

# Naturetrek Tour Report

# 13 - 20 April 2011



Tulipa saxatilis

Ophrys heldreichii

Report and images compiled by David Tattersfield



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#### Day 1

#### Wednesday 13th April

We arrived in Heraklion in the early afternoon and made the short journey to the Hersonissos Maris Hotel. We reassembled for drinks at 3.30 and left at 4.00 for the Malia Headland, a little way further east along the coast. Even before we left our vehicles, we had excellent views of a handsome male Woodchat Shrike. This was followed by numbers of Tawny Pipits and Northern Wheatears and later by large flocks of Common Swift, clear evidence of northward migration. The scratchy song of Sardinian Warblers seemed to come from every bush and one or two obligingly popped up to allow us a closer look. As we explored the low coastal scrub we had our only sightings of Stone Curlew and Peregrine.

Near the archaeological site large stands of *Gladiolus italicus* waved in the strong wind, while the rocky fields near the shore were ablaze with Three-horned Stock, *Matthiola tricuspidata*, Sun Spurge, *Euphorbia helioscopia*, and the delicate pink brassica, *Malcomia flexuosa*. In the spiny phrygana and wind-blasted Carobs we found the Phrygana Orchid, *Ophrys phryganae*, and the Eastern Tongue Orchid, *Serapias orientalis*. All too soon it was time to return and we were back for dinner by 7.20.

#### Day 2

### Thursday 14th April

A scrubby area near the hotel proved to be ideal for a pre-breakfast ramble and produced some fine colonies of Fan-lipped Orchid, *Orchis collina*, Cretan Bee Orchid, *Ophrys cretica*, and more splendid specimens of Eastern Tongue Orchid, *Serapias orientalis*. After breakfast we headed for the Analipsi Lagoon, where the typical sand dune flora included Cottonweed, *Otanthus maritimus*, Yellow Horned Poppy, *Glaucium flavum*, Sea Rocket, *Cakile maritima* and Sea Daffodil, *Pancratium maritimum*.

We had an interesting time sorting out the waders around the lagoons which included three Little Stints and a dozen or so Wood Sandpipers, coming into breeding plumage, a lone Spotted Redshank, Ruff and Greenshank. With a little patience we achieved our only good sighting of Red-throated Pipit before reluctantly having to move on.

After shopping and an unplanned coffee break in Hersonissos, we stopped for lunch in Olive groves above Mohos, where a wet area had a good population of the very variable Tongue Orchid, *Serapias lingua*. A little further on, an area of spiny phrygana held a profusion of orchids, including Four-spotted, *Orchis quadripunctata*, Sawfly, *Ophrys tenthredinifera* and plants of the confusing *Ophrys fusca* and *Ophrys mammosa* groups.

When we arrived at the edge of the Lassithi Plateau, the mist was down, and we retreated to the cafe for coffee and cakes. The nearby hillside was very rewarding, with fine specimens of Giant Orchid, *Barlia robertiana*, the sweetly scented Sparse-flowered Orchid, *Orchis pauciflora*, Cretan Bee Orchid, *Ophrys cretica*, including an albino form and our first *Cyclamen creticum* and *Daphne sericea*. The plateau provided our first sightings of Griffon Vulture, Booted Eagle and Raven and a short walk to the major water sink allowed close views of Jackdaw and Chough, nesting in the cliff. The cliff also provided home to a number of interesting endemic plants, including *Ranunculus creticus*, the shrubby *Dianthus fruticosus* subsp. *creticus*, *Valeriana asarifolia* and the Cretan Wall Lettuce, *Petromarula pinnata*. Following the plateau edge we stopped at the Psihro Cave for the view before crossing to Tzermiado and completing our circuit. We returned to the hotel, following a different route past the new dam being constructed to provide water for the ever-increasing demands of the coastal developments.

#### Day 3

Friday 15th April

After another pre-breakfast walk to see the orchids, we left for the Palace of Knossos, the best of Crete's many archaeological sites and home of King Midas and the legendary Minator. We then drove west along the coast, stopping to see Eastern Strawberry Tree, *Arbutus andrachne* and a range of plants typical of the maquis. Turning south at Rethymnon, we explored the Late Minoan Cemetery at Armeni, before and after lunch. As well as the impressive tombs, dating from12-1400 BC, there was much to see under the canopy of Valonia Oak, *Quercus macrolepis*. The dainty white *Gagea graeca* was plentiful and an impressive range of orchids included *Ophrys heldreichii*, Man Orchid, *Aceras anthropophorum* and drifts of Naked Man Orchid, *Orchis italica*.

A coffee stop followed with wide views to the south and the snow-covered Mt. Ida, making an ideal vantage point for watching passing migrants. Soon after, we were in the Kourtaliotiko Gorge, below towering cliffs and screes, finding Bonelli's Eagle, Alpine Swift and Blue Rock Thrush. Tree Spurge, *Euphorbia dendroides* and Greek Spiny Spurge, *Euphorbia acanthothamnos* were prominent, with many endemic species occupying nooks and crannies in the limestone. We finished a lovely sunny day with some free time around our hotel in Plakias before dinner.

#### Day 4

### Saturday 16th April

Pre-breakfast, some of us walked out along the headland below the dramatic Plakias fault. New plants included *Ophrys candica* and the curious Dutchman's Pipe, *Aritolochia cretica* and careful negotiation of the war-time tunnels revealed nesting Crag Martins.

After breakfast and shopping we stopped by the Turkish Bridge, on the way to Moni Prevelli Monastery. Here, a number of Mediterranean Storax, *Styrax officinalis* were in full flower and tall cream spikes of a Broomrape, *Orobanche* crenata, were growing in an Olive grove. A lone Sedge Warbler was foraging below the bridge and Speckled Wood butterflies flitted along the lane. After the majority of the group had visited the monastery, we walked to a Ruppell's Warbler site nearby. The whole hillside had been burnt and in any case these elusive birds are hard to find. After over an hour of patient searching and among many of the usual Sardinian Warblers we eventually located a distant female with its characteristic spotted throat and could clearly hear a male singing. We were all a little frustrated at the lack of good views, but by the time we left, even the keen birders were taking an interest in the diverse flora.

Retracing yesterday's route through the Kourtaliotko Gorge we picnicked above Spili. A pair of Bonelli's Eagles swooped low overhead and we admired the abundant *Cyclamen creticum* and *Aristolochia cretica* growing close-by, before moving on to explore the amazing flora of Spili Hill. To the sound of Corn Buntings, Woodlarks and Skylarks, we waded through fields of red tulip, *Tulipa doerfleri* and marvelled at the rich orchid flora with such gems as *Orchis boryi* and *Orchis sitiaca*. We returned to Plakias by way of the Kotsifou Gorge, where Red-billed Choughs were tumbling around the cliffs.

#### Day 5

#### Sunday 17th April

After overnight rain had cleared, we loaded the minibuses ready for departure, and strolled along the cliff path to the tunnel, one last time. Leaving Plakias, our first stop was the Kotsifou Canyon, to see the yellow spathes of *Arum creticum*. The screes were scattered with the pretty pink *Ricotia cretica*, while the cliffs were home to Cretan Comfrey, *Symphytum creticum*, yellow Shrubby Flax, *Linum arboreum* and the endemic evergreen *Staehelina petiolata*. We drove slowly along the scenic coast road, accompanied by the song of Corn Buntings, to Frangokastelllo, where we stopped for coffee, before heading on to Taverna Komitades for lunch.

We walked into the Imbros Gorge a short distance finding a migratory Nightingale skulking in a bush and with some perseverance, all of us had views of this difficult to see species. Good sightings of Hoopoe, Black-eared Wheatears and Crag Martins followed. Many impressive specimens of Dragon Arum, *Dracunculus vulgaris*, were encountered, the fresher ones advertising their presence by their obnoxious smell. Driving north over the mountains, we arrived in Hania around 6.30 and went out to a local taverna for a delicious selection of local Cretan food.

#### Day 6

#### Monday 18th April

As low cloud was obscuring the mountains, we spent a couple of hours exploring Hania, before heading off to the Akrotiri Peninsular. At the Agia Triada Monastery we encountered some raptor migration, with Buzzards, Booted Eagles, Marsh Harriers and a male Montague's Harrier, no doubt prevented from heading north by the strong northerly wind. The vineyards were alive with smaller birds including a large flock of Corn Buntings, mixed races of Yellow Wagtails, and lots of Whinchats. We moved on to an area of ancient olive groves for our picnic lunch where yet more migrants included Spotted, Pied and Collared Flycatchers. We finished the afternoon with an walk down towards the coast, some of us venturing as far as the ruined Katholikou Monastery, where, on the walls and cliffs were spectacular displays of some of Crete's endemic plants, especially Shrubby Mullein, *Verbascum arcturus*, Cretan Wall Lettuce, *Petromarula pinnata* and Cretan Sneezewort, *Achillea cretica*.

### Day 7

**Tuesday 19th April** 

Our last full day in Crete started rather dull and overcast. After visiting the Allied War Cemetery at Souda, we stopped at Agia Lake. In the marginal vegetation we had good views of our first Little Crake, Little Egret and Squacco Heron and Great Reed Warbler and Cetti's Warbler showed well by the bridge.

Up on the Omalos Plateau, the flowers were the best for a number of years. In the stony fields there were large numbers of *Tulipa saxatilis* and a spectacular display of Crown Anemones, *Anemone coronaria*, in a variety of colours. Cuckoos were calling, several Wood Larks and a number of Northern Wheatears were seen, and a lone Eleonora's Falcon dashed overhead.

From the head of the Samaria Gorge there were fine views and the hillside above had a number of interesting plants, including the endemics, *Cerastium scaposum*, *Arum idaeum* and the rare Cretan Orchid, *Ophrys prisca*. All too soon it was time to leave, to allow time for a second visit to Agia Lake. There had been a huge 'fall' of migrating Sand Martins and we were able to add the elusive Baillon's Crake to our list. Returning to Hania, we walked out to a harbour-side restaurant for our last evening meal.

### Day 8

### Wednesday 20th April

Leaving Hania for the long drive to Heraklion, we allowed time for a stop at Georgiopoulis Lake, adding three Marsh Sandpiper and distant Garganey and Little Bittern to our final tally. We were at the airport for 11.40 to check in for our homeward flight.

Sadly our time in Crete had come to an end but we had all enjoyed a wonderful week and seen a broad crosssection of the birds, plants and scenery of this dramatic island.

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## **Species Lists**

#### Plants

The term 'endemic' is applied to plants restricted to Crete For ease of reference, plant families are listed in alphabetic order

### **PTERIDOPHYTA**

### FERNS AND FERN ALLIES

<b>Selaginellaceae</b> Selaginella denticulata	Lesser Clubmoss Family Mediterranean Selaginella	Damp shaded areas
<b>Equisetaceae</b> Equisetum arvense Equisetum ramosissimum Equisetum telmateia	<b>Horsetail Family</b> Field Horsetail Branched Horsetail Giant Horsetail	Occasional in fields Agia Agia
<b>Adiantaceae</b> Adiantum capillus-vereris Cheilanthes acrosticha	<b>Maidenhair Fern Family</b> Maidenhair Fern	Knossos Rock crevices. Coast
<b>Aspleniaceae</b> Asplenium ceterach	<b>Spleenwort Family</b> Rusty-back Fern	Rock crevices
<b>Dennstaediceae</b> Pteridium aquilinum	Bracken Family Bracken	Frequent
<b>Hemionitidaceae</b> Anogramma leptophylla	Jersey Fern	Damp Shade
<b>Polypodiaceae</b> <i>Polypodium cambricum</i> subsp. <i>australe</i>	<b>Polypody Family</b> Southern Polypody	Occasional on rocks
GYMNOSPERMAE	CONIFERS	
<b>Pinaceae</b> Pinus halepensis subsp. brutia	<b>Pine Family</b> Calabrian Pine	Frequent. Native
<b>Cupressaceae</b> Cupressus sempervirens forma sempervirens	<b>Juniper Family</b> Italian Cypress	Occasional. Planted
Cupressus sempervirens forma horizontalis		Omalos and Samaria Gorge. Native
Juniperus oxycedrus subsp. oxcedrus	Prickly Juniper	Common. Mountains
Juniperus phoenicea	Phoenicean Juniper	Frequent. Maquis

#### ANGIOSPERMAE

Aceraceae Acer sempervirens

#### Aizoaceae

Carprobrotus acinaciformis Carprobrotus edulis Mesembryanthemum crystallinum Mesembryanthemum nodiflorum

#### Anacardiaceae

Pistacia lentiscus Pistacia terebinthus

#### Apiaceae

Conium maculatum Crithmum maritimum Daucus carota Eryngium amethystinum *Eryngium campestre* Eryngium maritimum Ferula communis Foeniculum vulgare Lagoecia cuminoides Oenanthe fistulosa Orlaya grandiflora Scandix pecten-veneris Smyrnium olusatrum Smyrnium perfoliatum Tordylium apulum Torilis leptophylla Torilis purpurea

#### Apocyanaceae

Nerium oleander

#### Araliaceae Hedera helix

#### Asteraceae

Achillea cretica Anthemis chia Anthemis rigida Atractylis cancellata Bellis annua Bellis perennis Bellis sylvestris Calendula arvensis

### **FLOWERING PLANTS**

Maple Family Cretan Maple

# Dew Plant Family

Red Hottentot Fig Hottentot Fig Ice Plant Omalos. Often grazed

Coasts. Alien Coasts. Alien Analipsi beach

Analipsi beach

#### **Sumach Family**

Mastic Tree Turpentine tree

### **Carrot Family**

Hemlock Rock Samphire Wild Carrot Blue Eryngo Field Eryngo Sea Holly Giant Fennel Fennel

Tubular Water Dropwort Orlaya Shepherd's Needle Alexanders Perfoliate Alexanders Tordylium Upright Hedge-parsley

#### **Periwinkle Family** Oleander

roadsides

**Ivy Family** Ivy

#### **Daisy Family** Cretan Sneezewort

Rayless Chamomile Bird-cage Plant Annual Daisy Daisy Southern Daisy Field Marigold Common in maquis Frequent in maquis

Roadsides Coasts Occasional Stony pasture Stony pasture Sand dunes Frequent Common Rocky pasture Agia lake Common Common Frequent **Gious Kambos** Common **Rocky** places Rocky places

Watercourses and

Occasional

Katholikou. Endemic Common Common. Coast Occasional Occasional. Rocky areas Frequent. Frequent Frequent

Carlina corymbosa Centaurea raphanina Centaurea solstitalis Chrysanthemum coronarium Crown Daisy Chrysanthemum segetum Cichorium spinosum Crupina crupinastrum Cynara scolymus Dittrichia viscosa Echinops spinosissimus Eupatorium adenophorum Filago pyramidata Galactites tomentosa *Helichrysum conglobatum* Helichrysum microphyllum Helichrysum orientale Hypochoeris achyrophorus Hypochoeris glabra Notobasis syriaca Otanthus maritimus Pallenis spinosa Phagnalon rupestre Ptilostemon chamaepeuce Reichardia picroides Rhagadiolus stellatus Scorzonera cretica Senecio vulgaris Silybum marianum Sonchus asper Sonchus oleraceus Staehelina petiolata Tragopogon hybridus Tragopogon porrifolius Xeranthemum inapterum

#### **Berberidaceae**

Berberis cretica

#### Boraginaceae

Alkanna tinctoria Anchusa aegyptiaca Anchusa azurea Anchusa undulata Anchusa variegata Borago officinalis *Cerinthe major* Cynoglossum creticum *Echium angustifolium* Echium italicum *Echium plantagineum* Onosma erecta

Flat-topped Carline Thistle Yellow Star-thistle Corn Marigold Spiny Chicory Crupina Globe Artichoke Stinkweed A Globe Thistle

Broad-leaved Cudweed Galactites (H. stoechas) A Curry Plant

Mediterranean Cat's-ear Smooth Cat's-ear Syrian Thistle Cottonweed

#### Shrubby Ptilostemon

Star Hawkbit Cretan Viper's-grass Groundsel Milk thistle Prickly Sow-thistle Smooth Sow-thistle

Slender Salsify Salsify Xeranthemum

### **Barberry Family**

Cretan Barberry

#### **Borage Family**

Alkanna Eastern Alkanet Large Blue Alkanet Undulate Anchusa

Borage Honeywort Cretan Houndstongue Narrow-leaved Bugloss Pale Bugloss Purple Viper's-bugloss Golden Drops

Common. Pasture Akrotiri. Endemic Occasional Common Frequent Mountain pasture Rocky places Cultivated Common Common. Rocky areas Roadsides. Alien Waste ground Common Frequent **Omalos** Cliffs. Katholikou Rocky fields Rocky fields Locally common Sand dunes. Analipsi Common Frequent. Rocks Rocky gorges Waste places Occasional Kourtaliotiko Gorge Frequent Common Common Waste places Cliffs. Endemic Frequent Frequent Coastal rocks

Common in mountains

Stony pasture. Lowland Stony ground. Lowland Stony pasture. Lowland Stony pasture. Mountains Stony pasture. Mountains Waste ground. Roadsides **Turkish Bridge** Frequent Waste ground. Coast Frequent. Roadsides Frequent Rocks. Omalos

Onosma graeca Symphytum creticum

**Brassiscace** Aethionema saxatile Allysoides cretica Arabis verna Aubrieta deltoidea Brassica cretica Biscutella didyma Cakile maritima subsp. aegyptiaca Capsella bursa-pastoris Cardaria draba Cardamine hirsuta Cheiranthus cheiri Crithmum maritimum Erophila verna Eruca sativa Erucaria hispanica Erysimum raulinii Malcolmia flexuosa Matthiola incana ssp incana Hoary Stock Matthiola tricuspidata Ricotia cretica Sinapsis arvensis Sisymbrium officinale

Cactaceae Opuntia ficus-indica

Campanulaceae Campanula erinus

Campanula saxatilis subsp. *saxatilis* Campanula tubulosa Petromarula pinnata

Capparaceae Capparis spinosa

Caprifoliaceae Viburnum lantana Sambucus nigra Lonicera etrusca

Caryophyllaceae Cerastium scaposum Petrorhagia velutina

Golden Drops Cretan Comfrey

**Cabbage Family** Burnt Candytuft

Spring Rockcress Aubrieta Cretan Cabbage Biscutella Sea Rocket

Shepherd's Purse Hoary Cress Hairy Bittercress Wallflower **Rock Samphire Common Whitlowgrass** Eruca **Spanish Mustard** A Treacle Mustard Sea Stock Three-horned Stock Ricotia Charlock Hedge Mustard

**Cactus Family Prickly Pear** 

A Bellflower

Petromarula

**Caper Family** 

Wayfaring-tree

**Pink family** 

**Honeysuckle Family** 

Etruscan Honeysuckle

Caper

Elder

**Bellflower Family** 

Triada

Armeni Kotsifou, Katholikou.

Omalos Rocks. Endemic Common Omalos Kourtaliatiko. Endemic Frequent Coast

Frequent Frequent Occasional Garden escape Coastal rocks Common Widespread. Fields Cliffs Coast Kourtaliotiko Gorge Sand dunes Rocky places. Endemic Occasional weed Waste places

Occasional. Alien

Annual. Knossos, Agia

Plakias. Endemic.

Above Spili. Endemic Cliffs and walls. Endemic

Cliffs

Occasional Frequent Frequent

> **Omalos**. Endemic Occasional. Rocks

Silene behen Silene colorata Silene gallica Silene italica Silene vulgaris Spergularia marina Stellaria media

#### Chenopodiaceae

Beta vulgaris maritima Salicornia europaea Salola kali Sueda maritima Sueda vera

### Cistaceae

Cistus incanus subsp. creticus Cistus monspeliensis Narrow-leaved Cistus Cistus parviflorus Cistus salvifolius Fumana arabica Helianthemum nummularium Common Rock-rose Helianthemum salicifolium Tuberaria guttata

#### Clusiaceae

*Hypericum empetrifolium* 

### Convolvulaceae

Calystegia sepium Calystegia soldanella Convolvulus altheoides Convolvulus arvensis Convolvulus oleifolius Cuscuta epithymum Ipomea indica

### Crassulaceae

Rosularia serrata Sedum acre Sedum amplexicaule subsp. *tenuifolium* Sedum album Sedum creticum Sedum litoreum Sedum rubens Umbilicus horizontalis Small-flowered Catchfly Italian Catchfly **Bladder Campion** Lesser Sea-spurrey **Common Chickweed** 

### **Goosefoot Family**

Arthrocnemum macrostachya A Perennial Glasswort Sea Beet **Common Glasswort** Prickly Saltwort Annual Sea-blite Shrubby Sea-blite

### **Rock-rose Family**

Sage-leaved Cistus Arabian Fumana Willow leaved Rock-rose Spotted Rock-rose

**St John's-wort Family** 

### **Bindweed Family**

Larger Bindweed Sea Bindweed Mallow-leaved Bindweed Field Bindweed

Common Dodder A Morning Glory

### **Stonecrop Family**

**Biting Stonecrop** 

White Stonecrop

**Reddish Stonecrop** A Pennywort

Occasional Locally common Agia Lake Agia Lake Occasional Frequent. Coast Occasional. Weed

Analipsi lagoon Hania. Coastal cliffs Analipsi lagoon Analipsi lagoon Coast Coast

Common Frequent Frequent Common Rocky areas. Lowland Rocky areas. Mountains Rocky areas. Lowland Rocky areas. Occasional

Occasional in phrygana

Occasional Sand dunes Common Frequent Rocks. Akrotiri Occasional Planted

Rocks and cliffs. Endemic Rocks and walls Occasional. Rocky areas

Rocks and walls Cliffs Coastal rocks Mountain rocks Rocks and walls

#### Cucurbitaceae

Bryonia cretica Ecballium elaterium

**Dipsacaceae** *Knautia integrifolia Scabiosa brachiata* 

#### Ericaceae

Arbutus andrachne Arbutus unedo Erica arborea Erica manipuliflora

#### Euphorbiaceae

Euphorbia acanthothamnos Euphorbia characias subsp. characias Euphorbia dendroides Euphorbia helioscopia Euphorbia paralias Euphorbia peplus Mercurialis annua Ricinus communis

#### Fabaceae

Acacia retinoides Anagyris foetida Anthyllis hermanniae Anthyllis tetraphylla Anthyllis vulneraria subsp. rubriflora Astragalus angustifolius Calicotome villosa Ceratonia siliqua Cercis siliquastrum Coronilla scorpioides Ebenus cretica Genista acanthoclada *Hymenocarpus circinnatus* Lathyrus aphaca Lathyrus cicera Lathyrus clymenum Lathyrus ochrus Lotus cytisoides Lotus ornithopodioides Lotus peregrinus Lotus uliginosus Lupinus micranthus Medicago arabica

**Gourd Family** White Bryony Squirting Cucumber

#### **Teasel Family**

Tremastelma

#### **Heath Family**

Eastern Strawberry Tree Strawberry Tree Tree Heath

#### **Spurge Family**

Greek Spiny Spurge Locally common Large Mediterranean Spurge Common

Tree Spurge Sun Spurge Sea Spurge Petty Spurge Annual Mercury Castor Oil Plant

#### **Pea Family**

A Wattle Bean Trefoil

Bladder Vetch Kidney Vetch

Hairy Thorny Broom Carob Judas Tree Annual Scorpion Vetch Shrubby Sainfoin Spiny Broom Disc Trefoil Yellow Vetchling

Greater Bird's-foot Trefoil Hairy Lupin Spotted Medick Cliffs near coast Frequent Plakias Waste places Frequent Occasional

Frequent

Occasional

Maquis

Maquis

Maquis

Maquis

Rocky places

Common near coast

Widely planted Near coasts Mountains. Common Widespread Common. Lowland rocks

Omalos. Common. Low altitudes Frequent near coast Planted Fields. Low altitude Cliffs. Endemic Stony places. Akrotiri Waste ground Frequent Grassy places Waste ground Armeni cemetery Rocky coasts Rocky coasts Rocky places Damp meadows Souda Bay Common

- Medicago arborea Medicago lupulina Medicago marina Medicago orbicularis Melilotus indicus Psoralea bituminosa Robinia pseudoacacia Spartium junceum Tetragonolobus purpureus Trifolium angustifolium
- Trifolium campestre Trifolium hybridum Trifolium repens Trifolium stellatum Trifolium tomentosum Trifolium uniflorum Vicia ervilia Vicia hybrida Vicia lutea Vicia pubescens Vicia sativa Vicia villosa

#### Fagaceae

Castanea sativa Quercus coccifera subsp. calliprinos Quercus ilex Quercus macrolepis

**Frankeniaceae** *Frankenia hirsuta* 

#### **Gentianaceae** *Blackstonia perfoliata*

Blackstonia perfoliata Centaurium pulchellum

### Geraniaceae

Erodium cicutarium Erodium gruinum Geranium columbinum Geranium luicdum Geranium molle Geranium rotundifolium Geranium robertianum

## Juglandaceae

Juglans regia

Tree Medick Black Medick Sea Medick Large Disc Medick Small Melilot Pitch Trefoil False Acacia Spanish Broom Asparagus Pea Narrow-leaved Crimson Clover Hop Trefoil

White Clover Starry Clover Woolly Clover

Hairy Yellow Vetchling Yellow Vetch

Common Vetch Fodder Vetch

### **Beech Family**

Sweet Chestnut Kermes Oak

Holm Oak Valonia Oak

Sea Heath Family Hairy Sea Heath

#### **Gentian Family**

Yellow-wort Lesser Centaury

#### **Geranium Family**

Common Stork's-bill Long-beaked Stork's-bill Long-stalked Crane's-bill Shining Crane's-bill Dove's-foot Crane's-bill Round-leaved Crane's-bill Herb Robert

Walnut Family Walnut Malia. Hania Widespread Sand dunes. Common Occasional weed Common Roadsides. Alien Roadsides Olive groves Dry areas. Low altitude

Waste ground Fields and waste places Widespread Dry rocky areas. Occasional Dry places Rocky slopes. Omalos Frequent Frequent Rocky slopes. Omalos Waste places Waste places

Widespread Common

Common Armeni cemetery

Analipsi beach

Occasional Occasional

Common Frequent. Coastal Frequent Frequent Frequent Frequent Common

Frequent. Cultivated

#### Lamiaceae **Mint Family** Ballota pseudodictamnus Common in phrygana Coridothymus capitatus Shrubby Thyme Locally common Lamium amplexicaule Henbit Deadnettle Occasional French Lavender Lavandula stoechas Locally in maquis Occasional in phrygana *Marrubium vulgare* White Horehound Water Mint Mentha aquatica Wet places Micromeria juliana Micromeria Frequent. Rocky places Dittany Origanum dictamnus Cliffs Origanum onites Pot Marjoram Dry places. Occasional Phlomis fruticosa Jerusalem Sage Locally common Mountains Phlomis cretica Phlomis lanata Malia. Endemic Prasium majus Prasium Frequent in phrygana Scutellaria sieberi Local. Endemic Locally common Salvia fruticosa Three-leaved Sage Salvia pomifera Imbros gorge Occasional Salvia sclarea Clary Wild Clary Salvia verbenacea Common Stony Ground. Akrotiri Salvia viridis **Red-topped Sage** Common Satureja thymbra Malia Teucrium polium Linaceae **Flax Family** Kourtaliotiko and Linum arboreum Shrubby Flax Kotsifou gorges Linum bienne Pale Flax Occasional Linum trigynum Rocky areas. Akrotiri Malvaceae **Mallow Family** Hibiscus rosa-sinensis Hibiscus Widely planted Lavatera arborea Tree Mallow Hania Frequent

Lavatera arborea Lavatera bryonifolia Malva cretica Malva parviflora Malva sylvestris

Meliaceae Melia azedarach

**Moracae** *Ficus carica* 

**Nyctaginacae** Bougainvillea glabra

**Oleaceae** Olea europaea Phillyrea latifolia Indian Bead Tree

Common Mallow

Least Mallow

**Mulberry Family** Fig

Bougainvillea Family Bougainvillea

Ash Family Olive Mock Privet Widely planted

Waste places

Waste places

Waste places

Cultivated

Widespread

Occasional wild tree Frequent in maquis **Onagraceae** Epilobium hirsutum

**Orobanchaceae** Orobanche crenata Orobanche pubescens Orobanche ramosa

**Oxalidaceae** Oxalis pes-caprae

**Paeoniaceae** Paeonia clusii

### Papaveraceae

Fumaria capreolata Fumaria officinalis Glaucium flavum Papaver argemone Papaver dubium Papaver rhoeas Papaver somniferum

**Pittosporaceae** *Pittosporum tobira* 

#### Plantaginaceae Plantago coronopus Plantago cretica Plantago lagopus Plantago lanceolata Plantago major

**Platanaceae** *Platanus orientalis* 

Plumbaginaceae Limonium sinuatum

**Polygalaceae** Polygala venulosa

Polygonacae Polygonum maritimum Rumex acetosella Rumex bucephalophorus

**Primulaceae** Anagallis arvensis Cyclamen creticum Cyclamen graecum Willowherb Family Greater Willowherb

### **Broomrape Family**

Lesser Broomrape Branched Broomrape

Wood-sorrel Family Bermuda Buttercup

**Peony Family** Clusius's Peony

**Poppy Family** Ramping Fumitory Common Fumitory Yellow Horned-poppy

Long-headed Poppy Common Poppy Opium Poppy

### Pittosporum Family

**Plantain Family** Buck's-horn Plantain

Ribwort Plantain Greater Plantain

Plane Tree Family Oriental Plane

**Thrift Family** Winged Sea-lavender

Milk-wort Family Eastern Milkwort

**Dock Family** Sea Knot-grass Sheep's Sorrel Bull's-head Dock

**Primula Family** Scarlet Pimpernel Cretan Sowbread Greek Sowbread Ditches

Turkish Bridge Occasional Common on Oxalis

Common. Alien

Omalos. Near-endemic

Frequent Frequent Coast and roadsides Agia Triada Agia Triada Fields and roadsides Occasional weed

Widely planted

Coastal Common. Dry places Waste places Waste places Waste places

Streambeds

Coast

Rocky places. Mountains

Coast Common Frequent

Widespread Locally common Occasional. Lassithi

# Rafflesiaceae

Cytinus ruber

### Ranunculaceae

Adonis microcarpa Anemone coronaria Anemone heldreichii Clematis cirrhosa Nigella damascene Ranunculus asiaticus Ranunculus bullatus Ranunculus creticus Ranunculus ficaria subsp. ficariiformis Ranunculus peltatus

Resedaceae Reseda alba

### Rosaceae

Crategus monogyna Crategus monogyna subsp. azarella Eriobotrya japonica Prunus dulcis Prunus prostrata Prunus spinosa Pyrus amygdaliformis Rosa canina *Rosa sempervirens* Rubus ulmifolius Sarcopoterium spinosum

### Rubiaceae

Asperula rigida Asperula taygetea *Galium* aparine Rubia peregrina Sherardia arvensis

### **Rutaceae**

Citrus limon Citrus sinensis Ruta chalepensis

Salicaceae Populus alba

Santalaceae Osyris alba

# **Rafflesia Family**

(on Cistus creticus)

**Buttercup Family** Yellow Pheasant's-eye **Crown Anemone** 

Virgin's Bower

**Turban Buttercup** 

Lesser Celandine

#### **Mignonette Family** White Mignonette

**Rose Family** Hawthorn

Japanese Loquat Almond Rock Cherry Blackthorn Almond-leaved Pear Dog Rose **Evergreen Rose** Bramble Thorny Burnet

### **Bedstraw Family**

Cleavers Wild Madder Field Madder

### **Rue Family**

### Lemon Orange

Fringed Rue

Willow Family White Poplar

Sandalwood Family Osyris

Agia Triada

Akrotiri Omalos Frequent Lassithi Imbros Phrygana Rocky areas. Lassithi Locally common. Omalos

Stream, Lassithi,

Frequent. Roadsides

Frequent Omalos

Occasional. Planted Widely planted Omalos Occasional Occasional Occasional Occasional. Maquis Widespread Common in phrygana

Rocks. Endemic Rocky places **Disturbed** habitats Rocky scrub Common

Planted Planted Occasional

Frequent

Stony scrub

#### Saxifragaceae **Saxifrage Family** Saxifraga rotundifolia Shady places. Omalos subsp. chrysosplenifolia Scrophulariaceae **Figwort Family** Bellardia trixago Bellardia Occasional Walls Cymbalaria muralis Ivy-leaved Toadflax Misopates orontium Lesser Snapdragon Frequent Southern Bartsia Occasional Parentucellia latifolia Parentucellia viscosa Yellow Bartsia Malia Scrophularia lucida Occasional Scrophularia peregrina Nettle-leaved Figwort Occasional Verbascum arcturus Shrubby Mullein Cliffs and walls. Endemic Verbascum macrurum Frequent Frequent Verbascum sinuatum Verbascum spinosum Spiny Mullein Rocky places. Endemic Veronica cymbalaria Cymbalaria-leaved SpeedwellRocks and walls **Solanaceae Potato Family** White Henbane Common. Hania Hyoscyamus albus Tea Tree Near coast Lycium schweinfurthii Mandragora officinarum Mandrake Rocky pasture Nicotiana glauca Shrub Tobacco Roadsides. Alien Solanum nigrum Black Nightshade Occasional **Styracaceae Storax Family** Mediterannean Storax Styrax officinalis **Turkish Bridge** Tamaricaceae **Tamarisk Family** Small-flowered Tamarisk Tamarix parviflora Coast. Thymelaeaceae **Daphne Family** Plakias Daphne gnidioides Daphne gnidium Frequent. Maquis Daphne sericea Frequent. Mountains Ulmaceae **Elm Family Omalos**. Endemic Zelkova abelicea Zelkova Urticaceae **Nettle Family** Occasional. Walls Parietaria cretica **Cretan Pellitory** Pellitory-of-the-wall Frequent on walls *Parietaria judaica* Urtica pilulifera Roman Nettle Frequent Small Nettle Urtica urens Frequent Valarianaceae Valerian Family Annual Valarian *Centranthus calcitrapa* Frequent. Mountains Centranthus ruber **Red Valarian** Garden escape Waste places Fedia cornucopiae Fedia Valeriana asarifolia Cretan Valarian Spili. Endemic

#### 15

**Verbenaceae** *Vitex agnus-castus* 

**Vitaceae** *Vitis vinifera* 

### Verbena Family Chaste Tree

Vine Family Vine Imbros Gorge.

Occasional

MONOCOTYLEDONS

**Agavaceae** Agave americana

Alliaceae Allium ameloprasum Allium circinnatum subsp. circinnatum Allium nigrum Allium subhirsutum Allium roseum

Amaryllidaceae Pancratium maritimum

Araceae Arisarum vulgare Arum concinnatum Arum creticum Arum idaeum Dracunculus vulgaris

Asparagaceae Asparagus aphyllus

Asphodelaceae Asphodeline lutea Asphodelus ramosus

**Dioscoridaceae** *Tamus communis* 

Hyacinthaceae Chionodoxa cretica Muscari spreitzenhoferi Muscari comosum Muscari neglectum Ornithogalum nanum Ornithogalum sibthorpii Ornithogalum narbonense Ornithogalum nutans Ornithogalum umbellatum Urginea maritima Agave Family Century Plant

Lily Family Wild Leek

Hairy Garlic Rosy Garlic

**Daffodil Family** Sea Daffodil

**Arum Family** Friar's Cowl

Cretan Arum

Dragon Arum

Asparagus Family An Asparagus

Asphodel Family Yellow Asphodel Common Asphodel

Yam Family Black Bryony

### **Hyacinth Family**

Tassel Hyacinth A Grape Hyacinth

Star of Bethlehem Sea Squill Widely planted

Frequent Akrotiri. Endemic

Malia Occasional Occasional

Coastal sand dunes

Frequent Common. Lowland Kotsifou Gorge. Endemic Omalos. Endemic Locally common

Frequent

Locally common Common

Frequent

Omalos. Endemic Plakias. Endemic Common Omalos Lassithi plateau Akrotiri Malia Lassithi plateau Lassithi plateau Common

#### Iridaceae

Crocus sieberi subsp. sieberi Gladiolus italicus Gynandriris sisyrinchium Hermodactylus tuberosus Iris cretensis Iris germanica Iris pseudacorus

#### Liliaceae

Gagea graeca Gagea peduncularis Tulipa doerfleri Tulipa saxatilis

#### Orchidaceae

Aceras anthropophorum Anacamptis pyramidalis Himantoglossum robertianumGiant Orchid **Ophrys** apifera **Ophrys** ariadnae Ophrys bombyliflora **Ophrys** candica Ophrys cretica subsp. cretica Cretan Bee Orchid Ophrys fusca **Ophrys** iricolor **Ophrys** mammosa **Ophrys** phryganae **Ophrys** heldreichii **Ophrys** sicula Ophrys tenthredinifera Orchis boryi Orchis collina Orchis fragrans Orchis italica Orchis lactea Orchis laxiflora Orchis papilionacea Orchis pauciflora Orchis prisca Orchis quadripunctata Orchis sitiaca Orchis tridentata Serapias bergonii Serapias lingua Serapias orientalis Serapias parviflora

#### **Poaceae**

Aegilops geniculata Arundo donax

### **Iris Family**

Wild Gladiolus **Barbary Nut** Widow Iris Cretan Iris German Iris Yellow Flag

#### Lily Family

Rock Tulip

### **Orchid Family**

Man Orchid Pyramidal Orchid Bee Orchid

**Bumblebee** Orchid White Ophrys Sombre Bee Orchid Rainbow Ophrys

Phrygana Ophrys Heldreich's Ophrys Small Yellow Ophrys Sawfly Orchid Bory's Orchid Fan-lipped Orchid **Bug Orchid** Italian Man Orchid Milky Orchid Lax-flowered Orchid Pink Butterfly Orchid Sparse-flowered Orchid Cretan Orchid Four-spotted Orchid

**Toothed Orchid** Bergoni's Serapias **Tongue Orchid Eastern Serapias** Small-flowered Serapias

#### **Grass Family**

Giant Reed

**Omalos**. Endemic Occasional. Fields Widespread Spili, Omalos Rocky mountain pasture Planted Occasional. By water

Locally common Omalos Spili **O**malos

Spili Plakias Lassithi. Spili Spili Spili Plakias Widespread Occasional Below Lassithi, Spili **Below Spili** Common Armeni, Spili. Spili Common Spili Hersonissos Hersonissos Locally common Spili Damp places. Agia Lassithi plateau, Spili. Locally common Rare. Omalos. Endemic Common Spili Spili. Armeni Locally common Hersonissos Locally common

Rocky places near coast Common. Naturalised

Ammophila arenaria Avena sterilis Briza maxima Bromus sterilis Catapodium rigidum Cynodon dactylon Cynosurus echinatus	Marram Winter Wild Oat Large Quaking Grass Sterile Brome Common Fern-grass Bermuda Grass Rough Dog's-tail	Sand dunes Waste places Common Widespread Local Waste places Common
Hordeum murinum Lagurus ovatus Phragmites australis Poa annua	Wall Barley Hare's Tail Reed Annual Meadow-grass	Waste places Common Wet areas. Common Widespread
<b>Posidoniaceae</b> Posidonia oceanica	<b>Neptune Grass Family</b> Neptune Grass	Sub-marine
<b>Ruscaceae</b> <i>Ruscus aculeatus</i>	<b>Butcher's-broom Family</b> Butcher's Broom	Occasional in scrub
<b>Smilacaceae</b> Smilax aspera	<b>Smilax Family</b> Smilax	Common
<b>Typhaceae</b> Typha domingensis	Reedmace Family	Agia Lake
<b>Zosteraceae</b> Zostera marina	<b>Eelgrass Family</b> Eelgrass	Sub-marine. Plakias

Birds ( $\checkmark$  = recorded but not counted; h = heard only)

			April							
	Common name	Scientific name	13	14	15	16	17	18	19	20
1	Garganey	Anas querquedula								1
2	Little Grebe	Tachybaptus ruficollis							20	2
3	Great Cormorant	Phalacrocorax carbo						1		
4	Little Bittern	Ixobrychus minutus								1
5	Squacco Heron	Aedeola ralloides							3	
6	Little Egret	Egretta garzetta	1	6					4	
7	Grey Heron	Ardea cinerea		2					2	
8	Eurasian Griffon Vulture	Gyps fulvus		6	10	10			2	
9	Booted Eagle	Aquila pennata		3	2					
10	Bonelli's Eagle	Aquila fasciata			1	2				
11	Black Kite	Milvus migrans						1		
12	Western Marsh Harrier	Circus aeruginosus						1	1	
13	Montagu's Harrier	Circus pygargus						1		
14	Common Buzzard	Buteo buteo			4	2	4	10	2	2
15	Common Kestrel	Falco tinnunculus	1		1	2	2	2	2	
16	Eleonora's Falcon	Falco eleonorae							1	
17	Peregrine Falcon	Falco peregrinus	1							
18	Little Crake	Porzana parva							3	
19	Baillon's Crake	Porzana pusilla							1	
20	Common Moorhen	Gallinula chloropus							10	

						Α	pril			
	Common name	Scientific name	13	14	15	16	17	18	19	20
21	Eurasian Coot	Fulica atra							30	
22	Stone Curlew	Burhinus oedicnemus	1							
23	Little Ringed Plover	Charadrius dubius		6						
24	Little Stint	Calidris minuta		3						
25	Wood Sandpiper	Tringa glareola		12						
26	Green Sandpiper	Tringa ochropus	1							
27	Common Sandpiper	Actitis hypoleucos		3					2	1
28	Spotted Redshank	Tringa erythropus		1						
29	Common Greenshank	Tringa nebularia		2						
30	Marsh Sandpiper	Tringa stagnatilis								3
31	Ruff	Philomachus pugnax		4						
32	Yellow-legged Gull	Larus michahellis	1	6			50	5	30	5
33	Common Tern	Sterna hirundo							1	
34	Rock Dove / Feral Pigeon	Columba livia	✓	✓	✓	✓	✓	✓	✓	✓
35	Common Wood Pigeon	Columba palumbus							3	
36	Eurasian Collared Dove	Streptopelia decaocto	✓	✓	✓	✓	✓	✓	✓	<ul> <li>✓</li> </ul>
37	European Turtle Dove	Streptopelia turtur			h	h				
38	Common Cuckoo	Cuculus canorus				h			h	
39	Common Swift	Apus apus	40			10	10	20	10	
40	Pallid Swift	Apus pallidus			1					
41	Alpine Swift	Apus melba			2	20				
42	Eurasian Hoopoe	Upupa epops	1				1	1		
43	European Bee-eater	Merops apiaster	· ·				· ·	10		
44	Common Skylark	Alaudo arvensis				h				
45	Crested Lark	Galerida cristata	4	4	1		2	10	4	
46	Woodlark	Lullula arborea			-	4		h	10	
47	Common Sand Martin	Riparia riparia							300	
48	Eurasian Crag Martin	Ptyonoprogne rupestris			2		3			
49	Barn Swallow	Hirundo rustica	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	_ ✓	✓	 ✓	✓	✓	<ul> <li>✓</li> </ul>
50	Red-rumped Swallow	Hirundo daurica	1		1					
51	Common House Martin	Delichon urbicum		4	50				5	
52	Tawny Pipit	Anthus campestris	10		00				0	
53	Red-throated Pipit	Anthus cervinus	10	1						
54	White Wagtail	Motacilla alba	2	2						
55	Yellow Wagtail	Motacilla flava flava	-	-				50		
56	Black-headed Yellow Wagtail	Motacilla flava feldegg	2	2				6		
57	Common Nightingale	Luscinia megarhynchos	-	-			1			
58	Northern Wheatear	Oenanthe oenanthe	6				•		6	
59	Black-eared Wheatear	Oenanthe hispanica	Ū			1	2	6	6	
60	Whinchat	Saxicola rubetta	1	2		· ·	1	10	20	
61	Common Stonechat	Saxicola torquata	+ ·	6		3	3	3	5	
62	Common Blackbird	Turdus merula	<ul> <li>✓</li> </ul>	 ✓	<ul> <li>✓</li> </ul>	 ✓	 ✓	 ✓	 ✓	<ul> <li>✓</li> </ul>
63	Blue Rock Thrush	Monticola solitarius	-		1	2	3	-		-
64	Blackcap	Sylvia atricapilla		h	h	ے h	h		1	<u> </u>
65	Sardinian Warbler	Sylvia melanocephala	<ul> <li>✓</li> </ul>	 ✓	 ✓	 ✓	 ✓	<ul> <li>✓</li> </ul>	 ✓	<ul> <li>✓</li> </ul>
66	Ruppell's Warbler	Sylvia rueppelli			-	2		-		<u> </u>
67	Sedge Warbler	Acrocephalus schoenobaenus				2			3	<u> </u>
68	Cetti's Warbler	Cettia cetti	h	h	h	h			 1	
69	European Reed Warbler	Acrocephalus scirpaceus		- 11					h	
	Laropean Neeu warbier		1	L	L					
70	Great Reed Warbler	Acrocephalus arundinaceus							1	

				April								
	Common name	Scientific name	13	14	15	16	17	18	19	20		
72	Common Chiffchaff	Phylloscopus collybita							1			
73	Winter Wren	Troglodytes troglodytes		h		h	h		h			
74	Spotted Flycatcher	Muscicapa striata						1				
75	Pied Flycatcher	Ficedula hypoleuca				3		3				
76	Collared Flycatcher	Ficedula albicollis				1		2				
77	Great Tit	Parus major		h		1	2	h	1			
78	European Blue Tit	Cyanistes caeruleus		3	2	4	2	2	1			
79	Woodchat Shrike	Lanius senator	2			1	2	6	3			
80	Western Jackdaw	Corvus monedula		✓	✓	<ul> <li>✓</li> </ul>	<b>√</b>		$\checkmark$			
81	Red -billed Chough	Pyrrhocorax pyrrhocorax		2		6	4					
82	Hooded Crow	Corvus cornix	✓	✓	✓	<ul> <li>✓</li> </ul>	<b>√</b>	✓	$\checkmark$	✓		
83	Common Raven	Corvus corax		2	2	4	6	2	6			
84	Italian sparrow	Passer italiae	✓	✓	✓	✓	<b>√</b>	✓	$\checkmark$	✓		
85	Common Chaffinch	Fringilla coelebs	<ul> <li>✓</li> </ul>	✓	✓	<ul> <li>✓</li> </ul>	<b>√</b>	✓	✓	✓		
86	Common Linnet	Carduelis cannabina						30	10			
87	European Goldfinch	Carduelis cardulis		3	3	6	<b>√</b>	✓	$\checkmark$			
88	European Greenfinch	Chloris chloris	2	2	2	4		10	10			
89	European Serin	Serinus serinus		1		1		2	1			
90	Cirl Bunting	Emberiza cirlus							2			
91	Corn Bunting	Miliaria calandra				2	2	20	2			

#### Mammals

Cretan Wild Goat

Capra hircus cretensis Omalos (captive)

#### Reptiles

Ehrhard's Wall Lizard	Podarchis erhardii
Balkan Green Lizard	Lacerta trilineata
Stripe-necked Terrapin	Mauremys caspica

### Amphibians

Tree Frog	Hyla arborea
American Bullfrog	Lithobates catesbeianus

#### **Butterflies**

Swallowtail	Cretan Festoon	Large White
Small White	Eastern Dappled White	Clouded Yellow
Brimstone	Small Copper	Long-tailed Blue
Common Blue	Red Admiral	Painted Lady
Speckled Wood	Wall Brown	
Dragonflies		

### Emperor Dragonfly

#### Other Insects

Solitary Wasp Pine Processionary Moth Violet Carpenter Bee

Blue-tailed Damselfly

Egyptian Locust