

# The Gargano

## *Italy's Secret Garden*

### A Greentours Tour Report

22<sup>nd</sup> April to 1<sup>st</sup> May 2013

Led by Paul Cardy

Daily Reports and Systematic Lists by Paul Cardy

#### **Day 1 Monday 22<sup>nd</sup> April      Arrival and transfer to Gargano**

After convening at Bari Airport we were soon on our way north towards the Gargano peninsula. Initially the journey took us across the extensive agricultural Tavoliere plain, roadsides yellow with *Chrysanthemum coronarium*. Just north of Bari a group of four Ring-necked Parakeets flew across the road in exactly the same spot I'd seen them several times in the past. The journey was uneventful through mainly olive plantations, but soon the limestone massif of the Gargano came into view. A motorway service station provided an atypically unattractive but convenient spot in which to eat lunch, Italian Sparrows in attendance.

Having left the motorway our route took us east along the north coast of the Gargano peninsula, the roadside verges colourful with flowers. We made a welcome and productive stop at our traditional *Paeonia peregrina* site, and although this species is not always in flower at this time, we were delighted to find several superb red cup-shaped blooms as well as several more in bud. Pink Butterfly Orchids were much in evidence, with a few Green-winged Orchids. The only *Ophrys fuciflora* of the tour were here. The purple flowered *Verbascum phoeniceum* was in attractive flower and legumes were well represented, for example by the red *Lathyrus cicera*. The attractive umbellifer *Tordylium apulum* was a feature, as was Large Mediterranean Spurge, and there were many *Ornithogalum divergens* in flower.

Italian Wall Lizards basked on rocks, and Wall Brown was the first butterfly seen. Swallowtails and a Scarce Swallowtail were on the wing. Bird activity was rather limited, but Sardinian Warblers were active in the scrub. There were fine views down to the coast, Lake Lesina, and the Isole Tremiti.

We continued east, through Rodi, and to our first hotel on the north coast. Having settled the group in I then set out to buy picnic supplies for the next few days.

#### **Day 2 Tuesday 23<sup>rd</sup> April      Peschici and Vieste areas**

The weather was fine, although the clouds massed during the morning, and the day remained dry until late afternoon. First we headed east to a beach site near Peschici where the partly forested slopes behind the dunes support a wealth of plants. The beautiful shrub *Anthyllis*

*barba-jovis*, together with tamarisk, formed a belt behind the beach, whilst on the shore was a typical littoral community of *Cakile maritima*, *Medicago marina*, *Medicago littoralis*, and *Calystegia soldanella*.

The white *Cistus monspeliensis* bloomed on the slopes behind the beach, and, on the roadsides, a few *Cistus creticus* were already in flower. The many *Orchis papilionacea* here were starting to go over, but several of the striking *Ophrys apulica* remained in fine condition. After a little searching we found the hoped for *Ophrys cornuta*, which was duly photographed, a remarkable fifteen or so being found today. This is the only site we know of for this species in the Gargano and we did not see it again. Bushes shelter such species as *Prasium majus* and *Cyclamen repandum*. Among the many other plants here were *Coronilla emerus*, *Buglossoides purpureocaerulea*, *Tetragonolobus purpureus*, *Securigera securidaca*, and *Trifolium stellatum*. The lovely *Crepis rubra* was commonly in flower, with red flowered *Anthyllis vulneraria*; *Fumaria capreolata*; *Silene italica*; *Urospermum dalechampii*; *Dorycnium hirsutum*; *Allium subhirsutum* and *Arum italicum* adding to the great floral variety of our first main stop.

Yellow-legged Gulls were numerous, and Sardinian Warblers called from the mastic scrub, and we occasionally glimpsed them. Among butterflies on the wing were Eastern Bath White, Green Hairstreak, Painted Lady, and Wall Brown. The weeds attracted us with among the many species here mostly blue, but also some red, Scarlet Pimpernel; Mallow-leaved Stork's-bill; and Buck's-horn Plantain. Several Italian Wall Lizards were active in the sunshine.

A nearby Napoleonic tower had the endemic *Campanula garganica* in good flower. Also here was White Henbane and I was pleased to find two Southern Comma larvae on the *Parietaria judaica*. Also in bloom was *Matthiola incana*.

Lunch was set out in an olive grove a little inland where there were a few Lady Orchids, but not the fine show that used to be at this site. *Nigella damascena* was in flower and Small Copper was on the wing.

A somewhat longer drive east took us to near Vieste, where we saw many Pyramidal Orchids, in fine flower. *Ophrys incubacea* was also here, Tassel Hyacinths were numerous, and there was a lot of Rosy Garlic. There were a number of *Orobancha loricata*, and *Malva cretica* and *Convolvulus pentapetaloides* were pleasing finds. Green-underside Blue and Brown Argus were seen. Bee-eaters called regularly, Red-rumped Swallows were a pleasing addition to the bird list, and a Hobby flew over. Among the many other flowers were *Onobrychis aequidentata*, and *Scorzonera hirsuta*. The next site had *Ophrys sicula* and more fine *Ophrys apulica*, and Richard saw a Jack Snipe here. Light rain curtailed a very productive full first day.

We arrived back at the hotel with time for a rest and an initial run through the plant list before enjoying dinner in the restaurant.

### **Day 3 Wednesday 24<sup>th</sup> April      Passo Ingarano, Dolina Pozzatina and Spina Pulci**

We drove west this morning, the skies cloudy but the day bright, as we headed to the Passo Ingarano, arriving after about an hour. We spent the whole morning exploring the hillsides here and found much of interest. Near the vehicle we started the plant list with *Erodium ciconium*, the beautiful *Pisum sativum*, and some amazingly robust Giant Fennels. Having

accessed a stony slope we started to see orchids, with widespread species such as *Ophrys bombyliflora* and many *Orchis italica* and *Orchis papilionacea*. A good number of Man Orchids were in good flower. Higher up were several of the southern Italian endemic *Ophrys parvimaculata* in fine flower, but the Adriatic endemic *Ophrys archipelagi* had gone over. Near both parents was a rather convincing hybrid between the two.

The yellowish mounds of *Euphorbia spinosa* were very attractive, the lovely purple flowered *Verbascum phoeniceum* was particularly fine, and *Vicia benghalensis* was in good bloom. *Paliurus spina-christi* provided a rather prickly scrub covered hillside which is spreading on the lower slopes. The *Iris lutescens* were mostly over here but there were a few still in flower, of the purple form. There were some fine patches of *Cyclamen repandum* higher up the slope sheltered under the Downy Oaks. Among the other plants here were *Lathyrus cicera*, *Helianthemum salicifolium*, *Alyssoides sinuata*, *Parentucellia latifolia*, and *Scorzonera hirsuta*. Subalpine Warblers were active in the scrub, whilst a female Montagu's Harrier flew overhead, and Corn Buntings and Cirl Buntings called from prominent perches. A dead Roman Mole was found.

Land snails are a feature of these limestone slopes. *Pomaceus elegans* was attractive; *Rumina decolata* had a characteristic truncated shell; a member of the Clausilidae represented a very large family; and a large Vitrinid shell, a glass snail, was characteristically light.

I started turning over stones and soon located no less than three of the potentially dangerous centipede *Scolopendra cingulatus*, and two small scorpions *Buthus occitanus*. A Cream-spot Tiger was much admired.

It was time to leave this productive site, and we drove a few kilometres to the impressive Dolina Pozzatina, a bowl shaped depression formed by the collapse of the limestone roof, the largest of its kind in the Gargano. It was time for our picnic and I set out the picnic in the back of the vehicle whilst the group admired the verdant dolina, surprisingly an arable field on its floor. Here the *Paeonia mascula* was already over.

Nearby was a large meadow coloured pink by the masses of *Orchis morio* and *Orchis papilionacea*. There were also a few obvious examples of hybrids between the two. Subalpine Warblers were much in evidence. Common Whitethroat and Corn Bunting were here, and in an oak copse I spotted a Golden Oriole to show Irene, rather distant, but a new bird for her. The peonies were again mostly over, but one still had petals, much paler than the deeply coloured *Paeonia peregrina* we had seen on the first day.

Next we headed up a minor road to the beautiful oak-hornbeam woodland of the Bosco di Spina Pulci, where the trees had just burst into leaf and were a startlingly fresh green. The forest floor was covered with *Anemone apennina*, *Cyclamen repandum* and *Allium pendulinum*. We strolled through the lovely woodland and found many other plants including *Viola graeca*, Wood Spurge, *Cardamine graeca*, a few *Narcissus poeticus* still in flower, and *Doronicum orientale*. A highlight was several fine specimens of *Ophrys biscutella*, and several yellow *Dactylorhiza romana* here this year. The diminutive *Asterolinon linum-stellatum* was common and *Aphanes inexpectata* was numerous for those who appreciate the tiniest of plants. *Vicia grandiflora*, *Bellis sylvestris*, and *Muscari commutatum* were noted too. The foodplant of Southern Festoon, *Aristolochia longa*, was rather common, and we saw the butterfly too, a species that we would

see at many sites this year. Nuthatch and Common Treecreeper were seen, and Green Woodpeckers called.

In the evening we met for a run through of the fauna we had seen so far, before dinner.

## **Day 4 Thursday 25<sup>th</sup> April      Lake Lesina and Carpino Area**

Awaking to fine weather we again headed west, initially along the coast and the bar that runs along the northern shore of Lake Varano. Having negotiated the stange deserted resort town of Lido del Sole, our first stop was a sandy track. Along the sides of the path patches of beautiful deep blue were provided by *Alkanna tinctoria*. The typical sand dune species *Silene colorata*, *Silene conica* and *Lotus cytisoides* were common, whilst Myrtle, *Phillyrea angustifolia* and Mediterranean Buckthorn were among the shrubs. White Mignonette was here, and Sweet Alison was common. The *Acacia cyanophylla* was in impressive flower and the grass *Lagurus ovatus* was very attractive. On the dunes was a fine flora including Sea Holly, Sea Medick, Cottonweed, *Anthemis maritima* (much in flower), *Ononis variegata*, Sea Spurge and Sea Bindweed, and the spiky leaves of *Echinophora spinosa* were found. Pelicans-foot, *Aporrhais pespelicani* was among the shells on the beach.

A basking European Pond Terrapin beside the channel was too distant to be appreciated properly. Green Frogs (Italian Hybrid Frogs) rasped continuously whilst Cetti's Warbler periodically gave its explosive song. Long-tailed Tits frequented the pines.

A little further along a wider sandy track again took us down to the shore. *Verbascum phlomoides* and *Cistus salvifolius* were in flower, and *Lonicera etrusca* and *Dorycnium hirsutum* were growing in the dunes. We again reached the beach and had a look at the typical flora. Also noted here were *Tragopogon crocifolius*, and *Erodium laciniatum*. Hoopoe was seen briefly.

Next we drove west to Lake Lesina, reaching the northern shores, and walked down to the fringing reed beds. There followed some good birding.

Little Egret was seen and on the lake were many Coots. Several Wood Sandpipers fed on the exposed mud, whilst a Marsh Harrier hunted over the reeds. Penduline Tits were seen superbly well gathering nesting material from the reeds. Indeed four nests were located, and the photographers spent much time at two of these, the birds regularly returning with nesting material and adding to the nests in the tamarisks.

On the lake were a few Little and Great Crested Grebes, and Pochard and Ferruginous Duck were seen. Common Snipe was seen in flight. Water Rail called from the reeds and Crested Larks frequented the ploughed fields. Great Reed Warblers sang continuously and were seen in the reeds, and Zitting Cisticolas performed display flights. One field had much *Melilotus messanensis* in flower. A highlight was an impressively large Four-lined Snake in the shallow water at the lake's edge, watched for a reasonable time.

Lunch was eaten a little further west. Black-headed Gulls were much in evidence, and there were a few Flamingos on this part of the lake, and Common Terns. Bee-eaters had been calling constantly and Walter spotted them on and around some low bushes on the other side of the channel. There was a typical salt marsh flora here.

In the afternoon we headed inland, initially above Cagnano where we found the local endemic *Iris bicapitata* in good flower, in the purple form. We drove along the periphery of the Bosco Quarto where the flowers were stunning, a taster of what we would see in a few days time. A stop was prompted by many superb *Dactylorhiza romana* under the trees. Here too was a fine *Orchis provincialis*.

The next stop was to look for Dense-flowered Orchid at one of the few sites where it may already be in flower at this time, where if we find it at all it's usually only one plant. Searching today yielded a few leaves, with one just about in flower. *Viola graeca* was here in both purple and yellow forms, and *Viola suavis* was found too. *Cruciata laevipes*, *Aremonia agrimonioides*, *Lamium garganicum* and *Ranunculus millefoliatus* were all in bloom.

The last stop of the day was on a fine rocky limestone hillside that supported many plants. Below us were Lake Varano and the calm blue sea. A few *Ophrys promontorii* were located, another new species for the trip, and there were several Burnt-tip Orchids. The natural rock garden held many fine flowers, with crucifers a feature, among them Burnt Candytuft, *Thlaspi praecox*, and *Alyssum minus*. *Anchusa cretica* and *Ajuga genevensis* provided some lovely blue splashes of colour, and there were many Man Orchids. *Minuartia verna* was in flower and there were extensive patches of *Parentucellia latifolia*.

## Day 5 Friday 26<sup>th</sup> April                      Transfer to Monte St. Angelo via Foresta Umbra

It was time to say farewell to the friendly owners of the hotel at Rodi and head south, driving inland across the peninsula of the Gargano, to our next hotel, in Monte St. Angelo. Clear blue skies were again characteristic. Our first scheduled stop was to admire what for several years has been a fine show of Lady Orchids under an olive grove. Sadly the obsessive chemical spraying of roadsides this year had scuppered this population the whole ground flora yellow and withered. However at the same site, just below the road, was a fine substitute, where under another olive grove some forty superb spikes were very photogenic and impressive. *Calystegia silvatica* bloomed in a hedgerow.

Next we stopped in the northern part of the Foresta Umbra, a beautiful beech woodland, to look for various woodland orchids. We found a few of the rare (here) *Orchis provincialis* in flower, and very young spikes of *Epipactis*, and a few *Cephalanthera damasonium* coming into flower. There was a good population of *Erica arborea* at the bottom of the slope, with which *Orchis provincialis* often grows. Sanicle was in bloom on the forest floor. Cuckoo called and Blackcaps and other familiar woodland birds provided a chorus in this beautiful spot. Firecrest and Great Spotted Woodpecker were here too.

The next stop took us to the small visitor centre of the Foresta Umbra, where a little museum displays a large number of stuffed local animals (mammals, birds, butterflies, moths, a few amphibians and reptiles), and the small shop has a reasonable selection of publications and postcards. Just next door to the visitor centre there was an enclosure with some Fallow Deer. On the wall here were Wall Speedwell, Shining Cranesbill, Maidenhair Spleenwort, Hart's-tongue Fern, and Rusty-back Fern. A drive east along the road to Vieste took us through more superb woodland, much more like an eastern European forest rather than one in southern Italy.

The woodland bird song was remarkable with a host of common species all singing together. Various stops produced a good selection of ferns, and *Cardamine chelidonia*.

I was especially pleased to spot two fine Sword-leaved Helleborines in perfect bloom on the roadside, and these were duly admired. At another stop Holly Blue and Speckled Wood were on the wing in the sunshine. Strangely the *Scrophularia vernalis* I'd found the previous year was not located, but *Scrophularia peregrina* was here instead!

We ate lunch at one of the many picnic tables provided in the forest. There were several interesting plants here such as *Cardamine bulbifera*, Ramsons, and Woodruff. The attendant Nuthatch was rather shy than is usual!

Once out of the forest a stop among open fields yielded a selection of orchids, and a pair of Woodchat Shrikes put in a brief appearance. Nearing Monte St. Angelo we made a stop at an orchid rich site, where we saw *Ophrys bertoloniiiformis* for the first time. Also here were *Ophrys promontorii*, *Ophrys sicula*, and *Ophrys phryganae*. With many common species here too there were perhaps fifteen orchid species at this site. The white *Helianthemum apenninum* was in fine flower, as was the rather tall *Bellis sylvestris*. Tree Heath was a feature of the roadsides in the area.

Another site had many flowers, including some beautiful forms of *Iris lutescens*. Here rather large numbers of *Ophrys funerea* this year was the highlight. There were many other orchids here too, and briefly I saw a dark phase Western Whip Snake. Queen of Spain Fritillary was on the wing.

We arrived at the hotel in Monte St. Angelo late afternoon and settled into our very comfortable rooms. As we drove through town we saw the purple *Aubrieta columnnae*, white *Arabis alpina*, the pink *Lamium garganicum*, and the yellow *Doronicum columnnae* in flower on the rocks.

We enjoyed a very good dinner in the hotel restaurant.

## Day 6 Thursday 19<sup>th</sup> April      Pulsano Road

A local day today, spent exploring the very productive Pulsano Road. The weather was rather changeable, and pretty cool at first, however with sunny spells, but unfortunately by lunch time the only persistent rain of the tour came, and the rest of the day was rather wet.

Orchids are a feature of the area, and very many were seen today. *Ophrys bertolonii*, *Ophrys bertoloniformis*, *Ophrys promontorii*, *Ophrys tenthredinifera*, *Ophrys garganica*, and *Ophrys sicula* were all in fine form. *Orchis lactea* was rather common at a couple of sites, but only one was found still in flower this year. Common species such as Man Orchid, *Orchis italica* and *Orchis morio* were numerous. At one site was a particularly fine patch of *Orchis quadripunctata*. I was very pleased to find a lone *Ophrys sipontensis*, a very local endemic, at a new site. Richard found the hybrid *Orchis italica* x *Aceras anthropophorum*, particularly appreciated by Walter.

The lack of sunshine meant most butterflies were rather torpid, providing ample photographic opportunities. At the first site were a remarkable number of Chapman's Blues, whilst Little Blues, Baton Blue, and Brown Argus were here too. A pair of freshly emerged Swallowtails

looked especially fine. *Arabis verna* was in attractive flower in one shady spot and among other new plants were *Helianthemum canum*, *Scandix australis*, *Valantia muralis* and *Valeriana collina*. The woolly leaves of *Salvia argentea* were very attractive. Lifting various stones yielded another impressive *Scolopendra* centipede and a few more scorpions. Communal masses of larvae of the lackey moth *Malacosoma franconicum* were numerous in the area.

Today I was forced to set out the extensive picnic in the back of the van under the cover of the door, whilst the group had to eat inside the vehicle due to the heavy rain. Early afternoon saw us visiting the Pulsano sanctuary from where the views of the gorge were impressive, all the way down to the coast. The old walls here supported several interesting plants including *Seseli montanum*, *Hyoscyamus albus*, *Capparis spinosa* and *Cymbalaria muralis*. There was a selection of fumitories.

Most opted for an early return to the hotel rather than the intended gorge walk, due to the persistent rain. This is one of my favourite sites of the tour, and I intended that we would return here in better weather, as it is usually especially productive for butterflies. Nevertheless Richard was keen to set out anyway despite the weather, so after driving the others to the hotel, we returned and embarked on what was a rather wet but very productive and enjoyable walk. By the end of it the heavy cloud had even cleared somewhat and there was a little sunshine.

The rocks supported three endemic plants. *Campanula garganica* had a few fine flowers, *Scabiosa dallaportae* was surprisingly not even in bud, whilst the *Inula verbascifolia* blooms much later. *Chamaecytisus spinescens* and *Onosma echioides* were both very attractive. There were some impressive broomrape spikes, *Orobanche caryophyllacea*, parasitising *Galium*. Several *Ophrys apulica* were located, and Early Spider Orchid, *Ophrys sphegodes*, was in flower. *Thesium humile*, *Silene subconica*, and *Sideritis romana* were among the many other plants. A highlight was a few *Serapias orientalis*, an addition to the orchid list.

Perched in the dull weather were several Eastern Bath Whites, with Eastern Dappled White here too. The burnet *Zygaena loti restricta* had evidently just emerged.

## Day 7 Sunday 28<sup>th</sup> April                      Bosco Quarto and Chiancate

Today, once we had left the 'main' road we saw almost nobody at all during our time in the beautiful Bosco Quarto, and very few vehicles on Chiancate either, surprising on a Sunday with perfect weather. As we left Monte St. Angelo we admired the cliffs covered in *Aubrietia columnae*, *Arabis alpina*, *Doronicum columnae*, and *Lamium garganicum*, but the rosettes of *Campanula garganica* were not in flower. At the first scheduled stop there was much *Linum austriacum* and *Helianthemum apenninum*, and Nightingale, Corn Buntings and Stonechats provided the soundtrack. I was pleased to find a fine stand of *Vicia melanops*, a species seemingly less common in the Gargano than in the past.

At a site for *Paeonia mascula* a few were in reasonable bloom, and among the arable weeds were *Eranthis hyemalis* (leaves), *Thlaspi perfoliatum* and *Lathyrus ochrus*. We had fine views of a Green Lizard. A roadside rock garden held many *Narcissus poeticus*, abundant *Anemone apennina*,

*Ophrys sphegodes*, and *Saxifraga carpetana*. Here were a couple of very early plants of Orange Lily just emerging and our first Elder-flowered Orchid. Golden Oriole sang in the distance.

Now in the woods, there were many fine *Dactylorhiza romana*. Among the many other woodland plants were Spurge Laurel, *Stellaria holostea*, *Dorycnium orientale* and *Cardamine graeca*. Much searching failed to locate any Bird's-nest Orchids (only a few old spikes), sometimes in good flower at this time, but a bonus was some fine morels. The woodland bird song was a constant soundtrack. White-backed Woodpecker was seen all too briefly.

At another stop the woodland floor was covered in privet, among which grew *Polygonatum multiflorum*, *Pulmonaria vallisae*, *Allium pendulinum*, *Anemone apennina*, *Viola suavis*, and *Viola riviniana*. Blackcaps sang continuously.

It was time for lunch which I prepared at one of the many deserted picnic areas. The gageas we sometimes see in bloom here, *Gagea chrysantha*, were all in fruit this year.

A field that is usually full of *Corydalis cava* had many in flower this year, but the *Paeonia mascula* here was in bud. There was also fine *Iris lutescens* and our first *Euphorbia myrsinites*, surely one of the most striking plants of the tour. A great find here was a lone *Bellevalia romana*, not seen by us on this tour since 2005! Southern Festoon was flying and *Senecio tenorei* was in flower.

Once on the fine limestone upland of Chiancate we were treated to one of the floral highlights of the week. The *Orchis pauciflora* was in fine form, with many in flower. This is the only known site for the diminutive *Ophrys virescens* on the peninsula, and I was pleased to find nearly thirty of them today. Several more fine Elder-flowered Orchids were located. There was much more *Euphorbia myrsinites*, and *Alyssum minus*, amid a fine selection of species already familiar to us. The *Narcissus tazetta* was all in fruit already this year. The limestone hills made an impressive backdrop.

Another stop was made for a simply stunning show of orchids, before we continued home to our lovely hotel and another very welcome dinner. Scops Owl was heard near the hotel.

## **Day 8 Monday 29<sup>th</sup> April                      Ruggiano Road and Margherita Salt pans**

Again under clear blue skies we set out on a varied day. At the first stop there was a selection of the commoner orchids, and a few *Ophrys biscutella*. Corn Bunting and Stonechat were much in evidence, and Walter found a green Western Whip Snake. A friendly dog was pleased to see us again. At the next slope there were many fine irises. Subalpine Warblers called from the bushes and we again heard Golden Oriole. The sun brought out many butterflies, particularly in one sheltered gully. Swallowtail, Scarce Swallowtail, Eastern Dappled White, Brimstone, Small Copper, Little Blue, Baton Blue, and Adonis Blue were all here. There were also several ascelaphids on the wing. *Linaria pelisseriana* was new for us and a pleasing find was the thrift *Armeria canescens*, just coming into flower, a species not seen for many years on this tour. One plant of *Salvia argentea* was in flower.

Close by was the site for the very local endemic *Ophrys sipontensis*, where some were in fine flower this year, although most showed some degree of hybridisation. The proximity of *Ophrys*

*bertolonii* and *Ophrys bertoloniiiformis* allowed the two to be compared. *Potentilla hirta* was in leaf. Irene was especially pleased when a Cuckoo flew over.

A viewpoint stop yielded fine views of Manfredonia and Siponto below. Blue Rock Thrush and Black-eared Wheatear were both seen. In leaf on the cliffs were *Dianthus sylvestris*, and the endemic *Centaurea subtilis*. *Tyrimnus leucographus* was added to the plant list. Among the many butterflies was the very special Italian Marbled White.

I set out the picnic in a beautiful olive grove near the locked gates of a interesting large ruined house, which showed an interesting range of architectural styles, with a selection of follies and outbuildings. One of my targets here was again Italian Marbled White, but it failed to appear here this year. Mallow Skippers and Four-spotted Moth were seen however, and *Medicago orbicularis* was in impressive fruit. *Echium parviflorum* was added to the list. There were a few Whinchats here, a species we saw at several sites this year.

The next stop was beside the busy motorway, a necessity to see the impressive *Serapias apulica*, reliable at this site, with several still in good flower. The vegetation here was as always very interesting but the difficult location meant we had to move on quickly after the *Serapias* had been admired.

Back on the road we drove south to the extensive series of working saltpans at Margherita. The many Flamingoes were mostly rather distant this year, grouped on the far side of the pans, although we saw a few closer birds, and large numbers in flight. Three Spoonbills were seen well. Among the waders were Black-winged Stilts, Little Stints, Ruff, Kentish Plovers, a lone Little Ringed Plover, Wood Sandpiper, Dunlin, and Curlew Sandpiper. The grey-headed form of Yellow Wagtail was seen well.

A feature of the site is the Slender-billed Gulls, in fully developed pink-flushed breeding plumage, and many were here today. Mediterranean Gulls were in breeding plumage and a Little Gull was a bonus. There were a few Little Terns. Shelduck were much in evidence, and there were many Avocets. The flora included typical saltmarsh species such as *Arthrocnemum perenne*, *Arthrocnemum fruticosum*, *Suaeda vera* and *Camphorosma monspeliaca*. Two Moorish Geckos basking on a disused building were well photographed.

Several Curlew Sandpipers were in breeding plumage, with one group in a channel near the road being approached closely. The Dunlin were also in breeding plumage.

We headed back to Monte St. Angelo via an exciting series of hairpin bends.

## **Day 9 Tuesday 22<sup>nd</sup> April      Monte Nero**

Our last day in the field saw us visiting a mixed selection of sites. Again the day started fine in Monte St. Angelo. Initially we headed a little further west to start a leisurely walk up Monte Nero, which today would take most of the morning.

The paved track that leads up Monte Nero is always a floral delight, having much in common with the nearby Chiancate. Thus we saw many more *Orchis pauciflora*, as well as many Elder-flowered Orchids, and *Dactylorhiza maculata* was in leaf. Marsh Tit was seen, Lesser Spotted

Woodpecker called, and Blackcaps sang. There were fine views of the extensive surrounding woodland, with scattered exposed limestone outcrops on the hill tops. Among the many plants here were *Aristolochia longa*, *Anemone pavonina*, *Ranunculus millefoliatus*, *Saxifraga bulbifera*, *Viola heterophylla*, and *Anchusa cretica*. *Symphytum bulbosum* and White Asphodel were new species for the tour. After much searching I located *Plantago subulata* and there was much *Laserpitium garganicum* in leaf. There were a few *Globularia punctata* in flower and *Senecio tenorei* was in bud.

Near Borgo Celano we saw several *Serapias vomeracea* and Burnt-tip Orchids, as well as a selection of *Ophrys*. An unfortunate injured Western Whip Snake was on the road, obviously hit by the vehicle that had preceded us.

Our last picnic was eaten in the Cento Pozzi dolina where the ponds supported the usual Italian Hybrid Frogs and Italian Crested Newts, and European Pond Terrapins. I had been dismayed at the amount of litter at this site in previous years, discarded by thoughtless visitors, but thankfully the last couple of years there has been almost none. A Dice Snake frequented one of the ponds, Subalpine Warbler and Nightingale sang throughout our visit, and as we arrived a Honey Buzzard flew over. Richard found Glanville and Knapweed Fritillaries flying together.

The afternoon was devoted to a return visit to walk the Pulsano Gorge, in fine sunshine this time!

The walk along the gorge was indeed rather hot this afternoon but the path is not difficult, and descends very gradually to the woods at the bottom. Of course we saw all the plants seen on our previous visit and we added several others. *Orobanche gracilis* parasitised legumes. There were many butterflies on the wing, and a fine Italian Marbled White nectared. Clouded Yellow still caused much interest and Cleopatra was on the wing. There was a good selection of blues.

Moorish Geckos frequented the limestone rocks, and Walter did battle with another black Western Whip Snake that really didn't want to be shown to the group!

## **Day 10 Wednesday 1<sup>st</sup> May      To Bari and Departure**

We said our farewells to Monte St. Angelo and descended to the plains, via the Ruggiano road, to Foggia, then taking the autostrada south to Bari. We reached the airport exactly at the intended time, and said our fond farewells. I then drove Irene to her hotel near the airport, as her flight was not until the following day.

## Gargano Systematic Lists 2013

Compiled by Paul Cardy

### Itinerary

- Day 1. 22<sup>nd</sup> April. Arrival. Transfer to Rodi Garganico. *Paeonia peregrina* site.
- Day 2. 23<sup>rd</sup> April. Beach near Peschici, sites west of Vieste.
- Day 3. 24<sup>th</sup> April. Passo Ingarano, Dolina Pozzatina, Bosco di Spina Pulci.
- Day 4. 25<sup>th</sup> April. Varano Island, Lake Lesina, sites above Carpino and Cagnano.
- Day 5. 26<sup>th</sup> April. Vico, Foresta Umbra, Carbonara Valley, Monte St. Angelo.
- Day 6. 27<sup>th</sup> April. Pulsano road and gorge.
- Day 7. 28<sup>th</sup> April. Bosco Quarto, Chiancate.
- Day 8. 29<sup>th</sup> April. Ruggiano road, Villa Rosa, Margherita saltpans.
- Day 9. 30<sup>th</sup> April. Monte Nero, Borgo Celano, Cento Pozzi, Pulsano Gorge.
- Day 10. 1<sup>st</sup> May. To Bari and departure.

## Systematic List Number 1      Plants

Species recorded on previous tours but not seen this year are annotated with the year in which they were last seen. Species seen for the first time this year are annotated 2013. A number of works are used for taxonomy and nomenclature, although in general the system of Flora Europaea is followed. ‘An Annotated Checklist of the Italian Vascular Flora’ by Conti et al, 2005, is invaluable. ‘Bestimmungsschlüssel zur Flora des Gargano’ by Wolfgang Licht, 2008, is an invaluable flora for those who speak German!

### *Pteridophyta*

<i>Adiantum capillus-veneris</i>	Maidenhair Fern	Peschici area 2007
<i>Asplenium adiantum-nigrum</i>	Black Spleenwort	Foresta Umbra and Bosco Quarto
<i>Asplenium trichomanes</i>	Maidenhair Spleenwort	Sheltered walls etc., locally common, e.g. Foresta Umbra
<i>Blechnum spicant</i>	Hard Fern	Foresta Umbra
<i>Ceterach officinarum</i>	Rustyback Fern	Widespread and locally common
<i>Cystopteris fragilis</i>	Brittle Bladder Fern	A few records, e.g. Monte Nero
<i>Dryopteris filix-mas</i>	Male Fern	Noted in the Foresta Umbra and Bosco Quarto
<i>Phyllitis scolopendrium</i>	Harts-tongue Fern	Noted in the Foresta Umbra, where locally common, and Bosco Quarto
<i>Polypodium cambricum</i>	Southern Polypody	Foresta Umbra etc.
<i>Polypodium vulgare</i>	Common Polypody	Foresta Umbra and Bosco Quarto
<i>Polystichum setiferum</i>	Soft Shield Fern	Foresta Umbra
<i>Pteridium aquilinum</i>	Bracken	Widespread
<i>Selaginella denticulata</i>	Mediterranean Selaginella	Locally common on shaded rocks and banks

### *Gymnospermae*

#### *Pinaceae*

<i>Cedrus atlantica</i>	Atlas Cedar	Bosco Quarto Agriturismo 2006
<i>Larix decidua</i>	Larch	Foresta Umbra and Bosco di Spina Pulci
<i>Pinus halepensis</i>	Aleppo Pine	Widespread, forming woods in the north
<i>Pinus nigra</i>	Black Pine	Locally planted, e.g. Foresta Umbra
<i>Pinus pinea</i>	Stone Pine	Noted on journeys to and from Bari Airport
<i>Pinus sylvestris</i>	Scots Pine	Foresta Umbra
<i>Pseudotsuga menziesii</i>	Douglas Fir	Agriturismo in Bosco Quarto 2006

#### *Cupressaceae*

<i>Cupressus macrocarpa</i>	Monterey Cypress	Above Carpino etc.
<i>Cupressus sempervirens</i>	Italian Cypress	Scattered
<i>Juniperus oxycedrus</i>	Prickly Juniper	North coast and Pulsano Gorge
<i>Juniperus phoenicea</i>	Phoenician Juniper	Noted along the north coast 2004!

#### *Taxacaceae*

<i>Taxus baccata</i>	Yew	Foresta Umbra
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## Angiospermae Dicotyledones

### Corylaceae

<i>Carpinus betulus</i>	Hornbeam	Widespread in the hills – sometimes co-dominant. Smooth grey bark.
<i>Carpinus orientalis</i>	Oriental Hornbeam	Widespread – tended to be commoner on lower slopes of the hills. Similar to the previous species but smaller leaves.
<i>Ostrya carpinifolia</i>	Hop Hornbeam	Locally numerous. Trunk brown and fissured. e.g. Spina Pulci
<i>Corylus avellana</i>	Hazel	Pulsano road

### Fagaceae

<i>Castanea sativa</i>	Sweet Chestnut	Local, e.g. Chiancate
<i>Fagus sylvatica</i>	Common Beech	Locally dominant, as in parts of Foresta Umbra
<i>Quercus cerris</i>	Turkey Oak	Widespread in the forests
<i>Quercus ilex</i>	Holm Oak	Widespread
<i>Quercus pubescens</i>	Downy Oak	Scattered throughout, forest on Monte Nero
<i>Quercus robur</i>	Pedunculate Oak	Noted at Dolina Pozzolino in previous years

### Salicaceae

<i>Salix babylonica</i>	Weeping Willow	Pulsano Road, Monte St Angelo.
<i>Populus nigra</i>	Black Poplar	North coast
<i>Populus tremula</i>	Aspen	A few in Foresta Umbra

### Juglandaceae

<i>Juglans regia</i>	Walnut	Near Bosco Quarto and in the north
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### Betulaceae

<i>Alnus cordata</i>	Oriental Alder	Foresta Umbra 2008
<i>Betula pendula</i>	Silver Birch	Foresta Umbra

### Ulmaceae

<i>Ulmus glabra</i>	Wych Elm	Foresta Umbra
<i>Ulmus minor</i>	Small-leaved Elm	Scattered records, e.g. Passo Ingarano

### Moraceae

<i>Ficus carica</i>	Fig	Widespread
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### Loranthaceae

<i>Loranthus europaeus</i>	a mistletoe	Parasitic on one oak near Ruggiano junction.
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### Santalaceae

<i>Osyris alba</i>	Osyris	Near Vico
<i>Thesium humile</i>	a bastard toadflax	Pulsano gorge and <i>Serapias apulica</i> site

### Urticaceae

<i>Parietaria judaica</i>	Pellitory of the Wall	Scattered
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<i>Parietaria officinalis</i>	Common Pellitory	Pulsano Sanctuary
<i>Urtica dioica</i>	Stinging Nettle	Common
<i>Urtica membranacea</i>	Membranous Nettle	Near the hotel in the north
<i>Urtica pilulifera</i>	Roman Nettle	Northern Forest Umbra roadsides
<i>Urtica urens</i>	Annual Nettle	North coast

## Aristolochiaceae

<i>Aristolochia clusii</i>	a birthwort	Scattered records, ground cover in woods. Synonym <i>A. longa</i> . Some affected by a rust.
<i>Aristolochia rotunda</i>	a birthwort	Noted in the Foresta Umbra and Bosco di Spina Pulci etc. Very short petioles.

## Polygonaceae

<i>Polygonum aviculare</i>	Knotgrass	South coast
<i>Rumex acetosa</i>	Common Sorrel	Scattered records
<i>Rumex acetosella</i>	Sheep's Sorrel	Near Dolina Pozzatina
<i>Rumex conglomeratus</i>	Clustered Dock	Margherita Salt pans
<i>Rumex crispus</i>	Curled Dock	Scattered records
<i>Rumex obtusifolius</i>	Broad-leaved Dock	Scattered records
<i>Rumex palustris</i>	Marsh Dock	Manfredonia Wetlands 2005
<i>Rumex pulcher</i>	Fiddle Dock	Foresta Umbra 2006

## Chenopodiaceae

<i>Arthrocnemum macrostachya</i>	Glasswort	Margherita Salt pans and Lake Lesina
<i>Atriplex halimus</i>	Shrubby Orache	Lake Lesina in previous years
<i>Atriplex prostrata</i>	Spear-leaved Orache	Lake Lesina and near Peschici
<i>Beta vulgaris</i>	Sea Beet	Near Peschici
<i>Camphorosma monspeliaca</i>		Margherita Salt pans
<i>Chenopodium album</i>	Fat Hen	Near Peschici 2012
<i>Chenopodium murale</i>	Nettle-leaved Goosefoot	Santa Maria di Pulsano Sanctuary
<i>Chenopodium vulvaria</i>	Stinking Goosefoot	Near Peschici 2011
<i>Halimione portulacoides</i>	Sea Purslane	Salt marshes at Margherita and Lesina
<i>Salicornia europaea</i>	Glasswort	Margherita Salt pans
<i>Salsola kali</i>	Prickly Saltwort	Varano Island 2012
<i>Suaeda vera</i>	Shrubby Seablite	Noted at Margherita Salt pans
<i>Suaeda splendens</i>	a seablite	Margherita Salt pans

## Aizoaceae

<i>Carpobrotus edulis</i>	Hottentot Fig	Saltmarshes at Margherita Salt pans, and north coast
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## Caryophyllaceae

<i>Arenaria leptoclados</i>	Lesser Thyme-leaved Sandwort	Scattered records
<i>Arenaria serpyllifolia</i>	Thyme-leaved Sandwort	Pulsano Road, Peschici area etc.
<i>Cerastium fontanum</i>	Mouse-ear Chickweed	Scattered records, e.g. Passo Ingarano
<i>Cerastium glomeratum</i>	Sticky Mouse-ear	Widespread
<i>Cerastium semidecandrum</i>	Little Mouse-ear	North coast and Pulsano road 2008
<i>Dianthus sylvestris</i>	Wood Pink	A few in leaf at Ruggiano viewpoint
<i>Herniaria glabra</i>	Smooth Rupturewort	Chiancate etc.
<i>Herniaria hirsuta</i>	Hairy Rupturewort	Ruggiano road 2012
<i>Minuartia hybrida</i>	Fine-leaved Sandwort	Scattered records, e.g. Spina Pulci
<i>Minuartia verna</i>	Spring Sandwort	Widespread in the hills, locally common.
<i>Moehringia trinervia</i>	Three-veined Sandwort	Bosco Quarto 2006
<i>Petrohagia velutina</i>	Kohlrauschia	Scattered records, e.g. Ruggiano road
<i>Polycarpon diphyllum</i>	Two-leaved Allseed	Noted in the south 2011
<i>Polycarpon tetraphyllum</i>	Four-leaved Allseed	North coast etc.

<i>Sagina apetala</i>	Annual Pearlwort	Pulsano Road
<i>Sagina procumbens</i>	Procumbent Pearlwort	Scattered records
<i>Scleranthus annuus</i>	Annual Knawel	Monte Nero 2008
<i>Scleranthus perennis</i>	Perennial Knawel	Recorded 2011
<i>Silene alba</i>	White Campion	Scattered records
<i>Silene colorata</i>	a catchfly	Very common on coastal dunes
<i>Silene conica</i>	Sand Catchfly	North Coast dunes
<i>Silene gallica</i>	Small-flowered Catchfly	Passo Ingarano 2008 and 2013
<i>Silene italica</i>	Italian Catchfly	Scattered, e.g. Pulsano Gorge
<i>Silene subconica</i>	a catchfly	Pulsano road and gorge
<i>Silene vulgaris</i>	Bladder Campion	Scattered, e.g. Varano Island
<i>Spergularia marina</i>	Lesser Sea Spurrey	Manfredonia wetlands 2008
<i>Spergularia rubra</i>	Sand-spurrey	Peschici etc.
<i>Stellaria holostea</i>	Greater Stitchwort	Scattered in wooded areas, e.g. Bosco Quarto
<i>Stellaria media</i>	Common Chickweed	Widespread. Stamens 3 to 8.
<i>Stellaria neglecta</i>	Greater Chickweed	Recorded. Stamens 10.
<i>Velezia rigida</i>	Velezia	Vieste area 2003

## Ranunculaceae

<i>Adonis aestivalis</i>	a Pheasant's-eye	Rignano 2005
<i>Adonis annua</i>	Pheasant's-eye	Carbonara Valley 2006 and 2013
<i>Anemone pennina</i>	Blue Anemone	Locally co-dominant under trees in the hills, including much of the white form var. <i>albiflora</i>
<i>Anemone hortensis</i>	an anemone	Scattered records. Tepals 12 to 19.
<i>Anemone pavonina</i>	Peacock Anemone	Widespread and common. Tepals 7 to 12.
<i>Aquilegia vulgaris</i>	Common Columbine	Leaves seen in the Bosco Quarto
<i>Clematis flammula</i>	Fragrant Clematis	Scattered in the north, in leaf
<i>Clematis vitalba</i>	Traveller's Joy	Scattered – mostly in the north. In leaf.
<i>Eranthis hyemalis</i>	Winter Aconite	In seed in Carbonara Valley
<i>Nigella damascena</i>	Love-in-a-mist	Peschici olive grove etc.
<i>Ranunculus acris</i>	Meadow Buttercup	Pilgrim's Road, Monte St Angelo and near Vieste
<i>Ranunculus arvensis</i>	Corn Buttercup	Carbonara 'tulip fields' 2012
<i>Ranunculus bulbosus</i>	Bulbous Buttercup	Widespread
<i>Ranunculus ficaria</i>	Lesser Celandine	Bosco di Spina Pulci, Monte Nero etc.
<i>Ranunculus garganicus</i>	a buttercup	Rather widespread. Sepals pubescent.
<i>Ranunculus lanuginosus</i>	Woolly Buttercup	Foresta Umbra
<i>Ranunculus millefoliatus</i>	a buttercup	Widespread and common. Sepals glabrous.
<i>Ranunculus muricatus</i>	a buttercup	Foresta Umbra 2013
<i>Ranunculus paludosus</i>	Jersey Buttercup	In leaf
<i>Ranunculus parviflorus</i>	Small-flowered Buttercup	Spina Pulci 2013
<i>Ranunculus sardous</i>	Hairy Buttercup	Widespread
<i>Ranunculus scleratus</i>	Celery-leaved Buttercup	Cento Pozzi
<i>Ranunculus trichophyllylus</i>	Thread-leaved Water Dropwort	Manfredonia wetlands 2008

## Paeoniaceae

<i>Paeonia mascula</i>	a Peony	In flower at one site in Carbonara Valley, several near Dolina Pozzatina in fruit, one flower, in bud near Chiancate
<i>Paeonia peregrina</i>	a Peony	Several in fine flower at one site in the northern coastal area, others in bud

## Capparaceae

<i>Capparis spinosa</i>	a Caper	Pulsano sanctuary
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## Papaveraceae

<i>Chelidonium majus</i>	Greater Celandine	Foresta Umbra
<i>Papaver apulum</i>	a poppy	Scattered records in north, mainly roadsides
<i>Papaver dubium</i>	Long-headed Poppy	Recorded in the north
<i>Papaver hybridum</i>	Rough Poppy	Passo Ingarano 2008
<i>Papaver rhoeas</i>	Common Poppy	Widespread and locally numerous
<i>Papaver somniferum</i>	Opium Poppy	Near Sannicandro 2007

## Fumariaceae

<i>Corydalis cava</i>	Bulbous Corydalis	Locally several in flower this year
<i>Fumaria agraria</i>	a fumitory	Dolina Pozzatina 2007
<i>Fumaria bastardii</i>	Tall Ramping-Fumitory	Scattered records
<i>Fumaria capreolata</i>	White Ramping-Fumitory	Widespread and common
<i>Fumaria densiflora</i>	a fumitory	Scattered records, e.g. Carbonara valley
<i>Fumaria officinalis</i>	Common Fumitory	Widespread and locally common
<i>Fumaria parviflora</i>	Small Fumitory	Pulsano Sanctuary, Passo Ingarano
<i>Fumaria vaillantii</i>	a fumitory	Near Peschici and Bosco Quarto

## Cruciferae

<i>Aethionema saxatile</i>	Burnt Candytuft	Hillside above Carpino, Pulsano road etc.
<i>Alliaria petiolata</i>	Garlic Mustard	Scattered in woodlands, e.g. Foresta Umbra
<i>Alyssoides sinuata</i>	Alyssoides	Scattered, e.g. Passo Ingarano and Pulsano sanctuary
<i>Alyssum leucadeum</i>		Possibly this species seen along Pulsano road 2004
<i>Alyssum minus</i>		Locally very common
<i>Arabidopsis thaliana</i>	Thale Cress	Scattered records
<i>Arabis alpina</i>	Alpine Rockcress	Monte St. Angelo, ssp. <i>caucasica</i>
<i>Arabis collina</i>	a rockcress	Scattered records in the south, pinkish flowers. Syn. <i>Arabis rosea</i> . Also above Carpino.
<i>Arabis hirsuta</i>	Hairy Rockcress	Widespread
<i>Arabis sagittata</i>	a rockcress	Recorded 2013
<i>Arabis turrita</i>	Towercress	Dolina Pozzatina
<i>Arabis verna</i>	Spring Rockcress	Bosco Quarto, Pulsano road, Passo Ingarano
<i>Aubrieta columnae</i>		Locally numerous on walls and rocks, Monte St. Angelo, ssp. <i>italica</i>
<i>Aurinia saxatile</i>	Golden Alyssum	Widespread and common, e.g. above Carpino
<i>Barbarea bracteosa</i>	a Wintercress	Scattered records
<i>Barbarea vulgaris</i>	Common Wintercress	Widespread
<i>Biscutella didyma</i>	Biscutella	Widespread
<i>Biscutellas lyrata</i>	a biscutella	Probably this species along Pulsano road
<i>Brassica nigra</i>	Black Mustard	Scattered
<i>Brassica rapa</i>	Wild Turnip	Recorded
<i>Bunias erucago</i>	Bunias	Rather widespread and locally common, e.g. near Peschici
<i>Cakile maritima</i>	Sea Rocket	Noted on the shore in the north, and at Margherita
<i>Calepina irregularis</i>	White Ball Mustard	Bosco di Spina Pulci
<i>Capsella bursa-pastoris</i>	Shepherd's-purse	Widespread and common
<i>Capsella rubella</i>	a shepherd's-purse	Recorded, e.g. Pulsano Gorge
<i>Cardamine chelidonia</i>	a bittercress	A few in Foresta Umbra
<i>Cardamine graeca</i>	a bittercress	Widespread in forests. White flowers.
<i>Cardamine hirsuta</i>	Hairy Bittercress	Bosco Quarto, Foresta Umbra etc.
<i>Cardaria draba</i>	Hoary Cress	Widespread, particularly in the north

<i>Clypeola jonthlaspi</i>	Clypeola	Recorded in fruit
<i>Coronopus squamatus</i>	Swinecress	Beach near Peschici 2008 and 2013
<i>Dentaria (Cardamine) bulbifera</i>	Coralroot Bittercress	Scattered in woods, e.g Foresta Umbra
<i>Diplotaxis eruroides</i>	White Wall Rocket	Near Peschici 2007
<i>Diplotaxis tenuifolia</i>	Perennial Wall Rocket	Margherita area 2012
<i>Draba muralis</i>	Wall Whitlow Grass	Scattered
<i>Erophila verna</i>	Whitlow Grass	Scattered records, a few still in flower
<i>Eruca sativa</i>	Eruca	Widespread and locally abundant
<i>Erysimum</i> sp.	Treacle Mustard	Yellow flowers and fine grey leaves, Pulsano road and transfer day. <i>Erysimum crassistylum?</i>
<i>Hirschfeldia incana</i>	Hoary Mustard	Scattered records
<i>Hornungia petraea</i>	Hutchinsia	Very local, Monte Nero
<i>Isatis tinctoria</i>	Woad	Widespread and often common on roadsides
<i>Lepidium latifolium</i>	Dittander	Very locally in flower on roadsides above Cagnano 2013.
<i>Lobularia maritima</i>	Sweet Alison	Scattered in the north
<i>Matthiola incana</i>	Hoary Stock	Tower near Peschici
<i>Matthiola sinuata</i>	Sea Stock	Only this species at tower near Peschici 2012 and mostly in fruit
<i>Neslia paniculata</i>	Ball Mustard	1 in arable field below Chiancate
<i>Raphanus raphinistrum</i>	Wild Radish	Scattered
<i>Rapistrum rugosum</i>	Bastard Cabbage	North, 2013
<i>Sinapis alba</i>	White Mustard	Widespread
<i>Sinapis arvensis</i>	Charlock	Widespread
<i>Sisymbrium irio</i>	London Rocket	Scattered records in the south
<i>Sisymbrium loeselii</i>	False London Rocket	Pulsano Sanctuary and Manfredonia
<i>Sisymbrium officinale</i>	Hedge Mustard	Scattered
<i>Sisymbrium orientale</i>	Eastern Rocket	Carbonara Valley 2012
<i>Thlaspi arvense</i>	Field Pennycress	Carbonara Valley, arable weed, 2012
<i>Thlaspi perfoliatum</i>	Perfoliate Pennycress	Arable weed near Bosco Quarto, 2012
<i>Thlaspi praecox</i>	a pennycress	Near Carpino, Bosco Quarto etc.

## Resedaceae

<i>Reseda alba</i>	White Mignonette	Widespread, mainly north
<i>Reseda lutea</i>	Wild Mignonette	North coast etc.
<i>Reseda phyteuma</i>	Corn Mignonette	Pulsano road and south of Foresta Umbra

## Crassulaceae

<i>Sedum acre</i>	Biting Stonecrop	Scattered in leaf, e.g. Pulsano Gorge
<i>Sedum album</i>	White Stonecrop	Monte Nero in leaf
<i>Sedum caespitosum</i>	a stonecrop	Widespread and locally common
<i>Sedum hispanicum</i>	a stonecrop	Pulsano Sanctuary
<i>Sedum ochroleucon</i>	a stonecrop	Pulsano Road etc., in leaf
<i>Sedum sediforme</i>	a stonecrop	Noted in leaf, Pulsano Gorge
<i>Sedum stellatum</i>	Starry Stonecrop	Scattered records, in leaf
<i>Umbilicus rupestris</i>	Navelwort	A few records

## Saxifragaceae

<i>Saxifraga bulbifera</i>	a saxifrage	Scattered, has bulbils in leaf axils
<i>Saxifraga graeca (carpetana)</i>	a saxifrage	Bosco Quarto and Monte Nero
<i>Saxifraga tridactylites</i>	Rue-leaved Saxifrage	Noted in a variety of localities, e.g. Pulsano Gorge

## Platanaceae

<i>Platanus X hybrida</i>	London Plane	Noted en route from Bari to Rodi
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## Hydrangeaceae

*Philadelphus coronarius*

Naturalised at the Dolina Pozzatina

## Pittosporaceae

*Pittosporum tobira*

Beach near Peschici

## Rosaceae

*Agrimonia eupatoria*  
*Aphanes inexpectata*

Agrimony  
a Parsley Piert

Noted in leaf 2012  
Noted at several sites in short woodland  
turf, locally numerous as in Spina Pulci  
Widespread but local in woods  
Possibly this species near Peschici 2008

*Aremonia agriminoides*  
*Cotoneaster nebrodensis*  
*Crataegus monogyna*  
*Cydonia oblonga*  
*Eriobotrya japonica*  
*Filipendula vulgaris*  
*Fragaria moschata*  
*Fragaria vesca*  
*Fragaria viridis*  
*Geum urbanum*  
*Malus sylvestris*

Bastard Agrimony  
a cotoneaster  
Hawthorn  
Quince  
Loquat  
Dropwort  
Hautbois Strawberry  
Wild Strawberry  
a strawberry  
Herb Bennet  
Crab Apple

Widespread  
A few in flower  
Recorded  
In leaf 2012  
Scattered in the hills  
Local in leaf  
Recorded 2008  
In leaf  
Pulsano Road, Monte St Angelo, near Vico,  
and above Carpino  
Scattered in leaf, in flower at Cento Pozzi  
Scattered, Spina Pulci, Foresta Umbra, and  
Bosco Quarto, not seen 2012! 2013 only  
Monte Nero.

*Potentilla hirta*  
*Potentilla micrantha*

a cinquefoil  
Pink Barren Strawberry

Scattered  
Commonly cultivated  
Pulsano Gorge  
Cultivated  
Scattered  
Recorded 2011  
Widespread  
Scattered records  
Villa Rosa lunch site etc.  
Other species not identified, in leaf and  
fruit

*Prunus avium*  
*Prunus dulcis*  
*Prunus mahaleb*  
*Prunus persica*  
*Prunus spinosa*  
*Prunus webbii*  
*Pyrus amygdaliformis*  
*Pyrus communis*  
*Rosa canina*  
*Rosa* spp.

Wild Cherry  
Almond  
St.Lucies' Cherry  
Peach  
Blackthorn  
Almond-leaved Pear  
Cultivated Pear  
Dog Rose  
rose spp.

Widespread. Small trefoil leaves.  
Widespread. Variable leaves.  
Other species not identified  
Scattered records  
Scattered records  
Foresta Umbra and Monte Nero

*Rubus canescens*  
*Rubus ulmifolius*  
*Rubus* spp.  
*Sanguisorba minor*  
*Sorbus aucuparia*  
*Sorbus torminalis*

a bramble  
a bramble  
bramble spp.  
Salad Burnet  
Rowan  
Wild Service Tree

## Fabaceae

*Acacia cyanophylla*  
*Amorpha fruticosa*  
*Anagyris foetida*  
*Anthyllis barba-jovis*  
*Anthyllis tetraphylla*  
*Anthyllis vulneraria*

Blue-leaved Wattle  
Bean Trefoil  
Jupiter's Beard  
Bladder Vetch  
Kidney Vetch

Planted in northern lowlands  
Manfredonia wetlands 2008  
Villa Rosa, not in flower  
Bordering the beach near Peschici  
Scattered in northern lowlands  
Subspecies *maura* and *praepropera*,  
both pink flowered, widespread and  
common

*Astragalus glycyphyllos*  
*Astragalus hamosus*

Wild Liquorice  
a milk-vetch

In leaf in Pulsano Gorge 2011  
Local, mostly in seed, e.g. Dolina Pozzatina

<i>Astragalus monspessulanus</i>	False Vetch	In flower at two sites along Pulsano road, and west of Vieste (2012)
<i>Astragalus montanus</i>	a milk-vetch	Pulsano road, this species? Synonymy?
<i>Astragalus sesameus</i>	a milk-vetch	A few records
<i>Ceratonia siliqua</i>	Carob Tree	Olive grove near Peschici
<i>Cercis siliquastrum</i>	Judas Tree	Scattered in flower
<i>Chamaecytisus spinescens</i>	a hairy broom	Several in Pulsano gorge
<i>Colutea arborescens</i>	Bladder Senna	Near Vieste 2008
<i>Coronilla cretica</i>	a scorpion vetch	Scattered records
<i>Coronilla emerus</i>	Scorpion Senna	Widespread
<i>Coronilla scorpioides</i>	Annual Scorpion Vetch	Widespread
<i>Coronilla valentina</i>	a scorpion vetch	In leaf, Pulsano Gorge
<i>Cytisus decumbens</i>	a broom	Locally very common around Monte St Angelo, in fine flower. Entire leaves.
<i>Cytisus scoparius</i>	Broom	Foresta Umbra 2012
<i>Cytisus villosus</i>	a broom	Near Dolina Pozzatina
<i>Dorycnium hirsutum</i>	Dorycnium	Common in dunes and sandy areas in north
<i>Genista sylvestris</i>	a greenweed	Pulsano gorge
<i>Genista tinctoria</i>	Dyer's Greenweed	Monte St Angelo and Bosco Quarto and above Carpino
<i>Hedysarum coronarium</i>	Italian Sainfoin	Scattered records, but not seen in recent years!
<i>Hippocrepis ciliata</i>	a horseshoe vetch	Recorded
<i>Hippocrepis glauca</i>	a horseshoe vetch	Widespread and common
<i>Hippocrepis multisiliquosa</i>	a horseshoe vetch	Recorded
<i>Hippocrepis unisiliquosa</i>	a horseshoe vetch	Widespread and common
<i>Hymenocarpus circinnatus</i>	Disk Trefoil	Passo Ingarano and near Peschici 2011
<i>Lathyrus aphaca</i>	Yellow Vetchling	Scattered records
<i>Lathyrus cicera</i>	a vetchling	Widespread and locally common
<i>Lathyrus clymenum</i>	a vetchling	Above Cagnano
<i>Lathyrus ochrus</i>	a vetchling	Local, e.g. near Dolina Pozzatina
<i>Lathyrus setifolius</i>	a vetchling	Scattered records
<i>Lathyrus sphaericus</i>	a vetchling	Scattered records
<i>Lathyrus venetus</i>	a vetchling	Foresta Umbra and Bosco Quarto, in leaf
<i>Lotus corniculatus</i>	Birdsfoot Trefoil	Common and widespread
<i>Lotus cytisoides</i>	a bird's-foot trefoil	North coast dunes
<i>Lotus edulis</i>	Edible Lotus	Widespread – especially along coasts
<i>Lotus halophilus</i>	a bird's-foot trefoil	Very common locally in the north of the peninsula but seemed absent in the south
<i>Lotus ornithopodioides</i>		Widespread and common
<i>Lupinus albus</i>	White Lupin	Fodder crop and seeded therefrom
<i>Lupinus varius</i>	a lupin	Near Sannicandro
<i>Medicago arabica</i>	Spotted Medick	Widespread
<i>Medicago disciformis</i>	a medick	Near Sannicandro etc.
<i>Medicago littoralis</i>	a medick	Noted by the coast near Peschici
<i>Medicago lupulina</i>	Black Medick	Widespread
<i>Medicago marina</i>	Sea Medick	Along the shoreline near Peschici, and Varano island
<i>Medicago minima</i>	Small Medick	Pulsano Road and Gorge
<i>Medicago murex</i>	a medick	Recorded in the past
<i>Medicago orbicularis</i>	Large Disk Medick	Villa Rosa etc.
<i>Medicago polymorpha</i>	Toothed Medick	Widespread
<i>Medicago sativa</i>	Lucerne	Between Monte St. Angelo and Bari Airport
<i>Medicago truncatula</i>	a medick	Near Peschici 2011
<i>Melilotus indicus</i>	Small Melilot	Scattered records
<i>Melilotus infestus</i>	a melilot	Near Peschici
<i>Melilotus italicus</i>	a melilot	Recorded 2007
<i>Melilotus messanensis</i>	a melilot	Dominant in one field at Lake Lesina
<i>Melilotus segetalis</i>	a melilot	Margherita salt pans
<i>Melilotus sulcata</i>	a melilot	Near Peschici

<i>Onobrychis aequidentata</i>	a sainfoin	Scattered records, e.g. near Vieste
<i>Onobrychis alba</i>	a sainfoin	Common around Monte St Angelo.
<i>Onobrychis caput-galli</i>	Cockscomb Sainfoin	Margherita Salt pans
<i>Onobrychis viciifolia</i>	Sainfoin	Margherita Salt pans
<i>Ononis diffusa</i>	a restharrow	Pulsano and near Vieste
<i>Ononis reclinata</i>	Small Restharrow	Near Rignano 2008
<i>Ononis variegata</i>	a restharrow	Locally common on the north coast
<i>Ononis viscosa</i>	a restharrow	Recorded in the north, 2007
<i>Ornithopus compressus</i>	Compressed Birdsfoot	Recorded
<i>Pisum sativum</i>	Wild Pea	Widespread and locally common
<i>Psoralea bituminosa</i>	Pitch Trefoil	Widespread, little in flower this year
<i>Robinia pseudacacia</i>	False Acacia	Locally planted
<i>Scorpiurus muricatus</i>	Scorpiurus	Widespread
<i>Scorpiurus vermiculatus</i>	a scorpiurus	Scattered records
<i>Securigera securidaca</i>	a scorpion vetch	Widespread and common
<i>Spartium junceum</i>	Spanish Broom	Widespread and locally common
<i>Tetragonolobus purpureus</i>	Asparagus Pea	Peschici area
<i>Trifolium arvense</i>	Hare's-foot Clover	Local 2008
<i>Trifolium campestre</i>	Hop Trefoil	Near Peschici etc.
<i>Trifolium cherleri</i>	a clover	Scattered records
<i>Trifolium fragiferum</i>	Strawberry Clover	In flower near Peschici 2011
<i>Trifolium medium</i>	Zigzag Clover	Pulsano road
<i>Trifolium pratense</i>	Red Clover	Scattered
<i>Trifolium repens</i>	White Clover	Widespread
<i>Trifolium resupinatum</i>	Reversed Clover	Near Peschici
<i>Trifolium scabrum</i>	Rough Clover	Scattered records
<i>Trifolium stellatum</i>	Star Clover	Widespread and common
<i>Trifolium subterraneum</i>	Subterranean Clover	Spina Pulci, near Carpino, Monte Nero, etc.
<i>Trifolium tomentosum</i>	Woolly Clover	Pulsano sanctuary etc.
<i>Trigonella monspeliaca</i>	Star-fruited Fenugreek	Near Vieste 2008
<i>Trigonella sp.</i>	fenugreek sp.	Cliffs south of Ruggiano. Yellow flowers. 2008. Spina Pulci 2012.
<i>Vicia atropurpurea (benghalensis)</i>	a vetch	Passo Ingarano
<i>Vicia barbitziae</i>	a vetch	Noted in the Foresta Umbra, yellow standard, blue wings, 2011
<i>Vicia bithynica</i>	Bithynian Vetch	Widespread, e.g. Passo Ingarano
<i>Vicia cracca</i>	Tufted Vetch	Local on roadsides
<i>Vicia faba</i>	Broad Bean	Occasionally naturalised
<i>Vicia grandiflora</i>	a vetch	Scattered woodland records, e.g. Spina Pulci
<i>Vicia hirsuta</i>	Hairy Vetchling	Peschici, Spina Pulci, etc.
<i>Vicia hybrida</i>	Hairy Yellow Vetchling	Widespread and reasonably common
<i>Vicia lathyroides</i>	Spring Vetch	A few records
<i>Vicia lutea</i>	Yellow Vetch	Spina Pulci and near Dolina Pozzatina 2008
<i>Vicia melanops</i>	a vetch	Very local in the Carbonara Valley
<i>Vicia onobrychioides</i>	False Sainfoin	Monte Nero and Chiancate
<i>Vicia peregrina</i>	a vetch	Pulsano Road
<i>Vicia pubescens</i>	a vetch	Olive grove near Peschici 2008
<i>Vicia sativa</i>	Common Vetch	Widespread and common

## Oxalidaceae

<i>Oxalis articulata</i>	Pink Oxalis	Pulsano sanctuary
<i>Oxalis corniculata</i>	Procumbent Yellow Sorrel	Recorded 2012
<i>Oxalis pes-caprae</i>	Bermuda Buttercup	Locally dominant under olives in the north

## Geraniaceae

<i>Erodium acaule</i>	a stork's-bill	Spina Pulci
<i>Erodium botrys</i>	a stork's-bill	Pulsano road 2008

<i>Erodium ciconium</i>	a stork's-bill	Passo Ingarano
<i>Erodium cicutarium</i>	Common Stork's-bill	Widespread and common
<i>Erodium laciniatum</i>	a stork's-bill	Varano Island dunes
<i>Erodium malacoides</i>	Mallow-leaved Stork's-bill	Widespread
<i>Erodium maritimum</i>	a stork's bill	Near Peschici 2005
<i>Geranium columbinum</i>	Long-stalked Cranesbill	Near Peschici
<i>Geranium dissectum</i>	Cut-leaved Cranesbill	Day 2
<i>Geranium lucidum</i>	Shining Cranesbill	Bosco di Spina Pulci, Bosco Quarto etc.
<i>Geranium molle</i>	Dovesfoot Cranesbill	Widespread
<i>Geranium purpureum</i>	Little Robin	Scattered records
<i>Geranium pusillum</i>	Small-flowered Cranesbill	Scattered records
<i>Geranium robertianum</i>	Herb Robert	Widespread
<i>Geranium rotundifolium</i>	Round-leaved Cranesbill	Scattered records
<i>Geranium tuberosum</i>	Tuberous Crane's-bill	Near Chiancate

## Linaceae

<i>Linum austriacum</i>	a flax	Carbonara valley. ssp. <i>collinum</i> . Large blue flowers.
<i>Linum bienne</i>	Pale Flax	Scattered records
<i>Linum tenuifolium</i>	a flax	One in flower in Pulsano Gorge 2008
<i>Linum trigynum</i>	a flax	Near Manfredonia 2007

## Euphorbiaceae

<i>Euphorbia amygdaloides</i>	Wood Spurge	Locally common in woods
<i>Euphorbia barrelieri</i>	a spurge	Scattered in the south
<i>Euphorbia ceratocarpa</i>	a spurge	Locally common, e.g. Chiancate
<i>Euphorbia characias</i>	Large Mediterranean Spurge	Widespread and very common
<i>Euphorbia exigua</i>	Dwarf Spurge	Locally common
<i>Euphorbia falcata</i>	a spurge	Near Peschici etc.
<i>Euphorbia helioscopia</i>	Sun Spurge	Widespread and common
<i>Euphorbia myrsinites</i>	Broad-leaved Glaucous Spurge	Chiancate
<i>Euphorbia paralias</i>	Sea Spurge	Varano Island
<i>Euphorbia peplus</i>	Petty Spurge	Scattered records
<i>Euphorbia pinea</i>	a spurge	Near Peschici
<i>Euphorbia rigida</i>	a spurge	Alta Murgia 2012
<i>Euphorbia segetalis</i>	a spurge	North coast dunes
<i>Euphorbia spinosa</i>	a spurge	Widespread on dry rocky turf
<i>Mercurialis annua</i>	Annual Mercury	Locally common in the north
<i>Mercurialis perennis</i>	Dog's Mercury	Foresta Umbra

## Rutaceae

<i>Citrus aurantium</i>	Seville Orange	Cultivated
<i>Citrus limon</i>	Lemon	Cultivated
<i>Ruta chalepensis</i>	Fringed Rue	Day 1
<i>Ruta graveolens</i>	a rue	Near Vieste etc.

## Meliaceae

<i>Melia azederach</i>	Persian Lilac	Noted in the north of the peninsula
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## Polygalaceae

<i>Polygala monspeliaca</i>	a milkwort	Pulsano Gorge
<i>Polygala nicaeensis</i>	Nice Milkwort	Noted in the south 2012
<i>Polygala vulgaris</i>	Common Milkwort	Monte Nero

## Hippocastanaceae

<i>Aesculus hippocastanum</i>	Horse Chestnut	A few seen, e.g. S.Marco in Lamis
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## Anacardiaceae

<i>Pistacia lentiscus</i>	Mastic Tree	Widespread and common
<i>Pistacia terebrinthus</i>	Terebrinth	Scattered throughout, locally common

## Aceraceae

<i>Acer campestre</i>	Field Maple	Widespread
<i>Acer opalus</i>	Italian Maple	Chiancate
<i>Acer obtusatum</i>	a maple	Chiancate
<i>Acer pseudoplatanus</i>	Sycamore	Scattered records

## Rhamnaceae

<i>Paliurus spina-christi</i>	Christ's Thorn	Forming thorny scrub on Passo Ingarano and elsewhere
<i>Rhamnus alaternus</i>	Mediterranean Buckthorn	Pulsano Gorge
<i>Rhamnus saxatilis</i>	a buckthorn	Pulsano Gorge and Ruggiano road

## Vitaceae

<i>Vitis vinifera</i>	Grape	Widely cultivated, occasionally naturalised plants seen as at Lesina
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## Aquifoliaceae

<i>Ilex aquifolium</i>	Holly	In the Foresta Umbra and Bosco Quarto
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## Elaeagnaceae

<i>Elaeagnus angustifolia</i>	Oleaster	Lake Lesina
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## Tiliaceae

<i>Tilia platyphyllos</i>	Large-leaved Lime	Foresta Umbra
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## Malvaceae

<i>Althaea hirsuta</i>	Rough Marsh-Mallow	Near Rignano and near Vieste 2008
<i>Lavatera cretica</i>	Smaller Tree-Mallow	Margherita Salt pans etc.
<i>Lavatera arborea</i>	Tree Mallow	Locally common along the north coast
<i>Lavatera olbia</i>	Tree Lavatera	Bari 2005
<i>Malva cretica</i>	a mallow	Near Vieste
<i>Malva neglecta</i>	Dwarf Mallow	Peschici etc.
<i>Malva parviflora</i>	Least Mallow	Manfredonia etc.
<i>Malva sylvestris</i>	Common Mallow	Widespread and common

## Thymelaeaceae

<i>Daphne gnidium</i>	a daphne	Noted in leaf
<i>Daphne laureola</i>	Spurge Laurel	Scattered in fruit in the Foresta Umbra, Bosco Quarto, and around Monte St Angelo

## Violaceae

<i>Viola arvensis</i>	Field Pansy	Local. Not seen in recent years.
<i>Viola graeca</i>	a violet	= <i>V. heterophylla</i> . Widespread at higher levels. Both yellow and purple forms.
<i>Viola reichenbachiana</i>	Early Dog Violet	Local in woods, e.g. Bosco Quarto
<i>Viola riviniana</i>	Common Dog Violet	Scattered in woods, e.g. Bosco Quarto
<i>Viola suavis</i>	a violet	Foresta Umbra and Bosco Quarto

## Guttiferae

<i>Hypericum montanum</i>	Mountain St John's-Wort	In leaf Pulsano road 2012
<i>Hypericum perforatum</i>	a St. John's-wort	Northern coastal lowlands, e.g. near Peschici
<i>Hypericum perforatum</i>	Perforate St John's-Wort	Scattered in leaf and bud

## Cistaceae

<i>Cistus creticus</i>	a cistus	Locally common along the north coast and lower north-facing hills, with several already in flower, also in the south
<i>Cistus monspeliensis</i>	Narrow-leaved Cistus	Locally common in flower in the north of the Peninsula
<i>Cistus salvifolius</i>	Sage-leaved Cistus	Locally common, as at Pulsano Gorge, and northern coastal dunes. Much in flower.
<i>Fumana ericoides</i>	a fumana	Pulsano Gorge
<i>Fumana thymifolia</i>	Thyme-leaved Fumana	Northern coastal dunes
<i>Helianthemum aegyptiacum</i>	a rockrose	Scattered records, e.g. Ruggiano road
<i>Helianthemum apenninum</i>	White Rockrose	Widespread and locally common in the south
<i>Helianthemum canum</i>	Hoary Rockrose	Pulsano Gorge
<i>Helianthemum lavandulaefolium</i>	Lavender-leaved Rockrose	Pulsano Sanctuary 2006
<i>Helianthemum nummularium</i>	Common Rockrose	Pulsano road and gorge
<i>Helianthemum salicifolium</i>	Willow-leaved Rockrose	Locally common, as at Passo Ingarano

## Tamaricaceae

<i>Tamarix gallica</i>	Tamarisk	By the beach near Peschici
<i>Tamarix africana</i>	a tamarisk	Lake Lesina

## Cucurbitaceae

<i>Bryonia dioica</i>	White Bryony	Near the hotel in the north, 2012
<i>Ecballium elaterium</i>	Squirting Cucumber	Near Peschici, Margherita salt pans, Pulsano Sanctuary and Villa Rosa

## Cactaceae

<i>Opuntia ficus-barbarus</i>	Prickly Pear	Widespread
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## Myrtaceae

<i>Eucalyptus camaldulensis</i>	River Red Gum	Planted on 'Varano island' and elsewhere
<i>Myrtus communis</i>	Common Myrtle	Scattered in the north

## Punicaceae

<i>Punica granatum</i>	Pomegranate	Cultivated along the northern coast, not noted 2013
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## Onagraceae

<i>Circaea lutetiana</i>	Enchanter's Nightshade	Common in leaf in woodlands
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## Theligoniaceae

<i>Theligonium cynocrambe</i>		Widespread, e.g. Passo Ingarano and near Vieste
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## Celastraceae

*Euonymus europaeus* Spindle Scattered in woodlands in the southern hills

## Cornaceae

*Cornus sanguinea* Dogwood Near Vico

## Araliaceae

*Hedera helix* Ivy Local in woods. Some very robust specimens in Bosco Quarto.

## Apiaceae

*Anthriscus sylvestris* Cow Parsley In leaf at Monte Nero  
*Bifora testiculata* Bifora Near Peschici 2005  
*Caucalis platycarpos* Small Bur Parsley Dolina Pozzatina  
*Chaerophyllum hirsutum* Hairy Chervil Foresta Umbra 2012  
*Cnidium silaifolium* This species seen in leaf ?  
*Conium maculatum* Hemlock Manfredonia wetlands 2008  
*Conopodium capillifolium* In flower on Chiancate  
*Daucus carota* Wild Carrot Lowlands south of Manfredonia etc.  
*Daucus* spp. carrot spp. Other species possibly present  
*Echinophora spinosa* Leaves noted in northern dunes  
*Echinophora tenuifolia* Leaves near Vieste  
*Elaeoselinum asclepium* Scattered in leaf, e.g. Passo Ingarano  
*Eryngium barrelieri* Entire basal leaves noted at a few sites, 2012  
  
*Eryngium campestre* Field Eryngo Scattered in leaf  
*Eryngium maritimum* Sea Holly Dunes and sandy shores along north coast, in leaf  
  
*Ferula communis* Giant Fennel Widespread and locally abundant, some very robust examples  
  
*Foeniculum vulgare* Fennel In leaf, 2011  
*Laserpitium garganicum* Monte Nero, common in leaf, glabrous with elliptical lobes  
  
*Opopanax chironium* In leaf near Monte Nero  
*Opopanax hispidus* In leaf in the Carbonara Valley etc., locally common  
  
*Pimpinella* sp. a burnet saxifrage Small examples in the wall at 100 Pozzi  
*Sanicula europaea* Sanicle In flower, Foresta Umbra and Bosco Quarto  
*Scandix australis* a shepherd's-needle Locally common in the limestone turf in the southern hills. Has an aniseed aroma.  
  
*Scandix pecten-veneris* Shepherd's-needle Widespread and common  
*Seseli montanum* Pulsano Sanctuary, on the walls. ssp. *polyphyllum*. Also Monte St. Angelo. Some fine examples Alta Murgia 2012.  
  
*Smyrniium olusatrum* Alexanders Near hotel in north  
*Smyrniium rotundifolium* Round-leaved Alexanders Locally common  
*Thapsia garganica* Thapsia Widespread in leaf, with some in flower  
*Tordylium apulum* Tordylium Widespread ands common  
*Tordylium officinale* Scattered records  
*Torilis arvensis* Spreading Hedge Parsley Recorded  
*Torilis nodosa* Knotted Hedge Parsley Margherita 2008

## Ericaceae

*Erica arborea* Tree Heath Very local, near Vico, and on roadsides on the northern slopes of Carbonara Valley

## Primulaceae

<i>Anagallis arvensis</i>	Scarlet Pimpernel	Widespread, mostly the blue flowered form
<i>Asterolinon linum-stellatum</i>		Widespread and locally common. Very small!
<i>Cyclamen hederifolium</i>	Ivy-leaved Sowbread	Leaves scattered
<i>Cyclamen repandum</i>	Spring Sowbread	Widespread in woods in the north and centre of the peninsula, locally numerous in flower this year

## Plumbaginaceae

<i>Armeria canescens</i>	a thrift	Above Carpino, 2002! Northern Ruggiano road 2013.
<i>Limonium vulgare</i>	Common Sea-Lavender	Salt marshes at Lesina, in leaf

## Oleaceae

<i>Fraxinus excelsior</i>	Ash	Recorded
<i>Fraxinus ornus</i>	Manna Ash	Widespread in fine blossom
<i>Ligustrum vulgare</i>	Privet	Forming ground layer in Bosco Quarto
<i>Olea europea</i>	Olive	Widely cultivated, and wild form seen too
<i>Phillyrea angustifolia</i>		Northern lowlands
<i>Phillyrea latifolia</i>		Peschici area

## Apocynaceae

<i>Nerium oleander</i>	Oleander	Roadsides
<i>Vinca major</i>	Greater Periwinkle	Dolina Pozzatina etc.

## Asclepiadaceae

<i>Vincetoxicum hirundinaria</i>	Swallow-wort	Recorded in 2002!
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## Gentianaceae

<i>Blackstonia perfoliata</i>	Yellow-wort	In leaf near Peschici 2012
<i>Centaurium erythraea</i>	Common Centaury	Noted in leaf
<i>Centaurium pulchellum</i>	Lesser Centaury	Some very small examples in flower

## Rubiaceae

<i>Asperula arvensis</i>	Blue Woodruff	Arable weed near Chiancate. Also transfer day. Numerous as an arable weed in one field in Alta Murgia 2012.
<i>Cruciata laevipes</i>	Cross-wort	Scattered records
<i>Cruciata pedemontana</i>	a cross-wort	Monte Nero 2011
<i>Cruciata glabra</i>	a cross-wort	Carbonara Valley 2011
<i>Galium aparine</i>	Cleavers	Scattered throughout
<i>Galium mollugo</i>	Hedge Bedstraw	Scattered records, e.g. near Vieste
<i>Galium murale</i>	a bedstraw	Pulsano road etc.
<i>Galium odoratum</i>	Woodruff	Foresta Umbra, in flower
<i>Galium rotundifolium</i>	a bedstraw	In leaf Foresta Umbra 2013
<i>Galium tricorutum</i>	Corn Cleavers	Arable field in Carbonara Valley
<i>Galium verum</i>	Lady's Bedstraw	Locally in leaf
<i>Galium verrucosum</i>	a bedstraw	Scattered records
<i>Rubia peregrina</i>	Wild Madder	Peschici etc., in good flower
<i>Sherardia arvensis</i>	Sherardia	Widespread and very common
<i>Valantia hispida</i>		Recorded
<i>Valantia muralis</i>		Widespread

## Convolvulaceae

<i>Calystegia soldanella</i>	Sea Bindweed	North coast dunes in leaf
<i>Calystegia sylvatica</i>	Great Bindweed	Near Vico
<i>Convolvulus arvensis</i>	Field Bindweed	In leaf near Peschici
<i>Convolvulus cantabrica</i>	Pink Convolvulus	Near Rignano 2012
<i>Convolvulus elegantissimus</i>	Mallow-leaved Bindweed	Also known a <i>Convolvulus althaeoides</i> subspecies <i>elegantissimus</i> . Widespread.
<i>Convolvulus lineatus</i>	a bindweed	In flower on Varano Island 2012
<i>Convolvulus pentapetaloides</i>	a bindweed	West of Vieste
<i>Cuscuta epithimum</i>	Common Dodder	Scattered records of presumably this species, in bud

## Boraginaceae

<i>Alkanna tinctoria</i>	Dyer's Alkanet	Widespread and locally common
<i>Anchusa cretica</i>	an alkanet	Locally common, e.g. Bosco Quarto, above Carpino, Spina Pulci, and Chiancate
<i>Anchusa italica</i>	Large Blue Alkanet	North coast roadsides
<i>Anchusa officinalis</i>	Alkanet	Noted on the first day 2011
<i>Borago officinalis</i>	Borage	Locally common
<i>Buglossoides arvensis</i>	Corn Gromwell	Near Chiancate, arable weed
<i>Buglossoides purpureocaerulea</i>	Purple Gromwell	Near Peschici, Passo Ingarano, above Carpino, southern woods, etc.
<i>Cerinthe major</i>	Honeywort	Near Vieste etc.
<i>Cynoglossum cheirifolium</i>	a hound's-tongue	Passo Ingarano
<i>Cynoglossum creticum</i>	Blue Hound's-Tongue	Lake Lesina lunch site
<i>Echium italicum/asperrinum</i>	Pyramidal Bugloss	Last years flower spikes scattered throughout – one or both species present
<i>Echium parviflorum</i>	Small-flowered Viper's-Bugloss	Villa Rosa
<i>Echium plantagineum</i>	Purple Viper's-Bugloss	Widespread and locally common
<i>Myosotis arvensis</i>	Field Forget-me-not	Scattered
<i>Myosotis ramosissima</i>	Early Forget-me-not	Scattered
<i>Myosotis sylvatica</i>	Wood Forget-me-not	Local in woods, e.g. Bosco Quarto
<i>Onosma echioides</i>	a golden-drop	Pulsano Gorge and lower Ruggiano road
<i>Pulmonaria vallarsae</i>	a lungwort	Scattered in woodlands
<i>Pulmonaria</i> spp.	lungworts	Others possibly seen. <i>P.hirta</i> , <i>P.mollis</i> , and <i>P.officinalis</i> also occur.
<i>Symphytum bulbosum</i>	a comfrey	Monte Nero
<i>Symphytum tuberosum</i>	Tuberous Comfrey	Bosco di Spina Pulci

## Lamiaceae

<i>Acinos alpinus</i>	Alpine Basil-Thyme	Pulsano Gorge
<i>Acinos arvensis</i>	Basil-Thyme	Recorded in the south, e.g. Pulsano Gorge
<i>Acinos suaveolens</i>	a basil-thyme	Monte Nero 2011
<i>Ajuga chamaepitys</i>	Ground Pine	Above Cagnano, Pulsano Sanctuary
<i>Ajuga genevensis</i>	Blue Bugle	Above Cagnano
<i>Ballota nigra</i>	Black Horehound	Noted in leaf 2012
<i>Corydothymus capitatus</i>	a thyme	Pulsano road etc., common in leaf
<i>Lamium album</i>	White Deadnettle	Recorded
<i>Lamium amplexicaule</i>	Henbit Deadnettle	Passo Ingarano
<i>Lamium bifidum</i>	a deadnettle	Scattered
<i>Lamium garganicum</i>	Large Red Deadnettle	Widespread, e.g. on walls and cliffs around Monte St. Angelo, where large pink flowers. Elsewhere usually smaller white flowered form
<i>Lamium hybridum</i>	Cut-leaved Deadnettle	A few records
<i>Lamium maculatum</i>	Spotted Deadnettle	Foresta Umbra
<i>Lamium purpureum</i>	Red Deadnettle	Scattered records
<i>Marrubium incanum</i>	a horehound	Widespread in leaf

<i>Marrubium vulgare</i>	White Horehound	Leaves noted
<i>Mentha arvensis</i>	Corn Mint	In leaf
<i>Micromeria graeca</i>		A few records
<i>Origanum heracleoticum</i>	a marjoram	In leaf at Pulsano sanctuary 2011
<i>Origanum vulgare</i>	Marjoram	Leaves noted
<i>Phlomis herba-venti</i>	a phlomis	Leaves noted in the north
<i>Prasium majus</i>	Prasium	Local, e.g. Passo Ingarano, near Peschici, and Pulsano Gorge
<i>Prunella laciniata</i>	Cut-leaved Self-heal	One along Ruggiano road 2011
<i>Prunella vulgaris</i>	Self Heal	In leaf
<i>Rosmarius officinalis</i>	Rosemary	On 2 days in the north, and on cliffs south of Monte St. Angelo
<i>Salvia argentea</i>	Silver Sage	Widespread in leaf in the south, in flower Ruggiano road
<i>Salvia officinalis</i>	Sage	In leaf
<i>Salvia verbenaca</i>	Wild Clary	Widespread and common
<i>Satureja cuneifolia</i>	a savory	Scattered records
<i>Satureja montana</i>	Winter Savory	Widespread
<i>Sideritis romana</i>		Pulsano Gorge
<i>Sideritis syriaca</i>		= <i>S.italica</i> . Very advanced this year with a few almost in flower.
<i>Stachys cretica</i>	Mediterranean Woundwort	Widespread in the north, in leaf
<i>Stachys officinalis</i>	Betony	In leaf, Monte Nero
<i>Teucrium chamaedrys</i>	Wall Germander	In leaf
<i>Teucrium polium</i>	Felty Germander	In leaf
<i>Thymus pulegioides</i>	Large Thyme	Scattered records. In flower above Cagnano.
<i>Thymus vulgaris</i>	Thyme	Pulsano Gorge

## *Solanaceae*

<i>Hyoscyamus albus</i>	Henbane	In flower on the walls of Pulsano Sanctuary, and tower near Peschici
<i>Solanum nigrum</i>	Black Nightshade	Near Peschici 2008
<i>Solanum sodomium</i>	Apple of Sodom	One plant near Peschici 2011
<i>Datura stramonium</i>	Thornapple	Previous years' fruiting plants by Lake Lesina, 2005. Gone over near Peschici.

## *Buddlejaceae*

<i>Buddleja davidii</i>	Buddleja	Scattered – naturalised or planted
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## *Scrophulariaceae*

<i>Antirrhinum siculum</i>	Sicilian Snapdragon	Common along roads in the north
<i>Bellardia trixago</i>	Bellardia	Torre Mileto
<i>Cymbalaria muralis</i>	Ivy-leaved Toadflax	On walls at Pulsano Sanctuary, and Monte St. Angelo
<i>Digitalis ferruginea</i>	Rusty Foxglove	Scattered in leaf, e.g. Passo Ingarano
<i>Euphrasia pectinata</i>	an eyebright	Pulsano Gorge
<i>Linaria pelisseriana</i>	Jersey Toadflax	Ruggiano road and <i>Serapias apulica</i> site
<i>Linaria purpurea</i>	Purple Toadflax	Roadsides in north 2012
<i>Linaria simplex</i>	a toadflax	1 plant in Carbonara valley (peony site) 2008. 2012, 1, Ruggiano road.
<i>Linaria vulgaris</i>	Common Toadflax	Near Peschici 2007
<i>Misopates orontium</i>	Weasel's Snout	Pulsano Gorge, and near Vieste
<i>Parentucellia latifolia</i>	Southern Red Bartsia	Locally common in the hills
<i>Parentucellia viscosa</i>	Yellow Bartsia	Scattered in leaf
<i>Scrophularia canina</i>	French Figwort	Scattered records in leaf
<i>Scrophularia peregrina</i>	Nettle-leaved Figwort	Foresta Umbra
<i>Scrophularia vernalis</i>	a figwort	In flower in Foresta Umbra 2012

<i>Verbascum densiflorum</i>	a mullein	Roadsides
<i>Verbascum phlomoides</i>	Orange Mullein	North coast dunes
<i>Verbascum phoeniceum</i>	Purple Verbascum	Near Peschici, Passo Ingarano, etc.
<i>Verbascum pulverulentum</i>	Hoary Mullein	Roadsides
<i>Verbascum sinuatum</i>	a mullein	Widespread in leaf
<i>Verbascum thapsus</i>	Aaron's Rod	North Coast
<i>Veronica acinifolia</i>	French Speedwell	Near Chiancate etc., 2008
<i>Veronica arvensis</i>	Wall Speedwell	Walls in Foresta Umbra etc.
<i>Veronica chamaedrys</i>	Germander Speedwell	Foresta Umbra 2008
<i>Veronica cymbalaria</i>	White Speedwell	Scattered records, e.g. hotel in north
<i>Veronica hederifolia</i>	Ivy-leaved Speedwell	Recorded
<i>Veronica montana</i>	Wood Speedwell	Foresta Umbra 2012
<i>Veronica persica</i>	Persian Speedwell	Scattered records, e.g. Foresta Umbra
<i>Veronica polita</i>	Grey Field Speedwell	Near Bosco Quarto 2012
<i>Veronica serpyllifolia</i>	Thyme-leaved Speedwell	Bosco Quarto

## Orobanchaceae

<i>Orobanche amethystea</i>	a broomrape	On <i>Eryngium campestre</i> , noted on one day, 2007
<i>Orobanche caryophyllacea</i>	Clove-scented Broomrape	Pulsano Gorge, parasitic on <i>Galium</i>
<i>Orobanche gracilis</i>	Slender Broomrape	Pulsano Gorge, on legumes
<i>Orobanche lavandulacea</i>	a broomrape	On <i>Psoralea bituminosa</i> , near Peschici, 2007
<i>Orobanche loricata</i>	Oxtongue Broomrape	3 above Cagnano 2011. 2013 near Vieste.
<i>Orobanche minor</i>	Common Broomrape	Pulsano Gorge
<i>Orobanche pubescens</i>	a broomrape	Probably this species on the first day 2008
<i>Orobanche ramosa</i>	Branched Broomrape	Varano Island etc.

## Myoporaceae

<i>Myoporum laetum</i>	Ngaio	Lake Lesina, native to New Zealand
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## Globulariaceae

<i>Globularia punctata</i>	Globularia	Monte Nero
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## Plantaginaceae

<i>Plantago afra</i>	a plantain	Passo Ingarano etc.
<i>Plantago albicans</i>	Silvery Plantain	Pulsano road 2012
<i>Plantago arenaria</i>	Branched Plantain	Scattered
<i>Plantago bellardii</i>	a plantain	North coast
<i>Plantago coronopus</i>	Buck's-horn Plantain	North coast
<i>Plantago holosteum</i>	a plantain	Recorded 2012
<i>Plantago lagopus</i>	a plantain	Widespread
<i>Plantago lanceolata</i>	Ribwort Plantain	Scattered throughout
<i>Plantago major</i>	Greater Plantain	A few records
<i>Plantago serraria</i>	a plantain	Locally frequent particularly in the north
<i>Plantago subulata</i>	a plantain	Monte Nero, one plant

## Caprifoliaceae

<i>Lonicera caprifolium</i>	Perfoliate Honeysuckle	Bosco Quarto, in leaf
<i>Lonicera etrusca</i>	Etruscan Honeysuckle	In leaf in the north
<i>Lonicera implexa</i>	a honeysuckle	North coast dunes, in leaf
<i>Lonicera xylosteum</i>	Fly Honeysuckle	Bosco Quarto, in leaf
<i>Sambucus ebulus</i>	Dwarf Elder	Noted in the north of the peninsula, in leaf 2012
<i>Sambucus nigra</i>	Elder	Recorded

## Valerianaceae

<i>Centranthus ruber</i>	Red Valerian	Locally common on roadsides in south, and near Vico
<i>Valeriana collina</i>	a valerian	Locally common in limestone turf in the south
<i>Valerianella dentata</i>	Narrow-fruited Corn Salad	Scattered in the north
<i>Valerianella locusta</i>	Common Corn Salad	Widespread. Other species possibly present.

## Dipsacaceae

<i>Cephalaria transylvanica</i>		In bud at the tower near Peschici, 2008
<i>Dipsacus fullonum</i>	Wild Teasel	Last years' dead seed heads in Carbonara valley
<i>Scabiosa atropurpurea</i>	Mournful Widow	Roadsides near Manfredonia
<i>Scabiosa columbaria</i>	Small Scabious	Scattered in leaf
<i>Scabiosa dallaportae</i>	a scabious	Many cushions along Pulsano Gorge

## Campanulaceae

<i>Campanula erinus</i>	a bellflower	Manfredonia and Pulsano Sanctuary
<i>Campanula garganica</i>	a bellflower	Endemic. In good flower this year in Pulsano Gorge and near Peschici.
<i>Legousia hybrida</i>	Venus's Looking Glass	One at Passo Ingarano, Carbonara etc.
<i>Legousia speculum-veneris</i>	Large Venus's Looking Glass	In fine flower in arable field near <i>Paeonia peregrina</i> site, 2008.

## Asteraceae

<i>Achillea millefolium</i>	Yarrow	In leaf
<i>Anacyclus tomentosus</i>	Anacyclus	Near Peschici etc.
<i>Anthemis altissima</i>	a chamomile	Possibly this species at Margherita
<i>Anthemis arvensis</i>	Corn Chamomile	Scattered records
<i>Anthemis cotula</i>	Stinking Chamomile	Scattered records
<i>Anthemis maritimus</i>	a chamomile	Noted along the north coast, with many in flower
<i>Anthemis praecox</i>	a chamomile	Possibly this species in Pulsano Gorge
<i>Anthemis tinctoria</i>	Yellow Chamomile	Noted in leaf, Carbonara valley
<i>Arctium nemorosum</i>	a burdock	Last year's fruiting heads in Foresta Umbra
<i>Artemisia arborescens</i>	a wormwood	Roadside near Peschici
<i>Artemisia campestris</i>	Field Wormwood	Recorded in the south 2008
<i>Aster tripolium</i>	Sea Aster	Lake Lesina
<i>Bellis perennis</i>	Daisy	Widespread
<i>Bellis sylvestris</i>	Southern Daisy	Widespread, e.g. Bosco di Spina Pulci
<i>Calendula arvensis</i>	Field Marigold	Scattered records
<i>Carduus acicularis</i>	a thistle	Widespread
<i>Carduus macrocephalus</i>	a thistle	Scattered in flower this year, e.g. Passo Ingarano and near Sannicandro
<i>Carduus pycnocephalus</i>	a thistle	Passo Ingarano etc.
<i>Carlina corymbosa</i>	Flat-topped Carline Thistle	Scattered old flowering heads
<i>Carlina vulgaris</i>	Carline Thistle	Old flowering heads widespread
<i>Centaurea calcitrapa</i>	Red Star Thistle	Scattered records in leaf
<i>Centaurea melitensis</i>	Maltese Star Thistle	In bud 2012
<i>Centaurea nicaeensis</i>	a star thistle	Recorded in bud at Manfredonia, 2007
<i>Centaurea subtilis</i>	a knapweed	Endemic. This was the species with purple flowers and grey foliage in Pulsano gorge, 2008 and 2011. Ruggiano viewpoint in bud.
<i>Centaurea triumfetti</i>	a knapweed	In flower on Chiancate, and in bud Monte Nero
<i>Chrysanthemum coronarium</i>	Crown Daisy	Abundant on motorway verges

<i>Chrysanthemum segetum</i>	Corn Marigold	Noted in the north
<i>Cichorium intybus</i>	Chicory	Manfredonia
<i>Cirsium arvense</i>	Creeping Thistle	Scattered records
<i>Cirsium morisianum</i>	a thistle	Rather widespread
<i>Conyza canadensis</i>	Canadian Fleabane	North coast 2012
<i>Crepis rubra</i>	Pink Hawksbeard	Widespread throughout
<i>Crepis vesicaria</i>	Beaked Hawksbeard	Scattered records
<i>Crepis</i> spp.	hawksbeard spp.	Several other species not identified
<i>Crupina crupinastrum</i>	Crupina	Widespread, several in flower
<i>Cynara cardunculus</i>	Cardoon	In leaf near Vico
<i>Dittrichia graveolens</i>	Stink Aster	Scattered in salt marshes and coastal areas
<i>Dittrichia viscosa</i>	a stink aster	Scattered in leaf
<i>Doronicum columnae</i>	a leopard's bane	Rock faces in the southern hills, e.g. Monte St. Angelo
<i>Doronicum orientale</i>	a leopard's bane	Widespread in woods
<i>Evax pygmaea</i>	Evax	Pulsano Gorge and Ingarano
<i>Filago pyramidata</i>	Broad-leaved Cudweed	Pulsano Gorge
<i>Galactites tomentosa</i>	Galactites	Widespread
<i>Hedypnois rhagadioloides</i>	Hedypnois	Passo Ingarano, near Peschici etc.
<i>Helichrysum italicum</i>		In leaf above Carpino
<i>Helichrysum stoechas</i>	Helichrysum	Near Peschici
<i>Hieracium</i> spp.	hawkweed spp.	Various species not identified
<i>Hyoseris radiata</i>		Widespread
<i>Hypochoeris glabra</i>	Smooth Cat's-ear	Widespread
<i>Hypochoeris achyrophorus</i>	Mediterranean Cat's-ear	Locally very common, e.g. Peschici
<i>Inula conyzae</i>	Ploughman's Spikenard	In bud near Dolina Pozzatina
<i>Inula crithmoides</i>	Golden Samphire	Lake Lesina
<i>Inula verbascifolia</i>		Common in leaf very locally in Pulsano gorge, Monte St. Angelo, and Ruggiano road cliffs
<i>Jurinea mollis</i>	Jurinea	In bud in Pulsano Gorge 2011
<i>Lapsana communis</i>	Nipplewort	Recorded 2012
<i>Leontodon</i> sp.		Pulsano road etc.
<i>Matricaria chamomilla</i>	Scented Mayweed	Scattered
<i>Otanthus maritimus</i>	Cottonweed	North coast, in leaf
<i>Pallenis spinosa</i>		Ruggiano road viewpoint and near Vieste
<i>Phagnalon rupestre</i>		Pulsano gorge, in bud, and lower Ruggiano road
<i>Picris echioides</i>	Bristly Ox-Tongue	Scattered records, e.g. Pulsano gorge
<i>Reichardia picroides</i>		Scattered in the north
<i>Rhagadiolus edulis</i>	a star hawk-bit	Pulsano gorge
<i>Rhagadiolus stellatus</i>	Star Hawk-bit	Widespread in the north
<i>Scorzonera hirsuta</i>	a viper's grass	Widespread and locally common
<i>Scorzonera laciniata</i>	Cut-leaved Viper's Grass	Recorded in the south 2008
<i>Senecio rupestris</i>	a ragwort	Probably this species in Carbonara valley
<i>Senecio tenorei</i>	a ragwort	Chiancate and Bosco Quarto, in bud
<i>Senecio vulgaris</i>	Groundsel	Scattered records
<i>Silybum marianum</i>	Milk Thistle	Scattered throughout
<i>Sonchus arvensis</i>	Field Sow-Thistle	Near Peschici 2011
<i>Sonchus asper</i>	Prickly Sow-thistle	Widespread
<i>Sonchus oleraceus</i>	Smooth Sow-Thistle	Scattered records
<i>Sonchus tenerrimus</i>	a sow-thistle	Scattered records, e.g. <i>Serapias apulica</i> site
<i>Taraxacum officinale</i>	Dandelion	Scattered
<i>Taraxacum laevigatum</i>	a dandelion	Probably this species Monte Nero and Chiancate
<i>Tragopogon crocifolius</i>	a goat's-beard	Purple flowers much exceeded by the bracts. Rather widespread.
<i>Tragopogon pratensis</i>	Goat's-beard	Scattered
<i>Tyrimnus leucographus</i>	Tyrimnus	Ruggiano viewpoint 2013
<i>Urospermum dalechampi</i>	Urospermum	Widespread

<i>Urospermum picroides</i>		A few records
<i>Xanthium strumarium</i>	Rough Cocklebur	Old fruiting plants on northern shores 2011
<i>Xeranthemum inapterum</i>		Pulsano road 2013

## Monocotyledones

### Lemnaceae

<i>Lemna minor</i>	Common Duckweed	Pools at 100 Dolinas
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### Ruppiaceae

<i>Ruppia maritima</i>	Tassel Pondweed	Channel at Margherita Salt pans
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### Liliaceae

<i>Allium cepa</i>	Onion	1 naturalised plant, Carbonara valley
<i>Allium neapolitanum</i>	Naples Garlic	Local along the north coast
<i>Allium nigrum</i>	a garlic	Noted in the north of the peninsula, <i>Paeonia peregrina</i> site, in bud, 2012.
<i>Allium pendulinum</i>	a garlic	Locally common in hill woods
<i>Allium roseum</i>	Rosy Garlic	Locally common, e.g. near Vieste
<i>Allium subhirsutum</i>	a garlic	Scattered, locally common
<i>Allium trifoliatum</i>	a garlic	Pulsano gorge.
<i>Allium ursinum</i>	Ramsons	Foresta Umbra, in flower
<i>Asparagus acutifolius</i>	an asparagus	Widespread
<i>Asphodeline lutea</i>	Yellow Asphodel	Widespread throughout and locally abundant as near San Giovanni Rotundo
<i>Asphodeline liburnica</i>	a yellow asphodel	Noted in leaf at various sites
<i>Asphodelus albus</i>	White Asphodel	In flower on Monte Nero
<i>Asphodelus fistulosus</i>	Hollow-stemmed Asphodel	Scattered records
<i>Asphodelus microcarpus</i>	Common Asphodel	Widespread and very common
<i>Asphodelus tenuifolius</i>	an asphodel	A few records 2012
<i>Bellevialia romana</i>		1 near Peschici 2005. 2013 1 near Chiancate.
<i>Colchicum cupanii</i>		Noted in fruit 2005
<i>Gagea chrysantha</i>		1 in the Bosco Quarto in flower 2011, and in 2012 circa 20 there. 2013 all in fruit.
<i>Lilium bulbiferum</i>	Orange Lily	Leaves in Bosco Quarto
<i>Muscari commutatum</i>	a grape hyacinth	Passo Ingarano, 2007
<i>Muscari comosum</i>	Tassel Hyacinth	Widespread and locally very common
<i>Muscari neglectum</i>	Common Grape Hyacinth	Widespread and locally common
<i>Ornithogalum collinum</i>	a star of Bethlehem	Scattered records
<i>Ornithogalum divergens</i>	a star of Bethlehem	Widespread in the north
<i>Ornithogalum montanum</i>	a star of Bethlehem	Locally common, mostly in the southern hills
<i>Ornithogalum narbonense</i>	a star of Bethlehem	Wild at Bari Airport 2011
<i>Ornithogalum pyrenaicum</i>	Bath Asparagus	Noted in the Carbonara Valley 2002!
<i>Ornithogalum umbellatum</i>	Star of Bethlehem	Scattered records
<i>Polygonatum multiflorum</i>	Common Solomon's Seal	Bosco Quarto etc.
<i>Polygonatum odoratum</i>	Angular Solomon's Seal	Bosco Quarto 2012
<i>Ruscus aculeatus</i>	Butcher's Broom	Scattered records in woods, and near Peschici
<i>Scilla bifolia</i>	Alpine Squill	1 on Chiancate 2005
<i>Smilax aspera</i>	Common Smilax	Locally very common
<i>Tulipa sylvestris</i>	Wild Tulip	Usually abundant in the Carbonara Valley, flowering in arable fields. Only a few leaves seen this year.
<i>Urginea maritima</i>	Sea Squill	Widespread in leaf

## Agavaceae

*Agave americana* Century Plant A few noted

## Amaryllidaceae

*Galanthus nivalis* Snowdrop Leaves in Foresta Umbra  
*Narcissus poeticus* Pheasant's-eye Daffodil Locally very common in the hills  
*Narcissus tazetta* Polyanthus Narcissus Chiancate, but none still in flower this year. Also in fruit Ruggiano road, and several other sites.  
*Pancratium maritimum* Sea Daffodil Leaves in north coast dunes

## Dioscoraceae

*Tamus communis* Black Bryony Scattered records

## Iridaceae

*Gladiolus communis* a gladiolus  
*Gladiolus italicus* Field Gladiolus  
*Serapias apulica* site  
Scarce in 2011, but many in one field near Villa Rosa. 2012 Varano roadsides etc. 2013 several in the north.  
*Crocus longiflorus* a crocus  
*Hermodactylus tuberosus* Widow Iris  
*Iris bicapitata* an iris  
In leaf at Chiancate and in Bosco Quarto  
Widespread but all in fruit this year  
A few of this endemic species south of Carpino, both yellow and purple flowered forms, many fewer in flower than usual  
*Iris foetidissima* Gladdon  
*Iris germanica* Tall Bearded Iris  
*Iris lutescens* an iris  
In fruit and leaf in Foresta Umbra  
Scattered by roadsides etc., naturalised  
Widespread and locally abundant – this iris is usually purple, although a few yellow flowered forms seen near Ruggiano etc.  
*Iris pseudacorus* Yellow Flag  
*Iris pseudopumila* an iris  
Vasca del Lago Salso, in fine flower, 2008  
Widespread and common, e.g. Carbonara valley. Very few in flower this year.  
*Gynandiris sisyrinchium* Barbary Nut  
Only 2, at *Serapias apulica* site 2011 and 2012  
*Romulea bulbocodium* Just 1 on Chiancate, 2006. 2012, 2 there gone over. 2013 gone over at several sites.

## Palmae

*Phoenix dactylifera* Date Palm Noted in the north

## Araceae

*Arisarum vulgare* Friar's Cowl Leaves only  
*Arum italicum* Italian Lords-and-Ladies Widespread and locally common  
*Arum maculatum* Lords-and-Ladies Noted in leaf

## Typhaceae

*Typha angustifolia* Lesser Reedmace Lake Lesina  
*Typha latifolia* Great Reedmace Southern wetlands

## Juncaceae

*Luzula campestris* Field Woodrush Carpino area etc.  
*Luzula pilosa* Hairy Woodrush Foresta Umbra  
*Luzula forsteri* Narrow-leaved Woodrush Foresta Umbra etc.

*Juncus acutus*  
*Juncus littoralis*  
*Juncus maritimus*

Sharp Rush  
a rush  
Sea Rush

Margherita area  
Lake Lesina  
Margherita saltmarshes

## Poaceae

*Aegilops geniculata*

*Aira caryophyllea*

*Ammophila arenaria*

*Ampelodesmos mauretanicus*

*Anisantha diandra*

*Anisantha madritensis*

*Anthoxanthum odoratum*

*Arundo donax*

*Avena barbata*

*Avena fatua*

*Brachypodium sylvaticum*

*Briza maxima*

*Bromus hordeaceus*

*Bromus rigidus*

*Catapodium marinum*

*Catapodium rigidum*

*Dactylis glomerata*

*Elytigia farcta*

*Festuca gigantea*

*Festuca rubra*

*Hordeum hystrix*

*Hordeum murinum*

*Lagurus ovatus*

*Lolium perenne*

*Melica uniflora*

*Phalaris paradoxa*

*Phleum pratense*

*Phragmites australis*

*Poa annua*

*Poa bulbosa*

*Poa compressa*

*Poa pratensis*

*Setaria pumila*

*Stipa capensis*

*Stipa pennata*

Silver Hair-grass

Marram-grass

Great Brome

Compact Brome

Sweet Vernal-grass

Giant Reed

Bearded Wild-oat

Common Wild-oat

Wood False-brome

Large Quaking-grass

Soft Brome

Stiff Brome

Darnel-fescue

Fern-grass

Cock's-foot

Sand Couch

Giant Fescue

Red Fescue

a barley

Wall Barley

Hare's-tail

Perennial Rye-grass

Mountain Melick

a canary-grass

Timothy

Reed

Annual Meadow-grass

Bulbous Meadow-grass

Flattened Meadow-grass

Smooth Meadow-grass

Yellow Bristle-grass

Mediterranean Needle-grass

Needle-grass

Passo Ingarano, near Peschici etc.

Manfredonia

North coast dunes

North coast lakes etc.

Scattered records

Pulsano Gorge and the north

Widespread and very common

Locally common

Local

Scattered

Scattered records

Locally very common

Scattered

Recorded

North coast dunes

Scattered in the north

Widespread and frequent

North coast dunes

Scattered, e.g. near Vieste

Near Carpino

Margherita saltmarshes

Locally abundant

Scattered

Scattered

Near Peschici

Near Peschici

Scattered

Forming extensive beds on lake shores

Widespread and common

Viviparous. Common.

Local

Scattered

Locally common in the north

Locally dominant

This species, or perhaps *Stipa austroitalica*,  
in the Manfredonia area

## Cyperaceae

*Carex caryophyllea*

*Carex flacca*

*Carex sylvatica*

*Eleocharis palustris*

*Schoenus nigricans*

Spring Sedge

Glaucous Sedge

Wood Sedge

Common Spike-rush

Black Bog-rush

Widespread in grassland

Locally common in grassland

Scattered records

Recorded 2008

Lake Lesina 2008

## Orchidaceae

*Aceras anthropophorum*

Man Orchid

Widespread and locally common. Seen on 8  
days.

*Anacamptis pyramidalis*

Pyramidal Orchid

The usual colony near Vieste was in fine  
flower. Seen on two other days too this  
year.

<i>Barlia robertiana</i>	Giant Orchid	Widespread. 2006:- many had finished flowering, but 1 still in flower at Dolina Pozzatina, and some 20 in San Giovanni Rotundo. 2007:- only a few dead spikes seen. 2008:- reasonable condition on Passo Ingarano, and c.4 in San Giovanni. 2011:- several over, a few flowers still in San Giovanni Rotundo. 2012:-, over at several sites but still with some colour at various sites, most remarkably at sea level at Margherita Saltans. 2013:- all gone over.
<i>Cephalanthera damasonium</i>	White Helleborine	A few in fine flower 2008, near Vico del Gargano. In early bud 2011. 2012 leaves only just appearing. 2013 two in flower.
<i>Cephalanthera longifolia</i>	Sword-leaved Helleborine	2007:- 1 in fine flower in Foresta Umbra
<i>Dactylorhiza maculata</i>	Heath Spotted Orchid	2013:- in fine flower in Foresta Umbra 2006:- 2 in fine flower near Chiancate 2007:- only in leaf and bud 2008:- 2 in fine flower near Chiancate, 3 at Monte Nero 2011:- only in leaf and bud. 2012 and 2013:- only in leaf and bud.
<i>Dactylorhiza romana</i>	Roman Orchid	2007:- Noted in the Bosco di Spina Pulci, several above Carpino and as quite common in the Foresta Umbra and Bosco Quarto. All of the yellow form. 2008:- only above Carpino and Bosco Quarto 2011:- Locally common Spina Pulci, Carpino, Foresta Umbra, and Bosco Quarto. All of yellow form. 2012 and 2013:- as in 2011.
<i>Dactylorhiza sambucina</i>	Elder-flowered Orchid	Small numbers in the Bosco Quarto and Monte Nero areas
<i>Epipactis helleborine</i>	Broad-leaved Helleborine	Leaves seen near Vico del Gargano
<i>Epipactis microphylla</i>	Small-leaved Helleborine	Leaves seen near Vico del Gargano
<i>Gymnadenia conopsea</i>	Fragrant Orchid	In early bud near Vieste, 2012
<i>Himantoglossum hircinum</i>	Lizard Orchid	In bud along Ruggiano road and Alta Murgia 2012. 2013 in leaf and bud at a few sites.
<i>Limodorum abortivum</i>	Violet Birdsnest	Several seen near Vico 2008. 2013 two spikes seen.
<i>Listera ovata</i>	Common Twayblade	Leaves and early shoots at Monte Nero 2012
<i>Neotinea intacta</i>	Dense-flowered Orchid	Several in leaf or bud near Carpino, also near Bosco Quarto, and Monte Nero, in flower
<i>Neottia nidus-avis</i>	Bird's-nest Orchid	Old seed heads noted in hill forests 2008. Only one old seed head, Bosco Quarto, 2012. 2013 only old seed heads.
<i>Ophrys apulica</i>	Apulian Ophrys	Endemic. This fine large and bright flowered species seen near Peschici and near Vieste. Also found in the hills in the south. Many fine examples this year. Also seen Alta Murgia in 2012.
<i>Ophrys archipelagi</i>		This odd bee orchid was formerly included in the 'arachnitiformis' species complex. Still little understood. Several on Passo Ingarano 2012, gone over 2013.

<i>Ophrys bertolonii</i>	Bertoloni's Ophrys	A very beautiful species. Quite common around Monte St Angelo where often grew with the following species. Quite a number seemed close to the 'saratoi' form with a pink-hued speculum.
<i>Ophrys bertoloniiformis</i>		Endemic. Quite common around Monte St Angelo and elsewhere in the southern hills. Also Passo Ingarano in 2008.
<i>Ophrys bilunulata</i>		2007:- Just one seen, near the Carbonara Valley. 2011:- 3 along Pulsano road. 2012:- 1 along Pulsano road. This should probably now be called <i>Ophrys lupercalis</i> .
<i>Ophrys biscutella</i>	Spectacle Ophrys	Endemic to southern Italy. Noted in small numbers at several localities in the hills in the north of the peninsula – and rather commoner in places in the south – always very local though. Varies greatly in basic colouration but pattern always distinctive. 2007:- only Spina Pulci (3), and several in Carbonara valley. 2011:- Spina Pulci, en route to Monte St. Angelo, and Monte Nero. 2012:- fine examples on 5 days. 2013:- seen on 7 days.
<i>Ophrys bombyliflora</i>	Bumble-Bee Orchid	Widespread. Seen near Peschici, near Vieste, Pulsano gorge, and Passo Ingarano.
<i>Ophrys fuciflora</i>	Late Spider Orchid	A few on Passo Ingarano, 2008 2012:- 2 just coming into flower Pulsano Gorge 2013:- <i>Paeonia peregrina</i> site
<i>Ophrys funerea</i>	Dull Ophrys	Very scarce, a few near Carbonara Valley, 2011. Also Passo Ingarano 2008. 2012:- many at the Carbonara Valley site. 1 Pulsano road. 2013:- many at the Carbonara valley site.
<i>Ophrys garganica</i>	Gargano Ophrys	Endemic to Southern Italy. Widespread and often common. Seen most days.
<i>Ophrys incubacea</i>	Dark Ophrys	Widespread in small numbers.
<i>Ophrys lutea</i>	Yellow Bee Orchid	Very similar to <i>O.sicula</i> and <i>O.phryganae</i> – but a lot larger in flower. The three are perhaps questionably separate. Pulsano road.
<i>Ophrys melena</i>		Perhaps one of this controversial taxon seen near Manfredonia 2012
<i>Ophrys oestrifera</i>		Nominate subspecies. Noted from near Peschici only – 20+ plants 2008. 2011:- only 2, but fine specimens. 2012:- c.15 fine specimens. ( <i>O.cornuta</i> ) 2013:- many fine examples
<i>Ophrys parvimaculata</i>	Small-patterned Ophrys	Endemic. A distinctive rather pastel-shaded species. A few fine examples, on Passo Ingarano.
<i>Ophrys phryganae</i>		Widespread and reasonably common.
<i>Ophrys promontorii</i>		Endemic. Quite common in the hills around Monte St Angelo. Several above Carpino.
<i>Ophrys sphegodes</i>	Early Spider Orchid	Scattered. Not uncommon. Pulsano Gorge, Ruggiano road etc.
<i>Ophrys sicula</i>		Locally very common –noted most days

<i>Ophrys sipontensis</i>	Siponto Ophrys	A very rare local endemic. A few this year, along the Ruggiano road. Another example discovered at a new site for us too.
<i>Ophrys tenthredinifera</i> <i>Ophrys virescens</i>	Sawfly Orchid	Widespread and locally common Very local on Chiancate. c.20 plants seen 2011. 2012 and 2013, c.30 in fine condition.
<i>Ophrys bertolonii</i> x <i>promontorii</i>		Probably this hybrid along the Pulsano road 2011
<i>Ophrys bertolonii</i> x <i>tenthredinifera</i>		Probably this hybrid along Pulsano road, several fine plants 2011
<i>Ophrys bertolonii</i> x <i>biscutella</i>		2012, possibly this hybrid
<i>Ophrys garganica</i> x <i>promontorii</i>		2012, possibly this hybrid
<i>Ophrys oestriifera</i> x <i>apulica</i>		2008 :- possibly 1 near Peschici
<i>Ophrys parvimaculata</i> x <i>exaltata</i>		2008 :- Passo Ingarano
<i>Ophrys parvimaculata</i> x <i>tenthredinifera</i>		2008 :- Passo Ingarano
<i>Ophrys promontorii</i> x <i>sipontensis</i>		2007:- Probably this hybrid along the Ruggiano road. Also 2012.
<i>Ophrys sipontensis</i> x <i>bertolonii</i>		2012, Ruggiano road
<i>Ophrys archeipelagi</i> x <i>parvimaculata</i>		Apparently this hybrid Passo Ingarano 2013
<i>Ophrys bertolonii</i> x <i>promontorii</i>		Apparently this hybrid 2013
<i>Orchis collina</i>	Fan-lipped Orchid	Gone over near Borgo Celano 2008
<i>Orchis fragrans</i>	Fragrant Bug Orchid	2007:- Some 15 in fine flower near Vieste, Not seen there since 2003. Also one in Pulsano Gorge. 2011 not possible to visit Vieste site due to road closure. 2012 not found. 2013 not found.
<i>Orchis italica</i>	Naked Man Orchid	Widespread and very common. Seen daily.
<i>Orchis lactea</i>	Milky Orchid	Only along the Pulsano road near Monte St Angelo where only one left in flower.
<i>Orchis morio</i>	Green-winged Orchid	Widespread – very common in the hills. Seen daily.
<i>Orchis picta</i>		The Mediterranean vicariant of Green-winged Orchid and perhaps doubtfully distinct. A few plants noted.
<i>Orchis papilionacea</i>	Pink Butterfly Orchid	Widespread and often very abundant. Swarms of thousands seen in some localities in the northern hills. Seen daily.
<i>Orchis pauciflora</i>	Sparse-flowered Orchid	Locally common on Chiancate where some unusually robust specimens were perhaps some of the most beautiful orchids of the holiday. Also Monte Nero.
<i>Orchis provincialis</i>	Provence Orchid	Very scarce. Seen only in the northern part of Foresta Umbra, and near Bosco Quarto. Also seen along Vieste road in Foresta Umbra in 2008.
<i>Orchis purpurea</i>	Lady Orchid	Widespread. Superb near Vico in particular.
<i>Orchis quadripunctata</i>	Four-spotted Orchid	Locally frequent on dry southern slopes. Many exceptional specimens especially along the Pilgrim's Road near Monte St Angelo.
<i>Orchis tridentata</i>	Toothed Orchid	A few in bud along the Pulsano road 2008.
<i>Orchis ustulata</i>	Burnt-tip Orchid	Widespread though usually in small numbers – though quite common in places along the Pulsano road, Monte St Angelo. 2011:- only 5 seen! 2012:- a few at a few sites. 2013:- seen on 5 days.
<i>Orchis morio</i> x <i>papilionacea</i>		Not uncommon where the two parents grew together. <i>Orchis xdebeauxii</i>

<i>Orchis italica</i> x <i>Aceras anthropophorum</i>		This striking hybrid was seen along Pulsano road 2013
<i>Platanthera chlorantha</i>	Greater Butterfly Orchid	A number of plants seen in bud or leaf in the Bosco Quarto and in the Foresta Umbra. Not seen in 2004, 2005, 2006 or 2007. 2008:- 1 in late bud on Passo Ingarano 2012:- in bud Monte Nero 2013:- in leaf and bud Bosco Quarto and Monte Nero.
<i>Serapias apulica</i>	Apulian Serapias	Endemic to Southern Italy. Seen beside the motorway near Manfredonia, with several in fine flower.
<i>Serapias bergonii</i>	a tongue orchid	Seen at Alta Murgia 2012. Seen at one site near Rignano 2006.
<i>Serapias lingua</i>	Tongue Orchid	Widespread, seen on 6 days
<i>Serapias parviflora</i>	Small-flowered Serapias	Only near Peschici, and 1 at <i>Serapias apulica</i> site 2011. Not in 2012. 2013 on 5 days.
<i>Serapias orientalis</i>		A very robust specimen at Manfredonia Wetlands 2008. 2013 several in the southern hills.
<i>Serapias vomeracea</i>	Plough-share Serapias	Widespread – the commonest tongue orchid. Some fine tall specimens seen. 2012 many fewer than usual, with most seen only in bud. 2013 seen at many sites.

## Systematic List Number 2      Butterflies

The taxonomy and systematic order follows that found in ‘Butterflies of Britain and Europe’, a Harper Collins guide, by Tolman. Species recorded on previous tours but not this year are put in square brackets.

### Papilionidae

Swallowtail	<i>Papilio machaon</i>	Widespread and rather common
Scarce Swallowtail	<i>Iphiclides podalirius</i>	Widespread in small numbers
Southern Festoon	<i>Zerynthia polyxena</i>	Rather widespread this year

### Pieridae

Large White	<i>Pieris brassicae</i>	Scattered in small numbers
Small White	<i>Artogeia rapae</i>	Scattered records
Green-veined White	<i>Artogeia napi</i>	Seen in the south
[Southern Small White	<i>Artogeia manni</i>	4 near Pulsano Sanctuary 2005]
[Mountain Small White	<i>Artogeia ergane</i>	1 near Carbonara Valley, on <i>Aethionema saxatile</i> , a new Gargano record? 2005]
Eastern Bath White	<i>Pontia edusa</i>	Widespread in small numbers
Eastern Dappled White	<i>Euchloe ausonia</i>	Pulsano Gorge, and Ruggiano road etc.
Orange-Tip	<i>Anthocharis cardamines</i>	Widespread in small numbers
Clouded Yellow	<i>Colias crocea</i>	Widespread in small numbers
Berger’s Clouded Yellow	<i>Colias alfacariensis</i>	A few in the south
Cleopatra	<i>Gonepteryx cleopatra</i>	Seen on the first day, and Pulsano road
Brimstone	<i>Gonepteryx rhamni</i>	Scattered records
[Wood White	<i>Leptidea sinapis</i>	Noted on two days 2007]

### Lycaenidae

Green Hairstreak	<i>Callophrys rubi</i>	Widespread in small numbers
Small Copper	<i>Lycaena phlaeas</i>	Scattered records
[Lesser Fiery Copper	<i>Lycaena thersamon</i>	A male near Peschici 2012 was a good record]
Little Blue	<i>Cupido minimus</i>	Pulsano road, Ruggiano road, Chiancate, etc.
Holly Blue	<i>Celastrina argiolus</i>	Scattered records
Green-underside Blue	<i>Glaucopsyche alexis</i>	Pulsano gorge and a few in the north
Baton Blue	<i>Pseudophilotes baton</i>	Pulsano gorge and Ruggiano road etc.
Brown Argus	<i>Aricia agestis</i>	Widespread in small numbers
Chapman’s Blue	<i>Agrodiaetus thersites</i>	Pulsano road and gorge, and Ruggiano road. Locally very common.
Adonis Blue	<i>Lysandra bellargus</i>	Pulsano gorge, Carbonara valley etc.
Common Blue	<i>Polyommatus icarus</i>	Scattered records

### Nymphalidae

[Large Tortoiseshell	<i>Nymphalis polychloros</i>	2 in Pulsano gorge 2012]
Painted Lady	<i>Cynthia cardui</i>	A few records
Red Admiral	<i>Vanessa atalanta</i>	Scattered records
Southern Comma	<i>Polygonia egea</i>	2 larvae on <i>Parietaria</i> near Peschici
Queen-of-Spain Fritillary	<i>Issoria lathonia</i>	Carbonara Valley and Monte Nero
Glanville Fritillary	<i>Melitaea cinxia</i>	Cento Pozzi
Knapweed Fritillary	<i>Melitaea phoebe</i>	Some rather atypically coloured examples at Cento Pozzi
[Spotted Fritillary	<i>Melitaea didyma</i>	1 in Pulsano Gorge was a new record for us in the Gargano, 2007]
[Heath Fritillary	<i>Mellicta athalia</i>	Rather widespread as larvae, e.g. on <i>Plantago</i> , but also found on some very odd plants such as <i>Iris</i> in the past.]
[Marsh Fritillary	<i>Euphydryas aurinia</i>	1 on Chiancate was the first we had ever seen in the Gargano and may be a new record for the Promontory, 2007.]

### **Satyridae**

Italian Marbled White	<i>Melanargia arge</i>	Some fine examples in the south
Small Heath	<i>Coenonympha pamphilus</i>	Widespread and reasonably common
Wall Brown	<i>Lasiommata megera</i>	Widespread and notably common this year, seen at many sites
Speckled Wood	<i>Pararge aegeria</i>	Local in woods, e.g. Foresta Umbra

### **Hesperiidae**

Grizzled Skipper	<i>Pyrgus malvae</i>	Scattered records
Rosy Grizzled Skipper	<i>Pyrgus onopordae</i>	Carbonara valley
[Red Underwing Skipper	<i>Spialia sertorius</i>	1 near Vieste, 2007]
Mallow Skipper	<i>Carcharodus alceae</i>	Villa Rosa, Pulsano, etc.
[Dingy Skipper	<i>Erynnis tages</i>	1 on Chiancate 2011]

## Systematic List Number 3      **Birds**

Little Grebe	<i>Tachybaptus ruficollis</i>	A few on Lake Lesina
Great Crested Grebe	<i>Podiceps cristatus</i>	A few on Lake Lesina, and at Margherita
Cormorant	<i>Phalacrocorax carbo</i>	North coast and southern wetlands
Greater Flamingo	<i>Phoenicopterus phoenicopterus</i>	Many at the Margherita Saltpans, a few on Lake Lesina
Cattle Egret	<i>Bubulcus ibis</i>	Lake Lesina
Little Egret	<i>Egretta garzetta</i>	Manfredonia wetlands and Lake Lesina
Great Egret	<i>Egretta alba</i>	Lake Lesina and southern wetlands
White Stork	<i>Ciconia ciconia</i>	On a nest at Manfredonia
Spoonbill	<i>Platalea leucorodia</i>	3 in southern wetlands
Shelduck	<i>Tadorna tadorna</i>	Several at Margherita Saltpans
Mallard	<i>Anas platyrhynchos</i>	Lake Lesina and the south
Pochard	<i>Aythya ferina</i>	Lake Lesina
Ferruginous Duck	<i>Aythya nyroca</i>	c.5 at Lake Lesina
Honey Buzzard	<i>Pernis apivorus</i>	1 on the penultimate day
Buzzard	<i>Buteo buteo</i>	Widespread in small numbers
Marsh Harrier	<i>Circus aeruginosus</i>	Widespread in small numbers, e.g. Lake Lesina
Montagu's Harrier	<i>Circus pygargus</i>	A female over Passo Ingarano
Kestrel	<i>Falco tinnunculus</i>	Widespread
Hobby	<i>Falco subbuteo</i>	One west of Vieste
Water Rail	<i>Rallus aquaticus</i>	Heard at Lake Lesina
Coot	<i>Fulica atra</i>	Numerous on Lake Lesina, and at Margherita
Black-winged Stilt	<i>Himantopus himantopus</i>	Several at the Margherita Saltpans, and Lake Lesina
Avocet	<i>Recurvirostra avosetta</i>	Rather common at Margherita Saltpans
Ringed Plover	<i>Charadrius hiaticula</i>	1 at Margherita
Kentish Plover	<i>Charadrius alexandrinus</i>	A few at Margherita Saltpans
Little Stint	<i>Calidris minuta</i>	Several at Margherita Saltpans
Curlew Sandpiper	<i>Calidris ferruginea</i>	Several at Margherita Saltpans, in breeding plumage
Dunlin	<i>Calidris alpina</i>	Several at Margherita Saltpans, in breeding plumage
Ruff	<i>Philomachus pugnax</i>	1 at Margherita Saltpans
Jack Snipe	<i>Lymnocyptes minimus</i>	1 west of Vieste
Common Snipe	<i>Gallinago gallinago</i>	Lake Lesina
Wood Sandpiper	<i>Tringa glareola</i>	Several at Lake Lesina, 1 at Margherita Saltpans
Common Sandpiper	<i>Actitis hypoleuca</i>	A few wetland records
Mediterranean Gull	<i>Larus melanocephalus</i>	Margherita Saltpans, breeding plumage
Little Gull	<i>Larus minutus</i>	1 at Margherita in breeding plumage
Black-headed Gull	<i>Larus ridibundus</i>	Scattered records
Yellow-legged Herring Gull	<i>Larus cachinnans</i>	Widespread and locally numerous
Slender-billed Gull	<i>Larus genei</i>	Common at Margherita Saltpans
Common Tern	<i>Sterna hirundo</i>	Lake Lesina
Little Tern	<i>Sterna albifrons</i>	A few in southern wetlands
Rock Dove	<i>Columba livia</i>	Widespread near habitation
Wood Pigeon	<i>Columba palumbus</i>	Widespread in small numbers
Collared Dove	<i>Streptopelia decaocto</i>	Scattered records near habitation
Cuckoo	<i>Cuculus canorus</i>	Heard often, seen on two days
Ring-necked Parakeet	<i>Psittacula krameri</i>	Seen near Molfetta
Scops Owl	<i>Otus scops</i>	Heard in Monte St. Angelo
Common Swift	<i>Apus apus</i>	Widespread and common
European Bee-eater	<i>Merops apiaster</i>	Heard almost daily at many sites, with several sightings
Hoopoe	<i>Upupa epops</i>	Scattered records
Green Woodpecker	<i>Picus viridis</i>	Heard several times in the forested hills

Great Spotted Woodpecker	<i>Dendrocopos major</i>	Heard often
White-backed Woodpecker	<i>Dendrocopos leucotos</i>	1 in Bosco Quarto
Lesser Spotted Woodpecker	<i>Dendrocopos minor</i>	Heard on Monte Nero and Chiancate
Crested Lark	<i>Galerida cristata</i>	Scattered records
Woodlark	<i>Lullula arborea</i>	Occasionally heard
Swallow	<i>Hirundo rustica</i>	Widespread and common
Red-rumped Swallow	<i>Hirundo daurica</i>	A few west of Vieste
House Martin	<i>Delichon urbica</i>	Widespread
Grey-headed Wagtail	<i>Motacilla flava cinereocapilla</i>	A few at Margherita
White Wagtail	<i>Motacilla alba</i>	A few records
Wren	<i>Troglodytes troglodytes</i>	Heard occasionally, a few seen
Black-eared Wheatear	<i>Oenanthe hispanica</i>	Ruggiano road view point
Blue Rock Thrush	<i>Monticola solitarius</i>	Ruggiano road view point
Whinchat	<i>Saxicola rubetra</i>	Several records, seen on 4 days
Stonechat	<i>Saxicola torquata</i>	Scattered records
Robin	<i>Erithacus rubecula</i>	Heard often, sometimes seen.
Nightingale	<i>Luscinia megarhynchos</i>	Heard often and sometimes seen
Blackbird	<i>Turdus merula</i>	Widespread
Song Thrush	<i>Turdus philomelos</i>	Foresta Umbra
Cetti's Warbler	<i>Cettia cetti</i>	Heard on Varano 'island'
Fan-tailed Warbler	<i>Cisticola juncidis</i>	Lake Lesina and Margherita
Great Reed Warbler	<i>Acrocephalus arundinaceus</i>	Lake Lesina reed beds
Sardinian Warbler	<i>Sylvia melanocephala</i>	Widespread
Subalpine Warbler	<i>Sylvia cantillans</i>	Widespread and reasonably common
Lesser Whitethroat	<i>Sylvia curruca</i>	Heard occasionally
Common Whitethroat	<i>Sylvia communis</i>	Near Dolina Pozzatina
Garden Warbler	<i>Sylvia borin</i>	Heard at various sites
Blackcap	<i>Sylvia atricapilla</i>	Widespread and reasonably common
Bonelli's Warbler	<i>Phylloscopus bonelli</i>	Heard in Foresta Umbra
Goldcrest	<i>Regulus regulus</i>	Heard occasionally
Firecrest	<i>Regulus ignicapillus</i>	Scattered records
Long-tailed Tit	<i>Aegithalos caudatus</i>	Varano and Day 7
Marsh Tit	<i>Parus palustris</i>	Monte Nero
Blue Tit	<i>Parus caeruleus</i>	Widespread
Great Tit	<i>Parus major</i>	Widespread
Nuthatch	<i>Sitta europaea</i>	Widespread in woodlands
Common Treecreeper	<i>Certhia familiaris</i>	Scattered woodland records
Penduline Tit	<i>Remiz pendulinus</i>	Seen very well at Lake Lesina, where nesting.
Golden Oriole	<i>Oriolus oriolus</i>	Heard often, seen on two days
Woodchat Shrike	<i>Lanius senator</i>	2 south of Foresta Umbra
Magpie	<i>Pica pica</i>	Very common. Noted daily.
Jay	<i>Garrulus glandarius</i>	Widespread
Jackdaw	<i>Corvus monedula</i>	Scattered records
Hooded Crow	<i>Corvus corone cornix</i>	Widespread. Noted daily.
Starling	<i>Sturnus vulgaris</i>	Bari area
Italian Sparrow	<i>Passer domesticus italiae</i>	Widespread. Noted daily.
Chaffinch	<i>Fringilla coelebs</i>	Widespread and reasonably common
Serín	<i>Serinus serinus</i>	Widespread in small numbers
Greenfinch	<i>Carduelis chloris</i>	Widespread
Goldfinch	<i>Carduelis carduelis</i>	Widespread and common
Linnét	<i>Carduelis cannabina</i>	A few records
Yellowhammer	<i>Emberiza citrinella</i>	Seen by the group near the hotel in the north?
Cirl Bunting	<i>Emberiza cirlus</i>	Widespread and rather common
Corn Bunting	<i>Miliaria calandra</i>	Widespread, heard regularly

## Systematic List Number 4

## Amphibians and Reptiles

Italian Crested Newt	<i>Triturus carnifex</i>	A few in a pond at Cento Pozzi
Italian Hybrid Frog	<i>Rana kl.hispanica</i>	Numerous at 100 Dolinas, heard in the north
European Pond Terrapin	<i>Emys orbicularis</i>	Cento Pozzi and Varano 'island'
Moorish Gecko	<i>Tarentola mauritanica</i>	Rather common in Pulsano Gorge, also Ruggiano view point, and Margherita
Green Lizard	<i>Lacerta bilineata</i>	Scattered records, e.g. Carbonara Valley
Italian Wall Lizard	<i>Podarcis sicula</i>	Widespread and common
Italian Three-toed Skink	<i>Chalcides chalcides</i>	Pulsano road and Day 7
Western Whip Snake	<i>Coluber viridiflavus</i>	Four seen this year. Dark phase animals near Carbonara Valley, near Cento Pozzi, and Pulsano Gorge. A dark green animal in Carbonara Valley.
Four-lined Snake	<i>Elaphe quatuorlineata</i>	A fine large individual at Lake Lesina
Dice Snake	<i>Natrix tessellata</i>	1 in a pond at 100 Dolinas

## Systematic List Number 5

## Mammals

Western Hedgehog	<i>Erinaceus europaeus</i>	Road casualties
Roman Mole	<i>Talpa romana</i>	Hills common. A dead individual on Passo Ingarano.
Fox	<i>Vulpes vulpes</i>	One road casualty 2008. Sign 2011. 2012 one on Chiancate, one Carbonara Valley.
Weasel	<i>Mustela nivalis</i>	1 in Bosco Quarto seen well (PGC) 2011
Red Squirrel	<i>Sciurus vulgaris</i>	Sign, knawed pinecones, north coast
Savi's Pine Vole	<i>Pitymys savii</i>	Burrows noted
Hare	<i>Lepus europaeus</i>	One on Monte Nero
Wild Boar	<i>Sus scrofa</i>	Rooting activity widespread