

Crete in Spring 2018

Lead by Fiona Dunbar

A Greentours Trip Report



Friday 6th April Arrival

After an early start at Gatwick, we arrived in Crete only a little late. Ian Hislop was on our flight, presumably on his way out to stay with his wife, author of such Cretan Aga sagas as 'The Island'. Driving along, the countryside was markedly lush and green compared to some years. The *Robinia pseudoacacia* was dripping in white blossom, the Judas trees with pink. There were acres of yellow, and yellow and white, *Chrysanthemum coronarium*. We enjoyed a welcome but late lunch at a taverna in the village of Armeni instead. The saganaki or fried cheese was made with the cooks' own freshly prepared, mild goats cheese. The garden centre next door was quite a pull, too! As we gained altitude we looked out over hills covered with fig, gorse, *Quercus pubescens*, *Asphodeline aestivus* and almost fluorescing lime green Giant Fennel, in between the groves of olives and small fields.

Having been greeted by Herakles in Spili with glasses of cold water and quince in honey, we settled into our rooms. Some walked down the track below. There was a fine stand of tall purple broomrapes on the nasturtiums in Heracles garden. We reconvened in the breakfast room and strolled over the road to Costas and Maria's taverna, almost hidden by trailing vines and flowers. Most of us tried the rabbit in lemon sauce – tender and tasty. It was Good Friday, and as I headed to bed I could hear a Scops Owl calling. Some of the group stayed up to see a model of a church in which was a representation of Christ being carried through the streets, to the sound of priests chanting and singing.

Saturday 7th April

Day 1

Triopetra and Agios Pavlos

The forecast had indicated that we could have some showers today, but the torrential rain and hail during and after breakfast made the decision easy and we changed our plans to head down to the coast at Triopetra. The rain eased and by the time we were walking the beach it was very light and then died away altogether. Swathes of *Ranunculus asiaticus* and numbers of *Orchis italica* were easily spotted from the van amongst the shrubby heavily flowering *Phlomis fruticosa* and the like on the drive.

Beach vegetation included the beautifully curled leaves of *Pancreatium maritimum*, and the *Convolvulus oleifolius* was in good flower with contrasting silvery leaves. Our first close up orchids were *Serapias bergonii*, and Lisa found a gorgeously marked *Orchis fragrans*. A large Snout nosed Grasshopper was examined; later Tessa found a Locust and bush crickets too. Lisa spotted a nice *Tragapogon hybridus*, with the sepals extending far beyond the petals, and the lovely thistle with a spiny basket surround the calyx was *Atractylis cancellata*. There were some good spikes of dark, velvety *Ophrys gortynia*, which were topped by even finer spikes of the same when we reached the headland.

A short scramble took us up to the headland, where we walked around the open grassy turf. Shrubby plants included *Cardiothymus capitatus*, Thorny Burnet (*Sarcopoterium spinosum*), purple flowered domes of *Satureja thymbra*. David H found *Cistus parviflorus*. It was a good chance to see some species we would become familiar with, like the pyramidal *Echium italicum*, *Fumana arabica* and Jointed Pine (*Ephedra campylopoda*). *Tremalstema palaestinum* with pretty scabious-like flowers was nice. Corn Buntings were calling and Ian saw a small flock of Yellow Wagtails following some sheep, the black-headed *feldegg* race. Very probably a Woodchat Shrike was seen too. By now the sun was out, opening the *Scorzonera cretica* flowers, and bringing out a few butterflies – Painted Lady and Clouded Yellow.

I headed down and prepared the picnic at the taverna, which although closed, always let us use the tables and loos there. After a leisurely lunch, and a stroll down to the edge of the sea, and a few photos of the impressive rock stacks that give this place its name we moved off. A streamside stop turned up some interesting plants – *Dracunculus vulgaris* nearly in flower with impressively patterned leaves and stems, and big patches of *Legousia speculum-veneris*. Walking along the road



we found some lovely groups of *Ophrys episcopalis*, in better shape than those in amongst the trees, and also some fine *Ophrys gortynia*. Pyramidal spikes of *Ornithogalum narbonense* flowered on a grassy open area backed with patches of purple flowered *Salvia triloba*.

Staying close to the coast and the better weather we headed to Agios Pavlos, well worth it for the beautiful patches of yellow flowered, furry, silvery leaved *Medicago marina*, two species of dodder, one in flower, and some beautiful tufts of miniature *Gynandiris*. After some research, I have decided these tiny pale flowers were *Gynandiris monophylla*, rather than the larger (but sometimes dwarf) *Gynandiris sysirinchium*. Alpine swifts flew low and called loudly. Yellow-horned poppy was in good flower, and *Cakile maritima* formed pleasing mats.

Perusing the verges on our return journey, we saw lovely displays of white *Ranunculus asiaticus*, and nearer the village, *Cerinth major* (Honeywort) had elegant nodding yellow flowers. *Allium subhirsutum* flowers were prolific, and a large tuft of *Prasium majus* was worth noting. There were a few more new orchids for the day – *Orchis collina*, *Barlia robertiana*, *Ophrys cretica*. A Hare was glimpsed below in the phrygana. The deep blue lupins probably *Lupinus angustifolius* stood out in under the olive trees on the final short drive back to Spili.

After a shower and a quick half hour with the plant books we made our way over to Costas and Marias. Ian and I ordered lamb chops, and shortly after an entire skinned lamb was carried into the kitchen, complete with innards and head, our chops were removed and grilled beautifully. The rest was for the Easter spit-roast lamb the following night (i.e. Greek Easter Sunday)

Half of our number stayed up to see and join the procession round the village at around 10pm. The candle lit procession was accompanied by some rather lovely singing by priests, and a number of fire crackers.

Sunday 8th April Day 2 The Gious Cambos

Easter Sunday; our boiled eggs were traditional red ones today for breakfast.

The short and scenic drive took us up to the Gious Cambos with great views back to Spili on the way. Stopping by a farm track, we were straight away in amongst some beautiful orchids – the two-toned yellow *Orchis pauciflora*, top-opening *Ochis boryi*, Man Orchid and brightly coloured *Ophrys heldreichii*. Perfoliate Alexanders added splashes of lime green. A pair of courting Sky Larks displayed to each other just opposite the van. Moving on a few hundred metres we parked opposite Spili bumps. We were quickly diverted from it to the opposite side of the road when Ian spotted a sea of purple orchids in the field. A Peregrine called frequently in this area, though we could not spot it. We walked over to the orchids which turned out to be *Orchis laxiflora* in a wet flush. Higher up were dense drifts of *Orchis italica*, with a few *Orchis collina* and large, deep pink *Orchis quadripunctata*. The serapias here were mainly pink *Serapias lingua*.

On to the bump itself, crossing the stream via an ancient, wide fallen plane tree. The fields had some lovely plants amongst the grass – Perfoliate Alexanders, *Euphorbia characias*, Field Poppy and Field Marigold, (*Chrysanthemum segetum*). The slopes above turned up a scattering of orchids, *Orchis pauciflora*, *tridentata* and a few aging *lactea*, *Ophrys bombiliflora*, *Ophrys fusca* ssp *cressa* and *Ophrys cretica*. There were some nice bushes of *Daphne sericea* scenting the air. *Tulipa cretica* was present as was the Widow Iris *Hermadactylis tuberosus*, both well in fruit. It was clear that the season was well advanced this year. A few Griffon Vultures drifted by overhead, as the air warmed up.



It was about time to make our way to the chapel for a picnic. The group wandered nearby fields and found some nice things like Corncockle while I prepared the meal. A very jovial family were sharing the picnic area by the spring under the ancient Plane tree. The men folk were enthusiastically turning two whole spit roast lambs over a fire. There was music and Greek dancing, and they hospitably did their best to offer chicken souvlakia and raki to us. After lunch we strolled up and around the limestone outcrop. There were Linnets and Chukar, and Sardinian Warblers. A stone threshing

circle can be found on the saddle of the outcrop, and there are some nice cliff dwelling species like *Scorzonera cretica* (Cretan Vipers-grass) and *Valeriana asarifolia* (Cretan Valerian). *Erodium gruinum* stood out in the short turf. Even before we had got through the fence we were finding the first *Fritillaria messanensis*, which has now been split as a separate species *Fritillaria sphaciotica*. Ian found our first *Neotinea maculata*, and there were a good number of *Ophrys tenthredinifera* and *Onosma graecum* amongst the Daphne. Pink flowered Hounds-tongue *Cynoglossum columnae* and the Large Blue Alkanet *Anchusa italica* were both looking good. We had already seen a scattering of *Tulipa doefleri* flowers, but we drove slowly past drifts of *Orchis italica* towards fields which had thousands of the orange red flowers. Mixed in were large patches of *Gynandiris sisyrinchium*, mostly over, and large areas of a very pretty crucifer – Wild Rocket *Eruca versicaria*. We walked back up the road, taking in the views and photographing flowers and orchids until it was time to head back to Spili.

Supper was a treat, a great plateful of spit-roasted lamb and potatoes fried in olive oil. (Also Greek Salad!) Happy Easter.



Monday 9th April

Day 3

The Mourne Drimiskos pass, a stroll down to the Chapel of



Agios Georgos and the Slag Heap.

Having raided the baker for spanakopita and sausage pies (still warm) and the zakaroplasteo for pastries soaked in honey and cinnamon and full of walnuts, we were ready to head towards Mourne. The rock type changes very noticeably from white grey limestone to surprisingly bright green metamorphic serpentine along the way

We packed our picnic into our day sacks and headed down a quiet track in to a stunning valley with large limestone outcrops, and a few tiny chapels visible far below. The taller vegetation was dominated by heavily flowering *Calicotome villosa*, on which we had a fine view of a Crested Lark. There were scattered small trees – almond, hawthorn, pubescent oak. The valley echoed with birdsong and almost no other noise on the still air. We saw Sardinian Warblers, Chaffinches, Blackbirds and Great Tits. The first orchid to be spotted was an *Ophrys spruneri* in very fine condition. Leaving the main track we made our way to one of my favourite spots in this valley. Two new orchids for the trip were immediately visible – creamy *Orchis provincialis* and some stunning *Orchis simia*. In this one glorious spot, with fantastic views of the steep valley and limestone outcrops all around, we found *Orphys iricolor*, *phrygana* and *sicula*; *Orchis collina*, *italica*, *simia*, *boryi*, *parviflora* and *provincialis*. There was both *Serapias lingua* and *bergonii*. The *Orchis simia* were especially fine, and there were some large groups of them. Other excellent plants here were budding *Petromarula pinnata*, *Silene cretica*, *Ranunculus creticus* and *Cyclamen creticum*.

A Chukar helpfully drew attention to himself by calling continuously as he perched on a rock on the skyline. As the day warmed up we started seeing butterflies – Common Blue, Large White, Clouded Yellow, Small Copper and Cretan Festoon.

Another little side track turned up the silvery leaved *Thymelaea tartonraira ssp argifolia* and the endemic little yellow thistle *Centaurea idaea*. *Scrophularia lucida* was in good flower and we took a moment to compare *Genista acanthoclada* and Spiny Broom (*Calicotome villosa*). A couple of Griffon Vultures and probably a couple of eagles passed through, and Ravens were frequently in the sky and calling. As we approached the tiny, ancient chapel, we began to see budding Pyramidal Orchids on the banks. Depositing bags and picnic makings, we walked on a short way into some wonderful little fields full to bursting with glowing purple *Orchis laxiflora* and *boryi*, in amongst drifts of *Gagea graeca*, Cretan Chamomile, *Vicia cretica* and many other beautiful, tiny flowers. There was one spike of *Ophrys candica* as well as some lovely examples of *Ophrys bombiliflora* and *cretica*.

Heading back up the chapel, we had Blue and Scarlet Pimpernel, *Orobanche ramosa* and a very pretty, almost stemless *Ornithogalum excapum* in the short turf. We had our picnic by the chapel, which has some fine old frescos, though in deteriorating condition, and a Turkish Gecko living behind the icons.



We made our way back up the minibus, spotting various things and admiring the views on the way. Then a short drive to the next spot, known to us over the years as the slag heap (which it isn't). This bare outcrop is home to a population of curly-leaved *Tulipa cretica*, and given the advanced season, we were happy to find a few still in good flower on the shady side of the rocks. Other tiny plants on this strange site included *Silene sedoides*, yellow buttons of *Anthemis rigida* and the very red *Rumex bucephalophorus*.

Dave headed over to explore some ancient terraces, where he got some good photos of some 12 species of orchids. We headed to a series of small fields where we spent a very pleasant hour wandering through the flower-filled grassland. Again the mix of *Orchis boryi* and *sitiaca/anatolica* was very attractive, as were the many flowering legumes including Dragons' Blood (*Tetragonolobus purpureus*), *Vicia sativa* and *Vicia villosa*, *Trifolium arvense* and the tall *Barlia robertiana* which were in good condition.

Dinner was at Yannis Taverna in the centre of town. A different selection of dishes, horta (spring greens from the mountain) were available, and gigantes something like broad beans cooked in the oven with tomatoes, cumin and of course olive oil, as well as papoutsakia – aubergines stuffed with mince and cheese – excellent.

Tuesday 10th April Day 4 Psiloritis Gazeone, Axos village

The weather forecast was perfect for a trip to Psiloritis – full sun and no wind. The *Styrax officinalis* bushes, *Petromarula pinnata* and *Cistus salvifolius* were all in fine flower as we ascended. Just below Gazaro we pulled off onto a farmers track and took a break to explore a couple of little meadows and the track itself. *Cistus creticus* and *Salvia triloba* were heavily flowering, the latter attracting butterflies including a couple of Common Swallowtails as well as Cretan Festoon, Large White, Common Blue and Small Copper. Borage and Shrubby St John's-wort were there, and David found one bee orchid – *Ophrys cretica*. The small fields had good numbers of the little Goatsbeard *Geropogon hybridus* and *Coronilla parviflora* with a bright yellow and a pink/white form. David H also found an interesting shrubby *Oreganum onites*. Having navigated the villages of Anonia and Zononia, we parked the van at a shepherds hut on a clay doleen, at around 1450m. The turf was

dotted with *Romulea bulbocodium* – star-like on the short, grazed turf. It was good to get out and stretch our legs, searching for tiny alpine flowers in amongst the weathered limestone rocks. *Scilla nana*, *Corydalis uniflora*, *Gagea chrysantha*, *Polygonum idaeum*, all tiny spots of colour against the white limestone. *Prunus prostrata* was common, often in bud but with some areas in flower, clinging tightly to the rocks over which it grew. Tiny blue *Myosotis refracta*, *Arabis verna* and *alpina* – so many tiny splashes of colour. The choughs were a delight, and Northern Wheatears were common. David H got some great photos of Alpine Chough walking round the doline, but most of the Chough were Red-billed, acrobatic and entertaining. After a civilised picnic sitting on the edge of the sheep watering troughs, (strings of toad spawn added interest here) we drove on a few more minutes to look down into the Nida plateau. The uplifted and twisted limestone strata were populated with Rusty back fern, white *Veronica cymbalaria*, *Asperula idaea* tiny pink *Putoria calabrica* and purple *Arabis verna*. It was time to begin the return journey. Stopping in Axos we enjoyed well deserved iced coffees and beers in a taverna before walking down to see the tiny church of Saint Irini. The key for the 700 year old church was held by a lovely old lady, Antonia, bent over and dressed in black, who let us in to view the church before taking us to her little shop where we were treated to a demonstration of hand spinning on a distaff of sheeps wool, and then weaving on a foot-operated loom.

Back at Spili we reconvened at 7 for a friendly supper at Costas and Marias.



Wednesday 11th April Day 5 Alonis, Kotsifou and Armeni Cemetary

Today was a day to enjoy Cretan hospitality. We left Herakles arranging a reasonably urgent appointment with the dentist on Tessa's behalf – what service! Then we were on our way towards the Village of Alones.

Our first stop – in truth partly to let a lorry get well ahead on the gravel track – was very productive. We photographed some of the splendid *Arum creticum* that were very eye catching, large splashes of yellow against the limestone rocks. Our first Friars Cowl of the trip was amongst the craggy rocks along with *Cyclamen creticum* and one or two yellow *Ophrys sicula*. Some very attractive rosettes were *Rosularia serrata*. Moving on through the beautiful valley, we stopped the van for three Whinchats sitting on the fence by the road.

Reaching our destination we left the minibus and began scanning the hillside. Ian called down – we can go home now- he had found *Paeonia clusii* with one perfect bloom. This spot is relatively low in altitude and the flowers can be over in some seasons. *Cichorium spinosum* was dominant on the grass verge. I checked out another area of peonies – they were over here but the Roman Nettles were in fine shape with lots of Friars Cows and cyclamen. This valley has some excellent mixed species of trees – *Pistacia terebinthus* (Turpentine Tree), *Acer sempervirens* (Creten Maple), *Quercus pubescens*, *Crataegus monogyna*. We spent an unexpected extra half hour where I turned the van round – we could get close to a fine stand of *Arbutus unedo* (Strawberry Tree) and *Erica arborea* (Tree Heather). *Anogramma leptophylla* (Jersey Fern) was on the cutting with lots of *Selaginella denticulata*, and we tried hard for more than a glimpse of an enthusiastically singing Nightingale.

On to Kotsifou gorge – small but very dramatic. Walking down, we quickly found *Origanum dictamnus*, (one of the main ingredients of the mountain tea commonly drunk on Crete) the pine-like composite *Ptilostemon chamaepeuce*, lovely patches of yellow flowered *Linum arborea* and the silver-backed leaves of shrubby *Stachalina petiolata*. Choughs and Crag Martins wheeled overhead. Other good plants on the way down were *Ricotia cretica*, *Campanula tubulosa*, *Symphytum cretica* Procopiana, endemic *Ebenus cretica* in bud and *Silene gigantea*. Clumps of *Scorzonera cretica* (yellow composite flowers in grassy leaved tufts) and Tree Euphorbias added to the mix. The Cliff dwelling *Verbascum arcturus* was in very good shape above the chapel. A local man stopped to kiss the icon in front of the church, wished David C a good day and gave him a bag of Easter biscuits.

We were more than ready for lunch at the fantastic family run taverna nearby. The group were invited into the kitchen to view and choose from around a dozen classic Greek dishes all homemade. Stuffed vine leaves, artichokes, fasolakia (green beans) chicken, meat balls, all great. We chose a number of different dishes and shared, also trying the muscari bulbs in vinegar which one of the ladies prepared a huge pile of, before settling down to some traditional embroidery.



The rest of the afternoon was spent in the late Minoan Cemetery of Armeni. The Late Minoan cemetery of Armeni has over 200 chamber tombs, all oriented towards the northeast and the Vryssinas mountain, which was at one time the site of a peak sanctuary. The chamber tombs are cut into what is quite a soft rock, known locally as kouskouras, but the rock was hard enough for the tombs to remain

well preserved. Perhaps the most unusual find here was a helmet made of 59 boars' tusks. The grove of *Quercus ithaburensis (macrolepus)* – Valarian Oak – was a pleasure to be under as the group explored the tombs (an endemic Cave Cricket lives in them and is easily spotted). Above ground the understory was a mass of pea flowers of all colours amongst the waving bromes and other grasses. There were colonies of *Serapias lingua*, Tassel Hyacinths and large areas of *Osyris alba* with 3-lobed tiny yellow flowers. Wall Browns and Common Blues were photographed along with Lisa's Spotted Rockrose *Tuberaria guttata* and the rather gorgeous *Convolvulus elegantissimus*. Practically the last find of the day was a budding orchid spike that was clearly going to be white flowered – *Cephalanthera cucullata*?

Supper was at Yannis taverna, with cheese and spinach pies for starters and many choosing the very good stuffed aubergines as the main.



Thursday 12th April Day 6 Agios Ioannis and the Gious Cambos

This morning we had planned a walk up through a tiny village into woodland beyond, ending at small chapel. The village streets were in the main too narrow for cars, and the arched stone doorways and old houses were very appealing. It was a hot day and we were glad of the shade from the trees. The heat brought out many butterflies – Scarce Swallowtail, Cretan Festoon, Red Admiral, Speckled Wood, Large White and were all seen. Cretan Festoon and Scarce Swallowtail were very obliging for the photographers. The heat also brought out numerous basking Balkan Green Lizards and their stripy juveniles. Bushes of the beautiful white flowered *Cistus salviifolius* were common, as were Tree Heather and Strawberry Tree, the latter in fruit and flower.

Just past the series of troughs that are the village laundry house (very well maintained so presumably still used) there were three Orobanche species by the track – *crenata*, *racemosa* and - a cream one. We admired the tidily stacked flowers of *Lotus ornithopodoides* here too.

Taking one track in amongst the *Cupressus* trees we came across an expansive area with drift after drift of white *Cyclamen creticum*. What a wonderful sight, and we took our time to admire it. There were narrow trails through the grass – signs of a thriving Cretan Badger colony. *Rubia peregrina* (Wild Madder), Friars Cowl and *Asplenium onopteris* were very nice too. A long line of 20 or so Griffon Vultures drifted overhead. Just as we were leaving Lisa spotted Violet Limadore spikes in the same area!

On round and up the track to the church. We saw more spikes of Violet Limodore and more Cretan Festoons, and some large (relatively!) patches of the bright red and white parasitic plant *Cytinus hypocistus* ssp *clusii*. On reaching the church, we found a herd of fat and healthy goats grazing the terraces we hoped to examine. As luck had it, the goat herd came before too long and moved them to another area making access rather easier. More Violet Limodores spikes were flowering, and best of all, Tessa found a couple of *Dactylorhiza romana* still just in flower – the pink form. After a little more searching one spike was found in a shady spot in perfect condition. Dave H saw a Jay, and Wren and Sardinian Warblers were seen.

Our picnic was prepared and eaten in the shade of the little chapel, gazing out over the forest to hills and the top of the Kourtaliotis Gorge beyond. Lovely.

For the afternoon, we revisited the very special Gious Cambos. The sunny afternoon had brought out the *Gynandiris sisyrinchium*. This plant only flowers briefly in the afternoon. Buds by the parked van had come into flower less than an hour later; the lovely white example that David H had found was practically going over before we left. Roaming the slopes in a couple of spots, we saw 27 orchid species this afternoon. For me the highlights were the single spike of the budding white orchid like the one in with the cyclamens and at the cemetery, the *Serapias cordigera* with the heart shaped lip, and the wonderful displays of *Tulipa doefleri* mixed with the Gynandiris and Orchis italica.



Friday 13th April Day 7 Kourtaliotis Gorge and transfer to Plakias A last breakfast with

Heracles before loading the van with luggage for Plakias. Arriving at the top of the Kourtaliotis Gorge we pulled into a layby and looked around to see what could be seen. Ian spotted the first Blue Rock Thrush (there would be many today) at the top of the cliff. Chough, Jackdaw and Raven all circled, with Alpine Swifts high up and Crag Martins lower down. Kestrels and Rock Pigeons were about. A Bonelli's Eagle drifted up the gorge, and we watched Griffon Vultures, perched on the cliffs at first but then taking to the skies as the air warmed sufficiently for thermals to form. Then finally two Bonelli's Eagles appeared – a breeding pair. One was particularly strongly marked and we were lucky enough to watch them lazily circling near the nest for some time. We watched a pair of beautifully lit Blue Rock Thrushes displaying to each other. Moving on to the top of the track down into the gorge we parked up again, and the group set off down the track while I 'guarded' the luggage and the van and bird watched. The bottom of the gorge is a beautiful spot, with waterfalls of crystal clear water over torrent-smoothed rocky chasms. Maidenhair ferns are lush, there is a Styax tree and Plane trees of course, and Dragon Arum in full black flower. *Campanula saxatilis*, *Muscari Spreitzenhoferi* and *Ranunculus asiaticus*. Overhead, up to 24 or so Griffon Vultures were circling, and below the van, another nicely lit Blue Rock Thrush. Southern Commas were reasonably common here. It was a



hot still day and we were glad to get into the shade of the Panorama taverna for some avocado salads, and incredibly fresh Dorado and Sea Bass, and cold drinks. After lunch we made our way to the Plakias Bay Hotel at the far end of Plakias bay, and settled into our rooms. The village of Plakias is first recorded officially in 1961, where it is mentioned as the home of 6 fishermen! The views from the little balconies are great, over both sea, mountains and hillside. After an hour (some nipped to the supermarket with me in the van) we gathered for a

walk under the strangely smooth, vertical cliff of Plakias. You can see where the Germans took pot shots at it during the occupation. Almost immediately we found a few spikes of *Serapias bergonii* – one with a small Praying Mantis on, and next to them a few spikes of *Ophrys sphegodes ssp cretica*. *Bellardia trixago* was in good flower, and yellow minuet was new. There were lots of butterflies – particularly Cretan Festoons, also Painted Ladies and Common Swallowtail, blues probably common, and Large and Small Whites. I found the first of a few plants of the strange and wonderful *Aristolochia cretica* which is the food plant for the Cretan Festoon. The combination of magnificent Tree Euphorbias and *Phlomis fruticosa* against the blue of the bay is fantastic on this walk. Spanish Sparrows called loudly and were nesting in the holes with the flowering *Verbascum arcturus* growing on the cliff. Blue Rock Thrushes were seen frequently. An *Ornithogalum narborensis* was in bud, as was what must be *Scabious maritima*. We found a patch with a few *Orchis pyramidalis*. David C found a lovely patch of *Nigella damascena* and next to a bud of *Ornithogalum narborensis* was an odd looking ophrys – probably a hybrid of *Ophrys sphegodes ssp cretica* and *Ophrys tenthredinifera*. At the end of the walk is a tunnel. Wikipedia says that once there was a coal mine run by a German businessman between Plakias and Lefkogia and that there was a small train track through the

mountain to allow ships to take in the coal. This coal business stopped in 1930. During world war 2 the Germans made the tunnel longer and made a second and bigger opening in the mountain to enable German submarines to take in food, water and torpedoes. We made our way through with the aid of Ian's torch, and on re-emerging on our return, we were rewarded by the most fantastic views of a Black-eared Wheatear perched on a nearby limestone outcrop long enough for photos.



The group sat outside at a table with fantastic views over the bay, cliffs and setting sun for the plant list and then a really excellent meal.

Saturday 14th April Day 8 Phaestos

Today we were driving to the Minoan palace of Phaestos, the largest on Crete after Knossos. Stops on the way included Spili for David H's forgotten shirts, and a track below Kria Vrissi. By the van there was a good show of *Ranunculus asiaticus*, mainly white but some shading to pink. The track follows the side of a beautiful little valley. On the opposite side of the little stream a bee keeper donned his gear to tend his bee hives and there was an example of an old stone water mill. The *Cistus creticus* all seemed to be extra dark pink here, and there was a scattering of orchids – Pyramidal, *Ophrys heldreichii*, *Serapias lingua* and *bergonii*. Ian and Tessa found a Land Crab *Potamon potamios* crashing noisily through the vegetation on the way back to their holes.

As we dropped down from the hills and came in sight of the Timbaki plain, a sea of plastic greenhouses came in sight, source of many of the tomatoes and cucumbers of the island, and having negotiated the double parked main street of the town we were soon out of the other side and approaching Phaestos. The second Hoopoe of the day flew past the front of us. Parking in a shady spot, most of the group headed over to explore Phaestos. The Minoan palace of Phaestos corresponds to a flourishing city which arose in the fertile plain of the Messara in prehistoric times, from circa 6000 BC to the 1st century BC, The first palace of Phaistos was built in circa 2000 BC. Its mythical founder was Minos himself and its first king was his brother Radamanthys. The extensive remains visible today are principally from the second palace. There are two large staircases - the monumental entrance to the main court (14m wide) and the entrance to the west court, (6m in height); a large theatre area with nine ranks of stone seats or steps, 24m long and with a possible capacity of over 400 standing spectators; the western court, where the celebrated bull-games were possibly held; two walled, circular pits; a lobby with benches; magazine rooms; remains of light wells; and large apartments, one - the so-called King's *Megaron* - still with original alabaster flagstones and red plaster interstices. David and I went to botanise the hillside adjacent. It was very hot today, but worth climbing to the top for the hill topping scarce swallowtails, big green beetles a very large Snout-nosed Grasshopper, drifts of *Echium angustifolium* and a brief glimpse of a Bee eater! David stayed near the bottom of the hill and we both found some nice *Ophrys mammosa*; David had heard more Bee eaters going over. Back at the carpark as I was preparing the picnic David heard more Bee-eaters calling and we were lucky enough to see three flying! A Kestrel was nesting in the beautiful Agios Georgos church opposite. Lunch was consumed sitting on a shady wall with great views down over the hills.

Afterwards, we moved round towards Agia Triada intending to walk some of the quiet road there. *Ebenus cretica* is almost dominant here along with thyme. On one bend there was a scattering of orchids amongst the thyme and *Allium subhirsutum*. We walked on a little way further, but it was very hot (28 degrees C and no breeze!) so we cut it short and headed for the hills, grateful of the excellent air conditioning in the van.

We broke the journey home at the place we have always called the slump. There are some fine old olive groves, with drifts of *Serapias lingua*. The signs we saw here by the olive trees translated to 'rectangular area variation distress age 100 - 200 years trunk diameter' on google translate! A pair of Buzzards circled, and there were some good *Ophrys cretica*.

Back to the hotel for a shower before supper. We sat outside with cold drinks in the now beautiful temperature and watched the sun sink behind the mountains before moving to our table for another excellent meal – lamb with horta or chicken with wild asparagus, or locally caught Dorado.

Sunday 15th April Day 9 Damnoni, Viglotopi and Preveli Monestary

Another, nearly-as-hot day was forecast, so I decided we should be out early. Almost everyone took up the option of a pre-breakfast visit to the nearby headland of Damnoni and we were off in the bus at 7. It was a good decision and we had a delightful hour at this very arid spot before the heat of the day arrived. Lisa found a lovely flowering *Campanula tubulosa*, and there were a number of gorgeous Black-eared Wheatears, some very close, some at the top of the cliff. Northern Wheatear was seen too, and Alpine Swift and Wren. Last of all a Blue Rock Thrush put in an appearance.



After breakfast and a stop at the bakery for fresh bread for the picnic, we headed back through the Kourtaliotis Gorge to a spot near Viglotopi. Here a wet flush was full of *Eleocharis palustris*, *Typha domingensis* and rushes, and some enormous spikes of *Orchis palustris* – some as high as my hip. There were tiny black toadlets hopping everywhere and a few Broad Scarlets. Common Swallowtails were quite common, and there was a lovely Small Copper. Yellow Bartsia, *Lythrum junceum* and fine *Bellardia* stood out, and again swarms of *Serapias lingua* and *bergonii*. *Ophrys episcopalis* and Pyramidal Orchids were in full flower, and three Snipe flew up, one at a time. Walking up the road from here we found *Centaureum maritimum* (Yellow Centaury) and *Blackstonia perfoliata* (Yellow-wort) in amongst drifts of the yellow crucifer *Synapsis alba*. A Greek couple were out gathering the latter as horta, the one called vrouves. *Silene bellidifolia* was new. We could see quite a number of Pink Butterfly Orchids – generally inaccessible through fences, but we found some on the right side of the fence in the end. We entered a little rotavated field planted with grasses drawn in by the patches coloured violet by *Echium plantaganium*. There were a number of clovers here, *Trifolium pubescens* flowers were odd little balls of wool. *Linaria pellensis* Jersey Toadflax was also seen. Our final stop before lunch was one last slope. Stonechats were nesting in the small tree; both Stonechat and Whinchat were frequent today. An eagle was being mobbed by Ravens overhead as we wandered around picking out around 10 species of orchid, of which some beautiful Pink Butterfly Orchids stood out (very large and blousy, I wondered if they were the *heroica* sub species, though the leaves were wrong) and a stand of *Serapias cordigera* with the red, hairy heart shaped lip. A tank

down a side track was full of Cretan Water Frogs *Pelophylax cretensis* which called constantly in the background.

Lunch was by a river and an impressive Venetian bridge, with cold drinks at the taverna afterwards. *Arum coccinium* flowered under the trees, and Emperor Dragonflies patrolled the water by the bridge. Did anyone see the Tawny Pipit in the carpark? A stroll down the track by the river had an ancient olive grove on one side and a mixture of Plane trees, Carob, Vine, Styrax and a small stand of the endemic palm *Phoenix theophrasti* on the other. (The sign here βιολογική καλλιέργεια = Organic Farming)

Onwards towards Preveli Monastery. We stopped at the memorial to the monks of the monastery, who took up arms to support the British, Australian and New Zealand troops who were rescued from Preveli beach by submarine in the Second World War. There were Stonechats, Corn Buntings and Black-eared Wheatears all around us, and a Crested Lark.

The monastery itself, which is still a working monastery, is a lovely place to wander. The monastery was probably founded in the middle ages, during the occupation of Crete by the republic of Venice, its founder being a feudal lord named Prevelis. After the Ottoman Turkish occupation of the island, Abbot Melchisedek Tsouderos led a group of rebels in the Greek War of Independence in 1821, one result of which was that the monastery was destroyed, but later rebuilt. In 1866 and 1878, the monastery was again active in organising rebellions against the Turks, which helped contribute to Crete's eventual independence and then its political union with Greece.

In the Battle of Crete in 1941, Agathangelos Lagouvardos helped supply British, Australian and New Zealand troops on the island, and provided shelter for them. A group of Australian soldiers protected by the monastery managed to secure their rescue by submarine from the island at Preveli Beach. After this was discovered, the Lower Monastery was destroyed by German forces.

I particularly like the spring-fed carved stone tank with a metal cup attached on a small chain, the superb iconic paintings in the museum.

Plant list tonight, before our last sunset and supper at Plakias.

Monday 15th April Day 10 From Plakias to Anopolis via Frankocastello, and Arendaina Gorge

Leaving Plakias after a stop at the supermarket and cash machine we were on our way along the winding coast road. I pulled over for a display of flowering *Verbascum macrurum*, and the *Petromarula pinnata* was in full flower too. Heavily flowering cistus bushes were probably the smaller flowered subspecies of *Cistus creticus – eriocephalus*. Just round the corner was a wet flush where the road cutting was a mass of Maidenhair Fern and the lovely and unusual endemic fern *Pteris vittata*. There seemed to be many flocks of sheep moving themselves from one place to another along the roads today!



Just outside Frankocastello we stopped by an unpromising looking field where the *Dracunculus vulgaris* flowers were nearly a metre tall and in full flower, in great clumps in some places. There were lots and lots of Chaffinches here and Stonechats were common.

We left the coast road and headed up the surprisingly wide tarmac road to the tiny village of Anopolis, via 23 hairpin bends.

Poppi greeted us and showed us to our rooms. These are now very well fitted out, and open out onto a shared balcony with amazing views over towards the mountains. We had lunch at Poppis taverna; salads and Sfakion pies (round, thin, filled with mizithra 'cream cheese' and drizzled with honey).



A few kilometres away is the abandoned village of Arendena. Dave H was dropped off to explore the top of the gorge and the village itself, and the rest of us returned over the bridge to walk the donkey track which zig zags down one precipitous side of the gorge and back up the other; the only way into the village until mid '80s, when a metal bridge was built. The village was abandoned around 1950 when a bloody vendetta between two families followed a fight for a bell of a goat, apparently. Poppi

reckoned it was a twenty minute walk; it took us two hours as there were so many plants to stop and look at. Two pairs of Ravens argued and fought up and down the gorge. There were Friars Cows, and *Biarum davisii* in fruit! Lots of *Gagea graeca* and the very pink *Silene cretica*, and the not dissimilar *Petrorhagia velutina*. A couple of shrubs were vexing – one with sinuous leaves and the other with tiny green four petaled flowers. The latter was *Rhamnus saxatilis* ssp *prunifolia*. A tree with silvery scaled bark was very interesting – I have not been able to identify it yet. *Scorzonera*, *Ebenus cretica* all the usual chasmophytes were in good shape; *Verbascum arcturus* flowers were twice the size we had seen elsewhere. *Saxifraga chrysosplenifolia*, *Anchusa variegata*, *Scrophularia peregrina* or Nettle-leaved Figwort – lots of nice things we had not seen before on the trip. Also lots of ferns – Cliff Brake, Rustyback, Maidenhair and possibly young Lady Fern. Wall Browns and Small Coppers were at the bottom of the gorge. As we approached the top of the gorge every rock seemed to have a wall lizard basking. Then we were out into the large, well-built abandoned houses, often with elegant arches, now home to fig trees and goats. Large bright green *Quercus coccifera* trees contrasted with the scattered Black Pines. Some of the houses are being restored and used again, which is good to see. Sitting at the tiny taverna by the bridge we had welcome cold drinks and Dave showed us the wonderful footage he had taken of a Blue Rock Thrush singing. He had also been photographing Black-eared Wheatears, and had had a number of Bee-eaters go past overhead! The Blue Rock Thrush and the Wheatear were still returning to the same perches so we all got to see them well.

Reluctantly we left this serene spot, heading to a little valley on the way back to Anopolis. We were hoping for Orioles but found Greenfinches! A very pleasant surprise was a stand of around 30 spikes of velvety lipped, enormous *Ophrys spruneri* ssp *gregoriana*, with an undivided lip without fully formed lobes. It took a while and some directions from a passing shepherd to find our way in, and having made our way round the stony edge of the field, through 'weeds' such as Field Poppy and Corncockle.



Back to Poppis, and an excellent meal of bean salad, vegetable pie and slow-cooked goat – like lamb but richer, and definitely one of my favourites.

Tuesday 17th April

Day11

Paknes



A pre-breakfast birding excursion with David and Ian gave us hope - both Cuckoo and Oriole were heard, though not seen.

At 9 am we loaded ourselves and our picnic into to the back of Constantine's 4 wd pickup truck – which now has wooden benches in the back. In past years we have sat on rolled up olive nets! Working our way up through the sickly Black Pine, covered in pine procession moth nests and Woolley aphids (the dew from which is the staple food for the many hundreds of bee hives in this area) the trees changed as we gained altitude. *Pinus brutii* began to mix in with the *Pinus nigra*, then *Acer sempervirens* becomes

dominant with some very large *Quercus coccifera* and *ilex* trees. Then *Cupressus sempervirens* subspecies *horizontalis* begins to take over, young and middle aged at first.

Several people spotted them at the same moment – Big blousy *Paeonia clusii*. Cameras out we descended from the van and spent a good while here. Most of the peonies were in bud still, but the ones that were open were full of bumble and honey bees rolling around the yellow anthers with great enjoyment. Under a large *Quercus coccifera* tree were several small, dark-spathed *Arum ideaum* in very good condition. We identified the first of the days long list of tiny jewel like alpine flowers – the white flowers of *Cerastium scaposum* were very common, tiny borage like *Lithospermum incrassatum*, *Lepidium hirtum* (like a little white candytuft), *Myosotis refracta*, the yellow crucifer *Erysimum mutabile* and purple *Arabis cretica*.

Climbing higher we left the trees largely below and the landscapes became increasingly surreal. We were very lucky with the weather – clear blue skies and no wind. The only trees now were ancient twisted *Cupressus sempervirens* subspecies *horizontalis*. The ones near the track had often had large branches cut off, some were just stumps, where shepherds had cut them for fire wood. The commonest birds were Northern Wheatears which were everywhere.

I spotted blue on the gravelly flat areas by the road and banged on the roof of the cab for Constantine to stop. *Anchusa caespitosa*; my favourite! Incredibly flat circular mats of long leaves dotted with the brightest of blue flowers. We wandered around this spot for some time admiring and examining the alpinas, and revelling in the increasingly moonscape like landscape. The only noises were wheatears and Chough. *Aubrieta deltoidea*, *Muscari neglectum*, and both the lovely dark pink and dark blue forms of *Veronica thymifolia* were flowering well. *Astragalus angustifolius* was there, attractive smooth green humps of feather leaves amongst spines, but not flowering. *Prunus prostrata* was there in good amounts too, never more than an inch or two at most above the rocks it grew around, pink cherry blossom flowers and bright green leaves. From here we could see ranges of smooth, bare rock, steep sided almost conical mountain slopes and patches of snow on all sides. It was another 2 kilometres before snow across the track stopped us going any further. We walked on a little way into the silent almost plantless mountains just for the breath-taking scenery, reaching a final height of 1880m. Constantine turned the van around somehow and we began the descent. Stopping at an area where we could walk, Ian immediately



found some fantastic yellow and cream *Viola fragrans*, and there was some blue *Scilla nana*, but no crocus yet. Stopping again at a little bowl of snow I checked out what I thought I could see from the car and, yes, *Crocus sieberi*, four perfect flowers. Not much further to a larger flat area where the group explored while the picnic was prepared. Alpine accentor, Chukar, Ravens, half a dozen more Northern Wheatears. *Scilla nana* and *Crocus sieberi* near the edges of the snow patches. Burnt Candytuft *Aethionema saxatile* in a patch of *Bellis longifolia*, yellow stars of *Hypericum kelleri*, endemic to the white mountains. Our almost final stop on the way down was for the spectacular ancient Cyprus trees. As we walked down the track David H found a surprisingly tall yellow crucifer with grayish glaucous leaves. The patch of what looked like a rose species here, with lovely pink flowers, was in fact what *Prunus prostrata* looks like when not grazed!

Back at lower altitudes in the black Pine again, we were excited to see two Cuckoos of the rufous colour variant.

After a quick break we took a walk up to the church of Saint Cathryne which has views down over the tiny fishing village of Loutro.



Wednesday 18th April Day 12 Georgiopolis, Agia Lake and to the Omalos

The big transfer day today. We had an hour or so of birdwatching and a little botanising before we left. The bird watching was excellent – we could hear a Hoopoe calling as we got out of the van, which was seen flying shortly after. Walking down the track we could still hear it calling, and a Whinchat perched for photos. In a small, fenced off and therefore less grazed field we found several spikes of *Ophrys spruneri* subspecies *grigoriana* and some *Ophrys fusca* subspecies *creberrima* still with flowers, everything else was gone over. We could hear Bee eaters calling, too. Trying the spot where we had heard Golden Orioles calling before, I briefly heard one again, but we all heard, and saw flying quite well, a Wryneck! Or in fact a couple as David H was watching one from a different spot along with Collared and Semi-collared Flycatcher. This track – which had procession-ing Pine Procession Moths crossing it – took us towards where the Bee eaters were calling – and we could see half a dozen of these glorious birds wheeling in the sky!

Pausing for a comfort stop at Poppi's, we collected the second forgotten shirts of the trip – Ian's this time, which was handy. Then we were on our way down the hair pin bends to Hora Sfakion with a Raven cruising by, and up the hairpin bends into the Imbros Gorge. We crossed to the North side of the island via typical Cretan hills, gorges and villages, and stopped at the spring fed lake/river at Georgiopolis for a break. There were Stripe-necked Terrapins, Emperor Dragonflies, Moorhens and Coots and a Cormorant, but not too much else so we made our way to Agia Lake. A Squacco Heron did fly in with a flash of white wings as we boarded the minibus which was nice.

As we approached Agia Lake Tim and Tessa spotted a raptor sitting on a wire – Marsh Harrier! Probably the same bird that flapped right past Lisa half an hour later. We picnicked on a shady wall/seat, and then had an hour watching birds on the water. The light was perfect, making the close Gargany almost shimmer, and there were Pochard, Pintail and Dabchicks too. An Eleonora's Falcon wheeled overhead, and a couple of Squacco Herons were out in the open at the edge of the reeds. Best of all were several Little and two Baillion's Crakes which were hunting over the water

vegetation in front of us, often fully out in the open, sometimes too close for my scope to be able to focus on them. What beautiful little birds.

We drove the last 26km to our destination – the Omalos hotel. There was time for a walk to stretch our legs, and we tried a newly marked access to the E4 route. It proved more difficult than the old access, and only Tessa and I reached the lovely areas of Cyclamen in under an area of mixed *Quercus coccifera*, *Acer sempervirens* and the endemic *Zelcovia abelicea* trees. We found David C and Ian relaxing with a beer at a taverna on the way back, so they had not suffered too much. Sadly this taverna keeps a Kri kri (Wild Cretan Goat) caged.



Before another excellent meal, with casseroled lamb, chicken or rabbit on offer along with stuffed tomatoes salads and horta for starters, we had a look at the maps to mark out the places we had been.

Thursday 19th April Day 13 Omalos and Agia Irini Gorge



The day began with a walk up the track to Giglos. The footing was rather loose so we did not go far, but even so there were very flowery patches of Aubrieta, flowering domes of *Astragalus angustifolius*, with white and purple domes, and some fine examples of *Saxifraga chrysosplenifolia*.

The light cloud had cleared so we went in search of flowers that open in the sun. I had searched before breakfast for a field we could get into which had some; because of the very advanced season it was not so easy to find them in flower. But they were there, and the group spent a pleasant hour with the last flowering *Tulipa bakeri* and reasonable numbers of the equally gorgeous dark blue *Anemone coronaria*. Pink *Orchis tridentata* were very numerous, and *Anchusa undulata* with even deeper purple (or occasionally deep pink) and white flowers was new for the trip. As we headed back to the track I spotted a Chukar sitting quietly on a wall 20 yards away, and he allowed us to photograph him gleaming in the sunlight until every camera was satisfied. Ian went forward to photograph a Whinchat as well, and videoed the Chukar walking quietly round in the short vegetation. There were Scarce Swallowtails and Red Admirals, one of the former sat and fed on a flowering Hawthorn for ages.



It was time for lunch and we ate it looking out over the spectacular views of the top of the Samaria Gorge from the taverna, which made us some great salads and a whole range of excellent pies. On the cliffs behind were some magnificent patches of *Linum arboreum* absolutely covered in yellow flowers.

As we drove out on the road to Souda, David H spotted some Jays, which turned out to be scrapping with two Hoopoes. The two Hoopoes then started feeding at the back of the little field in front of us, and we had great views of these beautiful birds in the scope. A big, bright yellow umbellifer that we stopped for was the rare endemic *Chaerophyllum creticum*, which is confined to the Omalos plateau.

After a 20 minute drive we parked up at Irini Gorge. There was a similar set of chasmophytes to those in Kotsifou gorge, but the Dyers Alkanet *Alkanna tinctora*, and the various ferns including Jersey were very nice. The ancient trees that lined the stream were gnarled and twisted, as were an avenue of very old olive trees. Large, old *Pinus nigra* added to the mix.

On the return drive we stopped for two or three sunlit Woodchat Shrikes, very nice.

Friday 20th April Day 14 Home

After a slightly early breakfast we drove back to Heraklion for an uneventful return flight to the UK, where it was hotter than Crete!



Itinerary

Day 0	Friday 8 th April	London - Heraklion - Spili
Day 1	Saturday 9 th April	Triopetra, Agios Pavlos, Saktouria (roadside stops)
Day 2	Sunday 10 th April	Gious-Cambos Plateau
Day 3	Monday 13 th April	Mourne - Drimiskos Pass - fields above Vatos
Day 4	Tuesday 14 th April	Below Gazaro village, Psiloritis, Axos village
Day 5	Wednesday 14 th April	Alones Road - Kotsifou Gorge - Armeni Cemetary
Day 6	Thursday 15 th April	Agios Ioannis, Gious Cambos
Day 7	Friday 16 th April	Kourtaliotikos Gorge, Plakias Headland
Day 8	Saturday 17 th April	Kria Vrisi (roadside bank) - Phaistos ruins - Agia Triada road - Melambes (road slump)
Day 9	Sunday 18 th April	Damnoni, Viglotopi -Venitian Bridge - Preveli Monestary Gious-Kambos Plateau
Day 10	Monday 19 th April	Frangokastello - Anapoli - Arandaina Gorge
Day 11	Tuesday 20 th April	The White Mountains - track to Paknes
Day 12	Wednesday 21 st April	Anapoli - Georgioupolis - Agia Reservoir
Day 13	Thursday 22 nd April	Omalos Plateau - Agia Irini Gorge
Day 14	Friday 23 rd April	Departure

So (1, 7-10) = seen day 1 and days 7 to 10. (seen) = seen but day not recorded. The number of days seen is not an indicator of rarity or absence for a species - we are sure we missed some!

NOTES

1. Species recorded in the previous years but not in 2018 are included in square brackets so as to give information for future trips, e.g. [*Lonicera etrusca*].
2. Names of species follow Lafranchis & Sfikas (2009) where possible. There is a considerable debate over the naming of some species especially in Orchidaceae, and it is likely that some names below will change in the future. Names of orchids follow Orchids of Crete and the Dodecanese by Kretzchmar and Kretzcchmar, as this book follows a sensible line in naming and splitting of the orchids!

Reference

Lafranchis, T. & Sfikas, G. (2009) *Flowers of Greece*. Diathia, Paris.
Cretan Flora website; <http://www.cretanflora.com>

Systematic List Number 1 Vascular Flora

ANGIOSPERMAE

DICOTYLEDONES

Acanthaceae

Acanthus spinosus **Spiny Bears Breaches** – seen by the roadside frequently

Aceraceae

Acer sempervirens - **Cretan Maple** (7, 12-14) [Small tree with 3-lobed leaves, and yellowish-green flowers]

Aizoaceae

Carpobrotus edulis - **Hottentot-fig** (1-9) near coast by roads, on sand and rocks [Mats of succulent leaves and pink daisy-like flowers]

Mesembryanthemum nodiflorum – seen

Anacardiaceae

[*Pistacia lentiscus* - **Mastic Tree** Forming dense thickets along coast [Evergreen shrub whose pinnate leaves normally have no terminal leaflet]]

Pistacia terebinthus - **Turpentine Tree** (1,5). Scrub [Small deciduous tree, whose pinnate leaves have a terminal leaflet; branched brownish flower-panicles]

[*Schinus molle* - **Californian Pepper-tree** [Small tree with pendulous branches, pinnate leaves, many narrow leaflets]]

Apocynaceae

Nerium oleander - **Oleander** (1-14). Though planted along the north coast road, clearly native by streams and wet gullies [Shrub with long leathery leaves, and gaudy pink flowers]

[*Vinca major* - **Greater Periwinkle** (1-14). Naturalised by road [Scrambling plant with opposite leathery leaves and blue flowers]]

Araliaceae

Hedera helix - **Ivy** (1-14). [Familiar evergreen climber with lobed leaves]

Aristolochiaceae

Aristolochia cretica - **Cretan Birthwort** (7) Occasional on Plakias headland with flowers and with attendant Cretan Festoon butterflies. [Low scrambling plant with heart-shaped leaves and large brown flowers like “Dutchman’s Pipe”, (Endemic)]

[*Aristolochia sempervirens* – **Climbing Birthwort** (3)]

Berberidaceae

Berberis cretica - **Cretan Barberry** (1,4,7,10,11,13) on mountains [Low shrub with 3 spines at each node, and leaves emerging] Covered in yellow flowers on the Omalos

Boraginaceae

[*Alkanna sieberi*]

Anchusa caespitosa (an **alkanet**) (11). Stony ground from 1500-1900m on Kakovoli, and at 1600m above Xiloskalon [Cushion of strap-shaped leaves and bright blue flowers, (Endemic)].

Anchusa hybrida (undulata)- **Undulate Alkanet** (13). Dry disturbed ground [Bristly herb with wavy leaves and bluish funnel-shaped flowers]

Anchusa italica - **Large Blue Alkanet** (1- 10). Frequent by roads and in disturbed areas [Large bristly herb with open panicle of big bright blue flowers]

Anchusa variegata (10)

Borago officinalis - **Borage** (1,4,5,6,8). Waste ground [Blue, star-like and almost nodding flowers, oval bristly leaves]

Cerintho major - **Honeywort** (1,3,8). Roadsides [Patch-forming, grey with white swellings, and nodding yellow flowers with reddish-purple base]

Cynoglossum columnae (2,10) [herb with grey soft-hairy leaves, smelling of mice and small pinkish-maroon flowers]

Cynoglossum creticum - **Blue Hound's-tongue** (1,7,8,9). Pathsides and rough ground [As latter but with larger dark-veined pale blue flowers]

[*Cynoglossum sphacioticum* - (**a hound's-tongue**). Stony ground [Slender with purple-maroon flowers, oblong leaves, (Endemic)]]

Echium angustifolium - **Narrow-leaved Bugloss** (8). Verges [Typical bugloss, but with narrow leaves and red flowers]

Echium italicum - **Pale Bugloss** (Daily) Verges and waste ground [Distinctive pyramidal inflorescence of bluish-white flowers]

Echium plantagineum - **Purple Viper's-bugloss** (1,5-10). Verges [Big violet-blue funnel-like flowers]

[*Lithodora hispidula*]

Lithospermum incrassatum - (**a gromwell**) (11,13). among scree above tree-line [Small decumbent herb with narrow in rolled leaves, and regular blue flowers]

[*Myosotis incrassata*]

Myosotis refacta (4,11)

Myosotis ramosissima (2)

[*Neotostema apulum* - **Yellow Gromwell** - Rocky point at Triopetra [Typical small erect gromwell, with small yellow flowers]]

Onosma erectum (13)

Onosma graecum - **Greek Golden-drop** (4, 6-9). Rough ground [Erect, very bristly - orange/purple tinged yellow flowers]

[*Paracaryum lithospermifolium* (12) Rocky ground at 1900m [Low, grey with narrow leaves; tiny violet-blue flowers, subsp. *cariense*]]

[*Phacelia tanacetifolia* – (2)]

Symphytum creticum - **Procopia** (5). On and below gorge cliffs [Like a small white comfrey, but with divided flowers, lobes recurved]

Cactaceae

Opuntia ficus-barbarica - **Barbary-fig** (Common). Verges and olive groves [Large cactus, made up of flattened jointed stems]

Campanulaceae

[*Campanula erinus*]

[*Campanula lyrata*]

Campanula tubulosa - (**a bellflower**) (5). Rock-crevices [Oblong-leaved and hairy, with pale blue bell-flowers, (Endemic)]

Campanula saxatilis (6,9) [typical campanula, leaves leathery, +- glabrous. Very rare Cretan endemic, found near the coast]

[*Legousia hybrida*]

Legousia speculum-veneris – **Venus's Looking Glass** (1)

Petromarula pinnata - **Cretan Blue-lettuce** Common in flower in this advanced season. Despite its (Endemic) status, common on wall as well as gorges [Pinnate leaves (toothed leaflets) and spikes of pale blue flowers with recurved lobes]

[*Solenopsis minuta*]

Capparidaceae

[*Capparis spinosa* - **Caper** . Cliffs [Decumbent, purplish stems with round leaves and paired stems; probably both subspp. *rupestris* and *spinosa* present)]

Caprifoliaceae

[*Lonicera etrusca* - **Etruscan Honeysuckle** [Typical honeysuckle, with leaves fused in pairs below flowers]]

Sambucus nigra - **Elder** (5). Rough verges (planted?) [Familiar shrub with heads of creamy-white flowers]

Caryophyllaceae

Agrostemma githago – **Corncockle** (1,2,10)

Arenaria serpyllifolia – **Thyme-leaved Sandwort** (1-7)

[*Cerastium brachypetalum* - **Grey Mouse-ear**]

[*Cerastium comatum* - **(a mouse-ear)** (5, 14)]

[*Cerastium glomeratum* - **Sticky Mouse-ear** (3, 4). Roadside gravel, also under pines [Erect sticky, regularly branched annual mouse-ear]]

Cerastium scaposum - **(a mouse-ear)** (11). Common in stony places, through and above forest [Compact mouse-ear with large white flowers on long stalks, (Endemic)]

[*Herniaria hirsuta* – **Hairy Rupturewort**]

[*Moenchia graeca*]

Paronychia macrosepala (4)[numerous papery bracts]

Petrorhagia velutina - **(an annual pink)** (10). Disturbed ground and rocks [Slender pink, brown papery bracts]

[*Polycarpon tetraphyllum* – **Four-leaved Allseed**]

[*Sagina apetala* – **Annual Pearlwort**]

[*Silene behen*]

Silene bellidifolia **(a catchfly)** (9)[Erect annual, with one-sided spike of pink flowers with reflexed petals]

Silene colorata (1)

Silene cretica - **Cretan Catchfly** (5,8,9,10). Widespread in rocky and disturbed places [Slender sticky annual with rose-pink flowers]

Silene dichotoma - **Forked Catchfly** (1,10,12). Gravel verges [Widely fork-branched herb, spike-like inflorescences of white notched petals, subsp. *racemosa*]]

Silene gallica – **Small-flowered Catchfly** (3,5)

Silene gigantea – (5)

[*Silene integripetala*]

Silene sedoides – (3)

Silene vulgaris – **Bladder Campion** (5)

[*Spergularia bocconeii* – **Greek Sand-spurrey**]

[*Stellaria cupaniana*]

Stellaria media - **Common Chickweed** (seen). Disturbed ground [The familiar weed]

Chenopodiaceae

Atriplex halimus - **Shrubby Orache** (2). Stabilised sands and lower rocks at Triopetra [Low shrub with silvery-white angled/oval leaves]

Chenopodium album - **Fat Hen** (4). [Mealy annual, irregular-toothed lanceolate leaves, grey-green flowers]

[*Chenopodium murale* - **Nettle-leaved Goosefoot**]

Salsola kali – **Prickly Saltwort** (1)

Cistaceae

Cistus creticus - **Cretan Cistus** (1-9,12). Common in phrygana and garigue [Short shrub with oval crinkly leaves and rose-pink flowers 4-6cm]

Cistus creticus ssp eriocephalus - **Cretan Cistus** (7,12)[as above but smaller, much more numerous pink flowers]

Cistus parviflorus - **Small-flowered Cistus** (1). Phrygana [Similar to last, neater, pale pink flowers ca 2-3cm wide]

Cistus salviifolius - **Sage-leaved Cistus** (1, 3-6, 9,10). Roadsides [Sage-like leaves and white flowers 3-5cm wide]

Fumana arabica - **Arabian Fumana** (1,3). Open phrygana [Like a narrow-leaved yellow rockrose, with 12-18mm flowers, all leaves alternate]

Fumana thymifolia - **Thyme-leaved Fumana** (1). [Similar, but most leaves opposite, and flowers only 9-14mm wide]

[*Helianthemum salicifolium* - **Willow-leaved rockrose**]

Helianthemum hymettium (11) [Endemic, 700-2300m]

Tuberaria guttata - **Spotted Rockrose** (5). Open phrygana under pines [Similar to latter, but with basal rosette, and petals with purplish-brown blotch]

Compositae (Asteraceae)

Anthemis arvensis - **Corn Chamomile** (1,2,3). [Scented branched chamomile, with leaves woolly beneath]

Anthemis chia - **Chian Chamomile** (2-6,8-13). Locally abundant in rocky or fallow land [Similar to latter, but generally unbranched and hairless]

Anthemis rigida - **Rayless Chamomile** (3-6,9,10). Near sea, gorge; and by tracks from 1200-1850m above Anopoli and Omalos [Short, often mat-forming annual, with yellow heads bearing no rays]

Asteriscus spinosus - **Pallenis** (1,3,5-10). Near coast in sandy and rocky sites [Like a yellow-flowered marigold or fleabane with spine-tipped bracts around the heads]

Atractylis cancellata – (1)

Atractylis gummifera (2)

Bellis annua - **Annual Daisy** (seen). Bare (seasonally damp) clay [Very like common daisy, but tiny, annual and with heads only 5-15mm across]

Bellis perennis - **Daisy** (2,5). Moist grassland [The familiar lawn daisy]

Bellis Longifolia (11)

Bubonium aquaticum (*Asteriscus aquaticus*)– (1)

Calendula arvensis - **Field Marigold** (1). Stony land [Like small-flowered orange Pot Marigold]

[*Carduus argentatus* (a **thistle**) . Rocky ground, often below cliffs [Prickly thistle with silver undersides to leaves, and long-stalked heads very variable in size]]

[Carduus pycnocephalus - Plymouth Thistle Waste land [Typical tall slender leafy thistle with many small rose-purple heads]]

Carlina corymbosa - Flat-topped Carlina Thistle (3). Phrygana [Like *Atractylis*, but branched leafy stems and remains of last year's head, subsp. *graeca*]

[Centaurea calcitrapa - Red Star-thistle. Roadsides [Softly-leafy below (pinnately cut) but with heads of straw-coloured spines]]

Centaurea idaea - Cretan Star-thistle (3-5,10,11). Frequent on stony ground [Grey leaved star-thistle, young heads with straw-coloured spines, (Endemic)]

Centaurea raphanina subsp. *raphanina - Stemless Knapweed* (everyday). Common on cliffs and rocky phrygana from sea-level to above tree line [Distinctive rosette of pinnate leaves, with pinkish thistle-like stemless heads (Endemic)]

[Centaurea spruneri - (a knapweed). Waste ground [Similar to *C calcitrapa* but shorter spines, subsp. *minoa* is (Endemic)]]

Chrysanthemum coronarium - Crown daisy (1,3,4,6,8,10). Common by roads [Tall 2-pinnately leaved herb with yellow (or yellow and white) heads 3-6cm wide]

Chrysanthemum coronarium var. *bicolor - Crown daisy* (1,3,4,6,8,10)

Chrysanthemum segetum - Corn Marigold (1,2,7,9,10). Rocky and fallow [Greyish annual with toothed (or lobed) leaves and large yellow daisy-like heads]

[Cichorium intybus - Chicory]

Cichorium spinosum - Spiny Chicory (5,7). Rocky ground also on upper beach [Spiny, much branched and woody, blue heads like dandelions]

[Crepis cretica (Se)]

Crepis rubra - Pink Hawksbeard (12) On the drive to the Omalos, a pink dandyion!

[Crupina crupinastrum - Crupina]

Cynara cornigera - (a cardoon) (2, 4, 7-10). Rocky places [Like a short very prickly globe artichoke]

Cynara scolymus - Globe Artichoke (6). Roadsides - almost certainly cultivated [Big non-prickly pinnately-cut leaves]

Dittrichia viscosa - Sticky Fleabane (6)

Echinops spinosissimus (1)

[Filago pygmaea - (a cudweed)]

Galactites tomentosa - Galactites (1-15). Common on roadsides [Thistle-like annual with white veined leaves, and purple-lilac rayed heads]

Geropogon hybridus - Goatsbeard (1,4,8,9)

[Hedypnois cretica - Hedypnois Rocky slopes and coastal sand [Dandelion-like plant with stalks thickened below heads, bracts incurved in fruit]]

Helichrysum barrelieri - (an everlasting) (3-6). Phrygana, quarries, stabilised sand and rocks [Tufted, woody-based; whitish stems, linear leaves, clustered small golden-yellow globular heads]

[Helichrysum italica - (an everlasting)]

Helichrysum stoechas (barrelieri) - (an everlasting) (3)

Helminthotheca echioides - Bristly Ox-tongue (7)

[Hypochaeris radicata - Common Cat's-ear (Se). Fallow [Leaves all basal and rough hairy, stem branched bearing dandelion-like heads]]

[Matricaria recutita - Scented Mayweed. Waste ground [Like a weedy, branched chamomile]]

Notobasis syriaca - Syrian Thistle (8)

Phagnalon graecum - (a phagnalon) (1). Rocky phrygana [Dwarf shrub, with narrow leaves white-felted beneath, and with long-stalked yellowish button-like heads]

[Picnomon acarna - Picnomon. Phrygana and verges [Grey thistle-like plant with golden spines]]

Ptilostemon chamaepeuce - **Shrubby Ptilostemon** (5,10). Frequent on cliffs in gorges around Spili on rocky banks and by fountain, and at coast [Small, rather pine-like, shrub with white undersides to leaves]

[*Pulicaria dysenterica* - **Common Fleabane**]

[*Reichardia picroides* (Se). Disturbed ground [Coarse herb, clasping leaves and inflated dandelion-like heads]]

[*Rhagadiolus stellatus* - **Star Hawkbit** Shady and disturbed sites [Like low weedy Nipplewort, distinctive star-like fruiting heads]]

Scolymus hispanicus - **Spanish Oyster-plant** (?1). Roadside [Thistle-like, very leafy, winged stems]

Scorzonera cretica - **Cretan Vipers-grass** (1,2,5,7-10) Cliffs coastal [Many linear cottony leaves, and dandelion-like heads]

[*Senecio squalidus* – **Oxford Ragwort** (2, 6). Debris below cliff, Kotsifou [Familiar weed]]

Senecio vulgaris - **Common Groundsel** (4). Bare soil [Familiar weed]

Silybum marianum – **Milk Thistle** (Se)

Sonchus asper - **Spiny Sow-thistle** (2-10). Waste ground [Thistle-like plant with milky sap, and many small dandelion-like heads]

Sonchus oleraceus - **Smooth Sow-thistle** (1-14) Waste ground [Similar to latter, but almost without prickles]

[*Stachelina fruticosa* Frequent on cliffs [Small tufted shrub, lanceolate green leaves, remains of last year's thistle-like flowers]]

Stachelina petiolata -(**Cretan Gorge Laurel**) (5) Limestone cliffs [1m shrub, with oval leaves, white beneath, (Endemic)]

[*Tanacetum parthenium* – **Feverfew**. Trackside in groves [Strongly-scented leafy herb, pinnately divided]]

Taraxacum bithynicum s.l. - (**a dandelion**) (4) Bare soil at high altitudes [A typical, if rather neat, dandelion]

Tragopogon sinuatus (= *porrifolius*) - (**a salsify**) (1,5,6,9) Rocky or sandy sites [Like leek with lilac dandelion-like heads, forming large "clock"]

[*Xanthium strumarium* – **Cocklebur**]

Convolvulaceae

Convolvulus althaeoides - **Mallow-leaved Bindweed** (seen). Rough grass [Clamberer with cordate or lobed leaves and decorative deep pink funnel-like flowers - see also below]

Convolvulus elegantissimus – **Bindweed** (5,7). Gorge edge [Form of *C. althaeoides*, differing in its finely-divided silvery leaves]

Convolvulus oleifolius - **Olive-leaved Bindweed**. (1) Rocky slopes by roads [Low erect woody, with narrow silvery leaves and pink flowers]

Cuscuta epithymum - **Common Dodder** (1,5,6,7). Phrygana/verges [Parasite with reddish thread-like stems, globular clusters of 5-lobed flowers]

Cuscuta palaestina (1,4,6,9) [the yellow stemmed one]

Ipomea indica - Morning Glory [large blue flowers, non native, useful for navigation ☺]

Crassulaceae

[*Crassula alata* - (**a mossy stonecrop**). Compacted soil pine groves fallow and near cave [Tiny erect reddish herb with linear leaves, dense clusters of flowers]]

Rosularia serrata - (**no common name**) (5,7,9,13). Cliffs and ledges [Rosettes like neat grey houseleek]The attractive non-flowering rosettes that I could never remember the name of.

[*Sedum acre* – **Biting Stonecrop**]

[*Sedum amplexicaule*]

Sedum creticum (10)

[*Sedum eriocarpum* subsp. *spathulifolium*]

[*Sedum laonicum*]

Sedum litoreum (seen) [Coastal]

Umbilicus horizontalis - (a wall pennywort) (1,5,6,7,9). Walls and rocks [Typical small navelwort, with reddish-green flowers]

Umbilicus parviflorus - **Small-flowered Navelwort** (10?) Walls by track also on rocks [Typical navelwort with large yellow flowers]

Cruciferae (Brassicaceae)

Aethionema saxatile - **Burnt Candytuft** (11,13). [Short herb, crowded oval grey untoothed leaves, dense head of pink & white flowers, subsp. *creticum*]

[*Alyssum foliosum* - (an alison). Gravel at 1900m in Kakovoli pass [Dwarf herb with narrow crowded ciliate leaves and dense heads of tiny yellow flowers]]

[*Alyssum minutum* - (an alison)]

Alyssum sphacioticum - (an alison)(11) The fine group of 4-5 inch tall yellow flowers that David H found.

Arabidopsis thaliana - **Thale Cress** (5). Fine gravel [Slender branched herb with white flowers and thin pods]

Arabis alpina (4)

Arabis cretica – **Cretan Rockcress** (11) [White flowers]

Arabis verna - **Spring Rockcress** (4,11). Open rocky areas [Low cress, oval toothed leaves and yellow-eyed purple flowers]

Aubrieta deltoidea - **Aubrietia** (11,13). Rocky places [Low straggling grey cress with big purple flowers and long-beaked fruit]

[*Barbarea vulgaris* - **Common Winter-cress**. Colouring verges [Medium-sized cress with yellow flower spikes and pinnate lower leaves First noted by us in 1996 seems to be new species for Crete; widespread in Europe]]

Biscutella didyma - **Buckler Mustard** (3,5,6). Gravel verges and stony land [Hairy annual with yellow flowers and distinctive pods comprising two joined disks]

Brassica cretica - **Cretan Cabbage** (7). Gorge cliffs [Tall cabbage with pale yellow flowers]

Brassica nigra - **Black Mustard** (5). Road verges [Tall yellow mustard with thin pods appressed to stem]

Cakile maritima - **Sea Rocket** (1). Sandy beaches [Decumbent succulent annual, with pinkish flowers and lanceolate pods]

Capsella bursa-pastoris - **Shepherd's-purse** (2,5,11). Disturbed areas, fine scree to 1700m on Kakovoli [Familiar white cress with triangular fruit]

Cardamine graeca – (10)

[*Cardamine hirsuta* –**Hairy Bittercress**]

[*Cardaria draba* – **Hoary Pepperwort**]

Draba cretica (10)

[*Erophila verna* s.l. - **Early Whitflow-grass** (12, 14). Bare stony ground [Tiny white cress, all leaves basal and pods ca 6mm All plants seen are probably *E. verna* in the strict sense]]

Eruca sativa (versicaria)– **Eruca or Wild Rocket**. Fallow land on Gious Kambos [Weedy annual with large creamy flowers veined in purple]]

[*Erucaria hispanica* – **Spanish Mustard**]

Erysimum mutabile – (12)

Erysimum raulinii - (a wallflower) (11,12). Crags [Similar but more densely tufted, (Endemic)]

Lepidium hirtum (11)

[*Matthiola sinuata* - Sea Stock Cliff. By chapel, Kourtaliotis [Large hairy stock with coarse toothed leaves and pinkish flowers]]

[*Matthiola tricuspidata* - (a stock)]

[*Raphanus raphanistrum* – Wild Radish]

Rapistrum rugosum - Bastard Cabbage (1)

Ricotia cretica - Ricotia (5). Scree/rubble in gorges [Low pink cress, distinctive pods like “purple mange-tout”, (Endemic)]

[*Rorippa nasturtium-aquaticum* - Water-cress (seen). Stream/ditches [Familiar aquatic with pinnate leaves and white flowers]]

Sinapis alba - White Mustard (7,9). Waste ground [Coarse yellow mustard, pods with word-like beak]

[*Sisymbrium officinale* - Hedge Mustard. (13) Pathsides [Erect yellow cress with pinnately-lobed leaves and pods appressed to stem]]

Cucurbitaceae

Bryonia cretica - White Bryony (7,10,13). Scrub/rubble in gorges [Climber with mottled maple-like leaves opposite tendrils, greenish-white flowers]

Ecballium elaterium - Squirting Cucumber (12). Waste ground [Coarse bristly scrambler with heart-shaped leaves, yellow flowers and 4-5cm long fruit]

Cytinaceae

Cytinus hypocistis subsp. *clusii* (6). [Parasitic under *Cistus* spp. bushes]

Dipsacaceae

Knautia integrifolia - (a scabious) (4,5,10). Rocky phrygana [Tall typical scabious, variable leaves]

Lomalosia brachiata - (a scabious) (1,7). Behind shores [Short scabious with leafy bracts]

Scabiosa atropurpurea ssp *martima* (Sweet Scabious) (7) Tall scabious, pink flowers, not normally seen in flower on this trip

Ericaceae

Arbutus unedo - Strawberry-tree (5,6). Maquis and common in pine woods [Evergreen tree with lanceolate leaves and warty berries]

Erica arborea - Tree Heath (5,6). [1-4m tall, but otherwise a typical white-flowered heather]

Erica manipuliflora - (a heath) (0,4). [Shorter species, in fruit, with longer leaves]

Euphorbiaceae

Euphorbia acanthothamnos - Greek Spiny-spurge (common). Phrygana, often coastal [Intricately branched and domed, spiny shrubby spurge]

Euphorbia characias - Large Mediterranean Spurge (common). Scrub and rocky slopes) [Tall tufted hairy perennial]

Euphorbia dendroides – Tree Spurge (1, 5,7-10)

Euphorbia helioscopia - Sun Spurge (2,7,12). Disturbed ground [Familiar weedy spurge, toothed leaves]

Euphorbia paralias - Sea Spurge (8). Low dunes [Fleshy greyish perennial, many oblong leaves]

[*Euphorbia peplus* - Petty Spurge . Damp soil [Similar to Sun Spurge, but untoothed, smaller]]

[Mercurialis annua - Annual Mercury (1-11). Olive groves and walls [Like neat nettle, with erect green spikes]]

Ricinus communis - Castor Oil Plant (8). Waste ground [Coarse purplish shrub, with palmate leaves]

Fagaceae

Quercus coccifera - Kermes Oak (1-14). Scrub and garigue, [Shrub or tree with evergreen, holly-like leaves]

Quercus ilex - Holm Oak (11-13). Some large trees near Alones [Evergreen tree with lanceolate leaves paler (downy) beneath]

Quercus ithaburensis (macrolepus)- Valonia Oak (5,6). Scattered trees but Armeni Cemetery is wooded with them [Tree with large leaves, lobed with pointed teeth; huge acorn-cup; subsp. *macrolepis*]

Quercus pubescens - Downy Oak (1,2,9) Woodland and scrub [Small tree/shrub, typical oak-leaves, downy]

Gentianaceae

Blackstonia perfoliata – Yellow-wort (9)

[Centaurium pulchellum – Lesser Centaury]

Centaurium maritimum Yellow Centaury (9)

Geraniaceae

Erodium cicutarium - Common Stork's-bill (6,12,13). Pathsides and disturbed ground [Typical stork's-bill with fern-like leaves, pink flowers and beaked fruit]

Erodium gruinum - Long-beaked Stork's-bill (4,5). Pathsides [Large annual with lobed leaves, violet flowers 4cm wide, and very long (6-11cm) fruit]

[Erodium malacoides - Soft Stork's-bill Olive groves [Like *E. cicutarium*, but with oblong, slightly-lobed leaves]]

[Erodium moschatum – Musk Stork's-bill]

[Geranium columbinum – Long-stalked Crane's-bill]

Geranium dissectum - Cut-leaved Crane's-bill (5,13). Damp soil [Similar to latter, but with smaller flowers, notched petals]

Geranium lucidum - Shining Crane's-bill (4,13). Walls and shady rocks [Shiny bluntly-lobed palmate leaves, and pink flowers]

Geranium molle - Dove's-foot Crane's-bill (5). Disturbed ground [Like *G. dissectum*, but wedge-lobed and with more purplish-pink flowers]

[Geranium purpureum - Little Robin . Shaded rocks [Aromatic herb with fern-like leaves and unnotched pink petals]]

[Geranium rotundifolium - Round-leaved Crane's-bill Groves and waste ground [Like *G. molle*, but shallowly-lobed, unnotched petals]]

Guttiferae (Hypericaceae)

Hypericum empetrifolium - Shrubby St John's-wort (1,4,5,10) Garigue and phrygana [Dwarf heather-like shrub with many yellow flowers. Mostly subsp. *oligathum*, though the Lefka Ori plants are probably subsp. *tortuosum* Both (Endemic)]

Hypericum kelleri (11)

Hypericum perforatum - (a St John's-wort) (2,5) Moist phrygana [Typical erect St John's-wort with leaves clasping stem]

Hypericum kelleri, day 11. On reflection and examination, this was probably *Hypericum empetrifolium*

Juglandaceae

Juglans regia - **Walnut** (1-15). Planted [Trees with fragrant pinnate leaves and coarse catkins]

Labiatae (Lamiaceae)

Acinos alpinus (11)

[*Ballota acetabulosa* – **Garden Horehound**]

[*Ballota nigra* subsp. *uncinata* - **Black Horehound** (7) Pathsides [Strongly scented, with coarsely toothed leaves, small purple flowers]]

Ballota pseudodictamnus - **False Dittany** (10,11) Often abundant on coastal verges [Woody-based perennial, woolly-felted, oval, almost untoothed leaves]

Cardiothymus capitatus – **Thyme** (common)

Lamium amplexicaule - **Henbit** (4). Disturbed ground, [Annual pink dead-nettle, long flowers]

Lavandula stoechas - **French Lavender** (5,6). Rocky verges [Linear-leaved shrub, flower spikes with purple tassel]

[*Marrubium vulgare* - **White Horehound** Rough verges [Like *Ballota*, but white-downy, small white flowers]]

[*Mentha longifolia* – **Horse Mint**]

[*Mentha pulegium* – **Pennyroyal**]

[*Nepeta melissifolia*]

[*Nepeta scordotis* - (a **catmint**). Rocky terraces [Blue branched spikes and heart-shaped leaves]]

Origanum dictamnus - **Dittany (diktamus)** (5). Limestone cliffs, mainly in gorges [White-woolly round-leaved, with overlapping bracts (Endemic)]

Origanum onites - **White or Pot Margoram** (4) [Dense terminal inflorescence]

Origanum vulgare - **Marjoram** (Se). Rocky ground [Typical marjoram, white flowers; subsp. *hirtum*]

Phlomis cretica - (a **Jerusalem Sage**) (1,3,10). NB Some of the plants at exposed sites near Anopoli are probably referable to this, rather than the next [Much shorter and more orange flowers]

Phlomis fruticosa - **Jerusalem Sage** (0-9, 11,13). One of typical dominants of rocky slopes [Grey-felted shrub, with leaves like a sage; and dense heads of 23-35mm long flowers]

[*Phlomis lanata*]

Prasium majus - **Shrubby Woundwort** (1,3,5,6). Banks in groves etc and on rocks [Evergreen shrub, with white flowers and aroma similar to a *Stachys*]

Rosmarinus officinalis - **Rosemary** (seen). [Familiar shrub]

Salvia fruticosa - **Three-leaved Sage** (1,3,4,5,6). Garigue (bearing abundant galls) [Typical lilac-flowered shrubby sage with 3-lobed leaves]

[*Salvia verbenaca* - **Wild Clary** Disturbed ground [Herb with wrinkled leaves, and spike of dense purple whorls]]

[*Salvia viridis* - **Red-topped Sage** Stony land and rocks [Short neat annual, with bright green bracts]]

Satureja nervosa - (a **Micromeria**) (9). Phrygana etc. [Slender shrub, with small-leaves and whorls of purple flowers above – the similar *S. juliana* possibly overlooked]

Satureja thymbra - **Satureja** (1,7,11). Scrub and phrygana [Like a large-leaved, very aromatic, pink thyme]

[*Scutellaria sieberi* - (a **skullcap**). Crevices in gorges [Neat scentless herb, with triangular-ovate leaves, and crowded curved spikes (Endemic)]]

[*Sideritis curvidens*]

[*Sideritis syriaca*]

[*Stachys arvensis* - **Field Woundwort**. Stony fallow fields below Viglotopi [Annual with heart shaped leaves and white/pink flowers]]

Stachys cretica - **Mediterranean Woundwort** (5,8). Rocky slopes, often by roads [Like a slender white-felted pink "Lamb's-ears"]

[*Teucrium microphyllum* - **Small-leaved Germander**. Rocky phrygana [Similar to last but leaves ca 5mm, white below]]

Lauraceae

Laurus nobilis - **Laurel** (2) [Evergreen tree with scented leaves]

Leguminaceae (Fabaceae)

Acacia sp. - (**an acacia**) (seen). Planted by roads [Shrubs with grey willow-like "leaves" and yellow mimosa blooms]

[*Anagyris foetida* - **Bean Trefoil** Trackside [Trefoil shrub 1-4m tall and foetid]]

Anthyllis vulneraria - **Kidney Vetch** (1-8). Rocky phrygana [Typical kidney vetch, but here red-flowered subsp. *rubriflora*]

Astragalus angustifolius - (**spiny milk-vetch**) (4,11,13). Open rocky slopes ["Vegetable hedgehog", pinnate leaves with 6-10 pairs of leaflet, large flowers white tinged with purple]

[*Astragalus depressus*]

Bituminaria bituminosa - **Pitch Trefoil** (common). Olive groves and verges [Dull green, often tall trefoil, flower-heads violet-blue, and smelling of bitumen]

Calicotome villosa - **Spiny Broom** (1-14). Often abundant in garigue [Like elegant gorse, scenting the air with honey]

Ceratonia siliqua - **Carob** (1,4,5,8). Olive groves and scrub [Evergreen tree with coarse pinnate leaves and big hanging pods]

Cercis siliquastrum - **Judas-tree** (1,4,5). Planted [Small tree, heart-shaped leaves, and pink flowers on stems]

[*Chamaecytisus creticus* - **Cretan Dwarf-broom**]

Coronilla parviflora (4) two colour forms - yellow and pink, white

[*Coronilla velutina glauca*]

Ebenus cretica - **Shrubby Sainfoin** (5,6,7,8,10,13). Cliffs and steep banks [Shrub, palmate leaves and silky heads of pink flowers, (Endemic)]

Genista acanthocloda - (**a greenweed**) (3,4,5). Phrygana [Similar to Cretan Dwarf-broom, but with tiny leaflets, and coming into flower]

[*Hedysarum spinosissimum* - **Spiny Sainfoin**]. Open ground [Low hairy annual, pinnate leaves, pinkish flowers and jointed spiny fruits]

Hippocrepis biflora - (**a horseshoe vetch**) (4). Bare ground among rocks [Short annual with pinnate leaves, single yellow flowers and pods like a string of horseshoes]

Hippocrepis unsiliquosa (Se)

Hymenocarpus circinnatus - **Disk Trefoil** (3, 4). Similar habitats to last [Pinnate-leaved; big terminal leaflet, flowers orange-yellow; fruit a toothed disc 1-15cm across]

[*Lathyrus annuus* - **Annual Yellow-vetch**]

Lathyrus aphaca - **Yellow Vetchling** (6)

Lathyrus cicera - (13) Grassy or shrubby places, waste ground [brick red flowers, legume with 2 dorsal keels]

Lathyrus clymenum - (**a vetchling**) (seen). Rough grass [As *L. annuus*, but with 2-tone flowers (crimson/violet)]

[*Lathyrus setifolius* - (**a vetchling**) Tracksides [Similar but narrow-winged with orange-red flowers]]

[*Lotus cytisoides*]

[*Lotus edulis* - **Edible Lotus**]

[*Lotus halophilus*]

Lotus ornithopodioides - **(a bird's-foot-trefoil)** (5,6). Trackside [2-5 yellow flowers stacked in a semi circle]

Lotus pedunculatus - **Greater Bird's-foot-trefoil** By ditch [Large hairy typical bird's-foot-trefoil]

Lupinus angustifolium - (1)[Deep blue flowers]

Lupinus pilosus - **Hairy Blue Lupin** (2,) Striking patches by roads, fallow [Bright blue and white hairy lupin]

Medicago arabica - **Spotted Medick** (5, 6, 9). Olive groves and fallow [Bur-fruited yellow trefoil, dark blotches on leaflet]

[*Medicago arborea* - **Tree Medick** Naturalised by roads [Silvery leaved scrub, golden-yellow heads]]

[*Medicago coronata*]

Medicago lupulina - **Black Medick** (seen)

Medicago marina - **Sea Medick** (1). Sandy beaches, low dunes [White-downy creeping perennial trefoil with yellow heads]

[*Medicago murex* - **(a bur medick)** Coastal rocks [Typical yellow medick with dense cylindrical bur fruit]]

Medicago orbicularis - **Large Disk Medick** (seen). Waysides [Typical yellow medick with large smooth spiral disc fruit]

[*Medicago polymorpha* - **Toothed Medick**]

[*Onobrychis aequidentata* - **(a sainfoin)** Phrygana and tracksides gorge, quarry [Pinnate-leaved, few pink flowers and fruit with cockscomb crest]]

[*Onobrychis caput-gallii* - **Cockscomb Sainfoin** [Similar, flowers smaller and bur fruit]]

[*Ononis reclinata* - **Small Restharrow**]

Robinia pseudoacacia - **False Acacia** (1,2). Planted/naturalised by coast road etc [Spiny tree with pinnate leaves, pendent white racemes]

[*Scorpiurus muricatus* - **Scorpiurus** Rocky banks [Long elliptical undivided leaves, yellow flowers and pods like coiled caterpillars]]

[*Securigera globosa* - **(a crown vetch)**. Cliffs gorges [Like neat Crown Vetch - large pinnate leaves (Endemic)]]

Securigera parviflora- **(a scorpion vetch)** (4,9,10) Rocky ground [As last but more slender and with pink and white or yellow flowers]

[*Securigera cretica*]

Spartium junceum - **Spanish Broom** (2,3,5,10). Roadsides [Shrub with many rush-like branches and large yellow flowers]

Tetragonolobus purpureus - **Dragon's Blood** (1,2,3,5,6,10). Groves and disturbed ground [Hairy trefoil herb, crimson flowers, big winged pods]

Trifolium angustifolium - **Narrow-leaved Crimson Clover** - (1,7)

Trifolium arvense - **Hare's-foot Clover** - (3,4)

Trifolium boissieri - **Brown Trefoil** (seen). Rocky slope [Low annual yellow clover, turning brown with age]

Trifolium campestre - **Hop Trefoil** (1,3,5,6). Rocky places

[*Trifolium fragiferum* - **Strawberry Clover** Moist turf of paths [Creeping clover with pink flowers, and inflated fruit heads, resembling raspberries!]]

[*Trifolium grandiflorum*]

Trifolium physodes - (seen)

Trifolium repens - **White Clover** (1,5). Phrygana and damp turf [Familiar clover creeping, rooting at nodes]

[Trifolium resupinatum - Reversed Clover Sandy ground [Pink annual clover, flowers are “upside down”]

Trifolium stellatum - Star Clover (1,5,11). Stony areas [Hairy annual clover with round leaflets, globose pink heads, calyx teeth spreading star-like, reddish]

[Trifolium subterraneum – Burrowing Clover]

Trifolium tomentosum - Woolly Trefoil (9,10). Stony turf [Like *T. resupinatum*, but flowers “right way up”, fruit heads like balls of cotton]

Trifolium uniflorum - (a clover) (1,3,4,5). Locally common on rocky turf and phrygana to 1600m [Mat or cushion-forming perennial, with stalkless white flowers in ones (-3) not heads]

Tripodion tetraphyllum – Bladder Vetch (1,4,5)

Vicia bithynica - Bithynian Vetch (8,9). Low phrygana [Vetch with tendrils, and violet and white flowers]

Vicia cretica – (5,13)

Vicia hybrida - Hairy Yellow-vetch (5). Banks in groves and by roads (especially by spring) and below Viglotopi [Large yellow-flowered vetch, hairy standard]

[Vicia lutea - Yellow Vetch Waste areas [Like smaller *V. hybrida*, but standard hairless and flowers cream]]

Vicia sativa - Common Vetch (3). Tracksides and fallow [Familiar pink leafy vetch]

Vicia villosa - Fodder Vetch (3). Olive groves [Like a bright red-purple Tufted Vetch; subsp. *varia*]

Linaceae

Linum arboreum - Shrubby Flax (5,13). Limestone gorge cliffs [Small shrub, spatulate leaves, yellow flowers]

[Linum austriacum]

Linum bienne - Pale Flax (1,5,9). Roadsides, rough grass [Slender pale blue flax]

[Linum strictum – Upright Yellow Flax]

Lythraceae

Lythrum hyssopifolia – Grass-poly (seen)

Lythrum junceum - (a loosestrife) (9). Seasonally wet places, ditches [Larger often ascending perennial, petals 5-6mm]

Malvaceae

[Alcea biennis - (a hollyhock) . Roadsides [Typical hollyhock, not in flower during April]]

Hibiscus rosa-sinensis - Hibiscus (Se). Planted along roadsides near Rethymno [Shrub with irregularly palmately toothed leaves]

[Lavatera bryonifolia - Tree Mallow]

[Lavatera cretica - Small Tree-mallow. Disturbed [Like Common Mallow, but broad epicalyx lobes]

Malva cretica - Cretan Mallow. (1) Rocks near sea also in gorges (lower Kotsifou, Kourtaliotis and Aradena gorge [Like a dwarf, delicate Musk Mallow – pale pink flowers]

[Malva neglecta]

[Malva parviflora - Least Mallow Pathsides and ruins [Usually prostrate mallow with tiny (<1cm) flowers]]

Malva sylvestris - Common Mallow (1,2,5,10). Roadsides [Familiar pink-purple biennial/perennial]

Moraceae

Ficus carica - Fig (1-10). [Familiar shrub/tree with large palmately-lobed leaves]

Morus alba - White Mulberry (1-10). Planted [Tree with oval and cordate leaves, dense flower spikes]

Myrtaceae

Eucalyptus sp. - **(a gum)** (1-10). Planted by roads [Large trees with flaking bark, grey leaves]

Myrtus communis - **Common Myrtle** (seen). Streamside thicket; by roads [Opposite-leaved evergreen aromatic shrub]

Nyctaginaceae

Bougainvillea glabra – **Bougainvillea** (seen). [Familiar ornamental climber with bright purple bracts]

Oleaceae

[*Jasminum* sp. - **Jasmine** Naturalised by ruined church above Faestos [Trefoil shrub with yellow flowers]]

Olea europaea - **Olive** (0-15). Abundantly cultivated [Evergreen tree with greyish narrow leaves]

Onagraceae

[*Epilobium hirsutum* - **Great Willow-herb**. Wet tracksides in lower groves [Familiar tall hairy herb]]

Orobanchaceae

Orobanche crenata - **(a broomrape)** (3,6). On *Vicia faba* in groves below Heracles Rooms, Spili [Tall broomrape with veined white flowers]

[*Orobanche lavandulacea* - **Lavender Broomrape**. On Pitch Trefoil by road at Damnoni [Small darkish purple broomrape]]

Orobanche pubescens - **Downy Broomrape** (6). On various hosts (often umbellifers) in phrygana [Medium yellow to purple-flowered broomrape, flowers hairy]

[*Orobanche purpurea* - **Purple Broomrape**. On Composites in waste [Like *O. lavandulacea*, flowers more violet]]

Orobanche ramosa - **Branched Broomrape** (1,3-6,10). Olive groves (often on *Oxalis pes-caprae*) [Small prolific broomrape, with pale purple flowers contrasting with light brown stems]

Oxalidaceae

Oxalis pes-caprae - **Bermuda Buttercup** (1-13). Often abundant in olive groves and by roads everywhere, rarely phrygana [Trefoil leaves, and umbels of yellow flowers]

Paeoniaceae

Paeonia clusii subsp. *clusii* - **Clusius's Peony** (5,11,12,13). In flower in Cypress woodland above Anopoli at 1400m and by rocky cliff by road near Alones where there were many plants in bud and 1 plant flowering well. Also on shaded rocky slopes in Imbros gorge in previous years [White flowers 7-12cm across and narrowly-divided leaves (Endemic)]

Papaveraceae

Corydalis uniflora - **Cretan Corydalis**. (4) Sparse on bare clay among stones 1600-1900m [Short herb with greyish lobed leaves, whitish flowers tipped in maroon (Endemic)]

Fumaria capreolata - **Ramping Fumitory**. (5) Clambering on coarse vegetation by streams etc. [Large fumitory, greyish divided leaves, pale flowers tipped reddish-black]

[*Fumaria officinalis* - **Common Fumitory**. Fallow [Typical non-climbing fumitory]]

Glaucium flavum - **Yellow Horned-poppy** (1,7). Coastal rocks and sand [Big grey-leaved poppy with yellow flowers and long pods]

Papaver argemone - **Pale Poppy** (4,10)

Papaver hybridum - **Rough poppy** – (8)

Papaver purpureomarginatum – (10)

Papaver rhoeas - **Corn Poppy** (1,4,5,10). Rocky and disturbed ground [Typical red poppy, sometimes with black blotches, globular pods]

Plantaginaceae

[*Plantago afra* - (a plantain) Pathsides to 1500m; coastal rock and sand [Typical plantain flowers, but branched leafy stem]]

[*Plantago coronopus*]

Plantago cretica - **Cretan Plantain** . Seashores and rocks [Similar to latter but with stems thickening and recurved in fruit]

Plantago lagopus – **Hare's-foot Plantain** (1,9)

Plantago lanceolata - **Ribwort Plantain** (9 and other days!). Olive groves and grasslands [Familiar plantain]

[*Plantago major* – **Greater Plantain**]

Plantago weldenii – 5,9,11)

Platanaceae

Platanus orientalis- **Plane Tree** (0-14) One above Kali Sikea by small chapel reputed to be at least 2,500 years old. Lining streams/rivers, forming groves [Tree with alternate palmate leaves, scaling bark]

Plumbaginaceae

[*Acantholimon ulicinum* "Vegetable hedgehog" zone on rock slopes 1600-1900m on Kakovoli [Differs from other components of zone in its linear spiny leaves]]

[*Limonium sinuatum* - (a sea-lavender)]

Polygalaceae

Polygala venulosa - **Eastern Milkwort** (1,2,3,9). Phrygana [Typical milkwort, with pale mauve veined flowers, rather pea-like]

Polygonaceae

Polygonum aviculare s.s. - **Common Knotgrass** (4). Waste verges [Familiar weedy knotgrass]

Polygonum idaeum – (a knotgrass). (3) Endemic to mountain dolines in Crete (named after Mount Ida, the old name for Psiloritis)

[*Polygonum maritimum* - **Sea Knotgrass**. Upper beach by planted Tamarisk at Triopetra [Prostrate knotgrass, with in rolled leaf margins]]

Rumex bucephalophorus - **Bull's-head Dock** (1-10). Rocky [Small annual, distinctive recurved fruit; subsp. *gallicus*]

Rumex bucephalophorus subsp *gallicus* - **Bull's-head Dock** [elongated and curved flower parts]

[*Rumex pulcher* – **Fiddle Dock**]

Rumex tuberosus – **Tuberous Dock** (5)

Primulaceae

Anagallis arvensis - **Scarlet Pimpernel** (3,5,6,8,9,10). Phrygana and fallow land [Familiar weed]

Anagallis foemina - **Blue Pimpernel**.(1,2,3,5,6,8,9,10) Similar habitat [As latter but bright blue]

[*Asterolinon linum-stellatum* – **Asterolinon**]

Cyclamen creticum - **Cretan Cyclamen** (2,3,5,6,10). Shade, scree and crevices [White cyclamen. Some of the non-flowering plants in the Kotsifou resemble *C. graecum*]

Cyclamen hederifolium (seen) In leaf on Gious Kambos.

[*Primula vulgaris* - **Primrose**]

[*Samolus valerandi* - **Brookweed**]

Punicaceae

Punica granatum - **Pomegranate** (seen) Naturalised (presumably originally planted) [Tree with shiny opposite untoothed leaves]

Ranunculaceae

Anemone coronaria - **Crown Anemone** (2,13). [Distinguished from Turban Buttercup by absence of green sepals]

Anemone hortensis (heldreichii) - **(an anemone)** (2,4). Frequent on phrygana and rocky places Spili, Gious Kambos, below Viglotopi, Kotsifou gorge and Drimiskos pass [Short anemone, white flushed pink; subsp. *heldreichii*]

[*Clematis cirrhosa* - **Virgin's Bower**. Rocky places [Typical Clematis, but evergreen and in fruit]]

[*Delphinium staphisagria* - **(a delphinium)**. (10) Abundant in the ruins and groves at Aradena, rarer in the gorge [Typical hairy delphinium]]

Nigella damascena - **Love-in-a-mist** (7,8)

Ranunculus asiaticus - **Turban Buttercup** (1,7,8,10) Drifts of white on phrygana and rocky road-sides [The only big white or red buttercup here, red separated from Anemone by presence of green sepals]

[*Ranunculus bulbosum* - **Bulbous Buttercup**]

[*Ranunculus bullatus* - **(a buttercup)** Open areas within phrygana. Early flowering [All leaves basal, ovate and warty]]

Ranunculus creticus - **Cretan Buttercup** (3). Cliffs (often shady) of gorges [Big buttercup with shallowly lobed leaves, mostly in fruit]

Ranunculus ficaria - **Lesser Celandine** (4). By ditches [Familiar plant, but big-flowered subsp. *chrysocephalus*]

Ranunculus gracilis - **(a buttercup)** (11). Abundant in rocky phrygana [Neat buttercup, leaves 3-lobed mostly basal), sepals recurved]

Ranunculus muricatus - **Bristly Buttercup** (6). Wet ruts and ditch edges [Hairless annual, with shallow-lobed leaves and fruit with spines on both surfaces]

[*Ranunculus radinotrichus*]

[*Ranunculus subhomophyllus* - **(a buttercup)**. [Differs from other mountain buttercups in its small flowers]]

[*Ranunculus velutinus* - **(a buttercup)**]

Ranunculus sprunerianus (13) [Hairy Sepals]

Resedaceae

[*Reseda alba* - **White Mignonette**]

Reseda lutea - **Wild Mignonette** (7). Rocky ground [pale yellow flowers]

Rosaceae

[*Aphanes arvensis* s.s. - **Parsley-piert**. Bare ground in pine grove [Small annual with parsley like leaves and tiny flowers]]

Crataegus monogyna - **Hawthorn** (1,2,4,5,6). By streams and in woodland [Familiar shrub, but here the densely hairy subsp. *azarella*]

Eriobotrya japonica - **Loquat** (seen). Planted [Robust shrub, large (to 30cm) ribbed and brown-felted leaves],

Prunus domestica - **Wild Plum** (seen). Naturalised [Familiar fruit tree]

Prunus dulcis - **Almond** (2,4,5,10,13). Naturalised by roads [Spiny shrub with narrow leaves, pale flowers and oval velvety fruit]

Prunus persica - **Peach** (seen). Naturalised [Familiar fruit tree]

Prunus prostrata - **Prostrate Cherry** (4,11,12). Frequent on rocky upper slopes of 1500-1900m [Prostrate shrub, with bright pink flowers]

Prunus webbii - (Se)

Pyrus communis - **Pear** (1,2,13). Naturalised on roadside [Familiar orchard tree]

Pyrus spinosa - **Almond-leaved Pear** (1,4,5,13). Rocky slopes and woodland (also in pine grove), by tracks above Anopoli to 1300m and around Omalos plain [Somewhat spiny shrub with narrow elliptical leaves, white flowers]

Rosa canina - **Dog-rose** (Se) Near the Venetian Bridge

Rubus sanctus - **Bramble** (1-14). Scrub, stream-banks [Typical bramble, but with small trefoil leaves]

Sanguisorba minor - **Salad Burnet** (5,10). Grass slopes and olive groves [Familiar herb, represented by subspp. *muricata* and *verrucosa*]

Sarcopoterium spinosum - **Spiny Burnet** (1-13). Often dominant in phrygana [Intricate spiny shrub ("barbed wire plant"), pinnate leaves, globose flower-heads]

Rubiaceae

Asperula idaea (4) Calcareous cliffs 1220 – 1300m [dwarf shrub with tiny 4 petaled pale pink flowers]

Galium aparine - **Cleavers** (2,4,5). [Familiar coarse clambering weed]

[*Galium tricorutum* - **Corn Cleavers**]

Putoria calabrica (4) Tiny pink flowers

Rubia peregrina - **Wild Madder** (6). Climbing on bushes in scrub Monastiraki, Mili, Arkadi and west of Aghios Ioannis [Like a coarse evergreen cleavers with berries]

Sherardia arvensis - **Field Madder** (6). Disturbed ground [Like a compact bedstraw with pink flowers]

[*Valantia hispida* - **Valantia** Rocks, gorges, coastal rocks at [Like a tiny bristly crosswort]]

[*Valantia muralis* Open phrygana [Similar to last, but more softly hairy, fruit stalked "horned"]]

Rutaceae

[*Ruta chalepensis* - **Fringed Rue** Near Imbros Gorge entrance. Rough ground [Two-pinnate blue-green leaves, pungently scented with yellow flowers, fringed with hairs]]

Salicaceae

Populus alba - **White Poplar** (Se)

Populus nigra - **Black Poplar** (4). Planted [Tall tree with fluttering leaves shaped like ace of spades]

Populus tremula - **Aspen** (10). Planted [Medium-sized tree with roundish leaves, slender stalks]

Santalaceae

Osyris alba – **Osyris** (seen) Often common in rocky sites [Broom-like shrub, with three-lobed yellowish flowers and narrow leaves - usually short but up to 2m tall in the last two sites] NB I think what I was calling Ephedra at Armeni Cemetary was this.

Saxifragaceae

Saxifraga rotundifolia subsp. *chryso-splenifolia* - (a saxifrage) (10,13). Shaded gorge rocks [Round-leaved saxifrage, white flowers, spotted yellow or red]

[*Saxifraga hederacea* - (a saxifrage) . Common in crevices among ruins [Slender herb with single white flower and rather ivy-like leaves]]

Scrophulariaceae

Bellardia trixago - **Bellardia** (2,7,9,10). Rough grass coastal sand [Erect opposite-leaved annual; 4-sided spike of white flowers flushed pink/yellow]

[*Cymbalaria muralis* - **Ivy-leaved Toadflax** Walls [Trailing plant with ivy-like leaves; spurred violet and yellow flowers]]

Linaria pelisseriana - **Jersey Toadflax** (7,9). Stony ground and fallow [Delicate erect toadflax, purple-violet flowers]

[*Misopates orontium* - **Weasel's-snout** Rough ground [Slim annual pink snapdragon]]

Parentucellia latifolia - (a **bartsia**) (1-6). Bare areas in phrygana [Short erect herb, opposite leaves, red-purple flowers]

Parentucellia viscosa - **Yellow Bartsia** (2,9). Damp ground fields [Sticky hairy erect herb, with opposite leaves and yellow flowers]

Scrophularia lucida - (a **figwort**) (2-5). Banks [Typical figwort flowers, but pinnately-lobed leaves]

Scrophularia peregrina - **Nettle-leaved Figwort** (10). Pathsides [Typical figwort, shiny nettle-like leaves]

Verbascum arcturus - (a **mullein**) (5,7-10). Cliffs in gorges) [Lower leaves lobed (densely soft-hairy), short spikes of yellow flowers, violet filament hairs (Endemic)]

Verbascum macrurum - (a **mullein**) (1,5,10). Stony ground [Typical mullein, with ovate leaves and tall spikes]

Verbascum sinuatum - **Wavy-leaved Mullein** (9). Pathsides [Differs from other mulleins in pinnately lobed undulate leaves]

[*Verbascum spinosum* - **Spiny Mullein**. Gorges and phrygana [Small spiny domed shrub with narrow white-downy, toothed to lobed leaves (Endemic)]]

[*Veronica anagallis-aquatica* – **Blue Water Speedwell**]

Veronica cymbalaria - **White Speedwell** (4). Paths/walls [Decumbent annual, lobed leaves and white flowers]

[*Veronica glauca* subsp. *kavusica* - (a **speedwell**). Ledges below Omalos cave [Erect annual, deep blue flowers and lobed leaves]]

Veronica persica - **Common Field-speedwell** (Se) Groves [Familiar annual weed]

Veronica thymifolia - (a **speedwell**) (11). Open soil in scree, tree-line to 1900m, Kakovoli [Woody-based perennial, oblong leaves and few-flowered clusters of blue or pink flowers]

Solanaceae

[*Hyoscyamus albus*- **White Henbane** Nutrient-rich margins and goat-frequented overhangs and in Kourtaliotis gorge [Irregularly lobed leaves, greenish-white flowers with purple throat]]

Mandragora autumnalis - **Mandrake** (3,5,8,9,10 – in fruit). Rocky turf [Violet flowers on stalks in centre of big crinkly rosettes]

[*Nicotiana glauca* - **Shrub Tobacco** Naturalised by roads [Tall slender shrub, with scattered glaucous leaves and tubular yellow flowers]]

Styracaceae

Styrax officinalis - **Storax** (4,8,10). Scrub [Shrub with alternate oval leaves, and pendant fragrant white flowers]

Tamaricaceae

Tamarix smyrnensis - (**a tamarisk**) (1). probably always planted on beach at Plakias (most pollarded 1999/2000), recently planted on Triopetra beach [Flowers would be 5-lobed (not 4) and pink - none seen]

Theligonaceae

[*Theligonium cynocrambe* – **Dog Spinach**]

Thymelaeaceae

Daphne sericea -) (2,12). Short dense evergreen shrub, crowded evergreen leaves; fragrant pink flowers]

Thymelaea hirsuta - (7,8). Rocky hills [1m shrub, white stems, scale-leaves (white-downy within)]

Thymelaea tartonraira - (3). Limestone phrygana [Small shrub with many silvery oblong leaves, and clusters of yellowish flowers; subsp. *argentea*]]

Ulmaceae

[*Ulmus minor* - **Smooth-leaved Elm** . Also probably planted by river and ditches at Agia [Typical elm; probably subsp. *minor*]]

Zelkova abelicea - **Zelkova** (12,13). Rocky slopes Psiloritis and above Omalos plain [Large shrub with small coarsely lobed leaves (Endemic)]

Umbelliferae (Apiaceae)

[*Apium nodiflorum* – **Fool's Watercress**]

[*Conium maculatum* – **Hemlock**]

Crithmum maritimum - **Rock Samphire** (seen). Coastal slopes (rocks and walls), Plakias, Damnoni and Triopetra [Succulent 1-2 pinnate leaves; perennial] Not in flower

Chaerophyllum creticum (13) A large, bright yellow flowered, feathery leaved umbellifer, endemic to Crete and confined to the Omalos plateau.

Daucus carota - **Wild Carrot** (1,4-8). Grass roadside [Familiar herb, divided bracts, bur fruit]

[*Daucus guttatus* (a carrot). Upper sands at Plakias and Kotsifou gorge [Short annual like latter]]

Eryngium campestre - **Field Eryngo** (1). Phrygana [Wide branched greenish spiny perennial, heads 10-15mm]

[*Eryngium maritimum* - **Sea Holly** Low dunes [Stiff leathery and spiny blue-green perennial]]

Ferula communis - **Giant Fennel** (1-7,10). Roadsides and abandoned land [Striking big herb with feathery leaflets and many yellow umbels]

Foeniculum vulgare – **Fennel** (seen). Roadsides and abandoned land.

[*Lagoecia cuminoides* – **Lagoecia**]

Lecokia cretica (3,7,13). Woods, groves and moist waysides [Robust perennial with 1-2 pinnate triangular leaves; large warty asymmetric fruit]

Oenanthe pimpinelloides - **Callous-fruited Water-dropwort** (2,3,6,8,10,12). Ditch/stream edges, seasonally wet turf, fallow [White perennial with parts of umbel distinct from one another]

[*Orlaya daucoides* Rocky verges [Erect annual with bur fruit and outer petals much bigger than the inner]]

[Pseudorlaya pumila More stable sands at Plakias [Rather like *Daucus guttatus*, but much more densely hairy]]

[Scaligeria napiformis - Scaligeria Shade and rocks [Slender bright green, lower leaves 2-3 divided, upper sparse, often linear]]

Scandix pecten-veneris - Shepherd's-needle (1-10). Disturbed or cultivated sites, rough grass [Stout widely branched with divided glossy leaves and rounded umbels of yellow green flowers]

[Smyrniium olusatrum – Alexanders]

Smyrniium perfoliatum - Perfoliate Alexanders (2). Grass by stream [Differs in brighter yellow flowers; upper leaves simple, oval and clasping]

[Tordylium apulum - (a hartwort) Disturbed ground [Annual with singly pinnate leaves, outer petal much larger; fruit disk-like with beaded margin (“false-teeth plant”)]

[Torilis leptophylla (a bur-parsley). Rocky ground [Rough hairy, 2-pinnate, small bare fruit; umbels leaf-opposed]]

[Torilis nodosa – Knotted Hedge-parsley]

Urticaceae

[Parietaria cretica – Cretan Pellitory]

Parietaria judaica – Pellitory-of-the-wall (5). Walls and rocks [Similar perennial, with leaves 1-7cm long]

Urtica pilulifera - Roman Nettle (5,9,10). Caves, ledges, areas frequented by goats [Annual with jagged toothed leaves, globular fruiting heads and stinging hairs]

[Urtica urens – Small Nettle]

Valerianaceae

[Centranthus calcitrapae (7) Rocky ground, especially below cliffs [Annual, opposite pinnately-divided leaves; pink-purple flowers, pouched at base]]

[Centranthus ruber - Red Valerian. Naturalised on ruins and walls [Familiar garden plant, with undivided leaves]]

Valeriana asarifolia - Cretan Valerian (1,2,5,6). Limestone cliffs/crevices [White valerian, basal leaves kidney-shaped; flower-head dense (Endemic)]

[Valerianella coronata - (a corn-salad) [Regularly branched annual, narrow leaves, globose inflorescence, calyx regularly 6-lobed]]

[Valerianella echinata - (a corn-salad) . Rocky ground Fourfouras and track to Kakovoli 1200-1400m [As latter, calyx with 3 lobed – one long and two short]]

Verbenaceae

Lantana comosa - Lantana (6). Naturalised on verges along the main north coast road [Scrambling prickly shrub with oval leaves and heads of orange and yellow flowers]

[Verbena officinalis – Vervain]

Vitex agnus-castus - Chaste-tree (seen). Damp gullies; also on seepage clay [Aromatic scrub and opposite digitate leaves, and fruiting spikes like peppercorns]

Violaceae

Viola fragrans (11) Lots of this lovely violet on Paknes, two-tone yellow

Vitaceae

Vitis vinifera - Common Vine (1-13). Naturalised in groves and hedges [Familiar climber]

MONOCOTYLEDONES

Agavaceae

Agave americana - **Century Plant** (1-10). Naturalised on roadsides and along north coast [Huge rosettes of grey spear-shaped leaves and last year's tall stems bearing saucer-sized heads]

Amaryllidaceae

Narcissus tazetta - **Polyanthus Narcissus** (2). Leaves and fruit by streams on Gious Cambos Frequent by streams/ditches, also field-banks [Typical daffodil leaves and several-fruited stems]

Pancratium maritimum - **Sea Daffodil** (1,9 leaves only). Coastal sands [Grey daffodil leaves]

Araceae

Arisarum vulgare - **Friar's Cowl** (5,6,10,13). Rock ledges [Patch-forming with heart-shaped leaves and spadix under a hooded spathe]

Arum concinatum - **Large Cuckoo Pint** (9). Olive groves and gorge woodland [Like big Cuckoo Pint]

Arum creticum - **Cretan Arum** (5). Rock, scree, stone-heaps [As latter but with yellow spadix and spathe -this folded backward]

Arum ideaum - **Cretan Mountain Arum** (11,12). Frequent in Lefka Ori woods above Anopoli at 1400m, shaded Imbros gorge and rocks at and near Omalos cave [Like Cuckoo Pint (Endemic)]

Biarum davisii (10) (Autumn flowering biarum, on fruit at Arendaina gorge)

Dracunculus vulgaris - **Dragon Arum** (1-14). Olive groves and disturbed rocky ground [Purple-striped stems, digitally divided leaves, long purple spathe]

[*Zantedeschia aethiopica* - **Arum-lily** Naturalised [Familiar garden plant]]

Cyperaceae

[*Carex distachya* – (a sedge)]

[*Carex divisa* – Divided Sedge]

[*Carex divulsa* – Grey Sedge]

[*Carex flacca* – Glaucous Sedge]

[*Carex pendula* – Pendulous Sedge]

[*Cyperus longus* – Galingale]

Eleocharis palustris – **Common Spike-rush** (9)

[*Schoenus nigricans* – Black Bog-rush]

[*Scirpioides holoschoenus* – Clustered Club-rush]

[*Scirpus cernuus* – Nodding Club-rush]

Dioscoreaceae

Tamus communis - **Black Bryony** (1,5,13). Shaded gorge-beds/gullies [Unarmed climber with cordate leaves]

Graminaceae (Poaceae)

[*Aegilops geniculata*]

Aegilops neglecta (8)

[*Aira elegantissima*]

[*Anisantha diandra* – Great Brome]

Anthoxanthum odoratum – **Sweet Vernal-grass** (seen)

Arundo donax – **Giant Reed** (1-14)

Avena sterilis – **Winter Wild-oat** (Se)

Brachypodium sylvaticum – Slender False-brome (seen)
Briza maxima – Great Quaking-grass (1-10)
 [Catapodium marinum – Sea Fern-grass]
 [Catapodium rigidum – Fern-grass]
Dactylis glomerata – Cock’s-foot (seen)
 [Hyparrhenia hirta]
Lagurus ovatus – Hare’s-tail (1,9)
Lolium perenne – Perennial Rye-grass (seen)
Melica ramosa (seen)
 [Poa bulbosa – Bulbous Meadow-grass]
 [Sesleria doerfleri]
Sporobolus pungens (seen)
Vulpia ciliata – Bearded Fescue (seen)
 [Poa infirma – Early Meadow-grass]
Polypogon monspeliensis Annual Beardgrass (Seen) Probably introduced

Iridaceae

Crocus sieberi - (a crocus) (11 - flowering in stony ground 1500-1900m on Paknes [Typical white crocus, purple streaked outside; narrow leaves with white midrib (Endemic)]
 [Freesia refracta - Freesia Naturalised [Familiar ornamental with spikes of scented bell-shaped flowers and linear leaves]]
Gladiolus italicus - Field Gladiolus (1-14). Olive groves and fallow [Typical large pink-purple gladiolus. Plants in rocky phrygana at last site have stamen features etc. of *G. byzantinus* – unknown on Crete]
Iris albicans - White Iris (5,6,10). Around cultivation and cemeteries in villages [Typical large iris, always with white flowers]
Iris tuberosa (= *Hermodactylus tuberosus*) - Widow Iris (2,3,5, in fruit). Fallow and scrubby banks, [Iris-like flowers, yellow-green with blackish blotch on falls; leaves quadrangular]
Iris unguicularis subsp. *cretensis* - Cretan Iris (2,6 in fruit). Rocky phrygana [Compact purple iris with yellow blotches (Endemic)]
Moraea sisyrinchium (= *Gynandiris sisyrinchium*) - Barbary-nut (1,2,6,7,10). Common (compact clay among rock) [Blue Iris-like flowers, opening in sun; leaves narrow and sheathing stem]
Moraea mediterranea (= *Gynandiris monophylla*) (1) – the dwarf plants on Agios Pavlos headland with pale flowers appear to be this
Romulea bulbocodium Romulea (4, 7, 9, 11, 14). Compacted clay (paths etc) and moist pans and paths [Small, crocus-like; white flowers have a yellow throat; leaves narrow-linear]

Juncaceae

[*Juncus articulatus* – Jointed Rush]
Juncus bufonius – Toad Rush (seen)
 [*Juncus heldreichianus* – (a rush)]
 [*Juncus inflexus* – Hard Rush]
 [*Luzula nodulosa* – (a woodrush)]

Liliaceae

[*Allium ampeloprasum* – Wild Leek]
Allium nigrum (a garlic) (8 in fruit). [Similar to last, but leaves all basal and narrower, and pale heads]

[*Allium roseum* **Rosy Garlic** Moist sites, often in shade [Low garlic with grass-like leaves and loose heads of rosy-pink flowers]]

Allium subhirsutum (**a garlic**) (1,8). Rocky areas and phrygana [Grass-like leaves with sparse hairs and umbels of white flowers]

[*Allium trifoliatum* - (**a garlic**) Fallow and waste [Similar to *A. subhirsutum*, flowers pink-tinged]]

Asparagus aphyllus subsp. *orientalis* - (**an asparagus**) (3,9,10,12). Olive groves and phrygana [Scrambling branched woody perennial, thorny "leaves" (actually branches)]

Asphodeline lutea - **Yellow Asphodel** (2,5,9,10,12,13). Phrygana [Similar to last, but with stiffer leaves and stout yellow spikes]

Asphodelus ramosus - **Common Asphodel** (1,2,4,5,10,12,13). Phrygana and fallow [Stout branched candelabra head of pinkish-white flowers]

[*Colchicum macrophyllum* - (**an autumn crocus**) Fallow terraces [Rosettes of large corrugated leaves, with a fruit capsule hidden at their base]]

Fritillaria messanensis (**now sphaciotica on Crete**)- (**a fritillary**) (2) Rocky areas of Gious Kambos. [Typical slender fritillary with linear leaves and nodding brownish flowers, usually mottled/chequered]

[*Gagea bohemica* – **Early Star-of-Bethlehem**]

Gagea chrysantha (4). Stony snow-melt at 1800m on Kakovoli, and with latter, Xiloskalon [Similar, but true yellow and broader leaves]

Gagea graeca - **Greek Star-of-Bethlehem** (1-4,10,12,13). Common in rock crevices, phrygana and bare soil [Slender erect perennial, several linear leaves; 3-5 white flowers, often nodding]

[*Gagea peduncularis*]

Muscari comosum - **Tassel Hyacinth** (1-4,6,13). Widespread in rocky phrygana and roadsides [Spike of pale brown tubular flowers with cream teeth, and prominent bright violet terminal tassel]

Muscari neglectum - **Common Grape-hyacinth** (10,11). Woods and rocks from 1300-1800m [Typical grape-hyacinth, but rather dwarfed]

Muscari spreitzenhoferi - (**a tassel hyacinth**) (1,7,11). Rock-crevices near the [Similar to latter, but shorter, teeth of fertile flowers yellow, and tiny terminal tassel]

Ornithogalum divergens - (**a star-of-Bethlehem**) (2,5,6). Fallow and open land [Typical white star-of-Bethlehem with widely-branched corymb of 1cm flowers]

Ornithogalum exscapum - (**a star-of-Bethlehem**) (3,8,10). Clay areas [Similar, widely branched from base, flowers much bigger]

Ornithogalum narbonense - (**a star-of-Bethlehem**) (1,7). Dry stony slopes [Elongate white spikes of white star-like flowers]

Ruscus aculeatus - **Butcher's Broom** (3,5). Shaded or sheltered gorge) and other rock crevices [Low evergreen shrub with lanceolate spine-tipped "leaves" (branches)]

Scilla nana - **Cretan Squill** (4,11). Frequent on recent snow-lie 1700-1900m on Kakovoli (flowering at 1800m+) and at 1600m above Xiloskalon [Low delicate squill with pale-blue star-like flowers, fading whitish (Endemic)]

Smilax aspera - **Common Smilax** (seen). Clambering on scrub [Cordate leaves with some prickles on leaves, stalks and/or stems]

Tulipa bakeri - **Baker's Tulip** (13). Abundant on the Omalos – in fallow [Similar to *T. saxatilis* (from which possibly not distinct) but smaller darker flowers (Endemic)]

Tulipa cretica - **Cretan Tulip** (3). Drimiskos pass (notably "slag-heap" knoll); also on rocks by foot-tunnel mouth, Plakias (Possibly on Kakovoli) [Small white tulip, yellowish base to petals and wavy leaves (Endemic)]

Tulipa doerfleri - **Orange Tulip** (2,6). Often common in cultivated and fallow fields on Gious Kambos [Orange-red tulip; linear-lanceolate leaves (Endemic)]

Tulipa saxatilis - **Rock Tulip** (2,5) [Pink tulip with white-edged yellow base to petals and rather oblong leaves]

Urginea maritima - **Sea Squill** (1-14). Rocky phrygana [Rosettes of large leathery leaves emerging from a big exerted bulb – “dog onion”]

Orchidaceae

Due to the complicated status of orchid nomenclature and the myriad of books on the orchids of Crete and Greece still being published, it is difficult to keep up to date with the name changes. This list uses the naming given in Kretzschmar and Kretzschmar (2004) (the popular pocket book on Crete orchids).

Aceras anthropophorum – **Man Orchid** (1,2,3,6,9) [Greenish yellow flower-spikes, edged in red – no spur, lip “anthropoid”]

Anacamptis pyramidalis – **Pyramidal Orchid** (1,2,3,6,7,9,10) Widespread in phrygana, locally, scrub: [Dense pink spikes with long thin spur, deeply 3-lobed lip; narrow leaves]

Barlia robertiana – **Giant Orchid** (1,2,3,5,6,9,10) Light shade and lush phrygana [Stout and fragrant, with many greenish-purple flowers]

Cephalanthera cucullata – Hooded Helleborine (5,6) The white Orchid buds Tessa found were probably both these.

Dactylorhiza romana – **Roman Orchid** (6) Agios Ioanis

Limodorum abortivum – **Violet Limodore** (6) Agios Ioannis [Purplish saprophyte with scale-like leaves]

[*Listera ovata* – *Common Twayblade* on steep path down to Spili]

Neotinea maculata – **Dense-flowered Orchid** (2,6) [Small, dense spike of tiny greenish white flowers; stem and leaves spotted/streaked]

Ophrys bombyliflora – **Bumble-bee Ophrys** (2,5,6,10) [Round right green sepals and brown very furry lip]

Ophrys candida – **White Ophrys** – Between Tiopetra and Agios Pavlos, (1) [large, pink sepals and white pattern on the lip]

Ophrys cretica subsp. cretica – **Common Cretan Ophrys** (2,3,4,6,9) [Sepals green (or rose-tinted below); lip marked (or speculum outlined) in white]

Ophrys episcopalis – **Large-flowered Bee Ophrys** (1,2,5,6,9) [larger flowers with spreading hairs, 3-5mm long “horns” and white/yellow band around speculum]

Ophrys fusca subsp. creberrima – **Creberrima Ophrys** (6, 8) [fusca type, with the lip edges turned down]

Ophrys fusca subsp. cressa – **Cressa Ophrys** (1,2,6,8) [fusca type, flatter lip, often yellow border]

Ophrys heldreichii – **Heldreich’s Ophrys** (1,2,5,6,8) [Distinguished from all other pale pink sepalled Ophrys by its deeply three-lobed labellum, the central lobe long-ovate]

Ophrys iricolor – **Rainbow Orchid** (2,6)[Unmistakable blue velvety lip, red underneath]

Ophrys mammosa – **Breasted Ophrys** (8)

Ophrys phrygana – **Phrygana Ophrys** (1,3,7,10) [Plants with larger yellow-lipped flowers. Lip held out straight]

Ophrys sicula – **Small Yellow Ophrys** (1,2,3,5,6) Like Ophrys phryganae. [Green/sepals, square label-lum 6-9mm. lip bent down. Endemic]

Ophrys sphegodes subsp. cretensis – **Small Cretan Spider Ophrys** (8) [green sepals/petals, brown lip rounded in shape – early flowering]

Ophrys sphegodes subsp. gortynia – (1,8) [lip spreading, sometimes yellow edged, later flowering]

Ophrys spruneri subsp. grigorianae – **Grigorian Ophrys** (10,11,12): [Exquisite! Rose pink sepals, bright blue speculum on brown-black labellum – this ssp as the lip not strongly divided into lobes]

Ophrys tenthredinifera – **Wasp Ophrys** (2,4,6) [Round pale pink sepals, and large square brown labellum with a wide straw-yellow margin – like Neopolitan ice-cream!]

Orchis anatolica – **Anatolian Orchid** (3): [Long purple spikes, flowers with long narrow spur and labellum with two rows of dark spots]

Orchis boryi – **Bory's Orchid** (2,3,5,6) *Commonest in grassy phrygana: [Resembles large Green-winged Orchid, upper flowers opening first, white or pink forms not uncommon]*

Orchis collina – **Hill Orchid** (1,2,6,12) *Grassy phrygana: [Few flowered spikes, olive-brown flowers, pink centre to labellum]*

Orchis fragrans – **Fragrant Orchid** (1,8)

Orchis italica – **Italian Orchid** **Common**. Frequent and often gregarious in phrygana, grassy areas and old terraces: [Large bright pink spikes, labellum of each flower with long thin lobes]

Orchis lactea – **Milky Orchid** (1,2,6) *Phrygana: [Dense milky white spikes, with many pink spots; se-pals with some green, notably at base] Often seen gone over this year*

Orchis laxiflora – **Lax-flowered Orchid** (2, 6,9) *mostly in damp seepage areas: [Long purple spikes, leafy stems]*

Orchis papilionacea subsp. alibertis – **Albertis' Butterfly Orchid** (1,2,6,9) [Distinctive few-flowered spike, large pink flowers with darker pink lines]

Orchis papilionacea subsp. heroica – **Heroic Butterfly Orchid** - Possibly one of these at Viglotopi

Orchis pauciflora – **Few-flowered Orchid** (2,6,13) [Spikes of 3-7 yellow flowers, labellum brighter yellow]

Orchis provincialis – **Provence Orchid** **above Mourne** (3) [Pale yellow/cream orchid]

Orchis quadripunctata – **Four-spotted Orchid** (2,3,6,7,8) [Often tiny, flowers small, usually pink with 2-6 small spots in centre of labellum]

Orchis simia – **Monkey Orchid** (6) [Dense spikes, flowers with grey-pink "helmet", labellum like dark purple dancing monkey]

Orchis sitiaca – **Sitia Orchid** (2,3) [Differs from *Orchis anatolica* in pale pink flowers, with a green blotch on lateral sepals Endemic, hybrid swarms with *Orchis anatolica* frequent!]

Orchis tridentata – **Three-toothed Orchid** (2,6,13) [Short almost conical spike, with violet-lilac flowers whose 13-20mm long labellum is strongly marked with purple lines]

Serapias bergonii – **Bergoni's Tongue Orchid** **frequent**: [Reddish-brown spikes with tonguelike lip with two dark blobs at base, and long bracts]

Serapias lingua – **Tongue Orchid** **Frequent**, *generally in damper phrygana: [Differs in long lip with 1 basal swelling, lip often much paler or pinker than the rest of flower]*

Serapias cordigera subsp cretica (6,9) [Deep red, heart shaped hairy lip]

Serapias parviflora **Small flowered Tongue Orchid** – possibly one at Armeni Cemetary

Palmae

Phoenix theophrasti – **Cretan Date-palm** (9). Near Preveli. [Typical date-palm with pinnately cut leaves]

Potamogetonaceae

Posidonia oceanica - **Posidonia** (1). Fragments of green leaves of plants, or cast-up balls of dead leaves on beaches [Submerged "sea-grass" with long ribbon-like leaves]

Typhaceae

Typha domingensis - (a reedmace) (9). Marsh and ditch by road [Typical reedmace]

PTERIDIOPHYTA

Adiantaceae

Adiantum capillus-veneris – Maidenhair Fern (6,8,10)

Aspleniaceae

Asplenium onopteris – Irish Spleenwort (6)

[*Asplenium trichomanes* – Maidenhair Spleenwort]

Asplenium ceterach (= *Ceterach officinarum*) – Rusty-back Fern (4,5,10,13)

Athyriaceae

Athyrium felix-femina - Lady Fern (10)

Dryopteridaceae

Dryopteris pallida - (a buckler-fern) (10)

Equisetaceae

[*Equisetum ramosissimum* - Branching Horsetail]

[*Equisetum telmateia* – Giant Horsetail]

Hypolepidaceae

Pteridium aquilinum – Bracken (3,6,10,13)

Isoetaceae

[*Isoetes histrix* – Land Quillwort]

Pteridaceae

Pteris vittata – (10) Endemic

Selaginellaceae

Selaginella denticulata – Mediterranean Selaginella (common)

Sinopteridaceae

Anogramma leptophylla – Jersey Fern (5,6,13)

Cheilanthes maderensis(*acrostica*) – Cliff-brake (1,10,13)

SPERMATOPHYTA

GYMNOSPERMAE

Cupressaceae

Cupressus sempervirens – Italian Cypress (1-14)

Cupressus sempervirens ssp *horizontalis* – (3,6,10,11,12)

Juniperus oxycedrus – Prickly Juniper (11)

Ephedraceae

Ephedra campylopoda – Joint Pine - Common

Pinaceae

Pinus halepensis subsp. *brutia* (9-14)

Pinus nigra Black Pine (10,11,12,13)

Systematic List Number 2 Birds

Thanks to Ian Black for sharing his lists.

Little Grebe	<i>Tachybaptus ruficollis</i>	Several individuals seen the one day around the water bodies at Georgioupolis pools & Agia Reservoir (12)
Squacco Heron	<i>Ardeola ralloides</i>	An individual seen at Georgioupolis flying in as we left, and good views at Agia Lake (12)
Little Egret	<i>Egretta garzetta</i>	Agia Reservoir (12)
Grey Heron	<i>Ardea cinerea</i>	Agia Reservoir (12)
Purple Heron	<i>Ardea purpurea</i>	Agia Reservoir. A low fly-by (12)
Mute Swan	<i>Cygnus olor</i>	Agia Reservoir (12)
Gadwall	<i>Anus strepera</i>	Agia Reservoir (12)
Mallard	<i>Anus platyrhynchos</i>	Agia Reservoir (12)
Garganey	<i>Anus querquedula</i>	Agia Reservoir, close and in stunning light! (12)
Pintail	<i>Anus acuta</i>	Agia Reservoir (12)
Pochard	<i>Aythya farina</i>	Agia Reservoir, a couple of pairs (12)
Griffon Vulture	<i>Gypus fulvus</i>	seen every day, 24 over Kourtaliotis
Bonelli's Eagle	<i>Hieraaetus fasciatus</i>	Nesting in Kourtaliotis, watched the pair circling low for some time – great (7,9)
Marsh Harrier	<i>Circus aeruginosus</i>	Sitting on the wire as we approached Agia Reservoir, then a very close fly-by for Lisa (12)
Buzzard	<i>Buteo buteo</i>	(3,8,7,14)
Peregrine	<i>Falco peregrinus</i>	Heard on the Gious Cambos (2,3)
Eleonora's Falcon	<i>Falco eleonora</i>	Scythe-like wings (12)
Kestrel	<i>Falco tinnunculus</i>	Common seen most days
Chukar	<i>Alectoris chukar</i>	Fantastic views on the Omalos, also Gious Cambos and Mourné (3,6,13. Heard on other days)
Little Crake	<i>Porzana parva</i>	Three individuals seen very close and confiding, great light! Agia Reservoir (12)
Baillon's Crake	<i>Porzana pusilla</i>	Two seen very close, fantastic views, probably nesting Agia Reservoir (12)
Moorhen	<i>Gallinula chloropus</i>	individuals seen around water bodies (12)
Coot	<i>Fulica atra</i>	individuals seen around water bodies (12)
Snipe	<i>Gallinago gallinago</i>	Three individuals flew up, one at a time, at Viglotopi (8)
Yellow-legged Gull	<i>Larus michahellis</i>	Common & widespread seen everyday
Rock Dove/Feral Pigeon	<i>Columba livia</i>	Common & widespread seen most days
Woodpigeon	<i>Columba palumbus</i>	Seen
Collared Dove	<i>Streptopelia decaocto</i>	(8-10)
[Turtle Dove	<i>Streptopelia turtur</i>	frequently recorded over the two weeks]
Cuckoo	<i>Cuculus canorus</i>	Heard(8) 2 rufous morph seen (10)
Scops Owl	<i>Otus scops</i>	Heard in the evening at Spili & Omalos
[Swift	<i>Apus apus</i>	regularly seen over the course of the trip often in large numbers with Pallid & Alpine Swifts]
Alpine Swift	<i>Apus melba</i>	Lovely scythe like wings, very low and calling noisily at Agios Pavlos (1,9,10,12)

Hoopoe	<i>Upupa epops</i>	Lovely views at Phaestos and on the Omalos (8,12,13)
Bee-eater	<i>Merops apiaster</i>	What a great year for this species – Dave H and I saw and heard them at Phaestos, they were in the skies at Agia Lake and also on the Omalos - over the bee hives...
Wryneck	<i>Jynx torquilla</i>	Seen and heard on the Omalos on the last morning – great!
Crested Lark	<i>Galerida cristata</i>	Occasional sightings – lovely view of one on a Gorse Bush near Mourne
Woodlark	<i>Lullula arborea</i>	Regularly heard or seen over the two weeks
Crag Martin	<i>Hirundo ruestris</i>	regularly recorded around cliff crags & rocky outcrops
Swallow	<i>Hirundo rustica</i>	Common (1-8)
Red-rumped Swallow	<i>Hirundo daurica</i>	Dave H photographed this lovely bird at Spili
Yellow Wagtail	<i>Motacilla flava</i>	Ian saw a small group of black-headed <i>feldegg</i> race at Triopetra
White Wagtail	<i>Motacilla alba</i>	(1)
Wren	<i>Troglodytes troglodytes</i>	(6,9,13)
[Robin	<i>Erithacus rubecula</i>	scattered recordings around various habitats over the two weeks]
Nightingale	<i>Phoenicurus ochruros</i>	Heard and seen (glimpsed!) below the peonies
Black-eared Wheatear	<i>Oenanthe leucura</i>	This gorgeous bird was seen frequently in the second week
Northern Wheatear	<i>Oenanthe oenanthe</i>	Recorded around rocky outcrops
Whinchat	<i>Saxicola rubetra</i>	Regularly recorded
Stonechat	<i>Saxicola rubicola</i>	Regularly recorded
Blackbird	<i>Turdus merula</i>	A common species recorded everyday
Blue Rock Thrush	<i>Monticola solitarius</i>	Great views in the Kourtaliotis and Damnoni (7,9,10,11)
Blackcap	<i>Sylvia atricapilla</i>	A common species recorded everyday
Whitethroat	<i>Sylvia communis</i>	heard twice in the first part of the trip (11 & 14)
Sardinian Warbler	<i>Sylvia melanocephala</i>	A common species recorded most days
Cetti's Warbler	<i>Cettia cetti</i>	A common species frequently recorded around riparian Vegetation 0,1,3,6,9,10,12)
Willow Warbler	<i>Phylloscopus trochilus</i>	(1(hd),3-7)
[Pied Flycatcher	<i>Ficedula hypoleuca</i>	Scattered sightings of this delightful species]
[Semi-collared Flycatcher	<i>Ficedula semitorquata</i>	both male & females were recorded frequently around Anapoli]
Great Tit	<i>Parus major</i>	Frequently recorded most habitats
Blue Tit	<i>Parus caeruleus</i>	Recorded most days
Woodchat Shrike	<i>Lanius senator</i>	Stopped for views of this striking bird on the last day (11,13)
Jay	<i>Garrulus glandarius</i>	A couple were hassling the Hoopoes on the Omalos!
Jackdaw	<i>Corvus monedula</i>	Recorded around rocky outcrops with other corvids (7)
Red-billed Chough	<i>Pyrrhocorax pyrrhocorax</i>	Recorded every day around mountainous areas
Alpine Chough	<i>Pyrrhocorax graculus</i>	David H got great photos of these walking the turf on Psiloritis
Hooded Crow	<i>Corvus cornis</i>	Recorded every day in various habitats
Raven	<i>Corvus corax</i>	Frequently encountered around rocky areas of the trip
Golden Oriole	<i>Oriolus oriolus</i>	Heard up at Anapolis both days, Lisa saw one flash by at the top of the Samaria Gorge!
House Sparrow	<i>Passer italiae</i>	A common species recorded everyday

Chaffinch	<i>Fringilla coelebs</i>	A common species recorded everyday
Linnet	<i>Carduelis cannabina</i>	small flocks (4,11,12)
Goldfinch	<i>Carduelis carduelis</i>	Recorded frequently
Siskin	<i>Spinus spinus</i>	Agia Reservoir
Greenfinch	<i>Carduelis chloris</i>	(10,11,12)
Cirl Bunting	<i>Emberiza cirlus</i>	(2,3)
Corn Bunting	<i>Emberiza calandra</i>	Recorded regularly (1,2,6,9)

Systematic List Number 3 Butterflies

Due to being the only leader, something had to give and this list is cobbled together from notes and my daily report. The taxonomic nomenclature & systematic order follows both that of *Collins: Butterflies of Europe, Tolman & Lewington*. The numbers indicate the dates on which a species was seen, and noted down at the time; there will be omissions!

Papilionidae

Swallowtail	<i>Papilio machaon</i>	(4,7) 2 below Gazaro
Scarce Swallowtail	<i>Iphiclides podalirius</i>	Photographed above Agios Ioannis (6)
Cretan Festoon	<i>Allanacstria cretica</i>	(3,4,6,7)

Pieridae

Large White	<i>Pieris brassicae</i>	(3,4) several sightings over open areas
Small White	<i>Artogeia rapae</i>	(7)
Orange-tip	<i>Anthocharis cardamines</i>	(seen) scattered sightings
Clouded Yellow	<i>Colias crocea</i>	occasionally around rocky areas (1,3)
Cleopatra	<i>Gonepteryx cleopatra</i>	another common species seen regularly over the course of the two weeks

Lycaenidae

Small Copper	<i>Lycaena phlaeas</i>	(3,4)
Common Blue	<i>Polyommatus icarus</i>	(3,4,5) regularly encountered on sunny days across the trip

Nymphalidae

Red Admiral	<i>Vanessa atalanta</i>	(6)
Southern Comma	<i>Polygonum egea</i>	Kourtalotis gorge, several individuals, (7)
Painted Lady	<i>Cynthia cardui</i>	scattered sightings (1,7)

Satyridae

Cretan Grayling	<i>Hipparchia cretica</i>	an individual was recorded basking at Gious-Kambos (24 & 27)
Wall Brown	<i>Lasiommata megera</i>	(5)
Speckled Wood	<i>Pararge aegeria</i>	(6) (The European colour morph was encountered quite frequently, be careful not to mix it up with Wall Brown which was very similar due to this species light brown colour morph)

Systematic List Number 4 Reptiles and Amphibians

Balkan Green Lizard	<i>Lacerta trilineata</i>	this species was regularly encountered amongst the low-lying scrub across the trip, often the stripy juveniles
Cretan Wall Lizard	<i>Podarcis cretensis</i>	Common around Arendaina
Green Toad	<i>Bufo viridis</i>	this species was quite vocal at night around Plakias, and spawn was seen in the sheep troughs on Psiliritis
Cretan Water Frog	<i>Pelophylax cretensis</i>	Lots of very relaxed frogs in the tank behind Viglotopi
Stripe-necked Terrapin	<i>Mauremys caspica</i>	plentiful around Agia Reservoir and Georgiopolis
Oscillated Skink	<i>Chalcides ocellatus</i>	One basking by the edge of the track at Viglotopi
Turkish Gecko	<i>Hemidactylus turcicus</i>	Behind the icons, in the little Agios Yorgos chapel

Other Species noted

Cretan Hare	<i>Lepus capensis</i>	One seen on day one
Cretan Badger	<i>Meles Meles ssp arcalus</i>	Several active dens seen – endemic sub species
Emperor Dragonfly	<i>Anax imperator</i>	This lovely species was recorded seen at the Venitian Bridge and Agia Reservoir
Broad Scarlet	<i>Crocothemis erythraea</i>	Noted at Viglotopi
Land Crab	<i>Potamon potamios</i>	At both Krea Vrisi and near Sellia
Longhorn Moth	<i>Adela paludicolella</i>	A little swarm of these amazing things at the Agios Yorgos Chapel