# Estonia

## Butterflies & Bogs

## A Greentours Trip Report

15<sup>th</sup> – 24<sup>th</sup> July 2004

Led by Amanda Borrows, Paul Cardy and Ian Green

Daily Reports by Amanda Borrows and Ian Green

#### Day 1 Thursday 15th July To Kohala

We all arrived into a rainy Tallinn though the sun was soon shining as we headed north-east of the bustling medieval city, along the A1 towards the city of St. Petersburg. The drive took us through boreal pine forests and past grass verges displaying colourful flowers. As we drove down the oak lined drive, we were confronted by a spectacular manor house, made even more grandiose by its colour – pink. Kohala Manor House is a 14<sup>th</sup> century wooden manor house that has recorded in documents since 1489. Apparently, the house is pink, as it is a bright and cheerful colour all the year round.

There was a quick chance to wander round the grounds before dinner, which was a basic Swedish style buffet. After which a few people went for an evening walk around the grounds. Sally, Peter and Henry, came back with tales of Lesser Spotted Eagle flying off with an animal in its talons, and a long list of plants to tantalise us with.

#### Day 2 Friday 16<sup>th</sup> July Lahemaa - Oandu - Altja & Latipea

The morning started with a few people out and about bird watching, or moth recording from the trap set last night. Over 50 species of moth were caught, including some excellent specimens such as Lilac Beauty, Eyed Hawk Moth, Pebble Hooktip, Peacock, Ghost Moth and Maple Prominent. Bird wise, Lesser Spotted Woodpecker, Marsh Warbler and Spotted Flycatcher gave good views.

It was a 9 o'clock start and we were heading north towards the oldest national park in Estonia, Lahemaa National Park. The national park was the first in the Soviet Union. It has approximately 838 plant species, and also boasts 50 mammals, among them brown bear, lynx, wild boar and elk, of which we saw recent evidence. The journey to the park, passed through traditional hay meadows, blooming with colour, and two Common Cranes, found by the keen eyes of Paul. Carrying on our journey the lanes and roadsides were decorated with the beautiful purple and yellow of *Melampyrum nemorosum*. We passed typical wooden Estonian buildings, some with thatched roofs,

whilst on the more modern corrugated iron roofs wooden ladders were placed along the edge of the roof. This was to push the snow away in the cold winters. The road margins also produced amazing displays of *Campanula* species including large *trachelium*, a beautiful plant, with very large bell flowers. We only found this species along a particular stretch of road in the Park.

We started our hunt for the various wondrous plants of Lahemaa National Park along the excellent Oandu trail, 3 – 4 km. A trail of diverse habitats, from the rich lichen understorey pine forests, to sandy heaths and dunes, with understorey of *Cladonia stellaris, Cladonia rangiferina, Cladonia digitata* and *Cetraria islandica*. There were various conversations of how the best shot could be achieved on the *Melampyrum pratense* and Twinflower, as the sun filtered through the trees. Other species found along the trail included large spikes of *Dactylorhiza fuchsii*, six different species of winter-green, *Pyrolas rotundifolia, media, minor, Orthilia secunda, Moneses unifolium* and *Pyrola norvegica*, the last of particular interest (see systematic list). We mustn't also forget the delicate Lesser Twayblade, *Impatiens noli-tangere* and *parviflora* around the bog edges, as well as *Potentilla palustris*, and this was the start of the sedge collection - there are some 70 species to look for! The interpretation boards gave some interesting facts about the various animals we may encounter, and what damage elk do to the surrounding trees. Unfortunately, there was little animal watching along this trail, but dragonflies such as *Aeshna grandis*, *Aeshna viridis & Calopteryx virgo* gave excellent views as they patrolled the various rides. Butterflies were thin on the ground, but there was a sighting of Cranberry Blue near the car park, a species that we had come to see.

After lunch we continued north towards the coast, for a few miles to the coast. This was a very popular swimming area for the local, and we found ourselves as a bit of a tourist attraction with the locals stopping and taking photos as we watched Goldeneye, Red-breasted Merganser, Eider, Cormorants basking, and Common and Arctic Terns quartering along the brackish water. This small fishing village, produced some exciting goodies such as our first Amanda's Blue and the beautiful Moorland Clouded Yellow, with its pink wing-liner. Small Tortoiseshell and Marsh Fritillary were also recorded feeding from the tops of *Knautia arvensis*. Walking back *Veronica spicata* and *chamaedrys* added a splash of colour to the yellows of *Linaria vulgaris*, *Ranunculus polyanthemos* and pinks of *Lychnis viscaria*, *Silene nutans*, *Silene dioica*, *Dianthus deltoides* along path verges.

We followed the coastal road east towards Latipea, another small coastal site with a huge variety of plants, invertebrates and birds. The main plant for this site was Malaxis monophyllos, a delicate green-flowered orchid, but Dactylorhiza maculata and Yellow Birds-nest also gave some lovely blooms. This was the only spot for the rare Lathyrus japonicus, in Estonia. The tiny Little Blue sat upon a huge carpet of Kidney Vetch, while Cordulia aenea and Orthetrum cancellatum allowed photographic views, but Leucorrhinia pectoralis and Leucorrhinia albifrons remained aloft and disappeared at the first sign of a lens. Sea watching produced Black-throated Diver, Lesser Blackbacked Gull, Eider, Common and Arctic Tern and Mute Swan. This was also a good spot for the large bush cricket *Decticus verruivorus*, which was very common. Other grasshopper species included Myrmeleotettix maculatus, Chorthippus biguttulus, both species which are common on sandy heaths and the beautiful three spotted *Metrioptera brachyptera*. This was the only site that it was recorded from. We made our way back, stopping now and again to admire the occasional harrier or crane feeding in the fields, or just admiring the colourful displays of flowers along the roadside and trying to name them as we passed by. Tonight we were in for a treat; it was Tutor's Salad, Sergeant Major's Craving and Peppi Sophia's Sweetness, all very delightful and filling, nothing like traditional Estonian food.

#### Day 3 Saturday 17<sup>th</sup> July Kohala

This morning was busy. A 6am bird walk for those who were interested. At 7am it was time to check the moth traps, and breakfast at 8am for a 9am start. Breakfast was always an interesting affair as everyone waited to see what exciting names were on tonight's dinner menu. Tonight's dinner will be Barn-keepers Gift, Lieutenant's Sword and Margareths's Love.

Moths recorded today, included the beautiful Burnished Brass, Poplar Hawk, Cox-comb Prominent, Buff Ermine, and Bloomer's Rivulet, a species not found in England. This is surprising, as surely, only the Victorians would come up with a name like that! A Tawny Owl was heard again this morning, while Spotted Flycatchers zipped backwards and forwards from their spot. Common and Green Sandpiper were seen around the river, and Cranes were heard quite near honking away. There was also a good show of warblers, Icterine Warbler, Lesser and Common Whitethroat, Blackcap and Chiffchaff.

In the morning we made our way north, passing over the river and turning left, towards the Corncrake field. Along the walk our attention was taken up with the many blue and white butterflies that were bouncing or rapidly dashing along the track. There were several cameras clicking away, when the butterflies allowed themselves to be exposed. The butterflies were often joined by delicate Azure and Variable Damselflies. Our highlight however, came further up the track with a most cooperative Purple Emperor, licking some disgusting thing on the ground. This gave great photographic opportunities, as it didn't move even when lenses were stuck in its face. Another was less obliging, but the purple on the upper and hind wings shone iridescent when the sun light stroked its wings. There was also a nice little salt spot on the road where several Amanda's Blues, Common Blues and various Whites were licking the bricks and allowing us ample time to identify them. In the meadows, the orange and brown species caught our eye on the various species of meadow plants, and grasses, such as Scarce and Small Copper, Meadow Brown, Small and Large Skipper and Nickerl's Fritillary.

Plants were also bountiful and interesting, with *Neslia paniculata*, Meadowsweet and Great Meadow-rue which lined the field verges, interspersed with colourful collections of *Galeopsis bifida*, various species of clovers and three beautiful blue spiked stems of *Veronica (austriacum) teucrium*. The Corncrake field had a wonderful variety of grasses and an impressive patch of *Cirsum oleraceum*. The meadows were, a 'paint by numbers' sketch of old fashioned meadows, yellow of *Ranunculus acris* and *Ranunculus repens*, white of *Linum catharticum*, pinks of *Dianthus deltoides* and *Lychnis flos-cuculi*, and the blues of *Veronica chamaedrys* and *Campanula rotundifolia*.

Harriers floated over the fields, a pair of Ravens displayed noisily above our heads and the Lesser Spotted Eagle flew by in the distance. A Grasshopper Warbler was heard reeling in the Corncrake field, while the Corncrakes kept quiet as we wandered by. Shelagh, Sally and Jean had stunning views of a beautiful male Rosefinch, while Tim could be seen chasing moths or damselflies. Peter was doing an excellent job showing everyone the different plants and answering questions from Pat and Henry. Margaret and David could be heard discussing the best possible angle and light for that shot, Robert would be engrossed in shots of behavioural antics, while Colin was further ahead with tales of the birds we'd missed and Anne was just enjoying the surroundings and atmosphere. It was a very pleasant morning with lots to see.

We took a different route this afternoon, turning left before the river and walking along the cow fields, towards the wood. This was just as pleasant as the morning walk. However, it was more dominated by birds, with Whinchat and Red-backed Shrike giving us some striking poses. The Lesser-spotted Eagle was 'spotted' again circling above the trees, so everyone eventually got to see this magnificent bird. One of the shrubby areas in the field caused a bit of excitement, when Sally found a Wryneck, blending well into the background, with young Red-backed Shrikes feeding on top. Wood Warbler, Goshawk and Honey Buzzard were either seen or heard as we carried along the road. The field verges produced little in different species to what we'd seen this morning, apart from some new sedges for the increasing collection. However, the wood produced wonderful variety, including some beautiful ferns Aythyrium filix-femina, Cystopteris fragilis, Gymnocarpium dryopteris, Drypteris filix-mas and Bracken (it gets everywhere). Flowering plants included some goodies, such as Bird's-nest Orchid, Scirpus sylvaticus, One-leaved Bog Orchid, Paris quadrifolia, Common Twayblade, Pyrola rotundifolia, Orthilia secunda, Vaccinium vitis-idaea, Primula veris, Glechoma hederacea, Myosoton aquaticum, Geum macrophyllum and Fly Honeysuckle to name a few. However, the thunder clouds rolled in and we headed back at a faster pace. Tim was fortunate enough to spy a Roe Deer as it crossed before us.

#### Day 4 Sunday 18<sup>th</sup> July Lahemaa - Viru Bog and Pohja Körvemaa-Maastiku-Kaitseala

The mist hung over the Corncrake field waiting to be woken by the morning sun, could this be the third day of summer? Although, it was misty this morning, it produced a couple of new birds for the list, Red-breasted Flycatcher and River Warbler. Mothing this morning produced another good catch, with Mother of Pearl, Small Magpie, Willow Beauty, Golden Y, Clouded Border, Small Scallop and Large Green Emerald.

Today saw us visiting Viru Bog and several meadows within the area of Pohja Koruemaa. The roadside verges still enchanted us with their displays of nature's colourful palette so we stopped a couple fo times. Viru bog was a beautiful place, the walk towards the board walk, revealed hidden colours that broke up the forest green, such as the delicate patches of dusky pink grasses. A Goshawk soared above our heads, while the sun light woke the surface of the small pools with sparkling diamonds. Those who were wearing wellies had a chance to explore these pools for the hidden treasures hiding behind the rushes and sedges. Animal wise, a Moor Frog was found just sitting quietly along the woodland edge.

Viru was drier than the trail at Oandu, and many *Ericaceae* species were recorded, *Ledum palustre*, *Andromeda polifolia, Vaccinium oxycoccus, Vaccinium microcarpum, Vaccinium uliginosum* to name a few. Many of the stunted and gnarled pines, only about a metre or two in height, were over 200 years old. The scattered pools, red, gold or brown from the peat, and various red coloured bog plants, with clumps of sedges, rushes and cotton grass gently moving in the wind.

The bogs provided some lovely displays of all three sundews, *Drosera rotundifolia*, *Drosera anglica* and *Drosera intermedia*, while this was the only place where *Betula nana* was recorded. The bog pools also provided a good selection of sedges, White-beaked sedge and the very interesting Rannoch Rush, which is a bog specialist.

As one wandered along the boardwalk, Silver-studded Blue, Amanda's Blue, and Cranberry Fritillary enticed the photographers to take their pictures, before closing their wings. The pool edges were busy places for the various dragonflies and damselflies, such as Common Blue Damselfly and Blue-tailed Damselfly. The larger dragonflies, such as The Emperor and Brown Hawker, were also spotted, as well as the delicate white-faced darters *Leucorrhinia albifrons* and *Leucorrhinia dubia*.

Amanda went off to find Colin who had undertaken the whole loop, and had seen Black Kite and Crossbill. They came back along the road, and found some very interesting little plant spots, as well as Swallowtail and a dead Adder, unfortunately a road casualty. Another Swallowtail was seen during lunch, as well as several Amanda's Blues and Common Blues and a very obliging Cranberry Blue.

There was a quick look at a woodland edge to admire the lovely spikes of Lesser Butterfly Orchid, a new plant for the list. However, this turned out to be a very interesting stop, as Henry found *Chimaphila umbellata* or Umbellate Wintergreen, a very uncommon species in Estonia belonging to the wintergreen family. Other wintergreen species included *Pyrola media*, *Pyrola rotundifolia* and *Orthilia secunda*; we were doing very well for the wintergreen species. And even the ditches held some goodies such as the beautiful feathered Moonwort and *Gymnocarpium dryopteris*, *Campanula patula*, *Campanula glomerata* and *Erigeron acer*.

From here we carried on to some amazing meadows, with their colourful bouquets of flowers, where various butterflies fed off the sweet nectar, and grasshoppers such as *Chorthippus biguttulus*, *Chorthippus brunneus* and *Chorthippus parallelus*, sang their summer songs. Butterflies included Scarce Copper, Pearl-bordered Fritillary, Glanville Fritillary, Heath Fritillary and a possible Pallas's Fritillary, but it wouldn't land long enough for positive identification. The Forrester Moth was also caught, showing off its brilliant green for all to see. The beautiful *Sympetrum flaveolum* darted around continuously.

One meadow edge produced what was probably *Sedum ewersii*, a delicate version of Orpine, possibly a new record for Estonia. This meadow was a big favourite with everyone, as they disappeared in all directions down towards the wood, where in the distance Henry shouted and flushed out a Hazel Grouse. Other birds seen were Buzzards, Cranes and White Storks, which littered the fields looking for the various invertebrates and vertebrates on which they feed.

After the delights of these amazing meadows it was homewards towards the pink Manor, and tonight's meal. As we sat on the balcony drinking a nice cool refreshing beer, Swifts, House Martins and Swallows continuously soared around the top of the trees, chirping and tweeting as they fed. Tonight's gourmet feast was Overseer's Embrace and Admiral's Command which included scrims! Desert was Princess' Compliments from Vienna, all very nice and fattening.

#### Day 5 Monday 19<sup>th</sup> July Endla Bog and Varangu Springs

A few people were up making the most of the morning before breakfast, having a look at last night's catch of moths or doing a spot of birding. After breakfast we headed south towards Endla Nature Reserve. The reserve was established in 1981, and covers a total of 8162 hectares of pine

bog woodland. As seems to be the case everywhere in Estonia the reserve had a headquarters converted from an old manor house – these buildings would be worth a fortune in Britain! A track took us through a farmyard and across some fields grazed by horses before suddenly disappearing into woodland. It was not at all obvious from the entrance that there was a huge bog beyond! In the sparse understorey we saw wintergreens and Lesser Butterfly Orchids and flying from trunk to trunk were a number of rather beautiful orange, black and white *Arichanna melanaria* moths.

A boardwalk took us out onto a superb sphagnum bog. We really should look at those mosses next time there seems to be so many different species. It was bright and sunny and there were a number of dragonflies including a female Emperor and several hawkers which escaped identification. Both *Leucorrhinia albifrons* and White-faced Darter posed well and amongst an abundance of Common Blue Damselflies we found both *Lestes sponsa* and *Lestes dryas* and what seems to be *Coenagrion johanssoni*. Amongst the typical bog plants that we'd had a thorough introduction to the previous day were more sundews and plenty of *Ericaceae* including one new one – *Chamaedaphne calyculata*. Sadly there were no Moose in sight even from the watchtower! We did see several Cranberry Blues around the base of the tower and a distant Honey Buzzard.

We drove a few miles through the lanes to the lovely little Varangu Reserve. Here we took our picnic on rough lawns next to a rather derelict looking old manor house. The owner came out and invited the group to go and have a look inside. The trail to the nature reserve took us past a beautiful wooden barn to a little pond where a walkway took us through some carr woodland. This was extremely species rich with many sedges (including Carex otrubae, diandra, disticha and beds of rhyncophysa) and fen species including the impressive Cowbane. Odonata were numerous too with Downy Emerald, several hawkers, our only Broad-bodied Chaser of the trip, and plenty of Blacklined Skimmers. Both Beautiful and Banded Demoiselles were by the little streams further in. These were amazingly clear and every detail of the stream beds – and there were several streams – were ultra-sharp. The waters emerged from deep springs a few hundred metres away. On the way to them we passed thousands of Round-leaved Wintergreens in flower and there were abundant Lady's Slipper Orchids in seed. This place would look spectacular in early June! There were occasional groups of Birds-nest Orchids and by the springs we found Early March Orchids still in flower with One-leaved Bog Orchids and Yellow Rattle. A Goshawk's nest was seen high in a spruce – the bird's moulted feathers giving away its position! A White Admiral flew past and Large Copper was seen. On the way back to Kohala a roadside stop on the Rakvere bypass revealed a singing Barred Warbler, some Common Cranes and a Cranberry Fritillary!

Our last night saw a change to the evening's menu, instead of Equerry's Order, it was Wrangell's Delight, followed by Fairy's Enticement, which was devine. The food had been excellent, well presented, plenty of variety, and very tasty.

#### Day 6 Tuesday 20<sup>th</sup> July Kohala to Saaremaa (Loona Manor)

An earlier start this morning and time to say goodbye to the lovely Kohala. We headed westwards back to the capital Tallinn and then towards the west coast islands. The route took us down towards Virtsu and it was clear that things were changing as we got closer to the west coast. The lush meadows now had shorter grass with many flowers and open areas which were clearly seasonally inundated started to appear. We made a stop to stretch our legs and enjoy a few roadside flowers.

Amongst many by now familiar species there was Brown Knapweed and by a small river some very fine Greater Spearwort and Greater Water Parsnip. Iridescent Beautiful Demoiselles fluttered above the water's surface.

We moved on to Matsalu, a large national park surrounding the bay of the same name. We stopped by a roadside meadow and spent half an hour pottering amongst Fragrant Orchids, *Trifolium montanum* and *Odontites vulgaris*. We had lunch at the carpark by Suitsu. A Wryneck flew up off the carpark gravel as we arrived and we watched it perched in the base of a nearby elder. Hen and Marsh Harriers quartered the coastal meadows and Common Snipe flew overhead. Almost as soon as we'd arrived the first Purple Emperor appeared and we saw several of these beautiful butterflies over the next hour or so. One in particular provided quite a show as it sat upon the trackside allowing very close approach and even opening its wings for the photographers. Other butterflies included Dark Green, Pearl-bordered and Lesser Marbled Fritillaries as well as Small Tortoiseshell, Large Copper and Common Blue. There were also various damselflies here including both *Lestes dryas* and *sponsa* and the White-legged Damselfly *Platycnemis pennipes*. As well as the Wrynecks there were Hawfinches (3), Red-backed Shrikes and an immature White-tailed Eagle.

On the way out we stopped by another promising area. In fact one could have stopped anywhere within five miles of Suitsu and enjoyed the wonderful flora! Our chosen spot of course had some very fine flowering specimens of Fragrant Orchids including a few pure white ones. Military Orchid and Fly Orchid had finished flowering a month ago along with *Primula farinosa* but in the here and now bracket there was still plenty to see. There were some lovely Marsh Helleborines and down by the ditch a wonderful display of *Ranunculus lingua*. One plant of *Ranunculus ophioglossifolius* was a good find and several hummocks contained a few plants of *Centaurium pulchellum*. Woodlark sang overhead.

Then it was time to go and get the ferry. The next one was at five so we had twenty minutes pottering by the harbour. Mats of *Ranunculus trichophyllus* had several flowers and on the shoreline there were several nice plants. *Aster tripolium* flowered alongside the rushes *Schoenoplectus tabernaemontani* and *maritimus* (we'd seen *lacustris* at Matsalu too). Common Terns, Scaup, Goldeneye and Red-breasted Merganser were all in the harbour.

Then we were on the ferry and a half hour's tea or sun on deck before arriving on Saaremaa or more correctly on its little twin Muhu. It was getting late so now we just drive to Loona Mois where we received a warm welcome as well as a superb evening meal.

## Day 7 Wednesday 21<sup>st</sup> July Vidumae Reserve and the western Tagamõisa Peninsula

A leisurely start to the day with a little pottering about the local property. Black-tailed Skimmers were numerous and Henry came in with a little haul of new plants including both *Ribes alpina* and *Ribes uva-crispa*. The main event started with a roadside stop just a couple of miles away. A mother and baby Roe Deer sprang across the road just as we arrived. A few striking Dark Red Helleborines flowered on the road verges and closer examination revealed much else. In ditches were a few Early Marsh Orchids and several fine patches of Marsh Helleborine. Broad-leaved Helleborine appeared

in fine large forms though still in bud. *Blysmus compressus* occupied a few square feet of verge and in the wet areas were our first *Ranunculus flammula*.

It wasn't far to the headquarters of Vidumae reserve but we passed many enticing looking spots on the way. We needn't have worried – the meadow by the information centre was also superb. The flora was pleasant rather than spectacular with a wide range of typical meadowland plants. It was the insect life which was really very good. Butterflies were present in the form of several fritillaries – mostly Dark Green and Pearl-bordered – and brilliant Scarce Coppers. Our first Black-veined White was seen as was Large Heath, White Admiral and Amanda's Blue. The grasshoppers were numerous and mostly big! In particular there was an abundance of Wartbiters with various instars present as well as both male and female. Spiders, beetles and flies received due attention as did a very tiny (recently hatched) baby lizard. Crossbills flew over and so too a Nutcracker.

Then we entered the wood for a walk round the nature trail. This was not as productive as the meadow but there were a few highlights on the way. Birds were not much in evidence though Colin did see Pied Flycatcher. Butterflies also were scarce with perhaps the most numerous species (i.e, less than 6 in total) being the large and well-marked Woodland Brown. The flora included the pretty *Vicia sylvatica*, the elegant Sermountain *Laserpitium latifolium* and Sanicle. In a large damp clearing were damselflies – *Ischnura elegans* and *Lestes sponsa* – and two new orchids species. These were both 'marsh orchids' or 'dactylorchids' and the two species concerned were *ruthei* and *curvifolia*, the former a Baltic endemic and a very rare plant even in Estonia. The flora lists only one locality which is on Saaremaa – was this it we wondered?.

Lunch was taken a few miles back down the road by a nice verge with Maiden Pink and plenty of other plants but crucially including the lovely *Melampyrum arvense* a pink and yellowish cowwheat.

Now it was time to go and explore the far northwest corner of the island. Tracks north of Kihelkonna took us past many wonderful areas. We stopped amid a very dry looking area of sparsely vegetated land. Though limestone underneath it clearly had standing water for part of the year – maybe only a few days – but it gave a distinctive feel to the habitat. In barren looking depressions Smooth Rupturewort was common. The pretty 'leadwort-like' *Sagina nodosa* was common as was thyme. *Inula salicina* was an uncommon flower. A Swallowtail flew past and Grayling was seen twice. Most spectacular was the brilliant green caterpillar of the Emperor Moth.

Next stop was by a small damp area visible from the roadside. This proved a wonderful botanical spot. The seasonally inundated turf was low and contained a strange mix of plants with dominants including *Viola pumila*, *Teucrium scordium* and *Mentha arvensis*. *Carex contigua* and *Carex buxbaumii* grew here with *Centaurium littorale* and *Scutellaria hastata*. Fritillaries here were numerous but included only species that had already been seen. Now it was time to head north to the tip of the peninsula and so we parked up in the carpark and set off on foot to the dunes. Of course a sand dune flora is both distinctive and in Europe quite universal so it didn't take long to find our bearings amongst *Carex arenaria*, Sea Holly, *Honkenya peploides*, Lyme Grass and on the shore Sea Rocket and various chenopods. Ringed Plover and Whimbrel were by the shore and Common Terns and a couple of immature Caspian Terns flew over. A previous visitor had made a little art piece with feathers gleaned from the tideline. One wonders if they knew what they were using as they had picked some rather special feathers with common species such as Mute Swan and

Herring Gull and Cormorant joined by male Red-breasted Merganser, Barbacle Goose, Black-throated Diver, Common Scoter and Little Gull. Over the other side of the ridge Sally spotted several distant Black-throated Divers on the sea.

It was time to head back but we still fitted in a quick stop by a stream through the sandy forest. By the banks were numerous Common Spotted Orchids and on dry land were some fine photogenic Yellow Birdsnests and our first fully in flower *Chimaphila umbellata* – such a pretty wintergreen. One minibus went directly back now whilst the rest of us made the journey last until dinner time by adding another three stops – the area is so rich! We looked at the area by a lake with Long-leaved Sundew and Marsh Helleborine amongst the *Cladium mariscus* by the shore. There were plenty of signs of Moose here but no sighting of the animals themselves. Remarkably Pyramidal and Burnttip Orchids were added to the trip – both in flower. Later we pulled up by the trackside as some reasonably close Common Cranes offered some photographic opportunities. Our last stop was by some dry limestone pavement. There was little of new floral interest here but a very noisy bunch of Jays kept us entertained as we tried to work out what it was they were scolding. Eventually I saw the female Sparrowhawk on the ground under some thick cover. The Jays were having a real go, approaching to within a foot of the raptor, and though we couldn't see what she had it seemed reasonable to surmise that it might be a young Jay!

# Day 8 Thursday 22<sup>nd</sup> July Vilsandi Island and northern and eastern Tagamõisa Peninsula

The day started at the front door where Tim's haul of moths from the traps had far exceeded the previous nights and verged on an overdose of pre-breakfast moths. As well as the usual rosechafers there was also a dead hornet amongst them. The moths were not just numerous they were also varied.

Whilst Tim and co sorted through their booty several of us went to the carpark intent upon some exploration only to be brought up short by Sally who had around twenty Common Cranes in the 'scope and had just seen two Black Storks circle in and land nearby. The exploration therefore started with a drive towards the cranes which allowed us quite close views – there were in fact 26 of them. We were unable to find the storks again though. We drove north to a fen north of Kihelkonna. This proved a marvellous place. The flora was quite exceptional with a hundred or more Fen Orchids jostling for attention amongst the numerous and large Marsh Helleborines, Fragrant Orchids and even the odd Fly Orchid. All bar one of the Fen Orchids had finished flowering but it was with great pleasure that we found this one still in flower and nearby a *Primula farinosa* still in good flower too. Two Common Cranes and their baby walked off into the reeds. We soon encountered more birds – Treecreeper, Willow, Long-tailed, Blue and Great Tits, Chiffchaff, Willow, Wood and Greenish Warblers and Yellowhammer and Chaffinch. A Redpoll flew over as did a pair of Common Cranes and by the bus were Red-backed Shrike and Wryneck – all in all a pretty good spot!

After breakfast and a little wait we set of for Papisaare and the boats for Vilsandi Island. We had two of them – a chubby old thing with fore and aft covered decks and a large old throbbing Russian engine and a little bright yellow thing altogether more open to the elements. It was by now

pleasantly sunny as we chugged across the waters. Two islets at the start held Common Terns, Barnacle Geese and Green Sandpipers and later we saw Little Terns and Little Gull. The route took us through some islets that now formed an almost complete causeway to Vilsandi – the result of rapid uplift which in western Estonia was seeing the land rising at 3mm a year. None of the islands in this section had even existed three hundred years before and as we went out into open water we could see more that would soon rise from the waters.

Once on the island Katri our local guide took us on a guided walk past the lake and in a circuit towards the windmills though most of us just dropped off and enjoyed the flora and fauna that were particularly good actually quite near the boatyard. By the shore was Seaside Century and by the lake a myriad of nice plants. Marsh and Sea Arrowgrass were present as was plenty of the fine *Odontites littoralis*. The orchids here, aside from Marsh Helleborine, were *Dactylorhiza longifolia* (*baltica*) though it took Peter to point out that they were in fact 'different'. Once 'discovered' it was obvious – they had tall tight columnar spikes rather reminiscent of a robust *incarnata* and the same robust yet hollow stem – but the flowers resembled more a cross between *praetermissa* and *maculata*. There were numerous sedges here with *Carexes distans, serotina, xbergrothii, demissa* and *lepidocarpa* and the lovely Flea Sedge *Carex pulicaria*. Butterflies were not numerous but we did find several Graylings, a few Common Blues, a female Amanda's Blue and best of all, back by the jetty, a Large Blue.

After chugging back to the mainland taking our picnic en route we made our way back down the cobbled road towards Kihelkonna only to stop again as orchids loomed up before us. Fly Orchids were in good flower still and there were also Dark Red Helleborine and plenty of *Tofieldia* calyculata – the German Asphodel. Amanda's minibus had already stopped for a prize-winning Red Helleborine. We joked that the ladies taking us on our afternoon guided orchid extravaganza would probably take us here it was so good but we should have known better! After joining up with Tina the orchid expert and Merica her translator and park guide we headed north again. Soon we were stopping by a track which took us through some damp woodlands to a lakeshore, The track had Greater Butterfly Orchid, Dark Red Helleborine, Agrimonia procera and the endemic yellow rattle Rhinanthus osiliensis. It also had numerous toads, prints of Moose and other mammals, several fine boletus mushrooms and the water crowfoot Ranunculus baudotii. Down by the lakeshore was a wonderful little display of orchids amongst sphagnum, sedges, Myrica gale and Salix repens. As is usual in this area there were numerous Marsh Helleborines, this time joined by both Fen Orchid (in seed) and Mush Orchid (in flower) and also the unusual marsh orchid Dactylorhiza curvifolia (russowii). Green Sandpipers were on the lake shore and there were plentiful Black-tailed Skimmers and Blue-tailed Damselflies as well as a few Common Blue Damselflies – the latter had been common on Vilsandi in the morning.

Then it was off to another site – this time a ditch through some rather ordinary looking meadows. Of course it was better than that – the ditch contained just a few Fen Orchids and abundant Musk Orchid – and in the meadow too – many were unusually large. *Dactylorhixa cruenta* had recently finished flowering and there was Adder's-tongue Fern here too. Next we entered forest where almost immediately we found ourselves amongst lots of very fine large Red Helleborines backed up by their cousins the Dark Red Helleborines. Two Nutcrackers flew over.

The last stop of the day was on the north coast of the peninsula. We had been driving through just the most wonderful countryside and this culminated in a boggy area surrounded by shingle

seashore, forest and dry flats and of course the sea itself. The object of our visit was a colony of *Dactylorhiza longifolia* (*baltica*) which was growing with Marsh Helleborine, Early Marsh Orchid and the odd *Dactylorhiza maculata*. Marsh Pea, *Equisetums hyemale* and *variegatum* mixed with *Carex buxbaumii* and *Veronica scutellaria* in the dampest areas whilst dry ridges were red, yellow and blue with Echiums, Toadflaxes and Clovers. On the seashore we found a good selection of shore species whilst birdwise there were Oystercatchers, Greenshank, Black-throated Diver and plenty of Cormorants offshore.

#### Day 9 Friday 23<sup>rd</sup> July To Tallinn

The day started rainy and so plans to go and photograph the Fen Orchid that was still in flower were shelved in favour of a relaxed breakfast. We set off at nine and took the shortcut through the Vidumae Reserve in the hope that a Moose might just appear at the last moment! No such luck, but we did see one particularly spectacular plant. This was the remarkable Moor King, a large yellow and red flowered Lousewort. It is a most peculiar species with flowers that stayed closed and is unusually tall for European louseworts – in fact the flowers reminded us a little of the North American Turtleheads. Growing with it were Marsh Helleborine, Fragrant Orchid and several fine specimens of *Dactylorhiza curvifolia*. Obviously worth more than the few minutes we had!

We continued on to the ferry and thence to Tallinn arriving at half past one. We settled into a modern and thoroughly pleasant hotel by the airport and then set about a very fine lunch of Tomato and Mozzarella salad complete with sun-dried tomatoes followed by something tasty with beef fillet steak.

Later in the afternoon we ventured into the old city of Tallinn. The centre is largely medieval and is very impressive and though busy with both locals and tourists has a very laid back air. Many restaurants and cafes spill out onto the streets and the medieval theme is enthusiastically taken up by these with waitresses and waiters in garb that though perhaps not middle-ages certainly brings to mind its more picturesque moments. Cathedral and museums there were but what was most striking was the number of shops filled with all sorts of goods from antiques to modern fashion – the city certainly seems to marry the modern and the old quite well. Presents and books were procured and flowers too and then we were back off to the hotel for an hour or two before once again setting forth for the town centre and our evening meal. This was taken in the 'dungeons' of the "Peppersack". A feast was provided with some fine ale to water it down!

#### Day 10 Saturday 24<sup>th</sup> July Departure

After an early breakfast at the hotel it was a five minute journey to the airport and a very efficient immediate check-in. All done and dusted in no time!

I (Ian) stayed in Estonia for a few more hours as my flight was at two. I popped down to have a look at the large Korvemaa Mka reserve east of Kehra. Nothing 'spectacular' was seen though the area was clearly good. Butterflies were especially so with Purple Emperor, numerous Map Butterflies, Silver-washed, High Brown and Pearl Bordered Fritillaries. Moorland Clouded Yellows

stopped to be photographed and Brimstone was new. Amanda's Blues were common and there was another Large Blue. Essex, Small and Large Skippers were all seen. Large Tortoiseshell and the lustrous Lapland Ringlet were nice additions and some of the 'heath' confusion may have been cleared up here as a close look revealed the 'large heaths' in this area to be washed out Chestnut Heaths – Paul was right of course! Birds were also quite good with 25 or so Common Cranes, Honey Buzzard, Wryneck, Hazelhen, Crested Tits and a Black Woodpecker that called frequently but failed to put in an appearance. It would clearly be a good area for mammals but mid-morning all I saw was a vole, a beaver dam and sadly, a dead Racoon Dog on the road. The flora took us back to a more 'eastern Estonian' type, radically different from that found on Western Saaremaa. Plants included *Trifolium aureum*, *Stachys palustris*, *Galeopsis bifida* and 'little yellow crucifers'. Then it was back to the airport again stopping briefly to repack and use up the last bit of a film on a friendly Purple Emperor perched by the minibus.

### **Summary of Locations**

Day 1	July 15 <sup>th</sup>	Tallinn to Kohala
Day 2	July 16 <sup>th</sup>	Lahemaa - Oandu
Day 3	July 17 <sup>th</sup>	Kohala
Day 4	July 18 <sup>th</sup>	Lahemaa – Viru Bog and Pohja Körvemaa-Maastiku-Kaitseala
Day 5	July 19 <sup>th</sup>	Endla Bog and Varangu Springs
Day 6	July 20 <sup>th</sup>	Kohala to Saaremaa (Loona)
Day 7	July 21st	Saaremaa – Vidumae & the western Tagamõisa Peninsula
Day 8	July 22 <sup>nd</sup>	Saaremaa – Vilsandi Island & the northern and eastern Tagamõisa
		Peninsula
Day 9	July 23 <sup>rd</sup>	Saaremaa to Tallinn
Day 10	July 24 <sup>th</sup>	Departure

#### Systematic List Number 1 Plants

The 'Flora of the Baltic Countries' published in three volumes by Tartu University is a very good flora of the region. The Scandinavian 'Gyldendals Store Nordiske Flora' is very useful in Estonia and it is fully illustrated. This list uses Paul's 2003 list as a basis and adds to it. Species not seen in 2004 are in square brackets [eg.].

#### Pteridophyta

Lycopodiaceae

Lycopodium clavatumStagshorn ClubmossViru Bog. 2004 Scattered[Huperzia selagoFir ClubmossScattered records]

Equisetaceae

Equisetum arvenseField HorsetailCommon[Equisetum pratenseShade HorsetailCommon]Equisetum palustreMarsh HorsetailWidespread

Equisetum fluviatile Water Horsetail Common in aquatic habitats

Equisetum sylvaticum Wood Horsetail Common

Equisetum hyemale Rough Horsetail Widespread. 2004 Saaremaa.

Equisetum scirpioides 2004. Found on Saaremaa – a rare plant in

Estonia

Equisetum variegatum 2004. Quite common on Saaremaa

*Ophioglossaceae* 

Ophioglossum vulgatum Adder's-Tongue Fern 2004. Tagamõisa Peninsula on Saaremma

Botrychium lunaria Moonwort 2004. Scattered – east and west

Hypolepidaceae

Pteridium aquilinum Bracken Widespread and common

*Thelypteridaceae* 

Thelypteris palustris Marsh Fern 2004. Varangu

Aythyriaceae

Aythyrium filix-feminaLady FernWidespread and commonCystopteris fragilisBrittle Bladder FernScattered records. 2004 Kohala

Matteucia struthiopterisOstrich FernWidespread.Gymnocarpium dryopterisOak FernScattered records.

Aspidiaceae

Dryopteris filix-mas Male Fern Widespread.

Dryopteris expansa Northern Buckler Fern Scattered records. Records of dilitata from

2004 should be included here

Dryopteris cristata Crested Buckler Fern 2004 several fine specimens in Pohja

Körvemaa-Maastiku-Kaitseala

Dryopteris carthusiana 2004. Pohja Körvemaa-Maastiku-Kaitseala

*Polypodiaceae* 

Polypodium vulgare Common Polypody Scattered records.

#### Spermatophyta

Gymnospermae

Pinaceae

Picea abiesNorway SpruceDominant over extensive areas.Pinus sylvestrisScots PineDominant over extensive areas.Larix deciduaLarchNoted on Saaremaa. 2004 widespread

Cupressaceae

Juniperus communis Juniper Widespread and very common.

Taxacaceae

Taxus baccata Yew 2004. Tagamõisa Peninsula

Salicaceae

Salix pentandraBay WillowSalix fragilisCrack WillowSalix triandraAlmond Willow[Salix myrsinifoliaDark-leaved Willow]

Salix capreaGoat WillowSalix cinereaGrey WillowSalix auritaEared Willow[Salix lapponumDowny Willow]

[Salix viminalis Osier]

Salix repens Creeping Willow

Salix alba White Willow

Populus tremula Aspen Widespread and often co-dominant

Scattered in boggy areas

Myricaceae

Myrica gale Bog Myrtle 2004. Tagamõisa Peninsula

Betulaceae

Betula pendulaSilver BirchWidespread and often co-dominantBetula pubescensDowny BirchWidespread and very common.Betula nanaDwarf BirchLocal in bogs, e.g. Viru Bog.

Alnus glutinosaAlderWidespread.Alnus incanaGrey AlderWidespread.

Corylaceae

Corylus avellana Hazel Widespread.

Fagaceae

Quercus robur Pedunculate Oak Widespread.

Ulmaceae

Ulmus glabra Wych Elm Scattered records.

Cannabaceae

Humulus lupulus Hop Scattered records.

Urticaceae

Urtica dioicaCommon NettleWidespread.[Urtica urensAnnual NettleWidespread.]

Polygonaceae

Polygonum aviculare Knotgrass Scattered

[Polygonum amphibia **Amphibious Bistort** Noted in some ponds.]

Polygonum persicaria Redshank Scattered

Fallopia convolvulus Black Bindweed 2004. Tagamõisa Peninsula

Rumex crispus Curled Dock Common. Rumex acetosa Common Sorrel Common. Sheep's Sorrel Rumex acetosella Scattered records. Water Dock [Rumex hydrolapathum] Widespread.] Rumex obtusifolius Broad-leaved Dock Widespread.

Chenopodiaceae

Chenopodium album Fat Hen Scattered records. [Chenopodium suecicum Green Goosefoot Scattered records.]

Chenopodium urbicum Upright Goosefoot 2004. Tagamõisa Peninsula Atriplex littoralis Grass-leaved Orache 2004. Tagamõisa Peninsula Spear-leaved Orache Tagamõisa Peninsula Atriplex prostrata Salicornia europeae Glasswort 2004. Tagamõisa Peninsula Salsola kali Prickly Saltwort 2004. Tagamõisa Peninsula

Caryophyllaceae

Moehringia trinervum Three-veined Sandwort 2004. Varangu

Honkenya peploides Coastal. 2004. Tagamõisa Peninsula Sea Sandwort

Stellaria media Common Chickweed Widespread. Stellaria graminea Lesser Stitchwort Common. Stellaria palustre 2004. Varangu Marsh Stitchwort Stellaria nemorum Wood Stitchwort 2004. Oandu

Cerastium fontanum Common Mouse-ear 2004. Common on Saaremaa

Myosoton aquaticum Water Chickweed 2004. Viru Bog

Sagina nodosa Knotted Pearlwort 2004. Tagamõisa Peninsula – common in dry

areas

Hernaria glabra Smooth Rupturewort Tagamõisa Peninsula

Spergularia salina Vilsandi Island. 2004. Tagamõisa Peninsula

Lychnis flos-cuculi Noted in Lahemaa. Ragged Robin Sticky Catchfly Lychnis viscaria Scattered records. Silene nutans Nottingham Catchfly Scattered records. Silene vulgaris Bladder Campion Widespread. Silene dioica Red Campion Scattered records. Silene latifolia White Campion Widespread.

[Saponaria officinalis Soapwort Locally common along roads.]

Dianthus deltoides Maiden Pink Widespread but local.

Nymphaeaceae

Nuphar lutea Yellow Water-Lily Locally in ponds and lakes.

Ranunculaceae

Aconitum leucostonum

Kaitseala. An interesting record as the Baltic Flora only records this species from one place

2004. In bud in Pohja Körvemaa-Maastiku-

in the south of Estonia!

Hepatica nobilis Hepatica Common in leaf in woods.

Pulsatilla vulgaris Pasque Flower In seed in Vilsandi National Park. 2004 Kohala

2004. Kohala

Anemone trifoliata Anemone nemorosa Wood Anemone 2004. Scattered Baneberry [Actaea spicata Lahemaa.]

Caltha palustrisMarsh MarigoldA few records.Ranunculus acrisMeadow ButtercupWidespread.Ranunculus auricomusGoldilocksScattered records.Ranunculus repensCreeping ButtercupCommon.

Ranunculus flammula Creeping Spearwort 2004. Tagamõisa Peninsula and Vilsandi Ranunculus lingua Greater Spearwort 2004. Noted near Risti between Tallinn and Virtsu and also at Matsalu

Ranunculus ophioglossifolius Adder's-Tongue Spearwort 2004. Just the one plant seen near Matsalu

Ranunculus sceleratusCelery-leaved Buttercup2004. Kohala and SaaremaaRanunculus polyanthemosMultiflowered ButtercupScattered records. 2004. Oandu

Ranunculus trichophyllus Thread-leaved Water Crowfoot Local in aquatic habitats. 2004 even noted in

the sea at Virtsu!

Ranunculus baudotii

Brackish Water Crowfoot

Aquilegia vulgaris

Common Columbine

Tagamõisa Peninsula

Loona Mois on Saaremaa

Thalictrum flavum

Common Meadow-rue

2004. Scattered

Thalictrum simplex Small Meadow-rue 2004. Tagamõisa Peninsula

Papaveraceae
Chelidonium majus Greater Celandine Scattered records.

Papaver rhoeas Corn Poppy 2004. Between Tallinn and Virtsu

Papaver dubium Long-headed Poppy 2004. Vidumae

Fumaria ceae
Fumaria officinalis Common Fumitory Scattered records.

Cruciferae
Crambe maritima
Sea Kale
2004. Tagamõisa Peninsula

Sinapis arvensisCharlock2004. VaranguCardamine bulbiferaCoralroot BittercressIn seed in woods.[Lunaria redivivaPerennial HonestyVery local in Lahemaa.]

Arabis hirsutaHairy RockcressCommon.Neslia paniculataBall MustardWidespread.Capsella bursa-pastorisShepherd's PurseCommon.Lepidium latifoliumDittanderScattered records.

Cakile maritima maritima Sea Rocket Local on coasts. 2004 Tagamõisa Peninsula

Cakile maritima baltica 2004. Tagamõisa Peninsula

Barbarea vulgarisCommon Wintercress2004. KohalaErysimum cheiranthoidesTreacle-Mustard2004. KohalaThlaspi arvenseField PennycressScattered records.Berteroa incanaHoary AlisonScattered records.

Berteroa incana Hoary Alison Scattered records.

Droseraceae
Drosera rotundifolia Common Sundew Locally very common in Bogs, e.g. Viru

Drosera anglica Great Sundew Locally common in bogs, e.g. Viru Bog.

Drosera intermedia Oblong-leaved Sundew Very scarce at Viru Bog.

Sedum telephiumOrpineScattered records.Sedum acreBiting StonecropScattered records.Sedum albumWhite StonecropScattered records.

Crassulaceae

Sedum anglicum English Stonecrop 2004. Saaremaa. This and the next record should be confirmed next year as neither

should be confirmed next year as neither species is listed in the Baltic Flora

Sedum ewersii 2004. Varangu

Parnassiaceae

Parnassia palustris Grass of Parnassus Varangu 2004 Varangu and various places on

Saaremaa

Grossulariaceae

Ribes rubrum Redcurrant Locally common, as on Vilsandi Island.

Ribes nigrum Blackcurrant Varangu.

Ribes uva-crispa Wild Gooseberry 2004. Loona Mois, Saaremaa. Not recorded in

the Baltic Flora?

Ribes alpinum Mountain Currant 2004. Loona Mois, Saaremaa

Rosaceae

Filipendula vulgaris Dropwort Scattered records.

Filipendula ulmaria Meadow Sweet Widespread and abundant.

Sorbaria sorbifolia 2004. Naturalised commonly

Rubus chamaemorusCloudberryCommon in bogs.Rubus saxatilisStone Branble2004. ScatteredRubus idaeusRaspberry2004. Scattered

Rubus nessensis 2004. Locally common in east

[Rosa rugosa In flower near the coast at Lahemaa.]

Agrimonia eupatoria Agrimony Widespread and common.

Agrimonia proceraFragrant AgrimonyScattered records.Geum rivaleWater AvensScattered records.Geum urbanumHerb BennetScattered records.

Geum macrophyllum 2004. Locally common in woods

Potentilla palustris Marsh Cinquefoil Local in Lahemaa.

Potentilla anserina Silverweed Widespread and very common.

Potentilla argenteaHoary CinquefoilWidespread.Potentilla norvegicaNorwegian CinquefoilScattered records.

Potentilla erecta Tormentil Common.

Potentilla reptans Creeping Cinquefoil Widespread and common.

[Potentilla impolita Scattered records.]

Fragaria vesca Wild Strawberry Common.

[Fragaria viridis Scattered records.]

[Fragaria moschata Hautbois Strawberry Widespread.]

Alchemilla spp. Noted in various places.

Malus sylvestris Wild Apple Common.

Sorbus aucupariaRowanScattered records.Sorbus intermediaSwedish WhitebeamScattered records.

Sorbus x hybrida 2004. Vidumae

Cotoneaster scandinavicus Local on Saaremaa.

Crataegus monogyna Hawthorn Uncommon.

Crataegus monogynaHawthornUncommon.Prunus aviumWild CherryScattered records.Prunus padusBird CherryScattered records.

Fabaceae

Lupinus polyphyllus Roadsides. [Oxytropis pilosa Saaremaa.]

Vicia craccaTufted VetchWidespread.[Vicia tenuifoliaFine-leaved VetchScattered records.]Vicia sativaCommon VetchScattered records.

Vicia sylvaticaWood Vetch2004. Common at VidumaeVicia hirsutaHairy Tare2004. Near Vidumae[Vicia cassubicaDanzig VetchScattered records.]Lathyrus pratensisMeadow VetchlingScattered records.

Lathyrus sylvestris Narrow-leaved Everlasting Pea 2004. Near Vidumae

Lathyrus vernusSpring Vetch2004. Pohja Körvemaa-Maastiku-KaitsealaLathyrus maritimusSea PeaWas subspecies of japonicus. 2004. Near

Oandu

Lathyrus nigerBlack Pea2004. Tagamõisa PeninsulaLathyrus palustrisMarsh Pea2004. Tagamõisa Peninsula

Tetragonolobus maritimus

Marsh Pea

2004. Tagamoisa Peninsula

2004. Tagamoisa Peninsula where common

Local on roadsides.]

White Melilot Widespread. Melilotus albus Melilotus officinalis Ribbed Melilot Scattered records. Medicago lupulina 2004. Scattered Black Medick Medicago sativa Lucerne Scattered records. Medicago sativa ssp. falcata Sickle Medick Widespread. Trifolium montanum Local. Mountain Clover

Trifolium repens White Clover Widespread and very common.

Trifolium hybridum Alsike Clover Scattered records.

Trifolium fragiferum Strawberry Clover Scattered records. 2004 only on Tagamõisa

Peninsula

Trifolium arvense Haresfoot Clover Scattered records.

Trifolium alpestre Alpine Clover Saaremaa.

Trifolium dubium Lesser Trefoil 2004. Pohja Körvemaa-Maastiku-Kaitseala

Trifolium mediumZigzag CloverWidespread.Trifolium pratenseRed CloverCommon.Lotus corniculatusBird's-foot TrefoilScattered records.Anthyllis vulnerariaKidney VetchScattered records.

Oxalidaceae

[Ononis arvensis

Oxalis acetosella Wood Sorrel Common in woods.

Geraniaceae

Geranium sanguineum Bloody Cranesbill Locally common, as on Saaremaa.

Geranium pratenseMeadow CranesbillLocally common.Geranium sylvaticumWood CranesbillWidespread.

Geranium robertianum Herb Robert Scattered records. 2004. The coastal form

'maritimum' seen in north of Tagamõisa

Peninsula

Geranium palustre Marsh Cranesbill 2004. Varangu and Kohala

Linaceae

Linum catharticum Purging Flax Scattered records.

Euphorbiaceae

[Mercurialis perennisDog's MercuryLahemaa.]Euphorbia helioscopiaSun Spurge2004. KohalaEuphorbia peplusPetty Spurge2004. KohalaEuphorbia palustrisMarsh Spurge2004. KohalaEuphorbia esulaLeafy Spurge2004. Kohala

Polygalaceae

Polygala amarellaDwarf Milkwort2004. VaranguPolygala serpyllifoliaThye-leaved Milkwort2004. Scattered

Aceraceae

Acer platanoides Norway Maple Widespread.

Balsaminaceae

Impatiens noli-tangere Touch-me-not Balsam Lahemaa.

Impatiens parviflora Small Balsam Locally common.

Celastraceae

[Euonymus europaeus Spindle Scattered records.]

Rhamnaceae

Rhamnus catharticus Buckthorn Widespread. Frangula alnus Alder Buckthorn Widespread.

Tiliaceae

Tilia cordata Small-leaved Lime Widespread.

Thymelaeaceae

Daphne mezereum Mezereon Local, e.g. seen at Vidumae.

Clusiaceae

Hypericum montanum Mountain St John's Wort Local. 2004 Saaremaa only.

Hypericum perforatum Perforate St.John's Wort Widespread.

Hypericum maculatum Imperforate St John's Wort 2004. Scattered throughout

Violaceae

Viola pumila Meadow Violet 2004. Tagamõisa Peninsula

2004. Scattered Viola epipsila Viola uliginosa In leaf at Matsalu.

Local.] [Viola tricolor Wild Pansy

Viola arvensis Field Pansy 2004. Scattered

Lythraceae

Lythrum salicaria Purple Loosestrife Common and widespread.

Onagraceae

Circaea alpina Alpine Enchanter's Nightshade 2004. Oandu

Epilobium angustifolium Rosebay Willowherb Widespread and abundant. Common.

Epilobium hirsutum Great Willowherb Hoary Willowherb 2004. Scattered Epilobium parviflorum

Cornaceae

Cornus sanguinea Dogwood Widespread and common.

Araliaceae

Hedera helix Very rare in Estonia. Seen at Vidumae on Ivy

Saaremaa, 2004, Kohala!

Umbelliferae

Hydrocotyle vulgaris Marsh Pennywort 2004. Tagamõisa Peninsula

Sanicula europaea Scattered in woods. Sanicle

Astrantia major Greater Masterwort 2004. Pohja Körvemaa-Maastiku-Kaitseala

Eryngium maritimum 2004. Tagamõisa Peninsula Sea Holly

Anthriscus sylvestris Cow Parsley Scattered records.

Pimpinella major Great Burnet Saxifrage 2004. Tagamõisa Peninsula

Pimpinella saxifraga **Burnet Saxifrage** 2004. Pohja Körvemaa-Maastiku-Kaitseala Aegopodium podagraria Ground Elder Widespread and common.

Sium latifoliumGreater Water Parsnip2004. Near Risti between Tallinn and VirtsuBerula erectaLesser Water Parsnip2004. South of Tallinn (Ian – after group left)

Aethusa cynapium Fool's Parsley 2004. Between Tallinn and Virtsu

Cicuta virosaCowbaneIn aquatic habitats.Carum carviCaraway2004. Scattered

Cnidium dubium Cnidium 2004. Tagamõisa Peninsula

Angelica sylvestrisAngelicaCommon.Angelica archelangicaGarden AngelicaRecorded.

Peucedanum palustreMilk ParsleyWidespread in wetlands.Pastinaca sativaWild ParsnipCommon and widespread.

Heracleum sibiricum

Heracleum mantegazzianum Giant Hogweed Local.

Laserpitium latifoliumBroad-leaved Sermountain2004. VidumaeTorilis japonicaUpright Hedge ParsleyScattered records.Daucus carotaWild CarrotScattered records.

Pyrolaceae

Pyrola rotundifolia Round-leaved Wintergreen Locally common in forests

Pyrola norvegica Norwegian Wintergreen 2004. Plants undoubtedly of this species seen in

many locations – it doesn't record it in the Baltic Flora but maybe it is included under

rotundifolia?

Local.

Pyrola media Intermediate Wintergreen 2004. Scattered in east

Pyrola minor Common Wintergreen 2004. Scattered – mostly in east

Moneses uniflora One-flowered Wintergreen 2004. Scattered

Chimaphila umbellata Umbellate Wintergreen 2004. Noted near Viru Bog and in good flower

on the Tagamõisa Peninsula

Orthilia secundaToothed WintergreenCommon in forests.Monotropa hypopitysYellow BirdsnestNear Viru Bog

Ericaceae

Calluna vulgarisHeatherWidespread and abundant.Ledum palustreLabrador TeaVery common in bogs.

Andromeda polifolia Bog Rosemary Locally very common, e.g. Viru Bog.

Chamaedaphne calyculata 2004. Endla Bog

Vaccinium oxycoccusCranberryLocally abundant.Vaccinium microcarpumSmall CranberryCommon in bogs.

Vaccinium vitis-idaeaCowberryWidespread and abundant.Vaccinium myrtillusBilberryWidespread and abundant.Vaccinium uliginosumNorthern BilberryWidespread and common.

Arctostaphylos uva-ursi Bearberry Widespread.

Empetraceae

Empetrum nigrum Crowberry Locally common.

Primulaceae

Primula veris Cowslip In seed locally.

Primula farinosa Birds-eye Primrose 2004. Matsalu and Saaremaa

Lysimachia vulgarisYellow LoosestrifeWidespread.[Lysimachia nummulariaCreeping JennyScattered records.]Lysimachia thyrsifoliaTufted LoosestrifeLocal, e.g. Varangu.Trientalis europaeaChickweed WintergreenScattered records.

Glaux maritima Sea Milkwort 2004. Vilsandi and Tagamõisa Peninsula

Oleaceae

Fraxinus excelsior Ash Widespread.

Gentianaceae

Centaurium littoraleSeaside CentaurySaaremaa.[Centaurium erythraeaCommon CentaurySaaremaa.]Centaurium pulchellumLesser Centaury2004. Matsalu

Menyanthaceae

Menyanthes trifoliata Bogbean Bogs in Lahemaa. 2004 and Saaremaa!

Rubiaceae

Asperula tinctoria Dyer's Woodruff Locally common.
Galium boreale Northern Bedstraw Widespread.

Galium verum Lady's Bedstraw Widespread and very common.

Galium aparineCleaversScattered records.Galium albumUpright BedstrawWidespread.Galium palustreMarsh Bedstraw2004.Common

Convolvulaceae

Calystegia sepium Hedge Bindweed Scattered records.

Convolvulus arvensis Field Bindweed Common.

Boraginaceae

Echium vulgareViper's BuglossCommon.Pulmonaria officinalisLungwortLahemaa.Symphytum officinalisCommon Comfrey2004. VaranguAnchusa officinalisAlkanetScattered records.Myosotis arvensisField Forget-me-notScattered records.

Myosotis scorpioidesWater Forget-me-notCommon in suitable habitat.Lappula squarrosaBur Forget-me-not2004. Tagamõisa Peninsula

Lamiaceae

Prunella vulgaris

Ajuga reptansBugle2004. Tagamõisa Peninsula.Teucrium scordiumWater Germander2004. Tagamõisa Peninsula

Scutellaria galericulata Scull-cap Varangu.

Self-heal

Scutellaria hastifolia Spear-leaved Skullcap 2004. Tagamõisa Peninsula

Galeopsis bifida Bifid Hemp-nettle Scattered records. Lamium album White Deadnettle Scattered records. Lamium purpureum Red Deadnettle 2004. Kohala etc. Lamiastrum galeobdolon Yellow Archangel Lahemaa. [Stachys palustris Marsh Woundwort Widespread.] Ground Ivy Glechoma hederacea Widespread.

Acinos arvensis Basil-Thyme 2004. Quite common on Saaremaa

Widespread.

Clinopodium vulgareWild BasilScattered records.Origanum vulgareMarjoramScattered records.Thymus serpyllumBreckland ThymeLocally common.Lycopus europaeusGypsywortScattered records.Mentha aquaticaWater MintLahemaa.

Mentha arvensis Corn Mint 2004. Saaremaa

Salvia nemorosa Wild Sage Occasional on roadsides.

Solanaceae

Solanum dulcamara Bittersweet Muhu Island.

Scrophulariaceae

Verbascum thapsus Aaron's Rod Common. Verbascum nigrum Dark Mullein Common. Scrophularia nodosa Common Figwort Lahemaa.

Small Toadflax Chaneorhinum minus 2004. Tagamõisa Peninsula

Linaria vulgaris Common Toadflax Locally common.

Cymbalaria muralis Ivy-leaved Toadflax 2004. Tallinn. Apparently not recorded in any

of the Baltic States before!

Long-leaved Speedwell Scattered records. Veronica longifolia

Veronica austriaca teucrium Large Speedwell 2004. Recorded as Veronica teucrium in the

> Baltic Flora. Kohala Scattered records.

Spiked Speedwell Veronica spicata Veronica officinalis Heath Speedwell Scattered records. Veronica chamaedrys Germander Speedwell Scattered records.

Brooklime Veronica beccabunga Widespread in suitable habitat.

Veronica anagallis-aquatica Blue Water Speedwell Scattered records.

Veronica scutellata Marsh Speedwell 2004. Matsalu and Saaremaa

> Widespread. Vilsandi Island.

Melampyrum pratense Common Cow-wheat Widespread and very common.

Melampyrum sylvaticum Small Cow-wheat Common. Melampyrum arvense Field Cow-wheat Scattered records.

Widespread and locally abundant. Melampyrum nemorosum Melampyrum cristatum Crested Cow-wheat 2004. Tagamõisa Peninsula

Euphrasia nemorosa Wind Eyebright 2004. Tagamõisa Peninsula

Pedicularis palustris Red Rattle 2004. Vidumae

Pedicularis sceptrum-carolinum Moor King 2004. Some fine plants near Vidumae!! Rhinanthus minor

Yellow Rattle Scattered records.

Rhinanthus serotinus 2004. Pohja Körvemaa-Maastiku-Kaitseala Rhinanthus osiliensis 2004. Very rare endemic of western Saaremaa seen in a couple of places on the Tagamõisa

Peninsula

Orobanchaceae Orobanche sp.

Odontites vulgaris

Odontites littoralis

A robust yellow species apparently parasitic on umbellifers seen at Pohja-Korvemaa

maastiku-kaitsealu.

Lentibulariaceae

Pinguicula vulgaris Common Butterwort In leaf on Saaremaa. 2004 in flower at Varangu Pinguicula alpina Alpine Butterwort 2004. In leaf in the ditch by the HQ at Vidumae

Plantaginaceae

Plantago major Greater Plantain Plantago media Hoary Plantain Plantago lanceolata Ribwort Plantain Plantago maritima Sea Plantain

Caprifoliaceae

Sambucus racemosa Red-berried Elder Widespread. Not native. Scattered. Not native. Sambucus nigra Elder

Viburnum opulus Guelder Rose Scattered records.

Viburnum lantana Wayfaring Tree 2004. Scattered Fly Honeysuckle 2004. Scattered Lonicera xylosteum Twinflower Linnaea borealis Local in boggy forests.

Valerianaceae

[Valeriana officinalis Common Valerian Widespread.] Valeriana sambucifolia 2004. Widespread

Dipsacaceae

Knautia arvensis Field Scabious Widespread and common. Succisia pratensis Devil's-bit Scabious Scattered

Campanulaceae

Campanula rotundifolia Harebell Widespread and common. Campanula persicifolia Widespread and common. Peach-leaved Bellflower Campanula patula Spreading Bellflower Widespread. Clustered Bellflower Campanula glomerata Widespread and common. Campanula latifolia Giant Bellflower Scattered records. Campanula trachelium Nettle-leaved Bellflower Scattered records.

Campanula rapunculoides Widespread and common. Creeping Bellflower Sheepsbit Scabious [Jasione montana Scattered records.]

Asteraceae

Widespread and very common. Solidago virgaureae Golden-rod

Bellis perennis Daisy Varangu. Aster tripolium Sea Aster Local on coasts. Erigeron acer Blue Fleabane Widespread. Inula salicina Irish Fleabane Locally common. 2004. Varangu Antennaria dioica Mountain Everlasting Anthemis tinctoria Yellow Chamomile Scattered records.

Achillea millefolium Yarrow Common. Leucanthemum vulgare Ox-eye Daisy Widespread. Artemisia vulgaris Mugwort Common. Wormwood Artemisia absinthium Widespread. Artemisia maritimum Sea Wormwood

Western Saaremaa coasts.

Artemisia campestris Field Wormwood Widespread. Tanacetum vulgare Tansy Widespread. Senecio vulgaris Groundsel

Senecio jacobaea Ragwort Tussilago farfara Coltsfoot 2004. Varangu Petasites hybridus 2004. Kohala etc. Butterbur

[Arctium lappa Greater Burdock

Arctium tomentosum Matricaria discoidea Pineapple Mayweed Common. Matricaria perforata Scentless Mayweed 2004. Kohala etc. Carlina vulgaris Carline Thistle 2004. Saaremaa [Carduus nutans Musk Thistle Widespread.] Carduus crispus Welted Thistle Common.

[Saussurea esthonica Finished flowering at Varangu. Endemic in

the Baltic Countries.]

1

Creeping Thistle Very common. Cirsium arvense Spear Thistle Cirsium vulgare Very common. Cirsium palustre Marsh Thistle Common. Cirsium acaule **Dwarf Thistle** Saaremaa. Cirsium heterophyllum 2004. Kohala

Cirsium oleraceum Cabbage Thistle Widespread and common.

Centaurea scabiosa Greater Knapweed Scattered.

Centaurea jacea Brown Knapweed Widespread and very common.

Hypochoeris maculata Spotted Cat's-ear 2004. Pohja-Korvemaa maastiku-kaitsealu

Cichorium intybus Chicory Roadsides.

[Arnoseris minima Lamb's Succory Scattered records.]
Tragopogon pratensis Goatsbeard Scattered records.
Scorzonera humilis Viper's-Grass 2004. Saaremaa
Mycelis muralis Wall Lettuce Common.
[Lapsana communis Nipplewort Scattered records.]
Tragagacum officinale Dandelion Widespread

I Lapsana communisNippiewortScattered records.]Taraxacum officinaleDandelionWidespread.Leontodon hispidusRough Hawkbit2004. KohalaCrepis paludosaMarsh Hawk's-beard2004. WidespreadHieracium umbellataLeafy Hawkweed2004. ScatteredHieraceum pilosellaMouse-ear Hawkweed2004. Widespread

#### Monocotyledons

Alismataceae

Alisma plantago-aquatica Water Plantain Scattered in aquatic habitats.

Scheuchzeriaceae

Scheuchzeria palustris Rannoch Rush Very common in seed in bogs.

Juncaginaceae

Triglochin maritimum Sea Arrow-Grass Vilsandi Island.

Triglochin palustre Marsh Arrow-Grass 2004. Varangu and Vilsandi

Potamogetonaceae

Potamogeton natansBroad-leaved PondweedWidespreadPotamogeton crispusCurled Pondweed2004. Varangu

Zostera marina Eel-Grass 2004. Tagamõisa Peninsula

Sparganiaceae

[Sparganium glomeratum Scattered records.]

Liliaceae

Allium ursinum Ramsons Abundant near Kunda.

Allium schoenoprasum Chives 2004. Tagamõisa Peninsula

Allium vineale Crow Garlic 2004. Tagamõisa Peninsula

Allium oleraceum Field Garlic Vilsandi Island.

Convallaria majalis Lily of the Valley Widespread and very common in leaf.

Maianthemum bifolium May Lily Common.

Tofieldia calyculata German Asphodel 2004. Tagamõisa Peninsula

Paris quadrifoliaHerb ParisScattered records.Polygonatum odoratumAngular Solomon's SealScattered records.

Iridaceae

[Iris pseudacorus Yellow Flag Scattered records.]

Juncaceae Luzula pilosa 2004. Widespread Luzula multiflora 2004. Varangu Juncus gerardii 2004. Scattered in the Tagamõisa Peninsula [Juncus filiformis Thread Rush Juncus effusus Soft Rush [Juncus conglomeratus Compact Rush ] Juncus compressus Round-fruited Rush Juncus bufonius Toad Rush Juncus articulatus Jointed Rush Poaceae Festuca gigantea 2004. Varangu [Festuca altissima Wood Fescue Sheep's Fescue [Festuca ovina ] [Festuca rubra Red Fescue 1 Lolium perenne Perennial Ryegrass Poa annua Annual Meadow-grass Poa trivialis Rough Maedow-grass Cocksfoot Dactylis glomerata Widespread Briza media **Quaking Grass** Milium effusum 2004. Scattered Melica nutans 2004. Scattered Bromus inermis Hungarian Brome Soft Brome [Bromus hordeaceus ] Wild Oat Avena fatua Deschampsia cespitosa Tufted Hair-grass Deschampsia flexuosa Wavy Hair-grass 2004. Kohala Southern Holy Grass [Hierochloe australis 1 Anthoxanthum odoratum Sweet Vernal Grass Velvet Bent Agrostis canina Agrostis stolonifera Creeping Bent 2004. Scattered Calamagrostis canescens Purple Small-reed [Calamagrostis arundinacea Rough Small-reed ] Phleum pratense Timothy Alopecuros pratensis Meadow Foxtail Hordeum jubatum 2004. Tagamõisa Peninsula 2004. Kohala Elytrigia arenaria Couch Phalaris arundinacea Reed Canary-grass Phragmites australis Common Reed Molinia caerulea Purple Moor-grass Nardus stricta Mat Grass [Helichtotrichon pratense ] Leymus arenarius Lyme Grass Araceae Calla palustris Bog Arum Scattered in bogs. Lemnaceae Common Duckweed Lemna minor Lemna trisulca 2004. Varangu *Typhaceae* Typha latifolia Bulrush Widespread. Typha angustifolia Scattered records. Lesser Bulrush

Cyperaceae Scirpus sylvaticus Schoenoplectus lacustris

Schoenoplectus tabernaemontani

Blysmus compressus Blysmus

Eriophorum vaginatum Harestail Cotton Grass

Trichophorum cespitosum

Eleocharis spp

Cladium mariscus

Rhynchospora alba White Beaked Sedge | Carex dioica Dioecious Sedge

Carex pulicaris Flea Sedge

[Carex pauciflora Few-flowered Sedge

Carex hirta Hairy Sedge
Carex pseudocyperus Cyperus Sedge

Carex rhynchophysa

[Carex lasiocarpa Slender Sedge Carex acutiformis Lesser Pond Sedge

Carex acutiformisLesser Pond SedgeVaranguCarex rostrataBottle SedgeViru BogCarex vesicariaBladder SedgeTagamõisa Peninsula

Carex flaccaGlaucous SedgeWidespreadCarex paniceaCarnation SedgeWidespreadCarex vaginataSheathed Sedge2004. VaranguCarex distansDistant Sedge2004. Vilsandi IslandCarex hostianaTawny Sedge2004. Widespread

Carex flavaLarge Yellow SedgeVaranguCarex lepidocarpaLong-stalked Yellow Sedge2004. Vilsandi IslandCarex demissaCommon Yellow Sedge2004. Vilsandi IslandCarex serotinaSmall-fruited Yellow SedgeVilsandi Island

Carex (x) bergrothii

Carex pallescensPale SedgeCarex ornithopodaBird's-foot SedgeCarex magellanicaBog Sedge

Carex buxbaumii Club Sedge

[Carex cespitosa

Carex nigraCommon SedgeScatteredCarex acutaSlender Tufted SedgeScattered

Carex appropinquataFibrous Tussock Sedge2004. Tagamõisa PeninsulaCarex diandraLesser Tussock Sedge2004. Varangu

Carex otrubae False Fox Sedge 2004. Varangu

Carex divulsa Grey/Leers' Sedge ?2004. Though the Baltic Flora suggests that

specimens identified as this species in Estonia are contigua plants found on the coast of the Tagamõisa Peninsula seemed to be closer to this

2004. Tagamõisa Peninsula and Vilsandi Island

2004. Common in seasonally inundated parts of

Widespread in meadows

the Tagamõisa Peninsula

Varangu along woodland paths

2004. Bogs - e.g. Viru and Endla

species?

2004. Widespread 2004. Matsalu

Common in bogs.

2004 Several noted

2004. Vilsandi Island

2004. Viru Bog

Widespread

2004. Oandu etc.

maritimus we saw at Virtsu?

2004. Tagamõisa Peninsula

2004. Widespread in bogs

2004. Tagamõisa Peninsula by lake

2004. Matsalu. Apparently often grows in the sea in Estonia so presumably this was the *S*.

2004. A large stand by the springs at Varangu

Carex contigua 2004. Vidumae and Tagamõisa Peninsula

Carex disticha Brown Sedge 2004. Varangu

Carex arenaria Sand Sedge 2004. Coasts of Tagamõisa Peninsula

Carex leporina Oval Sedge 2004. Formerly known as Carex ovalis. Pohja-

Korvemaa maastiku-kaitsealu

Carex echinata Star Sedge Oandu

Carex canescens 2004. Pohja-Korvemaa maastiku-kaitsealu

Carex brunnescens 2004. Oandu

Orchidaceae

Cypripedium calceolus Lady's Slipper Many plants in seed at Varangu.

Marsh Helleborine Common on Vilsandi, also at Varangu. 2004. Epipactis palustris

Very common on the Tagamõisa Peninsula and

Vilsandi

2004. Scattered in leaf and some very large Broad-leaved Helleborine Epipactis helleborine

plants in bud on Saaremaa

Scattered records. Epipactis atrorubens Dark Red Helleborine

2004. Common in north of Tagamõisa Cephalanthera rubra Red Helleborine

Peninsula

Listera cordata Lesser Twayblade 2004. Oandu

Listera ovata Twavblade 2004. Scattered throughout

Dead spikes widespread in woods. 2004 some Neottia nidus-avis Bird's-nest Orchid

live ones at Varangu

A few in early flower at Lahemaa. Spiranthes spiralis Autumn Lady's Tresses

Goodyera repens Common in forests. Creeping Lady's Tresses

Herminium monorchis Musk Orchid Vilsandi National Park. 2004. Several places on

the Tagamõisa Peninsula

Fen Orchid 2004. A large colony near Kihelkonna with one Liparis loeselii

still in good flower and another smaller colony

seen, both Tagamõisa Peninsula

In seed at Vilsandi. 2004. Widespread – many Platanthera bifolia Lesser Butterfly Orchid

in flower

Platanthera chlorantha Scattered records. 2004 only in flower on the Greater Butterfly Orchid

Tagamõisa Peninsula

Gymnadenia conopsea Fragrant Orchid Several on Saaremaa.

Ancamptis pyramidalis Pyramidal Orchid 2004. A few in flower northwest Tagamõisa

Peninsula

Orchis militaris Military Orchid 2004. In seed only. Matsalu and Tagamõisa

Peninsula

Burnt-tip Orchid 2004. In flower Tagamõisa Peninsula Orchis ustulata Dactylorhiza incarnata Early Marsh Orchid In flower at Toolse. 2004. Scattered

Dactylorhiza cruenta 2004. Flowers just finishing. Couple of places

on the Tagamõisa Peninsula

Dactylorhiza longifolia 2004. AKA D. baltica. Good colonies on

Vilsandi and on the northern tip of Tagamõisa

Peninsula

Dactylorhiza fuchsii Common Spotted Orchid Widespread.

Dactylorhiza curvifolia AKA D. russowei. In flower at Letipea. 2004.

In good flower at three locations on the

Tagamõisa Peninsula

Dactylorhiza ruthei 2004. A couple of flowers at Vidumae – a very

rare species. But what were the *Dactylorhizas* 

growing nearby?

In seed at Vilsandi. 2004. In flower at several Ophrys insectifera Fly Orchid

spots on the Tagamõisa Peninsula

One-leaved Bog Orchid c.8 at Letipea, and several at Varangu. 2004. Malaxis monophyllos

Several localities in the east

## Systematic List Number 2 Butterflies

The systematic order and nomenclature follow Tolman and Lewington 'Butterflies of Britain and Europe'.

#### **Summary of Locations**

Day 1	July 15 <sup>th</sup>	Tallinn to Kohala
Day 2	July 16 <sup>th</sup>	Lahemaa - Oandu
Day 3	July 17 <sup>th</sup>	Kohala
Day 4	July 18th	Lahemaa – Viru Bog and Pohja Körvemaa-Maastiku-Kaitseala
Day 5	July 19 <sup>th</sup>	Endla Bog and Varangu Springs
Day 6	July 20th	Kohala to Saaremaa (Loona)
Day 7	July 21st	Saaremaa – Vidumae & the western Tagamõisa Peninsula
Day 8	July 22 <sup>nd</sup>	Saaremaa – Vilsandi Island & the northern and eastern Tagamõisa
		Peninsula
Day 9	July 23rd	Saaremaa to Tallinn
Day 10	July 24th	Departure

## Papilionidae

Swallowtail	Papilio machaon	Pohja Körvemaa-Maastiku-Kaitseala and Vidumae
Apollo	Parnassius apollo	David Godfrey has photos of what looks very like caterpillars of

this species from Kohala

## Pieridae

Large White	Pieris brassicae	Widespread
Black-veined White	Aporia crataegi	Only seen at Vidumae
Small White	Artogeia rapae	Widespread
Green-veined White	Artogeia napi	Widespread
Orange-tip	Anthocharis cardamines	Noted at Kohala
Moorland Clouded Yellov	w Colias palaeno	Scattered throughout
Pale Clouded Yellow	Colias hyale	Only seen at Oandu
Brimstone	Gonepteryx rhamni	Korvemaa Mka – after group had left (Ian)

## Lycaenidae

Purple Hairstreak	Quercusia quercus	Kohala
Small Copper	Lycaena phlaeas	Kohala
Large Copper	Lycaena dispar	Varangu Springs and Tagamõisa Peninsula on Saaremaa
Scarce Copper	Lycaena virgaureae	Widespread
Purple-edged Copper	Lycaena hippothoe	David Godfrey photographed one at Kohala
Little Blue	Cupido minimus	Scattered
Large Blue	Maculinea arion	A male on Vilsandi and another Korvemaa Mka – after group
		had left (Ian)
Silver-studded Blue	Plebejus argus	Widespread and locally very common
Cranberry Blue	Vacciniina optilete	Several small colonies
Mazarine Blue	Cyaniris semiargus	Singles at Varangu Spring and Vidumae
Amanda's Blue	Agrodiaetus amanda	Widespread
Common Blue	Polyommatus icarus	Widespread and common

# Nymphalidae Apatura iris

Purple Emperor	Apatura ırıs	Locally quite common
Poplar Admiral	Limenitis populi	A dead one found on the Tagamõisa Peninsula
White Admiral	Limenitis camilla	1 at Varangu Spring and 2 at Vidumae

Large Tortoiseshell Nymphalis polychloros 1 at Korvemaa Mka – after group had left (Ian)

Peacock Inachis io 1 at Vidumae

Red Admiral Vanessa atalanta Very scarce – noted on only two days.

Small Tortoiseshell Aglais urticae Scattered

Comma Polygonia c-album 1 at Korvemaa Mka – after group had left (Ian)
Map Butterfly Araschnia levana A few at Korvemaa Mka – after group had left (Ian)

Silver-washed Fritillary Argynnis paphia Quite common at Korvemaa Mka – after group had left (Ian).

The small and beautifully marked fritillary by the Musk Orchid site on the Tagamõisa Peninsula was this species and *not* 

Pallas's

Dark Green Frtillary Argynnis aglaja Locally common

High Brown Fritillary Argynnis adippe Uncommon – noted on 2 days

Lesser Marbled Fritillary Brenthis ino Only seen at Matsalu

Cranberry Fritillary Boloria aquilonaris Pohja Körvemaa-Maastiku-Kaitseala and at Endla

Pearl-bordered Fritillary Clossiana euphrosyne Scattered in low numbers

Glanville Fritillary Melitaea cinxia 1 at Pohja Körvemaa-Maastiku-Kaitseala

Heath Fritillary Mellicta athalia Widespread and common

Nickerl's Fritillary Mellicta aurelia Locally common

#### Satyridae

Common Grayling Hipparchia semele Noted on the Tagamõisa Peninsula and Vilsandi Island

Lapland Ringlet Erebia embla 1 at Korvemaa Mka – after group had left (Ian)

Meadow Brown Maniola jurtina Widespread.

Dusky Meadow Brown Hyponephele lycaon Possibly this species at Matsalu Ringlet Aphantopus hyperantus Very common and widespread

Large Heath Coenonympha tullia Tagamõisa Peninsula and elsewhere on Saaremaa

Chestnut Heath Coenonympha glycerion Common in the Lahemaa area

Northern Wall Brown Lasiommata petropolitana ?Probably this species at Varangu Spring and at Korvemaa Mka

after group had left (Ian)

Woodland Brown Lopinga achine Several at Vidumae Nature Reserve

### Hesperiidae

Essex Skipper Thymelicus lineola Rather uncommon

Small Skipper Thymelicus sylvestris Scattered

Large Skipper Ochlodes venatus Reasonably common

Silver-spotted Skipper Hesperia comma 1 at Pohja Körvemaa-Maastiku-Kaitseala

#### List Number 3 Moths

Most of the species below were taken at light at Kohala Mõis and on Saaremaa Island. Two moth traps were operated nightly by Tim Crafer and the catch examined each morning. Other species were noted on our daytime excursions. Only Macro moths which were recognised are recorded. The number of species would have been considerably larger had the nights been warmer, as was illustrated on the last evening which was warm and the catch increased by about 200%. Unfortunately, Paul Cardy had to leave us on the second day because of an emergency and this deprived us of his unique knowledge of Lepidoptera. As a result, there were many other species (up to 50) caught but which were not recognised. The moths with Latin names at the end do not occur in England and have no English name.

Antler

**Barred Carpet** 

Beautiful Carpet

Beautiful Hook-tip

Bird's Wing

**Black Rustic** 

Blackneck

Blomer's Rivulet

**Blotched Emerald** 

Bordered Pug

Bright-line Brown-eye

Broom Moth

**Brown Rustic** 

Brown Scallop

Brown-line Bright-eye

**Buff Arches** 

**Buff Ermine** 

**Buff Tip** 

**Burnished Brass** 

Campion

Chimney Sweeper

Cinnabar

Clay

Clouded Buff

Clouded Magpie

Clouded-bordered Brindle

Common Carpet

Common Emerald

Common Footman

Common Heath

Common Lutestring

Common Wainscot

Common Wave

Common White Wave

Coxcomb Prominent

Crescent

Dark-barred Twin -spot Carpet

Dark Marbled Carpet

Dew Moth

Dot Moth

**Double Square Spot** 

Drinker

Dusky Hook-tip

Dwarf Cream Wave

Eyed Hawkmoth

Fan-foot

Flame

Four-dotted Footman

Frosted Orange

Garden Tiger

Ghost Moth

Great Oak Beauty

Green Arches

Green Carpet

Grey Arches

Ground Lackey

Heart and Club

Heart and Dart

Heart and Dart

Lackey Lappet

Large Emerald

Latticed Heath

Lesser Cream Wave

Lesser Swallow Prominent

Light Arches

Lilac Beauty

Lychnis

Map-winged Swift

Maple Prominent

Marbled Coronet

Marbled Minor

Middle-barred Minor

Mottled Beauty

Mottled Rustic

Narrow-bordered Five-spot Burnet

Netted Carpet

Netted Pug

Northern Spinach

Orange Moth

Orange Swift

Pebble Hook-tip

Peppered Moth

Phoenix

Pine Hawkmoth

Pine-tree Lappet

Plain Golden Y

Pod Lover

Portland Ribbon Wave

Purple Bar

Purple Thorn

Purple Treble-bar

Rannoch Looper

Red Carpet

Riband Wave

Ringed Carpet

Round-winged Muslin

Ruby Tiger

Rustic

Sandy Carpet

Satellite

Satin Beauty

Satin Wave

Scarce Forrester

Shaded Broad-bar

Shaded Fan-foot

Shark

Sharp-angled Carpet

Short-cloaked

Shoulder-striped Wainscot

Silver-ground Carpet

Silvery Arches

Single-dotted Wave

Small Fan-footed Wave

Small Scallop

Small Yellow Wave

Smoky Wainscot

Snout

Spectacle

Straw Dot

Swallow-tailed Moth

Sycamore

Tawny Speck Pug

Tawny-barred Angle

Toadflax Pug

Treble Brown Spot

Treble-bar

True Lover's Knot

Turnip Moth

Uncertain

V-moth

Varied Coronet

White Ermine

Willow Beauty

Wood Tiger

Arichanna melanaria

Ecliptopoa capitata

Scotopteryx moeniata

Xanthorhoe ferrugata

#### **Systematic List Number 4** Birds

Black-throated Diver Gavia arctica 3 seen along the coast at Litipea & Saaremaa.

Scattered records. Cormorant Phalacrocorax carbo Grev Heron Common & widespread. Ardea cinerea

Black Stork 2 seen early morning, Loona Manor Ciconia nigra

Very common & widespread on the mainland, none White Stork Ciconia ciconia

were recorded at Saaremaa Island.

Mute Swan Common & widespread, with large numbers off Cygnus olor

Vilsandi Island.

Greylag Goose Anser anser Scattered records across Saaremaa Island

Barnacle Goose Several individuals recorded at the small islands on Branta leucopsis

the way to Vilsandi Island.

Teal 2 records at Kohala & Saaremaa Island Anas crecca

> Anas platyryhnchos Common & widespread.

Scaup Aythya fuligula A pair seen at the ferry crossing at Virtsu. Several seen at Altja & Virtsu ferry crossing. Eider Somateria mollissima

Goldeneye Bucephala clangula Scattered records.

Mallard

Water Rail

Common Scoter Melanitta nigra Several seen on the water on the way to Vilsandi

Island.

Mergus serrator Red-breasted Merganser Several coastal sightings. Honey Buzzard Pernis apivorus One at Kohala & Endla Bog. Black Kite Milvus migrans One seen at Viru Bog.

Marsh Harrier Circus aeruginosus Common around Lahemaa & Kohala, elsewhere

Montagu's Harrier Circus pygargus Scattered sightings around Lahemaa. Hen Harrier Circus cyaneus Scattered sightings around Lahemaa.

Goshawk Accipiter gentilis Several sightings & calls, around several woodland

sites.

Sparrowhawk Accipiter nisus Scattered records. Common Buzzard Buteo buteo Common & widespread.

White-tailed Eagle Haliaectus albicilla One seen flying over at Matsalu Nature Reserve. Lesser-spotted Eagle Aquila pomarina Several recordings at Kohala, possible of the same

Kestrel Falco tinnunculus Sightings mainly seen along the roadside. Several sightings around Kohala & Lahemaa. Falco subbuteo Hobby Hazel Grouse Bonasa bonasia 2 birds recorded then flushed by Henry at Pohia

Korvemaa, and 1 seen at Varangu Springs. Rallus aquaticua One calling at Matsalu Nature Reserve.

Corncrake Crex crex Very common at Kohala.

Coot Fulica atra 2 seen on the causeway, joining Muhu Island with

Saaremaa.

Common Crane Grus grus Common & widespread.

Oystercatcher Haematopus ostralegus Scattered records. Ringed Plover Charadrius hiaticula Recorded along the coast at Tagamoisa Penisula.

Several individuals flushed at Matsula & Vilsandi Snipe Gallinago gallinago

Island.

Woodcock Scolopax rusticola 2 seen roding late evening at Kohala.

Vanellus vanellus Widespread sightings. Lapwing

Individuals recorded at Tagamoisa Peninsula & Whimbrel Numenius phaeopus

Vilsandi Island.

Greenshank 1 seen at Vilsandi Island. Tringa nebularia 1 recorded at Vilsandi Island. Redshank Tringa totanus

Green Sandpiper Tringa ochropus Scattered records. Common Sandpiper Actitis hypoleuca Scattered sightings. Great Black-backed Gull Larus marinus Scattered records.

Lesser Black-backed GullLarus fuscusScattered recordes.Black-headed GullLarus ridibundusCommon & widesread.Common GullLarus canusCommon & widesread.Herring GullLarus argentatusCommon & widesread.

Little Gull Larus minutus 1 recorded sitting on a rock near Vilsandi Island.

Common Tern Sterna hirundo Scattered records.

Arctic Tern Sterna paradisaea Sightings recorded at Litipea & Vilsandi Island.

Little Tern Sterna albifrons indivduals recorded on the small islands, on the way

to Vilsandi Island.

Caspian Tern Sterna caspia jurvnile recorded at Tagamoisa Peninsula.

Rock Dove Columba livia Feral Pigeon widespread.

Stock Dove Columba oenas Single records.

Woodpigeon Columba palumbus Common & widespread.

Tawney Owl Strix aluco Individuals heard regularly at Kohala.

Common Swift Apus apus Common & widespread.
Kingfisher Alcedo atthis 1 seen at Varangu Springs.

Wryneck Jynx torquilla Several individuals recorded at Kohala, Matsula &

Saaremaa Island.

Great Spotted Woodpecker Dendrocopos major Scattered records.

Lesser-spotted Woodpecker Dendrocopos minor 1 seen at Kohala.

Skylark Alauda arvensis Widespread in the meadows.

WoodlarkLullula arboreaScattered records.SwallowHirundo rusticaCommon & widespread.House MartinDelichon urbicaCommon & widespread.Tree PipitAnthus trivialisCommon & widespread.Meadow PipitAnthus pratensisScattered records.

Yellow Wagtail Motacilla flava 1 seen at Endla Bog & Saaremaa Island.

White Wagtail Motacilla alba Common & widespread.
Wren Troglodytes troglodytes Scattered records.
Robin Erithacus rubecula Common & widespread.

Redstart Phoenicurus phoenicurus Widespread at Lahemaa & surrounding environs.

WhinchatSaxicola rubetraScattered records.StonechatSaxicola torquata1 recorded at Lahemaa.Northern WheatearOenanthe oenantheScattered records.BlackbirdTurdus merulaCommon & widespread.

Mistle Thrush Turdus viscivorus Widespread at Kohala & Lahemaa environs.

Song Thrush Turdus philomelos Scattered records.

Redwing Turdus iliacus individuals recorded at Kohala & Matsula.
Fieldfare Turdus pilaris Common around Kohala & Lahemaa.
Grasshopper Warbler Locustella naevia Widespread around wet marshy sites on the

mainland.

River Warbler Locustella fluviatilis Common at Kohala.
Sedge Warbler Acrocephalus schoenobaenus Scattered records.

Marsh Warbler Acrocephalus arundinaceus Recorded at Kohala & Varangu Springs.

Icterine Warbler Hippolais icterina Recorded at several sites.

Barred Warbler Sylvia nisoria 1 recorded in bushes at a road side stop.

Lesser WhitethroatSylvia currucaScattered records.Common WhitethroatSylvia communisCommon & widespread.Garden WarblerSylvia borinSingle sightings recorded.BlackcapSylvia atricapillaCommon & widespread.

Greenish Warbler Phylloscopus trochiloides Several individuals recorded near Loona Manor.

Wood Warbler *Phylloscopus sibilatrix* Widespread in forest sites.

Chiffchaff Phylloscopus collybita Heard regularly, common & widespread.

Willow Warbler Phylloscopus Recorded at several sites.

Goldcrest Regulus regulus Scattered records.

Spotted Flycatcher Muscicapa striata Common & widespread.

Pied Flycatcher Ficedula hypoleuca An individuals recorded near Kohala.

Red-breasted Flycatcher Ficedula parva One individual recorded at Kohala.

Long-tailed Tit Aegithalos caudatus A feeding flock recorded near Loona Manor.

Marsh Tit Parus palustris Scattered records.

Willow Tit Parus montanus Several individuals recorded.

Crested Tit Parus cristatus Lahemaa.

Coal Tit Parus ater Scattered records.

Great Tit Parus major Common & widespread.
Blue Tit Parus caeruleus Common & widespread.
Nuthatch Sitta europaea Scattered records.

Common Treecreeper Certhia familiaris An individual recorded near Loona Manor.

Red-backed Shrike Lanius collurio Common & widespread.

Jay Garrulus glandarius Scattered records.

Magpie Pica pica Common & widespread.

Jackdaw Corrus monedula Common & widespread on Saaremaa Island.

Rook Corvus frugilegus Scattered records.

Hooded Crow Corvus (corone) cornix Common & widespread.
Raven Corvus corax Common & widespread.

Starling Sturnus vulgaris Common & widespread on Saaremaa Island.

House Sparrow Passer domesticus Common on the mainland.

Tree Sparrow Passer montanus 3 recorded on a roundabout in Tallinn.

Chaffinch Fringilla coelebs Common & widespread.
Greenfinch Carduelis chloris Common & widespread.
Goldfinch Carduelis carduelis Common & widespread.
Common Rosefinch Carpodacus erythrinus Recorded at Kohala.
Bullfinch Pyrrhula pyrrhula Scattered records.

Hawfinch Cocothraustes cocothraustes Several recorded at Matsula.

Reed Bunting Emberiza schoeniculus Individuals recorded near Loona Manor.

Yellowhammer Emberiza citrinella Common & widespread.

Corn Bunting

Miliaria calandra

1 individual seen near the Barred Warbler bush, along the roadside, returning from Varangu Springs.

### Systematic List Number 5 Mammals

Fox Vulpes vulpes One seen at Kohala & Loona Manor.

Lynx Lynx Lynx Territorial scratch markings on a tree at Oandu

nature trail.

Beaver Castor fiber Dams and much activity seen at Kohala. Wild Boar Sus scrofa Rooting activity seen at several sites.

Roe Deer Capreolus capreolus Common at Kohala and on route to Saaremaa. Elk Alces alces Droppings & activity seen at several sites.

Brown Hare Lepus europaeus 1 seen at Kohala.

Bear Ursus arctos Territorial scratch markings on a tree along the Oandu

nature trail.

Mole Talpa europaea Several specimens recorded at the different sites, but all

were dead.

### Systematic List Number 6 Reptile & Amphians

Adder Vipera berus 1 dead specimen at Viru Bog on the road side, and 2 road

casualties at Pohja Korvemaa.

Common Frog Rana temporaria Scattered records.

Moor Frog Rana arvalis 1 specimen recorded at Viru Bog.

Common Toad Bufo bufo Scattered sightings.

Natterjack Toad *Bufo calamita* 1 seen swimming at Varangu Springs. Common Lizard *Lacerta vivipara* Common sightings along the broad walks.

Smooth Newt Triturus boscai 1 caught at Kohala.

#### **Systematic List Number 7 Crickets & Grasshoppers**

Large Speckled Bush-cricket Isophya pyrenea 1 female seen at Vidumae in the meadow Wart-biter Decticus verrucivorus Common & widespread across the sites. An female in the unusual brown morph was seen at

Vidumae in the meadow. Roesel's Bush-cricket Metrioptera roeselii 1 male recorded at the coastal site Latipea.

Metrioptera brachyptera Common & widespread in marshy & bog areas. Bog Bush-cricket Dark Bush-cricket Pholidoptera griseoaptera Common & widespread.

Common Ground-hopper Tetrix undulata 1 specimen recorded at Viru Bog. Woodland Grasshopper Omocestus rufipes Common among sandy heath areas.

Mottled Grasshopper Myrmeleotettix maculatus Common among sandy heath areas at Saaremaa. Lesser Field Grasshopper Widespread in the meadow sites visited. Chorthippus mollis

Field Grasshopper Chorthippus brunneus Common & widespread.

Heath Grasshopper Chorthippus vagans Recorded on Tagamoisa Peninsula. Common Green Grasshopper Omocestus viridulus Common & widespread in meadow sites.

Small Gold Grasshopper Chrysochraon brachypterus 1 female recorded in marshy meadows at Matsalu.

Large Gold Grasshopper Chrysochraon dispar 1 female recorded in the damp ditches near

Matsalu.

#### **Systematic List Number 8 Dragonflies and Damselflies**

The taxonomy and systematic order follows Askew 1998.

Beautiful Demoiselle Calopteryx virgo Widespread **Banded Demoiselle** Calopteryx splendens Just one seen at Varangu Spring

**Emerald Damselfly** Lestes sponsa Scattered

Scarce Emerald Damselfly Lestes dryas Only seen at Endla White-legged Damselfly Platycnemis pennipes Only seen at Matsalu

Northern Damselfly Coenagrion hastulatum Matsalu

Coenagrion johanssoni Though this species isn't recorded by Askew

> for Estonia I am sure it was present at Endla which is perfect habitat for the species

Widespread Azure Damselfly Coenagrion puella Kohala Variable Damselfly Coenagrion pulchellum

Common Blue Damselfly Enallagma cyathigerum Locally abundant Scarce Blue-tailed Damselfly Ischnura pumilio Noted at Vidumae Ischnura elegans Blue-tailed Damselfly Vilsandi Island

Aeshna viridis Scattered Aeshna caerulea Oandu in Lahemaa Azure Hawker Brown Hawker Aeshna grandis Widespread A female at Endla The Emperor Anax imperator

Downy Emerald Cordulia aenea Scattered

**Broad-bodied Chaser** Libellula depressa 1 at Varangu Spring

Black-lined Skimmer Orthetrum cancellatum Widespread

Widespread and common Yellow-winged Darter Sypetrum flaveolum

Leucorrhinia albifrons Scattered White-faced Darter Leucorrhinia dubia Scattered

Leucorrhinia pectoralis Oandu in Lahemaa