

Crete in Spring 2023

A Greentours Trip Report



Lead by Fiona Dunbar and Amanda Borrows

Daily Report by Fiona Dunbar, Species Lists by Amanda Borrows

Day 0 Friday 7th April Arrival in Spili

Having arrived a couple of nights early in Spili and spent the day checking sites to see how the season was going, I drove to the airport to meet the incoming group. Everyone arrived without drama, and we headed for Spili in the minibus. A packed supper of pies fresh from the Spili bakery, fruit, water, and juice filled in any gaps as we would be too late for a taverna. Heracles and Christina were waiting to greet us and take us to our rooms, with teas and coffees for those in need of a cuppa, and we settled in for the night around 10 pm.

Day 1 Saturday 8th April The Gious Cambos

Our day started with a great breakfast of freshly squeezed orange juice, Greek yoghurt, honey walnuts, fresh bread and butter and a selection of jams made by Christina. We had a latish start to give time for unpacking and picnic preparation, setting off for the Gious Cambos at 10am.

Within 20 minutes we had made our first stop and immediately were surrounded by lovely flowers. In the verges and on the bank by the track were Spiny Burnet (*Sarcopoterium spinosum*) and the pretty yellow hairy pea *Vicia hybrida*. Red cups of *Tulipa doerfleri* dotted the banks, and white stars of *Gagea graeca* were scattered throughout, with lots of Red Bartsia. The first budding Dragon

Arums (*Dracunculus vulgaris*) with their stunning snake-skin stems were seen. *Euphorbia characias* and *helioscopia* brought splashes of light green. Within yards of the van we found Naked Man Orchid (*Orchis italica*), also *Orchis boryi*, and *laxiflora*. *Aceras anthropomorphum* was more subtle, green, and brown, delicate *Orchis quadripunctata* and then our first bee orchids of the day with *Ophrys bombiliflora* and *sicula*. The damper areas had *Oenanthes pimpinelloides* or Hollow-stemmed water dropwort. Griffon vultures soared overhead despite the cloudy morning, ravens also. Corn Buntings jingled and Cirl Buntings called continuously along with Pond frog. Throughout the day we crossed paths with two Greek botanists – quite a rarity. It was lovely to hear them remind us to look where we were putting our feet, and they were very much conservationists.

Moving a few hundred yards on we parked up and again immersed ourselves in flowers as soon as we stepped out of the van. The first blousy *Ophrys tenthredinifera* and striking brown and white *O.cretica* were found, two of my favourites. *Polygala venulosa* scrambled through the gorse. Some large weathered limestone boulders acted as rock gardens for *Asphodeline lutea* with *Asphodelus*



aestivus further up the slope. The shallow ditch was thick with glossy flowering watercress (*Nasturtium officinale*). Blue and Scarlet Pimpernel and Dusky Geranium grew through grasses. *Phlomis fruticosa* was common with the smaller endemic *Phlomis cretica* also quite frequent. Amanda and I prepared the picnic at the village picnic area by a small chapel with a spring marked by two huge sprawling Plane Trees. In this little clearing were *Allium subhirsutum*, and the cliffs had the yellow wallflower *Erysimum raulinii* and *Valeriana asarifolia*.

The final stop of the day was the Spili bumps. Hilary spotted a lovely small patch of the Cretan Violet *Viola cretica* before the stream. Having crossed over the stream we wandered the slopes

dotted with orchids adding several more new species to the list for today and finding lovely displays of all. John spotted a Rockrose *Tuberaria guttata* on the top and we found the last few pretty *Tulipa saxatilis* in flower. Deep blue *Anemone coronaria* glowed in the verges.

We returned for hot showers and a first look at the slightly overwhelming list of new plants including 23 orchid species before going over to Maria and Costas' tavern for an excellent supper of home cooked traditional Greek dishes such as lamb in wine sauce and moussaka, sat at a table next to the wood burning stove.

Day 2 Sunday 9th April

Faestos, with stops



A showery day was forecast so we headed down to the coast. As we boarded the van, Sue showed us a photo of a lovely *Serapias cordigera* which the rest of us had overlooked the day before. We broke the journey at one of my favourite little stops (which turned into quite a long one). We were greeted by banks of Turban Buttercups (*Ranunculus asiaticus*) thickly scattered through the turf, mostly white but a

few in shades of pink. Both Goatsbeard species was right by the van - the largest *Tragopogon sinuatus* and the smaller *Geropogon hybridus*. Originally we thought there were three species, but in fact it was two with hybrids between. Grasses here are lovely mix, with Quaking grass (*Briza media*), *Aegilops biuncialis*, Hare's-tail (*Lagurus ovatus*) and the forked *Cynodon dactylon* to name but a few, mixed with bright pink splashes of *Gladiolus italica*. Peas included the long-stemmed pink pea *Lathyrus setifolius*, Star Clover (*Trifolium stellatum*). The many flowering shrubs were mainly pink *Cistus creticus*, Thyme (*Coridothymus capitatus*), Summer Savoury (*Satureja thymbra*) Three-lobed Sage (*Salvia triloba*) and *Helichrisum barrelieri conglobulatum*. A Buzzard overhead, Sardinian and Cetti's warblers calling from the scattered terraced trees and vegetated riverside banks, and lots of butterflies were brought out by the sun - many Cretan Festoon, Large whites, Common Blue, Painted Lady and fresh Common Swallowtails. Large Blue Alkanet (*Anchusa italica*) was stunning, and we got close to our first pyramidal white *Echium italicum*. Parasitising a patch of Bermuda buttercup were little *Orobranche ramosa*. It was a lovely spot and we did not rush. At the end of our stroll was a tiny clearing, filled with a thousand *Ranunculus asiaticus*, with a stunning backdrop of mountain, stream and old olive groves. Here were *Orchis collina, italica* and a still flowering Pink Butterfly Orchid (*Orchis papilionacea ssp heroica*).

Somewhat regretfully we moved onto Phaestos, passing superb but difficult-to-access displays of *Ranunculus asiaticus*, and *Echium angustifolium* with beautiful silvery foliage and pink-orange flowers. Amanda's car had a Hoopoe fly across! Most of the group opted to visit the magnificent Minoan ruins of Phaistos itself. Phaistos was the home of Radamanthis, the brother of the legendary king of Minos and is the second largest palace of Crete after Knossos. The site was inhabited since the late neolithic era, and the first palace was built around 2000 BC. The builders of Phaistos took great care to create a functional as well as an aesthetically pleasing environment, which accommodated the spectacular views from the hill of the Messara plain and Mount Idi to the south and North respectively. My favourite part is the underground storage room with huge terra cotta pithoi or storage jars still in situ.

Sue Andy and I walked up a nearby hillside to see what we could see. A glorious hot mediterranean place, we found a few lovely flowering *Dracunculus vulgaris* and breathed in the scent from the Thyme and Summer Savoury. Golden grasses were thick on the ground mixed with Crown Marigolds and Wild Carrot and buzzed with Egyptian Grasshoppers bush crickets and honey bees. Sue spotted a Migrant Hawker and Carpenter bees buzzed by. Swallowtails flitted past at speed, but at our furthest point we watched one feeding on *Satureja fruticosa* for a good ten minutes while Alpine Swifts scythed past close overhead. Fantastic! On our return Amanda had the picnic all prepared and layed out and we all tucked in.

A couple of minutes towards Agia triada we were passing magnificent displays of the endemic *Ebonus cretica*, huge silvery green bushes with enormous pink furry tufts of flowers and definitely a highlight of the tour. *Allium neapolitanum* and *nigra* were scattered, with a few *Ornithogalum naborensis* and pink and white *Bellardia trixago*. Serapias here were mostly the large *Serapias orientalis*. Amanda and 1 or 2 members of the group found



it very hard to move on from the Ebony bushes, which were actually buzzing from the numerous bees, and were all trying to get that butterfly shot, particularly one of a skipper which turned out to be Mediterranean Skipper. They eventually re-joined the rest of the group, and found a lovely Long-nosed Grasshopper, blending in on one of the flower stalks.

Heading home we revisited the first stop briefly - Gay had pointed out the large number of budding *Gynandiris sisyrinchium* which adorned the centre of the track. Celia found fruiting *Mandragora officinarum* and we all thoroughly enjoyed the *Gynandiris* in the afternoon light before returning for a good meal in the very warm taverna. Scops owls were calling as we headed back to our rooms.

Day 3 Monday 10th April The Mournes – Drimiskos Pass

A short drive took us to our first stop of the day. We were on a very different rock – green serpentine rather than the limestone, and the plants were very different too. *Tulipa cretica* with curled leaves were all over the bare serpentine gravel, along with a few lovely Burnt Candytuft *Aethionema saxatile*, bright red *Rumex bucephalophorus*, *Centaurea calcitrapa*, Viper's Grass *Scorzonera cretica*, a wonderful hairy patch of *Plantago cretica*, along with Hare's-foot Plantain (*Plantago lagopus*), *Biscutella didyma* and tiny *Helichrysum italicum ssp macrophyllum*. *Fumana Arabica* was common and the much less common, Spotted Rockrose (*Tuberaria guttata*). Buzzards were overhead and our first Small Copper was seen. We moved onto a limestone cliff area, with

numerous holes and crevices in which *Tulipa cretica*, *Cyclamen cretica*, *Origanum dictamnus* and even larger shrubs and fig somehow got a foothold and thrived. Three species of *Arabis* were all lovely, *alpina*, *cretica* and *verna*. As we were leaving I spotted the trip's first *Orchis sitiaca* by the gate. We revisited the *Tulipa cretica* to see if an extra hour of sun would bring them out which it did. Trying to get everyone back to the van was not entirely successful, however I leapt back out anyway to check out a vulture – one of two Lammergeiers! Shouting didn't work, but Amanda and stragglers appeared after beeping the horn and we all had fantastic views of the two Lammergeiers circling round, quite close enough to see colours and beards for some minutes. (Gold star here today for Fi). The 20-odd Griffon Vultures are also worth a mention; presumably there was a carcass nearby. Gaye also found Forked Catchfly *Silene dichotoma* along the banks. After a certain amount of uncertainty on route to the next stop (usually do this day in reverse order) we stopped for our picnic overlooking the south coast.

People scouted for plants and found *Thymelaea tartonraira* and various orchids whilst Amanda and I prepared the picnic and 20 Griffons and occasionally a lammergeier in the distance this time were overhead. The forecast rain seemed to be heading our way with accompanying thunder and lightning, but by the time we were moving on, the skies cleared somewhat. We stopped for the best group of Butterfly Orchids – ssp *heroica* and *alibertis* mixed together that I have ever seen, spotted from the car, then slowed for a fabulous flock of goats, then stopped again for a superb group of *Orchis provincialis* up a steep bank. A Woodchat Shrike was spotted along with a few Northern



Wheatears as we drove along. A Lanner falcon soared past, and was seen again shortly after on the other side of the hill. Pine processionary moths were a source of interest for Sandy & Celia. Our final stop of the day saw us walking down a track into a peaceful valley, no sound of cars, only birdsong, and the smell of gorse. The first Giant Orchid (*Barlia robertiana*) was spotted and *Orchis lactea* was common. John and Hilary found a group of *Orchis italica* with which was the first *Orchid simia* of the trip, deep magenta and white where *italica* is pink all over. Two Chukkar flew in and landed on the hillside above, chattering loudly. A huge outcrop of limestone had a great list of plants, with *Ranunculus creticus*, *Valeriana asarifolia*, *Cyclamen cretica*. Two spikes of *Orchis provincialis* lead us down a track to more *Orchis simia*, and some very lovely *Ophrys iricolor*, *episcopalis* and *sphogoides spp cretensis*.

Finally the rain started to come in and we headed back to the van and then home.

Supper was at Yannis taverna, excellent salads and aubergine saganaki – delicious.

Day 4 Tuesday 11th April Triopetra and Mornes

The day with the awful forecast! Also Andy's birthday! Given the forecast we decided to head to Triopetra, a great coastal area to botanise and bird in. We broke the short journey at an area we knew to be good for orchids, and before the rain set in we had seen lots of rosettes and some young fruit of mandrake, our first *Muscari spritzenhofferi*, (endemic) and a spike of *Ophrys spruneri*. *Euphorbia spinosa* formed impressive hemispherical cushions. Views down to the south coast were striking with the lime green of Giant Fennel flowers (*Ferula communis*) against a stormy sky and blue sea. Two chukkar were disturbed by us and flew off in a huff, while the car had Black-eared Wheatear on occasions along the rocks down towards the beach.

At Triopetra itself the sand was populated with Yellow horned Poppy, *Cakile maritima*, curled leaves and 'charcoa'l seeds of *Pancreatium maritimum* and beautiful sprawling mats of silver foliated *Medicago marina*. Moving further into the dune area we found *Convolvulus oleifolius* and lots of *Muscari spritzenhoferi*. Surprisingly through the rain a flock of 14 Purple Herons flew in and landed on the Triopetra headland not far away. There were some lovely fresh spikes of *Ophrys mammosa*, then suddenly there was a melodious call from above, a flock of around 20 Bee-eaters, which flew overhead and circled over us calling loudly. Checking the beach vegetation on the way back there were a few leaves of *Eringium maritimum*, *Medicago murex*, and *Spergularia bocconeii*.

We left, passing a Ringed Plover. Amanda's car braved the (actually improving) weather and walked the beach to the stone pillars and cave. The rest of us headed to Spili where we had our picnic in Heracles' breakfast room, with hot drinks provided by the wonderful Hercules.

After a break we headed out again, to the 14th Century chapel of Agios Georgos at Mornes, which has superb 14th century frescoes of St George and scenes of heaven and hell. Jersey fern grows out of the walls, which are badly cracked allowing moisture in to damage the frescos, despite a sheet of plastic on the roof. A last stop near to Spili between showers allowed for a further stroll and chance to botanise. There were some interesting flowers here, including *Ranunculus chius*, *Silene bellidifolia*, *Petrorhagia velutina*, the dramatic *Tetragonolobus purpureus* posed photogenically against the striking dark green leaves, and yellow back ground of *Securigera parviflora*. and some great spikes of *Ophrys sitiaca*. We decided that discretion was the better part of valour and to return on a drier day to head out through damp vegetation towards an appealing area with Monkey Orchid.

Time to wash and brush up before meeting at half six for those that wanted to go through plant books and tackle some of the plant list, and time to give Andy a birthday postcard from us all with a box of birthday baklava.

Day 5 Wednesday 12th April Armeni Cemetery and Gious Cambos

It was only Andy and Sandy who took up Amanda's offer for the early morning bird walk along the bottom road in the hope for Nightingale. A couple of notes were heard from the bird as they reached the road, but that was all they were getting. However, there were some splendid views of a pair of Sardinian Warblers, with that beautiful red eye, a Pied Flycatcher among the orchard trees, while Swallows and Red-rumped Swallows circled overhead. They could never get onto the Cetti's warbler, although it was often seen in front of Hercules in the tall reeds, during the rest of the week.

After a breakfast of Greek yoghurt and honey and freshly squeezed orange juice we were away by 9.30. Wryneck had been calling round the hotel before breakfast. Twenty minutes saw us at the late Minoan cemetery at Amari. A tranquil grove of Valencia Oaks, the grassy area was full of the Minoan graves cut deep underground and accessed by steps carved into the bedrock. Lots of pea family brought colour, *Hippocrepis biflora*, *Coronella parviflora*, *Vicia villosa*, large patches, and tall spikes of the very common, but pretty *Bituminaria bituminosa* trefoil, *Securigera securidaca*, red *Lathyrus cicera*, Star *Trifolium stellatum*, and Strawberry Clover *Trifolium fragiferum*. An unexpected find was *Clathrus ruber*, the Red Cage fungus, the first I had ever seen. Serapias were mostly pink *lingua*, but we also found a few *Serapias cordigera*, and *parviflora*. Hare's foot Plantain (*Plantago lagopus*) carpeted areas between an excellent mixture of grass species, the strange green *Osiris alba* was common. Amanda found a hybrid *Ophrys tenthredinifera x heldrichii*, amongst 1 or 2 spikes of both *Ophrys tenthredinifera* and *O. heldrichii*, so we all could see the different characteristics. We made our way to the Gious Cambos and prepared the picnic under the same Plane trees as we had done on the first day.

Harriers were seen on the way and on the plateau but not well enough to identify. After lunch we investigated slopes of the plateau where short turf was dotted with thousands of *Orchis boryi*, *lactea italica* and *pauciflora*. A new Orchis was *tridentata*, distinct from *lactea* by the three-spiked hood and lack of milky hue. *Saxifraga chrysosplenifolia* mixed with areas of *Tulipa doerfleri* and – gold star to Sarah – some stunning areas of pink and yellow *Tulipa saxatilis*. A fine wall flower *Erysimum raulinii*, Painted Ladies basked amongst the white rocks, while Crested larks song around us adding to the day.



Our last stop of the day was a brief visit to a side gorge, where the chasmophytes were in excellent flower, particularly *Brassica cretica* and fine shrubby tufts of yellow flowering *Linum arboretum*. *Tamus communis*, *Scorzonera cretica*, *Origanum dictamnus*, *Stachalia petiolata* and *Clematis cirrhosa* were also seen, on the sides of the gorge which after a 100 m became impassable due to a series of mountain pools and waterfalls. By the edge of the road a lovely patch of *Symphytum creticum*, a delicate member of the borage family with curled whitish petals was admired.

After a break to relax and a half hour or so of studying plants, we returned to Yannis taverna for a tasty and cheerful meal.

Day 6 Thursday 13th April The Omalos



A two hour drive which we broke at Georgiopolis. In the clear spring water beautifully lit Coots and Little Grebes were feeding, a Marsh Harrier put in a brief appearance, there were some planted *Arum italicum* and a single flower of the pink dandelion *Crepis rubra*.

Roadworks slowed the onward journey, and after we turned towards the mountains so did a herd of sheep and their shepherd. The sheep were fine, the

random pair of wayward tourists wandering behind them taking endless photos of sheep's backsides were less forgivable.

But we made it up to the Omalos plateau past views of snow topped mountains and precipitous gorges backed by clear blue skies. The Neo Omolos Hotel is at the entrance to the plateau, and was remembered fondly by Sue and Andy as the start of their ascent of Giglos thirty years previously! We drove slowly past the fields of the plateau. I was pleased to see we were already amongst lots of flowering *Tulipa bakeri*, then expanses of deep blue *Anemone coronaria*, a gorgeous thing. We found a way into a field, many are fenced nowadays, and began photographing. From here we went to a slope, where we were to spend most of the rest of our time here. Stunning! Hundreds of thousands of *Tulipa bakeri*, with amazing backgrounds of valley and trees and a circle of snow-topped mountains. Mixed through this were every colour form of *Anemone coronaria*, blue, scarlet, white, magenta, pink. *Anchusa undulata* was beautiful and new for the trip, and lots of tufts of *Gagea bohemica*, and *G. graeca*, *Lotus ornithopodioides*, John & Hilary found leaves of *Romulea bulbocodium*, while Daphne was enjoying finding the various pinks, such as *Silene cretica*. Birds were singing, skies were blue and still, and there was no one else there. Our picnic was prepared by Sarah, and we sat on rocks amongst this bounty. Sue found the first of a few fresh *Hermodactylus tuberosus*, the elegant black and green velvet Widow Iris. Trees included blossoming Almond-leaved

Pear Hawthorn. By the van, on the other side of the road, Gay found a host of scarlet *Anemone coronaria*.

Eventually we were done and drove a couple of minutes first to view the magnificent *Zelkova abelicea* tree before the road up to Samaria Gorge. Once at the top everyone was trying to get that best shot of the dramatic view down the gorge, the group, and the magnificent displays of *Aubritia dendroides*, *Arabis alpina*, *cretica* and *verna*, with *Cerastium scaposum* to add to the collection and all were photographed, before a satisfied group were driven home.



There was time for a relax, or some shopping, or a flying visit to a mountain stream for a dip before a cheerful meal was at Costas and Maria's.

Day 7 Friday 14th April

Patsos...

not, Gious Cambos Fritillarias and new spots

At 9am we strolled into the centre of Spili as many of the group wanted to investigate the supermarket and the weekly outdoor market. This farmers market is the real thing, with four or five farmers in pickup trucks selling their own produce from the surrounds of Spili, fruit and veg, horta (greens picked from the hillsides), olives, grapes and raisins. At 10am we drove through some stunning scenery towards Patsos, only to find the road closed. Retracing our steps and stopping for views of the White Mountains we made our way to what was to have been our afternoon stop. We parked and made our way slowly up a series of old terraces, finding new plants such as *Myosotis congesta*, *Orchis sitica* and *anatolica* (some discussion needed there), *Ophrys spruneri*, a few flowers of the delicate and beautiful *Iris cretica* (Gold star for Gay). Sarah found the first *Fritillaria messanensis* (Gold star for Sarah. There were many in bud and we took care to watch our feet as the buds look very grass-like. There were easily 12 species of orchid, *Cyclamen creticum* and the dark red flowers of Cretan Houndstongue (*Cyanoglossum creticum*). There were some very picturesque fritillaries growing with weathered limestone, and a second new orchid for the day, *Ophrys creberrima*, like a brown furry boxing glove. We moved to the picnic spot by the church and had our picnic of spinach pies, several local cheeses, melitzanosalata, chocolate cigars, two freshly prepared salads, local walnuts and raisins etc etc etc... Amanda had noticed a spot with an excellent view of a



snowy Psiloritis so after lunch we stopped for the view and a wanderer Gay found a set of spikes of *Ophrys sphegoides ssp cretensis*, and there was an unbelievably well placed *Tulipa doerfleri* for photographs against the mountain backdrop.

What turned out to be our final stop of the day was near the fields of *Tulipa doerfleri*. The sunny afternoon meant that they were fully open, and mixed with large numbers of Barbary Nut it made a wonderful display. Sarah spotted a Lammergeier which most of the group saw. We moved round to another peaceful knoll, again with great views of Psiloritis, and great displays of so many flowers. There were nice insects with an interesting variety of beetles.



We returned to base and had time to pack before going to Yannis taverna for a lovely meal outside, listening to the singing from the church for Greek Easter Friday. We headed back before the village candle-lit parade started out. Most chose just to listen to the singing from our balcony, and watch the antics of the village cats below.

Day 8 Saturday 15th April Transfer to Plakias via Kourtaliotis and Damnoni

We sadly said our goodbyes to Heracles and Christina, possibly the best hosts ever (John left mud-clogged boots outside his door to find them cleaned in the morning as if by elves) Stopping in the impressive Kourtaliotis Gorge we saw an amazing fifty Griffon Vultures and brief glimpse of a Lammergeier! A walk down into the gorge was taken slowly because of all the interesting and often tiny flowers such as *Medicago Centranthus calcitrapa*, various *Crepis* species including *fraasii* and *auriculifolia*, and *Silene colorata*. Less accessible than previously because of a new stone wall were a good range of chasmophytes, including *Brassica nigra* and budding *Ebonus cretica*. The opposite

side of the gorge had some good examples of *Cupressus sempervirens ssp horizontalis*. Returning to the top we had great views of Ravens, chough, jackdaws and a Blue Rockthrush in and around a nest, and I forgot to mention the sunlit Blue Rock Thrush on first arrival. There was a fairly brief hiatus when the steering wheel lock could not be jiggled out of the minibus by any of us. To my chagrin, a male Greek minibus driver sorted the problem in seconds. I feel he will have gone away thinking something along the lines of (rolling eyes) 'women drivers' but what the heck.

Arriving at the arid headland of Damnoni we had lovely views of a Black-eared Wheatear, which called constantly and as it turned out was nesting nearby. The cliffs and sea were very appealing. There were some great rosettes of flowering and fruiting mandrake, and some beautiful budding of the very rare endemic *Campanula saxatilis*, rather than *tubulosa* as previously thought (leaves were not hairy) and tiny *Gynandriris monophylla*. We also had our picnic here, surprisingly comfortably, because of the delay with the minibus steering lock.

Approaching Plakias we stopped for a flock of Bee-eaters close overhead, and a colourful spectacular of dualling Swallowtail Butterflies next to the car. We were in our rooms at the Plakias Bay hotel by 2.30 ish and had the best part of an hour to cool off and unpack before taking a stroll under the sheer cliffs of Plakias. Cat. There were many plants that halted our journey, with *Scabiosa maritima*, *Ranunculus asiaticus* and *Ophrys mammosa* scattered amongst the phygana and elegant Tree Euphorbias. The smooth, sheer cliffs themselves had *Verbascum arcturus*, Shubby Linum, Caper, Fig *Ptilostemon chamaepeuce*, *Scorzonera cretica*, lovely *Orobanche lavandulacea*, and two or three climbers. Finally we found some wonderful hairy *Aristolochia cretica* in flower for Sandy! Returning to the cool of the very well laid out rooms there was time to relax or swim before plant list and supper at 6.30 and 7. Tree frog could be heard calling.



Day 9 Sunday 16th April Preveli Monastery, Venetian Bridge and Kotsifou Gorge

Our day began with an excellent buffet breakfast looking out over the bay of Plakias and surrounding mountains. A fifteen minute drive through sometimes narrow streets (!) took us to the serene monastery of Preveli. There were good views of Crested larks along the way, and the odd Black-eared Wheatear. The black clad, bearded monks were clearing up after the Easter Saturday service the night before, but we were able to look round the church at the ornate carvings and icons.

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.

The stone courtyards have a magnificent collection of pithoi and large pots with exceptional cacti and succulents growing in them. A spring feeds out into a trough from a carved spout and a chained ladle can be used to take the water. There are animals kept here, we were not sure why, but they



include a male and two female Kri Kri. A range of well fed cats relaxed around the place. The museum is fascinating, with a superb collection of icons dating back to the 13th century and a range of religious artefacts as well as information and relicts from the monks of Preveli that took up arms against the invading Turks and later the Germans. We walked round the monument to the monks and allied forces of the second world war. There were good views of Sardinian Warblers and Stonechats close by. Amongst the Phlomis were masses of Crepis and other flowers – tiny *Crepis cretica*, *Hypochaeris cretensis*, and *radicata*, along with *Crepis foetida*.

We moved on to the next stop at a beautiful Venetian Bridge over a clear river from which frogs called. Hawker dragonflies buzzed by. Flowering *Styrax officinalis* bushes grew behind and many tiny flowers grew between the stones. Walking along a track by the river we found

many plants in the verges, and admired a grove of huge, ancient olive trees. Underneath was a sea of *Anthamias chia*, Clematis, Field Eringo, Wild Asparagus and a crop of Magpie Inkcaps (*Coprinus xerophilus*) were all examined. A clearing held *Scrophularia peregrina* and architectural, deeply toothed *Urtica pilulifera*. We found *Borago officinalis*, *Cerinth major* and *Silene bellidifolia* by a lone endemic date palm *Phoenix theophrasti*. *Lathyrus clymenum* scrambled over bushes behind the grove of ancient olives which were much photographed.

Our picnic was out of the back of the van and for the most part taken seated on the wall of the old bridge in the shade. We moved over to the little taverna afterwards for cold drinks and ice creams, before setting off for the 15 minute drive to Kotsifou Gorge. We passed flowering *Verbascum arcturus* and a spectacular patch of *Convolvulus elegantissimus*. Parking at the top of the gorge we made our way slowly down the road. There were Cleopatras, Red Admirals and Cretan Festoons. Shrubby Linum was flowering splendidly everywhere, also *Origanum dictamnus*, lovely bunch of *Asphodelus aestivus*, and White Bryony in flower. There were the odd *Iris cretica*, *Tulipa cretica*,

Brassica cretica, *Arum cretica*, and even though these weren't flora, large clumps of *Albinaria corrugate*, hanging land snails from the family *Albinaria*, fascinated the group... And an amazing huge tuft of grass that John is manfully trying to identify from a German flora of Crete as we speak. We finished at the little chapel of St Antony, where there were a couple of gorgeous little flowering spikes of *Verbascum arcturus*, as well as *Anchusa variegata*. The cliffs opposite and above Griffons, Chough, Ravens, Crag Martins, Blue Rockthrush, and a Honey Buzzard added to the atmosphere. Gnarled Cupressus clung to the sides of the gorge.

Day 10 Monday 17th April

Agios Ioannis, the road to Alones and Sweet Water Bay



After breakfast at 9.30 we drove to the quiet village of Agios Ioannis. It was pleasurable walking up through the narrow streets, past open doors from which wafted cooking smells, past an old olive press and traditional wooden doors in stone arched frames. I had mentioned an old lady that had welcomed us the last time I had brought a group through the village, and on passing her lovely little house, out she popped, wanting to know where we were from and all about us,

welcoming us to her village; my limited Greek coming in very useful for this. It was decided there should be a wall garden plant list; ferns and little things like *Fumaria capreolata*, *Polygonum capitata*, and *Anogramma leptophylla* were tucked everywhere. As were cats.

Once out of the village we passed the old but still maintained wash house, and then not long after we were into shady mixed woodland, with Downy Oak, Hawthorn, Tree Heather and Strawberry Tree. There were some lovely pink *Serapias lingua*. Butterflies were frequent with Cretan Festoon and Common Blues. Shrubs were great with lots of flowering *Cistus salvifolius*, *Medicago arborea* and *Erica arborea*, and our first *Cytinus hypocistis* (gold star to Amanda, if what short lived thanks to Gaye later on in the day). We took a path that took us to splendid views over the surrounding hills and the top of the gorge before turning into an area of *Pinus brutea* carpeted beneath with tens of thousands of *Cyclamen cretica*. A fantastic display. There were some fresh looking *Asplenium onopterix* ferns and signs of an active Cretan Badger set. I had noticed a new pathway which had been cut through the woodland which helpfully led us to the track below the small church we were aiming for. I got a gold star for spotting two *Dactylhoriza romana* enroute. At the church no more *Dactylhoriza* were found despite searching the old terraces below, however 30 odd spikes of Violet Limadore, some in striking flower. Then Gaye, excelled herself with a fabulous patch of *Cytinus hypocistis*, absolutely stunning, along with some other bits and bobs like Perforate St John's Wort were very agreeable. Sarah and I walked down and brought the minibus up by a slightly easier route and prepared the picnic which was then consumed sitting on the steps of the church staring out at

the view over the hills and the top of the Kotsifou gorge. John entertained us with a short talk about the distribution of Strawberry Tree in the UK which was very well received.

Half the group retraced our steps on foot, half grabbed a lift down in the van, and having regrouped we set off for our last stops of the day; one for a fabulous patch of *Convolvulus elegantissima* and Weasel Snout, then finally after a very scenic drive along the coast road with lovely flowering *Ebenus cretica* and a very blue sea we stopped to photograph the endemic palm trees in a rocky valley.

We met for a G & T (sorry about the tonic, guys) ahead of the plant list to say goodbye to Sarah who was leaving the group and returning to university the following morning. Lovely sunset over supper.

Day 11 Tuesday 18th April Transfer to Anapoli via Frankokastello



We were packed up and on our way at 9.30. We broke our journey for a view stop looking back at Plakias across a blue and shining sea, then at Frankokastello. An unpromising looking field turned out to be a delight, with numerous impressive if smelly *Dracunculus vulgaris*. The short turf was full of flowers. Of note were Love-in-a-mist (*Nigella damascena*), and the uncommon tiny mauve and white flowers of *Solonopsis*

minuata. The crenellated Venetian castle was constructed around 1390 to protect the coast from pirates and was involved in an uprising against the Turkish in the 1800's. We walked over to an area of wetland but it was drier than in previous years. There was a Redstart nesting near where we parked the vehicles, and a pair of lovely Scarlett Darters were hovering and posing for photos near a small pool.

Reaching Anapoli via the 23 hairpin bends, we were welcomed by Popi and her son Constantine, who put a big table out in the sun for our picnic, and brought us coffees and orange juices etc. After lunch we were taken to our rooms, all of which have balconies with views out over the village 'square', forested hills and the bare, rocky, snowy tops of the White Mountains, specifically Paknes and Kakovoli.

After a break, we were out again and exploring the nearby fields of the plateau. A shepherd was moving his sheep through a stoney grove of olives as we pulled over. An enclosed field that we usually check for orchids had just been cleared and ploughed, but there was a strip of turf left with a dozen *Ophrys spruneri* and *gregoriana* (bigger, wider, flatter lip with no side lobes) in fine flower. We

visited a stand of *Barlia robertiana*, and after walking around an area of pine made our way to the Church of Agia Katarina for a fine view of the coast and the village of Loutro below.

Day 12 Wednesday 19th April

Paknes

A slightly early breakfast at 8am saw us ready for departure in the pick up trucks for 9.15. One had seats, one didn't! The intrepid Gaye joined me in the back of the seatless vehicle and we were on our way up the mountain under a cloudless sky. The olive groves of the plateau gave way to *Pinus brutia* above, before it gave way in turn to mixed *Acer creticum*, huge flowering Almond-leaved Pear (*Pyrus spinosa*) *Quercus coccifera* and *pubescens*. As altitude was gained on the rough track we moved into shrubby *Juniperus oxycedrus* and Cretan Cyprus (*Cupressus sempervirens* var



horizontalis). These ancient, twisted trees are very impressive in the stark landscape.

Our first stop was a little valley where we could see the leaves of *Paeonia clusii*. The population seemed to me to have spread since previous years but was still in bud. There were also leaves of *Arum idaeum*, and we had our first attempts at the array of tiny alpine flowers – *Cerastium scaposum* and *Crepis sibthorpiana* dominated. My

driver Michalis told us that just below us there used to be a village of 50 houses, now gone completely with only a few stone ruins visible. Moving on we gained more altitude and could see the snow patches on the bleak mountain top coming closer. We started to pass more and more ancient Cyprus trees and patches of *Aubritia dendroides* and I saw my first *Anchusa caespitosa* from the van, then the first patch of snow by the roadside. We stopped shortly after and dismounted via an upturned beer crate. The incredibly bleak, remote feeling slopes echoed with the calls of Wheatears and Chukkar, and the rounded mountain peaks and snow patches were visible deceptively nearby. For the next couple of hours we were enthralled by the range of alpiners. *Prunus prostrata* was covered in deep pink buds, and *Astragalus angustifolius* formed smooth flat domes but was not yet in bud. At the next patch of snow lovely displays of blue-starred *Chionodoxa nana* and the star of the day, *Crocus sieberi*, white with purple veins and yellow anthers. There were some gorgeous displays of Burnt Candytuft (*Aethionema saxatile*), lovely blue borage-like *Lithospermum incrassatum* and pink *Mattiastrum lithospermifolium* were both seen as well as *Alyssum simplex* with little yellow

crucifer flowers. The arid stony landscape that at first glance seems so bare was dotted with all colours. We were at a height of around 1860 m.

We had our picnic by the van, and then began walking downhill. The slight drop in altitude brought some things into flower, so we had some great mats of flowering *Prunus prostrata* and *Aubritia* whilst marvelling at the ancient, contorted Cyprus trees.

A bumpy ride later we were back at Anapolis having drinks and ice-creams at Popi's, sitting with cameras and books out identifying more tiny alpinines. After a break we took a stroll past and through some of the fields of ancient Anapolis which are visible on all the hills surrounding the modern village. The 'fields' were mainly large boulders but in the tiny areas of soil were many *Lupinus pilosus* and patches of lovely flowering *Gynandris sisyrinchium*. Along the roadside we found *Ballota pseudodictamnus* and three species of mallow - *Malva cretica*, *parviflora* and *sylvestris*. Moving up the hill, the leaves of *Colchicum macrophyllum* which were common below seemed to fill some areas entirely – we will be returning here on the autumn tour of course!

At supper after the plant list Popi fed us again with a range of dishes and salads placed in the middle of the table to share which included an excellent moussaka and roasted goat. She really is an exceptional cook.

Day 13 Thursday 20th April Arandaina and Anapoli environs

Amanda began the day by leading an early morning bird walk. Golden Orioles were heard, and a lovely male briefly seen, Wood Lark's could be heard singing, interspersed with the odd Tree Pipit, otherwise quiet. Several trails of the Pine Processionary Moth caterpillars distracted at times, along with the beautiful heads of red *Anemone coronaria* full of bees.

After breakfast we drove the 3k to the top of Arendaina Gorge. There was a beautifully lit Linnet on the roadside. Walking to the edge of the gorge we found leaves of *Biarum davisii* and looked without success for *Aristolochia sempervirens* which we would normally see here. We could see the spectacular stone trail zigzagging down the far side of the gorge, by which means we would be entering the largely abandoned village of Arendaina. Until the Bailey bridge was built in the 60's, this was the only way to access the village. Blue Rock Thrush, Rock Martins, Raven, and Griffons were around. Picking our way down carefully we were all photographing all sorts of things – *Umbilicus parviflorus*, lovely patches of flowering Monks Hood (*Arisarum vulgare*), *Anchusa variegata*, as well as views of the gorge itself of course. There were many delphiniums (*Delphinium staphisagria*) all the way; it is quite late flowering and it needs to be an early spring to see this in flower. A walk that could take 20 minutes or so took us an hour and a half to botanise (pink *Cyclamen creticum*, *Arabis alpina* and *verna*, *Saxifraga rotundifolia* subsp. *chrysosplenifolia*,



Arisarum vulgare, and the stunning pair of red *Papaver apulum*, just to name one or two) and we were at the bottom where we found mats of *Calamintha cretica* and the rare lemon-scented thyme *Thymus leucotrichus*. Some of the group walked down the gorge a few hundred metres, until the bailey bridge could be seen overhead. The usual chasmophytes decorated the cliffs along with nice shows of Maidenhair fern (*Adiantum capillus-veneris*). The far side was in full sun on our ascent, (lots of basking Erharts wall lizards) by is fortunately about a third lower, and it did not take too long before we had left the gorge and could stroll through the old houses to the little taverna/shack for a cold drink.

Back to Popi's for a home made lentil soup for lunch followed by ice-creams, then after a break we went out again for a last look at some of the local fields full of arable 'weeds'. If only wheat fields in the UK looked like this, full of gladioli, poppies, beautiful pink and purple *Vicia sativa*, tassel hyacinths and more. There was a constant buzz from honey bees, and we could hear a cuckoo calling. Then some outstanding spikes of *Ophrys spruneri* and *gregoriana* in the stony margin of a small wheat field were spotted. We found a way in and spent some time photographing these beauties. Back to the village past the small enclosure full of *Allium nigra*.

At six we met for a G&T on the communal balcony, from where we watched two hooded crows mobbing Sparrowhawk. Then a last look at the plant list to add new species for the day, and supper. John gave Amanda and I a rating on twenty aspects of being a tour leader. (!)



Day 14 Friday 21st April

Amazing photo stops and Heraklion Museum, departure



For our last day the group decided that a visit to the marvellous Heraklion museum of Archaeology would be a good idea, meaning that 'field' boots and clothes could be packed. I nipped out to the *Ophrys spruneri* site before breakfast as my battery had run out the day before and saw a Collared Flycatcher and as I was leaving my room there was a Golden Oriole calling close to the hotel too.

At breakfast we wished Hilary a happy birthday and gave her a card from the group. After breakfast, we said our goodbyes to Popi and loaded the van with magnificent efficiency, leaving promptly at 9.30. We had barely started our descent of the 23 hairpin bends

before the light on the sea and the serried ranks of mountains along the coast towards Plakias tempted us to pull over for a view stop. A good move as it turned out, we spent the next quarter of an hour watching around 15 Griffon Vultures circling around, so close below and above us. Many of them had been roosting on cliffs below when we pulled up. Magic.

Our next stop was for another spectacular view at the top of the Imbros Gorge having completed the hairpin bends to take us back up from the coast. Having passed through the Askifou plateau and begun our descent towards Rethymnon, I once again pulled over for a superb display of *Crepis rubra*. Daphne also spotted a Venus Looking Glass *Leguosa pentagonia*, and a lovely new umbel *Tordylium officinale*. An hour further in we pulled into a big petrol station for a quick lunch (great range of pies, sandwiches and desserts!) before completing the final hour of the journey to the museum.



Amanda and I dropped of the group outside the museum for a three hour visit, and took Gaye to her nearby hotel before waiting with the vehicles until it was time to collect.

The Museum is one of the largest and most important museums in Greece, and among the most important museums in Europe. It houses representative artefacts from all the periods of Cretan prehistory and history, covering a chronological span of over 5,500 years from the Neolithic period to Roman times. The singularly important Minoan collection contains unique examples of Minoan art, many of them true masterpieces. The Heraklion Museum is rightly considered as the museum of Minoan culture par excellence worldwide.

At 5 we regrouped and made the 10 minute journey to the airport, where I said my goodbyes by whatsapp as I had not realised I wouldn't get through security before the Gatwick flight left. This left Amanda to finish orchestrating a birthday call to Hilary from John's old student Owen Mountford.

The end of a great trip!



Itinerary

- Day 0 Fri 7th April London – Heraklion – Spili
- Day 1 Sat 8th April Gious-Kambos Plateau
- Day 2 Sun 9th April Nea Kria Vrisi – Phaestos
- Day 3 Mon 10th April Serpentine Rocks – track to chapel from slack heaps
- Day 4 Tue 11th April Triopetra – Chapel – track to Mourne slag heaps
- Day 5 Wed 12th April Armeni Cemetery – Gious-Kambos
- Day 6 Thur 13th April Georgioupolis Pools – Omalos Plateau
- Day 7 Fri 14th April Gious-Kambos Plateau
- Day 8 Sat 15th April Spili – Kourtaliotiko Gorge – Damnoni Headland – Plakias Headland
- Day 9 Sun 16th April Preveli Monastery – Venetian Bridge – Kotsifou Gorge
- Day 10 Mon 17th April Agios Ioannis – Sweetwater Bay
- Day 11 Tues 18th April Plakias – Frangokastello – Anapoli environs
- Day 12 Wed 19th April Kakvoli Mt Valley – Anapoli environs
- Day 13 Thur 20th April Aradena Gorge – Anapoli environs
- Day 14 Fri 21st April Anapoli – Heraklion Archaeological Museum – London

Systematic Lists

Systematic List – Vascular Flora

The numbers indicate the day on which a species was seen, not an indicator of rarity or absence. The species in square brackets e.g. [*Acanthus spinosus* 2019] indicator that the species was not recorded for this trip, but has been seen on previous trips, and can be cross-referenced, as we are sure we may have missed some. Se = Seen The list is presented with *Pteridophyta* (Ferns) first, and then *Spermatophyta* with *Gymnosperms* (Conifers) followed by *Angiosperms* (Flowering Plants) the latter is split into Dicotyledones and Monocotyledones. In each of these, families and species are arranged alphabetically rather than taxonomically to make the checklist easier to use.

NB: (i). The flora species list follows that of Lafranchis and Sfikas where possible. There is a considerable debate over the naming of some species especially in *Orchidaceae*, and it is likely that some of the names following have changed.

(ii). Grasses, Sedges, Rushes, Ferns, and Fern Allies, were very kindly undertaken, recorded, and compiled by John & Hilary Birks, which we are very grateful. The lists follow that of R. Jahn & P. Schönfelder (1995) *Exkursionsflora für Kreta*. Nomenclature follows this excursion flora which agrees with the nomenclature in Flora Europaea volume 5.

PTERIDIOPHYTA – (Ferns & Fern Allies)

(Several good illustrations in Flowers of Crete – pages given after notes, John & Hilary)

Adiantaceae

Adiantum capillus-veneris – **Maidenhair Fern** (2) Locally frequent in several localities, always on shaded and/or damp habitats (pp. 581–582). [Like familiar house plant]

Anogramma

Anogramma leptophylla – **Jersey Fern** (5,10) Small annual fern. dry rocks, very local [Upright fronds, tiny erect annual fern with 2-3 pinnate fronds,] (pp. 578–580)

Aspleniaceae

Asplenium onopteris – **Irish Spleenwort** (10) Rare, on bank in woodland (p.583). [Frond broad, black lower stem]

Asplenium trichomanes – **Maidenhair Spleenwort** (3,5) Locally frequent on walls and shaded rocks, [Small singly pinnate tufted fern, very distinctive with black stem and opposite pinnae]

Asplenium ceterach (= *Ceterach officinarum*) – **Rusty-back Fern** (3,4,5) Fairly common throughout the trip (p.577) [Small pinnately-lobed fern with underside covered in overlapping rusty scales]

Dryopteridaceae

[*Dryopteris villarii* – (a buckler-fern)]

Equisetaceae

Equisetum arvense – **Common Field Horsetail** (11) Sterile branches branched, only seen once in open damp area, surprisingly rare

Equisetum ramosissimum – **Branching Horsetail** (3) Large branching horsetail, only seen once in a ditch as Fiona was reversing her van (p. 583)

[*Equisetum telmateia* - Giant Horsetail]

Hypolepidaceae

Pteridium aquilinum – **Bracken Common**

Isoetaceae

[*Isoetes histrix* – Land Quillwort]

Selaginellaceae

Selaginella denticulate – **Mediterranean Selaginella** Common, creeping on rocks or over moss on shaded cliffs (p. 581) [Addressed to ground like a big branched moss]

Cheilanthes

Cheilanthes acrostica (13) Attractive fern in crevices on shaded but dryish limestone cliffs (p. 577). Flowers of Crete discuss the differences with *C. maderensis* which they consider to be a very rare plant on Crete growing on siliceous rocks. Our plant had broad indusia covering the sori whereas in *C. maderensis* the indusia are narrow.

SPERMATOPHYTA – GYMNOSPERMAE

Cupressaceae

Cupressus sempervirens – **Italian Cypress** Some lovely old and gnarled specimens along the journey up the mountain (12). [Large conifer with tiny paired scale leaves - native form broad (as along track to Kakovoli); introduced are columnar]

Juniperus oxycedrus – **Prickly Juniper** Several prostrate bushes around the mountain area (12). [Frequent above tree line; greyish shrub with awl-like leaves in 3's]

Ephedraceae

Ephedra campylopoda – **Joint Pine** Several bushes among the chapel terraces (10). [Small, opposite, or whorled, linear leaves that possess parallel veins, often fuse into a sheath at the base. The pollen cones are often in whorls of 1-10, and furrowed, each consisting of a series of intersected or crossed bracts].

Pinaceae

Pinus halepensis subsp. *brutia* [Tall conifer with 1mm wide needles, 11-16cm long and in pairs, has a characteristic black bark]

Pinus pinea – **Umbrella Pine** Specimens recorded were planted

ANGIOSPERMAE – DICOTYLEDONES

Acanthaceae

[*Acanthus spinosus* – Spiny Bears Breaches]

Aceraceae

Acer sempervirens – **Cretan Maple** for most of the trip this tree was not in leaf, but starting to appear along the route up the mountain (12) not in leaf yet [Small tree with 3-lobed leaves, and yellowish-green flowers]

Aizoaceae

Carpobrotus edulis – **Hottentot-fig** (2, 6, 8) near coast by roads, on sand and rocks [Mats of succulent leaves and pink daisy-like flowers]

[*Mesembryanthemum nodiflorum* – 'ice-plant']

Anacardiaceae

Pistacia lentiscus – **Mastic Tree** Forming dense thickets along coast, regularly encountered throughout the first week. [Evergreen shrub whose pinnate leaves normally have no terminal leaflet]

Pistacia terebinthus – **Turpentine Tree** Scrub very similar to above, and regularly encountered [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]]

Apiaceae

[*Apium nodiflorum* – Fool's Watercress]

[*Conium maculatum* – Hemlock]

Crithmum maritimum – **Rock Samphire** (4,8,9,11). This is what was in the first salad at Plakias. Coastal slopes (rocks and walls) [Succulent 1-2 pinnate leaves; perennial]

Daucus carota – **Wild Carrot** Frequent throughout along roadside, & waste grounds [Familiar herb, divided bracts, bur fruit]

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

Eryngium campestre – **Field Eryngo** Common dead heads throughout phrygana [Wide branched greenish spiny perennial, heads 10-15mm]

Eryngium maritimum – **Sea Holly** (4,8-10). Low dunes, coastal areas, mainly leaves [Stiff leathery and spiny blue-green perennial]

Ferula communis - **Giant Fennel** Common & widespread throughout along roadsides and abandoned land [Striking big herb with feathery leaflets and many yellow umbels]

Foeniculum vulgare – **Common Fennel** (9). Roadsides and abandoned land.

Lagoecia cuminoides – **Lagoecia** (Se)

[*Lecokia cretica* Woods, groves and moist waysides [Robust perennial with 1-2 pinnate triangular leaves; large warty asymmetric fruit]]

Oenanthe pimpinelloides – **Callous-fruited Water-dropwort** Frequent along ditch/stream edges, seasonally wet turf, fallow (1-7) [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** Common & widespread throughout disturbed or cultivated sites, rough grass [Stout widely branched with divided glossy leaves and rounded umbels of yellow green flowers]

Smyrniium olusatrum – **Alexanders** (1,7,9)

Smyrniium perfoliatum – **Perfoliate Alexanders** Scattered sightings throughout the trip. [Differs from *S. olusatrum* in brighter yellow flowers; upper leaves simple, oval and clasping]

Tordylium apulum – (a hartwort) (Se). 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). (Se) Rocky ground [Rough hairy, 2-pinnate, small bare fruit; umbels leaf-opposed]

Tordylium officinale – (14) Spied by Daphne at the Red *Crepis* stop on the last day

Torilis nodosa – **Knotted Hedge-parsley** (2)

Apocynaceae

Cionura erecta (11) Along the river channel near the cave at Triopetra

Nerium oleander – **Oleander** Planted along the north coast road, clearly native by streams and wet gullies, mainly in leaf, but a few flowers on the last day [Shrub with long leathery leaves, and gaudy pink flowers]

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

Araliaceae

Hedera helix – **Ivy** Common [Familiar evergreen climber with lobed leaves]

Aristolochiaceae

Aristolochia cretica – **Cretan Birthwort** (8) Often 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]

Asteraceae

[*Anthemis arvensis* – Corn Chamomile [Scented branched chamomile, with leaves woolly beneath]]

Anthemis chia – **Chian Chamomile** Common & widespread. Locally abundant in rocky or fallow land [Similar to latter, but generally unbranched and hairless]

Anthemis rigida – **Rayless Chamomile** (1,3,4,8). 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** (2,4,5,7,8,11-13). Near coast in sandy and rocky sites [Like a yellow-flowered marigold or fleabane with spine-tipped bracts around the heads]

[*Atractylis cancellata*]

[*Atractylis gummifera*]

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

Bellis perennis – **Daisy** (3,4). Moist grassland [The familiar lawn daisy]

Bellis sylvestris (12)

Bellis Longifolia (Se)

[*Bubonium aquaticum* =(Astericus aquaticus)]

Calendula arvensis – **Field Marigold** Common & widespread. Stony land [Like small-flowered orange Pot Marigold]

Carduus argentatus subsp *argentina* (a thistle). (13) 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 Carline Thistle** (3,5,7). Phrygana [Like Atractylis, but branched leafy stems and remains of previous year's head, subsp. *graeca*]

Centaurea calcitrapa – **Red Star-thistle**. This was the main thistle along the roadsides during the first half of the trip, although mostly in leaf, and, thus could not rule out following species [Softly-leafy below (pinnately cut) but with heads of straw-coloured spines]

Centaurea idaea – **Cretan Star-thistle** Mainly seen in the latter part of the trip at Anopoli, frequent on stony ground [Grey leaved star-thistle, young heads with straw-coloured spines, (Endemic)]

Centaurea raphanina subsp. *raphanina* – **Stemless Knapweed** Common throughout the trip, found 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)]]

[*Centaurea spinosa* [endemic]]

Chrysanthemum coronarium – **Crown Daisy** Fairly common throughout at lower altitudes, and wonderful yellow hillside patches [Tall 2-pinnately leaved herb with yellow (or yellow and white) heads 3-6cm wide]

Chrysanthemum coronarium var. *bicolor* – **Crown Daisy** Scattered across rocky fields, giving lovely roadside displays

Chrysanthemum segetum – **Corn Marigold** Common across rocky & fallow meadows in the first half of the trip, with scattered sightings during the second. [Greyish annual with toothed (or lobed) leaves and large yellow daisy-like heads]

Cichorium intybus – **Chicory** (Se)

Cichorium spinosum - **Spiny Chicory** (6). [Spiny, much branched and woody, blue heads like dandelions]

Crepis auriculifolia (8)

Crepis cretica (Se)

Crepis foetida subsp *commutata* (a hawksbeard) (Se)

Crepis fraasi (8)

Crepis rubra – **Pink Hawksbeard** (6,14)

Crepis sibthorpiana – (12)

[*Crupina crupinastrum* – Crupina]

Cynara cornigera – (a cardoon) Rocky places & waste ground (8-10) [Like a short very prickly globe artichoke]

Cynara scolymus – **Globe Artichoke** (11-13). Roadsides - almost certainly cultivated [Big non-prickly pinnately-cut leaves]

Dittrichia viscosa – **Sticky Fleabane** Common along roadsides
[*Echinops spinosissimus*]

Filago pygmaea – (a cudweed) (Se)

Galactites tomentosa – **Galactites**. Very common throughout, the lovely pink thistle like plant along waste ground & roadsides [Thistle-like annual with white veined leaves, and purple-lilac rayed heads]

Geropogon hybridus – **Goatsbeard** (1,7)
[*Hedypnois cretica* – Hedypnois Rocky slopes and coastal sand [Dandelion-like plant with stalks thickened below heads, bracts incurved in fruit]]

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

Helichrysum italicum subsp. microphyllum- (an everlasting) (Se) [Smells of curry]
[*Helichrysum stoechas (barrelieri)* - (an everlasting)]
[*Helichrysum conglobatum*]

Helminthotheca echioides – **Bristly Ox-tongue** (Se)

Hypochaeris cretensis – **Southern Cat's-ear**

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

Matricaria recutita – **Scented Mayweed**. (5) Waste ground [Like a weedy, branched chamomile]

Notobasis syriaca – **Syrian Thistle**. (11-13) Stony, rocky ground

Phagnalon graecum – (a phagnalon) (2,8). 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**. Frequent on cliffs in gorges throughout the trip [Small, rather pine-like, shrub with white undersides to leaves]
[*Pulicaria dysenterica* - Common Fleabane]
[*Reichardia picroides* 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 Roadside [Thistle-like, very leafy, winged stems]]

Scorzonera cretica – **Cretan Vipers-grass** (3,5,8) Cliffs coastal [Many linear cottony leaves, and dandelion-like heads] I love this plant as it is unkept and wild
[*Senecio squalidus* – Oxford Ragwort [Familiar weed]]

Senecio vulgaris – **Common Groundsel** (3). Bare soil [Familiar weed]
[*Silybum marianum* – Milk Thistle]

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

Sonchus oleraceus - **Smooth Sow-thistle** (Se1-14) Waste ground [Similar to latter, but almost without prickles]

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

Staehelina petiolata – **Cretan Gorge Laurel** Common throughout the gorges & 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) Bare soil at high altitudes [A typical, if rather neat, dandelion]]

Tragopogon sinuatus (= *porrifolius*) - (a salsify) Common on rocky or sandy sites [Like leek with lilac dandelion-like heads, forming large "clock"]
[*Xanthium strumarium* – Cocklebur]

Berberidaceae

Berberis cretica – Cretan Barberry (12) on mountains [Low shrub with 3 spines at each node, and leaves emerging]
[*Leontice leontopetalum*]

Boraginaceae

Alkanna sieberi – (Se)

Anchusa caespitosa (an alkanet) (12). Stony ground from 1500-1900m on Kakovoli, [Cushion of strap-shaped leaves and bright blue flowers, (Endemic)]

Anchusa hybrida (*undulata*) – **Undulate Alkanet** (2). Dry disturbed ground [Bristly herb with wavy leaves and bluish funnel-shaped flowers]

Anchusa italica (*azurea*) – **Large Blue Alkanet** Frequent & widespread across the first part of the trip. Frequent by roads and in disturbed areas [Large bristly herb with open panicle of big bright blue flowers]

Anchusa variegata (9,13)

Borago officinalis – **Borage** (1,9). Waste ground [Blue, star-like and almost nodding flowers, oval bristly leaves]

Cerintho major – **Honeywort** (4,5,9). Roadsides [Patch-forming, grey with white swellings, and nodding yellow flowers with reddish-purple base]

Cynoglossum columnae – **Cretan Hound's Tongue** (1,2,5,12) [herb with grey soft-hairy leaves, smelling of mice and small pinkish-maroon flowers]

Cynoglossum creticum - **Blue Hound's-tongue** (2,3,4). Pathsides and rough ground [As latter but with larger dark-veined pale blue flowers]

Cynoglossum sphacioticum – (a hound's-tongue). (12) Stony ground [Slender with purple-maroon flowers, oblong leaves, (Endemic)]

Echium angustifolium – **Narrow-leaved Bugloss** Scattered sightings across the first half of the trip along Verges [Typical bugloss, but with narrow leaves and red flowers]

Echium italicum – **Pale Bugloss** Widespread along verges and waste ground [Distinctive pyramidal inflorescence of bluish-white flowers]

[*Echium parviflorum* – Small flowered Bugloss]

Echium plantagineum – **Purple Viper's-bugloss** (2,8,9). Verges [Big violet-blue funnel-like flowers]
[*Lithodora hispidula*]

Lithospermum incrassatum – (a gromwell) among scree above treeline (12) [Small decumbent herb with narrow in rolled leaves, and regular blue flowers]

Myosotis congesta (6,7)

[*Myosotis incrassata*]

Myosotis refacta (4)

Myosotis ramosissima (4)

[*Neatostema apulum* - Yellow Gromwell [Typical small erect gromwell, with small yellow flowers]]

[*Onosma erectum* – Up-right Golden-drop]

Onosma graecum - **Greek Golden-drop** (2,4). Rough ground [Erect, very bristly - orange/purple tinged yellow flowers]

Paracaryum lithospermifolium (9) Rocky ground at 1900m [Low, grey with narrow leaves; tiny violet-blue flowers, subsp. *cariense*]

Phacelia tanacetifolia (8)

Symphytum creticum – **Procopia** (4,9). On and below gorge cliffs [Like a small white comfrey, but with divided flowers, lobes recurved]

Brassicaceae

***Aethionema saxatile* – Burnt Candytuft** (3,12). [Short herb, crowded oval grey untoothed leaves, dense head of pink & white flowers, subsp. *creticum*]

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

Alyssum fragillimum – (an alison) (8)

Alyssum minutum – (an alison) (13)

Alyssum simplex – (an alison) (12)

[*Alyssum sphacioticum* - (an alison)]

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

Arabis alpina – (a rockcress) (3,6,12)

***Arabis auriculata* – Annual Rockcress** (Se)

***Arabis cretica* – Cretan Rockcress** (3,6,12) [White flowers]

***Arabis verna* – Spring Rockcress** (3,6,12). Open rocky areas [Low cress, oval toothed leaves and yellow-eyed purple flowers]

***Aubrieta deltoidea* – Aubrietia** (6,12,13). Some lovely displays in the rocky cervices [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** Common & widespread amongst gravel verges & stony land [Hairy annual with yellow flowers and distinctive pods comprising two joined disks]

***Brassica cretica* – Cretan Cabbage** (2,5,9). Gorge cliffs [Tall cabbage with pale yellow flowers]

***Brassica nigra* – Black Mustard** (Se). [Tall yellow mustard with thin pods appressed to stem]

***Cakile maritima* – Sea Rocket** (4,8-10). Sandy beaches [Decumbent succulent annual, with pinkish flowers and lanceolate pods]

***Capsella bursa-pastoris* – Shepherd's-purse** (12,13). Disturbed areas, fine scree to 1700m on Kakvoli [Familiar white cress with triangular fruit]

[*Cardamine graeca*]

[*Cardamine hirsuta* –Hairy Bittercress]

[*Cardaria draba* – Hoary Pepperwort]

***Clypeola jonthlaspi* – Disk Cress** (Se)

Draba cretica (12)

Draba heterocoma (12) [Yellow flower]

Draba muralis (6)

***Erophila verna* s.l. – Early Whitlow-grass** (6,12,13). Bare stony ground [Tiny white cress, all leaves basal and pods ca 6mm]

***Eruca sativa (versicaria)* – Eruca or Wild Rocket**. Common across fallow ground [Weedy annual with large creamy flowers veined in purple]] Gathered as horta

[*Erucaria hispanica* – Spanish Mustard]

Erysimum candicum – (a wallflower) (12)

Erysimum mutabile – (a wallflower) (Se)

Erysimum raulinii – (a wallflower) (Se) Craggs [Similar but more densely tufted than *E. mutabile*, (Endemic)]

[*Lepidium hirtum* – [High altitudes of the mastiffs, (Endemic)]

***Lepidium draba* (=Cardaria) – Hoary Cress** (Se)

***Malcolmia chia* – Chian Stock** (8,9)

***Matthiola sinuata* – Sea Stock**. (8,9) [Large hairy stock with coarse toothed leaves and pinkish flowers]

[*Matthiola tricuspidata* – (a stock)]

[*Raphanus raphanistrum* – Wild Radish]

[*Rapistrum rugosum* – Bastard Cabbage]

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

***Rorippa nasturtium-aquaticum* – Water-cress** (1,3). Stream/ditches [Familiar aquatic with pinnate leaves and white flowers]

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

***Sisymbrium officinale* – Hedge Mustard** Common & widespread [Erect yellow cress with pinnately-lobed leaves and pods appressed to stem]

[*Thlaspi creticum* – (a pennycress)]

[*Thlaspi perfoliatum* – Perfoliate Pennycress]

Cactaceae

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

Campanulaceae

[*Campanula erinus* – Annual Bellflower Tiny herb with toothed leaves, and 3-5mm blue bells]]

[*Campanula lyrata*]

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

Campanula saxatilis This was the campanula in bud at the lunch stop, not *C tubulosa*, as the leaves were not hairy (8) [typical campanula, leaves leathery, +- glabrous. Very rare Cretan endemic, found near the coast]

[*Legousia hybrida*]

***Legousia pentagonia* – Venus’s Looking Glass** (8) Cultivated, fallow & waste land, roadsides [Often hairy, leaves alternate and slightly wavy]

***Legousia speculum-veneris* – Large Venus’s Looking Glass** (Se)

***Petromarula pinnata* – Cretan Blue-lettuce** Common & widespread on cliff faces, an excellent specimen next to the fountain in Spili (Endemic) [Pinnate leaves (toothed leaflets) and spikes of pale blue flowers with recurved lobes]

Solenopsis minuta (11)

Capparidaceae

***Capparis spinosa* – Caper** . Scattered sightings around cliffs [Decumbent, purplish stems with round leaves and paired stems; probably both subsp. *rupestris* and *spinosa* present)

Caprifoliaceae

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

[*Sambucus ebulus* – Dwarf Elder]

***Sambucus nigra* – Elder** Common along rough verges [Familiar shrub with heads of creamy-white flowers]

Caryophyllaceae

***Agrostemma githago* – Corncockle** (Se)

[*Arenaria muralis*]

***Arenaria serpyllifolia* – Thyme-leaved Sandwort** (3)

[*Cerastium brachypetalum* – Grey Mouse-ear]

[*Cerastium comatum* – (a mouse-ear)]

[*Cerastium glomeratum* - Sticky Mouse-ear [Erect sticky, regularly branched annual mouse-ear]]

Cerastium scaposum - (a mouse-ear) (6,12,13). Common in stony places, through and above forest
[Compact mouse-ear with large white flowers on long stalks, (Endemic)]

Herniaria hirsuta – **Hairy Rupturewort** (1,3,4)

Minuartia hybrida – **Fine leaved Sandwort** (13)

[*Moenchia graeca*]

Paronychia macrosepala (2)[numerous papery bracts]

Petrorhagia velutina - (an annual pink) (2,3,4,8). Disturbed ground and rocks [Slender pink, brown papery bracts]

Petrorhagia dubia – (a pink) (Se)

[*Polycarpon tetraphyllum* – Four-leaved Allseed]

Sagina apetala – **Annual Pearlwort** (7-9)

[*Silene behen*]

Silene bellidifolia (a catchfly) (4,9)[Erect annual, with one-sided spike of pink flowers with reflexed petals]

Silene colorata Seen fairly frequent across the first half of the trip, & last day, across rocky ground

Silene cretica – **Cretan Catchfly**. Widespread in rocky and disturbed places, across the trip [Slender sticky annual with rose-pink flowers]

Silene dichotoma - **Forked Catchfly** (3). Gravel verges [Widely fork-branched herb, spike-like inflorescences of white notched petals, subsp. *racemosa*]

Silene gallica – **Small-flowered Catchfly** (3,4,9)

[*Silene gigantea*]

[*Silene integripetala*]

[*Silene sedoides*]

Silene succulenta (Se)

Silene vulgaris – **Bladder Champion** (11 - 13)

Spergularia bocconeii – **Greek Sand-spurrey** Coastal areas (4,8)

[*Spergularia lycia*]

[*Stellaria cupaniana*]

Stellaria media – **Common Chickweed** (Se). Disturbed ground

Stellaria pallida (7)

Chenopodiaceae

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

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

Chenopodium murale – Nettle-leaved Goosefoot (Se) Mainly in the first half of the trip.

[*Salsola kali* – Prickly Saltwort]

Cistaceae

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

[*Cistus creticus* ssp *eriocephalus* – Cretan Cistus [as above but smaller, much more numerous pink flowers]]

Cistus parviflorus – **Small-flowered Cistus** (4,10). Phrygana, mainly in leaf, but 1 flower (10) [Similar to last, neater, pale pink flowers ca 2-3cm wide]

Cistus salvifolius – **Sage-leaved Cistus** (3,4,5). 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 procubens – (Se)

Fumana thymifolia – **Thyme-leaved Fumana** John spied this species (5). [Similar, but most leaves opposite, and flowers only 9-14mm wide]
[*Helianthemum salicifolium* – Willowleaved rockrose]
[*Helianthemum hymettium* [Endemic, 700-2300m]
Tuberaria guttata – Spotted Rockrose Scattered sightings, open phrygana under pines [Similar to latter, but with basal rosette, and petals with purplish-brown blotch]

Convolvulaceae

Convolvulus althaeoides – **Mallow-leaved Bindweed** Lovely species of plant (2) Rough grass [Clamberer with cordate or lobed leaves and decorative deep pink funnel-like flowers, similar to *C.elegantissimus*]
Convolvulus elegantissimus – **(a bindweed)** (6-11)Gorge edge, waste grounds, often bush forming [Form of *C. althaeoides*, differing in its finely-divided silvery leaves]
Convolvulus oleifolius – Olive-leaved Bindweed. (4,5) Rocky slopes by roads [Low erect woody, with narrow silvery leaves and pink flowers]
Cuscuta epithymum – **Common Dodder** Scattered sightings & widespread over the trip. Phrygana & verges [Parasite with reddish thread-like stems, globular clusters of 5-lobed flowers]
[*Cuscuta palaestina* (a dodder) [Similar to above but with yellow stemmed]]
Ipomea indica – **Morning Glory** Planted in gardens

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) (2,5,8,13). Cliffs and ledges [Rosettes like neat grey houseleek]
[*Sedum acre* – Biting Stonecrop]
Sedum amplexicaule – (a stonecrop) This is the small stonecrop with yellow flowers that most people were finding
[*Sedum creticum*]
[*Sedum eriocarpum* subsp. *spathulifolium*]
[*Sedum laconicum*]
[*Sedum litoreum* [Coastal]]
[*Sedum magellense*]
Umbilicus horizontalis – (a wall pennywort) Fairly common throughout, although most were not in flower– walls & and rocks [Typical small navelwort, with reddish-green flowers]
Umbilicus parviflorus – **Small-flowered Navelwort** Walls by track also on rocks, IDed (13), but probably overlooked due to most in leaf [Typical navelwort with large yellow flowers]

Cucurbitaceae

Bryonia cretica – **White Bryony** Mainly recorded in the latter part of the trip (9,13). Scrub/rubble in gorges [Climber with mottled maple-like leaves opposite tendrils, greenish-white flowers]
Ecballium elaterium – **Squirting Cucumber** (10). Waste ground [Coarse bristly scrambler with heart-shaped leaves, yellow flowers and 4-5cm long fruit]

Cytinaceae

Cytinus hypocistis subsp. *clusii* Gaye found a wonderful display in the terraces below the chapel. A big gold star there! (10)[Parasitic under *Cistus* spp. bushes]

Dipsacaceae

Knautia integrifolia – (a scabious). (4,9) Rocky phrygana [Tall typical scabious, variable leaves]
Lomalosia brachiata – (a scabious) (8). [Short, erect hairy scabious with leafy bracts]

Pterocephalus plumosus – (a scabious) (5,10,13) Dry stony ground, olive groves, meadows. [Erect, branched scabious, sparsely glandular & pubescent throughout]

Scabiosa atropurpurea subsp *martima* (Sweet Scabious) (Se) [Tall scabious, pink flowers]

Ericaceae

Arbutus unedo – **Strawberry-tree** (10). Maquis and common in pine woods [Evergreen tree with lanceolate leaves and warty berries]

Erica arborea – **Tree Heath** (10). [1-4m tall, but otherwise a typical white-flowered heather]

Erica manipuliflora – (a heath) (3,4,8,9). [Shorter species, in fruit, with longer leaves]

Euphorbiaceae

Euphorbia acanthothamnus – **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** (6,8,9)

Euphorbia helioscopia – **Sun Spurge** (1,7,9). Disturbed ground [Familiar weedy spurge, toothed leaves]

Euphorbia paralias – **Sea Spurge** (4,9-11). Low dunes [Fleshy greyish perennial, many oblong leaves]

Euphorbia peplus – **Petty Spurge** . (8) Damp soil [Similar to Sun Spurge, but untoothed, smaller]

Mercurialis annua – **Annual Mercury**. (1,3,9) Olive groves and walls [Like neat nettle, with erect green spikes]

Ricinus communis – **Castor Oil Plant** (Se). Waste ground [Coarse purplish shrub, with palmate leaves]

Fabaceae

Acacia sp. – (an acacia) (Se). Planted by roads [Shrubs with grey willow-like “leaves” and yellow mimosa blooms]

Anagyris foetida – **Bean Trefoil** (2) Trackside [Trefoil shrub 1-4m tall and foetid]

Anthyllis vulneraria – **Kidney Vetch** Common throughout rocky phrygana across the trip [Typical kidney vetch, but here red-flowered subsp. *rubriflora*]

Astragalus angustifolius – **Spiny milk-vetch** (4). 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** (very common). Olive groves and verges [Dull green, often tall trefoil, flower-heads violet-blue, and smelling of bitumen]

Calicotome villosa – **Spiny Broom** Common throughout the garigue [Like elegant gorse, scenting the air with honey]

Ceratonia siliqua – **Carob** Scattered throughout the first week. Olive groves and scrub [Evergreen tree with coarse pinnate leaves and big hanging pods]

Cercis siliquastrum – **Judas-tree** At this time of year this tree is very noticeable, scattered. Planted [Small tree, heart-shaped leaves, and pink flowers on stems]

[*Chamaecytisus creticus* – Cretan Dwarf-broom]

Coronilla parviflora Scattered sightings throughout the trip of this lovely little plant in both colour forms (yellow, pink & white)

Coronilla velutina glauca – (2)]

Ebenus cretica – **Shrubby Sainfoin** (2,8,10). Cliffs and steep banks [Shrub, palmate leaves, and silky heads of pink flowers, (Endemic)]

Genista acanthocloda – (a greenweed) (1,11). Phrygana [Similar to Cretan Dwarf-broom, but with tiny leaflets, and coming into flower]

Hedysarum spinosissimum – **Spiny Sainfoin**. (3,4) Open ground [Low hairy annual, pinnate leaves, pinkish flowers and jointed spiny fruits]

Hippocrepis biflora – (a horseshoe vetch) . Scattered throughout the trip around bare ground among rocks [Short annual with pinnate leaves, single yellow flowers, and pods like a string of horseshoes]
 [*Hippocrepis unsiliquosa*]

Hymenocarpus circinnatus – **Disk Trefoil**. Common & widespread [Pinnate-leaved; big terminal leaflet, flowers orange-yellow; fruit a toothed disc 1-15cm across]
 [*Lathyrus annuus* – Annual Yellow-vetch]

Lathyrus aphaca – **Yellow Vetchling** Common & widespread across fallow and waste ground

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

Lathyrus clymenum – (a vetchling) (2,9). Rough grass [As *L. annuus*, but with 2-tone flowers (crimson/violet)]

Lathyrus setifolius – (a vetchling) (1) Tracksides [Similar but narrow-winged with orange-red flowers]
 [*Lotus cytisoides*]
 [*Lotus edulis* – Edible Lotus]
 [*Lotus halophilus*]

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

Lotus pedunculatus – **Greater Bird's-foot-trefoil** (Se) By ditch [Large hairy typical bird's-foot-trefoil]
 [*Lupinus angustifolium* [Deep blue flowers]]

Lupinus pilosus – **Hairy Blue Lupin** Striking patches by roads, and fallow areas, scattered & widespread throughout the trip [Bright blue and white hairy lupin]

Medicago arabica – **Spotted Medick** (1,2,8) 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 constricta (9)

Medicago disciformis (9)

Medicago minima (8,9)
 [*Medicago coronata*]
 [*Medicago lupulina* – Black Medick]

Medicago marina - **Sea Medick** (4,8-10). Sandy beaches, low dunes [White-downy creeping perennial trefoil with yellow heads]

Medicago murex – (a bur medick) (4) Coastal rocks [Typical yellow medick with dense cylindrical bur fruit]

Medicago orbicularis – **Large Disk Medick** (2-4,9). Waysides [Typical yellow medick with large smooth spiral disc fruit]
 [*Medicago polymorpha* – Toothed Medick]

Melilotus indicus – **Small Melilot** (4)

Onobrychis aequidentata – (a sainfoin) (2,3,5) Phrygana and tracksides gorge, quarry [Pinnate-leaved, few pink flowers and fruit with cockscomb crest]

Onobrychis caput-gallii – **Cockscomb Sainfoin** (Common throughout the first week). [Similar, flowers smaller and bur fruit]
 [*Ononis reclinata* – Small Restharrow]

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

Scorpiurus muricatus – **Scorpiurus** (4) Rocky banks [Long elliptical undivided leaves, yellow flowers and pods like coiled caterpillars]
 [*Securigera cretica*]

Securigera globosa – (a crown vetch).(Fairly common throughout the first week Cliffs gorges [Like neat Crown Vetch – large pinnate leaves (Endemic)]

Securigera parviflora – (a scorpion vetch) (Se) Rocky ground [Similar to *S. globosa*, but more slender and with pink and white or yellow flowers]

Securigera securidaca – (Common)

Spartium junceum – **Spanish Broom** (Scattered sightings). Roadsides [Shrub with many rush-like branches and large yellow flowers]

Tetragonolobus purpureus – **Dragon's Blood** (1-4,6,8,13). Groves and disturbed ground [Hairy trefoil herb, crimson flowers, big-winged pods]

Trifolium angustifolium – **Narrow-leaved Crimson Clover** (2-4)

Trifolium arvense – **Hare's-foot Clover** (2-4,12,13)

Trifolium boissieri – **Brown Trefoil** (4,13). Rocky slope [Low annual yellow clover, turning brown with age]

Trifolium campestre – **Hop Trefoil** (Scattered). Rocky places

Trifolium fragiferum – **Strawberry Clover** (4,5) Moist turf of paths [Creeping clover with pink flowers, and inflated fruit heads, resembling raspberries!]

Trifolium filiforme – **Least Trefoil** (2,3)

[*Trifolium grandiflorum*]

[*Trifolium physodes*]

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

Trifolium resupinatum – **Reversed Clover** (10) [Pink annual clover, flowers are “upside down”]

Trifolium stellatum – **Star Clover** Very common in places throughout the two weeks. 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**. (Se) Stony turf [Like *T. resupinatum*, but flowers “right way up”, fruit heads like balls of cotton]

Trifolium uniflorum - (a single-flowered clover) 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** (2,4,8,9)

[*Vicia bithynica* – Bithynian Vetch. Low phrygana [Vetch with tendrils, and violet and white flowers]]

[*Vicia cretica*]

Vicia hybrida – **Hairy Yellow-vetch** (1,4). Banks in groves and by roads (especially by spring) [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. Tracksides and fallow [Familiar pink leafy vetch]]

Vicia villosa – **Fodder Vetch** (1,4,5). Olive groves [Like a bright red-purple Tufted Vetch; subsp. *varia*]

Fagaceae

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

Quercus ilex – **Holm Oak** (quite common, 5). Some large trees near Alones [Evergreen tree with lanceolate leaves paler (downy) beneath]

Quercus ithaburensis (macrolepus) – **Valonia Oak** (5). 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** (5) Woodland and scrub [Small tree/shrub, typical oak-leaves, downy]

Gentianaceae

[*Blackstonia perfoliata* – Yellow-wort]

[*Centaurium pulchellum* – Lesser Centaury]

[*Centaurium maritimum* – Yellow Centaury]

Centaurium erythraea – **Common Centaury** (11)

Geraniaceae

Erodium cicutarium – **Common Stork's-bill** . Common & widespread throughout along disturbed ground [Typical stork's-bill with fern-like leaves, pink flowers, and beaked fruit]

Erodium gruinum – **Long-beaked Stork's-bill** Scattered sightings (1,10,11,14). Verges, and disturbed ground [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** (2,4,7)

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

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

Geranium molle – **Dove's-foot Crane's-bill**. Common throughout disturbed ground [Like *G. dissectum*, but wedge-lobed and with more purplish-pink flowers]

Geranium phaeum – **Dusky Cranesbill** Scattered around Gious-Kambos

Geranium purpureum – **Little Robin**. Common throughout the trip [Aromatic herb with fern-like leaves and unnotched pink petals]

Geranium robertianum – **Herb Robert** Common throughout waste ground in the first week

[*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** (8) Garigue and phrygana [Dwarf heather-like shrub with many yellow flowers. Mostly subsp. *oligathum*, (Endemic)]

[*Hypericum kelleri*]

Hypericum perforatum – (a St John's-wort) After much debate it was decided that the 'Yellow-wort' type plant was actually this species in the terraces below the chapel (10) Moist phrygana [Typical erect St John's-wort with leaves clasping stem]

[*Hypericum triquetrifolium* – Crisped St. John's-wort]

Juglandaceae

Juglans regia – **Walnut** (Se). Widespread in the first half of the trip, planted [Trees with fragrant pinnate leaves and coarse catkins]

Lamiaceae

[*Acinos alpinus*]

[*Ajuga chamaepitys* – Ground Pine]

[*Ballota acetabulosa* – Garden Horehound]

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

Ballota pseudodictamnus – **False Dittany** (12), possible overlooked [Woody-based perennial, woolly-felted, oval, almost untoothed leaves]

Cardiothymus capitatus – **Thyme** (common)

Lamium amplexicaule – **Henbit** Common throughout disturbed ground, [Annual pink dead-nettle, long flowers]

Lavandula stoechas – **French Lavender** (1,6). 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) (3,5,9,11). Limestone cliffs, mainly in gorges [White-woolly round-leaved, with overlapping bracts (Endemic)]

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

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

Phlomis cretica – (a Jerusalem Sage) Common around rocky slopes [Much shorter and more orange flowers]

***Phlomis fruticosa* – Jerusalem Sage** Common, and 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** Fairly common throughout Banks in groves etc and on rocks [Evergreen shrub, with white flowers and aroma similar to a Stachys]

Prunella cretensis (10,13)

***Rosmarinus officinalis* – Rosemary** (1,2,5,9). [Familiar shrub]

***Salvia fruticosa* – Three-leaved Sage** Common & widespread throughout the garigue [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** (Se) Stony land and rocks [Short neat annual, with bright green bracts]

Satureja cretica – (12)

[*Satureja nervosa* - (a Micromeria) Phrygana etc. [Slender shrub, with small-leaves and whorls of purple flowers above]]

***Satureja thymbra* – Satureja** (Se) Scrub and phrygana [Like a large-leaved, very aromatic, pink thyme]

Scutellaria hirta (9,10)

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

Sideritis curvidens (8,9)

[*Sideritis syriaca*]

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

***Stachys cretica* – Mediterranean Woundwort** (5). Rocky slopes, often by roads [Like a slender white-felted pink “Lamb’s-ears”]

***Stachys spinosa* – Spiny Woundwort** (2)

Thymus leucotrichus (13)

Teucrium alpestre (Se)

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

Lauraceae

[*Laurus nobilis* – Laurel [Evergreen tree with scented leaves]]

Linaceae

Linum arboreum - Shrubby Flax (5,8,9). Limestone gorge cliffs [Small shrub, spatulate leaves, yellow flowers]

[*Linum austriacum*]

Linum bienne – Pale Flax (1,4,5). Roadsides, rough grass [Slender pale blue flax]

[*Linum strictum* – Upright Yellow Flax]

[*Linum trigynum*]

Lythraceae

[*Lythrum hyssopifolia* – Grass-poly]

[*Lythrum junceum* – (a loosestrife) 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 Planted along roadsides near Rethymno [Shrub with irregularly palmately toothed leaves]]

***Lavatera bryonifolia* – Tree Mallow** (Se)

***Lavatera cretica* – Small Tree-mallow.** Scattered sightings around disturbed & waste ground [Like Common Mallow, but broad epicalyx lobes]

***Malva cretica* – Cretan Mallow.** (12) Rocks near sea also in gorges [Like a dwarf, delicate Musk Mallow – pale pink flowers]

[*Malva neglecta*]

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

***Malva sylvestris* – Common Mallow** Frequent & widespread throughout [Familiar pink-purple biennial/perennial]

Moraceae

***Ficus carica* – Fig** Common throughout first part of trip, scattered after. [Familiar shrub/tree with large palmately-lobed leaves]

***Morus alba* – White Mulberry** Widespread throughout the trip, the typical tree around the taverna's. Planted [Tree with oval and cordate leaves, dense flower spikes]

Myrtaceae

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

***Myrtus communis* – Common Myrtle** (9) Streamside thicket; by roads [Opposite-leaved evergreen aromatic shrub]

Nyctaginaceae

***Bougainvillea glabra* – Bougainvillea** (Se). Planted in gardens [Familiar ornamental climber with bright purple bracts]

Oleaceae

[*Jasminum* sp. – Jasmine [Trefoil shrub with yellow flowers]]

***Olea europaea* - Olive** (Se). 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 alba* – Thyme Broomrape [Host *Thymus* & other *labiatae*, stigma red or purple]]

***Orobanche crenata* – (a broomrape)** (2,5). [Tall broomrape with purple veined white flowers, stigma white, yellow or pinkish]

***Orobanche lavandulacea* – Lavender Broomrape.**(8), Fi found this lovely plant on its usual host *Bituminaria bituminosa* [Small darkish purple broomrape, anthers hairy, stigma white or yellowish]

Orobanche pubescens – **Downy Broomrape** (2,5). On various hosts (often umbellifers) in phrygana [Medium yellow to purple-flowered broomrape, flowers hairy, stigma violet]

Orobanche purpurea – Purple Broomrape. (2) [Like *O. lavandulacea*, flowers more violet]

Orobanche ramosa – **Branched Broomrape** The commonest of the broomrapes, common & widespread (often on *Oxalis pes-caprae*) [Small prolific broomrape, with pale purple flowers contrasting with light brown stems]

Oxalidaceae

Oxalis pes-caprae – **Bermuda Buttercup** Common & widespread, 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** (12). Mainly leaves, but 1 or 2 in bud [White flowers 7-12cm across and narrowly-divided leaves (Endemic)]

Papaveraceae

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

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

[*Fumaria macrocarpa*]

Fumaria officinalis - **Common Fumitory**. Scattered throughout the trip around fallow ground [Typical non-climbing fumitory]

Glaucium flavum - Yellow Horned-poppy (1,2,4,9). Coastal rocks and sand [Big grey-leaved poppy with yellow flowers and long pods]

Papaver apulum – (a poppy). What a pair of stunning beauties of this species on the way down the gorge (13)

Papaver argemone - Pale Poppy (1,5,9)

Papaver hybridum - Bristly poppy (1,5)

Papaver purpureomarginatum – (1, possible 13)

Papaver rhoeas – **Corn Poppy** (1,2,5,13). Rocky and disturbed ground [Typical red poppy, sometimes with black blotches, globular pods]

Plantaginaceae

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

Plantago coronopus – **Stag's-horn Plantain** (4,8,9)

Plantago cretica – **Cretan Plantain** (3) [Low prostrate hairy plantain, with stems thickening and recurved in fruit] This was the lovely spread of plantain that Amanda was getting confused with hare's foot, on the Serpentine rocks.

Plantago lagopus – **Hare's-foot Plantain** (2,3,4)

Plantago lanceolata – **Ribwort Plantain**. Common & widespread Olive groves and grasslands [Familiar plantain]

Plantago major – **Greater Plantain** Common & widespread

[*Plantago weldenii*]

Platanaceae

Platanus orientalis – **Plane Tree** Common & widespread Lining streams/rivers, forming groves [Tree with alternate palmate leaves, scaling bark]

Plumbaginaceae

[*Acantholimon ulicinum* – Prickly Thrift "Vegetable hedgehog" zone on rock slopes 1600-1900m on Kakvoli [Differs from other components of zone in its linear spiny leaves, cushion forming]]
[*Limonium sinuatum* – (a sea-lavender)]

Polygalaceae

Polygala venulosa – **Eastern Milkwort** (1,7,8). Phrygana [Typical milkwort, with pale mauve veined flowers, rather pea-like]

Polygonaceae

[*Polygonum aviculare* s.s. – Common Knotgrass. Waste verges [Familiar weedy knotgrass]]

Polygonum = *Persicaria capitata* growing through the walls around the white village of Agios Ioannis (10) [has a strong urine-scented odour]

[*Polygonum idaeum* – (a knotgrass). 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**. Common & widespread around rocky ground [Small annual, distinctive recurved fruit; subsp. *gallicus*]

[*Rumex pulcher* – Fiddle Dock]

Rumex scutacous – (Scattered throughout the trip)

Rumex tuberosus – **Tuberous Dock**. Mainly leaves around rocky terraces, some what overlooked on the trip [Leaves somewhat arrowhead-shaped]

Primulaceae

Anagallis arvensis – **Scarlet Pimpernel** Common & widespread across the trip, around phrygana and fallow land [Familiar weed]

Anagallis foemina – **Blue Pimpernel** Often found with the above, widespread [As latter but bright blue]

Asterolinon linum-stellatum – **Asterolinon** (12)

Cyclamen creticum – **Cretean Cyclamen** Some lovely posing shots for people of this shy species, rocky outcrops, scree, and crevices [White cyclamen]

[*Primula vulgaris* - Primrose]

[*Samolus valerandi* – Brookweed]

Punicaceae

Punica granatum – Pomegranate (Se) Naturalised (presumably originally planted) [Tree with shiny opposite untoothed leaves]

Ranunculaceae

Anemone coronaria – **Crown Anemone** Scattered & widespread (1,4,5,7-9,13,14). [Distinguished from Turban Buttercup by absence of green sepals]

Anemone hortensis (heldreichii) – (**an anemone**) Frequent & widespread throughout the trip, on phrygana and rocky places [Short anemone, white flushed pink; subsp. *heldreichii*]

Clematis cirrhosa -**Virgin's Bower**. Scattered & widespread, (1,2,5,9,10) Rocky places [Typical Clematis, but evergreen and in fruit]

Delphinium staphisagria – (**a delphinium**). (11-13) Abundant in the ruins and groves at Aradena, rarer in the gorge [Typical hairy delphinium]

Nigella damascena – **Love-in-a-mist** (Se)

Ranunculus asiaticus – **Turban Buttercup** (2-4,8) 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** (Se)

Ranunculus bullatus – (a buttercup) Scattered & widespread Open areas within phrygana. Early flowering [All leaves basal, ovate, and warty]

Ranunculus chius – **Eastern Buttercup** Found by springs and seasonally damp places, open woodland & olive groves (4,10) [Flower head never looks complete, sparsely soft pubescent, often branched from base].

Ranunculus creticus – **Cretan Buttercup** (3,5). Cliffs (often shady) of gorges [Big buttercup with shallowly lobed leaves, mostly in fruit]

Ranunculus ficaria – **Lesser Celandine** (4,8,9). By ditches [Familiar plant, but big-flowered subsp. *chrysocephalus*]

Ranunculus gracilis – (a buttercup) (9). Abundant in rocky phrygana [Neat buttercup, leaves 3-lobed mostly basal), sepals recurved]

Ranunculus muricatus – **Bristly Buttercup** Widespread 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* [Hairy Sepals]]

Resedaceae

[*Reseda alba* – White Mignonette]

Reseda lutea – Wild Mignonette (2). Rocky ground [pale yellow flowers]

[*Reseda luteola* – Weld]

Rhamnaceae

Rhamnus alaternus – **Mediterranean Buckthorn**(9). Possible overlooked [Evergreen shrub with glossy thick leaves and reddish berries]

[*Rhamnus lycioides*]

[*Rhamnus saxatilis*]

Rosaceae

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

Crataegus monogyna – **Hawthorn** Widespread By streams and in woodland [Familiar shrub, but here the densely hairy subsp. *azarella*]

Cydonia oblonga – **Quince** Planted (10)

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

Prunus domestica – **Wild Plum** (Se). Naturalised [Familiar fruit tree]

Prunus dulcis – **Almond** (Se). Naturalised by roads [Spiny shrub with narrow leaves, pale flowers, and oval velvety fruit]

Prunus persica – **Peach** (Se). Naturalised [Familiar fruit tree]

Prunus prostrata – **Prostrate Cherry** Not as flowery as usual, but we did get to see some flowers as we walked back down the mountain. (12). Frequent on rocky upper slopes of 1500-1900m [Prostrate shrub, with bright pink flowers]

[*Prunus webbii*]

[*Pyrus communis* – Pear. Naturalised on roadside [Familiar orchard tree]

Pyrus spinosa – **Almond-leaved Pear** Common & widespread. Rocky slopes and woodland (also in pine grove) [Somewhat spiny shrub with narrow elliptical leaves, white flowers]

[*Rosa canina* – Dog-rose]

Rubus sanctus – **Bramble** Common, [Typical bramble, but with small trefoil leaves]

Sanguisorba minor – **Salad Burnet** (2,4,5). Grass slopes and olive groves [Familiar herb, represented by subspp. *muricata* and *verrucosa*]

Sarcopoterium spinosum – **Spiny Burnet** Common. Often dominant in phrygana [Intricate spiny shrub (“barbed wire plant”), pinnate leaves, globose flower-heads]

Rubiaceae

[*Asperula pubescens*]

[*Asperula idaea* Calcarious cliffs 1220 – 1300m [dwarf shrub with tiny 4 petaled pale pink flowers]]

[*Asperula rigida*]

Galium aparine – **Cleavers** (5,10). [Familiar coarse clambering weed]

[*Galium fruticosum*]

[*Galium mollugo*]

Galium murale (Se)

Galium odoratum – **Sweet woodruff** (1,5,10)

[*Galium tricornerutum* – Corn Cleavers]

[*Putoria calabrica* Tiny pink flowers]

[*Rubia peregrina* – Wild Madder. [Like a coarse evergreen cleavers with berries]]

Sherardia arvensis – **Field Madder**. Common & widespread throughout disturbed ground [Like a compact bedstraw with pink flowers]

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

Valantia muralis Common & widespread through open phrygana [Similar to last, but more softly hairy, fruit stalked “horned”]

Rutaceae

[*Ruta chalepensis* – Fringed Rue Rough ground [Two-pinnate blue-green leaves, pungently scented with yellow flowers, fringed with hairs]]

Salicaceae

Populus alba – **White Poplar** Possible this species at the entrance of Armeni cemetery, or hybrid

Populus nigra – Black Poplar (1,5,7) Planted [Tall tree with fluttering leaves shaped like ace of spades]]

Populus tremula - **Aspen** (11-14). Planted [Medium-sized tree with roundish leaves, slender stalks]

Salix alba – (12)

Santalaceae

Osyris alba – *Osyris* (5,9) 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].

Saxifragaceae

Saxifraga rotundifolia subsp. *chrysosplenifolia* - (a saxifrage) (5,13). 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** (2,4,8,10) Rough grass coastal sand [Erect opposite-leaved annual; 4-sided spike of white flowers flushed pink/yellow]

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

Linaria pelisseriana – **Jersey Toadflax** (10). Stony ground and fallow [Delicate erect toadflax, purple-violet flowers]

Misopates orontium – **Weasel's-snout** (9,10) Rough ground [Slim annual pink snapdragon]

Parentucellia latifolia – **Red Bartsia** Common & widespread through bare areas in phrygana [Short erect herb, opposite leaves, red-purple flowers]

Parentucellia viscosa – **Yellow Bartsia**. (1,2,4) Damp ground fields [Sticky hairy erect herb, with opposite leaves and yellow flowers]

Scrophularia lucida – (a figwort) Scattered sightings [Typical figwort flowers, but pinnately-lobed leaves]

Scrophularia peregrina – **Nettle-leaved Figwort**. Scattered sightings [Typical figwort, shiny nettle-like leaves]

Verbascum arcturus – (a mullein) (8-11). Cliffs in gorges [Lower leaves lobed (densely soft-hairy), short spikes of yellow flowers, violet filament hairs (Endemic)]

Verbascum macrurum – (a mullein) Mainly rosettes, but common across stony ground [Typical mullein, with ovate leaves and tall spikes]

Verbascum sinuatum – **Wavy-leaved Mullein** Mainly in leaf, common & widespread [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** (1,5,7)

[*Veronica cymbalaria* – **White Speedwell**. Scattered sightings (1,5,6,10) Paths/walls [Decumbent annual, lobed leaves and white flowers]]

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

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

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

Solanaceae

[*Datura stramonium* – Thorn-apple]

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

Hyoscyamus niger – **Black Henbane**. (14) These were the plants all over the walls in Heraklion.

Mandragora autumnalis – Mandrake Mainly in leaf, but Hilary found some in flower, lovely. (2,4,8-11) Rocky turf [Violet flowers on stalks in centre of big crinkly rosettes]

Nicotiana glauca – **Shrub Tobacco** Naturalised by roads, several seen on the last day back to the airport [Tall slender shrub, with scattered glaucous leaves and tubular yellow flowers]

Styracaceae

Styrax officinalis – **Storax** (9). Scrub [Shrub with alternate oval leaves, and pendant fragrant white flowers]

Tamaricaceae

Tamarix parviflora – possible the tall trees planted along the highway near Rethymnon (6)

Tamarix smyrnensis – (a tamarisk) (5,8-11). probably planted along the coastal areas [Flowers would be 5-lobed (not 4) and pink]

Theligonaceae

Theligonium cynocrambe – **Dog Spinach** Common and widespread

Thymelaeaceae

Daphne sericea – (no common name) (1,5-7). Short dense evergreen shrub, crowded evergreen leaves; fragrant pink flowers]

Thymelaea hirsuta – (no common name) Scattered sightings (2, 8). Rocky hills [1m shrub, white stems, scale-leaves (white-downy within)]

Thymelaea tartonraira - (no common name) (2,7). Limestone phrygana [Small shrub with many silvery oblong leaves, and clusters of yellowish flowers; subsp. *argentea*]

Ulmaceae

[*Celtis tournefortii* – Southern Nettle Tree]

[*Ulmus minor* – Smooth-leaved Elm [Typical elm; probably subsp. *minor*]]

Zelkova abelicea – **Zelkova** (6). Omalos plain [Large shrub with small coarsely lobed leaves (Endemic)]

Urticaceae

Parietaria cretica – **Cretan Pellitory** Seen in the latter part of the trip (11 – 13) [Spreading annual, alternate leaves <15mm]

Parietaria judaica – **Pellitory-of-the-wall** Fairly common on walls and rocks (1-7, 9, 10) [Similar perennial, with leaves 1-7cm long]

Parietaria luisitanica (Se)

Urtica pilulifera – **Roman Nettle** Frequent throughout caves, ledges, and areas frequented by goats [Annual with jagged toothed leaves, globular fruiting heads and stinging hairs]

[*Urtica urens* – Small Nettle]

Valerianaceae

Centranthus calcitrapae Scattered sightings (1,4,8,10). 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 (10) [Familiar garden plant, with undivided leaves]

Valeriana asarifolia – **Cretan Valerian** Frequently seen throughout the trip Limestone cliffs/crevices [White valerian, basal leaves kidney-shaped; flower-head dense (Endemic)]

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

Valerianella discoidea – (**a corn salad**) (Se) Widespread

Valerianella echinata - (**a corn-salad**) (Se). [As latter, calyx with 3 lobed – one long and two short]

Valerianella obtusiloba (2,5)

Valerianella turgida Field margins, meadows, and oak scrub. This could possibly be the species John recorded, but needs to be clarified with John.

Verbenaceae

Lantana comosa – **Lantana** 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. Damp gullies; also on seepage clay [Aromatic scrub and opposite digitate leaves, and fruiting spikes like peppercorns]]

Violaceae

Viola cretica – **Cretan Violet** A small clump of this delicate plant was by the steam (1)

[*Viola fragrans*]

Vitaceae

[*Vitis vinifera* - Common Vine Naturalised in groves and hedges [Familiar climber]]

MONOCOTYLEDONES

Agavaceae

Agave americana – **Century Plant**. Naturalised on roadsides and along north coast, mainly seen in the latter part of the trip. [Huge rosettes of grey spear-shaped leaves and last year's tall stems bearing saucer-sized heads]

Amaryllidaceae

Narcissus tazetta – **Polyanthus Narcissus** (1, 5, 7). Leaves and fruit by streams on Gious-Kambos
Frequent by streams/ditches, also field-banks [Typical daffodil leaves and several-fruited stems]

Pancratium maritimum – **Sea Daffodil** (3,4,7-10,leaves only). Coastal sands [Grey daffodil leaves]

Araceae

Arisarum vulgare – **Friar's Cowl**. Rock crevices, scattered, but frequent sightings throughout the trip
[Patch-forming with heart-shaped leaves and spadix under a hooded spathe]

Arum concinatum – **Large Cuckoo Pint** (6,9,10). Olive groves and gorge woodland [Like big Cuckoo Pint]

Arum creticum – **Cretan Arum** (6,9,10). Rock, scree, stone-heaps [As latter but with yellow spadix and spathe -this folded backward]

Arum ideaum – **Cretan Mountain Arum** (12). Mainly leaves seen Anapoli at 1400m. [Like Cuckoo Pint (Endemic)]

Arum italicum – **Italian Arum** Sightings of this species were mainly in garden areas and were probably planted or introduced

Dracunculus vulgaris – **Dragon Arum** Common throughout the trip, with some wonderful plants displaying large spathes. Olive groves and disturbed rocky ground [Purple-striped stems, digitally divided leaves, long purple spathe]

Zantedeschia aethiopica – **Arum-lily** (10) Naturalised [Familiar garden plant]

Cyperaceae: (All local or very local, often in damp or wet areas – John & Hilary Birks)

Carex distachya – (a sedge) (10) Rare

Carex distans – (a sedge) (10) Rare

Carex divisa – Divided Sedge (6) Rare

[*Carex divulsa* – Grey Sedge]

Carex flacca – Glaucous Sedge (1) Local, see picture in Flowers of Crete (p.482)

[*Carex pendula* – Pendulous Sedge]

Carex troodi (*C. idaea*) (4) Very rare, loosely tufted, low-growing endemic, illustrated in Flowers of Crete (p. 482) found in damp flush

[*Cyperus longus* – Galingale]

Eleocharis palustris – Common Spike-rush (10) Very rare

Schoenus nigricans – Black Bog-rush (1,6) Local, see picture in Flowers of Crete (p. 481)

Scirpioides holoschoenus – Clustered Club-rush (6) Coastal

[*Scirpus cernuus* – Nodding Club-rush]

Dioscoreaceae

Tamus communis – **Black Bryony** Fairly common throughout often with huge cascades. Shaded gorge-beds/gullies [Unarmed climber with cordate leaves]

Graminaceae (Poaceae):

(Habitats varied but many were in waste areas or grassland patches – John & Hilary Birks)

[*Aegilops geniculata*]

[*Aegilops neglecta*]

Agrostis stolonifera – (3) Scattered

Aira elegantissima – (4) Local

Ammophila arenaria – (4) Coastal

[*Anisantha diandra* – Great Brome]

Anthoxanthum odoratum – Sweet Vernal-grass(1,3) Surprisingly local

Arundo donax – Giant Reed Common tall reed, seen more or less everywhere. See picture in Flowers of Crete (p. 485), damp sites

Avena sterilis – Winter Wild-oat (4) scattered

Brachypodium sylvaticum – Slender False-brome (3) Wooded patches

Briza maxima – Great Quaking-grass (2) See picture in Flowers of Crete (p.485)

Bromus hederaceus – (4) Local

[*Catapodium marimum* – Sea Fern-grass]

Catapodium rigidum – Fern-grass (13) Very local dry crevices

Corynephorus articulatus – (4) Very local, confined to accumulating sand,[Glabrous annual without non-flowering shorts, 3 mm spikelets, very short hairs at base of floret]

Cynodon dactylon – (3) Surprisingly rare, extensive creeping plant with stolons, ligule rings of hairs

Cynosurus echinatus – (3) Fairly common

Dactylis glomerata – Cock's-foot Common

Hordeum bulbosum – (4) Scattered

Hordeum leporinum – (4) Scattered

[*Hyparrhenia hirta*]

Lagurus ovatus – Hare's-tail (4) Locally frequent, see picture in Flowers of Crete (p. 486)

Lolium perenne – Perennial Rye-grass Common

Lolium temulentum (*L. arvense*) – (1,4) Annual ryegrass-like plant, large (4–8 mm) lemma with scabrid awn. Casual ruderal, ?native

Melica ciliata – (4) Distinctive, hairy lemma with glabrous band on back, leaves lacking prominent midrib, rare

Melica ramosa (*M. minuta*) – (4) Very local

Phragmites australis – (4) Local in wet areas

Poa annua – (1) Common in waste and trampled sites

Poa bulbosa – Bulbous Meadow-grass (3) Frequent

[*Poa infirma* – Early Meadow-grass]

Poa trivialis – (3) Frequent

[*Polygomon monspeliensis* – Annual Beardgrass Probably introduced]

Saccharum ravennae – (9,11) Large tussocky plant by water and on wet coastal sands, very distinctive

Sesleria doerfleri – (7) Rare, see picture in Flowers of Crete (p. 488), endemic to a few calcareous cliffs in gorges on Crete

Sporobolus pungens

Stipa bromoides – (9,10) Local, large lanceolate lemma (>4 mm), seta glabrous, dry soils

Triticum neglectum – (4) Rare

Vulpia ciliata – Bearded Fescue (3,4) Occasional

Vulpia muralis – (4,8) Rare, inflorescence sparingly branched, 2–5 fertile florets, 1–2 sterile florets, inflorescence well exerted from uppermost leaf-sheath, dry soils.

Iridaceae

Crocus sieberi – (**a crocus**) (12) [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**. Regularly seen throughout olive groves and fallow areas across the trip [Typical large pink-purple gladiolus.]

Iris albicans – **White Iris** (1-7,9,11). Around cultivation, roadsides, and cemeteries in villages [Typical large iris, always with white flowers]

Iris tuberosa (= *Hermodactylus tuberosus*) – **Widow Iris** Leaves of this species were seen on (1), but it was Sue who first found this lovely iris among the tulips, and once people got their eye in, several more individuals were found (6). Fallow and scrubby banks, [Iris-like flowers, yellow-green with blackish blotch on falls; leaves quadrangular]

Iris unguicularis subsp. *cretensis* – **Cretan Iris** (1,7,9,10). Rocky phrygana, some lovely examples of this species were found [Compact purple iris with yellow blotches (Endemic)]

Moraea sisyrinchium (= *Gynandiris sisyrinchium*) – **Barbary-nut**. Common across the first half of the trip with some wonderful displays late afternoon, around compact areas. (1-7,11) [Blue Iris-like flowers, opening in sun; leaves narrow and sheathing stem]

Moraea mediterranea (= *Gynandiris monophylla*) This delightful little plant adorned the pathways around Plakias environs (8-9)

Romulea bulbocodium – **Romulea** Only leaves seen of this plant (1), and a single specimen flowering (6) by John & Hilary. Compacted clay (paths etc), moist pans and paths [Small, crocus-like; white flowers have a yellow throat; leaves narrow-linear]

[*Romulea linairesii* (Recently confirmed on Crete, purple flowers)]

Juncaceae: (Records courtesy of John & Hilary Birks)

Juncus acutus (4) Very local, distinctive tufted pointed inflorescence, coastal ('sharp rush')

Juncus articulatus – **Jointed Rush** (6) Local, damp areas, see picture in *Flowers of Crete* (p. 516)

Juncus effusus (6) Surprisingly rare considering how common it is in the UK, solitary leaves on specialised shoots, stem almost smooth (cf. *J. conglomeratus*, *J. inflexus*), damp sites.

Juncus bufonius – **Toad Rush** (1,8) Not uncommon on damp muddy paths

[*Juncus heldreichianus* – (a rush)]

[*Juncus inflexus* – **Hard Rush**]

Luzula nodulosa – (a woodrush) (10) Rare [Flat leaves, white hairs, woodland]

Liliaceae

Allium ampeloprasum – **Wild Leek** (Se)

Allium nigrum – **Black Garlic** (a garlic) (2,11,12) [Similar to last, but leaves all basal and narrower, and pale heads]

Allium roseum – **Rosy Garlic** (8) Moist sites, often in shade [Low garlic with grass-like leaves and loose heads of rosy-pink flowers]

Allium rubrovittatum – (a garlic) Daphne spied this species (2). Rocky places and dry, open, stony ground, endemic

Allium subhirsutum (a garlic). Rocky areas and phrygana (1) [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) (1,2,8). Olive groves and phrygana [Scrambling branched woody perennial, thorny "leaves" (actually branches)]

Asphodeline lutea – **Yellow Asphodel** Very common throughout trip [Similar to last, but with stiffer leaves and stout yellow spikes]

Asphodelus aestivus – **Common Asphodel** Phrygana, fallow and stony ground, seen regularly throughout the trip.

Asphodelus fistulosus – **White Asphodel** (12-14) [Hollow stem, fine-like leaves coming from the base]

Asphodelus ramosus – **Branched Asphodel** Phrygana and fallow [Stout branched candelabra head of pinkish-white flowers, smaller fruits than *A. aestivus*]

Colchicum macrophyllum – (an autumn crocus) Lots of leaves around the terrace fields at Anapolis (11-14) Fallow terraces [Rosettes of large corrugated leaves, with a fruit capsule hidden at their base]

Fritillaria messanensis (now *sphaciotica* on Crete) – Snake's Head Fritillary (7) [Typical slender fritillary with linear leaves and nodding brownish flowers, usually mottled/chequered]

Gagea bohemica – **Early Star-of-Bethlehem** (6)

Gagea chrysantha. Stony snowmelt at 1800m on Kakvoli. (12) [Similar, but true yellow and broader leaves]

Gagea graeca – **Greek Star-of-Bethlehem** Scattered sightings (2,6,8-13). 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** (2,5,8,13). 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** (12). Woods and rocks from 1300-1800m [Typical grape-hyacinth, but rather dwarfed]

Muscari spreitzenhoferi – (**a tassel hyacinth**) (4,5,9,13). Rock-crevices, stoney ground [Similar to latter, but shorter, teeth of fertile flowers yellow, and tiny terminal tassel]

Ornithogalum divergens - (**a star-of-Bethlehem**) (11) Fallow and open land [Typical white star-of-Bethlehem with widely-branched corymb of 1cm flowers]

Ornithogalum exscapum – (**a star-of-Bethlehem**) (5). Clay areas [Similar, widely branched from base, flowers much bigger]

Ornithogalum narbonense – (**a star-of-Bethlehem**) (2,5,7). Dry stony slopes [Elongate white spikes of white star-like flowers]

Ruscus aculeatus – **Butcher's Broom** (5,9,10). Shaded or sheltered gorge, and other rock crevices [Low evergreen shrub with lanceolate spine-tipped "leaves" (branches)]

Scilla nana – **Cretan Squill** (12). Lovely show of this delicate flower on Kakvoli [Low delicate squill with pale-blue star-like flowers, fading whitish (Endemic)]

Smilax aspera – **Common Smilax** (10,11). Clambering on scrub [Cordate leaves with some prickles on leaves, stalks and/or stems]

Tulipa bakeri – **Baker's Tulip** (6). Fantastic displays across the plateau , [Similar to *T. saxatilis* (from which possibly not distinct) but smaller darker flowers (Endemic)]

Tulipa cretica – **Cretan Tulip** (5,8,9). Lovely display of this small tulip on the Serpentine (notably "slag-heap" knoll); also on rocks by foot-tunnel mouth, Plakias (Possibly on Kakvoli) [Small white tulip, yellowish base to petals and wavy leaves (Endemic)]

Tulipa doerfleri - **Orange Tulip** (1,2,4,5,7). Often common in cultivated and fallow fields on Gious-Kambos [Orange-red tulip; linear-lanceolate leaves (Endemic)]

Tulipa saxatilis - **Rock Tulip** (1,3,5) [Pink tulip with white-edged yellow base to petals and rather oblong leaves]

Urginea (Drimia) maritima – **Sea Squill** Leaves were common throughout 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. The following listed in bold is the accepted species name compiled from a variety of literature. A useful site to check the names, and description – www.cretanflora.com & www.orchidsofbritainandurope.co.uk . If the species name is different from the Greentours checklist used on the trip (which is outdated, but may still be in circulation), then that name will follow in brackets, to be use as reference. A total of 43 species were recorded over the two weeks.

Anacamptis boryi (*Orchis boryi*) **Bory's Orchid** Regularly recorded throughout the first half of the trip in grassy phrygana. [Resembles large Green-winged Orchid, upper flowers opening first]

Anacamptis collina (*Orchis collina*) **Hill/Fan-lipped Orchid** Regularly encountered on most days in the first half of the trip in grassy phrygana; only once in Anapolis (11) [Few flowered spikes, olive-brown flowers, pink centre to labellum].

Anacamptis laxiflora (*Orchis laxiflora*) **Lax-flowered Orchid** Mostly in damp seepage areas (1, 3, 5, 7) [Long purple spikes, leafy stems].

Anacamptis papilionacea (*Orchis papilionacea*) subsp. *alibertis* **Alibertis' Pink Butterfly Orchid** Only the once when Amanda spotted them on the roadside verge (3) [Distinctive few-flowered spike, large pink flowers with darker pink lines]

Anacamptis papilionacea (*Orchis papilionacea*) subsp. *heroica* **Heroic Pink Butterfly Orchid.** Scattered sightings (2 – 4, 11 gone over). [As above but bigger and more flowers, leaves still plentiful and green while flowering]

Anacamptis pyramidalis **Pyramidal Orchid** Widespread in phrygana, seen most days throughout Spili and Plakias environs. (Dense pink spikes with long thin spur, deeply 3-lobed lip; narrow leaves].

Dactylorhiza romana **Roman Orchid** only 2 spikes of this species were found along the roadside to the chapel above Aghios Ioannis. (10) [Typical “marsh-orchid” with rose-pink flowers]

Himantoglossum robertianum (*Barlia robertiana*) **Robert's Giant Orchid** Frequent across the trip, although most had gone over, there were a few spikes at Anapolis that could be admired. (2-5 , 7, 11-13) [Stout and fragrant, with many greenish-purple flowers]

Limodorum abortivum **Violet Limodore** Gaye found an amazing display of 27+ spikes near the chapel at Aghios Ioannis, most were in bud, but those that were out, were showing off (10) [Purplish saprophyte with scale-like leaves]

Neotinea lactea (*Orchis lactea*) **Milky Orchid** Frequently recorded in phrygana (1-3, 5, 7) [Dense milky white spikes, with many pink spots, sepals with some green, notably at base]

Neotinea tridentata (*Orchis tridentata*) **Three-toothed Orchid** Several individuals found amount the rocky phrygana slopes at Gious-Kambos (7) [Short almost conical spike, with violet-lilac flowers whose 13-20mm long labellum is strongly marked with purple lines].

Ophrys bombyliflora **Bumble-bee Orchid** Often gregarious in phrygana (1, 2, 5) [Round right green sepals and brown very furry lip].

Ophrys candida **White Bee Orchid** This blousy species was only seen once, but unfortunately only by one member of the group (1). [Like square-lipped Late Spider Orchid, wide white edge to speculum, and no/tiny “horns”].

Ophrys cretica subsp. *cretica* **Cretan Bee Orchid** Common in phrygana, old terraces and groves. (1-7) [Sepals green (or rose-below); lip marked (or speculum outlined) in white].

Ophrys cretica subsp. *adriadnae* **Cretan Bee Orchid** Very similar to the above species. (1, 5, 7) [Sepals green (or rose-tinted below); white pattern on the lip more divided and marbled than *cretica*]

Ophrys episcopalis **Large-flowered Bee Orchid** Fairly frequent over the first part of the trip (1-3, 5, 7). [larger flowers with spreading hairs, 3-5mm long "horns" and white/yellow band around speculum] Similar in colouring to *O. heldreichii*, but the lip is flared out like the skirts of a bishop, apparently...

Ophrys heldreichii **Cretan Woodcock Orchid** Frequently seen throughout the phrygana (1, 3, 5, 7). [Distinguished from all other pale pink-sepalled *Ophrys* by its deeply three-lobed labellum, the central lobe long-ovate].

Ophrys funerea **Lesser Dull Ophrys** Occasional in phrygana. This species was possible overlooked as it was only recorded the one day (7). [Tiny member of *O. fusca* group, lip 7-12mm, often with strong narrow yellow margin]

Ophrys fusca subsp. *creberrima* **Sombre Bee Orchid** Scattered amongst the grassy phrygana (1, 7). [Green sepals, 15-23mm brown lip, pale "omega" mark edges of the lip turned downwards]

Ophrys fusca subsp. *cressa* **Sombre Bee Orchid** This species is similar to above, but was more common (1-3, 7). [Similar to above, smaller flowers and flatter lip]

Ophrys fusca subsp. *creticola* A confirmed specimen of this species from photos (3), possible overlooked [Grassy dry open shrubby, meadows, olive groves]

Ophrys fusca subsp. *iricolor* (*Ophrys iricolor*) **Rainbow Orchid** Frequent throughout phrygana (1-3, 5, 7) [Like large *O. fusca* whose labellum is 14-26mm and strongly red or purple underneath]

Ophrys lutea subsp. *phryganae* **Yellow Bee Orchid** Scattered and widespread throughout the trip. [Plants with larger yellow-lipped flowers. Lip held out straight]

Ophrys lutea subsp. *sicula* **Lesser Yellow Bee Orchid** Scattered and widespread throughout the trip. [Differs from *O. phrygana* in its sub-horizontal labellum 8-14mm long, often with inverted purple V in yellow margin].

Ophrys sphegodes subsp. *cretensis* **Small Cretan Spider Orchid** (1,3,8,9) [Green sepals, square labellum 6-9mm. Endemic]

Ophrys sphegodes subsp. *gortynia* **Gortys Bee Orchid** (11) 4). [Differs in having labellum 9-13mm long and deep brown black (Endemic)]

Ophrys sphegodes subsp. *mammosa* (2,4,5,7,8). [Striking, with bicoloured lateral sepals and large velvety labellum].

Ophrys sphegodes subsp. *spruneri* (*Ophrys spruneri*) **Grecian Spider Orchid** (4,7,11,13) : [Exquisite! Rose pink sepals, bright blue speculum on brown-black labellum].

Ophrys spruneri subsp. *grigoriana* **Grigoria Spider Orchid** Some fine specimens of this species (11,13) Rare in phrygana: [Rose pink sepals, bright blue speculum on brown-black labellum].

Ophrys tenthredinifera **Sawfly Orchid** (aka Amanda's Orchid) This stunning orchid gave us some amusement throughout the trip, along with some wonderful and abundant displays, common to frequent throughout first half of trip. [Round pale pink sepals, and large square labellum with a wide straw-yellow margin– like Neopolitan ice-cream! Plants with little or no pink colour (“chlorantha”) occasional]. It was also possible that the washed-out looking clumps on the slopes at Gious-Kambos, were subsp. *villosa*, but like with all orchids, its under debate

Orchis anatolica **Anatolian Orchid** (7) Rare in phrygana:[Long purple spikes, flowers with long narrow spur and labellum with two rows of dark spots].

Orchis anthropophorum (*Aceras anthropophorum*) **Man Orchid** Frequent across the first half of the trip, with some very colourful spikes. Phrygana [Greenish yellow flower-spikes, edged in red – no spur, lip “anthropoid”]

Orchis sitiaca **Sitia Orchid** (3,4,5,7) [Differs from *O. anatolica* in having pale pink flowers, with a green blotch on lateral sepals. Endemic]

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

Orchis pauciflora **Sparsely-flowered Orchid** Frequent in open phrygana (1,5,7) [Spikes of 3-7 yellow flowers, labellum brighter yellow].

Orchis provincialis **Provence Orchid** Rare (3) [Differs from *O. pauciflora* in its spike of 5-20 uniform pale yellow flowers, and spotted leaves].

Orchis quadripunctata **Four-spotted Orchid** Frequent across the first half of the trip, with a wonderful white specimen (3) ([Often tiny, flowers small, usually pink with 2-6 small spots in centre of labellum, sometimes white].

Orchis simia **Monkey Orchid** (3) [Dense spikes, flowers with grey-pink “helmet”, labellum like dark purple dancing monkey, flowers two-tone, dark and v pale].

Serapias bergonii **Bergoni's Serapias** The commonest of this family, and regularly recorded throughout the trip. [Reddish-brown spikes with long tongue-like lip with two dark blobs at base, and long bracts].

Serapias cordigera subsp. *cretica* **Cretan Heart-flowered Serapias** Scattered sightings of this lovely species. (1, 5, 7, 8) [Bright pink or red heart-shaped tongue, purple spots at the base of the stem and leaves]

Serapias lingua **Tongue Orchid** Generally in damper phrygana (3-5) [Differs in long lip with one basal swelling, often much paler or pinker than the rest of flower

Serapias orientalis **Eastern Serapias** Only recorded twice, but possible overlooked (2,11) [From other tongue orchids by its lip being 11-23mm wide near base and markedly hairy].

Serapias parviflora **Small-flowered Tongue** Again only recorded the once at Armeni Cemetery, but again possible overlooked (3) [Similar to *S. bergonii*, but shorter bracts and lip more closely recurved under flower, often light yellow on lip and hairy]

Palmae

Phoenix theophrasti – **Cretan Date-Palm** A wonderful specimen at Preveli monastery, Venetian bridge, and palm forest at Sweetwater Bay (9-10) [Typical date-palm with pinnately cut leaves]

Potamogetonaceae

Posidonia oceanica **Posidonia** Recorded along the shoreline (4, 11). [Fragments of green leaves of plants, or cast-up balls of dead leaves on beaches, often referred to as Posidonia's balls, which are basically submerged "sea-grass" with long ribbon-like leaves]

Typhaceae

Typha domingensis - (a reedmace) Marsh and ditches by road (5) [Typical reedmace]

FUNGI

Phallaceae

Clathrus ruber – **Red Cage Stinkhorn** (5) A great find if not a bit stinky in the cemetery quite a fitting place, if one is allow to say that!

Coprinus xerophilus – **Magpie Inkcap** (9)

Systematic List – Birds

The taxonomic nomenclature & systematic order follows both that of Collins: Bird Guide 2nd edition. During the two weeks a total of 71 species were recorded. The numbers indicate the day on which a species was seen.

Chukar *Alectoris chukar* heard or seen around rocky terrain (2-4, 8, 9, 12)

Little Grebe *Tachybaptus ruficollis* several individuals seen the one day at Georgioupolis pools (6)

Cormorant *Phalacrocorax carbo* several individuals seen from the bus basking on rocks at Georgioupolis pools (6)

Little Egret *Egretta garzetta* small group flying to roost in the evening at Plakias (8-10)

Purple Heron *Ardea purpurea* up to 14 individuals flying above the cliffs at Triopetra (4)

Lammergeier *Gypaetus barbatus* the group had fantastic views of this species has 2 circled low above our heads with a large circling flock of griffins (3), with another single bird (7), and Sarah had a possible single bird (8), very nice.

Griffon Vulture *Gypus fulvus* common seen every day often in large numbers, giving eye-level views along the coastal cliff tops, on the last day as we headed back to Heraklion

Short-toed Eagle *Circaetus fulvus* a single individual flying high above Kotsifou Gorge (9)

Bonelli's Eagle *Hieraetus fasciatus* an individual high above Kotsifou Gorge (9).

Red Kite *Milvus milvus* an individual quartering in the fields behind the lunch stop on the last day (21)

Hen Harrier *Circus cyaneus* a female was quartering around the agricultural fields (1)

Buzzard *Buteo buteo* common & widespread seen everyday

Sparrowhawk *Accipiter nisus* an individual was flushed, and flew across the group, whilst walking up to the Golden Oriole site, and being mobbed by crows before we were leaving (13)

Kestrel *Falco tinnunculus* scattering sightings across the two weeks

Lanner *Falco biarmicus* 2 individuals, possible the same bird around serpentine rocks (3)

Moorhen *Gallinula chloropus* individuals seen around Georgioupolis pools (6)

Coot *Fulica atra* individuals seen around Georgioupolis pools (6)

Ringed Plover *Charadrius hiaticula* 1 or 2 individuals along the shoreline at Triopetra (4)

Yellow-legged Gull *Larus michahellis* common & widespread seen everyday

Rock Dove/Feral Pigeon *Columba livia* common & widespread seen most days

Woodpigeon *Columba palumbus* scattered sightings around wooded areas

Collared Dove *Streptopelia decaocto* common around urban areas seen everyday

Turtle Dove *Streptopelia turtur* 1 or 2 sightings of this lovely bird across the two weeks (2, 12, 13)

Cuckoo *Cuculus canorus* this species was only heard on the last day in the distance at Anapoli (13)

Barn Owl *Tyto alba* heard in the evenings around Spili

Scops Owl *Otus scops* heard in the evening around Spili & Anapolis

Swift *Apus apus* scattered sightings of this common bird (3, 7-9, 11)

Alpine Swift *Apus melba* frequent sightings of this large swift around cliff crags & rocky outcrops, with eye-level views at Phaestos, quality (2, 3, 9, 11, 13, 14)

Hoopoe *Upupa epops* only seen the once from the car (2)

Bee-eater *Merops apiaster* we all got to see and hear this wonderful species often in groups of 15+ (2, 4, 7, 8, 11)

Wryneck *Jynx torquilla* only heard 1 morning at Spili

Crested Lark *Galerida cristata* common around agricultural fields

Woodlark *Lullula arborea* regularly heard or seen over the two weeks

Crag Martin *Hirundo ruestris* regularly recorded around cliff crags & rocky outcrops

Swallow *Hirundo rustica* common seen everyday

Red-rumped Swallow *Hirundo daurica* frequently seen around urban areas

House Martin *Delichon urbica* only seen the once in the mixed flock of hirundines at Phaistos (3)

Tree Pipit *Anthus trivialis* mainly recorded in the latter part of the trip, giving some lovely vocal displays around the wooded forests of Anapolis (11-13), but was heard on early morning walk in Spili (3)

Robin *Erithacus rubecula* scattered recordings around various habitats over the two weeks

Nightingale *Phoenicurus ochruros* only heard the once on the early morning walk (3)

Black Redstart *Phoenicurus ochruros* usually a common species but only heard the once

Black-eared Wheatear *Oenanthe leucura* what a gorgeous bird, scattered sightings around dry rocky outcrops(4, 6, 8, 11, 14)

Northern Wheatear *Oenanthe oenanthe* scattered sightings throughout the trip around rocky outcrops (3, 4, 6, 9, 12, 13)

Stonechat *Saxicola rubicola* regularly encountered throughout the trip

Song Thrush *Turdus philomelos* Fi saw this bird (2)

Blackbird *Turdus merula* regularly encountered or heard throughout the trip

Blue Rock Thrush *Monticola solitarius* regularly recorded around rocky outcrops across the trip

Blackcap *Sylvia atricapilla* a common species recorded every day or heard

Sardinian Warbler *Sylvia melanocephala* very common species recorded everyday

Cetti's Warbler *Cettia cetti* common around riparian vegetation

Wood Warbler *Phylloscopus sibilatrix* Fi saw this lovely species early morning in Anapoli, when on the hunt for the Golden Oriole that was singing nearby the hotel (21)

- Wren** *Troglodytes troglodytes* common and widespread, seen or heard everyday
- Pied Flycatcher** *Ficedula hypoleuca* a male was seen on the early morning bird walk (3)
- Collared Flycatcher** *Ficedula albicollis* Fi spotted this lovely little fellow on her Golden Oriole chase (21)
- Great Tit** *Parus major* frequently recorded most habitats, everyday
- Blue Tit** *Parus caeruleus* recorded everyday
- Woodchat Shrike** *Lanius senator* unfortunately only a few people who were in the car saw this striking bird as it flew across the car (3)
- Jay** *Garrulus glandarius* only 1 or 2 sights of this species recorded around woodland areas (7, 11, 14)
- Jackdaw** *Corvus monedula* recorded around rocky outcrops with other corvids
- Red-billed Chough** *Pyrrhocorax pyrrhocorax* only recorded around mountainous areas (8, 9)
- Alpine Chough** *Pyrrhocorax graculus* only recorded the once on the truck trip to the mountains (12)
- Hooded Crow** *Corvus cornis* common, recorded every day in various habitats
- Raven** *Corvus corax* common, recorded everyday
- Golden Oriole** *Oriolus oriolus* 2 birds heard calling, and 1 male briefly seen on the morning bird walk, and 1 bird calling in the morning outside the hotel (20, 21). early
- Italian Sparrow** *Passer italiae* only recorded in the latter part of the holiday.
- Chaffinch** *Fringilla coelebs* a common species recorded everyday
- Linnet** *Carduelis cannabina* a lovely male at the side of the road en-route to Aradena Gorge (13)
- Goldfinch** *Carduelis carduelis* regular seen throughout the holiday
- Greenfinch** *Carduelis chloris* scattered sightings, and heard throughout the trip
- Cirl Bunting** *Emberiza cirlus* mainly heard around agricultural fields (1, 6).
- Corn Bunting** *Emberiza calandra* recorded around agricultural areas

Systematic List - Butterflies

The taxonomic nomenclature & systematic order follows both that of *Collins: Butterflies of Europe, Tolman & Lewington*. A total of 17 species were recorded. The numbers indicate the day on which a species was recorded.

Papilionidae

Swallowtail *Papilio machaon* 1 or 2 sightings of this lovely species, with excellent views of a pair duelling on route to Plakias (2, 8)

Scarce Swallowtail *Iphiclides podalirius* this species was only seen the once above the mould on our first site in the morning (2)

Cretan Festoon *Allancastris cretica* the commonest of the butterflies seen most days

Pieridae

Large White *Pieris brassicae* regularly recorded throughout the trip

Small White *Artogeia rapae* only 1 or 2 sightings of this species (2, 9, 11)

Orange-tip *Anthocharis cardamines* 1 or 2 females recorded on the one day (5)

Clouded Yellow *Colias crocea* common and widespread throughout the week

Cleopatra *Gonepteryx cleopatra* a pair of this lovely species was only seen at the top of Kotsifou Gorge (9)

Lycaenidae

Small Copper *Lycaena phlaeas* scattered sightings around grassy slopes(3, 7, 10)

Common Blue *Polyommatus icarus* occasionally encountered on sunny days across the trip (1, 5, 7)

Nymphalidae

Red Admiral *Vanessa atalanta* several sightings of this large butterfly (9, 11, 13)

Painted Lady *Cynthia cardui* frequent throughout the trip

Satyridae

Cretan Grayling *Hipparchia cretica* an individual was recorded basking at Gious-Kambos (5)

Wall Brown *Lasiommata megera* individuals recorded basking on rocky areas (2, 3)

Speckled Wood*Pararge aegeria* this European colour morph was encountered quite frequently, we had to be careful not to mix it up with Wall Brown which was very similar due to this species light brown colour morph

Hesperiidae

Essex Skipper *Thymelicus lineola* Several individuals were recorded around the Ebony bushes at Phaestos (2)

Mediterranean Skipper *Gegenes Nostradamus* 1 or 2 individuals were fluttering between the Ebony bushes (2)

Systematic List – Dragonflies: The weather wasn't really conducive for Odonata

Migrant Hawker *Aeshna mixta* Seen by those who went up the hill (2)

Scarlett Darter *Crocothemis erythraea* a lovely pair were recorded around a small pool at the Frangokastello stop (11)

Systematic List – Reptiles & Amphibians: Again, both families were scarce on the ground.

Cretan Water Frog *Pelophylax cretensis* heard calling from the small rivulet near the chapel on the days at the Gious-Kambos

Stripe-necked Terrapin *Mauremys caspica* one basking on a rock at Georgioupolis pools (6)

Erhard's Wall Lizard *Podarcis erhardii* scattered records across the trips around stony ground (6, 7, 13)

Cretan Wall Lizard *Podarcis cretensis* again scattered sightings of this lovely lizard (6, 10, 11)

European Tree Frog *Hyla arborea* mainly heard around the hotel at Plakias in the afternoon

Systematic List – Other Invertebrates: The species list does not follow any order.

Arachnida

Wolf Spider *Lycosides* sp. Sandy & Cecelia found a species of this family in their room

Jumping Spider *Bianor albobimaculatus* often seen on rocky open areas on sunny days

Green Huntsman Spider *Micrommata ligurina* Sue photography this among the rocks

Coleoptera

Long-horn Beetle *Agapanthia cynarae* this species belongs to the family *Cerambycidae*, and a lovely one posed for many of us en-route to Aradena Gorge (20)

Leaf Beetle *Clytra quadripunctata* this was the species many people were seeing throughout the trip, a red beetle with two black spots on its wings, often found in a mixture of flower heads.

Orthoptera

Egyptian Locust *Anacridium aegyptium* Hilary spotted a lovely specimen on the wall at Hercules, otherwise, individuals were seen around rocky and grassy spots throughout the trip.

Long-nosed Grasshopper *Acrida ungarica* Amanda found a lovely specimen of this species in the long grass at Phaestos (2)

Praying Mantis *Ameles decolour* Sue found one of these looking at her as she studied the smaller species of plants (3)

Hemiptera

Fire bug *Pyrrhocoris apterus* This was the common red and black bug many people were seeing throughout the trip

Hymenoptera

Paper Wasp *Polistes gallicus* 1 or 2 sightings on sunny days of this species

Ruby-tailed Wasp *Chrysis ignita* agg. a beautiful little solitary wasp that took a shine to Cecelia's shirt, giving everyone lovely views (8)

Honey Bee *Apis mellifera* Very common, often heard before being seen, everyday.

White-tailed Bumble-bee *Bombus sp.* scattered sightings on sunny days

Violet Carpenter Bee *Xylocopa violacea* quite widespread, recorded on sunny days

Carpenter Bee sp. *Chalicodoma parietina* often seen on flower heads on sunny days

Roman Snail *Helix pomatia* Common & widespread, often eaten by locals.

Land Snail – *Albinaria corrugate* This was the species of snail we were seeing in large groups hanging from rocks alongside the gorge (9)

Pine Processionary Moth *Thaumetopoea pityocampa* Caterpillars of this species form large white nests in pine trees. Those on the early morning bird walk in Anapolis, witnessed the trails of caterpillars.