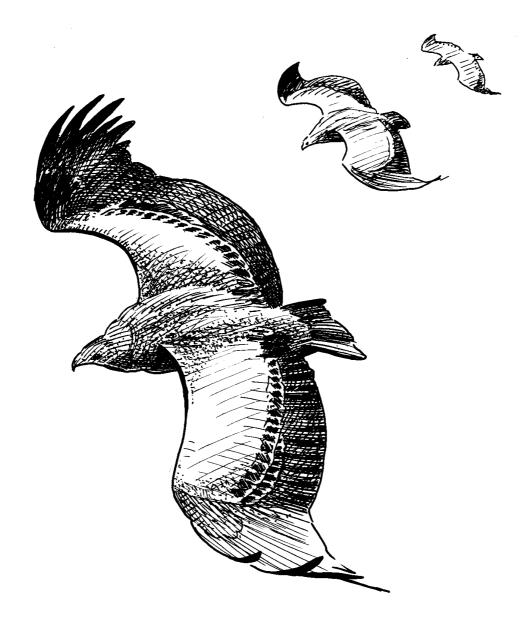
Honeyguide

WILDLIFE HOLIDAYS

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From the Alps to the Adriatic Eastern Italy and Slovenia 6 – 13 June 2006

From the Alps to the Adriatic 6 – 13 June 2006

Holiday participants

Helen Cox Edward Cox Margaret Cox

Ron Waters

Malcolm Crowder Helen Crowder

Dorothy Iveson Jean Connor

John Rumpus Rosemary MacDonald

Harvey Wood

Martin George Barbara George

Bill Napthine Anne Napthine

Leaders

Paul Tout Chris Gibson

Lesser spotted woodpecker by Szabolcs Kokay from Gerard Gorman's Woodpeckers of Europe (Bruce Coleman Books) and reprinted here with their kind permission.

Other illustrations by Rob Hume. Front cover: griffon vultures

As with all Honeyguide holidays, £25 of the price of the holiday was put towards a conservation project, in this case for the first time to ASTORE − FVG, a recently established conservation organisation for Friuli-Venezia Giulia, and part of a network of similar bodies in regions in Italy. The conservation contribution this year of £25 per person was supplemented by gift aid through the Honeyguide Wildlife Charitable Trust, leading to a total of £466, rounded up to £470. Added to last year's donation £480, this gives a total of £950 raised for ASTORE to date (roughly €1330).

The total conservation contributions through Honeyguide since 1991 was at £42,235 (roughly €59,100) at the end of summer 2006.

From the Alps to the Adriatic 6 – 13 June 2006

Tuesday 6 June: The way there & Zolla Quarry

A slightly delayed lunchtime departure from Stansted saw us leaving behind the warm, sunny skies of home, for the cooler, cloudier weather of north-east Italy – an unexpected contrast which remained for much of the week, as the UK basked in glorious weather. But it was nowhere near as bad as it could have been: recent Italian weather had been at best variable, and one night in the previous week had seen the coldest June night for decades!

Once back on *terra firma*, and we had collected our luggage, co-leader Paul and the minibuses, it was straight onto the *autostrada* towards Trieste, arriving at the Hotel Kri_man in Monrupino (Repen), close to the Slovenian border, at 4 pm. A few minutes to unpack were in order, but everyone was keen to get out and sample our new surroundings, so we took a short drive to the local quarry. Right on the border, here marked by little more than a stone, the quarry is on the edge of a *dolina*, a deep depression formed by the collapse of a cavern, giving Paul the chance to introduce us to the magic that is the karst (or *carso*, in Italian) – so important and distinctive that it has lent its name to this form of limestone geomorphology worldwide.

Now filled with deciduous woodland, the *dolina* was home to many shade-tolerant plants under the canopy of oaks and eastern hornbeam: lily-of-the-valley, bastard balm, asarabacca and hepatica mingled with the first orchids of the trip, both saprophytic and thus not dependent on light: birdsnest orchid and violet birdsnest orchid. But birdlife was noticeably absent (or just quiet because of the time of the day) – just the song of blackbird and song thrush resonated in the emptiness, with a distant piercing call of short-toed treecreeper. Of these, perhaps song thrush was the most interesting: largely a montane bird in these parts, its presence here was a reflection of the inverted biological zonation in the cool depths of the *dolina*.

Moving into the quarry, the aspect opened up with lovely views into Slovenia, and the welcome sunlight provided ideal conditions for limestone flora, with superb displays of several *Genista* species, and some impressive plants of *Silene italica*, albeit with rather crumpled flowers as it is a night-flowering, moth-pollinated plant. Paul warned those of us in sandals of the presence of the rather venomous nose-horned viper, but sadly none were visible. A couple of hawfinches zipped over, and at our feet, we found the first of several large, spotted leopard slugs, and butterflies included large wall and speckled wood, here in the familiar northern form (as opposed to the more richly coloured southern form which can be found just a few kilometres away on the coast). But even here the Mediterranean influence was still apparent, in the unmistakeable, elongate shape of a well-grown nymph of the scarce bush-cricket *Saga pedo*.

The quarry itself is a known breeding site for eagle owls, but Paul suspected the nest had failed, and true enough there was no sign of adult or chicks. However, a little perseverance produced a singing male rock bunting, along with a blue rock thrush and a passing sparrowhawk.

Rather reluctantly, given the natural wealth of the area, we headed back to the hotel and into the first of many excellent meals prepared by Elvis and his team.

Wednesday 7 June: Cerknisko Jezero

The decision was taken to head straight into Slovenia for our first full day, stopping just before the border to admire a splendid short-toed eagle over the road. Our destination was Cerknisko Jezero, a large karstic lake (turlough) which displays widely fluctuating water levels (more than a metre a day according to recent rainfall); Paul had reccy'd the site a few days before, and found it full but falling fast, hence our urgency to get there.

Crossing the border was a simple task, especially in comparison with my previous visit ten years earlier, before Slovenia joined the EU. And the roads were infinitely better than before, but it was reassuring to note that the lovely, diverse landscape has remained largely intact despite the Common Agricultural Policy.

Our first stop was at one of the villages which form a necklace around the lake, to view a recently-founded white stork nest: adult and chicks were present and correct. But it was very cool, almost cold, with a biting wind, so it was with some trepidation we approached the huge windswept lake. What a revelation! Huge meadows of damp grassland, blooming riotously, a mosaic of yellow (buttercups and viper's-grass), blue (meadow clary, clustered bellflower and scabious) and pink (ragged robin) merging into a glorious palette of colour. And then, scanning over the lake, a white-tailed eagle floated into view, coming to land on a post close to a grazing roe deer. And then a second eagle appeared; these two magnificent birds put in sporadic appearances all morning, putting all other raptors (including more than 40 hobbies) almost literally in the shade.

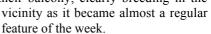
Before long, the sun forced its way through the cloud, lifting the temperatures, and almost immediately insect life sprung into action, especially in the lee of patches of scrub. Many marsh fritillaries were soon on the wing, alongside woodland ringlet, little blue, and chequered and grizzled skippers, while it seemed that every bramble leaf had a scorpion-fly in residence.

Working our way around the lake by bus, we saw a mixture of the familiar – mallard, great crested grebe and black-headed gull – and the less familiar: a singing marsh warbler did allow a few glimpses, and cause a few missed heartbeats when its song included phrases from that of scarlet rosefinch. And so on to the lunch stop, with what was to become a daily highlight, a packed lunch prepared by Paul's wife Ann. As we were finishing, a party of three Dutch and Slovenian naturalists headed out of the woods, in a bit of a hurry, saying they thought they had smelt a bear (apparently like a sweet goat!). Undeterred, we plunged into the woods - not a sweet goat to be smelt, seen or heard. But the meadows were again superb, orange lily and deadly nightshade being two of the new species for the day, and from the clifftop viewpoint, a beautiful breeding-plumaged red-necked grebe eventually gave itself up to scrutiny, close to the shore but incredibly difficult to spot on the rippled waters.

As the afternoon progressed, the clouds gathered and started to produce a little rain and thunder; our next stop at the busy end of the lake was curtailed as a result. But not before we had listened in wonder to a marsh warbler not more than 5 metres from us, deep in a bush, producing snippets of chaffinch, song thrush, house sparrow, great tit and greenfinch calls in rapid succession. No sign of the hoped-for scarlet rosefinch at this site, but a breeding fieldfare was good to see. Then a final couple of short stops by the outflow of the lake, taking in the natural rock arch from above and below, more lovely meadows and beech woodland, before heading home after a long but rewarding day.

Thursday 8 June: Lake Doberdo & Isola della Cona

A clear dawn persuaded a few of the group to make a pre-breakfast exploration of the woods behind the hotel at Monrupino, but the birds were very few and far between within the woodland, apart from roving bands of tits and a couple of noisy nuthatches. It was most striking how, as we wandered back to the village, the number and variety of birds increased, with serins and black redstarts on the rooftops and a calling hoopoe being the highlights. There were rewards also for those who didn't make it out: Dorothy and Jean spotted a lesser spotted woodpecker from their balcony, clearly breeding in the





Another day, another karstic lake. This time, we headed up to Lake Doberdo, just inland from Monfalcone. On the long approach to the lake in hot sunshine, the diversity of the scrub belied the fact that these hill slopes had been severely burnt just a few years previously. Typically, the dominant shrub was smoke-bush, many in full, wispy flower, and in every shade between dark green and reddish-purple, a most attractive sight.

Other botanical interest was provided by lower shrubs, such as *Teucrium flavum* and *chamaedrys*, Etruscan honeysuckle, and the feathery plumes of *Stipa* grass. But it was the insects which really attracted attention, with southern white admiral, ilex and green hairstreaks, the dark Italian form of

marbled white, and nettle-tree butterflies, the nine-spotted moth, and numerous grasshoppers, including the large, karst endemic *Prionotropis hystrix*. Bird life included woodlark, subalpine warbler, redbacked shrike and corn bunting, while a honey buzzard passed low overhead and a family of ravens made forays from the hilltop crags.

As we approached the lake, the scrub became ever more dense, and the clearings and glades ever more richer in butterflies. Here, lesser spotted and niobe fritillaries and Essex skipper were added to the list, as golden orioles called fluidly all around, and *Clematis viticella* made an attractive purple show. The lake itself was little more than a puddle amid a vast reedbed, but surprisingly a reedbed without birds, presumably related to the extreme water level fluctuations which can take place.

Lunch was taken in the welcome shade of the new visitor centre (albeit not open), accompanied by sightings of short-toed eagles, alpine swifts, a cucumber spider and for a lucky few, a western whip snake. Heading back to the lake, we approached a plantation of large poplars, one of which had a black woodpecker's roost hole in its trunk. Paul tried, but failed, to elicit some response to tape luring, and we had to be content with calling great spotted and green. A nightingale was in full flow, and an Italian agile frog, here on the very edge of its limited world distribution, hopped across the path.

Then it was back to the buses, and on to Isola della Cona, a recently-created wetland, formed by the flooding of low-lying coastal farmland and now a haven for birds. Just outside the first hide there were purple heron and great white egret, and as we explored further into the reserve, we added spoonbill, night heron and garganey to our ever-growing bird list. Norfolk hawker and white-tailed skimmer dragonflies were seen well, along with a couple of lovely lesser purple emperors.

One feature of the reserve not to be missed is its main, three-storey hide. Each floor gives a different perspective, but especially the basement, which is half below the water level. The windows look out into the reeds and under the water, a fantastic demonstration of the ecosystem which supports the birds we had already seen in abundance from upstairs; a small pike allowed particularly close scrutiny, just a few centimetres from the window.

A final drive over the agricultural plains failed to produce the reported flock of lesser kestrels (presumably driven here by the cutting of their orthopteran-rich grassland habitat further south), but every bit as good for us was a group of five red-footed falcons, in a diverse array of plumages, and sitting around on the telegraph wires for easy comparison.

After dinner, we had planned to return to the quarry to try and connect with scops owl. In the event it turned rather cool, so we restricted ourselves to a village walk. And a good one it turned out to be, with common pipistrelles, a few moths including light emerald, and a glowing glow-worm, all after a bit of bedroom excitement when Margaret found a scorpion in hers! Although not a dangerous species, she was very pleased when Ron and his pot came to her rescue.

Friday 9 June: Slovenian karst near Kobjaglava & Monte Stena

As well as rescuer of damsels in distress, Ron was also the mothman of the group, and he had duly set his trap in the hotel garden last night. We were not expecting much, given the conditions, and that proved to be the case apart from a couple of heart and dart, and single angle shades, heath rivulet, light emerald and lilac beauty when the trap was investigated after breakfast.

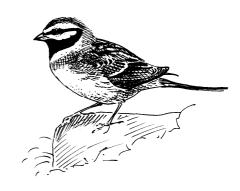
Today was a day of exploring karst grassland, taking in two contrasting sites, one remote and the other much more visited on the outskirts of Trieste. But first into Slovenia, to the heart of a vast area of unimproved karst grassland, near Kobjaglava; 'unimproved' in the agricultural sense, but for us it could hardly have been any better. As we arrived, a party of six honey buzzards (perhaps very late migrants) drifted over, and other birds included short-toed eagle and ortolan bunting. At least two males of the latter were in song, which is very impressive given that it is a rapidly declining species – there are only 30 or so pairs left in the Slovenian karst, and Italy has lost its birds.

The meadows were simply wonderful, a few of the highlights including the karst endemic cow-wheat *Melampyrum carstiense*, bedstraw broomrape, the newly-opened flowers of which were very distinctly clove-scented, and the almost impossibly vivid pink flowers of *Dianthus carthusianorum*. Otherwise it was a fritillary-fest: flying everywhere, in all sizes, the ones we managed to identify included high

brown, Glanville, twin-spot and knapweed. Huge, chunky grasshoppers and bush-crickets were everywhere, and then most dramatic of all, a beautiful red-and black female ladybird spider, wandering towards us on the track as we headed back to the van.

In a break from the usual pattern, we then headed to Paul's garden, just back into Italy, for lunch – an *al fresco* delight. And even there, the wildlife studies continued, with a blue butterfly being confirmed as silver-studded (rather than Idas) on the basis of its tibial spine.

Monte Stena is one of the largest remaining areas of *carso* grassland, and forms a large swathe of open space along with Val Rosandra on the outskirts of Trieste. As such, it is much used and abused by the general public, and its bird life in particular is consequently much reduced, although we did see woodlark and cirl bunting well. Fortunately though, the flowers and insects are rather less sensitive to disturbance, and it remains a superb wildlife site. On the plateau, dense stands of *Jurinea mollis* were attracting numerous insects to their thistle-like heads, and the feathery *Stipa* flower heads were glowing in the afternoon light. A more acquired taste perhaps, we found a patch of *Daphne alpina*, here at a very atypical non-montane site, but well past flowering; most unexpected (and serendipitous, given that we would not have seen



it had Paul's sense of direction not deserted him) was a superb, freshly opened lizard orchid spike (which I later realised to be the form/species – taxonomic opinions differ – *Himantoglossum adriaticum*).

Paul's warning about ticks proved to be uncannily accurate, and he was the sole beneficiary. In display of unparalleled team-work, the tick on the back of his neck was duly extracted cleanly by his co-leader, before we all headed into the hotel for an early dinner – it was the night of a huge wedding reception, so they wanted us to be out of the way. It was a warmer, still evening so we decided to check out the nightlife at the quarry. Scops owls inexplicably failed us, nightjars were only distant, but as we approached the open quarry, Paul saw an eagle owl scurry behind a boulder – perhaps they hadn't failed after all? We waited and waited, as dusk fell, and nothing – until we turned round and saw an adult bird perched on a pole a hundred metres away, watching us all along. It stayed there, barely moving apart from an occasional twist of the head, until the light failed, and the nearly full moon rose over the cliff face.

Saturday 10 June: Cornino & Magredi

Ron had placed his moth trap at the quarry last night, so it was an early start for a few of us to retrieve it. From the number of moths, especially blotched emeralds, around the trap, it seemed to have been successful, and when opened after breakfast, that proved to be the case: species included clay triplelines, festoon, spectacle, lunar marbled brown, and green oak rollers in abundance.

Then it was on to the planned pre-breakfast walk, up the hill and through the woods, hopefully to find a circular route as marked on the maps. Unfortunately we failed, and the woods were quiet anyway, apart from a distant calling black woodpecker (not the mimetic blackbird in the village, though perhaps the model for that aspect of the blackbird's song) and a couple of marsh tits. But we were kept entertained by the local grazing livestock, which seem to roam free in the woods – a billy goat is clearly in control, but the sight of it mounting a horse (not in the equestrian sense!) was most bizarre.

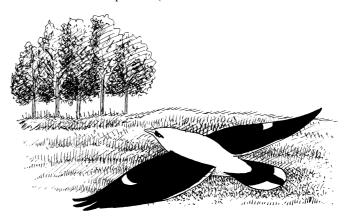
A long drive up the motorway, to Udine and beyond, brought us into the foothills of the Alps, with steeply-rising land, and vast outwash rivers of boulders. The main object of this visit was Cornino, and the reintroduction project for griffon vultures. Initially contentious, it now seems to have been accepted and indeed welcomed, not least because of the number of visitors it draws in. As we 'scoped the vulture restaurant, there were the griffons in all their glory, demolishing a carcass, pulling out the entrails and eating it though it were spaghetti. As the temperature rose, so several took to the wing, and started to drift away over the mountain, leaving a few stragglers, lots of ravens and a black kite to clear up the remnants.

Then a few minutes to peer at the captive, injured vultures and other birds, a couple of basking nose-horned vipers (sadly also captive), and a genuinely wild red squirrel running through the treetops. Back down at the vans, a look at the sparrows was in order. There were tree sparrows around, and the 'house' sparrows also had chestnut crowns, but these were Italian sparrows, a taxonomically debated form, which probably derived from hybridisation between house sparrow (which is found hereabouts –

it was the only form around the hotel for example) and the Spanish sparrow which isn't ... all very confusing.

We headed back down onto the plains for lunch, eventually settling for the shade of a row of poplars, to keep the increasingly ferocious sun at bay. As always, lunch was enlivened by passing wildlife, in this case golden oriole, and both marsh and Montagu's harrier.

The drive towards this area had given some clues about what we should expect after lunch, with the road crossing dry



rivers of boulders, and construction taking place over them, where the road had been damaged by movement of the boulders in flood conditions. But I for one was completely amazed by the Magredi area, a truly vast outwash plain at the confluence of two huge flood channels, boulders having been washed in their millions of tonnes out of the Alps, and deposited on the flatlands. And deposited at different geological times, such that the delta is at a series of different elevations, like raised beaches. The most recent, lower areas were almost devoid of vegetation, not doubt having been washed over during the previous winter, while the higher, older, more stable areas have developed an extensive grassland habitat, similar to the steppes or Breckland as it used to be.

In the grassy areas, there was yellow rattle and dropwort, green-winged orchid and the distinctive pale yellow flowered *Centaurea dichroantha*, to name just a few of the vast array of flowers, along with a few plants of the tartar's cabbage, a relative of our more familiar sea kale, and here at the very western end of its world distribution. And as always there were butterflies all around, including spotted fritillary and a very small fritillary which we believe was Assmann's, a rare species with very few known sites in Italy.

Down on the lower areas, there was more scrub, with a lack of management, and consequently more birds, most excitingly several stone-curlews, and a pair of lesser grey shrikes, while some of the more surprising plants included two – mountain avens and *Erica carnea* – which are presumably persisting remnant populations derived from seeds washed down from the mountain-tops.

After a long, hot day, and a lot of bumping along rocky tracks, we needed a reward, so a real ice-cream in the magnificent 'square' at Palmanova rounded things off very nicely!

Sunday 11 June: Gonars Bog, Medea, Lisert & Cala Romana

Heading back to the Palmanova area (no ice-creams this time!) our first site was the Gonars Bog, a fragment of formerly extensive wetland created by the artesian upwelling of alpine water. Unfortunately nowadays most are dry, being drained for and by agriculture, and perhaps suffering from climate change (these bogs are on the southernmost edge of the climate zone in which peat can form). On the site it was concerning to see how little water there was, and how the peat had shrunk, in places eroded down to the mineral soil: Martin resolved to try and effect some conservation action, using his experience from the Broads, while Paul equally resolved to make some complementary enhancements through more direct action. Together they can make a difference...

But why would we want to make a difference? Well, a walk around the remaining fragment provided more than enough justification, from patches of marsh helleborines and shocking-pink spikes of marsh gladiolus, to dyer's greenweed, fen ragwort, valerian and a host of other wetland plants. A honey buzzard was flying around, and a female Montagu's harrier in attendance around a nest site, the first local breeding pair for some years. And in the warm sunshine, insects were everywhere – Weaver's and

false heath fritillaries, a trio of lesser purple emperors drinking along a ditch with short-tailed blues, and best of all, several examples of one of Europe's rarest and rapidly declining butterflies, the false ringlet. Add to that several species of dragonfly and damselfly and a large, showy, delta-winged moth *Grammodes bifasciata*, and you have a precious wetland, with vulnerable wildlife, which must be protected.

Also a fine place for lunch, especially as Ron was able to deploy his pheromone lures and managed to attract in at least two orange-tailed clearwing moths, while way overhead, the dust devils were carrying large chunks of aerial flotsam which looked remarkably like yesterday's tartar's cabbage.

We then moved down to the riverbank and sand workings at Medea, where we hoped to catch up with bee-eaters. Well, they were there, but very distant, and there was little else to detain us apart from a white-letter hairstreak, quite properly found on an elm hedge. So before long, on our way again, down to the coast at Lisert. Here, at the head of the Adriatic, intertidal habitat is at a premium, as it is throughout the micro-tidal Mediterranean. But in seeking to create more land for industry through land-claim, Man has inadvertently created a superb replica for the intertidal mudflats we are so familiar with, in the form of reclamation pools and reedbeds. Black-winged stilts and Kentish plovers were

holding territory, while little stints, little terns and great white egrets were feeding in and around the water. Then offshore, around the mussel beds off Duino, the sharp-eyed were able to pick out numerous shags (of the Mediterranean race) and a few eiders, the latter with a recently established small breeding population in the area.



Meanwhile, Ron was at it again with his pheromones, producing several six-belted clearwings in the sparse vegetation, and his net, taking both short-tailed and Idas blues for critical examination. And among the many Odonata flying around in the sunshine were dainty damselfly and lesser emperor.

Our final locality was a little down the coast, overlooking the impressive, active marble quarry at Cava Romana. Crag martins and alpine swifts gave excellent views flying just above the top of the cliff, while blue rock thrush, raven and rock dove completed the suite of cliff-nesters.

It was a warm and humid evening, so for the first time dinner was served *al fresco*, to the accompaniment of a male golden oriole – very close, but typically not showing itself. And a gentle potter up to the woods at dark brought us to more glow-worms, and distant churring nightjars and barking roe deer.

Monday 12 June: Montasio & Val Raccolana

Last night's haul of moths from the trap which had been set on the edge of the woods included a range of familiar British species, including scarce footman, tawny marbled minor and willow beauty, along with a couple which we see largely as immigrants, white point and bordered straw.

Then it was another long drive up into the mountains, towards the Austrian border. Rising up through the wooded valley, suddenly the aspect opened at around 1500m, and the magnificent sight of the Julian Alps appeared before us at Montasio. With huge areas of rock to investigate, 'scoping the snow beds is always a good bet, and so it proved, as Malcolm located a herd of 18 male alpine ibex, their impressive horns easily visible despite the long range view.

At these high levels, the bird life was very reminiscent of home, with lesser whitethroat, tree pipit and whinchat among the sparse woodland at the tree-line, and in an old pine, crested tits were excavating their nest hole. Several alpine choughs fed on invertebrates in the turf, and danced in the skies with a bizarre range of wheezing, clicking, almost mechanical calls. Surprisingly, the diversity of plants was relatively low, perhaps partly to do with the intensity of summer grazing, the importance of which was apparent from the fact that the abundant, toxic false helleborine had been weed-wiped. But spring cinquefoil, spring gentian, mountain milkwort and kidney-vetch were able to put on a good show in places, especially on the steeper banks which are presumably less conducive to grazing.

We took lunch at the car park, with an incredible view down the valley, and dingy skippers all around. One odd looking specimen, with reduced markings, was captured; it looked for all the world like an inky skipper, but presumably wasn't as this species is known only from further south in the mountains of the Balkans. Then another walk in a different direction brought us a fresh crop of birds, including a pair of the scaly *alpestris* form of ring ouzel, water pipit (surely the prettiest of this dowdy family, with its blue-grey head and pinkish breast), a golden eagle being mobbed by a raven, and a goshawk, circling overhead, and giving even the leaders some doubts as to their identification skills – it did look remarkably like an alpine chough!

We then walked down the road, through the forest, and wherever light was able to penetrate the canopy, there were flowers in abundance. Purple colt's-foot, alpine snowbell, *Anemone trifolia*, oxlip and wood sorrel jostled for our attention, alongside freshly-emerged pearl-bordered fritillaries. Back with the minibuses, we proceeded downhill into the Val Raccolana, stopping wherever it looked interesting. Alpine clematis festooned the road bank in places, and clearings were home to some magnificent (unsprayed) flowering spikes of false helleborine, and numerous clouded Apollos and bright-eyed ringlets. Still further down, laburnum in full flower became a major part of the tree community, and down at the river, many pairs of eyes searched for, but only one (Helen's) saw a dipper.

And so to our final dinner, again outside, opportunity to reflect on the success of the holiday now sadly almost behind us. The highlights were many and varied, but the facts speak for themselves - 134 birds on the list, along with 70 butterflies (including 14 fritillaries) is an impressive haul, and when viewed in the context of everything else we saw, an undoubted success. Then to cap it all, just after most of us headed for bed, the long-awaited scops owl struck up its chorus from the tree under which we had been sitting. This tempted a few stragglers to take a final walk around the village, and provided a new mammal for the trip, a hedgehog.

Tuesday 13 June: Monte Cocusso & home

An hour to pack after breakfast left us with time for one final look at the local *carso*, this time on the foothills of Monte Cocusso. In common with much of this habitat, as a result of insufficient grazing the open limestone grassland has become overgrown with scrub, but now the local authority is trying to reverse the trend. Scrub is being cleared, grazing reintroduced, and, judging from this site, the features of the former grassland successfully restored. Many of the plants, by now old friends, such as meadow clary, were blooming away, and the whole place was teeming with moths and butterflies. Niobe fritillaries everywhere, along with chalkhill and baton blues, *Zygaena carniolica* and transparent burnet, and fittingly as we boarded the buses, a large chequered skipper squeezed itself onto everyone's holiday list.

And so back to the hotel to load the cases, a quick stop at Paul's to collect our lunches, and off to the airport for our early afternoon flight. Or so the theory went: in practice, a two-hour delay and back over Stansted, half an hour circling the skies while we waited for a huge thunderstorm to dissipate. A dramatic end to a wonderful trip!

LISTS

In the lists below, the localities are identified by the following codes:

KG - Karst/carso grassland sites in general

KW - Karst/carso woodland site in general

Z – Zolla Quarry

LD – Lake Doberdo

MS - Monte Stena

MC -Monte Cocusso

CJ – Cerknisko Jezero

Ko – Kobjaglava

R - Repen (Monrupino)

Ma - Malchina

CR - Cava Romana

L-Lisert

IC – Isola della Cona

G - Gonars

Me - Medea

M - Magredi

JA – Julian Alps (Montasio/Val Raccolana)

PLANTS

Of all the major lists, these are the least comprehensive, excluding many 'weedy' species, grasses, and things not in flower. English names are given only where one is used in the books.

FERNS & ALLIES

FERNS & ALLIES		
Asplenium adiantum-nigrum	black spleenwort	KG
A. ruta-muraria	wall-rue	R KG
A. trichomanes	maidenhair spleenwort	R
Ceterach officinarum	rusty-back fern	R
Dryopteris dilatata	broad buckler	JA
D. filix-mas	male fern	KW JA
Equisetum arvense	field horsetail	IC
E. fluviatile	water horsetail	CJ
E. hyemale	Dutch rush	IC G
E. palustre	marsh horsetail	G
E. telmateia	great horsetail	LD IC
Gymnocarpium dryopteris	oak fern	JA
Polystichum aculeatum	hard shield-fern	CJ
Pteridium aquilinum	bracken	MS
CONIFERS		
Juniperus communis	juniper	KG
Pinus nigra	black pine	KW JA

o tirip er tis committe	Juliper	110
Pinus nigra	black pine	KW JA
P. sylvestris	Scots pine	JA
Taxus baccata	yew	CJ

DICOTYLEDONS

Aceraceae

Aceraceae		
Acer campestre	field maple	LD R

Anacardiaceae

Cotinus coggygria	smoke bush	KG
Pistachia terebinthus	turpentine tree	LD Z

Apiaceae

Chaerophyllum temulentum rough c Eryngium amethystinum	ater-parsnip G nervil R LD MC	•
Hacquetia epipactis	СЈ	,
Orlaya grandiflora	KG	

Sanicula europaea	sanicle	Z
•		
Apocynaceae		
Vinca minor	lesser periwinkle	CJ
	-	
Araliaceae		
Hedera helix	ivy	KW
Aristolochiaceae		
Asarum europaeum	asarabacca	Z CJ
Aristolochia clematitis	birthwort	LD R
A. rotunda		LD
Asclepiadaceae		
Vincetoxicum hirundinaria	contiguum swallow-wort	KG
V. h. laxum		M
Astawasasa		
Asteraceae Achillea millefolium	Varrow	KG
Adenostyles alliariae	yarrow	JA
Artemisia campestre	field wormwood	MS
Bellis perennis	daisy	KG
1	3	_
Buphthalmum salicifolium	yellow ox-eye	KG
Centaurea dichroantha		M
C. triumfetti		KG
Cirsium erysithales	yellow melancholy thistle	CJ
C. pannonicum		MS
Crepis chondrilloides		MS MC
Erigeron annuus		R LD IC
Eupatorium cannabinum	hemp-agrimony	G
Hieracium pilosella	mouse-eared hawkweed	CJ
Homogyne alpina	purple colt's-foot	JA
Inula hirta		Ko
I. viscosa	stink aster	L
Jurinea mollis		MS
Lactuca perennis	blue lettuce	LD
Leucanthemum liburnicum		MS
L. vulgare	ox-eye daisy	KG
Scorzonera austriaca	viper's-grass	Ko CJ
S. humilis		G
Senecio fluviatilis	fen ragwort	G
Serratula tinctoria	saw-wort	CJ
Tragopogon tommasinii		CJ
Xanthium spinosum	spiny cocklebur	L
ъ		
Boraginaceae		
Buglossoides purpureo-cae	rulea purple gromwell	R
Echium vulgare	viper's-bugloss	M
Onosma javorkae	1	KG
Pulmonaria officinalis	lungwort	CJ
P. rubra	red lungwort	CJ
Symphytum officinale	comfrey	CJ G
Brassicaceae		
Arabis alpina	alnina roak arass	JA
	alpine rock-cress	R Z
A. glabra	tower mustard	
Biscutella laevigata	coralroot bittercress	LD M CJ
Cardamine bulbifera	coramout differerss	
C. enneaphyllos	mannayy 1 1 L*44	CJ
C. impatiens	narrow-leaved bittercress	CJ
C. pratensis	lady's smock	CJ M
Crambe tartarica	tartar's cabbage	M
Matthiola fruticulosa		M
Sisymbrium austriacum		JA
Componulações		
Campanula alomarata	clustered bellflower	CJ
Campanula glomerata	Ciusteted Dellifowei	CJ

C. pyramidalis C. rapunculus C. trachelium Legousia speculum-veneris Phyteuma ovata	rampion bellflower nettle-leaved bellflower large Venus's-looking-glass	Z KG CJ LD CJ
Caprifoliaceae Lonicera etrusca L. japonicum Sambucus nigra Viburnum lantana V. opulus	elder wayfaring tree guelder rose	LD MS IC KW CJ CJ
Caryophyllaceae Dianthus carthusianorum D. sylvestris ssp. te Gypsophila repens Lychnis flos-cuculi Petrorhagia saxifraga Silene alba S. italica S. nutans S. otites S. vulgaris	Carthusian pink rgestinus wood pink ragged-Robin tunic flower white campion Italian catchfly Nottingham catchfly Spanish catchfly bladder campion	KG LD M Ko CJ LD R KG KW KG
Celastraceae Euonymus europaeus	spindle	R LD
Cistaceae Fumana procumbens Helianthemum nummularium H. n.grandiflorum H. ovatum	rock-rose	R R LD M MS
Convolvulaceae Convolvulus cantabricus Cuscuta epithymum	pink convolvulus dodder	R LD MS
Cornaceae Cornus mas C. sanguinea	cornelian cherry dogwood	KW KW
Corylaceae Carpinus betulus C. orientalis Corylus avellana	hornbeam eastern hornbeam hazel	CJ Z KW
Crassulaceae Sedum acre S. sexangulare	wall-pepper tasteless stonecrop	Ko KG
Cucurbitaceae Bryonia dioica	white bryony	G
Dipsacaceae Dipsacus fullonum Lomelosia graminifolia Knautia arvensis K. drymeia K. illyrica Scabiosa gramuntia	teasel field scabious	IC M KG Z R CJ CJ
Ericaceae Erica carnea		M

Euphorbiaceae

Eurhauhia amuadalaidas	wood spurge	VW
Euphorbia amygdaloides	wood spurge	KW KG
E. cyparissias E. fragifera	cypress spurge	MS
E. Jragijera E. lathyrus	caper spurge	R
E. nicaeensis	caper spurge	MS
E. palustris	marsh spurge	CJ G
E. verrucosa	maron sparge	CJ
Mercurialis perennis	dog's mercury	CJ
ine. em tams per en ms	acg s mercary	
Fabaceae		
Amorpha fruticosa	false indigo	M IC LD
Anthyllis vulneraria	kidney-vetch	KG
A. v. alpestris		JA
Chamacytisus hirsutus		ZR
Chamaespartium sagittale	winged greenweed	KG
Coronilla varia	crown vetch	LD R G
Dorycnium germanicum		KG
Genista pilosa		Z
G. sylvestris		Ko
G. sericea		KG
G. tinctoria	dyer's greenweed	M KG G
Hippocrepis comosa	horseshoe vetch	KG
Laburnum anagyroides	laburnum	JA
Lathyrus latifolius	everlasting-pea	LD 7
L. pratensis	meadow vetchling	Z
L. sylvestris L. tuberosus	narrow-leaved everlasting per tuberous pea	Z
L. tuverosus L. verna	spring pea	Z CJ
L. verna Lembotropis nigricans	spring pea	LD
Lotus alpinus		JA
L. corniculatus	bird's-foot-trefoil	CJ LD
L. glaber	narrow-leaved bird's-foot-tre	
L. uliginosus	marsh bird's-foot-trefoil	G
Onobrychis arenaria	maish one s foot trefon	Ko
Trifolium incarnatum ssp. mo	olinieri	MS
-	mountain clover	CJ
T. montanum	mountain clover red clover	CJ Z
-		
T. montanum T. pratense		Z
T. montanum T. pratense T. rubens	red clover	${\rm Z\atop CJ\ MS\ LD}$
T. montanum T. pratense T. rubens Vicia cracca	red clover tufted vetch	Z CJ MS LD CJ
T. montanum T. pratense T. rubens Vicia cracca	red clover tufted vetch	Z CJ MS LD CJ CJ
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica	red clover tufted vetch bush vetch beech	Z CJ MS LD CJ CJ KW
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris	red clover tufted vetch bush vetch beech turkey oak	Z CJ MS LD CJ CJ KW MS
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea	tufted vetch bush vetch beech turkey oak sessile oak	Z CJ MS LD CJ CJ KW MS KW
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris	red clover tufted vetch bush vetch beech turkey oak	Z CJ MS LD CJ CJ KW MS
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens	tufted vetch bush vetch beech turkey oak sessile oak	Z CJ MS LD CJ CJ KW MS KW
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae	tufted vetch bush vetch beech turkey oak sessile oak white oak	Z CJ MS LD CJ CJ KW MS KW KW
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis	tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian	Z CJ MS LD CJ CJ KW MS KW KW
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae	tufted vetch bush vetch beech turkey oak sessile oak white oak	Z CJ MS LD CJ CJ KW MS KW KW
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna	tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian	Z CJ MS LD CJ CJ KW MS KW KW
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian	Z CJ MS LD CJ CJ KW MS KW KW
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill	Z CJ MS LD CJ CJ KW MS KW KW CJ
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill	Z CJ MS LD CJ CJ KW MS KW KW JA JA CJ CJ
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA Z
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum G. sanguineum	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin bloody cranesbill	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA CJ CJ Z
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA Z
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum G. sanguineum	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin bloody cranesbill	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA CJ CJ Z
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum G. sanguineum G. sylvaticum	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin bloody cranesbill	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA CJ CJ Z
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum G. sanguineum G. sylvaticum Globulariaceae	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin bloody cranesbill	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA JA
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum G. sanguineum G. sylvaticum Globulariaceae Globularia cordifolia	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin bloody cranesbill	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA JA JA JA
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum G. sanguineum G. sylvaticum Globulariaceae Globularia cordifolia	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin bloody cranesbill	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA JA JA JA
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum G. sanguineum G. sylvaticum Globulariaceae Globularia cordifolia G. punctata	red clover tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin bloody cranesbill	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA JA JA JA
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum G. sanguineum G. sylvaticum Globulariaceae Globularia cordifolia G. punctata Grossulariaceae Hypericum perforatum	tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin bloody cranesbill wood cranesbill	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA JA LD
T. montanum T. pratense T. rubens Vicia cracca V. sepium Fagaceae Fagus sylvatica Quercus cerris Q. petraea Q. pubescens Gentianaceae Gentiana acaulis G. verna Geraniaceae Geranium dissectum G. nodosum G. purpureum G. sanguineum G. sylvaticum Globulariaceae Globularia cordifolia G. punctata Grossulariaceae	tufted vetch bush vetch beech turkey oak sessile oak white oak trumpet gentian spring gentian cut-leaved cranesbill knotted cranesbill little-Robin bloody cranesbill wood cranesbill	Z CJ MS LD CJ CJ KW MS KW KW JA JA JA JA LD

Lamiaceae		
Ajuga genevensis		LD
A. pyramidalis	pyramidal bugle	JA
A. reptans	bugle	CJ
Lamiastrum galaeobdolon	yellow archangel	KW
Lamium album	white dead-nettle	JA
L. maculatum	spotted dead-nettle	CJ
L. orvala	op 0 111 0 111 111 111 111 111 111 111 11	CJ
Melittis melissophyllum	bastard-balm	KW
Mentha aquatica	water mint	CJ
Micromeria thymifolia	water mint	MS
Origanum vulgare	marjoram	KG
Salvia pratensis	meadow clary	KG M
		KG M
Stachys officinalis	betony	
S. recta	yellow woundwort	KG
Teucrium chamaedrys	wall germander	KG
T. flavum	yellow germander	LD
T. montanum	mountain germander	LD MS
Thymus longicaulis	wild thyme	LD
T. pulegioides	large thyme	R LD CJ
Linaceae		
Linum tenuifolium		KG
L. tommassini		MC
L. viscosum		Me
Loranthaceae		
Loranthus europaeus		MS
Malvaceae		
Althaea officinalis	marsh mallow	IC
Nymphaeaceae		
Nymphaea alba	white water-lily	IC
N. lutea	yellow water-lily	CJ
Oleaceae		
Fraxinus ornus	manna ash	KW
Ligustrum vulgare	wild privet	KW
Orobanchaceae		
Orobanche alba	thyme broomrape	Ko
O. caryophyllacea		Ko
O. gracilis	bedstraw broomrape	G
O. gracius O. lutea		Ko
O. tuteu		KU
Oxalidaceae		
Oxalis acetosella	wood sorrel	JA
Papaveraceae		
Chelidonium majus	greater celandine	R
Papaver rhoeas	common poppy	CJ
Plantaginaceae		
Plantago holosteum		R
P. media	hoary plantain	KG
	<i>J</i> 1	
Polygalaceae		
Polygala alpestris	mountain milkwort	JA
P. nicaeensis		KG
Polygonaceae		
Polygonum viviparum	alpine bistort	JA
Polygonum viviparum Rumex alpinus	alpine bistort monk's rhubarb	JA JA

Primulaceae

Cyclamen purpurascens	sowbread	CJ
Primula auricula	auricula	JA
P. elatior		JA
	oxlip	
P. vulgaris	primrose	CJ
Samolus valerandi	brookweed	IC
Soldanella alpina	alpine snowbell	JA
Ranunculaceae		
Aconitum napellus	monk's-hood	CJ
	monk 5 nood	JA
Anemone trifolia		
Aquilegia atrata		CJ
A. vulgaris	columbine	CJ
Caltha palustris	marsh marigold	CJ
Clematis alpina	alpine clematis	JA
C. recta		LD G IC
	tmaxiallam'a iavi	Z
C. vitalba	traveller's joy	_
C. viticella		Me LD IC
Helleborus odorus		Z
Hepatica nobilis	hepatica	KW
Pulsatilla alpina	alpine pasque-flower	JA
Ranunculus aconitifolius	m-p pq	JA
· ·		
R. acris	meadow buttercup	CJ
R. montanus		JA
Thalictrum aquilegifolium	greater meadow-rue	CJ
Trollius europaeus	globe-flower	JA
- · · · · · · · · · · · · · · · · · · ·	8	
Rhamnaceae		
	alder by alrtherm	CI
Frangula alnus	alder buckthorn	CJ
F. rupestris		LD
Paliurus spina-christi	Christ's-thorn	LD
Rhamnus saxatilis	rock buckthorn	MS
Rosaceae		
	mountain avens	M
Dryas octopetala		
Filipendula ulmaria	meadowsweet	CJ
F. vulgaris	dropwort	KG G
Fragaria moschata		CJ
F. vesca	wild strawberry	KW
Geum rivale	water avens	JA
		CJ
G. urbanum	wood avens	
Potentilla anserina	silverweed	CJ
P. crantzii	alpine cinquefoil	JA
P. erecta	tormentil	P CJ
P. recta	sulphur cinquefoil	MC
Prunus mahaleb	St. Lucie's cherry	LD
Rosa canina		
	dog rose	KG
R. pendulina	alpine rose	CJ
Sanguisorba major	great burnet	CJ
S. minor	salad burnet	KG
Sorbus aria	whitebeam	CJ
Rubiaceae		
		KG
Galium album		
G. anisophyllum		JA
G. lucidum	shining bedstraw	CJ
G. verum	lady's bedstraw	KG M
Rutaceae		
Dictamnus albus	burning-bush	KG
Ruta divaricata	rue	KG
ima airai ieuu	140	11.0
Santalaceae		
Osyris alba		ID
•		LD
•		LD
Salicaceae		
•	black poplar	LD CJ
Salicaceae	black poplar	

S. fragilis S. retusa	crack willow	LD JA
Saxifragaceae		
	m alternate leaved golden-saxi	frage JA
Saxifraga rotundifolius	round-leaved saxifrage	JA
S. squarrosa		JA
Scrophulariaceae		
Melampyrum carstiense		Ko MS
Rhinanthus freynii		KG
R. minor Scrophularia canina	yellow-rattle	M LD
S. c. hoppeana	French figwort alpine figwort	JA
S. c. noppeana S nodosa	common figwort	CJ
Verbascum nigrum	dark mullein	LD
V. thapsus	great mullein	CJ
Veronica chamaedrys	germander speedwell	CJ
Solanaceae		
Atropa belladonna	deadly nightshade	CJ
Physalis alkekengi		LD
Staphylaeaceae		
Staphylaea pinnata	bladder-nut	CJ
Tamaricaceae		
Tamarix gallica	tamarisk	IC
TO 1		
Thymelaeaceae Daphne alpina		MS
Бирине шриш		IVIO
Tiliaceae	11.1 1.1	ъ
Tilia cordata	small-leaved lime	R
Ulmaceae		
Celtis australis	nettle-tree	LD R
Ulmus glabra	wych elm	CJ
U. minor	small-leaved elm	IC
Urticaceae		
Parietaria judaica	pellitory-of-the-wall	R
P. officinalis		R
Valerianaceae		
Valeriana dioica	marsh valerian	CJ
V. montana	1 .	JA
V. officinalis V. tripteris	valerian 3-leaved valerian	G CJ JA
v. tripteris	3-icaved valerian	JA
Violaceae		G.
Viola elatior V. odorata	sweet violet	CJ Z
r. ouoruu	sweet violet	L
MONOCOTYLEDONS		
Alismataceae		a-
Alisma plantago-aquatica	water-plantain	CJ
Amaryllidaceae		
Leucojum aestivum	summer snowflake	CJ
Cyperaceae		
Carex acutiformis	lesser pond sedge	LD
Č. extensa	long-bracted sedge	L
C. lepidocarpa	long-stalked yellow sedge	G
C. otrubae	false fox sedge	LD LD
C. paniculata	tussock-sedge	LD

C. pseudocyperus	hop sedge	G
Cladium mariscus	saw-sedge	G
Schoenus nigricans	black bog-rush	CJ M G
Scirpus holoschoenus	round-headed club-rush	G
S. lacustris	bulrush	CJ
S. maritimus	sea club-rush	IC
S. tabernaemontan	glaucous bulrush	IC
Dioscoreaceae		
Tamus communis	black bryony	LD
Iridaceae		
Crocus vernus		JA
Gladiolus communis		CJ
G. palustris		G
Iris pseudacorus	yellow flag	CJ IC
Liliaceae		
Allium carinatum		LD
A. vineale	crow garlic	G
Asparagus acutifolius		Z LD R
Colchicum autumnale	meadow saffron	CJ
Convallaria majalis	lily-of-the-valley	KW
Lilium bulbiferum	orange lily	CJ
L. martagon	martagon lily	CJ
Maianthemum bifolia	may lily	CJ
Muscari comosum	tassel hyacinth	MS LD
Ornithogalum divaricatum	star-of-Bethlehem	R MS
O. pyrenaicum	Bath asparagus	LD
Paris quadrifolia	herb-Paris	CJ
Polygonatum odoratum	scented Solomon's-seal	CJ
P. verticillatum	whorled Solomon's-seal	CJ MC
Ruscus aculeatus	butcher's-broom	MS
Tofieldia calyculata Veratrum album	white false helleborine	G JA
Orchidaceae		
Anacamptis pyramidalis	pyramidal orchid	KG G
Cephalanthera damasonium	white helleborine	Z
Dactylorhiza fuchsia	common spotted-orchid	CJ
D. incarnata	early marsh-orchid	CJ CJ
Epipactis helleborine	broad-leaved helleborine	CJ
E. palustris	marsh helleborine	G
Gymnedenia conopsea	fragrant orchid	LD G M
Himantoglossum adriaticum	lizard orchid	MS
Limodorum abortivum	violet bird's-nest orchid	Z
Listera ovata	twayblade	CJ Z
Neottia nidus-avis	bird's-nest orchid	Z CJ
Ophrys apifera	bee orchid	LD MC
O. sphegodes	late spider-orchid	MS
Orchis laxiflora	loose-flowered orchid	CJ
O. morio	green-winged orchid	M
Poaceae		
Alopecurus pratensis	meadow fox-tail	CJ
Arrhenatherum elatius	false oat-grass	CJ
Briza media	quaking grass	KG
Chrysopogon gryllus	11: 1: 1	LD
Melica nutans	nodding melick	CJ
Milium effusum	wood millet	CJ
Parapholis incurva	curved hard-grass	L
Phalaris arundinacea	reed canary-grass	IC C C
Phragmites australis Setaria viridis	common reed	LD IC G CJ L
Stipa eriocaulis ssp. austriaca	g feather grass	LD MS M
supa eriocanus ssp. austriaci	a realiter grass	LD MIG MI



Smilacaceae

Smilax aspera		LD
Typhaceae Typha angustifolia	lesser reedmace	IC
T. latifolia	greater reedmace	IC
MOLLUSCS	Leave I. I	7
Limax maximus	leopard slug	Z
ARACHNIDS		
Araniella cucurbitina Eresus niger	cucumber spider ladybird spider	LD Ko
Euscorpius flavicaudis	a scorpion	R R
Philaeus chrysops	a black and red jumping spice	ler M
Thomisus onustus	a pink crab-spider	Me
INSECTS		
Coleoptera		
Aphodius sp.	chafer	CJ
Cetonia aurata C. cuprea	rose chafer	Z R MS
Clytra 4-punctata		G
Lampyris noctiluca	glow-worm	RZ
Oedemera nobilis	G1 C	G
Oxythyrea funesta Trichius sp.	flower chafer a bee-beetle	G R
Trientus sp.	a see seeme	TC .
Dictyoptera		77
Mantis religiosa	praying mantis	Ko
Diptera		
Bombylis major	bee-fly	LD
Thyridanthrax fenestratus		Ko
Hemiptera		
Aelia glebana	bishop's mitre	Z
Cercopis vulnerata	i- 1	LD
Rhinocoris sp.	an assassin bug	LD
Hymenoptera		
Formica rufa	wood ant	JA
Vespa crabro Xylocopa violacea	hornet carpenter bee	LD CJ
Trytocopu violuccu	curponer sec	Co
Lepidoptera – Butterflies		
swallowtail	KG	
scarce swallowtail	KG	
clouded Apollo	JA LD	
southern festoon	LD	
red admiral	LD	
southern white admiral	LD	
lesser purple emperor	G IC KG	
painted lady small tortoiseshell	CJ	
comma	G	
southern comma	LD	
high brown fritillary	Ko	
silver-washed fritillary	LD	
Glanville fritillary	KG	
twin-spot fritillary	Ko CJ	
marsh fritillary heath fritillary	KG	
false heath fritillary	G	



spotted fritillary M lesser spotted fritillary LD

niobe fritillary LD MC Ko

Weaver's fritillary G
Knapweed fritillary Ko
Assmann's fritillary M
pearl-bordered fritillary JA

nettle-tree LD

speckled wood KW (northern form)

meadow brown LD R gatekeeper R bright-eyed ringlet JA woodland ringlet CJ false ringlet G large wall Z LD small heath KG pearly heath KG

marbled white KG (form *procida*)

large white KG small white KG G

green-veined white JA (dark alpine form)

orange tip
wood white
black-veined white
clouded yellow
Berger's clouded yellow
brimstone

LD CJ
LD CJ MC
CM MC
KG L
KG

ilex hairstreak LD green hairstreak LD white-letter hairstreak Me common blue KG silver-studded blue MC Ma Adonis blue KG Idas blue L green-underside blue Ko chalkhill blue MC short-tailed blue G L mazarine blue CJ small blue KG baton blue MC holly blue G IC small copper Me

large skipper CJ LD Essex skipper LD red-underside skipper Ko mallow skipper LD dingy skipper MS JA chequered skipper CJlarge chequered skipper G MC grizzled skipper CJlarge grizzled skipper CJ

Lepidoptera - Moths

Yponomeuta cagnagella R MS (caterpillars)
Y. rorella CJ (caterpillars)

Nemophora scabiosellaCJgreen oak-rollerR ZOlethreutes lacunanaRMetaxmeste phrygialisJAsmall magpieRlarge white plume-mothLDsix-spotted burnetKG

	1.50	
transparent burnet	MC	
slender scotch burnet	LD MS	
Zygaena carniolica	MC MS	
Z. transalpina	MS	
Z. punctum	Z	
scarce forester	MS Ko MC	
festoon	RZ	
six-belted clearwing	L	
orange-tailed clearwing	G	
grass eggar	Ko (caterpillar)	
common carpet	Z	
grass emerald	MS	
small grass emerald	M	
blotched emerald	R Z	
light emerald	R Z	
clay triple-lines	Z	
heath rivulet	R	
lilac beauty	R	
common heath	CJ	
silver-ground carpet	Z	
Schistostege decussata	KG	
Rhodostrophia vibicaria	Z	
Syntomis marjana	LD	
hummingbird hawk-moth	KG	
maple prominent	CJ	
lunar marbled brown	Z	
Dysauxes punctata	LD	
scarce footman	R	
clouded buff	CJ	
vapourer	MS (caterpillars)	
burnet companion	CJ	
silver-Y	KG	
angle shades	R	
heart and dart	R	
straw dot	CJ	
Grammodes bifasciata	G	
spectacle	Z	
marbled minor	Z	
tawny marbled minor	R	
cabbage moth	R	
water betony	LD (caterpillar)	
white point	R	
bordered straw	R	
Mecoptera		
Panorpa communis	scorpion fly	CJ
Neuroptera		
Libelloides macaronius	ascalaphid	M
Odonata		
Aeshna isosceles	Norfolk hawker	IC
Anax parthenope	lesser emperor	L
Calopteryx splendens	banded demoiselle	CJ
C. virgo	beautiful demoiselle	G
Coenagrion puella	azure damselfly	CJ
C. scitulum	dainty damselfly	L
Ischnura elegans	blue-tailed damselfly	IC
Libellula depressa	broad-bodied chaser	CJ
L, fulva	scarce chaser	G
L. quadrimaculata	four-spotted chaser	CJ
Orthetrum coerulescens	keeled skimmer	G
O. cancellatum	black-tailed skimmer	LD M
O. albistylum	white-tailed skimmer	IC
Orthonters		
Orthoptera Decticus verrucivorus	wart-biter	Ko
Decicus verrueivorus	wait-oitei	110

Eupholidoptera schmidtii LD MC Gryllus campestris field cricket KG Kisella irena LD Metrioptera brachyptera bog bush-cricket G Roesel's bush-cricket LD M. roeselii Oecanthus pellucens tree-cricket R Polysarcus denticauda Ko Ko LD Prionotropis hystrix Saga pedo Z G Tettigonia viridissima great green bush-cricket

FISH

pike IC

AMPHIBIANS

marsh frog R CJ Italian agile frog LD

REPTILES

European pond terrapin IC

green lizard LD IC MS common wall lizard IC western whip-snake LD Me viperine snake C (dead)

MAMMALS

western hedgehog R

mole CJ (molehills)

common pipistrelle R
serotine Z
brown hare IC Ko
red squirrel C
snow vole JA (runs)
alpine marmot JA

wild boar CJ (rootings)

roe deer R CJ alpine ibex JA

BIRDS

CJ IC Little grebe Great crested grebe CJRed-necked grebe CJ Shag L Night heron IC Little egret IC L Great white egret IC L Grey heron CJ IC L Purple heron IC White stork CJIC Spoonbill CJ IC L Mute swan Greylag goose IC Wigeon IC Teal CJ IC Garganey CJ IC Mallard CJ IC L

Eider L

Honey buzzard LD Ko M G

Black kite C Griffon vulture C

Short-toed eagle CJ LD Ko R
Marsh harrier IC M
Montagu's harrier M G

Sparrowhawk Z LD Ko

Goshawk JA

Common buzzard

Golden eagle JA White-tailed eagle CJ

Common kestrel

Red-footed falcon IC

Hobby CJ LD Ko M G

Quail CJ M Pheasant IC G Moorhen IC CJ IC Coot Black-winged stilt IC L Stone-curlew M Little ringed plover IC M L Kentish plover L Lapwing IC M Little stint L Ruff IC IC L Redshank Black-headed gull CJ L

Yellow-legged gull

Common tern L
Little tern L
Black tern CJ

Feral pigeon

Rock dove CR Woodpigeon R C G

Collared dove Turtle dove

Cuckoo Scops owl R Eagle owl Z

Nightjar Swift

Alpine swift LD MS CR
Bee-eater Me
Hoopoe R M
Green woodpecker LD G
Black woodpecker R

RZ

Great spotted woodpecker

Lesser spotted woodpecker R Crested lark M Me

Woodlark R LD Ko M MS Skylark CJ M Me Crag martin CR

Swallow House martin

Tree pipit CJ JA
Water pipit JA
Tawny pipit M
Yellow wagtail (ashy-headed) CJ IC L
Grey wagtail CJ

White wagtail

Dipper JA Robin Z JA

Nightingale

Black redstart

Whinchat CJ JA
Stonechat M
Northern wheatear M JA

Blue rock thrush Z CR Ring ouzel JA

Blackbird

Fieldfare CJ

Song thrush Z CJ LD JA

Mistle thrush MS Cetti's warbler IC G Sedge warbler CJMarsh warbler CJ IC Great reed warbler IC L LD MS Melodious warbler Subalpine warbler LD Lesser whitethroat JA

White throat

Blackcap

Chiffchaff

Firecrest CJ C JA Spotted flycatcher CJ Z

Long-tailed tit

Marsh tit R
Crested tit R JA
Coal tit R JA

Blue tit Great tit

Nuthatch R Short-toed treecreeper Z

Golden oriole R LD M Ko Red-backed shrike CJ LD Ko M JA

Lesser grey shrike M

Jay

Magpie

Alpine chough JA
Jackdaw JA
Hooded crow CJ M

Carrion crow

Raven Ko C CR JA LD

Starling

House sparrow

Italian sparrow C

Tree sparrow

Chaffinch Serin Greenfinch Goldfinch

Linnet CJ

Hawfinch R Z CJ G MC Ko

Rock bunting Z LD
Cirl bunting R Z CJ MS
Yellowhammer CJ
Ortolan bunting Ko M

Reed bunting CJ
Corn bunting LD M