#### **HUNGARY**

 $5^{th} - 15^{th}$  July 2011

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#### I. Introduction

The Bukk Hills and Aggtelek National Park in Hungary form two of the most spectacular places in Europe to observe quality and quantity of butterflies. Here, in a system of hay-meadows and flower-rich forests long lost to Britain, the lepidopterist can enjoy thousands of butterflies, flying in clouds, and encounter a great range of species. The Bukk and the Hortobagy, to the south, also provide excellent birding, and this combination makes for a very attractive trip, especially during the height of summer. It's worth noting that this is the only trip for which my written records were lost, so accounts have been 'reconstructed' from meta-data from photographs and personal re-call. All other information, such as GPS data for sites visited, is entirely accurate.

#### **II. Logistics**

## (a) Preparatory Work

We arranged to stay at two key centres – with renowned Hungary lepidopterist, Rob de Jong, at Farm Lator in the Bukk Hills, and at Josvafo in the Aggtelek National Park, where we had stayed in 2009. Rob's local knowledge being second to none, we did not do extensive preparatory work on butterfly sites in the Bukk, concentrating instead on a 'standard' itinerary of sites on the Hortobagy Plain, and researching good sites to visit in the Aggtelek National Park.

#### (b) Transport

We flew from London to Budapest, and hired a car then drove with ease to Farm Lator. Most of the roads in Hungary are in excellent condition. Permits are rarely an issue: on visiting the Hortobagy Halasto fishponds, for example, one simply pays a fee for a day's entry to these superb wetlands. In the heart of the Bukk Hills, however, permits can become more difficult, especially to access the truly astounding meadows within the heart of the forest (north of Farm Lator), and the Nagi Meadow, one of the most pristine floral meadows in Hungary. All enquiries in this regard are best directed to Rob de Jong at Farm Lator, who has experience of securing permits – even if you choose not to lodge there during your stay (see below).

#### (c) Accommodation

For the first five nights of our visit, we stayed at the excellent Farm Lator (<a href="www.farmlator.hu">www.farmlator.hu</a>). In spite of a few issues with damp in the rooms, the place was, by and large, excellent, with an extraordinarily rich wealth of wildlife in the immediate vicinity, including Collared Flycatcher, Wryneck, Middle-spotted Woodpecker, Hawfinch and Golden Oriole in and around the garden itself. Rob's advice proved invaluable in locating many species, and prime butterfly meadows, over the course of the week, as well as with obtained permits. Eastern Imperial Eagle was seen over the garden during our stay. For the next five nights, we lodged at the village of Josvafo, at the head of a valley in the Aggtelek National Park. Here we stayed at the Hotel Tengerszem (<a href="https://hotelce.com/tengerszem-szallo-josvafo">hotelce.com/tengerszem-szallo-josvafo</a>). This was another excellent accommodation choice, situated within easy reach of the Aggtelek's prime butterfly meadows and woodlands.

## **III. Daily Notes**

# 6<sup>th</sup> July 2011

We drove from Budapest to Farm Lator in the Bukk Hills (47.981386, 20.634707). En-route we noted Long-legged Buzzard (*Buteo rufinus*), Short-toed Eagle (*Circaetus gallicus*), Great White Egret (*Ardea alba*), White Stork (*Ciconia ciconia*) and several other species that reminded us we were in eastern Europe. On arrival at Farm Lator, we settled into our accommodation and explored, briefly, the gardens here, which held calling Middle-spotted Woodpecker (*Dendrocopos medius*), several orchard Hawfinch (*Coccothraustes coccothraustes*) and fluting Golden Oriole (*Oriolus oriolus*). Common garden butterflies included Scarce Swallowtail (*Iphiclides podalirius*), Large White (*Pieris brassicae*) and numerous Silver-washed Fritillary (*Argynnis paphia*).

In the evening, we walked south of Farm Lator to a small disused sand quarry near the village of Saly (47.968667, 20.647242). A Bee-eater colony here had, apparently, been abandoned, though several Bee-eaters (*Merops apiaster*) were seen high overhead. Black Redstart (*Phoenicurus ochruros*) were nesting here and a brief session with butterflies here yielded Map Butterfly (*Araschnia levana*), Holly Blue (*Celastrina argiolus*), Meadow Brown (*Maniola jurtina*) and Green-veined White (*Artogeia napi*).

#### 7<sup>th</sup> July 2011

Awaking to a gorgeous morning, we drove south to spend a full day on the Hortobagy Plains. We headed towards Mezokovesd, then SE through Szentistvan, to a track across the plains (47.762766, 20.677342). The farm buildings held a teeming colony of hundreds of Tree Sparrows (*Passer montanus*), a fascinating insight into how many 'scruffy' farms must have looked in Britain in the pre-war period, promoting thousands of seed and insect-eating passerines.

This area, part of the "Little Hortobagy", was hot and arid even in the morning. Parking further along (47.756120, 20.691222), we found some freshly-cut meadows teeming with Eastern Bath White (*Euchloe ausonia*), Pale Clouded Yellow (*Colias hyale*), Longtailed Blue (*Lampides boeticus*) and some Silver-studded Blues (*Plebejus argus*). White Storks (Ciconia Ciconia) were abundant in the fields and we noted Great White Egret (Ardea alba) over. The trees along the road held Lesser Grey Shrike (*Lanius minor*), whilst a bridge over the Csince river channel (47.751108, 20.704513) held a singing Marsh Warbler (Acrocephalus palustris). In the far distance, Red-footed Falcons (*Falco vespertinus*) were visible in the haze, frequently what seems to be a small colony in the copse to the east (47.746898, 20.718762). Driving back along the road, a superb adult Roller (*Coracius garrulus*) landed briefly to collect food, before flying towards a presumed nest site.

We then drove the road from Fuzesabony through Tizafured towards the famous Hortobagy Halasto Fishponds. We first secured permits at the charismatic Hortobagy Village, noting at least 5 active nests of White Stork (*Ciconia ciconia*). The Halasto car park (47.605903, 21.072935) was teeming with thousands of Sand Martins (*Riparia riparia*) – thronging on every wire; swirling around in clouds. At least 4 Golden Orioles (*Oriolus oriolus*), a family party, moved through the trees here whilst White Storks (*Ciconia ciconia*) nested atop a telegraph post in the car park.

We then took the well-organised train out to the main reserve (47.623071, 21.077565). In baking heat, we enjoyed superb birding, including breeding Purple Heron (*Ardea purpurea*), Night Heron (*Nycticorax nycticorax*), Squacco Heron (*Ardeola raleoides*), Great White Egret (*Ardea alba*), Little Egret (*Egretta garzetta*), audible Little Bittern (*Ixobrychus minutus*), Spoonbill (*Platalea leucordia*), Ferruginous Duck (*Aythya nyroca*), superb Pygmy Cormorants (*Phalacrocorax pygmeus*), Whiskered Tern (*Chlidonias hybridus*), Penduline Tit (*Remiz pendulinus*), Great Reed Warbler (*Acrocephalus arundinaceus*), reeling and briefly seen Savi's Warbler (*Locustella lusciniodes*), and the constant fluting of Golden Orioles (*Oriolus oriolus*). The overall impression was, typically for Hungary, one of teeming life. Butterflies were few and far between but we noted several Eastern Pale Clouded Yellow (*Colias erate*). Satiated, we returned and drove back towards the Bukk.

We made two memorable stops along the rich stretch of roadside 'putza' between Hortobagy and Tizafured – the very heart of the Hortobagy. At an active and well-managed colony of Bee-eater (*Merops apiaster*), just N of the 33 road (47.587426, 21.010326), we gained magical views of numerous pairs (15-20) bringing food to their burrows, glowing in the evening plains light. A little further on, a traditional colony (47.581642, 21.002720) of Red-footed Falcons (*Falco vespertinus*), offered superb views of these masterful birds hawking and perching, in addition to 2-3 Lesser Kestrels (*Falco naumanni*). Approximately 1km further on, we noted White-winged Tern (*Chlidonias leucopterus*), and a male Montagu's Harrier (*Circus pygargus*) across the road. As we drove back at dusk past the central vegetated fish-pond N of Bukkabrany (47.912447, 20.669232), River Warbler (*Locustella fluviatilis*) was heard calling from the car.

## 8<sup>th</sup> July 2011

Today our host at Farm Lator, Rob de Jong, was excited. He had, he said, 'never' seen butterflies in the Bukk Hills flying in numbers like he had yesterday. Around the farm grounds, a female Collared Flycatcher (*Ficedula albicollis*), graced a fence post; most probably the female who had earlier nested in the garden box. We then walked north into the permissive woodlands and meadows of the Bukk Nemzeti National Park. We parked at a turn in the road (48.011507, 20.634779), and immediately were besieged by butterflies. Over a dozen Purple Emperor (*Apatura ilis*) and Common Glider (*Neptis sappho*) were floating down to drink from mud in the forest clearing whilst piles of animal faeces were carpeted in Small Whites (*Artogeia rapae*), Green-veined Whites (*Artogeia napi*), Wood Whites (*Leptidea sinapsis*) and some Map Butterflies (*Araschnia levana*)

This was nothing, however, compared to a vast clear-fell and forest meadow we found driving NW (48.026489, 20.625003). Here, the first striking change from a British clear-fell was the startling abundance of flowers; the result, in turn, of abundant pollinators and a lack of overt browsing. There must have been hundreds of species but by far the most abundant were *Umbeliferae*. And carpeting almost every flower was a species of fritillary. Over the day, amongst the larger fritillaries, we found thousands of Silverwashed Fritillary (*Argynnis paphia*), many High Brown Fritillary (*Argynnis adippe*) and Dark Green Fritillary (*Argynnis aglaja*), several Marbled Fritillary (*Brenthis daphne*) and at least one Lesser Marbled Fritillary (*Brenthis ino*).

Amongst the small fritillaries, literally thousands of Heath Fritillaries (*Mellicta athalia*) thronged, carpeting flowers and mudpudding. These 'flocks' held smaller numbers of Spotted Fritillary (*Melitaea didyma*), several Nickerl's Fritillary (*Mellicta athalia*), Queen of Spain (*Issoria lathonia*), Violet Fritillary (*Clossiana dia*) and Pearl-bordered Fritillary (*C. euphrosyne*). White Admirals (*Limentitis camilla*) glided everywhere, and some stunning Large Tortoiseshells (*Nymphalis polychloros*) flew down to take sweat from our brows, perching on our hats and drinking from my fingertips.

Other species included smaller clouds of mud-puddling Marbled White (*Melanargia galathea*), numerous Scarce Copper (*Lycaena virgaureae*), Common Blue (*Polyommatus icarus*), Adonis Blue (*Lysandra bellargus*) and several Eastern Short-tailed Blue (*Everes decoloratus*). Clustered in tight groups, we found Large Skipper (*Ochlodes venatus*), Lulworth Skipper (*Thymelicus acteon*), Essex Skipper (*Thymelicus lineola*) and Small Skipper (*Thymelicus sylvestris*). We traversed these meadows for the whole day, stopping briefly for lunch at a village to the north, Bukkzentkereszt.

## 9<sup>th</sup> July 2011

Early next morning, several Scarce Swallowtails (*Iphiclides podalirius*) graced buddleia in the garden, whilst the orchard produced a Middle-spotted Woodpecker (*Dendrocopos medius*) in oak, and numerous juvenile Hawfinch (*Coccothraustes coccothraustes*); a very common bird. A stop first at the sand quarry at Saly (47.968667, 20.647242) yielded a few very attractive Chequered Blues (*Maculinea arion*) and several Bee-eaters (*Merops apiaster*) overhead. Other butterflies included Dingy Skipper (*Erynnis rages*). After breakfast, we then headed to a highly sensitive riparian meadow in the south-east of the Bukk Hills.

A walk through a complex of riparian meadows, clear-fells and woods here yielded another startlingly rich variety of butterflies. In a deep, rich, wet meadow, several Pallas' Fritillary (Argynnis laodice) stole the show, surrounded by many Silver-washed Fritillary (Argynnis paphia), High Brown Fritillary (Argynnis adippe), Berger's Clouded Yellow (C. alfacariensis), Comma (Polygonia c-album) and many others, whilst the woodland edge here held Purple Emperor (Apatura ilis), numerous Lesser Purple Emperor (Apatura ilia) and Common Glider (Neptis sappho). Birds here were few, but included a Honey-buzzard (Pernis apivorus) carrying food overhead, whilst a Lesser-spotted Woodpecker (Dendrocopos minor) called from typical riparian willows in a glade. At the woodland edge, we found Sooty Copper (Lycaena tityrus), Duke of Burgundy (Hamearis lucina), Small White (Artogeia rapae) and Dingy Skipper (Erynnis rages). A superb morning in a pristine valley.

In the afternoon, we took lunch again at Bukkzentkereszt in the central Bukk. In the heat of the day, we then explored the heat-baked limestone plateaux to the SE of yesterday's meadows, via a permissive and slightly precarious concrete track (48.000874, 20.654193). Here we immediately noticed and photographed some different species including, at last, confirmed Lesser-spotted Fritillary (*Melitaea trivia*) and a male Meleager's Blue (*Meleageria daphnis*), together with Spotted Fritillary (*Melitaea didyma*) and Violet Fritillary (*Clossiana dia*).

We then relocated to yesterday's site. At the 'drinking mud' (48.011507, 20.634779) there were now flocks of Wood Whites (*Leptidea sinapsis*), and at least one probable Fenton's Wood White (*Leptidea morsei*), in addition to basking Eastern Short-tailed Blues (*Everes decoloratus*). We then drove to the north of yesterday's clearing. Here, in the meadows (48.026489, 20.625003), we photographed Assmann's Fritillary (*Mellicta britomartis*) amongst the hoards of other fritillaries.

# 10<sup>th</sup> July 2011

A brief morning sally into the yesterday's meadows was followed by a longer trip to the famous Nagi Mezo – Great Meadow – that's the jewel in the crown of the Bukk's extraordinary flower meadows. This requires an even stricter permit than the main Bukk Reserve – and it's admirable how well the Hungarians protect and manage their greatest wildlife treasures compared to many national parks in the UK. We parked at the designated car park, just W of Repashuta (48.058743, 20.505383).

Our ascent from the car park here was on a steep, tarmacked road (48.065764, 20.503302). This was alive with Purple Emperors (*Apatura ilia*), Lesser Purple Emperors (*Apatura ilia*) and White Admirals (*Limentitis camilla*). As we reached the meadow (48.073646, 20.490264), its sheer scale came to life – acres and acres of flowers and grasses, teeming with more invertebrate life than most British counties. Here, from two bushes, two pairs of Red-backed Shrike (*Lanius collurio*) were catching enormous grasshoppers, whilst two Corncrakes (*Crex crex*) called from iris beds within the meadow.

Hoards of fritillaries included our first Knapweed Fritillary (*Melitaea phoebe*), Assmann's Fritillary (*Mellicta britomartis*), Nickerl's Fritillary (*Mellicta athalia*) and a few superb Lesser Marbled Fritillary (*Brenthis ino*), High Brown Fritillary (*Argynnis adippe*) and our only Niobe Fritillaries (*Argynnis niobe*). Mazarine Blue (*Cyaniris semiargus*) was found at the shrubby edge of the meadow, whilst numerous Alcon Blue (*Maculinea alcon*) were photographed laying their eggs on *Gentian*. Other new species included Lulworth Skipper (*Thymelicus acteon*) and White-letter Hairstreak (*Satyrium w-album*). The sight of this meadow was quite overwhelming; an incredible vision of grasslands at their very best.

In the late afternoon, we returned to Farm Lator and, for a final time, drove the permissive track north to Bukkzentkereszt. Every flower now heaved under the weight of fritillaries. Butterflies were flying in their thousands; a phenomenon evocative of the early Victorian accounts of the New Forest. Then, around 1km S of Bukkzentkereszt, a large grey bird settled on the track. It was a Ural Owl (*Strifx uralensis*). It took us a while to realise the fact but, as we cautiously emerged from the car, I became aware of a fully-fledged young owl watching from nearby, and located the second adult watching with placid ferocity. Aware of the actual danger presented by these notoriously aggressive owls, we proceded with great caution to the car, but absolutely stunned at this chance encounter with a bird rarely, if ever, chanced. A little further up the road, we drove past a settled dark-phase Honey-buzzard (*Pernis apivorus*); a fitting end to our time here.

#### 11<sup>th</sup> July 2011

We drove from Farm Lator in the Bukk to Hotel Tengerzsem, above Josvafo, in the Aggtelek National Park (48.484692, 20.539480). A brief evening walk located, as in 2009, a Black Woodpecker (*Dryocopos martius*) immediately behind our hotel, which called and showed for a brief second as it flew. From our hotel balcony, large numbers of Hawfinch (*Coccothraustes coccothraustes*), one of the commonest birds in Hungarian beech woods, were constantly flying over, and Honey-buzzard (*Pernis apivorus*) were also noted.

# 12<sup>th</sup> July 2011

As in 2009, we began our tour walking through Josvafo village. Here, the little ford, as we'd hoped, teamed with butterflies (48.484156, 20.551279). In the morning, these were mostly Scarce Swallowtail (*Iphiclides podalirius*), but Large Tortoiseshell (*Nymphalis polychloros*), Purple Emperor (*Apatura ilis*), Clouded Yellow (*Colias croceus*) and many others were airborne. As we headed N out of the village, we encountered a stunning female Meleager's Blue (*Meleageria daphnis*) with the characteristic jagged wing-edge. By the river, a large group of Red-underwing Skipper (*Spiala sertorius*), Grizzled Skipper (*Pyrgus malvae*) and Dingy Skipper (*Erynnis rages*) were taking up salts. As we cleared the village we passed through woodland (48.489481, 20.552898), where numerous Woodland Grayling (*Hipparchia fagi*) and Great Banded Grayling (*Kanetisa circe*) appeared. White Admiral (*Limentitis camilla*) and Purple Emperor (*Apatura ilis*) both flew in numbers.

As we entered the forest meadows, large piles of horse faeces attracted hundreds of Silver-studded Blues (*Plebejus argus*), Eastern Short-tailed Blue (*Everes decoloratus*), Map Butterfly (*Araschnia levana*) and Green-veined White (*Artogeia napi*). We continued until we were exploring the flower meadows beyond the woodland (48.491090, 20.556216). Here, *Umbeliferae* held Turquoise Blue (*Plebicula dorylas*), and we soon came across a Great Sooty Satyr (*Satyrus ferula*), which landed on me, Lesser-spotted Fritillary (*Melitaea trivia*), Marbled Fritillary (*Brenthis daphne*), Berger's Clouded Yellow (*C. alfacariensis*) and Small Heath (*Coenonympha pamphilus*). A small brick hut, falling apart (48.492375, 20.558263), looked promising for future visits, so we left some bananas here to ferment.

In the late afternoon, we returned here, finding a Sloe Hairsteak (Satyrium acaciae) on daisies in a shaded patch just north of the village. The 'ford' had become busier, with European Swallowtail (Papilio machaon) added to the mix. The meadows now yielded Assmann's Fritillary (Mellicta britomartis), whilst the decaying fruit at the hut had already attracted a Purple Emperor (Apatura ilis), several Lesser Purple Emperor (Apatura ilia) and, best of all, a superb Camberwell Beauty (Nymphalis antiopa) that sailed over, not stopping. Other butterflies in the rich meadow by the hut included confirmed Idas Blue (Plebejus idas), Large Skipper (Ochlodes venatus) and Dingy Skipper (Erynnis rages). Birds here were scant but included a Lesser-spotted Woodpecker (Dendrocopos minor) in riparian willows and a brief sighting of male Collared Flycatcher (Ficedula albicollis).

# 13<sup>th</sup> July 2011

We revisited the meadows north of Josvafo village. In the village, a juvenile Syrian Woodpecker (*Dendrocopos syriacus*) showed extremely well; the species on the western edge of its range here. Closer inspection yielded new species, including a Large Blue (*Maculinea arion*), Sooty Copper (*Lycaena tityrus*), Scarce Copper (*Lycaena virgaureae*) and, by the hut, Twin-spot Fritillary (*Brenthis hecate*), Large Grizzled Skipper (*Pyrgus alveus*) and, a subtle and attractive Tufted Marbled Skipper (*C. flocciferus*). Various piles of manure between here and the village now accrued a larger range of species including more Lesser Purple Emperors (*Apatura ilia*), Spotted Fritillary (*Melitaea didyma*) and Wood Whites (*Leptidea sinapsis*). That afternoon, returning through Josvafo village, a juvenile Eagle Owl (*Bubo bubo*) flew high overhead and was, beyond doubt, the surprise bird of the trip – perhaps a juvenile bird dispersing to find new territory.

# 14<sup>th</sup> July 2011

The morning started well when a superb Camberwell Beauty (*Nymphalis antiopa*) finally soared down and landed on the hotel wall, basking for a few moments to allow a photograph. Encountering this very special, elusive and spectacular *Nymphalid* was perhaps the Lepidopteral highlight of the trip. A morning walk north of Josvafo added further species included excellent views of second-brood Fenton's Wood White (*Leptidea morsei*) and Violet Fritillary (*Clossiana dia*).

In rich meadows along the Menez-patak stream, at the end of the road N of the small village of Szogliget (48.538671, 20.662550), we wandered in search of Yellow-legged Tortoiseshell, which has been seen here in the past. We failed to find any, but did enjoy brief views of a singing River Warbler (*Locustella fluviatilis*) in riparian vegetation as well as several flying presumed Large Tortoiseshell (*Nymphalis polychloros*) and numerous High Brown Fritillaries (*Argynnis adippe*).

After lunch, we drove to the meadows just N of Tornakapolna, a small village SW of Josvafo. The meadows here (48.463989, 20.611486) were some of the richest in flowers we have seen. We went in search of further species of blue, including Anomalous and Osiris, but without success. However, the meadows were alive with hundreds of High Brown Fritillaries (*Argynnis adippe*), Lesser-spotted Fritillary (*Melitaea trivia*), Lesser Marbled Fritillary (*Brenthis ino*), Queen of Spain (*Issoria lathonia*), Scarce Swallowtail (*Iphiclides podalirius*), Idas Blue (*Plebejus idas*), Long-tailed Blue (*Lampides boeticus*) and a Large Blue (*Maculinea arion*). In the small village here, we noted several Common Glider (*Neptis sappho*). The invertebrate abundance here was extraordinary, especially in terms of large grasshoppers flushing at every foot-fall.

# 15<sup>th</sup> July 2011

A final afternoon visit to the Josvafo meadows continued to turn up new species, including Chestnut Heath (*Coenonympha glycerion*) and Sooty Copper (*Lycaena tityrus*), in addition to the many other species seen on previous days. We then left for Budapest and flew back. An outstanding trip for both butterflies and birds: eastern Europe at its best.

# **IV. BUTTERFLY LIST**

All sites mentioned below are described in the main report, where they are each attributed digital GPS references.

| 1   | Swallowtail Panilia machana                  | One noted at the dripling need in Joseph (Agatelel)                      |
|-----|--|--|
| 1.  | Swallowtail Papilio machaon                  | One noted at the drinking pool in Josvafo (Aggtelek)                     |
| 2.  | Scarce Swallowtail Iphiclides podalirius     | Very common, especially Farm Lator (Bukk) and 20+ Josvafo (Aggtelek)     |
| 3.  | Large White Pieris brassicae                 |  |
| 4.  | Small White Artogeia rapae                   |  |
| 5.  | Green-veined White Artogeia napi             |  |
| 6.  | Eastern Bath White Euchloe ausonia           | Locally common in fields south of Szentistvan (Hortobagy)                |
| 7.  | Pale Clouded Yellow Colias hyale             | Locally common in fields south of Szentistvan (Hortobagy)                |
| 8.  | Clouded Yellow Colias croceus                |  |
| 9.  | Berger's Clouded Yellow C. alfacariensis     | 1-2 in the Josvafo Meadows (Aggtelek) and SE Bukk Hills.                 |
| 10. | Eastern Pale Clouded Yellow C. erate         | Several seen at the Halasto Fishponds (Hortobagy)                        |
| 11. | Brimstone Gonepteryx rhamni                  |  |
| 12. | Wood White Leptidea sinapsis                 |  |
| 13. | Fenton's Wood White Leptidea morsei          | 1 confirmed in the Josvafo Meadows (Aggtelek)                            |
| 14. | Sloe Hairstreak Satyrium acaciae             | 1 at the north end of Josvafo Village (Aggtelek)                         |
| 15. | White-letter Hairstreak Satyrium w-album     | 1 in meadows north of Farm Lator (Bukk Hills)                            |
| 16. | Small Copper Lycaena phlaeas                 |  |
| 17. | Scarce Copper Lycaena virgaureae             | Common north of Farm Lator (Bukk) and Josvafo Meadows (Aggtelek)         |
| 18. | Sooty Copper Lycaena tityrus                 | 1 or more in Josvafo Meadows (Aggtelek)                                  |
| 19. | Long-tailed Blue Lampides boeticus           | Locally common south of Szentistvan (Hortobagy); Aggtelek.               |
| 20. | Short-tailed Blue Everes argiades            |  |
| 21. | Eastern Short-tailed Blue Everes decoloratus | Common near mud, i.e. N of Farm Lator (Bukk) and Josvafo (Aggtelek)      |
| 22. | Holly Blue Celastrina argiolus               |  |
| 23. | Alcon Blue Maculinea alcon                   | Common in the Nagy Meadow (Bukk) where egg-laying on Gentian             |
| 24. | Large Blue Maculinea arion                   | 1 in Josvafo Meadows and 1 near Tornakapolna (Aggtelek)                  |
| 25. | Chequered Blue Scolitanides orion            | 2-3 seen well in sand quarry N of at Saly village (Bukk Hills)           |
| 26. | Silver-studded Blue Plebejus argus           | Abundant, with 100s on mature in Josvafo Meadows (Aggtelek)              |
| 27. | Idas Blue Plebejus idas                      | Confirmed at Josvafo Meadows and Tornakapolna (Aggtelek)                 |
| 28. | Mazarine Blue Cyaniris semiargus             | 1-3 at the Nagy Meadow (Bukk Hills)                                      |
| 29. | Turquoise Blue Plebicula dorylas             | 2-3 at the Josvafo Meadows (Aggtelek)                                    |
| 30. | Meleager's Blue Meleageria daphnis           | 1 NE of Farm Lator (Bukk); 1f Josvafo Village, 1 Tornakapolna (Aggtelek) |
| 31. | Chalk-hill Blue Lysandra coridon             |  |
| 32. | Adonis Blue Lysandra bellargus               |  |
| 33. | Common Blue Polyommatus icarus               |  |
| 34. | Duke of Burgundy Hamearis lucina             | 1-2 at woodland edge habitat in the SE Bukk Hills.                       |
| 35. | Purple Emperor Apatura ilis                  | Locally common, i.e. N of Farm Lator (Bukk) and Josvafo (Aggtelek)       |
| 36. | Lesser Purple Emperor Apatura ilia           | Locally common, especially SE Bukk Hills and Josvafo (Aggtelek)          |
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| 37. | White Admiral Limentitis camilla           | Locally very common, i.e. N of Farm Lator (Bukk) and Josvafo (Aggtelek) |
|-----|--|---|
| 38. | Common Glider Neptis sappho                | Locally common N of Farm Lator (Bukk) and Tornakapolna (Aggtelek)       |
| 39. | Camberwell Beauty Nymphalis antiopa        | 1 over Josvafo Meadows and 1 settled at Hotel Tengerszem (Aggtelek)     |
| 40. | Large Tortoiseshell Nymphalis polychloros  | Locally common at woodland edge N of Farm Lator (Bukk)                  |
| 41. | Peacock Inachis io                         |   |
| 42. | Red Admiral Vanessa atalanta               |   |
| 43. | Comma Polygonia c-album                    |   |
| 44. | Map Butterfly Araschnia levana             |   |
| 45. | Silver-washed Fritillary Argynnis paphia   | Abundant, with literally 1000s flying N of Farm Lator (Bukk)            |
| 46. | Pallas's Fritillary Argynnis laodice       | Very locally common in a riparian valley in the SE Bukk Hills           |
| 47. | Dark Green Fritillary Argynnis aglaja      | Locally common, i.e. N of Farm Lator (Bukk)                             |
| 48. | High Brown Fritillary Argynnis adippe      | Locally common, i.e. N of Farm Lator (Bukk) & Tornakapolna (Aggtelek)   |
| 49. | Niobe Fritillary Argynnis niobe            | 1 or more at the Nagy-Meadow (Bukk Hills)                               |
| 50. | Queen of Spain Fritillary Issoria lathonia | Small numbers N of Farm Lator (Bukk) & Tornakapolna (Aggtelek)          |
| 51. | Twin-spot Fritillary Brenthis hecate       | Highly localised in 1 of the Josvafo Meadows (Aggtelek)                 |
| 52. | Marbled Fritillary Brenthis daphne         | Several at N of Farm Lator (Bukk Hills), 1-2 Josvafo Meadows (Aggtelek) |
| 53. | Lesser Marbled Fritillary Brenthis ino     | 1 N of Farm Lator, 2-3 Nagy-Meadow (Bukk), 1-2 Josvafo (Aggtelek)       |
| 54. | Pearl-bordered Fritillary C. euphrosyne    | 1-2 N of Farm Lator (Bukk Hills)  |
| 55. | Violet Fritillary Clossiana dia            | Several N to NE of Farm Lator (Bukk Hills) & Josvafo Meadows (Aggtelek) |
| 56. | Knapweed Fritillary Melitaea phoebe        | Several at the Nagy-Meadow (Bukk Hills)                                 |
| 57. | Spotted Fritillary Melitaea didyma         | Common across the Bukk Hills and Aggtelek                               |
| 58. | Lesser Spotted Fritillary Melitaea trivia  | 1-2 NE of Farm Lator (Bukk), 1-2 Josvafo and Tornakapolna (Aggtelek)    |
| 59. | Heath Fritillary Mellicta athalia          | Common throughout, but 1000s flying north of Farm Lator (Bukk)          |
| 60. | Nickerl's Fritillary Mellicta aurelia      | Several N of Farm Lator and the Nagy-Meadow (Bukk Hills)                |
| 61. | Assmann's Fritillary Mellicta britomartis  | N of Farm Lator & Nagy-Meadow (Bukk); Josvafo Meadows (Aggtelek)        |
| 62. | Marbled White Melanargia galathea          |   |
| 63. | Woodland Grayling Hipparchia fagi          | Flying in woodland N of Josvafo Village (Aggtelek)                      |
| 64. | Rock Grayling Hipparchia alcyone           | Several on rocks at N end of Josvafo Village (Aggtelek)                 |
| 65. | Grayling Hipparchia semele                 |   |
| 66. | Great Sooty Satyr Satyrus ferula           | 1 in Josvafo Meadows (Aggtelek)   |
| 67. | Great Banded Grayling Kanetisa circe       | Several in woodland N of Josvafo Village (Aggtelek)                     |
| 68. | Meadow Brown Maniola jurtina               |   |
| 69. | Ringlet Aphantopus hyperantus              |   |
| 70. | Gatekeeper Pyronia tithonus                |   |
| 71. | Small Heath Coenonympha pamphilus          |   |
| 72. | Chestnut Heath Coenonympha glycerion       | 1-2 in Josvafo Meadows (Aggtelek)                                       |
| 73. | Speckled Wood Pararge aegeria              |   |
| 74. | Wall Brown Lasiommata megara               |   |
| 75. | Grizzled Skipper Pyrgus malvae             |   |
| 76. | Large Grizzled Skipper Pyrgus alveus       | Very locally in 1 of the Josvafo Meadows (Aggtelek)                     |
| 77. | Red-underwing Skipper Spiala sertorius     | Locally common around stream in Josvafo Village (Aggtelek)              |
| 78. | Tufted Marbled Skipper C. flocciferus      | Several very locally in 1 of the Josvafo Meadows (Aggtelek)             |
| 79. | Dingy Skipper Erynnis rages                | Common in the Bukk Hills and Aggtelek.                                  |
| 80. | Lulworth Skipper Thymelicus acteon         | Several N of Farm Lator and in the Nagy-Meadow (Bukk Hills)             |

| 81. Essex Skipper Thymelicus lineola    | 1 or more N of Farm Lator (Bukk Hills) |
|---|--|
| 82. Small Skipper Thymelicus sylvestris |  |
| 83. Large Skipper Ochlodes venatus      |  |

# IV. BIRD LIST

All sites mentioned below are described in the main report, where they are each attributed digital GPS references.

| 1.  | Greylag Goose Anser anser                |   |
|-----|--|---|
| 2.  | Mallard Anas platyrhynchos               |   |
| 3.  | Pochard Aythya farina                    |   |
| 4.  | Ferruginous Duck Aythya feroca           | Excellent views of birds at the Halasto Fishponds (Hortobagy)         |
| 5.  | Little Grebe Tachybaptus ruficollis      |   |
| 6.  | Pygmy Cormorant Phalacrocorax pygmeus    |   |
| 7.  | Little Bittern Ixobrychus minutus        | 1 or more heard at the Halasto Fishponds (Hortobagy)                  |
| 8.  | Night Heron Nycticorax nycticorax        | Good numbers present at Halasto Fishponds (Hortobagy)                 |
| 9.  | Squacco Heron Ardeola raleoides          | Excellent views of many birds at Halasto Fishponds (Hortobagy)        |
| 10. | Little Egret Egretta garzetta            |   |
| 11. | Great White Egret Ardea alba             | Excellent views of many birds at Halasto Fishponds (Hortobagy)        |
| 12. | Grey Heron Ardea cinerea                 |   |
| 13. | Purple Heron Ardea purpurea              | Excellent views of birds at Halasto Fishponds (Hortobagy)             |
| 14. | White Stork Ciconia ciconia              | Nesting across villages in the Hortobagy, notably Hortobagy Village.  |
| 15. | Spoonbill Platalea leucordia             | Breeding birds at the Halasto Fishponds (Hortobagy)                   |
| 16. | Honey-buzzard Pernis apivorus            | Seen at 2 sites in the Bukk Hills and over Josvafo (Aggtelek)         |
| 17. | Short-toed Eagle Circaetus gallicus      | One seen en-route between Budapest and the Bukk Hills                 |
| 18. | Marsh Harrier Circus cyaneus             |   |
| 19. | Montagu's Harrier Circus pygargus        | One male over the road W of the Halasto Fishponds (Hortobagy)         |
| 20. | Buzzard Buteo buteo                      |   |
| 21. | Long-legged Buzzard Buteo rufinus        | One seen en-route between Budapest and the Bukk Hills                 |
| 22. | Lesser Kestrel Falco naumanni            | 2-3 seen with Red-footed Falcons W of Halasto Fishponds (see report)  |
| 23. | Red-footed Falcon Falco vespertinus      | Superb colony in Hortobagy (see report); and Little Hortobagy         |
| 24. | Moorhen Gallinula chlorupus              |   |
| 25. | Coot Fulica atra                         |   |
| 26. | Little Ringed Plover Charadrius dubius   |   |
| 27. | Lapwing Vanellus vanellus                |   |
| 28. | Yellow-legged Gull Larus michahellis     | Present at the Halasto Fishponds (Hortobagy)                          |
| 29. | Caspian Gull Larus cachinnans            | Present at the Halasto Fishponds (Hortobagy)                          |
| 30. | Whiskered Tern Chlidonias hybridus       | Large numbers at the Halasto Fishponds (Hortobagy)                    |
| 31. | Black Tern Chlidonias niger              | Small numbers at the Halasto Fishponds (Hortobagy)                    |
| 32. | White-winged Tern Chlidonias leucopterus | Small numbers flying across the road W of the Halasto (Hortobagy)     |
| 33. | Woodpigeon Columba palumbus              |   |
| 34. | Turtle Dove Streptopelia turtur          |   |
| 35. | Little Owl Athene noctua                 |   |
| 36. | Ural Owl Strix uralensis                 | Amazing encounter with adult and young in the Bukk Hills (see report) |

| 37. | Bee-eater Merops apiaster                | Superb views of a colony W of the Hortobagy Halasto (see report) and also a second colony N of Saly village (Bukk Hills) |
|-----|--|--|
| 38. | Roller Coracius gallurus                 | Excellent views of adult S of Szentistvan (Little Hortobagy)   |
| 39. | Hoopoe Upupa epops                       | Recorded – no written records  |
| 40. | Black Woodpecker Dryocopos martius       | Heard and briefly seen behind Hotel Tengerzsem, Josvafo (Aggtelek)   |
| 41. | Syrian Woodpecker Dendrocopos syriacus   | One juvenile seen well in Josvafo Village (Aggtelek)   |
| 42. | Middle-spotted Woodpecker D. medius      | Seen in the orchard at Farm Lator (Bukk Hills)   |
| 43. | Lesser-spotted Woodpecker D. minor       | Seen at Farm Lator and SE Bukk Hills; also Josvafo Meadows (Aggtelek)  |
| 44. | Sand Martin Riparia riparia              |  |
| 45. | Swallow Hirundo rustica                  |  |
| 46. | House Martin Delichon urbicum            |  |
| 47. | Yellow Wagtail Motacilla flava           | Present at the Halasto Fishponds (Hortobagy)   |
| 48. | White Wagtail Motacilla alba             |  |
| 49. | Robin Erithacus rubecula                 |  |
| 50. | Nightingale Luscinia megarhynchos        |  |
| 51. | Black Redstart Phoenicurus ochruros      |  |
| 52. | Blackbird Turdus merula                  |  |
| 53. | Cetti's Warbler Cettia cetti             |  |
| 54. | River Warbler Locustella fluviatillis    | Heard at the Saly Fishponds (Bukk); seen near Szogliget (Aggtelek)   |
| 55. | Savi's Warbler Locustella luscinioides   | Many heard and one briefly seen at Halasto Fishponds (Hortobagy)   |
| 56. | Sedge Warbler Acrocephalus schoenobaenus |  |
| 57. | Marsh Warbler Acrocephalus palustris     | One singing in the Csince River channel, Little Hortobagy  |
| 58. | Reed Warbler Acrocephalus scirpaceus     |  |
| 59. | Great Reed Warbler A. arundinaceus       | One or more singing at Halasto Fishponds (Hortobagy)   |
| 60. | Collared Flycatcher Ficedula albicollis  | 1-2 birds daily at Farm Lator (Bukk); 1 at Josvafo Meadows (Aggtelek)  |
| 61. | Bearded Tit Panurus biarmicus            | Present at the Halasto Fishponds (Hortobagy)   |
| 62. | Blue Tit Parus caeruleus                 |  |
| 63. | Great Tit Parus major                    |  |
| 64. | Golden Oriole Oriolus oriolus            | Farm Lator (Bukk); family parties at the Halasto Fishponds (Hortobagy)   |
| 65. | Red-backed Shrike Lanius collurio        | Superb views of 2 pairs collecting food at Nagy-Meadow (Bukk Hills)  |
| 66. | Jay Garrulus glandarius                  |  |
| 67. | Magpie Pica pica                         |  |
| 68. | Carrion Crow Corvus corone               |  |
| 69. | House Sparrow Passer domesticus          |  |
| 70. | Tree Sparrow Passer montanus             | Present across the Hortobagy i.e. large colony S of Szentistvan.   |
| 71. | Serin Serinus serinus                    |  |
| 72. | Greenfinch Carduelis chloris             |  |
| 73. | Goldfinch Carduelis carduelis            |  |
| 74. | Hawfinch Coccothraustes coccothraustes   | Extremely common in beech-woods across the Bukk Hills and Aggtelek.  |