south of the lake and plain of Mantinea. Bedrock is Cretaceous limestone of the Pindos Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 6B) along a farm trail 1 km north of the village (N37.682917° E22.3767170° 683 m) and is an Orthent (Soil Survey Staff, 2000)

*Quercus coccifera* (holly oak, Fagaceae, indigenous shrub) *Sarcopoterium spinosum* (thorny burnet, Euphorbiaceae, indigenous thornbush)

**Artemisio, Euboea.** This village in a narrow coastal valley of northwestern Euboea (modern Evia) was named for Artemis, but the site of her sanctuary is unknown. The coast here is rocky and steep, and the modern village is in a narrow valley, with a creek debouching into a narrow shingle beach (N39.0115° E23.226217° 2 m). There is a conical hill of Neogene sediments behind the village, and also a view across the sea to the hills of Thessaly and Mount Olympus (Scully, 1979). Soil was examined (Figure 6A) on a 3 m coastal terrace capped by limestone boulders and gravel of a raised beach 100 m west of downtown Artemisio (N39.0115° E23.226217° 2 m), and is an Orthent (of Soil Survey Staff, 2001). Vegetation is olive grove and coastal woodland.

Myosoton aquaticum (water chickweed, Caryophyllaceae, indigenous vine) Olea europea (olive, Oleaceae, indigenous fruit tree) Quercus ilex (Holm oak, Fagaceae, indigenous tree) Senecio vulgaris (groundsel, Compositae, indigenous weed)

**Asine, Argolida.** A temple of Apollo was mentioned by Pausanias (Jones, 1931, p. 449) at Asine, and is probably the archaic foundation facing east, on the uppermost terrace of the northside of the summit of Mt Barbouna (N37.52977° E22.86901° 78 m), a conical rocky hill east of the modern coastal village of Asine (Stillwell et al., 1976). The principal acropolis of ancient Asine is a lower, more elongate, rocky ridge 0.5 km to the east, extending with rocky cliffs out into the sea in the archeological preserve. Both hills



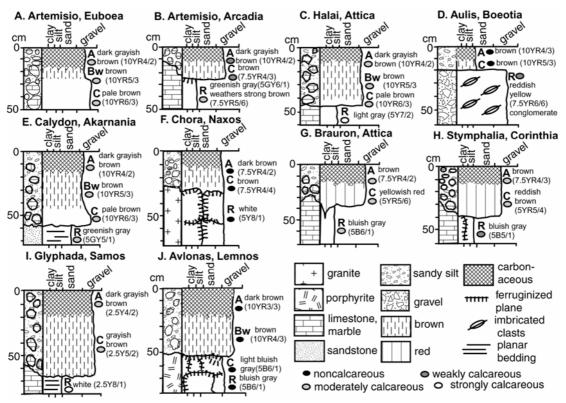


Figure 6. Soil profiles at temples of Artemis.

are isolated from the mountains to the west toward Nafplia, and stand well above the cliffed coast to the south and floodplain fields and olive groves to the north. They are massive Cretaceous limestone of the Pindos Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 2K) in a cut for an agricultural terrace for an olive grove on the south slope of the summit of Mt Barbouna, 10 m south of the temple (N37.52953° 22.86893° 54 m), where it is a thin rocky Orthent (of Soil Survey Staff, 2000). Vegetation is alpine and cultivated olive groves.

Allium roseum (rose garlic, Liliaceae, indigenous herb) Antherium liliago (St Bernard's lily, Liliaceae, wildflower) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Asteriscus spinosus (spiny golden star, Compositae, wildflower) Astragalus parnassi (spny vetch, Leguminosae, indigenous thornbush) Avena fatua (wild oats, Gramineae, indigenous grass) Buxus sempervirens (box, Buxaceae, indigenous thornbush) Chamaecytisus supinus (clustered broom, Leguminosae, indigenous shrub) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Erica manipulifera (heather, Ericaceae, indigenous shrub) Festuca ovina (sheep's fescue, Gramineae, indigenous grass) Helichrysum stoechas (everlasting, Compositae, wildflower) Micromeria juliana (savory, Labiatae, indigenous herb) Minuartia setacea (sandwort, Caryophyllaceae, wildflower) Olea europea (olive, Oleaceae, indigenous fruit tree) Quercus coccifera (kermes oak, Fagaceae, indigenous shrub)

Quercus ilex (evergreen oak, Fagaceae, indigenous tree) Sagina maritima (sea pearlwort, Caryophyllaceae, indigenous weed) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Sedum tenuifolium (stonecrop, Crassulaceae, indigenous succulent) Senecio vulgaris (groundsel, Compositae, indigenous weed) Setaria pumila (yellow bristletail grass, Gramineae, indigenous grass) Sideritis syriaca (ironwort, Labiatae, indigenous weed) Sonchus arvensis (cow thistle, Compositae, indigenous weed) Spergula arvensis (spurry, Caryophyllaceae, indigenous succulent) Trifolium campestre (hop trefoil, Leguminosae, indigenous weed)

**Aulis, Boeotia.** The temple of Artemis at Aulis faces east on a spur 1 km east of the higher hill and modern village of Vathi, Viotia (N38.414533° E23.598783° 31 m). The temple has a superb view of nearby harbors and bays, and faces south (Olalla, 2002). Soil was examined (Figure 6D) along the road to the cement plant 300 m east of the temple (N38.41495° E23.56935° 25 m)., and is thin and rocky, as in Orthents of Soil Survey Staff (2000). Vegetation is coastal phrygana.

*Phlomis lanata* (woolly Jerusalem sage, Labiatae, indigenous weed) *Sarcopoterium spinosum* (thorny burnet, Euphorbiaceae, indigenous thornbush)

**Avlonas, Lemnos.** The sanctuary of Artemis is partly excavated between the lobby and hotel units of Porto Myrina Palace Hotel, south of Myrina, Limnos Island (N39.8935° E25.62327° 16 m). The hotel and temple are on ridge above a low sea cliff, with a stunning view of the headland to the south and bay to the north. Bedrock to the temple and hotel is early Miocene porphyritic tuff from the Myrina volcanic center (Higgins and Higgins, 1996). Soil was examined (Figure 6J) in the roadcut east of the hotel entrance on the sealed road between Myrina and Kapsakas (N39. 892017° E25.0636° 39 m), and is a thick, brown bouldery Xerept (of Soil Survey Staff, 2000). Vegetation is commercial-landscaping and coastal phrygana.

Calicotome villosa (spiny broom, Leguminosae, indigenous shrub) Carpobrotus acaciniformis (pigface, Aizoaceae, South African succulent) Conyza canadensis (Canadian horseweed, Compositae, American weed) Cupressus sempervirens (funeral cypress, Cupressaceae, indigenous tree) Erodium cicutarium (storksbill, Geraniaceae, indigenous weed) Eucalyptus camaldulensis (river red gum, Myrtaceae, Australian tree) Euphorbia characias (large Mediterranean spurge, Euphorbiaceae, wildflower) Geranium dissectum (cutleaf cranesbill, Geraniaceae, indigenous weed) Hypochoeris radicata (cat's ear, Compositae, indigenous weed) Nerium oleander (oleander, Apocynaceae, indigenous shrub) Phlomis lanata (woolly Jerusalem sage, Labiatae, indigenous weed) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Senecio jabobaea (ragwort, Compositae, indigenous weed) Taraxacum officinale (dandelion, Compositae, indigenous weed)

**Bassae, Arcadia.** The Temple of Apollo at Bassae is perhaps the best preserved of all ancient Greek temples renovated in 2003 by a U.N.E.S.C.O. project. It is located on a barren high ridge of Mt Palialakhitsa (ancient Mount Kotilion), 14.5 km southeast of

Andritsaina (N37.4297° E21.900817° 1117m). Views are spectacular in most directions, showing ridge upon ridge of mountains. The temple is in bedrock of finely bedded, Late Cretaceous siliceous limestone, but faces south over a small alpine valley of Pleistocene alluvium (Higgins and Higgins, 1996). Soil was examined (Figure 2E) in the roadcut above the parking lot, immediately east of the temple N37.597033° E21.901667° 1118 m). Vegetation is alpine phrygana, but includes plantation trees.

Buxus sempervirens (box, Buxaceae, indigenous thornbush) Quercus cerris (manna oak, Fagaceae, indigenous tree) Quercus coccifera (kermes, Fagaceae, indigenous shrub) Quercus ilex (evergreen, Facagaeae, indigenous tree)

**Brauron, Attica.** The temple of Artemis is south of a standing colonnade in an archeological preserve and fee area (N37.926067° E23.992817° 5 m) north of a museum and parking lot, 2 km west of modern Vraona, and 7 km southwest of Markopoulo, Attica. The temple is on the swampy footslope of a prominent rocky hill in a small valley of vineyards and orchards surrounded by mountains. With few buildings in sight, the general impression is of wild nature, but the temple is on the footslope of the hill to the south, facing east, and has no special views (Olalla, 2002). The temple is on bouldery colluvium to Triassic-Jurassic Pelagonian marble (Higgins and Higgins, 1996). The soil profile (Figure 6G) was measured in a roadcut west of the sealed road 300 m south of the museum (N37.92115° E24.000133° 26 m). It is thin and bouldery, an Orthent of Soil Survey Staff (2000). Original vegetation was probably coastal heath, degraded to maquis and montane phrygana.

Anemone coronaria (crown anemone, Ranunculaceae, wildflower) Anemone pavonina (peacock anemone, Ranunculaceae, wildflower) Anthemis arvensis (corn chamomile, Compositae, indigenous weed) Arabidopsis thaliana (thale cress, Cruciferae, indigenous weed) Arundo donax (reed cane, Gramineae, indigenous cane grass) Chrysanthemum coronarium (chrysanthemum, Ranunculaceae, wildflower) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) *Eucalyptus camaldulensis* (river red gum, Myrtaceae, Australian tree) Geranium molle (marsh cranesbill, Geraniceae, wildflower) Hypochoeris radicata (common cat's ear, Compositae, indigenous weed) *Leucanthemum vulgare* (ox-eye daisy, Compositae, wildflower) *Malus domesticus* (apple, Rosaceae, indigenous fruit tree) Myosotis arvensis (field forget-me-not, Boraginaceae, indigenous weed) Olea europea (olive, Oleaceae, indigenous fruit tree) Opuntia ficus-indica (prickly pear, Cactaceae, American weedy succulent) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub) *Poa pratensis* (blue grass, Gramineae, indigenous grass) Punica granata (pomegranate, Punicaceae, indigenous fruit tree) *Salix caprea* (goat willow, Salicaceae, indigenous tree) Sarcopoterium spinosum (thorny burnet, Euphorbiaceae, indigenous thornbush) Saxifraga sempervirens (everlasting saxifrage, Saxifragaceae, wildflower) Sedum acre (stonecrop, Crassulaceae, indigenous succulent) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed)

*Ulex europeaus* (gorse, Leguminosae, indigenous thornbush) *Vitis vinifera* (grape, Vitaceae, indigenous fruit vine)

**Cabirion, Boeotia.** A sacred grove of Demeter and Core is mentioned by Pausanias (Jones, 1935, p. 279) near the sanctuary of Cabirion, within an enclosure on the floodplain of the channelized Kanavari River, 400 m south of the road to Livadhia 8 km west of Thiva, Viotia (N38.32652° E23.2567° 126 m). The exact location of the sacred grove is not known, but the twin dieties of the Cabirioi also had a farm related cult (Barber, 2001). Soil was examined (Figure 7D) on the west bank of the Kanavari River 10 m across the river bridge from the enclosure (N38.32651° E23.2565° 122m). The hills and low and 2-3 km distant in this wide alluvial plain. A Xeroll soil (of Soil Survey Staff, 1996) is developed on friable loamy Holocene silt of the river floodplain (Higgins and Higgins, 1996). Vegetation is riparian weed and open pasture, with trees restricted to the fenced enclosure.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Amaranthus retroflexus (pigweed, Amaranthaceae, American weed) Avena fatua (wild oats, Gramineae, indigenous grass) Brassica nigra (black mustard, Cruciferae, indigenous weed) Bromus diandrus (great brome, Gramineae, indigenous grass) Calendula arvensis (marigold, Compositae, wildflower) Cerastium arvense (chickweed, Caryophyllaceae. American weed) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) Cichorium intybus (chicory, Compositae, indigenous weed) Cirsium candelabrum (candelabra thistle, Compositae, indigenous weed) Convolvulus arvensis (bindweed, Convolvulaceae, indigenous vine) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Digitaria sanguinalis (crab grass, Gramineae, American grass) Ecballium elaterium (squirting cucumber, Cucurbitaceae, indigenous vine) *Ficus carica* (fig, Moraceae, indigenous fruit tree) Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed) Hordeum vulgare (barley, Gramineae, Turkish grain) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Laurus nobilis (laurel, Lauraceae, indigenous tree) *Phleum paniculatum* (rough cat's tail, Gramineae, indigenous grass) Phragmites australis (common reed, Gramineae, indigenous grass) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) *Populus nigra* (black poplar, Salicaceae, indigenous tree) Prunella vulgaris (common self heal, Labiatae, indigenous weed) Rumex crispus (curly dock, Polygonaceae, indigenous weed) Saniculum europea (sanicle, Umbelliferae, wildflower)

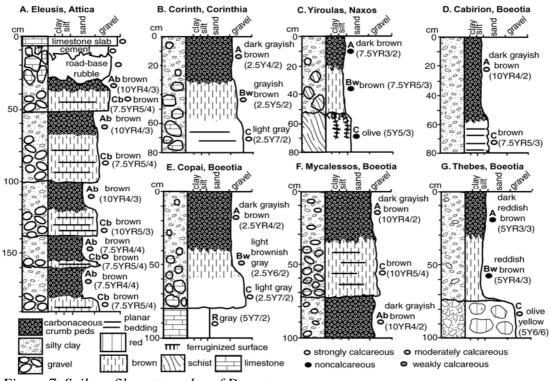


Figure 7. Soil profiles at temples of Demeter.

Sinapis alba (white mustard, Cruciferae, indigenous weed) Tribulus terrestris (puncturevine, Zygophyllaceae, indigenous weed) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed) Vitis vinifera (grape, Vitaceae, Turkish fruit vine) Xanthium strumarium (cockleburr, Compositae, American weed)

**Calydon, Akarnania.** The sanctuary of Artemis and a Heroon are in the archeological preserve 8.5 km northeast of Mesolongi.The temple is on a promontory of a high coastal terrace (N38.37208° E21.539638° 50 m). The temple has a good view of coast here, including spectacular coastal headlands of limestone, and faces east (Olalla, 2002). Bedrock is greenish gray calcareous sandstone of Paleogene flysch of the Gavrovo Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 6E) 20 m north of the temple, and is developed on 58 cm of colluvium of middle Pleistocene age, lying unconformably on dipping bedrock (N38.37275° E21.53037° 47 m). The soil has a weak B horizon and is a Xerept (of Soil Survey Staff, 2000). Vegetation is olive grove, but would have been coastal oak woodland.

Acinos arvensis (field calamint, Labiatae, wildflower) Agrostis gigantea (bent grass, Gramineae, indigenous grass) Allium roseum (rose garlic, Liliaceae, indigenous herb) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Asteriscus spinosus (spiny golden star, Compositae, wildflower) Carduus nutans (musk thistle, Compositae, indigenous weed) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) Ficus caricus (fig, Moraceae, indigenous fruit tree)

Heliotropum hirsutissium (heliotrope, Boragninaceae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Jurinea mollis (oriental thistle, Compositae, indigenous weed) *Lavandula angustifolia* (lavender, Labiatae, indigenous herb) *Lithospermum officinale* (cromwell, Boraginaceae, wildflower) Micromeria juliana (savory, Labiatae, indigenous herb) Morus nigra (mulberry, Moraceae, Middle Eastern fruit tree) *Olea europea* (olive, Oleaceae, indigenous fruit tree) Paspalum paspaloides (knotgrass, Gramineae, Central American weed) Plantago major (common plantain, Plantaginaceae, indigenous weed) *Psoralea bituminosa* (pitch trefoil, Leguminosae, indigenous weed) Quercus ilex (evergreen oak, Fagaceae, indigenous tree) Rubus fruticosus (bramble, Rosaceae, indigenous spiny vine) Saxifaga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower) Sideritis syriaca (ironwort, Labiatae, indigenous weed) Verbascum blattaria (moth mullein, Scrophulariaceae, indigenous weed) *Veronica rhodopea* (rhodope speedwell, Labiatae, wildflower) *Vitex agnus-castus* (chaste tree, Verbenaceae, indigenous tree)

**Cape Tainaron, Laconia.** The southern extremity of Cape Tainaron (Cape Matapan), in the Mani region of far southern Laconia, is where sea caves were thought to be entrances to the underworld and to its ruler, Hades (Olalla, 2002). A particularly large cave, recently collapsed is across the bay from Porto Kayo. This rocky mountainous promontory is mainly Mesozoic marble of the Gavrovo Terrane (Higgins and Higgins, 1996). Views are good of the open Mediterranean Sea. A soil was examined (Figure 8A) along the trail 200 m north of the lighthouse (N36.386067° E22.4825° 12 m), where it is a thin brown Orthent (Soil Survey Staff, 2000) supporting low coastal heath no taller than 1 m.

Anemone coronaria (crown anemone, Ranunculaceae, wildflower) Anthemis arvensis (corn chamomile, Compositae, indigenous weed) Asphodelus aestivus (asphodel, Liliaceae, wildflower) *Callicotome villosa* (spiny broom, Leguminosae, indigenous shrub) Epilobium angustifolium (rosebay willow herb, Onagraceae, American weed) *Epilobium parviflorum* (willow herb, Onagraceae, indigenous weed) Euphorbia acanthothamus (spiny spurge, Euphorbiaceae, indigenous thornbush) *Hypochoeris glabra* (smooth cat's ear, Compositae, indigenous weed) *Iris unguicularis* (wild iris, Iridaceae, wildflower) Lotus corniculatus (birdsfoot trefoil, Leguminosae, Chinese shrub) *Muscari commutatum* (grape hyacinth, Liliaceae, wildflower) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub) Raphanus raphanastrum (wild radish, Cruciferae, indigenous weed) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Saxifraga sempervivum (saxifrage, Saxifragaceae, wildflower) Sisymbrium officinalis (hedge mustard, Cruciferae, indigenous weed) *Trifolium campestre* (hop trefoil, Leguminosae, indigenous weed)

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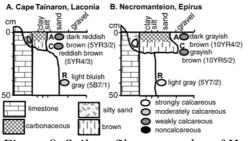


Figure 8. Soil profiles at temples of Hades.

Cenchreai, Corinthia. The ancient harbor of Cenchreai at the eastern end of the Corinthian Canal and ancient Dolkos, and east of the modern village of Kekhries, had two temples according to Pausanias (Jones, 1931, p. 255), one on the southern mole called the "Baths of Helen" and probably dedicated to Isis, and one on the northern mole dedicated to Aphrodite (N37.88053° E22.99596° 2 m). Little remains of either temple, but both are on the lowest marine terrace here, of calcareous gravels of probably late Pleistocene age (Higgins and Higgins, 1996). Soil was examined (Figure 9C) in a roadcut on the highway from Isthmia to Epidauros where it descends from the west into Kechries some 200 m west of the Temple of Aphrodite (N37.88626° E22.99581° 24 m), where it is a Calcid, like that at nearby Isthmia. Vegetation is littoral woodland.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Arundo donax (reed cane, Gramineae, indigenous grass) Asteriscus spinosus (spiny golden star, Compositae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) *Briza media* (quaking grass, Gramineae, indigenous grass) Bromus diandrus (great brome grass, Gramineae, indigenous grass) *Carduus nutans* (musk thistle, Compositae, indigenous weed) *Carthanus lanatus* (saffron thistle, Compositae, indigenous weed) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) *Ecballium elaterium* (squirting cucumber, Cucurbitaceae, indigenous weed) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) *Foeniculum vulgare* (fennel, Umbelliferae, indigenous weed) Helichrysum stoechas (everlasting, Compositae, wildflower) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) *Micromeria juliana* (savory, Labiatae, indigenous herb) Olea europea (olive, Oleaceae, indigenous fruit tree) Phalaris minor (dwarf canary grass, Gramineae, African grass) *Pinus halepensis* (Aleppo pine, Pinaceae, indigenous tree) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower) Scabiosa columbaria (butterfly blue, Dipsaceae, wildflower) Sonchus arvensis (cow thistle, Compositae, indigenous weed) *Trifolium arvense* (hare's foot clover, Leguminosae, indigenous weed) *Vitis vinifera* (grape, Vitaceae, Turkish fruit vine)

**Chaironeia, Boeotia.** The ancient theater cut into bedrock of a low hill on the western edge of Chaironeia (modern Heronia, Viotia) has a dedication above the last tier to Apollo and Artemis (N38.49449° E22.84192° 149 m). Most of the theater is cut into

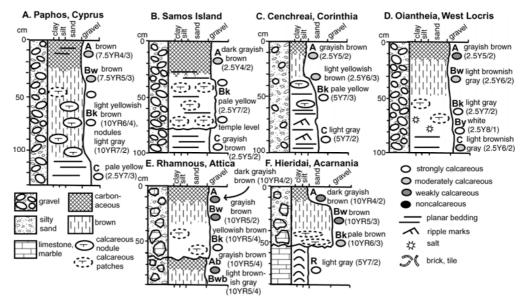


Figure 9. Soil profiles at the temples of Aphrodite.

Cretaceous limestone of the Sub-Pelargonian Terrane (Higgins and Higgins, 1996) forming the footslope of Mount Petrarchos, which rises steeply to the south. Soil was examined (Figure 2J) in the slope at the southwestern side of the theater (N38.49448° E22.84154° 152 m). Vegetation is alpine phrygana grading down to suburban garden and pasture.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Ajuga reptans (bugleweed, Labiatae, wildflower) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Atropa belladonna (deadly nightshade, Solanaceae, indigenous herb) Carduus nutans (musk thistle, Compositae, indigenous weed) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) Cucumis sativa (cucumber, Cucurbitaceae, indigenous weedy vine) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) *Echinops graecus* (globe thistle, Compositae, indigenous weed) *Ervngium amethystinum* (blue ervngo, Compositae, indigenous weed) *Geranium rotundifolium* (roundleaf cranesbill, Geraniaceae, indigenous weed) Heliotropum hirsutissimum (heliotrope, Boragninaceae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) *Hypochoeris radicata* (cat's ear, Compositae, indigenous weed) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lagurus ovatus (hare's tail grass, Gramineae, indigenous grass) Lepidium campestre (common pepperwort, Cruciferae, indigenous weed) *Malus domesticus* (apple, Rosaceae, indigenous fruit tree) *Micromeria juliana* (savory, Labiatae, indigenous herb) Minuartia setacea (sandwort, Caryophyllaceae, wildflower) Olea europea (olive, Oleaceae, indigenous fruit tree) *Reseda lutea* (yellow mignonette, Resedaceae, wildflower)

Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wilddlower) Setaria viridis (green bristle grass, Gramineae, indigenous grass) Sideritis syriaca (ironwort, Labiatae, indigenous weed) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) Smyrnium rotundifolium (roundleaf alexander, Umbelliferae, wildflower) Tordylium maximum (hartwort, Umbelliferae, indigenous weed) Tribulus terrestris (puncturevine, Zygophyllaceae, indigenous weed) Trifolium campestre (hop trefoil, Leguminosae, indigenous weed)

**Chora, Myconos.** Ancient worship of Dionysos in main village of Myconos indicated by coins is consistent with its current reputation as a resort. The site of the sanctuary has not been discovered, but the village is small and arrayed around the harbor (N37.44784° E25.32665° 2 m). Soils around Myconos Chora are heavily built, but an undisturbed profile (Figure 4I) was examined 2 km to the southwest along the upper road to Ornos (N37.43053° E25.32856° 72 m), in the cultivated plateau above the village. The soil was a Xeroll developed on Miocene granite (Higgins and Higgins, 1996) in a fenced field under pasture.

Alopecurus myosuroides (slender foxtail, Gramineae, indigenous grass) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) Cichorium intybus (chicory, Compositae, indigneous weed) Convolvulus arvensis (field bindweed, Convolvulaceae, indigenous weed) Conyza canadensis (Canadian horseweed, Compositae, American weed) Cynodon dactylon (Bermuda grass, Compositae, African grass) Daucus carota (Queen Anne's lace, Unbelliferae, indigenous weed) *Eryngium campestre* (field eryngo, Compositae, indigenous weed) Foeniculum vulgare (giant fennel, Umbelliferae, indigenous weed) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lagurus ovatus (hare's tail, Gramineae, indigenous grass) Pastinaca sativa (wild parsnip, Umbelliferae, indigenous weed) Plantago lanceolata (ribwort plantain, Plantaginaceae, indigenous weed) Rumex crispus (curly dock, Polygonaceae, indigenous weed) Scirpus mucronatus (clubrush, Cyperaceae, indigenous sedge) Sonchus arvensis (cow thistle, Compositae, indigenous weed) *Taraxacum officinale* (dandelion, Compositae, indigenous weed) *Verbascum longifolium* (mullein, Scrophulariaceae, indigenous weed)

**Chora, Naxos.** The temple of Artemis on the northwestern corner of Chora on Naxos Island has now been built over, but was at the highest southern end of Heirolochiton Street (N37.109833° E25.382633° 42 m). This is above a headland of Pleistocene fanglomerate, but is on Miocene, light gray, gneissic granite (Higgins and Higgins, 1996). Soil was examined (Figure 6F) in the roadcut of the highway to Egara 1 km north of Chora (N37.111033° E25.387417° 44 m), and is a thin Orthent (of Soil Survey Staff, 2000). Vegetation is a low scrubby coastal phrygana.

Astragalus parnassii (spiny vetch, Leguminosae, indigenous thornbush) Biscutella brevifolia (buckler mustard, Cruciferae, indigenous weed) Epimedium pupigerum (barrenwort, Berberidaceae, indigenous weed)

Lepidium graminifolium (grass-leaved pepperwort, Cruciferae, indigenous weed) Phlomis fruticosa (Jerusalem sage, Labiatae, indigenous weed) Plantago lanceolata (ribwort plantain, Plantaginaceae, indigenous weed) Primula halleri (cowslip, Primulaceae, wildflower) Senecio jacobaea (ragwort, Compositae, indigenous weed)

**Cirra, Phocis.** Pausanias (Jones, 1935, p. 597) mentioned a temple of Apollo, Artemis and Leto in this former port town of Amphissa, but its location is uncertain. The highest part of the low coastal terrace is at the church of Agios Polycarpos at the corner of Tzhon Kenentu and Agios Polycarpou Streets (N38.43053° E22.44582° 15 m). The modern coastal town of Kirra (formerly Xeropigadi) is on a Pleistocene marine terrace south of low-lying marshes and floodplains ringed by mountains of Cretaceous limestones of the Parnassos Terrrane (Higgins and Higgins, 1996). Soil was examined (Figure 2K) in the roadcut at the northeastern side of the intersection of Tzhon Kenentu and Krissos Streets (N38.43059° E22.44452° 14 m), and is a Xerept on limestone gravel. Vegetation is suburban garden.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) *Digitaria sanguinalis* (crab grass, Gramineae, American grass) *Galium spurium* (cleavers, Rubiaceae, indigenous vine) Geranium rotundifolium (roundleaf cranesbill, Geraniaceae, indigenous weed) Laurus nobilis (laurel, Lauraceae, indigenous tree) *Lonicera xylosteum* (honeysuckle, Caprifoliaceae, indigenous vine) Nerium oleander (oleander, Apocynaceae, indigenous shrub) Olea europea (olive, Oleaceae, indigenous tree) Paeonia suffruticosa (tree paeony, Paeoniaceae, Chinese ornamental shrub) *Phoenix dactylifera* (date palm, Palmae, African tree) Picris hieracioides (ox-tongue hawkweed, Compositae, indigenous weed) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Punica granata (pomegranate, Punicaceae, indigenous tree) *Pyrus pyraster* (wild pear, Rosaceae, indigenous fruit tree) Rosa chinensis (rose, Rosaceae, Chinese ornamental) Senecio viscosus (stinking groundsel, Compositae, indigenous weed) Sonchus arvensis (cow thistle, Compositae, indigenous weed) *Tecoma radicans* (trumpet creeper, Bignoniaceae, Central American ornamental)

**Copai, Boeotia.** Ancient Copai was on the low acropolis of modern Kastro, Viotia, and had coins (Stillwell et al., 1976) and a sanctuary dedicated to Demeter, as well as a sanctuaries to Dionysos and Serapis (Pausanias, see Jones, 1935, p. 273). No remains of sanctuaries have been found, but the church of Profitas Elias at the southern end of the town square on the summit of the acropolis is a likely location (N38.49308° E23.16005° 119 m). This church as a good view south over the plains, which were formerly Lake Copais. In classical times some of this was already drained for fields, and there were additional fields to the east near the Mycenean fortress of Gla 2 km to the northeast. Like Gla, the acropolis of Kastro rose from the plains isolated from hill-ranges 1-2 km to the north, but unlike Gla's precipituous cliffs and walls, the acropolis of Copai was a rounded low hill. Bedrock in both cases is Cretaceous limestone of the Sub-Pelagonian Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 7E) in the

roadcut 300 m west of the town square below the crest of the hill (N38.49378° E23.15981° 109m). Vegetation is garden and pasture. Agrostis gigantea (bent grass, Gramineae, indigenous grass) Allium junceum (rose garlic, Liliaceae, indigenous herb) Avena fatua (wild oats, Gramineae, indigenous grass) Bromus diandra (great brome grass, Gramineae, indigenous grass) *Campanula latifolia* (large bellflower, Campanulaceae, wildflower) *Chrozophora tinctoria* (giradol, Euphorbiaceae, indigenous weed) *Cirsium arvense* (Canadian thistle, Compositae, indigenous weed) Foeniculum vulgare (fennel, Umbelliferae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Juniperus phoenicea (Phoenician juniper, Cupressaceae, indigenous tree) Jurinea mollis (oriental thistle, Compositae, indigenous weed) *Lactuca serriola* (prickly lettuce, Compositae, indigenous weed) *Lagerstroemia speciosa* (crepe myrtle, Lythraceae, Indian tree) Laurus nobilis (laurel, Lauraceae, indigenous tree) *Magnolia grandiflora* (magnolia, Magnoliaceae, American tree) *Mora nigra* (mulberry, Moraceae, Middle Eastern tree) Nerium oleander (oleander, Apocynaceae, indigenous shrub) Olea europea (olive, Oleaceae, indigenous tree) Papaver rhoeas (corn poppy, Papaveraceae, indigenous weed) *Phoenix dactylifera* (date palm, Palmae, African tree) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Platanus orientalis (plane tree, Platanaceae, indigenous tree) Prunus dulcis (almond, Rosaceae, Iranian fruit tree) *Punica granata* (pomegranate, Punicaceae, indigenous fruit tree) Rosa chinensis (rose, Rosaceae, Chinese ornamental) Setaria viridis (green bristle grass, Gramineae, indigenous grass) Sinapis alba (white mustard, Cruciferae, indigenous weed) Spartium junceum (broom, Leguminosae, Spanish shrub) Vitis vinifera (grape, Vitaceae, Turkish fruit vine)

Corinth, Corinthia. The classical Temple of Apollo, and a variety of other Hellenistic and Roman Imperial ruins are within a large archeological preserve and fee area, 5.5 km southwest of modern Corinth (N37.905089° E22.87892° 78m). The temple still has a few standing columns and faces northeast (Barbour, 2001; Olalla, 2002). It was constructed on a high marine terrace, probably early Pleistocene, of calcite-cemented conglomerate, some of which has been carved as the classical Fountain of Glauke (Higgins and Higgins, 1996). The terrace is the last broad level surface in the ascent to the Acrocorinth, and has good views west, north and east over the lowlands of the Corinthian isthmus. Soil was examined (Figure 2N) in a roadcut 20 m west of the museum in the archeological preserve (N37.90502° E22.87721° 82 m), and includes a modern and a buried Xerept on pebbley conglomerate. Vegetation is suburban garden, but pasture is not far distant.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Allium sphaerocephalum (round-headed leek, Liliaceae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Carduus nutans (musk thistle, Compositae, indigenous weed)

*Chrozophora tinctoria* (giradol, Euphorbiaceae, American weed) Conyza canadensis (horseweed, Compositae, Canadian weed) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) *Ervngium campestre* (field ervngo, Compositae, indigenous weed) *Eucalyptus camaldulensis* (river red gum, Myrtaceae, Australian tree) Galium aparine (stickywilly, Rubiaceae, indigenous weed) Geranium rotundifolium (roundleaf cranesbill, Geraniaceae, indigenous weed) Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed) Laurus nobilis (laurel, Lauraceae, indigenous tree) Lavatera cretica (mallow, Malvaceae, wildflower) Medicago minima (small medick, Leguminosae, indigenous weed) *Melia azederach* (chinaberry, Meliaceae, Chinese tree) Mespilus germanicus (medlar, Rosaceae, indigenous fruit tree) Nerium oleander (oleander, Apocynaceae, indigenous shrub) *Pinus halepensis* (Aleppo pine, Pinaceae, indigenous tree) Portulaca oleracea (purslane, Portulacaceae, indiegnous shrub) Reseda lutea (yellow mignonette, Resedaceae, wildflower) Robinia pseudoacacia (black locust, Leguminosae, American tree) *Sinapis alba* (white mustard, Cruciferae, indigenous weed) Tecoma stans (yellow bells, Bignoniaceae, Central American ornamental shrub) Tribulus terrestris (puncturevine, Zygophyllaceae, indigenous weed) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed) Zizyphus jujuba (jujube, Rhamnaceae, Chinese fruit vine)

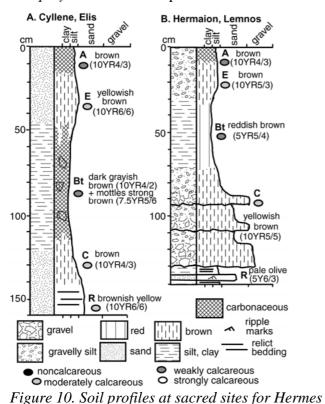
On the footslopes of the imposing hill of Acrocorinth, also a sacred site, 1 km south of the temple of Apollo in ancient Corinth is a Temple of Demeter, below a theatre and above a classical spring (N37.89885° E22.87635° 181 m). This temple also faces east, and was along the old sacred way to Acrocorinth, and on its steep northern slopes. To the south the view is of cliffs of the Acrocorinth, but this part of the hill has good views of the Temple of Apollo below, and the entire Corinthian Gulf to the west, north and east. The temple has foundations in massive Cretaceous limestone of the Parnassos Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 7B) in the roadcut to the modern sealed road to Acrocorinth 20 m southwest of the temple (N37.89845° 22.87584° 192m), and was a Xeroll on colluvium and bedrock. Vegetation is grassy pasture.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Asparagus acutifolium (spiny asparagus, Liliaceae, indigenous weedy vine) Asperula boissieri (asperula, Rubiaceae, wildflower) Asteriscus spinosus (spiny golden star, Compositae, wildflower) Astragalus parnassii (spiny vetch, Leguminosae, indigenous thornbush) Avena fatua (wild oats, Gramineae, indigenous grass) Ballota acetabulosa (horehound, Labiatae, wildflower) Briza media (quaking grass, Gramineae, indigenous grass) Buxus sempervirens (box, Buxaceae, indigenous thornbush) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) Ceratonia siliqua (carob, Leguminosae, indigenous tree) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) Dactylis glomerata (orchard grass, Gramineae, indigenous grass) Echinops graecus (globe thistle, Compositae, indigenous weed)

Eryngium amethystinum (blue eryngo, Compositae, indigenous weed) Euphorbia characias (large spurge, Euphorbiaceae, indigenous weed) Foeniculum vulgare (fennel, Umbelliferae, indigenous weed) Helichrysum stoechas (everlasting, Compositae, wildflower) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Hypochoeris radicata (cat's ear, Compositae, indigenous weed) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lepidium campestre (common pepperwort, Cruciferae, indigenous weed) Medicago orbicularis (large disk medick, Leguminosae, indigenous weed) Micromeria juliana (savory, Labiatae, indigenous herb) Olea europea (olive, Oleaceae, indigenous tree) Rumex crispus (curly dock, Polygonaceae, indigenous weed) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Senecio viscosus (sticky ragwort, Compositae, indigenous weed) Setaria pumila (yellow bristletail grass, Gramineae, indigenous grass) *Tofieldia calyculata* (false asphodel, Liliaceae, wildflower) *Trifolium campestre* (hop trefoil, Leguminosae, indigenous weed) Verbascum blattaria (moth mullein, Scrophulariaceae, indigenous weed) Xanthium spinosum (Bathurst burr, Compositae, South American weed)

**Cyllene, Elis.** This is the modern town of Killini, in modern Ilia. Pausanius (Jones, 1939, p. 159) noted a large stone phallus mounted on a pedestal in this coastal town, where Hermes was worshipped with great reverence. A soil was examined on a road leading down to the beach 2 km north of Killini (N37.936917° E21.1279° 6 m), and is developed on Pliocene brown sandstone including gypsum (Higgins and Higgins, 1996). The soil (Figure 10A) is 143 cm thick and has a well devloped argillic (Bt) horizon as is typical of Xeralf (Soil Survey Staff, 2000). Vegetation is a coastal thicket adjacent to sheep pasture.

Anemone hortensis (star anemone, Ranunculaceae, wildflower) Buxus sempervirens (box, Buxaceae, indigenous thornbush) Callicotome villosa (spiny broom, Leguminosae, indigenous thornbush) Myrtus communis (myrtle, Myrtaceae, indigenous shrub) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub) Rubus fruticosus (bramble, Rosaceae, indigenous spiny vine) Smilax aspera (sarsparilla, Smilacaceae, indigenous vine) Spartium junceum (broom, Leguminosae, Spanish shrub)



**Daulis, Phocis.** Ancient Daulis is on a cliffed, high citadel, accessible by road across a narrow causeway, 2 km east of the modern hillside town of Davlia, Fokida. A sanctuary and cult of Athena is known from Pausanias (Jones, 1935, p. 389), who notes

that *daulis* is an archaic term for "shaggy" or "wooded". The sanctuary was probably on the northwest corner of this tablelike citalel, at the site of the ruined early Christian basilica of Hagii Theodori (Stillwell et al., 1976; N38.50708° E22.73172° 447 m). The citadel high on the slopes of large mountains, which rise to the south, has a commanding view north of the Kephissos River and fields below. Bedrock exposed in fortified cliffs around the table-like citadel is Cretaceous limestone of the Parnassos Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 1B) at the northern edge of the Christian basilica (N38.50708° E22.73172° 447 m). Vegetation is pine woodland.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Ballota acetabularis (horehound, Labiatae, wildflower) Bilderdykia dumetorum (copse bindweed, Polygonaceae, indigenous vine) Carthamus lanatus (safrron thistle, Compositae, indigenous weed) Ceratonia siliqua (carob, Leguminosae, indigenous fruit tree) Conringia orientalis (hare's ear cabbage, Cruciferae, indigenous weed) Crepis capillaris (smooth hawksbeard, Compositae, indigenous weed) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Erica manipulifera (heather, Ericaceae, indigenous low shrub) Fibigia clypeata (Roman shields, Cruciferae, wildflower) Galium spuium (hedge bedstraw, Rubiaceae, indigenous weed) Hypericum maculatum (St John's wort, Guttiferaceae, indigenous weed) Jurinea mollis (oriental thistle, Compositae, indigenous weed)

Lepidium campestre (common pepperwort, Cruciferae, indigenous weed) Lunaria annua (honesty, Cruciferae, wildflower) Micromeria juliana (savory, Labiatae, indigenous herb) Oryzopsis miliacea (smilo grass, Gramineae, indigenous grass) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Psalorea bituminosa (pitch trefoil, Legumninosae, indigenous weed) Quercus coccifera (kermes oak, Fagaceae, indigenous shrub) Quercus ilex (evergreen oak, Fagaceae, indigenous tree) Ruscus aculeatus (butchers' broom, Liliaceae, indigenous weed) Setaria pumila (yellow bristle tail grass, Gramineae, indigenous grass) Smyrnium rotundifolium (roundleaf alexander, Umbelliferae, wildflower) Spartium junceum (broom, Leguminosae, Spanish shrub) Trifolium arvense (hare's foot clover, Leguminosae, indigenous weed) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed)

**Delos Island.** This whole island in the central Cyclades is an archeological preserve accessible by ferry from Mykonos harbor, and was a center for the worship of Apollo second only to Delphi (Barber, 2001; Olalla, 2002). The temple of Apollo faces east, on toeslopes north of Mt Cynthos, and south of the Sacred Lake (N37.40043° E25.26681° 9 m). It was built on colluvium and bedrock of Miocene light brown granite (Higgins and Higgins, 1996). Soil was examined (Figure 2O) in a bank 250 m south of the temple, and south across the road from the Agora of the Delians (N37.39903° E25.26709° 20 m). Vegetation is garden and low coastal phrygana.

Arundo donax (reed cane, Gramineae, indigenous cane grass) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Asteriscus spinosus (spiny golden star, Compositae, wildflower) Astragalus parnassii (spiny vetch, Leguminosae, indigenous thornbush) Avena fatua (wild oats, Gramineae, indigenous grass) Carduus pycnocephalus (Italian thistle, Compositae, indigenous weed) Carpobrotus acaciniformis (pigface, Aizoaceae, South African succulent) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Ecballium elaterium (squirting cucumber, Cucurbitaceae, indigenous vine) *Echinops graecus* (globe thistle, Compositae, indigenous weed) Eryngium campestre (field eryngo, Compositae, indigenous weed) Festuca ovina (sheep's fescue, Gramineae, indigenous grass) *Hordeum murinum* (wall barley, Gramineae, Turkish grain) Juniperus excelsa (Grecian juniper, Cupressaceae, indigenous tree) Laurus nobilis (laurel, Lauraceae, indigenous tree) Malcomia maritima (Virginia stock, Cruciferae, indigenous weed) Medicago marina (sea medick, Leguminosae, indigenous weed) Phagnalon graecum (phagnalon, Compositae, wildflower) *Phoenix dactylifera* (date palm, Arecaceae, African palm) Plantago major (common plantain, Plantaginaceae, indigenous weed) Rumex crispus (curly dock, Polygonaceae, indigenous weed) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Scirpus mucronatus (clubrush, Cyperaceae, indigenous sedge)

Sonchus arvensis (cow thistle, Compositae, indigenous weed) Typha latifolia (lesser reedmace, Typhaceae, indigenous cattail) Verbascum longifolium (long-leaf mullein, Scrophulariaceae, indigenous weed)

**Delphi, Phocis.** The Temple of Apollo at Delphi was famous in the ancient world for its oracular priestess, the Pythia. The temple is perched on a narrow shelf below high cliffs of limestone of Mt Parnassos (N38.482317° E22.50083° 575 m), and faces northeast into a narrow gorge of the Castalian Spring, within a large archeological site and museum east of the modern village of Delfi (Olalla, 2002). The temple is on Cretaceous limestone of the Parnassos Terrane, and on a fault that runs under the temple and laterally to the Castalian Spring (Piccardi, 2000). Several other limestone and flysch units crop out on this cliffed mountainside (Higgins and Higgins, 1996). Soil was examined (Figure 2C) in the bank 200 m west of the archeological museum (N38.477017° 22.49575° 540 m), and was a red and bouldery Xerept (Soil Survey Staff, 2000). Vegetation includes garden and alpine phrygana.

Amaranthus retroflexus (horseweed, Amaranthaceae; American weed) Anthemis arvensis (corn chamomile, Compositae, indigenous weed) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) *Calicotome villosa* (spiny broom, Leguminosae, indigenous thornbush) Cotinus cogyria (smoke tree, Anacardiaceae, indigenous tree) *Cupressus semervirens* (funeral cypress, Cupressaceae, indigenous tree) Euphorbia acanthothamnus (spiny spurge, Euphorbiaceae, indigenous thornbush) Euphorbia helioscopa (sun spurge, Euphorbiaceae, indigenous weed) Geranium molle (marsh cranesbill, Geraniceae, wildflower) Hedera helix (ivy, Araliaceae, indigenous vine) *Inula convzae* (spikenard, Compositae, indigenous weed) Laurus nobilis (laurel, Lauraceae, indigenous tree) *Malus domesticus* (apple, Rosaceae, indigenous fruit tree) *Myrtus communis* (myrtle, Myrtaceae, indigenous shrub) Nerium oleander (oleander, Apocynaceae, indigenous shrub) Olea europea (olive, Oleaceae, indigenous fruit tree) Phlomis fruticosa (Jerusalem sage, Labiatae, inidgenous weed) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Platanus orientalis (plane tree, Platanaceae, indigenous tree) Potentilla fruticosa (shrubby cinquefoil, Rosaceae, indigenous shrub) Primula halleri (cowslip, Primulaceae, wildflower) Prunus cerasus (sour cherry, Rosaceae, indigenous tree) *Prunus laurocerasus* (cherry laurel, Rosaceae, indigenous tree) *Punica granata* (pomegranate, Punicaceae, indigenous fruit tree) Quercus coccifera (kermes oak, Fagaceae, indigenous shrub) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) Spartium junceum (broom, Leguminosae, Spanish shrub) Viburnum tinus (laurustinus, Caprifoliaceae, indigenous shrub)

**Dodona, Epirus.** The temple of Zeus at Dodona, was the site of a famous oracle, in an archeological preserve and fee area, 2 km south of Dodonopoulos village, 22 km southwest of Ioannina (Barber, 2001). The temple faces southeast (Olalla, 2002), and is built on rubble below the walls of the acropolis (39.546167° 20.78545° 646 m), which is

a low ridge within a narrow mountain valley lacking a stream because of local sinkholes. Bedrock of the walls and acropolis is a Paleocene-Eocene limestone with veins of chert, and is part of the Gavrovo Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 3C) in a cutting 300 m east along a farm track 1 km north of the parking area for the fee area (N39.553717° E20.7904° 703 m), and is 66 cm thick, dark with humus and bouldery with limestone and cultural debris, as in an Anthrept (Soil Survey Staff, 2000). Vegetation here is a hedge to livestock pasture and chicken pens.

Arabidopsis thaliana (thale cress, Cruciferae, indigenous weed)
Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine)
Hedera helix (ivy, Araliaceae, indigenous vine)
Myrtus communis (myrtle, Myrtaceae, indigenous shrub)
Phlomis fruticosa (Jerusalem sage, Labiatae, indigenous weed)
Pteridium aquilinum (bracken fern, Dennstaedtiaceae, indigenous fern)
Quercus coccifera (kermes oak, Fagaceae, indigenous shrub)
Quercus ilex (evergreen oak, Fagaceae, indigenous tree)
Rubus fruticosus (bramble, Rosaceae, indigenous thorny vine)
Senecio jacobaea (ragwort, Compositae, indigenous weed)

Eleusis, Attica. Ancient Eleusis was famous for the Eleusinian Mysteries of Demeter and Persephone (Stillwell et al., 1976), and is an archeological preserve and museum on the southeast side of downtown Elefsina, 30 km east of Athens (modern Athinae), Attica (N38.041367° E23.538683° 17 m). The Telesterion of Demeter is partly cut into the rock and partly on colluvial footslopes at the western end of a rocky hill (Olalla, 2002). Views from near the Telesterion include the Island of Salamis to the south, which looks like the profile of a sleeping woman, and twin peaks of Kerata, like a pair of bulls horns according to Scully (1982). The twin caves of Persephone face east from the cliff above the Ploution, 100 m north of the Telesterion, and look like the eyesockets of a giant skull emerging from the plain. The rocky hill is another outcrop of Late Cretaceous Sub-Pelagonian limestone like that on the Athenian Acropolis (Higgins and Higgins, 1996). The limestone crops out above an alluvial plain and delta of Holocene gravels and colluvium (Katsikatos, et al., 1986). Soils closest to the Telesterion of Demeter were examined (Figure 7A) in excavations for a house basement to 2 m below street level at 52 Nikolaidou Street, just across that street from the archeological enclosure (N38.040217° E23.539433° 12 m). Soils around the caves of Persephone (Figure 11A) are limited to crevices within limestone immediately south of the Ploution (N38.041367° E23.538683° 17 m). The general flora of the Telesterion and surroundings is grassy and weedy, but was probably a grassland before Elefsina became a petrochemical industrial area.

Achillea millefolium (yarrow, Compositae, indigenous weed) Antherium lilago (St Bernard's lily, Liliaceae, wildflower)

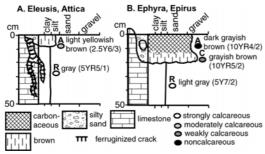


Figure 11. Soil profiles at sacred sites for Persephone.

Campanula glomerata (clustered bellflower, Campanulaceae, wildflower)
 Chrysanthemum coronarium (chrysanthemum, Ranunculaceae, wildflower)
 Eucalyptus camaldulensis (river red gum, Myrtaceae, Australian tree)
 Euphorbia helioscopia (sun spurge, Euphorbiaceae, indigenous weed)
 Geranium molle (marsh cranesbill, Geraniaceae, wildflower)
 Inula conyzae (spikenard, Compositae, indigenous weed)
 Lactuca serriola (prickly lettuce, Compositae, indigenous weed)
 Pedicularis verticillata (whorled lousewort, Scrophulariaceae, indigenous weed)
 Plantago lanceolata (ribwort plantain, Plantaginaceae, indigenous weed)
 Raphanus raphanastrum (wild radish, Cruciferae, indigenous weed)
 Trifolium dubium (lesser yellow trefoil, Leguminosae, Indigenous weed)
 The crevice flora of the Caves of Persephone near the Ploution include the

Asphodelus aestivus (asphodel, Liliaceae, wildflower) Calicotoma villosa (prickly broom, Leguminosae, indigenous thornbush) Chrysanthemum coronarium (chrysanthemum, Ranunculaceae, wildflower) Cupressus sempervirens (funeral cypress, Cupressaceae, indigenous tree) Opuntia ficus-indica (prickly pear, Cactaceae, American weedy succulent) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree)

**Eleutherai, Attica.** The temple of Dionysos mentioned by Pausanias (Jones, 1931, p. 207) is fenced off in a pasture east of the road junction above the Aigosthena River (N38.17642° E23.38142° 407 m), below the crag-top fortess of Eleutherai (commonly Yiftokastro), and the modern canyon village of Kahani Kazi, in northeastern Attica, at the foot of the road pass into Viotia. The sanctuary is oriented east on a low gradient outer part of a Pleistocene alluvial fan from the steep creek draining the mountains of Cretaceous limestones of the Sub-Pelagonian Terrane to the north (Higgins and Higgins, 1996). Soil was examined (Figure 4H) in the low roadcut 20 m southwest of the temple enclosure (N38.17627° E23.38145° 395 m), and is a Xeroll (of Soil Survey Staff, 2000). Vegetation is riparian and pasture grassland.

Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Buxus sempervirens (box, Buxaceae, indigenous thornbush) Carduus nutans (musk thistle, Compositae, indigenous weed) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) Chondrilla juncea (skeletonweed, Compositae, indigenous weed)

*Echium italicum* (Italian viper's bugloss, Boraginaceae, indigenous weed) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) *Eryngium campestre* (field eryngo, Compositae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Jurinea mollis (oriental thistle, Compositae, indigenous weed) *Lagurus ovatus* (hare's tail grass, Gramineae, indigenous grass) Nigella damascena (love-in-a-mist, Ranunculaceae, wildflower) Pastinaca sativa (wild parsnip, Umbelliferae, indigenous weed) *Phleum pratense* (Timothy grass, Gramineae, indigenous grass) Plantago major (common plantain, Plantaginaceae, indigenous weed) Poa trivialis (rough bluegrass, Gramineae, indigenous grass) Quercus coccifera (kermes oak, Fagaceae, indigenous shrub) Quercus ilex (evergreen oak, Fagaceae, indigenous tree) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Senecio viscosus (sticky ragwort, Compositae, indigenous weed) Sideritis syriaca (ironwort, Labiatae, indigenous weed) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) Sonchus arvensis (cow thistle, Compositae, indigenous weed)

**Ephyra, Epirus.** This conical hill 1 km west of the Necromanteion and the modern village of Mesopotamos had a sanctuary to Persephone (Stillwell et al., 1976), probably at the site of large masonry on the eastern side of the summit (N39.24246° E20.53101° 59 m). This conical hill has the same commanding view of the plain of Archeron and the harbor south of Cape Cheimerion, as the nearby Necromanteion, which is on the eastern high point of the same ridge within swampy plains. Bedrock crops out in low cliffs at the crest of the hill, and is Cretaceous limestone of the Ionian Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 11B) on the eastern side of the rocky summit 5 m east of the presumed sanctuary (N39.24254° E20.53090° 63 m), and is in pockets with exposed rock. Vegetation is garden and phyrgana.

Acanthus spinosus (spiny bear's breech, Acanthaceae, indigenous weed) Agrostis gigantea (bent grass, Gramineae, indigenous grass) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous spiny vine) Avena fatua (wild oats, Gramineae, indigenous weed) Capsella bursa-pastoris (shepherd's purse, Cruciferae, indigenous weed) Carduus nutans (musk thistle, Compositae, indigenous weed) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) *Cirsium arvense* (Canadian thistle, Compositae, indigenous weed) *Cirsium eristhales* (yellow melancholy thistle, Compositae, indigenous weed) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) *Echinops sphaerocephalus* (pale globe thistle, Compostae, indigenous weed) Erodium cicutarium (storksbill, Geraniaceae, indigenous weed) Eryngium campestre (field eryngo, Compositae, indigenous weed) *Ficus carica* (fig, Moraceae, indigenous fruit tree) Hedera helix (ivy, Araliaceae, indigenous vine) Hordeum murinum (wall barley, Gramineae, indigenous grass) *Hypochoeris radicata* (cat's ear, Compositae, indigenous weed) Jurinea mollis (oriental thistle, Compositae, indigenous weed)

Lagurus ovatus (hare's tail, Gramineae, indigenous grass) Lavatera cretica (mallow, Malvaceae, wildflower) Medicago minima (small medick, Leguminosae, indigenous weed) Micromeria juliana (savory, Labiatae, indigenous herb) Olea europea (olive, Oleaceae, indigenous tree) Paspalum paspaloides (knot grass, Gramineae, South American grass) Rumex crispus (curly dock, Polygonaceae, indigenous weed) Ruscus aculeatus (butcher's broom, Liliaceae, indigenous weed) Sanguisorba minor (burnet, Rosaceae, wildflower) Setaria pumila (yellow bristletail grass, Gramineae, indigenous grass) Sideritis syriaca (ironwort, Labiatae, indigenous weed) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) Urginea maritima (sea squill, Liliaceae, wildflower) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed)

Epidauros, Argolida. Epidauros is a popular tourist destination with archeological fee area, museum, and preserve, 3 km northwest of modern Ligourio, because of its well preserved, and still used, ancient theater (Olalla, 2002). The principal deity worshipped was Asclepios, but originally the area was sacred to Apollo (Barber, 2001). Clear foundations remain of the sanctuary of Apollo-Asclepios, 300m southeast of the theater (N37.59808° E23.07515° 320 m), facing northeast down this small valley. There also is a small Temple of Artemis 20 m to the southeast (N37.59928° E23.07442° 320 m). The sanctuary of Asclepios-Apollo is built into steeply dipping Triassic tuff, which has been planed off by erosion to form the gently sloping valley bottom here, not far from Holocene alluvium only a few meters further down the valley. This is also on the footslope of steep and rugged hills of Triassic-Jurassic limestone of the Parnassos Terrane, into which the theater is cut (Higgins and Higgins, 1996). At the entrance of the sacred way 200 m to the southeast of the sanctuary are pink Middle Triassic (Ladinian) limestones of ammonitico rosso facies with strongly ferruginized ammonoids, nautiloids, belemnoids and bivalves (Jacobhausen, 1967). The snake-like ammonoids may well have suggested a connection with the caduceus and Asclepios. Soil was examined (Figure 2P) 10 m northwest of the sanctuary of Asklepios-Apollo, in the walls of an archeological excavation exposing the gymnsaium complex of the Roman Odeon (N37.59768° E23.0764° 295 m), and is a shallow, rocky Xerept (of Soil Survey Staff, 2000). Vegetation is now garden, but at an ecotone between pine woodland of the rock uplands, and pasture of this small valkley bottom..

Acinos arvensis (field calamint, Labiatae, wildflower) Agrostis gigantea (bent grass, Gramineae, indigenous grass) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Avena fatua (wild oats, Gramineae, indigenous grass) Ceratonia siliqua (carob, Leguminosae, indigenous tree) Chondrilla juncea (skeltonweed, Compositae, indigenous weed) Cupressus sempervirens (Italian cypress, Cupressaceae, indigenous tree) Eryngium amethystinum (blue eryngo, Compositae, indigenous weed) Eucalyptus camaldulensis (river red gum, Myrtaceae, Australian tree) Euphrasia officinalis (eyebright, Schrophulariaceae, wildflower) Helichrysum stoechas (everlasting, Compositae, indigenous weed)

*Hieracium pilosella* (hawkweed, Compositae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Laurus nobilis (laurel, Lauraceae, indigenous tree) *Malus sylvestris* (crab apple, Rosaceae, indigenous fruit tree) *Micromeria juliana* (savory, Labiatae, indigenous herb) Nigella damascena (love in a mist, Ranunculaceae, wildflower) *Olea europea* (olive, Oleaceae, indigenous fruit tree) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Pistacia terebinthus (turpentine, Anacardiaceae, indigenous tree) *Psoralea bituminosa* (pitch trefoil, Leguminosae, indigenous weed) Pyrus pyraster (wild pear, Rosaceae, indigenous fruit tree) Quercus ilex (evergreen oak, Fagaceae, indigenous tree) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxigrafaceae, wildflower) Setaria pumila (yellow bristletail grass, Gramineae, indigenous grass) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) Sonchus arvensis (cow thistle, Compositae, indigenous weed) *Trifolium campestre* (hop trefoil, Leguminosae, indigenous weed) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed)

**Eretria, Euboea.** A sanctuary of Dionysos is south of the theatre, and just east of the West Gate of ancient Eretria, north of the archeological museum (N38.398067° E23.790133° 21 m), on the southwest coast of Euboeia (modern Evia). This temple faces west and is on the floodplain of a creek on the northern edge of both the ancient and modern town. Soil was examined (Figure 4D) in the creek banks 100 m west of the sanctuary of Dionysos (N38.398533° E23.789283° 16 m), where it is a Xeroll (of Soil Survey Staff, 2000). Vegetation near the sanctuary of Dionysos is pasture and riparian with the following species

Arundo donax (reed cane, Gramineae, indigenous cane grass) Barbarea vulgaris (winter cress, Cruciferae, indigenous weed) Cupressus sempervirens (Italian cypress, Cupressaceae, indigenous tree) Eryngium amethystinum (blue eryngo, Umbelliferae, indigenous weed) Eucalpytus camaldulensis (river red gum, Myrtaceae, Australian tree) Festuca ovina (sheep's fescue, Gramineae, indigenous grass) Malus domesticus (apple, Rosaceae, indigenous fruit tree) Mercurialis perennis (dog's mercury, Euphorbiaceae, indigenous weed) Muscari commutatum (grape hyacinth, Liliaceae, wildflower) Oxalis pes-caprae (wood sorrel, Oxalidaceae, indigenous weed) Ranunuculus ficaria (buttercup, Ranunculaceae, wildflower)

There also is a large temple of Apollo, facing southeast, close to the center of town (N38.395083° E23.7949° 9 m), on a footslope of the acropolis of Miocene mica schist of the Pelagonian Terrane (Higgins and Higgins, 1996). A soil profile was examined (Figure 2D) 200 m north of the temple of Apollo (N38.388433° E23.796533° 11 m) where it is an Orthent (of Soil Survey Staff, 2000). Vegetation around the temple of Apollo is wooded gardens of the city and montane phrygana.

*Chrysanthemum coronarium* (chrysanthemum, Ranunculaceae, wildflower) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree)

Erigeron acer (blue fleabane, Compositae, indigenous weed) Eucalyptus camaldulensis (red river gum, Myrtaceae, Australian tree) Geranium molle (cransbill, Geraniaceae, wildflower) Mercurialis perennis (dog's mercury, Euphorbiaceae, indigenous weed) Myrtus communis (myrtle, Myrtaceae, indigenous shrub) Olea europea (olive, Oleaceae, indigenous fruit tree) Raphanus raphanastrum (wild radish, Cruciferae, indigenous weed) Sisymbrium officinale (hedge mustard, indigenous weed)

**Eurotas River, Laconia.** A sanctuary to Ares is mentioned on the road to Sparta (modern Sparti) by Pausanias (Jones and Ormerod, 1926, p. 121). Dogs, and occasionally also human prisoners, were sacrificed to the god there. The exact location of this sanctuary has not been found, but it was on the road to Therapne, where I examined soil (Figure 12A) on Holocene alluvium on the eastern bank of the Eurotas River, 2 km southeast of the modern city of Sparti (N37.072417° E22.449117° 175m). This is well below the Pleistocene fanglomerates forming cliffs to the north, and across the river from the city of Sparti to the west (Higgins and Higgins, 1996). Vegetation is now a citrus plantation, but has riparian elements.

*Citrus sinensis* (orange, Rutaceae, Chinese fruit tree) *Olea europea* (olive, Oleaceae, indigenous tree) *Anemone ranunculoides* (yellow wood anemone, Ranunculaceae, wildflower) *Erysimum graecum* (treacle mustard, Cruciferae, indigenous weed) *Alopecurus myosuroides* (slnder foxtail, Gramineae, indigenous grass)

**Geronthrae, Laconia.** A temple and grove of Ares are mentioned by Pausanias (Jones and Ormerod, 1926, p. 141) in Geronthrae (modern Geraki), as well as an annual festival in which women were forbidden to enter the grove. British and Dutch excavations have failed to find the temple (Catling, 1998) in the archeological site near the modern church of Agios Athanasios on the eastern edge of this hilltop village. The soil examined (Figure 12B) is in the south bank of the creek 200 m south of the church, at the southern edge of the archeological site, and is a weakly developed Fluvent (of Soil Survey Staff, 2000) on Holocene silty and gravelly alluvium (N36.984233° E22.710933° 590 m). Vegetation here is riparian woodland, within olive groves.

Anthemis arvensis (corn chamomile, Compositae, indigenous weed) Diplotaxis muralis (wall rocket, Cruciferae, indigenous weed) Euphorbia characias (large Mediterranean spurge, Euphorbiaceae, wildflower) Euphorbia acanthothamnus (spiny spurge, Euphorbiaceae, indigenous thornbush) Inula conyzae (spikenard, Compositae, indigenous weed)

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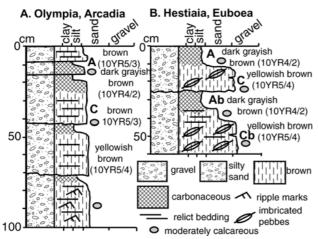


Figure 12. Soil profiles at sites sacred to Ares.

Malus domestica (apple, Rosaceae, indigenous fruit tree). Mercurialis perennis (dog's mercury, Euphorbiaceae, indigenous weed) Olea europea (olive, Oleaceae, indigenous fruit tree) Quercus coccifera (kermes oak, Fagaceae, indigenous shrub) Ranunculus ficaria (buttercup, Ranunculaceae, wildflower) Sisymbrium officinale (hedge mustard, Cruciferae) Taraxacum officinale (dandelion, Compositae, indigenous weed)

**Glyphada, Samos.** A sanctuary of Artemis is now partly inundated by salt marsh near the road to Pototaki beach, west of the village of Glyphada, along the road from Pithagorio, in the island of Samos (N37.69132° E26.92736° 17 m). An early Christian basilica and cemetery is on the ridge 20 m to the west, which is early Miocene freshwater limestone of the Pythagorion Formation (Solounias, 1981). The sanctuary foundation of large blocks faces south, on a mound standing 1 m above mean sea level. The nearby ridge is a low toeslope, from the steep rocky hill to the north. Soil was examined (Figure 6I) in the roadcut through the low ridge 20 m to the west (N37.69151° E26.92672° 24 m), and is a thin rocky Orthent (of Soil Survey Staff, 2000). Vegetation is salt marsh and open woodland.

Arthocnemum macrostachys (carp grass, Chenopodiaceae, indigenous succulent)
Asphodelus aestivus (asphodel, Liliaceae, wildflower)
Asteriscus maritimus (beach daisy, Compositae, wildflower)
Astragalus parnassii (spiny vetch, Leguminosae, indigenous thornbush)
Avena fatua (wild oats, Gramineae, indigenous grass)
Ballota acetabulosa (horehound, Labiatae, wildflower)
Carduus pycnocephalus (Italian thistle, Compositae, indigenous weed)
Ceratonia siliqua (carob, Leguminosae, indigenous tree)
Conyza canadensis (Canadian horseweed, Compositae, American weed)
Cupressus sempervirens (funeral cypress, Cupressaceae, indigenous tree)
Echinops spinosissimus (spiny globe thistle, Compositae, indigenous weed)
Elymus repens (couch grass, Gramineae, indigenous weed)
Euphorbia paralias (sea spurge, Euphorbiaceae, indigenous weed)
Hordeum vulgare (barley, Gramineae, Turkish grain)
Juncus maritimus (sea rush, Juncaceae, indigenous grass)

Juniperus excelsa (Grecian juniper, Cupressaceae, indigenous tree) Juniperus phoenicia (Phoenician juniper, Cupressaceae, indigenous tree) Lagurus ovatus (hare's tail, Gramineae, indigenous grass) Limonium bellidifolium (sea lavender, Plumbaginaceae, wildflower) Phoenix dactylifera (date palm, Palmae, African palm) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub) Plantago lanceolatum (ribwort plantain, Plantaginaceae, indigenous weed) Poa pratensis (bluegrass, Gramineae, indigenous grass) Quercus coccifera (kermes oak, Fagaceae, indigenous shrub) Salicornia europea (samphire, Chenopodiaceae, indigenous succulent) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Scabiosa atropurpurea (sweet scabious, Dipsaceae, indigenous weed) Scirpus mucronatus (clubrush, Cyperaceae, indigenous sedge) Sonchus arvensis (cow thistle, Compositae, indigenous weed) Zizyphus jujuba (jujube, Rhamnaceae, Chinese fruit vine)

**Haleis, Argolida.** The temple of Apollo is now only a foundation facing east, on the coastal terrace by the bay north of the ancient Acropolis 2 km southwest of the modern resort village of Porto Cheli (N37.31535° E23.15251° 5 m). The temple is on a flat coastal terrace at the foot slope of the broad low hill of the ancient acropolis, so has poor views to thewest and south, but a good view across the bay to the north and east. Bedrock is gently dipping fanglomerate of Neogene age (Higgins and Higgins, 1996), but the toeslope of the acropolis with the temple and soil examined is very gently sloping like a late Pliestocene marine terrace. Soil was examined (Figure 2Q) in the cliff above the shingle beach 4 m north of the temple (N37.3154° E23.15247° 4 m), and is a Xerept (of Soil Survey Staff, 2000). Vegetation is littoral woodland.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Asteriscus spinosus (spiny golden star, Compositae, wildflower) Buxus sempervirens (box, Buxaceae, indigenous thornbush) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) Conyza canadensis (horseweed, Compositae, American weed) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) *Eryngium campestre* (field eryngo, Compositae, indigenous weed) *Hordeum murinum* (wall barley, Gramineae, indigenous grass) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Juncus maritima (sea rush, Gramineae, indigenous grass) Lagurus ovatus (hare's tail grass, Gramineae, indigenous grass) Malus sylvestris (crab apple, Rosaceae, indigenous fruit tree) Mesembryanthemum nodiflorum (ice plant, Aizoaceae, South African succulent) *Olea europea* (olive, Oleaceae, indigenous fruit tree) Phleum paniculatum (rough cat's tail, Gramineae, indigenous grass) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub) Plantago maritima (sea plantain, Plantaginaceae, indigenous weed) Primula minima (primrose, Primulaceae, wildflower) Salicornia europea (samphire, Chenopodiaceae, indigenous succulent)

Salsola soda (saltwort, Chenopodiaceae, indigenous succulent) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Setaria pumila (golden bristletail grass, Gramineae, indigenous grass) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed) Zizyphus lotus (lote fruit, Rhamnaceae, inidgenous vine)

**Halai, Attica.** The temple of Artemis is in a fenced enclosure beside the beach 1 km north of modern Loutsa (also known as Artemida), in eastern Attica (N37.97988° E24.00849° 17 m). The fence has nucleated sand dunes from the nearby beach, which override the seaward edge of the temple mound and foundations, facing east across the beach (Olalla, 2002). The exposed base of the temple is a Pleistocene marine terrace or red clay and marble cobbles derived from Miocene marbles of the Pelagonian Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 6C) in the exposed bank 2 m east of the temple foundation (N37.97988° E24.00849° 17 m). Vegetation is dune bunding grasses and open coastal woodland.

Acacia cyanophylla (blue wattle, Leguminosae, Australian tree) Agrostis gigantea (bent grass, Gramineae, indigenous grass) Allium amethystinum (ornamental onion, Liliaceae, wildflower) Allium roseum (rose garlic, Liliaceae, indigenous herb) Anthemis arvensis (corn chamomile, Compositae, indigenous weed) Avena fatua (wild oats, Gramineae, indigenous grass) Bromus diandrus (great brome, Compositae, indigenous grass) Butomus umbellatus (flowering rush, Butomaceae, indigenous rush) Carduus nutans (musk thistle, Compositae, indigenous weed) *Carduus pycnocephalus* (Italian thistle, Compositae, indigenous weed) *Chondrilla juncea* (skeletonweed, Compositae, indigenous weed) Echinops graecops (globe thistle, Compositae, indigenous weed) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) *Eucalyptus camaldulensis* (red river gum, Myrtaceae, Australian tree) Helichrysum stoechas (everlasting, Compositae, wildflower) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Lagurus ovatus (hare's tail, Gramineae, indigenous grass) Lavandula angustifolia (lavender, Labiatae, indigenous herb) Lavatera cretica (mallow, Malvacaeae, wildflower) *Myrtus communis* (myrtle, Myrtaceae, indigenous shrub) *Pinus halepensis* (Aleppo pine, Pinaceae, indigenous tree) *Reseda lutea* (yellow mignonette, Resedaceae, wildflower) Salvia nemorosa (perennial sage, Labiatae, indigenous herb) *Trifolium campestre* (hop trefoil, Leguminosae, indigenous weed)

**Haliartos, Boeotia.** Ancient Haliartos was on a rocky acropolis 1 km west of the modern town of modern Aliartos, south of ancient Lake Copai (N38.37902° E23.08788° 169 m). At its maximum extent, Lake Copai would have lapped against the northern toeslope of this rocky acropolis, but by classical times the lake was partly drained for agriculture. The temple of Athena on the summit faces east, and is built on cultural debris and Cretaceous limestone of the Sub-Pelagonian Terrane (Higgins and Higgins, 1996).

Soil was examined (Figure 1D) 15 m east of the temple in archeological excavations (N38.37902° E23.08788° 169 m), which exposes an Anthrept, with several layers of cultural debris. Vegetation is pasture, with some garden elements.

Acanthus spinosus (spiny bear's breech, Acanthaceae, indigenous weed) Anemone coronaria (crown anemone, Ranunculaceae, wildflower) Agrostis gigantea (bent grass, Gramineae, indigenous weed) Alopecurus myosuroides (foxtail grass, Gramineae, indigenous grass) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Avena fatua (wild oats, Gramineae, indigenous grass) Ballota acetabulosa (horehound, Labiatae, wildflower) Carduus nutans (musk thistle, Compositae, indigenous weed) Carthanus lanatus (saffron thistle, Compositae, indigenous weed) Cercis siliquastrum (Judas tree, Leguminosae, indigenous tree) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) *Cynodon dactylon* (Bermuda grass, Gramineae, African grass) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Ecballium elaterium (squirting cucumber, Cucurbitaceae, indigenous weedy vine) Echinops graecum (globe flower, Compositae, indigenous weed) Eryngium amethystinum (blue eryngo, Compositae, indigenous weed) Erysimum graecum (treacle mustard, Cruciferae, indigenous weed) Euphorbia characias (large spurge, Euphorbiaceae, indigenous weed) Ficus carica (fig, Moraceae, indigenous fruit tree) Heliotropum hirsutissium (heliotrope, Boraginaceae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Mercurialis annua (annual mercury, Euphorbiaceae, indigenous weed) Olea europea (olive, Oleaceae, indigenous fruit tree) Rhamnus alaternus (wild buckthorn, Rhamnaceae, indigenous tree) Rubus fruticosa (bramble, Rosaceae, indigenous thorny vine) *Setaria pumila* (yellow bristle tail grass, Gramineae, indigenous grass) Smyrnium rotundifolium (round leaf alexander, Umbelliferae, wildflower) Tamus communis (black bindweed, Dioscoraceae, indigenous vine) *Tribulus terrestris* (puncture vine, Zygophyllaceae, indigenous weed) Verbascum nigrum (black mullein, Scrophulariaceae, indigenous weed) *Vitex agnus-castus* (chaste tree, Verbenaceae, indigenous tree)

**Hephaistia, Lemnos.** This was the principal city of Limnos Island in classical times, with a harbor, bay, acropolis and coastal plain near the modern hamlet of Palaiopolis. Most of the ruins visible are Hellenistic, apart from a preclassical sanctuary on the northern flank of the acropolis (N39.9652° E25.318117° 49 m). It is unlikely that this was the temple of Hephaistos (Barber, 2001). Although he was worshiped in this

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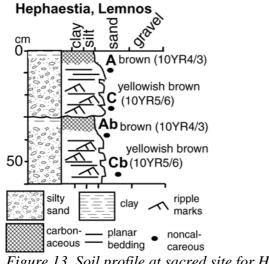


Figure 13. Soil profile at sacred site for Hephaestos.

city, the location of his temple is unknown. The acropolis is on a low hill of Eocene-Oligocene sandstone forming a promontory around a bay of tidal flats and coastal plain (Higgins and Higgins, 1996). Soil was examined (Figure 13) in a creek bank 500 m east of Palaeopolis (39.956617° E25.324883° 4 m), and it was silty and weakly developed, as in a Fluvent (Soil Survey Staff, 2000). Vegetation is pasture and intertidal.

Carduus nutans (musk thistle, Compositae, indigenous weed) Crepis biennis (rough hawksbeard, Compositae, indigenous weed) Cupressus sempervirens (funeral cypress, Cupressaceae, indigenous tree) Eryngium campestre (field eryngo, Compositae, indigenous tree) Ferula communis (giant fennel, Umbelliferae, indigenous weed) Geranium dissectum (cutleaf cranesbill, Geraniaceae, indigenous weed) Hypochoeris radicata (cat's ear, Compositae, indigenous weed) Juncus martimus (sea rush, Juncaceae, indigenous rush) Lolium perenne (perennial rye grass, Gramineae, indigenous grass) Phlomis lanata (woolly Jerusalem sage, Labiatae, indigenous weed) Polycnemum majus (needleleaf, Chenopodiaceae, indigenous succulent) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Thymelaea passerina (spurge flax, Thymeleaceae, indigenous low shrub)

**Heraion, Argolida.** The Argive Heraion is an archeological preserve 2 km north of the modern town of Neo Iraio, and 10 km north east of Argos (N37.691483° E22.77525° 103 m). The temple faces southeast (Olalla, 2002), and is on a low knoll of Pliestocene fanglomerate on the footslopes of a high hill of limestone and shale of the Parnassus terrane (Higgins and Higgins, 1996). This high mountain has a general appearance of a seated woman, with leg-like ridges running south, as suggested by Scully (1979). The soil examined (Figure 14A) was 1 km southeast of the temple near a fence-line in pasture (N37.686333° E22.776817° 58m), and is thick, red and clayey (Xeralf of Soil Survey Staff, 2000). The whole area is now cultivated with citrus orchards and olive groves, which have spread throughout the region since the advent of plastic irrigation pipe. Soil and trees suggest original woodland.

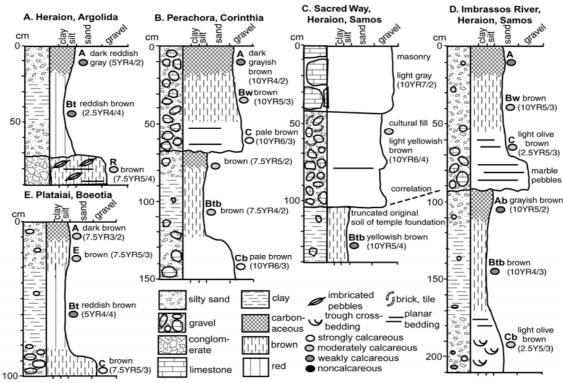


Figure 14. Soil profiles at temples of Hera.

Anemone coronaria (crown anemone, Ranunculaceae, wildflower) Citrus limon (lemon, Rutaceae, Chinese fruit tree) Citrus reticulata (mandarin, Rutaceae, Chinese fruit tree) Euphorbia acanthothamnos (spiny spurge, Euphorbiaceae, indigenous thornbush) Melilotus officinalis (common melilot, Leguminosae, indigenous weed) Muscari commutatum (grape hyacinth, Liliaceae, wildflower) Nerium oleander (oleander, Apocynaceae, indigenous shrub) Olea europea (olive, Oleaceae, indigenous fruit tree) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Quercus coccifera (kermes oak, Fagaceae, indigenous shrub) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) Sonchus oleraceus (cow thistle, Compositae, indigenous weed)

**Heraion, Samos.** The temple of Hera faces east at the western end of an ancient sacred road on the western part of the coastal plain of southeastern Samos Island (N37.67177° E26.88563° 41 m). It is reached by road 5 km east of the airport and 2 km east of the resort town of Irea. The site is flat and on Holocene alluvium of the coastal plain (Higgins and Higgins, 1996). Soil was examined within the archeological preserve 200 m east of the temple in the foundations of a building north of the sacred way (N37.67315° 26.85749° 11m), where an eroded Bt horizon is covered by construction rubble. Soil was also examined (Figure 14C-D) in the western bank of the Milioi River (ancient Imbrasos River) 300 m north of the bridge east of Irea (N37.66331° E26.88131° 2 m), where the same soil has both A and Bt horizon of Xeralf, and is buried by 91 cm of

alluvial gravel and silt with a Xerept soil. Vegetation is olive grove, and vineyard, with riparian vegetation.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Alnus incana (grey alder, Betulaceae, indigenous tree) Arundo donax (reed cane, Gramineae, indigenous cane grass) Astragalus parnassii (spiny vetch, Leguminosae, indigenous thornbush) Bambusa vulgaris (bamboo, Gramineae, Chinese bamboo) Buxus sempervirens (box, Buxaceae, indigenous thornbush) Calystegia sepium (greater bindweeed, Convulvulaceae, indigenous vine) Carpinus betulus (hornbeam, Corylaceae, indigenous tree) Ceratonia siliqua (carob, Leguminosae, indigenous tree) Cirsium vulgare (spear thistle, Compositae, indigenous weed) Cynodon dactylon (Bermuda grass, Gramineae, African grass) *Eucalyptus camaldulensis* (river red gum, Myrtaceae, Australian tree) *Festuca ovina* (sheep's fescue, Graminaeae, indigenous grass) Ficus caricus (fig, Moraceae, indigenous fruit) Foeniculum vulgare (giant fennel, Umbelliferae, indigenous weed) Galium aparine (bedstraw, Rubiaceae, indigenous vine) Geranium rotundifolium (roundleaf cranesbill, Geraniaceae, indigenous weed) *Glycrirhiza echinata* (spiny-fruited liquorice, Leguminosae, North American tree) Juniperus excelsa (Grecian juniper, Cuperssaceae, indigenous tree) Juniperus phoenicea (Phoenicean juniper, Cupressaceae, Indigenous tree) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Lotus corniculatus (birdsfoot trefoil, Leguminosae, Chines shrub) Mentha arvensis (corn mint, Labiatae, American weed) Mentha spicatum (spearmint, Labiatae, indigenous herb) *Morus nigra* (mulberry, Moraceae, middle eastern fruit tree) Nerium oleander (oleander, Apocynaceae, indigenous shrub) Olea europea (olive, Oleaceae, indigenous fruit tree) Phalaris arundiaceae (reed canary grass, Gramineae, American grass) Phalaris minor (dwarf canary grass, Gramineae, African grass) *Phleum paniculatum* (rough cat's tail, Gramineae, indigenous grass) Plantago lanceolata (ribwort plantain, Plantaginaceae, indigenous weed) Platanus orientalis (plane tree, Platanaceae, indigenous tree) *Poa trivialis* (rough bluegrass, Gramineae, indigenous grass) Prunella vulgaris (selfheal, Labiatae, indigenous weed) Pulicaria dysenterica (fleabane, Compositae, indigenous weed) Populus nigra (black poplar, Salicaceae, indigenous tree) Rosa canina (dog rose, Rosaceae, wildflower) Rubus fruticosa (bramble, Rosaceae, indigenous thorny vine) *Rumex crispus* (curly dock, Polygonaceae, indigenous weed) Scirpus mucronatus (clubrush, Cyperaceae, indigenous sedge) Sonchus arvensis (cow thistle, Compositae, indigenous weed) Tamus communis (black bindweed, Dioscoraceae, indigenous vine) *Trifolium striatum* (soft clover, Leguminosae, indigenous weed) Tribulus terrestris (puncturevine, Zygophyllaceae, indigenous weed) Verbascum graecum (Greek mullein, Scrophulariaceae, inidigenous weed) *Veronica triphylla* (fingered speedwell, Scrophulariaceae, wildflower)

Vitex agnus-castus (chaste tree, Verbenaceae, indigenous tree) Vitis vinifera (grape, Vitaceae, Turkish fruit vine) Xanthium strumarium (cockleburr, Compositae, American weed) Natural vegetation northwest of Irea is mixed conifer-broadleaf Mediterranean woodland.

*Ceratonia siliqua* (carob, Leguminosae, indigenous tree) *Pinus brutia* (Turkish pine, Pinaceae, indigenous tree) *Pistacia lentiscus* (lentisk, Anacardiaceae, indigenous shrub)

**Hermaeon, Lemnos.** The Hermaeon, sacred to Hermes, mentioned by Aeschylus in his play Agamamnon was a hilltop for a beacon lit to send the message to Clytaemnestra of Agammenon's victory at Troy (Verrall, 1904, p. 37). The exact location is unknown, but most likely was on one of the ridges of Mt Alepotrypes, southwest of Panagia (Barber, 2001). The most prominent of these peaks is 0.5 km east of the microwave tower (N39.987833° E25.392583° 121 m), which has on top a large boulder of bedrock sandstone 142 cm high and 153 cm thick tipped up on end like a herm (dip is 78°N at 004° strike, unlike beds in place dipping 34°N at 121° strike). This bedrock is Eocene-Oligocene sandstone (Higgins and Higgins, 1996). Soil was studied (Figure 10B) on the footslope of this hill, along the road to Sotiras beach, 2 km east of Panagia (N39.98925° E25.397817° 57 m), where it is thick, red and clayey, as in a Xeralf (Soil Survey Staff, 2000). Vegetation is pasture and montane phrygana.

Anemone pavonina (peacock anemone, Ranunculaceae, wildflower) Crocus biflora (yellow crocus, Iridaceae, wildflower) Hypochoeris radicata (cat's ear, Compositae, indigenous weed) Phlomis lanata (woolly Jerusalem sage, Labiatae, indigenous weed) Setaria viridis (millet, Gramineae, indigenous grass) Thymelaea hirsuta (spurge flax, Thymeleaceae, indigenous low shrub)

**Hermione, Argolida.** Monumental masonry of the temple of Poseidon, facing east, is in the large public park of the coastal promontory southeast of the modern village of Hermione (N37.384° E23.25713° 21 m). The promontory is bedrock, but flat-topped like a marine terrace, and has good views east out to sea, north and south over deep coves and harbors, and west to the higher acropolis of ancient and modern Hermione. Bedrock is limestone, well bedded with black chert nodules, dipping 57° south at a strike of 233° magnetic, and is a Paleogene limestone of the Sub-Pelagonian Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 5D) on bedrock atop the low cliff on the northern shore of the promontory, about 300 m east of the quay and paved streets of Hermione (N37.38535° E23.25857° 3 m). It is developed on colluvium, including much shelly debris of a raised beach of presumed Pleistocene age, and has films of pedogenic carbonate indicating it is a Calcid (of Soil Survey Staff, 2000). Vegetation is littoral and open grassy pine woodland of a city park.

Agave americana (century plant, Agavaceae, Mexican succulent) Agrostis gigantea (bent grass, Gramineae, indigenous grass) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Asteriscus spinosus (spiny golden star, Compositae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Carthamus lanatus (saffron thistle, Compositae, indigenous weed)

Chrysanthemum segetum (corn marigold, Compositae, indigenous weed) Eryngium campstre (field eryngo, Compositae, indigenous weed) Helichrysum stoechas (everlasting, Compositae, wildflower) Juniperus drupacea (plum juniper, Cupressaceae, indigenous tree) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Lagurus ovatus (hare's tail grass, Gramineae, indigenous grass) Minuartia setacea (sandwort, Caryophyllaceae, wildflower) Papaver dubium (long-pod poppy, Papaveraceae, indigenous weed) Phalaris minor (dwarf canary grass, Gramineae, African grass) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower) Senecio vulgaris (groundsel, Compositae, indigenous weed)

**Hestiaia, Euboea.** This town (modern Istiea or Xerochori) in northern Euboea (modern Evia) was dedicated to Hestia, but her sanctuary has not been discovered. The town square includes a church of Agia Paraskevi, as well as another to Agios Nikolaos (N38.953667° E23.151167° 70 m). The city is on a flat coastal plain, about 10 km wide, surrounded by hills, and has no views from the built city center. Soil was examined (Figure 15B) on the high (3.4 m), alluvial terrace of the Kallas Xirias River, 1 km northeast of town, and 500 m north of the highway bridge (N38.9574° E23.159° 38 m), and is a Fluvent (of Soil Survey Staff, 2001). This is Holocene gravelly alluvium, derived from surrounding steep hills of Neogene sediments, which are primarily fluvial (Higgins and Higgins, 1996). Vegetation is riparian and includes the following species.

Anthemis arvensis (corn chamomile, Compositae, indigenous weed) Arundo donax (reed cane, Gramineae, indigenous cane grass) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Erodium cicutarium (storksbill, Geraniaceae, indigenous weed) Euphorbia characias (large spurge, Euphrobiaceae, indigenous weed) Olea europea (olive, Oleaceae, indigenous fruit tree) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) Spartium junceum (broom, Leguminosae, Spanish shrub) Vicia cassubica (wood vetch, Leguminosae, indigenous shrub)

**Hieridai, Akarnania.** Ancient Hieridai and its temple of Aphrodite is known from inscriptions to its citizens, and sometimes identified with the fortress at Neromana where walls and towers appear Hellenistic (Stillwell et al., 1976). A more likely location is in the village of Agia Sofia (Barber, 2001), where the Byzantine church of Agia Sofia is built on monumental blocks of classical proportions (N38.58056° E21.64889° 303 m). It is on a very high terrace, below the ridgeline to the north, with a good view southwest

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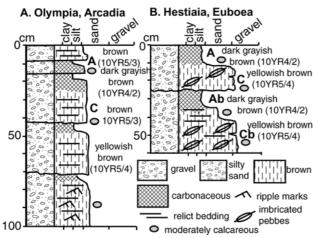


Figure 15. Soil profiles at sites sacred to Hestia.

to Lake Trichonida. Bedrock here is flaggy bedded, folded Triassic limestones of the Pindos Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 9F) in the roadcut at the roadbend 300 m east of the church (N38.579210° E21.64326° 315 m). It has calcareous cement to colluvium of limestone blocks and is thus a Calcid (of Soil Survey Staff, 2000). Vegetation is garden in the church, and pasture on the soil, but native vegetation was probably evergreen oak grassy woodland.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Ajuga reptans (bugleweed, Labiatae, wildflower) Allium roseum (rose garlic, Liliaceae, indigenous herb) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weed vine) Avena fatua (wild oats, Gramineae, indigenous grass) Cercis siliquastrum (Judas tree, Leguminosae, indigenous tree) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Digitaria sanguialis (crab grass, Gramineae, American grass) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) *Eucalyptus camaldulensis* (river red gum, Myrtaceae, Australian tree) Foeniculum vulgare (fennel, Umbelliferae, indigenous weed) Galium aparine (stickywilly, Rubiaceae, indigenous weed) Juniperus excelsa (Grecian juniper, Cupressaceae, indigenous tree) Jurinea mollis (oriental thistle, Compositae, indigenous weed) *Lactuca serriola* (prickly lettuce, Compositae, indigenous weed) *Lonicera xylosteum* (honeysuckle, Caprifoliaceae, indigenous vine) Mahonia japonica (Japanese mahonia, Berberidaceae, Taiwanese shrub) Malva sylvestris (high mallow, Malvaceae, wildflower) Morus nigra (mulberry, Moraceae, Iranian fruit tree) *Myrrhis odorata* (myrrh, Umbelliferae, Caucasus herb) Nigella damascena (love in a mist, Ranunculaceae, wildflower) Olea europea (olive, Oleaceae, indigenous tree) Phleum paniculatum (rough cat's tail, Gramineae, indigenous grass) Phoenix dactylifera (date palm, Palmae, African palm) Phragmites australis (common reed, Gramineae, indigenous grass)

Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree)
Pistachia terebinthus (turpentine tree, Anacardiaceae, indigenous tree)
Polygonum bistorta (meadow bistort, Polygonaceae, indigenous weed)
Quercus ilex (evergreen oak, Fagaceae, indigenous tree)
Robinia pseudoacacia (black locust, Leguminosae, American tree)
Scandix pecten-veneris (Venus' comb, Umbelliferae, indigenous weed)
Silene dioica (red catchfly, Caryophyllaceae, wildflower)
Smyrnium rotundifolium (roundleaf alexander, Umbelliferae, wildflower)
Tecoma radicans (trumpet creeper, Bignoniaceae, Central American vine)
Tordylium maximum (Roman pimpernal, Umbelliferae, indigenous weed)
Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed)

**Icaria, Attica.** The sanctuary of Dionysos is beside the theater in the creek bottom 200 m north along Odos Dionysa from Leoforo Dionysou in modern Dionissos (ancient Icaria), Attica (N38.095367° E23.903167° 414 m). This is the place where the god was reputed to have taught king Icarios how to cultivate vines and make wine (Barber, 2001). To the north of the theater is another temple of Apollo facing south east, closer to the steep hills of this narrow valley, in a small meadow, below the larger meadow of the modern town of Dionissos, and above a series of steep drops down to the coastal plain at Nea Makri. The sanctuary of Dionysos is on Holocene gravel, and that of Apollo is partly on gravel and partly on Miocene mica schist of the Pelagonian Terrane. The mountains on either side however are Pentelic marbles of the Pelagonian Terrane, famous in antiquity for their quality for sculpture, and still actively quarried (Higgins and Higgins, 1996). Soil was examined (Figure 4B) on gravel in the park north of Leoforo Dionysou and east of Odos Anemonis in Dionissos, where it is a Xeroll (N38.103033° E23.875863° 434 m). Vegetation is valley bottom meadow and riparian.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Anemone pavonina (peacock anemone, Ranunculaceae, wildflower) Arbutus andrachne (strawberry tree, Ericaceae, indigenous tree) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Buxus sempervirens (box, Buxaceae, indigenous thornbush) Crataegus monogyna (hawthorn, Rosaceae, indigenous tree) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Festuca ovina (sheep's fescue, Gramineae, indigenous grass) *Pinus halepensis* (Aleppo pine, Pinaceae, indigenous tree) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub) *Quercus ilex* (Holm oak, Fagaceae, indigenous tree) *Rhamnus alaternus* (Mediterranean buckthorm, Rhamnaceae, indigenous tree) Silybum marianum (blessed milk thistle, Compositae, indigenous tree) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) Smilax aspera (sarsparilla vine, Smilacaceae, indigenous vine) Viburnum tinus (laurustinus, Caprifoliaceae, indigenous shrub) *Vicia cracca* (tufted vetch, Leguminosae, indigenous vine)

**Isia, Naxos.** The temple of Dionysos is an archeological preserve at Iria, 3 km southeast of Chora on the Island of Naxos (N37.077167° E25380833° 21 m). This is a flat area of Holocene coastal plain sands, with few views from fields flanked with reed cane. Soil was examined (Figure 4A) in an irrigation ditch 20 m north of the entrance to the

archeological preserve (N37.07785° E25.3818° 16 m), and is a Xeroll (of Soil Survey Staff, 2000). Vegetation is cultivated pasture.

Arundo donax (reed cane, Gramineae, indigenous cane grass)
Avena fatua (wild oats, Gramineae, indigenous grass)
Chrysanthemum coronarium (chrysanthemum, Ranunculaceae, wildflower)
Eucalyptus camaldulensis (river red gum, Myrtaceae, Australian tree)
Geranium rotundifolium (roundleaf cranesbill, Geraniaceae, indigenous weed)
Hordeum murinum (wall barley, Gramineae, indigenous grass)
Nerium olenader (oleander, Apocynaceae, indigenous shrub)
Ononis pusilla (restharrow, Leguminosae, indigenous weed)
Oxalis pes-caprae (wood sorrel, Oxalidaceae, indigenous weed)
Raphistrum rugosum (hybrid cabbage, Cruciferae, indigenous weed)
Schinus molle (pepper tree, Anacardiaceae, South American tree)
Sonchus arvensis (cow thistle, Compositae, indigenous weed)
Sonchus oleraceus (smooth cow thistle, Compositae, indigenous weed)

**Ismenion, Boeotia.** This conical hill 1 km southwest of the principal hill of Thebes (modern Thiva), had a temple of Apollo, near the church of Agios Loukas (N38.325367° E23.33195° 187m). This hill has views of the Theban plain, a gully to the north and the main hill (Cadmeia) of Thebes. It is formed of west-dipping red fanglomerates of Pleistocene age, strongly cemented with calcite, which also fills bedrock veins (Higgins and Higgins, 1996). Soil was examined (Figure 2B) in the basement of a house north of the corner of Xanthou and Ypsilantou Streets (N38.324077° E20.3314° 180 m) and is thin gravelly and red, as in Orthent (Soil Survey Staff, 1999). Vegetation is garden.

*Olea europea* (olive, Oleaceae, indigenous tree) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree)

**Isthmia, Corinthia.** The temple of Poseidon and associated museum is an archeological preserve 5 km south east of the canal at the isthmus of Corinth (N37.91580° E22.99354° 39 m). Only the foundations of the temple remain, facing east, south of the stadium and other buildings, used for the Isthmian Games, one of the few panhellenic games. The soil examined (Figure 5A) was in a roadcut on the Epidauros-Isthmia road 1.5 km north of the museum (N37.91715° E22.999367° 46 m). This soil has soft micritic nodules and is a Calcid of Soil Survey Staff (1999). Both the temple and soil are on a high terrace of Tyrhennian Gravels of mid-Pleistocene age, with locally abundant oysters, cockles and other marine shells (Higgins and Higgins, 1996). This terrace is locally cut by ravines, but the temple has good views over the lowlands of the isthmus, and the mountainous ridges of Perachora and Megara to the north. The whole area is extensively cultivated for olives, with maquis in vacant lots, but original vegetation was probably coastal heath.

Agrostis gigantea (bent grass, Gramineae, indigenous grass)Asteriscus spinosus (spiny golden star, Compositae, wildflower)Avena sativa (wild oats, Gramineae, indigenous grass)Briza media (quaking grass, Gramineae, indigenous grass)Bromus diandrus (great brome, Gramineae, indigenous grass)Carthamus lanatus (saffron thistle, Compositae, indigenous weed)Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed)

Eryngium amethystinum (blue eryngo, Compositae, indigenous weed) Helichrysum stoechas (shrubby everlasting, Compositae, wildflower) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Micromeria juliana (savory, Labiatae, indigenous herb) Olea europea (olive, Oleaceae, indigenous tree) Phalaris minor (dwarf Canary grass, Gramineae, African grass) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragacaeae, wildflower) Scabiosa columbaria (butterfly blue, Dipsacaceae, wildflower) Sonchus arvensis (cow thistle, Compositae, indigenous weed) Trifolium arvense (field clover, Leguminosae, indigenous weed) Verbascum blattaria (mullein, Scrophulariaceae, indigenous weed)

**Lebadeia, Boeotia.** A large temple of Zeus facing northeast is visible only by foundation stones on the summit of Mount Profitas Elias, high over modern Levhadia, Viotia (N38.43029° E22.85995° 389 m). This summit is in the foothills of mountain ranges to the south, and overlooks both the Frankish Kastro and town of Levhadia in the valley below, as well as further north into the plain of Copais. Bedrock of the mountain in late Cretaceous (Maastrichtian) rudistid limestone of the Sub-Pelagonian Terrane (Higgins and Higgins, 1996; Steuber, 1999). Soil was examined (Figure 3F) in a deep excavated well, perhaps the Oracle of Trophonios, 5 m east of the southeastern corner of the temple (N38.43005° E22.86029° 416 m), and was an Anthrept on cultural debris including much roofing tile. Vegetation is alpine and garden.

Ajuga reptans (bugleweed, Labiatae, wildflower) Asperula boissieri (woodruff, Rubiaceae, indigenous herb) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Ballota acetabulosa (horehound, Labiatae, wildflower) Carduus nutans (musk thistle, Compositae, indigenous weed) Carthanus lanatus (safrron thistle, Compositae, indigenous weed) Ceratonia siliqua (carob, Leguminosae, indigenous weed) Cercis siliquastrum (Judas tree, Leguminosae, indigenous tree) *Conyza canadensis* (horseweed, Compositae, American weed) Crepis capillaris (smooth hawksbeard, Compositae, indigenous weed) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Erica manipuliflora (heather, Ericaceae, wildflower) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Lagurus ovatus (hare's tail grass, Gramineae, indigenous grass) Mentha spicata (spearmint, Labiatae, indigenous herb) Micromeria juliana (savory, Labiatae, indigenous herb) Nerium oleander (oleander, Apocynaceae, indigenous shrub) *Phlomis fruticosa* (Jerusalem sage, Compositae, indigenous weed) Phragmites australis (common reed, Gramineae, indigenous grass) *Pinus halepensis* (Aleppo pine, Pinaceae, indigenous tree) Psoralea bituminosa (pitch trefoil, Leguminosae, indigenous weed)

Quercus coccifera (evergreen oak, Fagaceae, indigenous tree) Rubus fruticosus (bramble, Rosaceae, indigenous spiny vine) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Scabiosa columbaria (butterfly blue, Dipsacaeae, wildflower) Sonchus arvensis (cow thistle, Compositae, indigenous weed) Spartium junceum (broom, Leguminosae, Spanish shrub, Spanish shrub) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed) Zisyphus lotus (lote fruit, Rhamnaceae, indigenous vine)

**Mycalessos, Boeotia.** Ancient Mycalessos was on the low grassy hill behind the roadside store at modern Rhitsona, east of Thiva and north of Vathi, in eastern Viotia (N38.41017° E23.5233° 179 m). Pausanias indicated that the temple of Demeter (exact location unknown) was toward the sea and Aulis (Jones, 1935, p. 255), which would be in the floodplain to the north of Mycalessos. Bedrock in the area is Miocene marble from Cretaceous limestone of the Pelagonian Terrane (Higgins and Higgins, 1996), but no rock is exposed in the city mound or the creek filled with Pleistocene alluvium. Marble forms a ridge 1 km to the east. Soil was examined (Figure 7F) in the creek 150 m west of Rhitsona store (N38.40923° E23.52402° 126 m), and is a Xeroll (of Soil Survey Staff, 2000). Vegetation is grassy pasture and riparian.

Acanthus spinosus (spiny bear's breech, Acanthaceae, indigenous weed) Amaranthus retroflexus (pigweed, Amaranthaceae, American weed) Avena fatua (wild oats, Gramineae, indigenous grass) Bilderdykia dumetorum (copse bindweed, Polygonaceae, indigenous vine) Bromus diandrus (great brome, Gramineae, indigenous grass) Calendula arvensis (marigold, Compositae, wildflower) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) *Cirsium creticum* (Cretan thistle, Compositae, indigenous weed) *Convolvulus arvense* (field bindweed, Convolvulaceae, indigenous vine) Cynodon dactylon (Bermuda grass, Gramineae, African grass) Ecballium elaterium (squirting cucumber, Cucurbitaceae, indigenous vine) Ficus carica (fig, Moraceae, indigenous fruit tree) *Foeniculum vulgare* (fennel, Umbelliferae, indigenous weed) Juglans regia (English walnut, Juglandaceae, Carpathian tree) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) *Mentha spicata* (spearmint, Labiatae, indigenous herb) Nerium oleander (oleander, Apocynaceae, indigenous shrub) Olea europea (olive, Oleaceae, indigenous tree) Phleum paniculatum (rough cat's tail, Gramineae, indigenous grass) Prunus dulcis (almond, Rosaceae, Iranian fruit tree) Rumex crispus (curly dock, Polygonaceae, indigenous weed) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower) *Scirpus triquetrus* (three-angled clubrush, Cyperaceae, indigenous sedge)

**Necromanteion, Epirus.** The Necromanteion was an ancient oracle of death and sanctuary of Hades (Olalla, 2002), now beneath the ruins of the church of Aghios Ioannis Prodromus, in an archeological preserve and fee area on the hilltop immediately north of the modern village of Mesopotamos (N39.23022° E20.53429° 44m). It faces east

overlooking what in classical times was a large swamp at the confluence of the Boubos, Cocytos and Acheron Rivers, now largely drained for agriculture. These formerly swampy lowlands surround the hill on three sides, with a low connection to coastal hills. To the west is a view of coastal hills and the harbor south of Cape Cheimeron. Bedrock of this commanding hill is massive Cretaceous limestone of the Ionian Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 8B) in the courtyard of the church over the Necromanteion, 10 m south of the sanctuary (N39.23624° E20.53389° 44 m). Vegetation is garden and alpine phrygana.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Ajuga reptans (bugleweed, Labiatae, wildflower) Arabiodopsis thaliana (thale cress, Cruciferae, indigenous weed) Avena fatua (wild oats, Gramineae, indigenous grass) Buxus sempervirens (box, Buxaceae, indigenous thornbush) *Chrozophora tinctoria* (giradol, Euphorbiaceae, indigenous weed) Clematis flammula (fragrent virgins' bower, Ranunculaceae. indigenous vine) Conyza canadensis (horseweed, Compositae, American weed) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Digitaria sanguinalis (crab grass, Gramineae, American grass) Echium italicum (Italian viper's bugloss, Boraginaceae, indigenous weed) *Ficus carica* (fig, Moraceae, indigenous fruit tree) Helichrysum stoechas (everlasting, Compositae, wildflower) Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed) Juniperus phoenicea (Phoeniceian juniper, Cupressaceae, indigenous weed) *Micromeria juliana* (savory, Labiatae, indigenous herb) Minuartia setacea (sandwort, Caryophyllaceae, wildflower) *Olea europea* (olive, Oleaceae, indigenous tree) *Phalaris minor* (dwarf Canary grass, African grass) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) *Pistachia terebinthus* (turpentine tree, Anacardiaceae, indigenous tree) *Poa trivialis* (rough blue grass, Gramineae, indigenous grass) *Quercus ilex* (evergreen oak, Fagaceae, indigenous tree) Robinia pseudoacacia (black locust, Leguminosae, North American tree) Rubus fruticosus (bramble, Rosaceae, indigenous spiny vine) *Silene armeria* (sweet William catchfly, Caryophyllaceae, wildflower) Sonchus asper (prickly sow thistle, Compositae, indigenous weed) *Taraxacum officinale* (dandelion, Compositae, indigenous weed) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed)

**Nemea, Argolida.** The temple of Zeus in Nemea was famous for its panhellenic games (Stillwell et al., 1976), and is in an archeological preserve and fee area with museum 4 km northeast of modern Nemea (N37.80949° E22.71038° 330m). The temple includes a few standing columns, and faces northeast toward a large external altar. It is on Holocene gravels of the floodplain of the Nemea River, now channelized only 10 m to the west of the temple. The valley floor here is only 3 km wide, and is a small intermontane valley surrounded by low hills of limestone and flysch of the Pindos Terrane (Higgins and Higgins, 1996). High peaks are visible to the east, but only low hills to the west, including Tsoungiza Hill only 1 km to the east, which has been occupied since Neolithic times (Barber, 2001). Soil was examined (Figure 3D) in the banks on the

other side of the Nemea River from the temple (N37.80943° E22.70984° 307 m). Both a modern profile 60 cm thick and buried profile 1 m thick include much tile and other cultural debris and a weakly expressed B horizon, and are Anthrepts (of Soil Survey Staff, 2000). Vegetation is garden, with surrounding pasture.

Allium sphaerocephalum (round-headed leek, Liliaceae, wildflower) Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Avena fatua (wild oats, Gramineae, indigenous grass) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) *Cirsium creticum* (Cretan thistle, Compositae, indigenous weed) Conyza canadensis (horseweed, Compositae, American weed) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Digitaria sanguinalis (crab grass, Gramineae, American grass) Ficus caricus (fig, Moraceae, indigenous fruit tree) Juglans regia (English walnut, Juglandaceae, Carpathian tree) Juniperus excelsa (Grecian juniper, Cupressaceae, indigenous tree) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) *Psoralea bituminosa* (pitch trefoil, Leguminosae, indigenous weed) Reseda lutea (yellow mignonette, Resedaceae, wildflower) *Rubus fruticosus* (bramble, Rosaceae, indigenous spiny vine) Salix repens (creeping willow, Salicaceae, indigenous tree) *Trifolium campestre* (hop trefoil, Leguminosae, indigenous weed) Typha latifolia (cat-tail, Typhaceae, indigenous rush) *Ulmus minor* (smooth-leaved elm, Ulmaceae, indigenous tree) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed) Vitis vinifera (grape, Vitaceae, Turkish fruit vine)

**Oiantheia, West Lokris.** Pausanias (Jones, 1935, p. 603) saw a temple of Aphrodite on the seashore, probably at the ruin of the Frankish castle north of modern Tolophonos (also known as Vitrinitsa: Stillwell et al., 1976). Cyclopean blocks can be seen beneath Frankish masonry, 500 m north of the Delfia Club, across the road from the beach (N38.34312° E22.20746° 2m). The kastro is on a Pleistocene coastal marine terrace of beach gravels, flanking a narrow coastal plain between headlands of limestone of the (Higgins and Higgins, 1996). Soil was examined (Figure 9D) in an excavation for a new house 200 m north of the ruins and east of the coast road (N38.3433° E22.20817° 2 m), where it is a Calcid (of Soil Survey Staff, 2000), with films of carbonate and efflorescences of white gypsum. Vegetation is littoral and pasture.

Agrostis gigantea (bent grass, Gramineae, indigenous grass)Allium roseum (rose garlic, Liliaceae, indigenous herb)Asteriscus spinosus (spiny golden star, Compositae, wildflower)Avena fatua (wild oats, Gramineae, indigenous grass)Carthamus lanatus (saffron thistle, Compositae, indigenous weed)Chrysanthemum segetum (corn marigold, Compositae, wildflower)Cichorium intybus (chicory, Compositae, indigenous weed)Cirsium arvense (Canadian thistle, Compositae, indigenous weed)Conyza canadensis (horseweed, Compositae, American weed)Eryngium amethystinum (blue eryngo, Compositae, indigenous weed)Hypochoeris radicata (cat's ear, Compositae, indigenous weed)

Juniperus excelsa (Grecian juniper, Cupressaceae, indigenous tree) Lepidium graminifolium (pepperwort, Cruciferae, indigenous weed) Medicago polymorpha (hairy medick, Compositae, indigenous weed) Morus nigra (mulberry, Moraceae, middle eastern fruit tree) Papaver dubium (long-pod poppy, Papaveraceae, indigenous weed) Phleum paniculatum (rough cat's tail grass, Gramineae, indigenous grass) Plantago major (common plantain, Plantaginaceae, indigenous weed) Silybum marianum (blessed thistle, Compositae, indigenous weed) Sonchus arvensis (cow thistle, Compositae, indigenous weed) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed) Zizyphus jujuba (jujube, Rhamnaceae, Chinese fruit vine)

Olympia, Arcadia. The statue of Zeus in his temple at Olympia, was one of the wonders of the ancient world, and Olympia was also the site of panhellenic Olympic Games. The large temple of Zeus is on the toeslope of Kronos Hill where it flattens to the high alluvial terrace of the Alpheos River (N37.63755° E21.62995° 37 m) faces east. It includes a complete foundation, and numerous column drums felled by earthquake. The foundation of the temple is on colluvium and cultural debris, in part including blocks of Pliocene sandstones from nearby Kronos Hill (Higgins and Higgins, 1996). It is also partly on sandy and silty alluvium of the high terrace of the Alpheos River. Also in the archeological preserve south of the museum, and entirely on sandy and silty alluvium is a shrine to Hestia (N37.63803° E21.631333° 25m), on the southern edge of the high terrace 100 m southeast of the Temple of Zeus. Neither site has remarkable views, The archeological preserve and Kronos Hill are wooded, as are the low ridges on the other side of the Alpheos and Kladeos Rivers (Olalla, 2002). The soils examined included Anthrepts (Figure 3B) on the lower flank of Kronos Hill above the road 200 m northeast of the temple of Zeus (N37.639633° E21.630183° 38 m) and also in a fresh archeological excavation (Figure 3A) below the southwest corner of the temple of Zeus (N37.63755 $^{\circ}$ E21.62995° 37 m), as well as Fluvents in Kladeos and Alpheos River terrace deposits in a bank just inside the entrance gate to the fee area of the archeological preserve (N37.639583° E21.628483° 38 m) and immediately south of the junction between the Kladeos and Alpheos Rivers 2 km south of the town of Olympia (Figure 15A; N37.63435° E21.626017° 20 m). Local vegetation includes garden plants, weeds and a plantation of pine atop Kronos Hill. The following list is of the area closest to the Temple of Zeus.

Anemone coronaria (crown anemone, Ranunculaceae, wildflower) Anemone hortensis (star anemone, Ranunculaceae, wildflower) Anemone pavonina (peacock anemone, Ranunculaceae, wildflower) Anthemis arvensis (corn chamomile, Compositae, indigenous weed) Avena fatua (wild oats, Gramineae, indigenous grass) Buxus sempervirens (box, Buxacaeae, indigenous thornbush) Callicotome villosa (spiny broom, Leguminosae, indigenous thornbush) Euphorbia helioscopa (sun spurge, Euphorbiaceae, indigenous weed) Geranium molle (marsh cranesbill, Geraniaceae, wildflower) Hedera helix (ivy, Araliaceae, indigenous vine) Inula conyzae (spikenard, Compositae, indigenous weed) Iris unguicularis (wild iris, Iridaceae, wildflower) Laurus nobilis (laurel, Lauraceae, indigenous tree)

Nerium oleander (oleander, Apocynaceae, indigenous shrub)
Orlaya kochi (white lace flower, Umbelliferae, indigenous weed)
Phalaris minor (dwarf Canary grass, Gramineae, African grass)
Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree)
Quercus ilex (evergeeen oak, Fagaceae, indigenous tree)
Quercus pubescens (white oak, Fagaceae, indigenous tree)
Rosa canina (dog rose, Rosaceae, wildflower)
Salix repens (creeping willow, Salicaceae, indigenous shrub)
Taraxacum officinale (dandelion, Compositae, indigenous weed)
Veronica chamaedrys (birdseye speedwell, Scrophulariaceae, indigenous weed)
Viburnum tinus (laurustinus, Caprifoliaceae, indigenous shrub)
These additional species were found in riparian and cultivated vegetation closer to the shrine of Hestia (Figure 15A).
Arundo donax (reed cane, Gramineae, indigenous grass)
Citrus sinensis (orange, Rutaceae, Chines fruit tree)

*Eucalyptus camaldulensis* (river red gum, Myrtaceae, Australian tree) *Olea europea* (olive, Oleaceae, indigenous tree)

**Onchestos, Boeotia.** Pausanias (Jones, 1935, p. 285) saw a temple and grove of Poseidon, which may be the monumental marble blocks in the old roadcut (north of the new roadcut) in this prominent ridge between the plains of Kanavari to the east and of Kopai to the west (N38.36277° E23.14527° 125 m). In classical times, Lake Copai was 24 by 15 km, the largest lake in Greece. Onchestos was a natural acropolis of Triassic-Jurassic limestone of the Sub-Pelagonian Terrane, overlooking the southwestern corner of the lake (Higgins and Higgins, 1996). Soil was examined (Figure 5C) 5 m east of the temple blocks in the roadcut (N38.36253° E23.14548° 131 m), and is a Calcid with a groundwater calcrete horizon on parent material of limestone colluvium and clacareous mylonite with schist blocks (Soil Survey Staff, 2000). Vegetation is field and garden of open farmland.

Acanthus spinosus (spiny bear's breech, Acanthaceae, indigenous weed) Agrostis gigantea (bent grass, Gramineae, indigenous grass) Asperula boissieri (asperula, Rubiaceae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Ballota acetabulosa (horehound, Labiatae, wildflower) Bromus diandrus (great brome, Gramineae, indigenous grass) Calendula arvensis (marigold, Compositae, wildflower) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) Chrysanthemum coronarium (chrysanthemum, Compositae, wildflower) Cichorium intybus (chicory, Compositae, indigenous weed) Conringia orientalis (hare's ear cabbage, Cruciferae, indigenous weed) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Echinops graeca (globe thistle, Compositae, indigenous weed) *Ficus carica* (fig, Moraceae, indigenous fruit tree) Geranium rotundifolium (roundleaf cranesbill, Geraniaceae, indigenous weed) *Glycyrrhiza echinata* (spiny-fruited licorice, Leguminosae, North American tree) Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed)

Hordeum vulgare (barley, Gramineae, Turkish grain)
Jurinea mollis (oriental thistle, Compositae, indigenous weed)
Lactuca serriola (prickly lettuce, Compositae, indigenous weed)
Malus sylvestris (crab apple, Rosaceae, indigenous fruit tree)
Mentha spicata (spearmint, Labiatae, indigenous herb)
Olea europea (olive, Oleaceae, indigenous fruit tree)
Onopordum acanthum (Scotch thistle, Compositae, indigenous weed)
Papaver rhoeas (corn poppy, Papaveraceae, indigenous weed)
Prunus dulcis (almond, Rosaceae, Iranian fruit tree)
Rhamnus alaternus (wild buckthorn, Rhamnaceae, indigenous shrub)
Rubus fruticosa (bramble, Rosaceae, indigenous spiny vine)
Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower)
Sisymbrium officinale (field mustard, Cruciferae, indigenous weed)
Verbascum graecum (Grecian mullein, Scrophulariaceae, indigenous weed)

**Paphos, Cyprus**. The sanctuary of Aphrodite (N34.70605° E32.57325° 73 m) was famous in the ancient world for the festival of Aphrodisia (Stillwell et al., 1976). All that remains is a partial enclosure of cyclopean blocks, within the fee area of the archeological preserve, which includes a museum in Lusignan Manor, an austere Frankish kastro. Both are on the high marine terrace on the southern edge of the village of Kouklia, 15 km east of Nea Paphos, and command a limited view over two lower terraces extending 2 km south to the shingle beach at the coast. Vegetation at the temple is garden and maquis. The measured soil profile (Figure 9A) is in the middle of a low roadcut 0.5 km south of the temple (N34.69695° E32.57635° 22 m), on the next lowest terrace, and belongs to the Koloni Series, identified as a Calcic Cambisol by Soterias and Koudounas (1969), which would be a Calcid of Soil Survey Staff (2000). This soil is irrigated with plastic pipe and cultivated by a nearby agricultural experiment station. Both raised marine terraces are coarse conglomerate of Pleistocene age.

Anchusa azurea (alkanet, Labiatae, wildflower) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Berberis cretica (barberry, Berberidaceae, indigenous thornbush) *Ceratonia siliqua* (carob, Leguminosae, indigenous tree) Chrysanthemum coronarium (chrysanthemum, Compositae, wildflower) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Laurus nobilis (laurel, Lauraceae, indigenous tree) *Linum perenne* (perennial flax, Linaceae, indigenous herb) Matthiola tricuspidata (three-horned stock, Cruciferae, indigenous weed) Mesembryanthemum nodiflorum (ice plant, Aizoaceae, indigenous succulent) Olea europea (olive, Oleaceae, indigenous tree) Oxalis pes-caprae (wood sorrel, Oxalidaceae, indigenous weed) *Pinus brutia* (Turkish pine, Pinaceae, indigenous tree) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub) Prunus dulcis (peach, Rosaceae, Iranian fruit tree) *Punica granata* (pomegranate, Punicaceae, indigenous fruit tree) *Salix repens* (creeping willow, Salicaceae, indigenous shrub) Schinus molle (pepper tree, Anacardiaceae, American tree) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed)

**Perachora, Corinthia.** The Temple of Hera at Perachora is on the lowest marine terrace above the harbor on the south side of the end of the Perachora Peninsula, a short walk down the trail to the south from the parking lot at the end of the road (N38.028146<sup>o</sup> E22.8524<sup>o</sup> 4 m). The temple faces east, but has only a view to the north across the water, as it is hedged in on three sides by steep limestone hills and higher marine terraces. This lowest terrace of calcareous gravel is probably late Pleistocene or Holocene in age considering the rate of uplift of this area (Higgins and Higgins, 1996). Surrounding hills are Cretaceous limestone of the Parnassos Terrane. Soil was examined (Figure 14B) in a bank 2 m west of the temple (N38.02809<sup>o</sup> E22.85232<sup>o</sup> 4 m), and consisted of a Xerept in modern colluvial fill over a Xeralf (of Soil Survey Staff, 2000). Vegetation is littoral, but the limestone hills around have maquis, and the higher terraces above have pasture and woodland.

Antennaria dioica (pussytoes, Compositae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Briza media (quaking grass, Gramineae, indigenous grass) Carpobrotus acacinifolia (pigface, Aizoaceae, South African succulent) *Cistus monspeliensis* (rockrose, Cistaceae, wildflower) Crithmium maritimum (rock samphire, Umbelliferae, indigenous succulent) Erica manipulifera (heather, Ericaceae, indigenous shrub) Helichrysum stoechas (everlasting, Compositae, wildflower) Juniperus phoenicea (Phoenician juniper, Cupressaceae, indigenous tree) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) *Lagurus ovatus* (hare's tail grass, Gramineae, indigenous grass) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub) *Polygonum aviculare* (prostrate knotweed, Polygonaceae, indigenous succulent) Raphistrum rugosum (hybrid cabbage, Cruciferae, indigenous weed) Sedum tenuifolium (stonecrop, Crassulaceae, indigenous succulent) Setaria viridis (green bristletail grass, Gramineae, indigenous grass) Sonchus arvensis (cow thistle, Compositae, indigenous weed) *Tofieldia calyculata* (false asphodel, Liliaceae, wildflower) Zizyphus jujuba (jujube, Rhamnaceae, Chinese fruit vine)

**Plataiai, Boeotia.** The temple of Hera at ancient Plataiai is south of the road 1 km east of modern Plateia, Viotia ((38.21544° E23.27688° 372 m). Only the foundation of the temple remains, facing east (Olalla, 2002). The ancient city is on a wide spur of middle Pleistocene alluvium forming a high alluvial terrace below mountains of Sub-Pelagonian Cretaceous limestone (Higgins and Higgins, 1996). Soil was examined (Figure 14E) in a roadcut directly south across the road from the temple (N38.21531° E23.27701° 370 m) and is a Xeralf (of Soil Survey Staff, 2000). Vegetation is grassy pasture.

Alyssoides utricularia (bladderpod, Cruciferae, indigenous weed) Avena fatua (wild oats, Gramineae, indigenous weed) Ballota acetabulosa (horehound, Labiatae, wildflower) Buxus sempervirens (box, Buxaceae, indigenous thornbush) Carduus nutans (musk thistle, Compositae, indigenous weed) Centaurea solstitialis (St Barnaby's thistle, Compositae, indigenous weed)

Chondrilla juncea (skeletonweed, Compositae, indigenous weed) *Cichorium intybus* (chicory, Compositae, indigenous weed) *Cirsium vulgare* (spear thistle, Compositae, indigenous weed) Cynodon dactylon (Bermuda grass, Gramineae, African grass) Echinops graeca (globe thistle, Compositae, indigenous weed) *Echium italicum* (Italian viper's bugloss, Scrophulariaceae, indigenous weed) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) *Eryngium arvense* (field eryngo, Compositae, indigenous weed) Foeniculum vulgare (fennel, Umbelliferae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Mentha spicata (spearmint, Labiatae, indigenous herb) Nerium oleander (oleander, Apocynaceae, indigenous shrub) Papaver dubium (long-headed poppy, Papaveraceae, indigenous weed) Polygonum bistorta (meadow bistort, Polygonaceae, indigenous weed) Rumex crispus (curly dock, Polygonaceae, indigenous weed) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower) Scabiosa columbaria (butterfly blue, Dipsaceae, wildflower) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed)

**Pleuron, Aitolia.** The acropolis of Pleuron with remains of a temple of Athena is a high hill above the lower city and archeological preserve, itself on a high ridgetop, 4 km north of Mesolongi (Barber, 2001). Only the rock-cut niche and foundations of the temple remain, facing north, on the northwestern side of the summit, immediately south of the remains of large cisterns (N38.41865° E21.40788° 365 m). There are commanding views on all sides of the coast and islands to the west, and of the eastern margin of the Corinthian Gulf. Bedrock is massive Cretaceous limestone of the Ionian terrane (Higgins and Higgins, 1996). Soil was examined (Figure 1F) in a bank on the western side of the summit rocks (N38.41867° E21.40617° 358 m). The soil is thin, with numerous bedrock outcrops, and littered with tile and brick as in Anthrept (of Soil Survey Staff, 2001). Vegetation is alpine phrygana, still heavily grazed by sheep.

Alopecurus myosuroides (foxtail grass, Gramineae, indigenous grass) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Hordeum vulgare (barley, Gramineae, Turkish grain) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Malus domesticus (crab apple, Rosaceae, indigenous fruit tree) Plantago major (common plantain, Plantaginaceae, indigenous weed) Poa trivialis (rough bluegrass, Gramineae, indigenous grass) Quercus coccifera (kermes oak, Fagaceae, indigenous shrub) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Setaria pumilis (yellow bristletail grass, Gramineae, indigenous grass) Sideritis syriaca (ironwort, Labiatae, indigenous weed) Solanum nigrum (deadly nightshade, Solanaceaa, Chinese herb) Thymus praecox (thyme, Labiatae, indigenous herb)

**Portara, Naxos.** Portara is a low sea stack connected by a short built causeway to the port of Naxos Island at Chora, with a temple of Apollo on its summit (N37.11025° E25.372183° 16 m). The doorway of the temple is still standing, facing east, with a good view of the harbour of Chora, coastal plain of Isia and mountains of Mt Zas. The sea stack is developed of boulder fanglomerate of Pleistocene age, largely dervied from Miocene granites and mica schist of the mountains of Naxos (Higgins and Higgins, 1996). Soil was examined (Figure 2F) on the southern slope 30 m north of the temple (N37.11005° E25.372017° 9 m), and is an Orthent (of Soil Survey Staff, 2001). Vegetation is maritime succulent scrub.

Carpobrotus acaciniformis (pigface, Aizoaceae, South African succulent) Hordeum murinum (wall barley, Gramineae, indigenous weed) Medicago littoralis (shore medick, Leguminosae, indigenous weed) Mesembryanthemum nodiflorum (ice plant, Aizoaceae, indigenous succulent) Portulaca oleracea (purslane, Portulaceae, indigenous shrub) Salicornia europea (glasswort, Chenopodiaceae, indigenous succulent) Sonchus arvensis (cow thistle, Compositae, indigenous weed) Suaeda maritima (sea blite, Chenopodiaceae, indigenous succulent)

**Ptoon, Boeotia.** The temple of Apollo at Ptoon is on the southern flanks of Mt Pelasgia by a spring in the head of Perdikhovrisi Gorge, 200 m west of the church of Agia Paraskevi (N38.45969° E23.25092° 357 m). It is accessible by car on an unsealed track across the gorge from the sealed road to Pelasgia Convent, 3 km uphill from Akraiphion, Viotia. Viewed from the road to the south, Mt Pelasgia looks like the upper part of a skull, with two large depressions like eyesockets, divided by a nose-like ridge, and with the spring and sanctuary of Apollo on the lower left cheek (Richer, 1994). This cannot be seen from the temple, which overlooks a steep narrow gorge, now bisected by high-tension power lines, and the plain of Lake Copai to the south. Little of the temple remains, but it appears to face west (Olalla, 2002). Soil was examined (Figure 2A) 4 m north in the hillside above the temple (N38.45963° E23.25105° 369 m), and is an Orthent (of Soil Survey Staff, 2000). Vegetation is alpine phrygana and pasture, below a farm.

Adiantum capillus-veneris (Venus hair fern, Adiantaceae, indigenous fern) Agrostis gigantea (bent grass, Gramineae, indigenous grass) Ajuga reptans (bugleweed, Labiatae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Elvmus repens (couch grass, Gramineae, indigenous grass) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) *Eryngium campestre* (field eryngo, Compositae, indigenous weed) *Euphorbia acanthorhamnus* (spiny spurge, Euphorbiaceae, indigenous thornbush) *Ficus carica* (fig, Moraceae, indigenous fruit tree) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Hypochoeris radicata (cat's ear, Compositae, indigenous weed) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Malus domesticus (apple, Rosaceae, indigenous fruit tree) *Mentha spicata* (spearmint, Labiatae, indigenous herb) *Micromeria juliana* (savory, Labiatae, indigenous herb) Pastinaca sativa (wild parsnip, Umbelliferae, indigenous weed) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub)

Quercus ilex (evergreen oak, Fagaceae, indigenous tree) Rubus fruticosa (bramble, Rosaceae, indigenous spiny vine) Scabiosa columbaria (butterfly blue, Dipsacaceae, wildflower) Setaria pumila (yellow bristletail grass, Gramineae, indigenous grass) Sonchus arvensis (cow thistle, Compositae, indigenous weed)

**Rhamnous, Attica.** This archaeological preserve on the rocky coast north of Marathon includes a large temple to Nemesis at the top of the hill (N38.21763° E24.02688° 95 m), and a smaller sanctuary of Aphrodite along the trail down to the harborside acropolis (N38.21584° E24.02676° 45 m). This is a hilly coast, with a steep track down from the low knoll with the temple of Nemesis in the saddle between mountains to a lower sea side spur of the lower acropolis around the harbor. There are good views north across the sea to southern Evia. Bedrock of both temples is Miocene marble from Cretaceous limestone protolith of the Pelagonian Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 9E) 20 m north of the temple of Nemesis in fresh archeological excavations, and is a Calcid (of Soil Survey Staff, 2000). Vegetation is maquis and olive groves.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Allium roseum (rose garlic, Liliaceae, indigenous herb) Allium vineale (crow garlic, Liliaceae, indigenous herb) Astragalus parnassii (spiny vetch, Leguminosae, indigenous thornbush) Avena fatua (wild oats, Gramineae, indigenous grass) *Buxus sempervirens* (box, Buxaceae, indigenous thornbush) *Caucalis platycarpus* (small burr-parsley, Umbelliferae, indigenous weed) Ceratonia siliqua (carob, Leguminosae, indigenous tree) *Cupressus sempervirens* (funeral cypress, Cupressaceae, indigenous tree) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Echinops graeca (globe thistle, Compositae, indigenous weed) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) *Eryngium campestre* (field eryngo, Compositae, indigenous weed) *Festuca arundinacea* (tall fescue, Gramineae, indigenous grass) Galium spurium (bedstraw, Rubiaceae, indigenous vine) Helichrysum stoechas (everlasting, Compositae, wildflower) Inula ensifolia (elacampane, Compositae, wildflower) Juniperus phoenicia (Phoenician juniper, Juniperaceae, indigenous tree) *Lavatera cretica* (mallow, Malvaceae, wildflower) *Medicago sativa* (alfalfa, Leguminosae, indigenous weed) Myrtus communis (myrtle, Myrtaceae, indigenous shrub) Nigella damascena (love-in-a-mist, Ranunculaceae, wildflower) Olea europea (olive, Oleaceae, indigenous tree) Papaver dubium (long-headed poppy, Papaveraceae, indigenous weed) Phalaris minor (dwarf Canary grass, Gramineae, African grass) Phlomis fruticosa (Jerusalem sage, Labiatae, indigenous weed) *Picris hieracioides* (oxtongue hawkweed, Compositae, indigenous weed) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Pistachia lentiscus (lentisk, Anacardiaceae, indigenous shrub) Pulicaria dysenterica (meadow false fleabane, Compositae, indigenous weed) *Quercus coccifera* (kermes oak, Fagaceae, indigenous shrub)

Quercus ilex (evergeen oak, Fagaceae, indigenous tree) Quercus macrolepis (Valonia oak, Fagaceae, indigenous tree) Quercus pubescens (white oak, Fagaceae, indigenous tree) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower) Scabiosa atropurpurea (sweet scabious, Dipsacaceae, indigenous weed) Senecio viscosus (stinking groundsel, Compositae, indigenous weed) Spartium junceum (broom, Leguminosae, Spanish shrub) Tamus communis (black bindweed, Dioscoraceae, indigenous vine) Tordylium maximum (hartwort, Cruciferae, indigenous weed) Tribulus terrestris (puncturevine, Zygophyllaceae, indigenous weed) Trifolium arvense (hare's foot clover, Leguminosae, indigenous weed) Trifolium dubium (suckling clover, Leguminosae, indigenous weed)

**Samos Island.** Samos in ancient times was used as the name of the both the city (modern Pithagorio) and island (modern Samos of the eastern Sporades). A sanctuary of Dionysos has been partly excavated southeast of the corner of Efpalinou and Agkaiou Streets, on the hillside about 500 m northwest of the harbor (N37.69045° E26.94099° 26 m). The temple is on colluvium and early Miocene freshwater limestone of the Pythagorion Formation, which forms the acropolis to the northwest (Solounias, 1981). The soil is exposed (Figure 4E) in the southern wall of the excavation (N37.69045° E26.94099° 26 m), and is a Xeroll (of Soil Survey Staff, 2000). Vegetation of the sanctuary of Dionysos is urban garden and lawn.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) Citrus aurantifolia (lime, Rutaceae, Chinese fruit tree) Conyza canadensis (horseweed, Compositae, American weed) Ficus carica (fig, Moraceae, indigenous fruit tree) Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Morus nigra (mulberry, Moraceae, Iranian fruit tree) Panicum repense (torpedo grass, Gramineae, Australian grass) Phytolacca americana (polk sallet, Phytolacceae, American weed) Tecoma radicans (trumpet creeper, Bignoniaceae, American ornamental vine) Ziziphus jujuba (jujube, Rhamnaceae, Chinese fruit vine) A temple of Aphrodite is 100 m southwest of the corner of Logotheti and

Polycrati Streets in the western part of Pithagorio (N37.6903° E26.9391° 5 m), and is on calcareous conglomerates of the Pleistocene coastal terrace (Higgins and Higgins, 1996). A nearby soil was examined (Figure 9B) in archeological excavations immediately west of the parking area for Pythagorio Beach (N37.69046° E26.93699° 2m). Vegetation of the temple of Aphrodite is urban garden, weeds, and littoral shrubland.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Ailanthus altissimum (tree of heaven, Simaroubaceae, Chinese tree) Anemone coronaria (crown anemone, Ranunculaceae, wildflower) Arundo donax (reed cane, Gramineae, indigenous grass) Asteriscus maritimus (beach daisy, Compositae, wildflower) Astragalus parnassii (spiny vetch, Leguminosae, indigenous thornbush) Avena fatua (wild oats, Gramineae, indigenous grass) Cichorium intybus (chicory, Compositae, indigenous weed)

*Cirsium arvense* (Canadian thistle, Compositae, indigenous weed) Cirsium vulgare (spear thistle, Compositae, indigenous weed) *Conyza candensis* (horseweed, Compositae, American weed) *Festuca ovina* (sheep's fescue, Gramineae, indigenous grass) Geranium rotundifolium (roundleaf cranesbill, Geraniaceae, indigenous weed) Juniperus excelsa (Grecian juniper, Juniperaceae, indigenous tree) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Lotus corniculata (birdsfoot trefoil, Leguminosae, Chinese shrub) Mentha arvensis (corn mint, Labiatae, American weed) Morus nigra (mulberry, Moraceae, indigenous fruit tree) Phagnalon graecum (phagnalon, Compositae, wildflower) *Phytolacca americana* (polk sallet, Phytolacceae, American weed) Psoralea bituminosa (pitch trefoil, Leguminosae, indigenous weed) Rumex crispus (curly dock, Polygonaceae, indigenous weed) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower) Sonchus arvensis (cow thistle, Compositae, indigenous weed) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed) *Veronica triphylla* (fingered speedwell, Scrophulariaceae, wildflower) Ziziphus jujuba (jujube, Rhamnaceae, Chinese fruit vine)

**Sicyon, Corinthia.** Ancient Sicyon is on dissected marine terraces 5 km southeast of modern Kaitou, and the foundation of its Temple of Apollo are across the road from the archeological museum (N37.98397° E22.71366° 162 m). The temple faces east on an extensive lower marine terrace, north of the acropolis and steep slopes to high marine terraces 300 m to the south. There are views to water of the Corinthian Gulf to the north, but this extensive terrace and its pastures do not have a commanding position below higher ground immediately to the south. These marine terraces of calcareous gravel are probably middle Pleistocene in age like comparable terraces around Isthmia to the east (Higgins and Higgins, 1996). Soil was examined (Figure 2G) within the archeological excavation 3 m west of the temple (N37.98393° E22.7134° 162 m), and is a Xerept (of Soil Survey Staff, 2000). Vegetation is pasture, but garden plants are in the archeological museum across the road.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Ceratonia siliqua (carob, Leguminosae, indigenous tree) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) Conyza canadensis (horsetail, Compositae, American weed) Crithmium maritimum (rock samphire, Umbelliferae, indigenous succulent) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Oxytropis pilosa (hairy milk vetch, Leguminosae, indigenous weed) Picris hieracioides (ox tongue hawkweed, Compositae, indigenous weed) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower) Setaria viridis (green bristletail grass, Gramineae, indigenous grass) Sonchus asper (cow thistle, Compositae, indigenous weed)

In the steep riser of a higher marine terrace 200 m southwest of the Temple of Apollo in Sicyon is a theatre, and on its eastern side a small sanctuary of Dionysos, facing north (N37.9836° E22.71166° 176m). Views are similar to those from the temple of Apollo, but ths temple is set into the steep hillslope like the nearby theater. This terrace is probably early Pleistocene in age, by comparison with terreaces near Isthmia (Higgins and Higgins, 1996). Soil was examined (Figure 4J) in the roadcut leading southeast up the terrace 4 m east of the temple (N37.98335° E22.71186° 183 m), and is a Xeroll (of Soil Survey Staff, 2000). Vegetation is grassy pasture.

Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Asperula boissieri (asperula, Rubiaceae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Bromus diandrus (great bromw grass, Gramineae, indigenous grass) Carduus nutans (musk thistle, Compositae, indigenous weed) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) *Conyza canadensis* (horsetail, Compositae, American weed) Erica manipulifera (heather, Ericaceae, indigenous shrub) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) Foeniculum vulgare (fennel, Umbelliferae, indigenous weed) Heliotropum hirsitissimum (heliotrope, Boraginaceae, indigenous weed) Jasione heldreichi (sheep's bit, Campanulaceae, wildflower) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lagurus ovatus (hare's tail grass, Gramineae, indigenous grass) Nerium oleander (oleander, Apocynaceae, indigenous shrub) *Olea europea* (olive, Oleaceae, indigenous fruting tree) Oryzopis miliacea (smilo grass, Gramineae, indigenous grass) Oxytropis pilosa (hairy milk vetch, Leguminosae, indigenous weed) Papaver dubium (long-pod poppy, Papaveraceae, indigenous weed) Papaver rhoeas (corn poppy, Papaveraceae, indigenous weed) *Phleum pratense* (Timothy grass, Gramineae, indigenous grass) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Raphanus raphanastrum (wild radish, Cruciferae, indigenous weed) Reseda lutea (yellow mignonette, Resedaceae, wildflower) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Saxifraga sibthorpi (Sibthorp's saxigrage, Saxifragaceae, wildflower) Senecio viscosus (sticky ragwort, Compositae, indigenous weed) Sideritis syriaca (ironwort, Labiatae, indigenous weed) Sonchus asper (prickly cow thistle, Compositae, indigenous weed) Spergula arvensis (spurry, Caryophyllaceae, indigenous succulent) Zizyphus jujuba (jujube, Rhamnaceae, Chinese fruit vine)

**Sounion, Attica.** Cape Sounion is a high and prominent cape, the first visible point of Attica for ships returning from the east. The Temple of Poseidon overlooks the sea, facing east, and still has many columns standing (N37.65015° E24.024567° 92 m). It is built on bedrock of mica schist of the Pelagonian Terrane. Metamorphism was probably Miocene, associated with Cycladic granitic intrusions and the silver-lead mines of Laurion (modern Lavrion), but the protolith was marine shales and limestones of Triassic and Jurassic age (Higgins and Higgins, 1996). Soil was examined (Figure 5B)

north of the parking area to the restaurant and fee area (N37.650383° E24.027133° 71 m). Vegetation is sparse, low maquis, with much bare rock exposed.

Asphodelus aestivus (asphodel, Liliaceae, wildflower) Carpobrotus acaciniformis (pigface, Aizoaceae, South African succulent) Chamaecytisus supinus (clustered broom, Leguminosae, indigenous thornbush) Chrysanthemum coronarium (chrysanthemum, Compositae, wildflower) Epilobium parviflorum (willow herb, Onagraceae, wildflower) Euphorbia acanthothamnus (spiny spurge, Euphorbiaceae, indigenous thornbush) Geranium rotundifolium (round-leaved cransebill, Geraniaceae, indigenous weed) Iris unguicularis (wild iris, Iridaceae, wildflower) Muscari commutatum (grape hyacinth, Liliaceae, wildflower) Olea europea (olive, Oleaceae, indigenous tree) Orlaya kochi (white lace flower, Umbelliferae, indigenous weed) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub)

**Stratos, Acarnania.** Foundations of the temple of Zeus are atop a low hill at the western edge of the archeological preserve and ancient walled city of Stratos, 2 km northwest of the modern village of Stratos, also immediately west of the Achelous River (N38.67125° E21.31116° 92 m). The ancient walled city straddles four low hills, of which this is the most western, overlooking a creek and pasture to the west. The temple of Zeus faces east over the central hill of the ancient city, with the theatre on its western slope. Bedrock is cherty Pleistocene conglomerate on a high alluvial terrace remnant, in the structurally and lithologically varied Ionian Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 3E) in a bank 10 m northeast of the temple (N38.67133° E21.3115° 86 m). Vegetation is garden and farm, but was probably originally evergreen oak forest.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Arum maculatum (lords and ladies, Araceae, indigenous herb) Asparagus acutifolium (spiny asparagus, Liliaceae, spiny indigenous vine) Buxus sempervirens (box, Buxaceae, indigenous thornbush) Cerastium arvense (chickweed, Caryophyllaceae, American weed) Chondrilla juncea (skeletonweed, Compositae, indigenous weed) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) *Conyza canadensis* (horseweed, Compositae, American weed) Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed) Digitaria sanguinalis (crab grass, Gramineae, American grass) *Ficus carica* (fig, Moraceae, indigenous fruit tree) Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Hypochoeris radicata (cat's ear, Compositae, indigenous weed) Jurinea mollis (oriental thistle, Compositae, indigenous weed) *Lagurus ovatus* (hare's tail grass, Gramineae, indigenous grass) Malus domesticus (apple, Rosaceae, indigenous fruit tree) *Olea europea* (olive, Oleaceae, indigenous tree) Orlaya kochi (white lace flower, Umbelliferae, indigenous weed) Paspalum paspaloides (knotgrass, Gramineae, central American grass) *Rubus fruticosa* (bramble, Rosaceae, indigenous spiny vine) Setaria viridis (green bristletail grass, Gramineae, indigenous grass)

Sideritis syriaca (ironwort, Labiatae, indigenous weed) Silene dioica (red catchfly, Caryophyllaceae, wildflower) Solanum nigrum (deadly nightshade, Solanaceae, Chinese weed) Sonchus asper (prickly cow thistle, Compositae, indigenous weed) Verbascum graecum (Greek mullein, Scrophulariaceae, indigenous weed) Veronica triphylla (fingered speedwell, Scrophulariaceae, wildflower) Vitex agnus-chastei (chaste tree, Verbenaceae, indigenous tree)

**Stymphalia, Corinthia.** The acropolis of ancient Stymphalia had a Temple of Athena, 5 km south of the modern village of Stymphalos, on a prominent rocky ridge west of Lake Stymphalos (N37.85854° E22.45733° 637m). Only the foundation of the temple remains facing east on the northeastern slope near the summit of the acropolis (Olalla, 2002). The acropolis has good views on all sides, of Lake Stymphalos to the east and north, and floodplains to the west and south, which set the acropolis apart from the high massif of Mt Kyllene to the east. The temple is set into bedrock, which also crops out at the summit of the hill, of massive Cretaceous limestone of the Pindos Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 1E) in walls of the archeological excavation 3 m to the east of the temple foundation (N37.85854° E22.45733° 637m), and is an Anthrept with much broken tile. Vegetation is montane phrygana.

Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous weedy vine) Avena fatua (wild oats, Gramineae, indigenous grass) Ballota acetabularis (horehound, Labiatae, wildflower) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) *Eryngium amethystinum* (blue eryngo, Compositae, indigenous weed) Eryngium campestre (field eryngo, Compositae, indigenous weed) *Helichrysum stoechas* (everlasting, Compositae, wildflower) *Minuartia setacea* (sandwort, Caryophyllaceae, wildflower) Paspalum paspaloides (knotgrass, Gramineae, Central American grass) Phalaris minor (dwarf Canary grass, Gramineae, African grass) *Poa trivialis* (rough bluegrass, Gramineae, indigenous grass) Quercus coccifera (kermes oak, Fagaceae, indigenous shrub) Quercus ilex (evergreen oak, Fagaceae, indigenous tree) Senecio vulgaris (groundsel, Compositae, indigenous weed) Setaria pumila (green bristletail grass, Gramineae, indigenous grass) Sideritis syriaca (ironwort, Labiatae, indigenous weed) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) *Trifolium arvense* (hare's foot clover, Leguminosae, indigenous weed) *Trifolium campestre* (hop trefoil, Leguminosae, indigenous weed) The Frankish church 3 km south of the modern village of Stymphalos

(N37.867783° E22.45865° 628 m), includes isolated blocks from a prior temple of Artemis mentioned by Pausanias (Jones, 1935, p. 7). This is on bouldery limestone colluvium at the footslopes of Mt Kyllene to the west, which is mainly massive Cretaceous limestone of the Pindos terrane (Higgins and Higgins, 1996). The soil was examined (Figure 6H) in a roadcut immediately across the highway from the ruined chuch on the flats, and is a red Xerept (Soil Survey Staff, 2000). Vegetation near the Frankish church ruins is alpine phrygana, still heavily grazed.

Asparagus acutifolius (spiny asparagus, Liliaceae, indigenous spiny vine) Erigeron acer (blue fleabane, Compositae, indigenous weed)

*Erodium cicutarium* (storksbill, Geraniaceae, indigenous weed) *Eryngium campestre* (field eryngo, Compositae, indigenous weed) *Phlomis lanata* (woolly Jerusalem sage, Labiatae, indigenous weed) *Quercus coccifera* (kermes oak, Fagaceae, indigenous shrub) *Teesdalia nudicaulis* (shepherd's purse, Cruciferae, indigenous weed)

**Tanagra, Boeotia.** Ancient Tanagra is a grassy hill south of the road between Tanagra and Schimandous, 5 km east of modern Tanagra, Viotia. The ruins of a temple of Dionysos are near ruins of an early Christian chapel, above the grassy bowl on the west side of the hill taken to be the ancient theatre (N38.3058° E23.59383° 117m). This is below the summit of the hill in accord with Pausanias (Jones, 1935, p. 265), who indicated that sanctuaries were set apart from the houses. Both the temple and theater have good views of rolling farmland to the east. Bedrock of the hill is Miocene marble from Cretaceous limestone of the Pelagonian Terrane (Higgins and Higgins, 1996), which is still actively quarried in this area. Little of this rock crops out on this low grassy hill, where is is best seen in roadcuts along the footslopes to the north. Soil was examined (Figure 4G) in the roadcut north of the creek in the road leading south from the Tanagra-Schimandous road (N38.30494° E23.59387° 96 m), and is a Xeroll (of Soil Survey Staff, 2000). Vegetation is olive groves, grassland and cultivation.

Acanthus spinosus (spiny bear's breech, Acanthaceae, indigenous weed) Allium roseum (rose garlic, Liliaceae, indigenous herb) Asparagus acutifolius (spiny apsaragus, Liliaceae, indigenous spiny herb) Asperula boissieri (asperula, Rubiaceae, wildflower) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Astragalus centralpinus (milk vetch, Leguminosae, indigenous weed) Avena fatua (wild oats, Gramineae, indigenous grass) Buxus sempervirens (box, Buxaceae, indigenous thornbush) Carduus nutans (musk thistle, Compositae, indigenous weed) Carthanus lanatus (saffron thistle, Compositae, indigenous weed) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) Cichorium intybus (chicory, Compositae, indigenous weed) Cirsium arvense (Canadian thistle, Compositae, indigenous weed) Conringia orientalis (hare's ear cabbage, Cruciferae, indigenous weed) Cynodon dactylon (Bermuda grass, Gramineae, African grass) Delphinium peregrinum (larkspur, Ranunuculaceae, wildflower) *Echinops graeca* (globe thistle, Compositae, indigenous weed) *Eryngium campestre* (field eryngo, Compositae, indigenous weed) Heliotropum hirsutissimum (heliotrope, Boraginaceae, indigenous weed) *Hordeum vulgare* (barley, Gramineae, Turkish grain) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Olea europea (olive, Oleaceae, indigenous tree) Onopordum acanthium (Scotch thistle, Compositae, indigenous weed) Papaver rhoeas (corn poppy, Papaveraceae, indigenous weed) Paspalum paspaloides (knotgrass, Gramineae, central American grass) *Phleum pratense* (Timothy grass, Gramineae, indigenous grass) Picris hieracioides (ox-tongue hawkweed, Compositae, indigenous weed) Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub)

Potentilla fruticosa (shrubby cinquefoil, Rosaceae, indigenous shrub)
Prunus webbi (wild almond, Rosaceae, indigenous tree)
Quercus macrolepis (Vallonia oak, Fagaceae, indigenous tree)
Quercus pubescens (white oak, Fagaceae, indigenous tree)
Sonchus asper (prickly cow thistle, Compositae, indigenous weed)
Tordylium apulum (Roman pimpernel, Cruciferae, indigenous weed)
Trifolium arvense (hare's foot clover, Leguminosae, indigenous weed)
Verbascum graecum (Grecian mullein, Scrophulariaceae, indigenous weed)

**Thebes, Boeotia.** A temple of Demeter was in the Cadmeia, at the corner of Pindarous and Antigonis Streets in modern Thiva, Viotia (N38.32045° E23.317967° 205 m). The Cadmeia is a broad egg-shaped ridge eroded from Pleistocene fanglomerates, which stand above the Theban Plain (Higgins and Higgins, 1996). It is surrounded by buildings now, and probably was in classical time as well, so that there is no clear view from the temple. Soil was examined (Figure 7G) in a roadcut 500 m east opposite 5° Gymnasio Thivas (school) on Pergamon Street (N38.327683° E23.3235° 162 m). It is a Xeroll of (Soil Survey Staff, 2000), with 72 cm of colluvial-alluvial dark loam above conglomeratic bedrock. Vegetation is a pasture and park.

Agrostis gigantea (bent grass, Gramineae, indigenous grass) Anthemis arvensis (corn chamomile, Compositae, indigenous weed) Cirsium arvense (creeping thistle, Compositae, indigenous weed) Geranium dissectum (cutleaf cranesbill, Geraniaceae, indigenous weed) Punica granata (pomegranate, Punicaceae, indigenous fruit tree) Raphanus raphanastrum (wild radish, Cruciferae, indigenous weed) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) Urtica pilulifera (Roman nettle, Urticaceae, indigenous weed)

**Thermon, Acarnania.** The sanctuary of Apollo at ancient Thermon is in the archeological preserve and museum 1 km southeast of modern Thermon, formerly Kefalovrisi (N38.55949° E21.66802° 337 m). The temple is on a level spur leading south from the mountainous ridge to the north, which also towers above the modern gorge town of Thermon. There are distant views down the valley, and to Lake Trichonida in the distance over low ridges. Bedrock of this area is flaggy bedded, folded Triassic limestones of the Pindos Terrane (Higgins and Higgins, 1996). Soil was examined (Figure 2M) in the roadcut to the small parking lot north of the arehcological exnclosure (N38.55965° E21.66892° 321m) and was a Xerept (of Soil Survey Staff, 2000). Vegetation is pasture and garden, but was probably originally evergreen oak woodland.

Ailanthus altissima (tree of heaven, Simaroubiaceae, Chinese tree) Avena fatua (wild oats, Gramineae, indigenous grass) Carthamus lanatus (saffron thistle, Compositae, indigenous weed) Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed) Citrus medica (citron, Rutaceae, Indian fruit tree) Ficus carica (fig, Moraceae, indigenous fruit tree) Geranium rotundifolium (roundleaf cranesbill, Geraniaceae, indigenous weed) Hedera helix (ivy, Araliaceae, indigenous vine) Juglans regia (English walnut, Juglandaceae, Carpathian tree) Jurinea mollis (oriental thistle, Compositae, indigenous weed) Lactuca serriola (prickly lettuce, Compositae, indigenous weed)

*Lagerstroemia speciosa* (crepe myrtle, Lythraceae, Indian tree) Laurus nobilis (laurel, Lauraceae, indigenous tree) Lysimachia nummularia (loosestrife, Primulaceae, indigenous weed) *Medicago orbicularis* (large disc medick, Leguminosae, indigenous weed) Mespilus germanicus (medlar, Rosaceae, indigenous fruit tree) *Micromeria juliana* (savory, Labiatae, indigenous herb) Minuartia setacea (sandwort, Caryophyllaceae, wildflower) Morus nigra (mulberry, Moraceae, Iranian fruit tree) Olea europea (olive, Oleaceae, indigenous tree) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Plantago lanceolata (ribwort plantain, Plantaginaceae, indiegnous weed) Plantago major (common plantain, Plantaginaceae, indigenous weed) Prunus cerasus (sour cherry, Rosaceae, indigenous tree) *Ouercus ilex* (evergreen oak, Fagaceae, indigenous tree) Robinia pseudoacacia (black locust, Leguminosae, American tree) Rosa chinensis (rose, Rosaceae, Chinese ornamental) Rumex crispus (curly dock, Polygonaceae, indigenous weed) Setaria viridis (green bristletail grass, Gramineae, indigenous grass) Sideritis syriaca (ironwort, Labiatae, indigenous weed) *Taraxacum officinale* (dandelion, Compositae, indigenous weed) *Torylium apulum* (Roman pimpernel, Umbelliferae, indigenous weed) Vitis vinifera (grape, Vitaceae, indigenous fruit vine)

**Thespiai, Boeotia.** The temple of Apollo was on a high flat-topped spur across the gorge east from the modern hillside village of Thespies, Viotia (N38.3225° E23.17495° 221 m). A large smooth column of marble 40 cm diameter and 4 m long remains, but other blocks appear to have been incorprated into the Christian basilica here. There is a commanding view of the mountains behind the town, across the gorge to Thespies, and down onto the flat plain of the Kanavari River to the north. The flat-topped ridge is an early Pleistocene alluvial terrace, and fanglomerate gravels are exposed in roadcuts nearby (Higgins and Higgins, 1996). Soil was examined (Figure 2H) in the cutting behind the house 20 m east of the basilica and temple (N38.32174° 23.17493° 220m), where it is a Xerept (of Soil Survey Staff, 2000). Vegetation is garden, and lightly wooded, grassy pasture.

Ailanthus altissima (tree of heaven, Simaroubaceae, Chinese tree)
Avena fatua (wild oats, Gramineae, indigenous grass)
Ballota acetabulosa (horehound, Labiatae, wildflower)
Bromus diandrus (great brome, Gramineae, indigenous grass)
Buxus sempervirens (box, Buxaceae, indigenous thornbush)
Calendula arvensis (marigold, Compositae, wildflower)
Carthamus lanatus (saffron thistle, Compositae, indigenous weed)
Chrozophora tinctoria (giradol, Euphorbiaceae, indigenous weed)
Chrysanthemum coronarium (chrysanthemum, Ranunculaceae, wildflower)
Cupressus sempervirens (funeral cypress, Cupressaceae, indigenous tree)
Daucus carota (Queen Anne's lace, Umbelliferae, indigenous weed)
Ficus carica (fig, Moraceae, indigenous fruit tree)
Heliotropum hirsutissima (heliotrope, Boraginaceae, indigenous weed)
Hordeum vulgare (barley, Gramineae, Turkish grain)

Juniperus excelsa (Grecian juniper, indigenous tree) Lactuca serriola (prickly lettuce, Compositae, indigenous weed) Morus nigra (mulberry, Moraceae, Iranian fruit tree) Olea europea (olive, Oleaceae, indigenous fruit tree) Pinus halepensis (Aleppo pine, Pinaceae, indigenous tree) Prunus webbii (wild almond, Rosaceae, indigenous weed) Quercus coccifera (kermes oak, Fagaceae, indigenous shrub) Quercus ilex (evergreen oak, Fagaceae, indigenous tree) Saxifraga sibthorpi (Sibthorp's saxifrage, Saxifragaceae, wildflower) Sinapis alba (white mustard, Cruciferae, indigenous weed) Sisymbrium officinale (field mustard, Cruciferae, indigenous weed) Xanthium spinosum (Bathurst burr, Compositae, South American weed) Zizyphus jujuba (jujube, Rhamnaceae, Chinese fruit vine)

**Thoricos, Attica.** The sanctuary of Dionysos is on the eastern side of the theater at the archeological site of Thoricos, 2 km north of Lavrion (N37.737717° E24.053917° 24 m). The temple was partly cut into rock, facing south, toward another temple base, possibly of Demeter (Barber, 2001). The rock is marble of the Pelagonian Terrane rising above Holocene alluvium of a small creek. A soil was examined (Figure 4C) in the bank of this creek 300 m south of the theater (N37.373067° E24.050583° 19 m), where alluvial gravel is overlain by 24 cm of crumb-structured, silty clay of a Xeroll (Soil Survey Staff, 2000). Vegetation is a grassy meadow overgrown with riparian trees and shrubs close to the creek.

Anemone coronaria (crown anemone, Ranunculaceae, wildflower)
Arundo donax (reed cane, Gramineae, indigenous grass)
Asphodelus aestivus (asphodel, Liliaceae, wildflower)
Chrysanthemum coronarium (chrysanthemum, Ranunculaceae, wildflower)
Erodium cicutarium (storksbill, Geraniaceae, indigenous weed)
Euphorbia acanthothamnus (spiny spurge, Euphorbiaceae, indigenous thornbush)
Euphorbia characias (spurge, Euphorbiaceae, indigenous weed)
Olea europea (olive, Oleaceae, indigenous weed)
Oxalis pes-caprae (wood sorrel, Oxalidaceae, indigenous weed)
Pistacia lentiscus (lentisk, Anacardiaceae, indigenous shrub)
Primula halleri (cowslip primrose, Primulaceae, wildflower)
Raphanus raphanastrum (wild radish, Cruciferae, indigenous weed)

**Yiroulas, Naxos.** The temple of Demeter at Yiroulas is on a hilltop, in rolling hill country, 2 km south of Sangri, in the foothills above the coastal plain around Chora (N37.02915° E25.431133° 144 m). The temple has good views of the coastal plain and the mountainous hinterland of the island. Bedrock is Miocene mica schist (Higgins and Higgins, 1996). Soil was examined (Figure 7C) in the roadcut 200 m northeast of the temple (N37.02660° E25.432117° 128 m), and is a Xeroll (of Soil Survey Staff, 2001). Vegetation is rolling pasture with hedgerows.

Asperula arcadiensis (woodruff, Rubiaceae, indigenous herb) Asphodelus aestivus (asphodel, Liliaceae, wildflower) Avena fatua (wild oats, Gramineae, indigenous grass) Callicotome villosa (spiny broom, Leguminosae, indigenous thornbush) Campanula glomerata (clustered bellflower, Campanulaceae, wildflower)

Ceratonia siliqua (carob, Leguminosae, indigenous tree) Chrysanthemum coronarium (chrysanthemum, Ranunculaceae, wildflower) Cupressus sempervirens (funeral cypress, Cupressaceae, indigenous tree) Hordeum vulgare (barley, Gramineae, Turkish grain) Juniperus excelsa (Grecian juniper, Juniperaceae, indigenous tree) Laurus nobilis (laurel, Lauraceae, indigenous tree) Nerium oleander (oleander, Apocynaceae, indigenous shrub) Ononis pusilla (restharrow, Leguminosae, indigenous weed) Oxalis pes-caprae (wood sorrel, Oxalidaceae, indigenous weed) Quercus ilex (evergreen oak, Fagaceae, indigenous tree) Raphistrum rugosum (hybrid cabbage, Cruciferae, indigenous weed) Sarcopoterium spinosum (thorny burnet, Rosaceae, indigenous thornbush) Schinus molle (pepper tree, Anacardiaceae, South American tree) Sisymbrium officinale (hedge mustard, Cruciferae, indigenous weed) Viburnum tinus (laurustinus, Lauraceae, indigenous shrub)

# Additional sites promising for future study (Figure 16)

- 1. Abai, Phokis (Apollo)
- 2. Acharnai, Attica (Apollo)
- 3. Aigina Island (Athena, Posiedon, Apollo)
- 4. Alagonia, Laconia (Dionysos, Artemis)
- 5. Alipheira, Arkadia (Athena)
- 6. Amarousion, Attica (Artemis, Aphrodite)
- 7. Amathous, Cyprus (Aphrodite)
- 8. Amyklai, Laconia (Apollo)
- 9. Andros Island (Dionysos, Zeus, Apollo, Hestia, Athens)
- 10. Anthedon, Boetia (Dionysos)
- 11. Aphrodision, Cyprus (Aphrodite, Hera)
- 12. Aphytis, Chalkidike (Dionysos)
- 13. Aptera, Crete (Artemis)
- 14. Arsinoe (earlier Marion), Cyprus (Zeus, Aphrodite)
- 15. Atrax, Thessaly (Poseidon)
- 16. Babes, Arkadia (Zeus)
- 17. Chaleion, West Lokris (Apollo)
- 18. Chalkis, Euboea (Apollo, Zeus)
- 19. Chersonesos, Crete (Artemis)
- 20. Chios Island (Athena)
- 21. Chytroi, Cyprus (Artemis, Hermes)
- 22. Corycian Cave, Phokis (Dionysos)
- 23. Daphne, Attica (Aphrodite)
- 24. Dion, Macedonia (Zeus, Dionysos, Athena, Artemis, Hermes)
- 25. Dreros, Crete (Apollo, Hestia)
- 26. Elis, Elis (Athena, Aphrodite, Hades, Artemis)
- 27. Geraistos, Euboea (Artemis)
- 28. Golgoi, Cyprus (Aphrodite)
- 29. Gomphoi, Thessaly (Dionysos)
- 30. Gonnos, Thessaly (Athena)
- 31. Gortyn, Crete (Apollo, Asklepios)

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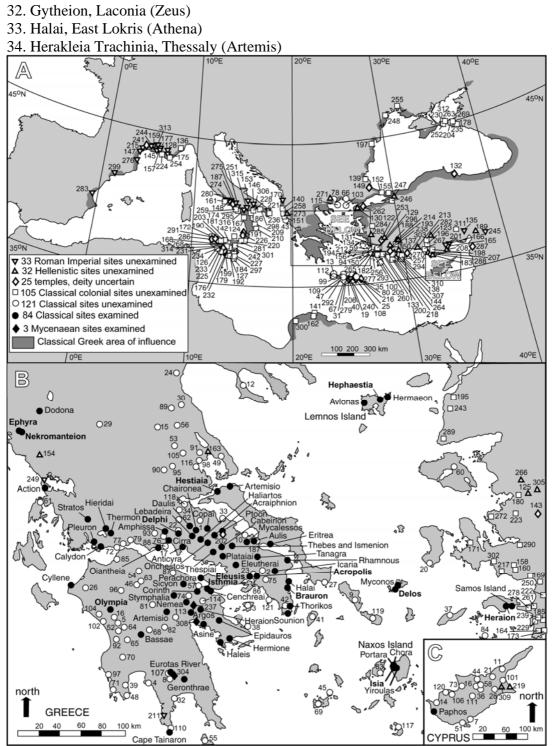


Figure 16. Ancient Greek sacred sites (after Stillwell et al. 1976).

- 35. Hierapytna, Crete (Zeus, Hera, Apollo, Athena)
- 36. Idalion, Cyprus (Aphrodite, Apollo)
- 37. Ikaria Island (Dionysos)
- 38. Kalauria, Poros (Poseidon)

- 39. Kandianika, Messenia (Athena, Apollo)
- 40. Karteros, Crete (Zeus)
- 41. Keos Island (Apollo, Athena)
- 42. Kephale, Attica (Aphrodite)
- 43. Kerkyra Island (Apollo, Aphrodite, Hermes, Artemis)
- 44. Keryneia, Cyprus (Aphrodite, Apollo)
- 45. Kimolos Island (Athena)
- 46. Kleitor, Arkadia (Demeter, Athena)
- 47. Korion, Crete (Athena)
- 48. Koroni, Messenia (Athena, Zeus, Artemis, Dionysos)
- 49. Korope, Thessaly (Apollo)
- 50. Kos Island (Aphrodite, Askepios)
- 51. Kourion, Cyprus (Apollo)
- 52. Krambovos, Arkadia (Apollo)
- 53. Krannon, Thessaly (Athena)
- 54. Kynaitha, Arkadia (Zeus)
- 55. Kythera Island (Aphrodite)
- 56. Larissa, Thessaly (Apollo)
- 57. Lechaion, Corinthia (Poseidon, Aphrodite)
- 58. Ledrai, Cyprus (Apollo)
- 59. Leros Island (Artemis)
- 60. Lesbos Island (Zeus, Hera, Dionysos, Apollo)
- 61. Leukas Island (Apollo)
- 62. Lilaia, Phokis (Demeter)
- 63. Lousoi, Arkadia (Artemis)
- 64. Lykaion, Arkadia (Zeus)
- 65. Lykosoura, Arkadia (Demeter)
- 66. Maroneia, Thrace (Apollo)
- 67. Matala, Crete (Artemis)
- 68. Megalopolis, Arkadia (Zeus)
- 69. Melos Island (Demeter)
- 70. Messene, Messenia (Zeus, Artemis)
- 71. Methone, Messenia (Athena)
- 72. Molykreion, West Lokris (Poseidon)
- 73. Morphou, Cyprus (Aphrodite)
- 74. Mount Apesas, Corinthia (Zeus)
- 75. Mount Hymettos, Attica (Zeus)
- 76. Myania, West Lokris (Poseidon)
- 77. Naupaktos, West Lokris (Poseidon)
- 78. Neapolis, Thrace (Artemis)
- 79. Oineon, West Lokris (Zeus)
- 80. Olous, Crete (Zeus)
- 81. Orchomenos, Arkadia (Poseidon, Aphrodite)
- 82. Pallantion, Arkadia (Athena, Poseidon)
- 83. Paros Island (Apollo, Artemis, Zeus, Athena)
- 84. Patmos Island (Aphrodite, Artemis)
- 85. Patrai, Achaia (Zeus, Demeter)
- 86. Peiraeos, Attica (Dionysos, Artemis, Athena, Zeus)

- 87. Pellene, Achaia (Athena, Poseidon, Artemis, Dionysos, Apollo)
- 88. Phaistinos, West Lokris (Zeus)
- 89. Phalanna, Thessaly (Athena)
- 90. Pharsalos, Thessaly (Zeus)
- 91. Pherai, Thessaly (Zeus, Artemis)
- 92. Phigalia, Arkadia (Artemis, Dionysos)
- 93. Physkeis, West Lokris (Zeus)
- 94. Pothaia, Kalymnos (Apollo)
- 95. Proerna, Thessaly (Demeter)
- 96. Psophis, Arkadia (Aphrodite)
- 97. Pylos, Messenia (Athena)
- 98. Pyrasos, Thessaly (Demeter)
- 99. Rhithymna, Crete (Artemis)
- 100. Rhodes Island (Apollo, Athena, Zeus)
- 101. Salamis, Cyprus (Zeus)
- 102. Samikon, Arkadia (Poseidon)
- 103. Samothrace Island (Demeter, Hermes, Hades, Persephone)
- 104. Skillous, Arkadia (Artemis, Athena)
- 105. Skotoussa, Thessaly (Zeus)
- 106. Soloi, Cyprus (Aphrodite, Zeus)
- 107. Sparta, Laconia (Athena, Artemis)
- 108. Sta Lenika, Crete (Ares, Aphrodite)
- 109. Sybrita, Crete (Dionysos, Apollo, Hermes, Zeus)
- 110. Tainaros, Laconia (Poseidon)
- 111. Tamassos, Cyprus (Apollo, Demeter)
- 112. Tarrha, Crete (Apollo)
- 113. Tegea, Arkadia (Athena)
- 114. Tenea, Corinthia (Apollo)
- 115. Thasos Island (Poseidon, Dionysos, Artemis)
- 116. Thebes, Phthiotis (Athena)
- 117. Thera Island (Apollo)
- 118. Thermopylae, Thessaly (Demeter)
- 119. Tinos Island (Poseidon)
- 120. Vouni Palace, Cyprus (Athena).
- 121. Zoster, Attica (Athena, Apollo, Artemis)

## Additional sites excluded from analysis (Stillwell et al. 1976)

- 122. Acharaca, Turkey deity uncertain, Hellenistic
- 123. Adada, Turkey (Zeus, Aphrodite) Hellenistic
- 124. Aeoliae Insulae, Italy (Demeter, Persephone)
- 125. Aigai, Turkey (Demeter, Apollo) Hellenistic
- 126. Akragas (Agrigento), Sicily (Demeter, Kore, Zeus, Asklepios)
- 127. Akrai, Sicily (Artemis, Aphrodite, Kore)
- 128. Alebaece Reiorum Apollinarium (Riez), France (Apollo, Asklepios) Roman
- 129. Alabanda, Turkey (Apollo, Artemis)
- 130. Alexandria Troas, Turkey Hellenistic, diety unknown
- 131. Alinda, Turkey (Aphrodite, Adonis)
- 132. Amisos, Turkey sanctuary, deity unknown

- 133. Amos, Turkey (Apollo) Hellenistic
- 134. Amyzon, Turkey (Apollo)
- 135. Anazarbos, Turkey (Zeus) Roman Imperial
- 136. Antipolis, France (Apollo)
- 137. Aphrodisias, Turkey (Aphrodite, Ninoe)
- 138. Apollonia (Lycia), Turkey presumably Apollo, but no temple known
- 139. Apollonia del Ponto, Romania (Apollo)
- 140. Apollonia, Albania (Apollo)
- 141. Apollonia, Libya (Apollo)
- 142. Apollonia, Sicily (Apollo)
- 143. Apollonis (Lydia), Turkey -presumably Apollo, but temple unknown, Hellenistic
- 144. Araxa, Turkey (Artemis, Apollo)
- 145. Arelate, France (Venus) Roman Imperial
- 146. Armento, Italy sanctuary deity unknown, Roman Imperial
- 147. Baeterrae, France (Jupiter, Apollo, Bacchus) Roman Imperial
- 148. Baiae, Italy (Diana, Mercury) Roman Imperial
- 149. Bizye, Turkey temple, but deity unknown
- 150. Bubon, Turkey (Ares) Hellenistic
- 151. Buthrotum, Albania (Apollo, Asklepios)
- 152. Byzantium, Turkey (Dionysos, Asklepios)
- 153. Canusium, Italy (Jove) Hellenistic
- 154. Cassope, Epirus (Aphrodite) Hellenistic
- 155. Chalkedon, Turkey (Apollo)
- 156. Chalketor, Turkey (Apollo)
- 157. Châtillon-sur-Seine Fôret, France (Apollo) Roman Imperial
- 158. Claros, Turkey (Apollo, Dionysos, Hestia)
- 159. Collias, France (Diana) Roman Imperial
- 160. Colophon, Turkey (Demeter)
- 161. Cumae, Italy (Hera, Apollo, Jupiter)
- 162. Cyrene, Libya (Apollo, Zeus)
- 163. Demetrias, Thessaly (Artemis) Hellenistic
- 164. Didyma, Turkey (Apollo)
- 165. Diocaesarea, Turkey (Zeus) Roman Imperial
- 166. Elaeussa, Turkey (Zeus, Hermes) Roman Imperial
- 167. Elea, Italy (Poseidon)
- 168. Enna, Sicily (Demeter, Kore)
- 169. Ephesus, Turkey (Artemis, Hestia)
- 170. Epidamnos, Albania (Minerva, Diana) Roman Imperial
- 171. Erythrai, Turkey (Athene)
- 172. Eryx, Sicily (Aphrodite)
- 173. Euromos, Turkey (Zeus)
- 174. Foce del Sele, Italy (Hera)
- 175. Fox-Amphoux, France (Minerva) Roman Imperial
- 176. Gela, Sicily (Athena)
- 177. Glanon, France (Apollo, Fortuna) Roman Imperial
- 178. Gorgippia, Ukraine (Hermes)
- 179. Grammichele, Sicily (Persephone)
- 180. Gryneion, Turkey (Apollo)

- 181. Halaisa, Sicily (Apollo)
- 182. Halikarnassos, Turkey (Ares, Aphrodite, Hermes)
- 183. Hamaxia, Turkey (Hermes) Hellenistic
- 184. Heloros, Sicily (Demeter, Kore)
- 185. Herakleia under Latmos, Turkey (Athena)
- 186. Herakleia, Italy (Demeter, Kore)
- 187. Herculaneum, Italy temple deity unknown, Roman Imperial
- 188. Hierapolis (Phrygia), Turkey (Apollo, Hades) Hellenistic
- 189. Hieropolos Castabala, Turkey (Artemis) Hellenistic
- 190. Himera, Sicily temple, deity unknown
- 191. Hipponion, Italy three temples, deity uncertain
- 192. Hybla Heraia, Sicily (Hera)
- 193. Hyllarima, Turkey (Zeus, Artemis) Hellenistic
- 194. Iasos, Turkey (Zeus)
- 195. Ilion, Turkey (Apollo)
- 196. Incirliban, Turkey (Demeter)
- 197. Istros, Romania (Zeus)
- 198. Kagrai, Turkey (Zeus)
- 199. Kamarina, Siciliy (Athene, Demeter, Artemis)
- 200. Kandyanda, Turkey temple, deity unknown
- 201. Kanli Divane, Turkey (Zeus) Hellenistic
- 202. Kastraki, Boeotia temple, deity uncertain
- 203. Kephaloidion, Sicily (Artemis)
- 204. Kepoi, Ukraine (Aphrodite)
- 205. Keramos, Turkey (Zeus)
- 206. Knossos, Crete temple, deity unknown
- 207. Kolybrassos, Turkey temple, deity unknown, Roman Imperial
- 208. Korykos, Turkey (Zeus) Hellenistic
- 209. Krimisa, Italy (Apollo)
- 210. Kroton, Italy (Hera)
- 211. Kyparissos, Laconia (Aphrodite, Demeter) Roman Imperial
- 212. Labraunda, Turkey (Zeus) Hellenistic
- 213. Lagon, Turkey (Artemis) Hellenistic
- 214. Laodicea ad Lycum (Zeus) -Hellenistic
- 215. Latara, France (Mercury) Roman Imperial
- 216. Lato, Crete temple, deity unknown
- 217. Lebedos, Turkey (Dionysos)
- 218. Letoum, Turkey (Artemis, Apollo)
- 219. Leukolla, Cyprus (Apollo) Hellenistic
- 220. Lokroi Epizephyroi, Italy (Zeus, Persephone)
- 221. Lupiae, Italy (Athena) Roman Imperial
- 222. Magnesia ad Maeandrum, Turkey (Artemis)
- 223. Mamurt Kale, Turkey (Demeter)
- 224. Massalia (Marseille), France (Apollo, Kybele, Artemis)
- 225. Mazzarino, Sicily temple, deity unknown
- 226. Medma, Italy sanctuary deity, uncertain, Hellenistic and Roman Imperial
- 227. Megara Hyblaea, Sicily temple, deity unknown
- 228. Metapontium, Italy (Apollo)

- 229. Miletos, Turkey (Apoollo, Athena)
- 230. Mirmekion, Ukraine (Demeter)
- 231. Montagna di Marzo, Sicily temple deity unknown
- 232. Monte Bubbiona, Sicily (Athena)
- 233. Monte Saraceno, Sicily temple deity unknown
- 234. Morgantina, Sicily (Hades, Persephone, Demeter, Zeus)
- 235. Mt Maiskaia, Russia (Demeter, Aphrodite, Artemis)
- 236. Muro Leccese, Italy (Aphrodite)
- 237. Mycenae, Argolida sanctuary, deity uncertain, Mycenaean
- 238. Mylasa, Turkey, Zeus)
- 239. Myous, Turkey (Dionysos, Apollo)
- 240. Myrtos, Crete (Aphrodite) Roman Imperial
- 241. Nages, France temple but deity unknown, Roman Imperial
- 242. Naxos, Sicily (Aphrodite)
- 243. Neandria, Turkey (Apollo)
- 244. Nemausus, France (Diana) Roman Imperial
- 245. Nemrud Dagh, Turkey (Zeus) Roman Imperial
- 246. Nicaea, Turkey (Dionysos, Asklepios)
- 247. Nicomedia, Turkey (Demeter) Hellenistic
- 248. Niconion, Ukraine (Demeter, Aphrodite)
- 249. Nicopolis, Epirus (Apollo) Roman imperial
- 250. Notion, Turkey (Athena)
- 251. Nuceria Alfaterna, Italy (Juno, Apollo) Roman Imperial
- 252. Nymphaion, Ukraine (Demeter, Aphrodite, Kabeiroi)
- 253. Nysa, Turkey (Hades) Hellenistic
- 254. Olbia, France (Aphrodite)
- 255. Olbia, Ukraine (Zeus, Apollo)
- 256. Olymos, Turkey (Apollo, Artemis)
- 257. Olympos, Turkey (Hephaistos)
- 258. Orikon, Albania (Aphrodite)
- 259. Paestum, Italy (Hera, Poseidon, Athena)
- 260. Panamara, Turkey (Apollo)
- 261. Panionion, Turkey (Zeus)
- 262. Parion, Turkey altar, deity unknown
- 263. Parthenion, Russia (Kore)
- 264. Patara, Turkey (Apollo)
- 265. Pedasa (Gökçeler), Turkey (Athena)
- 266. Pergamon, Turkey (Hera, Zeus, Dionysos, Athena, Apollo) Hellenistic
- 267. Perge, Turkey (Artemis, Zeus)
- 268. Pergusa, Sicily (Persephone)
- 269. Phanagoria, Russia (Aphrodite, Demeter, Kore, Apollo, Dionysos)
- 270. Phaselis, Turkey temple, deity unknown
- 271. Phillippi, Thrace (Apollo) Hellenistic
- 272. Phokaia, Turkey (Athena)
- 273. Plocë, Albania (Zeus) Hellenistic
- 274. Pollena Trocchia, Italy (Dionysos, Apollo) Roman Imperial
- 275. Pompeii, Italy (Jupiter, Apollo, Venus) Roman Imperial
- 276. Portus Veneris, France (Aphrodite) Roman Imperial

- 277. Praisos, Crete temple but deity unknown
- 278. Priene, Turkey (Dionysos, Athena)
- 279. Prinias, Crete temple, deity unknown
- 280. Puteoli, Italy (Jupiter, Neptune, Diana) Roman Imperial
- 281. Rhegion, Italy (Artemis)
- 282. Sagalossos, Turkey (Apollo)
- 283. Saguntum, Spain (Diana)- Roman Imperial
- 284. Saittai, Turkey (Zeus, Aphrodite, Dionysos, Apollo)
- 285. Sardis, Turkey (Artemis) Hellenistic
- 286. Segesta, Sicily temple, deity unknown
- 287. Seleucia Pieria, Turkey deity uncertain, Hellenistic
- 288. Side, Turkey (Dionysos, Athena, Apollo) Hellenistic
- 289. Smintheon, Turkey (Apollo)
- 290. Smyrna, Turkey (Zeus, Poseidon, Demeter)
- 291. Soloeis, Sicily altar, deity unknown
- 292. Soulia, Crete (Artemis) Roman Imperial
- 293. Stratonikeia, Turkey (Zeus) Hellenistic
- 294. Sura, Turkey (Zeus)
- 295. Surrentum, Italy (Athena)
- 296. Syangela, Turkey (Athena)
- 297. Syracuse, Sicily (Apollo, Zeus, Athena)
- 298. Taras (Tarentum), Italy (Kore, Dionysos, Apollo)
- 299. Tarraco, Spain (Jupiter) Roman Imperial
- 300. Taucheira, Libya (Demeter, Kore)
- 301. Tauromenion, Sicily (Zeus)
- 302. Teos, Turkey (Dionysos)
- 303. Termessos, Turkey (Artemis, Zeus) Hellenistic
- 304. Therapne, Laconia (Helen) Mycenaean
- 305. Thyateira, Turkey (Apollo, Artemis) Hellenistic
- 306. Timmari, Italy sanctuary, deity unknown
- 307. Tlos, Turkey temple, deity unknown
- 308. Tiryns, Argolida sanctuary, deity uncertain, Mycenaean
- 309. Tremithous, Cyprus (Apollo) Hellenistic
- 310. Trysa, Turkey (Zeus, Helios)
- 311. Tyana, Turkey (Zeus)
- 312. Tyrambe, Ukraine (Aphrodite)
- 313. Urgo, France (Apollo, Jupiter) Roman Imperial
- 314. Vassallaggi, Sicily temple, deity unknown
- 315. Venusia, Italy (Venus) Roman Imperial
- 316. Volcei, Italy (Vulcan) Roman Imperial

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Table 1. Chemical analyses of lower A and B horizons of soils at ancient Greek temples	Table 1.	Chemical an	alyses of lower	A and B	horizons	of soils at	ancient	Greek temples
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Table 1. Chemical analyses of lower A and B horizons of soils at ancient Greek temples.																	
Diety	Location	SiO <sub>2</sub>	$AI_2O_3$	$Fe_2O_3$	CaO	MgO	Na <sub>2</sub> O	$K_2O$	$Cr_2O_3$	${\sf TiO}_2$	MnO	$P_2O_5$	SrO	BaO	LOI	Total	Corg.
Aphr.	Paphos	37.84	7.03	4.05	22.27	1.68	0.53	0.71	0.05	0.46	0.08	0.11	0.04	0.02	23.4	98.27	1.1
Aphr.	Samos	67.99	10.73	4.04	3.71	1.33	1.44	1.9	0.06	0.52	0.07	0.05	0.03	0.05	6.22	98.13	0.27
Aphr.	Rhamno.	55.92	11.26	4.74	8.82	1.86	0.71	1.96	0.02	0.68	0.08	0.11	0.01	0.03	12.5	98.7	0.75
Aphr.	Oiantheia	47.88	12.96	5.56	10.37	2.67	0.99	2.57	0.02	0.74	0.08	0.43	0.03	0.04	14.6	98.94	0.71
Aphr.	Hieridas	77.92	5.77	2.86	0.83	0.92	0.18	1.28	0.02	0.25	0.25	0.14	0.01	0.02	7.85	98.29	1.86
Aphr.	Cenchreai	19.85	3.7	1.73	37.2	1.61	0.25	0.34	0.07	0.22	0.03	0.04	0.04	0.01	33.4	98.49	1.5
Apoll.	Bassae	48.43	18.01	7.53	1.69	2.13	0.25	2.59	0.02	0.83	0.42	0.2	0.01	0.04	16.25	98.41	2.61
Apoll.	Delphi	16.25	4.55	2.05	39.17	0.98	0.28	0.75	0.05	0.21	0.06	0.48	0.02	0.02	33.9	98.77	1.5
Apoll.	Ismenion	43.49	2.88	8.24	3.99	20.37	0.06	0.26	0.95	0.11	0.12	0.06	0.01	0.01	17.75	98.29	0.55
Apoll.	Portara	60.75	9.92	2.95	8.63	1.59	1.43	2.57	0.06	0.36	0.05	0.47	0.03	0.04	10.1	98.94	0.71
Apoll.	Delos	59.12	12.04	2.44	8.69	1.1	2.09	3.02	0.01	0.34	0.04	0.46	0.03	0.07	8.6	98.05	0.59
Apoll.	Thespiai	34.51	6.52	5.74	18.03	6.75	0.21	0.72	0.2	0.34	0.12	0.05	0.01	0.01	25.1	98.31	0.74
Apoll.	Ptoon	52.8	11.9	7.29	5.44	2.82	0.65	1.67	0.21	0.66	0.13	0.22	0.01	0.03	14.75	98.58	2.37
Apoll.	Cirrha	49.22	9.21	4.04	12.46	2.47	1.24	1.27	0.06	0.51	0.09	0.61	0.02	0.03	17.15	98.37	0.91
Apoll.	Action	66.61	3.14	1.64	11.06	1.13	0.48	0.54	1.37	0.27	0.05	0.1	0.02	0.01	12.25	98.67	1.47
Apoll.	Thermon	71.79	8.11	3.58	1.75	0.88	0.21	0.98	0.01	0.37	0.23	0.34	0.01	0.03	10.25	98.55	2.15
Apoll.	Corinth	25.79	4.78	2.48	31.99	1.68	0.24	0.82	0.05	0.24	0.07	0.48	0.06	0.02	29.5	98.2	0.53
Apoll.	Sicyon	43.31	8.99	3.85	18.28	1.13	0.29	1.18	0.03	0.46	0.11	0.21	0.03	0.02	21	98.89	1.19
Apoll.	Epidauros	61.89	12.14	4.16	4.95	1.29	0.96	1.28	0.01	0.71	0.08	0.08	0.04	0.04	11.1	98.72	0.33
Apoll.	Haleis	34.58	5.79	2.61	25.62	1.17	0.29	0.65	0.04	0.31	0.08	0.1	0.02	0.01	26.9	98.17	1.44
Apoll.	Asine	39	5.34	6.9	12.42	12.45	0.16	0.4	0.48	0.17	0.06	0.06	0.01	0.01	20.7	98.16	1.39
Apoll.	Argos	41.53	8.36	3.71	16.01	1.43	0.46	1.15	0.05	0.49	0.1	0.8	0.02	0.02	24.1	98.22	3.92
Ares	Geronthr.	44.59	9.61	4.02	16.61	1.48	0.43	1.5	0.01	0.48	0.03	0.38	0.01	0.02	19.35	98.52	1.35
Ares	Sparti	70.36	11.26	4.7	1.65	1.13	0.67	1.68	0.01	0.78	0.1	0.12	0.01	0.03	5.76	98.26	0.45
Artem.	Stymphal.	33.54	12.11	4.6	18.49	1.14	0.19	1.56	0.01	0.55	0.08	0.4	0.02	0.02	25.4	98.11	2.92
Artem.	Artem. A.	32.96	11.8	5	19.67	1.97	0.22	1.65	0.02	0.45	0.19	0.14	0.04	0.05	24.4	98.55	1.22
Artem.	Brauron	32.4	5.05	2.66	28.35	2.05	0.5	0.65	0.03	0.23	0.06	0.05	0.02	0.01	26.6	98.66	0.95
Artem.	Aulis	18.16	2.77	1.85	36.84	1.86	0.28	0.33	0.06	0.12	0.03	0.06	0.01	0.01	36.2	98.58	2.63
Artem.	Avlonas	61.35	15.73	5.05	2.6	1.85	2.8	2.93	0.01	0.58	0.07	0.16	0.09	0.18	5.52	98.92	0.5
Artem.	Artem. E.	55.76	11.58	3.49	8.73	1.13	1.14	1.87	0.02	0.46	0.06	0.16	0.01	0.05	14.1	98.56	2.21
Artem.	Naxos	67.59	15.34	3.12	0.31	0.6	1.94	4.48	0.01	0.45	0.01	0.06	0.03	0.07	4.02	98.03	0.33
Artem.	Glyphada	20.72	3	1.28	36.48	1.28	0.34	0.48	0.01	0.15	0.03	0.22	0.03	0.01	34.1	98.12	1.19
Artem.	Halai	34.54	4.02	1.73	29.05	0.96	0.44	0.56	0.03	0.19	0.03	0.08	0.04	0.01	26.5	98.18	0.51
Artem.	Chairon.	43.81	7.2	3.26	18.33	1.54	0.69	1.59	0.05	0.42	0.08	0.83	0.02	0.03	20.5	98.35	1.65
Artem.	Calydon	63.69	6.69	2.91	7.94	1.77	1.17	1.26	0.13	0.34	0.06	0.48	0.02	0.03	12	98.49	1.81
Athe.	Acropolis	36.85	6.07	2.84	22.06	4.09	0.66	0.94	0.02	0.44	0.06	0.53	0.02	0.02	23.6	98.2	0.8
Athe.	Haliartos	47.26	6.88	4.61	15.12	2	0.5	1.23	0.27	0.34	0.1		0.01		18.55	98.32	1.73
Athe.	Daulis	23.92	4.48	2.05	33.92	1.24	0.46	0.68	0.04	0.23	0.04	0.37	0.02		31.3	98.76	1.15
Athe.	Amphissa	26.77	6.03	2.71	29.96	1.47	0.35	0.91	0.05	0.28	0.07	0.59	0.02		28.8	98.06	1.4
Athe.	Pleuron	48.06	15.76	6.4	2.46	1.45	0.49	1.77	0.03		0.31	0.82	0.01	0.05	19.7	98.13	5.13
Athe.	Stymphal.	50.19	18.4	7.31	2.11	1.41	0.35	1.85	0.02	0.89	0.13	0.2	0.01	0.04	15.3	98.2	2.37
Athe.	Argos	38.96	7.68	3.98	19.28	2.99		1.02	0.1	0.4	0.1	1.11		0.02	22.2	98.27	2.06
Dem.	Eleusis	48.4	7.58	2.91	14.03	2.54	1.26	0.61	0.01	0.33	0.05	0.33	0.02		20.9	98.99	0.31
Dem.	Thebes	40.98	2.39	7.1	7.3	19.58	0.1	0.26	0.65	0.09	0.1	0.3	0.01	0.01	20	98.86	0.92
Dem.	Yiroulas	73.25	12.71	2.51	1.2	0.68	3.06	1.59	0.02	0.32	0.03	0.05	0.01	0.05	2.84	98.32	0.57
Dem.	Tanagra	28.54	4.03	2.69	28.75	3.39	0.3	0.46	0.1	0.24	0.07	0.14	0.03		30.8	99.55	1.68
Dem.	Mykales.	33.26	7.09	4.33	22.79	3.23	0.22		0.33	0.38	0.08		0.00	0.02	25.9	98.52	0.39
Dem.	Kabirion	41.74	8.11	4.55	17	2.66		1.05	0.08	0.46		0.15	0.01	0.02	21.8	98.17	2.53
Dem.	Kopai	29.3	5.85	3.14	27.02	2.37	0.27		0.06	0.26	0.06		0.01	0.02	28.2	98.55	1.45
Dem.	Corinth	16.97	3.58	2.17	38.24	1.48	0.15	0.4	0.09	0.21	0.05	0.14	0.02		34.9	98.41	1.08
Dion.	Thoricos	55.36		5.61	8.28	2.94		1.82	0.04		0.23				12.1	98.79	1.31
2.000		20.00		0.01	0.20	r	5.77		0.01	0.07	0.20	0.00	0.02	0.07		55.10	

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Dion.	Ikaria	59.93	11.56	5.58	7.24	1.08	0.83	1.72	0.01	0.68	0.06	0.06	0.03	0.02	9.53	98.33	0.56
Dion.	Eritrea	60	9.65	4.27	7.7	1.55	1.02	1.49	0.01	0.52	0.09	0.4	0.01	0.03	11.35	98.1	1.06
Dion.	Iria	70.94	13.81	1.8	1.79	0.65	2.65	4.16	0.01	0.36	0.03	0.07	0.04	0.07	1.91	98.28	0.31
Dion.	Eritrea	65.66	11.79	4.72	4.27	1.48	1.63	1.92	0.01	0.65	0.07	0.1	0.01	0.04	6.64	99	0.37
Dion.	Myconos	67.68	14.77	2.75	2.29	0.9	2.34	4.07	0.02	0.48	0.04	0.08	0.04	0.07	2.94	98.46	0.28
Dion.	Samos	47	7.84	3.02	16.67	1.45	0.82	1.43	0.03	0.35	0.07	0.81	0.02	0.03	18.9	98.44	1.73
Dion.	Eleutherai	34.49	7.29	2.71	22.54	2.48	0.34	0.97	0.02	0.28	0.06	0.18	0.01	0.02	27.1	98.49	1.9
Dion.	Acraiphia	47.62	8.57	3.69	14.43	2.18	0.76	1.6	0.05	0.46	0.06	0.85	0.02	0.03	18	98.32	1.36
Dion.	Sicyon	27.55	4.82	2.1	32.11	0.83	0.18	0.53	0.02	0.23	0.07	0.13	0.04	0.01	29.9	98.52	1.22
Had.	Tainaron	42.62	18.22	6.84	3.23	3.51	0.44	2.85	0.01	0.82	0.07	0.23	0.01	0.03	19.75	98.64	3.18
Had.	Mesopot.	53.2	11.81	5.07	5.68	2.68	0.92	1.89	0.07	0.61	0.13	1.72	0.01	0.03	14.45	98.27	2.85
Heph.	Hephaest.	73.1	6.35	2.33	5.74	0.91	1.6	1.04	0.13	0.31	0.05	0.08	0.02	0.03	6.6	98.29	0.23
Hera	Argive H.	58.54	11.37	5.42	4.7	1.95	0.31	1.53	0.09	0.61	0.19	0.13	0.01	0.03	13.6	98.48	1.5
Hera	Samian H.	54.04	9.33	4.07	10.79	2.73	1.26	1.09	0.02	0.71	0.08	0.24	0.02	0.03	14.1	98.52	0.21
Hera	Plataia	51.6	16.25	8.77	2.46	1.83	0.27	1.24	0.13	0.85	0.18	0.15	0.01	0.03	14.8	98.57	1.47
Hera	Perachora	15.31	3.74	1.75	37.69	1.73	0.39	0.25	0.02	0.18	0.06	0.36	0.07	0.02	36.7	98.26	2.13
Herm.	Killini	67.7	9.93	4.48	3.98	1.2	1.07	1.61	0.03	0.51	0.02	0.06	0.01	0.03	8.57	99.2	0.64
Herm.	Panagia	66.94	10.4	3.71	5.21	1.26	1.43	1.84	0.04	0.52	0.06	0.05	0.03	0.05	7.23	98.77	0.29
Hest.	Olympia	52.98	6.54	2.69	14.99	1.24	0.72	1.19	0.01	0.31	0.1	0.13	0.02	0.02	17.3	98.25	1.45
Hest.	Hestiaia	50.99	8.55	4.14	10.6	5.41	1.04	1.32	0.11	0.43	0.07	0.12	0.01	0.03	15.75	98.58	0.84
Pers.	Eleusis	29.88	5.52	2.88	28.3	1.71	0.49	0.72	0.01	0.27	0.04	0.29	0.02	0.02	28.7	98.86	2.81
Pers.	Ephyra	44.96	13.57	5.53	2.29	2.35	0.66	1.84	0.04	0.7	0.13	0.53	0.01	0.03	25.8	98.45	8.85
Pose.	Isthmia	25.51	2.37	2.41	30.89	5.6	0.13	0.25	0.22	0.08	0.13	0.06	0.05	0.01	30.5	98.21	0.68
Pose.	Sounion	38.57	4.47	4.06	17.52	7.2	0.13	0.96	0.02	0.19	0.2	0.07	0.01	0.01	25.1	98.52	0.98
Pose.	Onchest.	46.55	4.58	4.31	17.36	4.47	0.36	0.65	0.35	0.2	0.07	0.19	0.01	0.02	19.5	98.62	0.85
Pose.	Antikyra	25.8	6.49	2.68	30.14	1.48	0.31	0.83	0.02	0.35	0.04	0.12	0.01	0.02	30.2	98.49	1.23
Pose.	Hermione	33.65	5.68	3.38	25.03	2.92	0.7	0.81	0.05	0.37	0.06	0.24	0.04	0.01	25.1	98.04	1.64
Zeus	Olympia	47.95	5.18	2.39	20.11	1.04	0.5	0.88	0.02	0.22	0.09	0.23	0.03	0.02	20.1	98.75	0.92
Zeus	Dodona	78.73	6.92	3.44	1.08	0.58	0.21	0.89	0.01	0.48	0.31	0.11	0.01	0.03	5.84	98.63	0.6
Zeus	Acraiphia	46.51	6.18	2.44	17.11	1.65	0.81	1.03	0.03	0.28	0.03	0.22	0.02	0.02	22	98.33	0.49
Zeus	Lebadeia	69.35	10.38	4.78	1.47	1.93	0.72	1.94	0.05	0.58	0.06	0.07	0.01	0.02	7.26	98.62	0.96
Zeus	Stratos	67.09	8.9	3.83	0.66	0.75	0.17	1.03	0.04	0.4	0.15	0.17	0.01	0.02	14.95	98.16	4.88
Zeus	Nemea	33.03	5.95	2.74	27.75	0.75	0.2	0.51	0.03	0.3	0.13	0.06	0.02	0.02	26.7	98.19	1.01
Error	2 sigma	0.77	0.044	0.23	0.20	n.d.	10 <sup>-3</sup>	0.04	0.04	0.05	0.02	10 <sup>-2</sup>	10 <sup>-5</sup>	10 <sup>-4</sup>	n.d	n.d	n.d
			0						0								

Note: Analyses are from x-ray fluorescence and Leco-furnace by ALS Chemex, Vancouver, Canada.