Estonia

Orchids, Butterflies & Bogs

A Greentours Trip Report

6th – 15th July 2005

Led by Ian Green

Day 1 July 6th Arrival

The flight from Gatwick took three hours and on arrival we soon had our baggage and were on our way. It was about one o'clock when we pulled up at the Kohala Manor though in truth it had barely got dark!

Day 2 July 7th Kohala Manor and Letipea

A leisurely breakfast was enjoyed this morning. By ten o'clock we were ready to explore the very promising looking surroundings. Icterine Warblers and Spotted Flycatcher were in a tree just outside the back door and Chiffchaffs called loudly as we walked down past the stable to the river. Immediately apparent was how lush the growth was everywhere with meadows and verges alike waist deep in grasses and tall herbs. Thistles and umbellifers were frequent and these attracted butterflies. Ringlets were really very abundant and it wasn't long before we saw our first Skippers, This time Large and Essex. Willows and Bird Cherry mixed with the ubiquitous Grey Alder Alnus incana ad we walked along a track by the slow moving Kunda River. A Kingfisher flew downstream. The as the landscape opened out into a series of meadows we heard the unmistakable rasping calls of Corncrake. At least three were calling even at eleven o'clock in the morning. A Lesser Spotted Eagle appeared for a while too. Once the meadows had become a little less rank we started to find some rather beautiful plants led by the shocking purple and yellow *Melampyrum nemorosum*. This stunning plant appeared in small groups then in larger groups and later was dominant in places alongside the track. Hardly less nice was the abundant Campanula patula as well as Ragged Robin and Meadow Cranesbill. *Linum catharticum*, *Galium album* and two sedges, Carex panicea and Carex flava appeared. The butterflies were now really livening up not least the blues. Here it was Amanda's Blue with plentiful males and females. There was also Lesser Marbled Fritillary and Chestnut Heath. Our first River Warbler reeled in the background and Whinchats occupied field edges. Margaret who'd moved a little further on found a stunning male Purple-edged Copper.

Our last area of the morning was by some woodland edge where the mix of plants was quite excellent. Under the trees we found flowering Round-leaved Wintergreen and Toothed Wintergreen was about to bloom. Herb Paris is always a fine thing to see and there was abundant Lily-of-the-Valley, now going over. Chickweed Wintergreen and May Lily were over too but Birdsnest Orchid was still in good nick. In more open ground the colourful meadow flora continued and here was perhaps the greatest density of butterflies yet with Meadow Brown and Heath Fritillary joining the rest.

Then it was back to the Kohala's delightful grounds for a picnic lunch with table and chairs above the small lake. Spotted and Pied Flycatchers sallied forth from one of the huge oaks that leant this way and that over the lawns and lake. Golden Orioles called from the far end of the pond.

At two we set off for the north coast, a short ten km journey away. However it wasn't long before a flowery meadow drew us to a stop. It was the bellflowers that did it. As well as occasional Peachleaved, Nettle-leaved and Spreading Bellflowers there was also a magnificent display of Clustered Bellflower. Buzzard and Hooded Crow flew over as we enjoyed campions and catchflies and heaths and blues. Then it was on to the Letipea headland. On one side was the Baltic Sea and on it was quite a raft of Goldeneye as well as terns, gulls, Red-breasted Merganser, Cormorants and Mute Swans. By the shore we soon encountered the lovely Sea Pea. There was plenty else along the shore too with maritime specialities like Honkenyia peploides, Atriplex littoralis and Sea Rocket joined by more freshwater loving Celery-leaved Buttercup and Gypsywort giving an indication of how low in salt the waters of the Baltic are. Small Blues had a colony right by the parking spot and along the shore numerous Black-tailed Skimmers sunned themselves on the sand. Inland of the minibus was a forest with some great plants. Just metres from the vehicle we found the first of many Malaxis monophyllos, the One-leaved Bog Orchid, a scarce plant in Estonia. Some of these were impressive specimens with flower spikes eight inches high and with numerous tiny flowers. Dactylorhiza maculata was common as was Twayblade and there was also a goodly amount of Creeping Lady's Tresses in bud. Wintergreens here included the gorgeous One-flowered and unusual Pyrola chlorantha.

Then it was time to return to Kohala and after a break, our dinner. Tonight's menu started with Lembit's Surprise, a rather delicious Potato Salad, and was followed by Wrangler's Delight, a fine pork chop with Dijon mustard sauce, and finished by Margaretha's Love, a sweet of pears and custard. All washed down well with local wine or beer!

Day 3 July 8th Viru Bog and Pohja Körvemaa-Maastiku-Kaitseala

There was some rumour about rain but a quick glance outside by those who turned up at around eight scotched any such ideas and the rest of the day remained sunny and was increasingly warm – in shot, a perfect summer's day. We headed west out of Kohala taking about an hour to reach the carpark by Viru Bog in Lahemaa National Park.

A trail took us through some beautiful Scots Pine woodland with scattered birches and fir. The understorey was a mix of Bilberry, mosses and lichens with little else to interest us other than the odd sedge or woodrush. However to one particular species of butterfly it was clearly captivating for Cranberry Blues were really quite common. This is such a pretty species with deep blue uppers and

finely marked undersides with a single large orange spot. Chaffinches and Chiffchaffs were common and it wasn't long before we encountered our first Crested Tit a species we seemed to hear if not see for much of the rest of the day. Dragonflies were soon in evidence as we found our first hawkers flying up and down the rides. The brown-hued wings hinted at Brown Hawker but the amount of blue and green colouration suggested otherwise so a quick glance at the book revealed these to be *Aeshna viridis*. A smaller dragonfly perched allowing us great views in the 'scope. Our first Black Darter was a female sat upon a pine but we were hardly out of sight of one or other of these all the rest of the morning.

A boardwalk took us out onto the bog itself. This proved a beautiful place with bags of 'primaeval habitat' points and a beauty that is rare in a 'flat' landscape. Dwarfed Scots Pines (apparently over two hundred years old) dotted the bog, the cover thicker or thinner here and there, and in places there was open water and in between all was covered in a wonderful bogland flora of sphagnums and Ericaceae. The large deep peaty pools of water with islands of sedge and Rannoch Rush and surrounded by red mats of sphagnum and sundews and backed by pines and a blue sky had us searching for the best angle to get that ultimate boreal bog atmospheric landscape shot! Ten species of sphagnum were listed on one of the information boards. Two or three red species tended to cover the open muddy ground and it was amongst these that we encountered magnificent displays of sundews with *Drosera rotundifolia* abundant throughout and in areas there were large colonies of the large and beautiful upright leaved *Drosera anglica*. Eventually Ian and Ian found some *Drosera* intermedia though everyone had started back for lunch by then! Ian B found another special carnivorous plant in the form of the diminutive *Utricularia minor*. Dwarf Birch was found amongst the Labrador Tea and we searched the Bog Rosemary for some in flower but sadly it was all just going into fruit. Bog Whortleberry and Small Cranberry were very common with just a bit of Cranberry found too. The lovely Cloudberry was in both fruit and flower. White Beaked Sedge and Deer Grass were two common 'sedges' and there were several true sedges in the form of the brown hanging female flowers of Carex limosa, elegant Carex canescens and others including Carex nigra, Carex echinata and Carex rhyncophysa.

Birdlife was largely non-existent though a warm sunny midday was never the best time for these! We saw Raven and a Sparrowhawk, the latter being chased by some irate Fieldfares. A group of baby Goldeneye kept us entertained as we watched them from a beautifully constructed tower hide allowing us to see them dive down into the depths of the peaty water before bobbing up to the surface like corks.

Odonata was another matter. There really were lots. Darter types predominated. Black was very common and we saw the brightly coloured white-faced darter type *Leucorrhinia rubicunda*. Much commoner though was *Leucorrhinia albifrons* one of which met a sticky end in a sundew plant. There were also larger dragonflies. We saw the impressive *Aeshna subarctica* patrolling one pool edge, one holding itself stationary in mid air allowing us good binocular views of it. Damselflies were predominantly Common Blue Damselfly though we did see *Lestes sponsa* and a single rather out-of-place looking Beautiful Demoiselle!

Out amongst all the cranberries we found many blues but all out here turned out to be Silver-studded Blues not the Cranberry! A Green Hairstreak and a Heath Fritillary were seen as well as several Moorland Clouded Yellows.

Our picnic was a pleasant affair on the benches back in the carpark after which we moved a mile to some dry forest. Several fine tall Lesser Butterfly Orchids grew here amongst a carpet of Bearberry and Cowberry. Green-flowered Wintergreen was a nice find and along the verge were some exceptionally large Moonwort ferns. Most impressive here though were several trees exhibiting plenty of bear scratches, the deep incisions made by each claw were quite worrying!

A mile or two further on we stopped by a bit of old fallow land near Kemba Whinchats, Lesser Whitethroat and a male Scarlet Rosefinch all perched on the same bare alder twigs. In the field were some nice flowers such as Hoary Cinquefoil, *Galeopsis speciosa* and Maiden Pink, and butterflies included Large and Essex Skippers. We spent the latter part of the afternoon driving south a few miles into Pohja Körvemaa-Maastiku-Kaitseala otherwise known by us as PKMK. We had little time here and other than a nice drive through a forest and a brief look at a lake from a campground all we did was explore a damp area where a little stream crossed the road. There was a good display of Round-leaved Wintergreen by the track and off the road was Marsh Cinquefoil in flower and nice ferns in the shape of Lady Fern and both *Dryopteris carthusiana* and *Dryopteris expansa*. A twenty by twenty metre mat of Stagshorn Clubmoss was well worth seeing too! Then it was back to the Kohala where some elected to relax pre-dinner and others drove out to the butterfly watering hole!

Here there were perhaps forty-five Amanda's Blues mud-puddling and two superb Large Coppers in a stand of Sedge. The latter were possibly eclipsed by ten Lesser Marbled Fritillaries on a clump of *Veronica austriaca teucrium*. Corncrakes called nearby and Redwings flew off and so too, eventually, did some really young chicks which we nearly stood on! Whinchats, Tree Pipits and Scarlet Rosefinches were also seen.

Day 4 July 9th Oandu and the Beaver Trail

The weather had that settled 'its going to be a warm one' look about it as we enjoyed a hearty breakfast at the Kohala. The sun shone brightly on the pink building as we left, this time driving north up to the coast and thence eastwards through the backroads to Lahemaa National Park. It was a pleasant drive through quiet roads and lovely often forested scenery. Some of the little coastal hamlets looked great places to be and certainly some of the homes looked they might cost a penny or two!

We stopped in the carpark at Oandu where to my surprise there was no-one else even on a fine Saturday morning in July. Two dog walkers (illegal along the trail though) arrived and walked off and that was all the people we saw all morning until we arrived back at the carpark warm and hungry at one-thirty where a young brother and sister were playing cards and a small party arrived and set off through the forest. In other words we had the entire place to ourselves all morning!

And what a fabulous area of forest it is. The first part of the trail is through, if you'll pardon the phrase, 'bog-standard' cropped Scots Pine with an 'abbreviated' understorey of lichens, melampyrum and vaccinium. Ian B spotted a superb sub-adult White-tailed Eagle soaring overhead with a Honey Buzzard for a thermal companion. Then the path dropped steeply (11 metres the board told us) as we had reached the edge of the old Ancyclus Sea. Here the ice-sheets had tarried awhile and so the moraine and coastal erosion had formed this 'old coastline'. Now we were in

wonderful 'old-growth' forest with a mix of firs, aspens and alders and with a few pines too. The understorey became damper and mossier and was rich in ferns – Dryopteris dilitata and expansa were noted and Lady Fern was common. Almost as abundant was Oak Fern and there was even a little Beech Fern. Amongst the many mosses (Polytrichum commune, Hylocomium splendens, Dicranum scoparium, Dicranum polysetum, Pleurozeum schreberi and Ptilium crista castrensis) Ian B spotted the tiny *Listera cordata* or Lesser Twayblade along with plenty of *Goodyera repens*. Best though was the abundant Twinflower *Linnaea borealis* that was everywhere – the stump that was covered in it gained some serious admiration. Birdlife was still very noticeable in these early stages of the walk and we noted Crested Tit at regular intervals and plenty of Chaffinches as well as Siskins, Wood and Greenish Warblers and a Spotted Flycatcher. The forest continued to be stunning all the way round with plenty of dead wood in the shape of large fallen trees rotting away or covered in Twinflower-adorned mosses. Springs seeped from the bases of the old coastlines down which we 'stepped' and streams meandered fernily through the forest floor. Woodpeckers were heard rarely but one stayed put long enough for Ian A to have good views of a Three-toed Woodpecker. Of course seeing mammals was never likely but we had started with a vole running across the road by the carpark and there were numerous signs as we went round. Moose came close to being seen as one was heard by both Ians moving off through the trees and we found the fern it had been munching on and saw the footprints in the needley floor - a substrate that doesn't hold footprints easily for long! Perhaps even closer had been a Pine Martin that had left a fresh scat on the boardwalk and then had peed on it! Lynx and Bear scratch marks were pointed out by wellplaced boards but of course they were not recent!

Wintergreens had been on the agenda here last year and though we failed to find all the species seen the previous year we still enjoyed *Pyrola minor*, *Orthilia secunda* and the lovely One-flowered Wintergreen. *Crepis paludosa* added splashes of yellow and by mossy streams we found Alternateleaved Golden Saxifrage. *Lysimachia thrysifolia*, Bog Arum and *Dactylorhizas fuchsii* and *maculata* were all seen.

Then it was back to the carpark for an excellent picnic lunch before driving the mile or so to the Beaver Trail. Here what may have been *Pyrola norvegicus* had just finished flowering and down in the river we found Water Plantain, *Oenanthe aquatilis*, *Veronica catenata* and Sparganium. The Beaver's of course weren't in sight but there was no mistaking their presence. There were several impressive dams and also lots of cut and partially cut trees, some of startling girth. There were also fresh footprints in muddy riversides and in these we also discerned Otter, Racoon Dog, Mink and a barefoot child! By the first dam we encountered the beautiful Brilliant Emerald an iridescent green dragonfly and all along the river we saw the shimmering Beautiful Demoiselles enjoying the warm sunny afternoon.

We moved briefly to the coast where the village was enjoying a 'fête' and was so crowded that we decided to try the visitor's centre at Palmse to see what they had. The girl behind the counter had only been working there two days and did well to cope with the demands of the strange English group buying her out of most of her stock so quickly. An ice-cream later and we were on our way back to the Kohala. Pre-dinner saw Ians both finding populations of Greater Spearwort along the river along with Greater Water Parsnip. There was also a colony of about a dozen Large Coppers showing off their golden-orange hues on sedge beds in the horse field and whilst trying to photograph them Ian A flushed a Corncrake!

The evening meal of home-made seljanka soup, roast lamb in a red wine sauce and a lovely chocolate 'sachertorte' with orange sauce, was just superb! Beers and coffees on the terrace overlooking the treed grounds made a fine end to the day.

Day 5 July 10th Endla Bog and Varangu Springs

Today we headed south to sample the best the southern end of Viru Country had to offer us. It took us exactly an hour to reach the nature reserve headquarters at Tooma on the edge of Endla, an impressively large reserve stretching more than ten kilometres to our west. We set off across the dry sandy soil of the horse farm and dropped down into a lush field full of sedges – ovalis, muricata and hirta in the main – and then entered some woodland. Pyrolas minor and rotundifolia flowered along the track through pine and spruce woodland. This however soon came to an end and we found ourselves looking out over an extensive bog. This one had many stunted pines emerging from the sphagnum but the overall impression was of much more open-ness than at Viru Bog, and it was appreciably larger too. In fact it is the smallest of five large bogs in the reserve but still measures more than a kilometre in diameter. The sphagnum was once again home to considerable quantities of sundews, again anglica and rotundifolia. Bog Whortleberry and Chamaedaphne calyculata added variety to the many ericaceous plants occupying the drier positions. White Beaked Sedge, Rannoch Rush and Carex limosa flowered in the wettest spots. There was an abundance of dragonflies and damselflies. Over the next three hours we recorded an incredible variety of species - more than a dozen in all. Most obvious were several large hawkers. Europe's largest, Aeshna serrata, whose females look quite like an 'Emperor' were egg laying or patrolling the dark peaty ponds. Aeshna subarctica was another large blue species flying here and smaller was Hairy Dragonfly. Brown Hawkers and Aeshna viridis made the 'hawker' tally an impressive five. The Brilliant Emerald was again on show and a single Four-spotted Chaser had taken up position on one of the ponds. White-faced Darters (dubia) were very common around these pools and again one pool had Leucorrhinia caudalis. Yellow-winged Darter was enjoying life by the small river at the far end of the bog. Damselflies were represented by lots of Variable and lots of Irish Damselflies as well as the odd Beautiful Demoiselle and a few Scarce Emerald Damselflies. Back by the picnic lake there were even more – here Downy Emerald flew back and forth as we admired Norfolk and Variable Damselflies and just a single Red-eyed Damselfly perched on a Yellow Water Lily leaf.

In contrast birds and mammals were thin on the ground. Ravens called occasionally and there was a single Goldeneye on one of the pools, otherwise the field was left to Willow and Marsh Tits on the bog fringes. Moose 'beds' were seen but of course no sign of the animals themselves, and signs were also observed of Wolves – twice dung, perched high on a plant each time, was found.

It was however, a very beautiful place and we all enjoyed the atmosphere of the bog and also the stunning views all around from the top of the central watch tower. Lunch was pleasant too back at the visitors centre where maps, leaflets and even a book or two were found.

In the afternoon we drove about thirty kilometres back north to the springs at Varangu. We walked down past a beautiful old wooden barn and thence through some fine old trees to the first area of water. We took the walkway through some damp woodland, noting the orchid *Malaxis monophyllos* and wintergreens *Pyrola rotundifolia* and *Moneses uniflora* as we went. Goldcrests and Crested Tits passed by in tall spruces and pines. The forest understorey was rich in wintergreens with

rotundifolia and Orthilia being abundant. The leaves and fruiting heads of Lady's Slipper orchid were common and must have been a superb sight six weeks previously. We found the deep clear water – almost blue – of one of the springs. A large hawker and an emerald dragonfly flew back and forth over it. Common Butterwort flowered in sphagnum by its side along with Early Marsh Orchid, Marsh Lousewort, and several fine sedges – Carexes lepidocarpa, rostrata, panicea and in the water itself the aptly named aqualitis. Moving back the other way we found a Pied Flycatcher feeding its spotty baby and under some shade the largely finished Birdsnest Orchids. Then it was time to head back north for our last night at the Kohala – today had been warm and sunny and by mid-afternoon was decidedly hot, so a cold beer by the Kohala's shady lake was very appealing.

Day 6 July 11th To Matsalu

Another fine sunny morning ... We made our farewells to Mika, Karin and family (and George the mostly labrador) and the Kohala Manor and drove westwards passing Tallinn as we turned southwestwards towards Matsalu. A Honey Buzzard was seen early on the journey and Kestrel later.

We were within thirty kilometres of Matsalu when we made our first 'wildlife' stop. By the roadside was a little river with an old bridge over it. In the water grew plentiful Greater Spearwort and Greater Water Parsnip, both British rarities. Common Blue Damselfly was joined by Beautiful Demoiselle and Large Red Damselfly whilst Four-spotted Chaser, Black-tailed Skimmer and Downy Emerald represented the larger odonata. Then it was on to park HQ at Matsalu where we enjoyed our picnic under a shadey tree – temperatures were now getting hot! We paid the museum and information centre a visit and came away with the usual goodies. Common Redstart, Fieldfares and Willow Tits were in the grounds. A channel contained a good variety of water plants including Flowering Rush, more Greater Water Parsnip, Water Plantain, Water Crowfoot, Sparganium and various sedges. Wet stones here attracted several skippers and a Purple Emperor and over the bridge another brighter Purple Emperor was found. Barred Warbler sang from the trees as we looked at a bank covered in *Melampyrum nemorosum* and the restharrow *Ononis arvensis*.

Then we moved on to Suitsu and its tower. Purple Emperors were here this year but only one or two though we did find a couple of Marbled Fritillaries too. Brown Hawkers were everywhere and both Downy and Brilliant Emeralds were seen. The view from the top of tower was impressive but there was little see. As we drove away another Marsh Harrier appeared and a Honey Buzzard hung over the HQ. The drive from here to Kloostri proved very fine for butterflies (the roadside *Dactylorhizas* and *Epipactis* were good too!). We saw at least seven Purple Emperors including a couple of very 'easy to photograph' specimens. A surprise was a Lesser Purple Emperor, easily photographable – it was in perfect condition. It would appear that it is a rare species in Estonia. Also along the roadside were plenty of Green-veined Whites, these gathering in sizeable groups.

Kloostri Tower may not have provided us with much of a wildlife spectacle but the people were interesting! A man stood by his daughters as they swam in the river, seemingly ready to jump in after them at the first sign of trouble. A group of youngsters travelled slowly upstream like a little pack of otters and over the other side the unmistakable bearded head of a researcher/professor was followed by two attentive female students intent on learning the art of measuring whatever it was he was measuring with his muddy stick and electronic device! Back to the wildlife – there was a nice

Moose trail but no sign of the animal itself! Marsh Harrier again and Linnets, a Yellow Wagtail calling, and along the edge of the alder wood what must have been *Iris sibirica* in seed and what certainly was *Veronica longifolia* in good flower. Then it was off to the Altmoisa on the northern side of the bay.

Day 7 July 12th Puhtu Mets, Laelatu Puisniit and Saaremaa

At breakfast Ian B told us of the eight species of orchid that he'd found in the field across the road from the hotel – a mix including Marsh Helleborine and Musk Orchid. Back in a less attractive looking field by the hotel we saw Cornflower (Estonia's National Flower), Larkspur and Corncockle.

We drove south – it took forty five minutes to drive from one end of Matsalu to the other – it really is quite a large nature reserve! In Virtsu we met up with Peeter Virsik, the warden at several reserves centred on the former island of Puhtu. Peeter is a lively engaging character exceptionally keen to show off all his local wildlife and as the flora is so rich it was all we could do to catch the ferry one hour after the one we'd intended (even then we had to wait for the next one as the Saaremaa bound traffic was so busy!). Back to Puhtu. Peeter told us a little of the history of this beautiful place, how the island had risen from the Baltic some two thousand years ago and how two hundred years ago a Germanic family had come here to live and had made an English/Dutch style park of the place. Today the island has joined the mainland, a consequence of the rapid glacialrebound in the area with the land rising 3mm a year. And the park has gone wild so now it is difficult to tell what is wild and what was planted as far as the big trees go. And big trees there were - some of the oaks and elms were magnificent and one or two of the pines were impressive too. One of the oaks was at least seven hundred years old. We started outside the woodland in fine sedge and herb rich meadows between reedbed and wood. It was immediately apparent that richness in this area had much to do with the juxtaposition of habitats as woodland and seashore species mixed freely in grassy meadows! Peeter showed us the seeding heads of the very rare Dactylorhiza ruthei a species known with certainty only from this spot in Estonia and a couple of recently re-discovered populations in Germany. Inula salicina was in good flower with Marsh Pea and Bittern boomed in the background. Field and Crow Garlic were in flower and inside the woodland we found Ramsons, a species very rare in Estonia, but common here. Other forest species of note were Mezereon, Woodruff, Martagon Lily (naturalised) and sedges Carex digitata and Carex vaginata. Pied Flycatchers, Nuthatches, Treecreepers and Chiffchaffs were all seen and in the mammal line we spotted a little Yellow-necked Wood Mouse and Peeter showed us the midden of a Racoon Dog. one that had been used for twenty-five years, and was indeed a big pile of dung! White Admiral sat on the track on the way back.

Then it was to Laelatu, a stunning wooded meadow just a few kilometres away. This place is celebrated amongst conservationists in Estonia as having the highest species diversity per square metre in the country (and certainly the region and maybe northern Europe?). 75 to be exact. It was a beautiful sight. Oak, Ash, Maple and in particular Hazel were scattered about a meadow that could hardly be described as grassy so many were the sedges and flowers. Orchids there were though they seemed few but in one hour we did find Fragrant Orchid, Red Helleborine, Burnt-tip Orchid, Common Spotted Orchid, *Dactylorhiza incarnata* and *Epipactis helleborine* as well as the ubiquitous Twayblade. Lady's Slipper had clearly put on a good show a few weeks previously!

Saw-wort, Yellow Rattle, Spotted Catsear, Rough Hawkbit, Field Scabious, both Burnet and Greater Burnet Saxifrage, Round-leaved Wintergreen, rare *Viola elatior* and *Viola pumila* were amongst many flowers seen. Sedges were also varied with *Carexes hostiana*, *flacca*, *pulicaris*, *davalliana*, *tomentosa*, *montana* and *pallescens*. Sadly we had to leave all this finery and be off to the ferry though Peeter clearly wanted us to stay!

The ferry journey passed uneventfully (great ice-creams!) and then we were off across Saaremaa's rural landscapes. A brief roadside stop short of Kuressaare proved very good for butterflies with singletons each of Purple Emperor, Map Butterfly and White Admiral joining several Dark Green Fritillaries and Black-veined Whites. Green-veined Whites sat sipping salts in some numbers.

Nearer to Loona Mois we stopped by a roadside ditch. Black-tailed Skimmers were abundant as they had been all day. Downy Emeralds, Common Blue Damselflies and Beautiful Damselflies patrolled the water course. Peering over the bridge we saw a commotion and the watched a Grass Snake swim elegantly off up the water course! Common Eyebright and Yellow Rattle flowered with Marsh Helleborines, Marsh Cinquefoil and the usual rich ditch flora!

Then it was to the Loona Mois and a relaxing evening and dinner in this excellent guesthouse.

Day 8 July 13th Vidumae and the Tagamõisa Peninsula

Another sunny and very warm morning! We were off about ten past nine and the drive through the backwoods to the Vidumae took just fifteen minutes or so. We parked up by the visitor's centre there and walked hastily through the lovely meadow and into the woodland trying not to look at anything until inside the wood! Inside the shade of the wood it was cool but mosquito-y so we didn't hang around at any spot for long, pausing briefly to enjoy such varied delights as a largeleaved Viola in fruit and Ranunculus cassubicus in the same state, both Lathyrus niger and Vicia sylvatica in lovely flower, and Pyrola media just going over. We heard Nutcrackers close by, not for the last time during the day, but couldn't see them. The woodland opened out into a fen area though it was so dry it took us some time to find water! This held a very small population of 'marsh orchids'. There were just a few Dactylorhiza curvifolia (russowi) and at least two Dactylorhiza ruthei, though local orchid experts say these are hybrids between the latter and former species. Though they looked perfect for *ruthei* the later flowering time suggests that perhaps the hybrid theory is correct? Carex buxbaumi was new and abundant here with Carexes hostiana and panicea. Woodland Browns flew around the edge of the clearing, one posing long enough for John to get a photo. Then it was with all haste back to the meadow. Florally it was a fine place though we concentrated on the butterflies. There were several Marbled Fritillaries and also at least three Silverwashed Fritillaries. A superb Scarce Copper was our first of the trip whilst Chestnut Heaths were the first we had seen in several days. Ian B found a Purple Emperor by the excellent visitor's centre and this turned out to be a bit of a theme for the next half an hour as we drove slowly along the forest track pausing... Purple Emperor ... Lesser Purple Emperor ... Purple Emperor ... two Lessers and a Purple ... White Admiral – and there were plenty of fritillaries too.

Our next stop was by a stunning fen surrounded by trees. Not only did it look like it ought to have a Moose sitting in it (there were plenty of tracks) it had a very fine selection of plants. Immediately by the roadside there were Marsh Helleborines and Fly Orchids whilst by the wetter areas were

Dactylorhizas incarnata and ochroleuca. The latter appears to be new to Estonia! Main interest here though centred on the Fen Orchids which were in fine flower – there were perhaps fifty in total though undoubtedly more would be found if we searched the whole fen. A single Dark Red Helleborine poked out from below a sphagnum-bound pine. A nice surprise here was the abundance of bladderworts. These insectivorous plants are often shy flowerers but this year they were at it with a vengeance and though we saw few *Utricularia vulgaris* – the large rich yellow one – there was an abundance of the smaller paler *Utricularia ochroleuca*. Nutcrackers again called from out of sight!

For lunch we moved up on to the west side of the Tagamõisa Peninsula. A roadside with abundant Dark Red Helleborines provided the excuse to stop between meadow and wood and we tucked in to the Loona's fine picnic. In the woods we found Birdsnest Orchids going over.

Just up the road we stopped by what one would call a dune slack if it were in dunes but here it was between alvar or flat dry limestone pavement. Nevertheless its characteristics were like a slack, particularly the seasonal inundation bit. There was a wealth of unusual plants here with some of the best being *Scutellaria hastifolia*, *Teucrium scordium*, *Veronicas longifolia* (pink and blue forms) and *scutellata*, *Ranunculus flammula* and *Inula salicina*. Sedges, rushes and grasses as usual provided a plethora of unusual species. Fritillaries were very common here with the most being Dark Green though a single Heath appeared too and by the bus Mazarine Blue and Chestnut Heath. Then it was on to a little stream where the hoped for Umbellate Wintergreen *Chimaphila umbellata* was indeed there (along with *Pyrolas rotundifolia* and *media* and *Orthilia secunda* too) but was only in bud. In the stream was a huge Brown Trout, it seemed almost too large to stay in the water but managed eventually to disappear off downstream.

Most of the group went for a potter along the beach or a paddle whilst the rest of us looked at the dune and strand-line flora. In the dunes *Pulsatilla pratensis* was in abundant fruit and must have been a tremendous sight in April. A pretty good sight now was the mats of pink Thyme, blue Harebells and the lovely glaucous tints of Sea Holly. Assorted Chenopods and *Caryophyllaceae* preferred the strand-line. Then it was back towards base stopping by a lake where a magnificent display of Marsh Helleborine was enjoyed. Also here were Pyramidal Orchids, Red Rattle and some very clear of footprints of Moose and what may have been Lynx in the lakeside mud.

Ian B and I popped out for some evening recce-ing and found a large colony of Musk Orchids as well as yet more sedges and seaside specialities.

Day 9 July 14th Vilsandi Island and the Tagamõisa Peninsula

Well, it had to happen, there was a cloud or two in the sky this morning! By breakfast these had hardly dented the blue sky and temperatures were already very warm. In short, a fine day to take a boat trip out on the Baltic!

At Papisaare we parked after enduring the Russian's cobbled road that leads out to their 'last bastion' against the West where they picked up any wannabee defectors who thought a boat trip across the Baltic might be preferable to Stalinist Russia. We had an altogether more relaxing ride across the flat waters especially when our boatman had to slow down because of the very shallow water lying between the newly formed islets that had risen out of the sea between Vilsandi and the

mainland in the past forty years. The shallowest bit rather bizarrely was where a truck plied a regular crossing on its taller than usual wheels – it was but a metre deep here.

In these shallows was an abundance of aquatic plantlife mostly *Potamogetons pectinatus* and pusillus and algae as well. Birlife was reasonably abundant too with Mute Swans, Black-headed Gulls, Common and Arctic Terns and a small colony of Barnacle Geese. Once we had landed on the island it was a case of choose your preferred option whether it be taking a walk into the island's centre or along its coast or just pottering in the immediate vicinity of the landing which several of us did for the next three hours. Grey Herons and later Common Cranes were seen offshore and a pair of White-tailed Eagles soared overhead before dropping to the sandbank that was home to some of the taller grey leggy birds in the area. This of course put them all into a panic and the various large birds in the air at one time made for an impressive sight. Not long after a Caspian Tern flew inland and Little Terns came past. A little inland Red-backed Shrikes, Yellowhammers, Skylarks and a little group of Greenish Warblers were encountered. Butterflies were not prolific but did include Large and Essex Skippers, Chestnut Heaths in abundance, Pearl-bordered and Lesser Marbled Fritillaries and Ian B saw Large Blue. The plantlife started with a great show of the regional endemic Dactylorhiza baltica (or longifolia as it is now known) and continued with Early Marsh Orchids, Lesser Butterfly Orchids and an assortment of shore-based species such as Centauriums pulchellum and littorale, Odontities littorale, Inula salicina and several chenopods. Blysmus rufus and Schoenus nigricans were two of many Cyperaceae which also included the sedges Carex distans, extensa and serotina. The 'toad rush' Juncus ranarius and two sea spurreys were found and in shallow water were stoneworts, Myriophyllum spicatum, Horned Pondweed and Ruppia cirrhosa. It was a veritable soup out there.

Then it was back to the mainland where we headed back to the Loona Mois and took our picnic there before meeting up with Tina the orchid expert and Merica, a translator, who took us off on a grand tour of the orchid sites of Tagamõisa for the afternoon. It was a hectic afternoon with little driving time – we covered perhaps thirty kilometres in total – but with about six sites visited we really had a lot of time in the field. The first spot was along a very grassy ride into thick woodland. The flora was exceptionally diverse with many lovely flowers including Herb Paris, Dark Red Helleborine and the water crowfoot Ranunculus aquatilis. Tracks of boar were everywhere and they'd been having a fine time digging up orchids, something they are able to do with trowel like precision! Moose tracks were in the boggy area by the lake and we found Moose dung. Right by this was the main object of our visit – two Dactylorhiza curvifolia (russowii) and nearby Musk Orchid too. The damselfly Ischnura elegans was common along with Four-spotted Chaser. Next up was Tina's farm which was a few hundred metres away. She took us on a whirlwind tour of some mixed fen and meadows that held thousands of orchids - Fragrant Orchids, Burnt-tip Orchids and the marsh orchid Dactylorhiza cruenta amongst others. Tina had a restored windmill which she showed us – a pretty picture amongst a dry meadow of Kidney Vetch. Then it was up north to the coast where we stopped by a steeply shelving pebbly beach for a spot of relaxation. Or examining aquatic plants. These included Ruppias, Zannechellias and Potamogetons filiformis and pusillus. A little further on a pool behind the beach held a number of orchids including several Fen Orchids. On the beach we looked closely at a plant of Senecio viscosus only for a Grass Snake to erupt from it and make its escape between my legs!

The next coastal stop was in a very rich area with *Dactylorhiza longifolia* (*baltica*) the main orchid reason for stopping. However it was the wealth of other unusual plants that kept us there another

hour! Marsh Pea was common amid a sea of rushes and sedges that included *Bulboschoenus maritimus* and *Juncus balticus*. There was plenty along the beach too with some nice plants of Sea Kale and Tall Rocket.

The last stop was past a 'being constructed' holiday village and into the woods. Tina took us on a marvellous walk through mossy woods and grassy meadows passing Nodding Wintergeeen, Red and Dark Red Helleborines, both in perfect flower, and to an area of old sand dunes covered in old growth forest. In damper areas amongst the spruce we saw Lesser Twayblades in abundant flower and a few Coralroot Orchids in seed as well as an unusual Flea Sedge like sedge and Broad Buckler Fern which is uncommon in Estonia. In all Tina had shown us twenty three species of orchid in the afternoon and we'd seen a great deal else in the process. Back at the Loona we sat outside with a beer before dinner and a Common Crane flew directly over our heads!

Day 10 July 15th To Tallinn

An earlier than usual start leaving at eight saw us heading back east to the mainland and thence to Tallinn. After all the blue sky it was quite a cloudy and humid morning but any rain never caught us up! We drove the backwoods way through Vidumae hoping to catch sight of a Moose or a Boar but nothing so the first stop was by the main road. Here we admired that fine lousewort *Pedicularis sceptrum-carolinum*, or Moor King. Now it was in bud and so the cream and purple flowers were not yet at their best and the plants were still less than half a metre too – but impressive nonetheless. *Carex buxbaumii* and *Carex davalliana* indicated we were in fine fen habitat. And so too did *Dactylorhiza curvifolia (russowi)* which was more abundant here that at any place we'd seen it. We continued on to the ferry making it with plenty of time to spare. The ferry crossing was a picture of efficiency and the lovely maxi icecreams were enjoyed by most of us! We drove eastwards out of Virtsu stopping almost immediately at a very orchid rich roadside marsh. Marsh Helleborines were here in their thousands and so too were Fragrant Orchids. Fly, Military and Musk Orchids were there too and we found our only German Asphodels of the trip and Carline Thistle.

The journey continued with a White Stork flying alongside us for a while – we drew in our speed and levelled with it at a gliding 50km an hour – a spectacular sight from just metres out the window. The journey then became a little sleepy until the shout of Moose suddenly woke everyone up! A mother Moose and her two babies (these were several months old) were moving off across a marsh full of tall vegetation – the youngsters were only visible by their ears most of the time though all three came into sight at one point. Even at a distance and near a noisy main road the female was still nervous of us once we were out of the vehicle and she kept a constant watch on us as she shepherded the youngster gently into the wooded area beyond.

Then it was to Tallinn and a brief visit to the Apollo Bookshop in town for flower books before a hastle free check-in and flight back to Gatwick.

Summary of Locations

Day 1	July 6 th	Tallinn to Kohala
Day 2	July 7 th	Kohala and Letipea
Day 3	July 8 th	Lahemaa – Viru Bog and Pohja Körvemaa-Maastiku-Kaitseala
Day 4	July 9 th	Lahemaa – Oandu, Beaver Trail and Palmse
Day 5	July 10 th	Endla Bog and Varangu Springs
Day 6	July 11 th	Kohala to Matsalu – Suitsu & Klootsi watchtowers & Altmoisa
Day 7	July 12 th	Puhtu Mets, Laelatu Puisniit and Saaremaa
Day 8	July 13 th	Saaremaa – Vidumae & the western Tagamõisa Peninsula
Day 9	July 14 th	Saaremaa - Vilsandi Island & the northern and eastern Tagamõisa
		Peninsula
Day 10	July 15 th	Vidumae/Virtsu & Riispere – then to Tallinn

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 2005 are in square brackets [eg.].

Pteridophyta

Lycopodiaceae

Lycopodium annotinum Interrupted Clubmoss Widespread in Lahemaa

Lycopodium clavatum Stagshorn Clubmoss Viru Bog. 2004 Scattered. 2005 Viru

[Huperzia selago Fir Clubmoss Scattered records]

Equisetaceae

Equisetum arvenseField HorsetailCommonEquisetum pratenseShade HorsetailCommon

Equisetum palustre Marsh Horsetail Widespread. 2005 Kohala only 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

Estonial

Equisetum variegatum 2004. Quite common on Saaremaa. 2005 ditto

Ophioglossaceae

Ophioglossum vulgatum Adder's-Tongue Fern 2004. Tagamõisa Peninsula on Saaremma. 2005

ditto and also Matsalu

Botrychium lunaria Moonwort 2004. Scattered – east and west. 2005 ditto

Hypolepidaceae

Pteridium aquilinum Bracken Widespread and common

Thelypteridaceae

Thelypteris palustris Marsh Fern 2004. Varangu. 2005 and Matsalu

Aythyriaceae

Aythyrium filix-femina Lady Fern Widespread and common

[Cystopteris fragilis Brittle Bladder Fern Scattered records. 2004 Kohala]

Matteucia struthiopteris Ostrich Fern Widespread.

Gymnocarpium dryopteris Oak Fern Scattered records. 2005 widespread

Aspidiaceae

Dryopteris filix-masMale FernWidespread.Dryopteris expansaNorthern Buckler FernScattered records

Dryopteris cristata Crested Buckler Fern 2004 several fine specimens in Pohja

Körvemaa-Maastiku-Kaitseala. 2005 onw

clump at Endla

Dryopteris carthusiana 2004. Pohja Körvemaa-Maastiku-Kaitseala.

2005 ditto

Dryopteris dilitata Broad Buckler Fern 2005 Tagamõisa Peninsula

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 WillowKohalaSalix fragilisCrack WillowKohala[Salix triandraAlmond Willow][Salix myrsinifoliaDark-leaved Willow]

Salix capreaGoat WillowWidespreadSalix cinereaGrey WillowScattered[Salix auritaEared Willow]

[Salix aurita Eared Willow Downy Willow

Salix viminalis Osier Beaver Trail

Salix repens Creeping Willow Scattered in boggy areas

Salix rosmarinifolia Endla

Salix alba White Willow south of Tallinn

Populus tremula Aspen Widespread and often co-dominant

Myricaceae

Myrica gale Bog Myrtle 2004. Tagamõisa Peninsula. 2005 Saaremaa

bogs generally

]

Betulaceae

Betula pendulaSilver BirchWidespread and often co-dominantBetula pubescensDowny BirchWidespread and very common.Betula nanaDwarf BirchLocal in bogs, e.g. Viru Bog.Alnus glutinosaAlderWidespread. 2005 only Varangu

Alnus incana Grey Alder Widespread.

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 lapathifoliaPale PersicariaKohalaPolygonum persicariaRedshankScattered

Fallopia convolvulus Black Bindweed 2004. Tagamõisa Peninsula. 2005 Kohala

Rumex crispusCurled DockCommon.Rumex acetosaCommon SorrelCommon.Rumex acetosellaSheep's SorrelScattered records.

Rumex hydrolapathum Water Dock Scattered
Rumex obtusifolius Broad-leaved Dock Widespread.

Chenopodiaceae

[Chenopodium albumFat HenScattered records.]Chenopodium chenopodioidesSaltmarsh Goosefoot2005 VilsandiChenopodium rubrumRedGoosefoot2005 Letipea[Chenopodium suecicumGreen GoosefootScattered records.]

[Chenopodium urbicum Upright Goosefoot 2004. Tagamõisa Peninsula]

Atriplex littoralis Grass-leaved Orache 2004. Tagamõisa Peninsula. 2005 all coasts

Atriplex prostrata Spear-leaved Orache Tagamõisa Peninsula. 2005 Letipea

Salicornia europeae Glasswort 2004. Tagamõisa Peninsula. 2005 also Matsalu

Salsola kali Prickly Saltwort 2004. Tagamõisa Peninsula. 2005 ditto

Suaeda maritima Annual Seablite 2005 Matsalu

Caryophyllaceae

Moehringia trinervumThree-veined Sandwort2004. Varangu. 2005 KohalaHonkenya peploidesSea SandwortCoastal. 2004. Tagamõisa Peninsula

Stellaria mediaCommon ChickweedWidespread.Stellaria gramineaLesser StitchwortCommon.

Stellaria holosteaGreater StitchwortScattered in wooded westStellaria palustreMarsh Stitchwort2004. Varangu. 2005 scatteredStellaria nemorumWood Stitchwort2004. Oandu. 2005 scattered

Holosteum umbellatum Umbellate Chickweed 2005 Puhtu?

Cerastium fontanum Common Mouse-ear 2004. Common on Saaremaa

Cerastium semidecandrum Little Mouse-ear 2005 Letipea

Myosoton aquaticum Water Chickweed 2004. Viru Bog. 2005 widespread

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

areas

[Hernaria glabra Smooth Rupturewort Tagamõisa Peninsula] Spergularia arvensis Corn Spurrey 2005 Endla reception

Spergularia marinaLesser Sea SpurreyVilsandi Island. 2004. Tagamõisa PeninsulaLychnis flos-cuculiRagged RobinNoted in Lahemaa. 2005 widespread

Lychnis viscaria Sticky Catchfly Scattered records. 2005 only along Beaver Trail

Silene nutansNottingham CatchflyScattered records.Silene vulgarisBladder CampionWidespread.Silene dioicaRed CampionScattered records.Silene latifoliaWhite CampionWidespread.

[Saponaria officinalis Soapwort Locally common along roads.]
Agrostemma gitahgo Corncockle 2005 weedy areas by Altmoisa

Dianthus deltoides Maiden Pink Widespread but local.

Aristolochiaceae

Asarum europaeum Asarabacca 2005 Endla reception area

Nymphaeaceae

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

Ranunculaceae

[Aconitum leucostonum 2004. In bud in Pohja Körvemaa-Maastiku-

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

in the south of Estonia!]

Consolida regalis Forking Larkspur 2005 in weedy areas by Altmoisa

Hepatica nobilis Common in leaf in woods. Hepatica

Pulsatilla pratensis 2005 in leaf Tagamõisa Peninsula

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

[Anemone trifoliata 2004. Kohalal

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

Trollius europaeus Globeflower 2005 in leaf Puhtu Mets

Caltha palustris Marsh Marigold A few records. Ranunculus acris Meadow Buttercup Widespread.

Ranunculus auricomus Goldilocks Scattered records. 2005 Kohala

Ranunculus repens Creeping Buttercup Common.

Ranunculus flammula Lesser Spearwort 2004. Tagamõisa Peninsula and Vilsandi. 2005

widespread

Ranunculus lingua **Greater Spearwort** 2004. Noted near Risti between Tallinn and

Virtsu and also at Matsalu. 2005 ditto plus

[Ranunculus ophioglossifolius Adder's-Tongue Spearwort 2004. Just the one plant seen near Matsalu] Ranunculus sceleratus Celery-leaved Buttercup 2004. Kohala and Saaremaa. 2005 Letipea

2005 in leaf Vidumae

Scattered records. 2004. Oandu. 2005 in leaf Ranunculus polyanthemos Multiflowered Buttercup Ranunculus nemorosus

2005 in leaf Puhtu Mets

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

the sea at Virtsu!]

Tagamõisa Peninsula. 2005 Matsalu Ranunculus baudotii Brackish Water Crowfoot

Common 'at sea' between Vilsandi and land Ranunculus aquatilis Water Crowfoot Loona Mois on Saaremaa. 2005 scattered Aquilegia vulgaris Common Columbine Thalictrum flavum Common Meadow-rue 2004. Scattered

Thalictrum simplex Small Meadow-rue 2004. Tagamõisa Peninsula. 2004 ditto &

Varangu

Papaveraceae

Ranunculus cassubicus

Chelidonium majus Greater Celandine Scattered records.

Papaver rhoeas Corn Poppy 2004. Between Tallinn and Virtsu. 2005

scattered

Papaver dubium Long-headed Poppy 2004. Vidumae. 2005 scattered

Berberidaceae

Berberis vulgaris Barberry 2005 Tagamõisa Peninsula

Fumariaceae

Fumaria officinalis Scattered records. Common Fumitory

Cruciferae

Crambe maritima Sea Kale 2004. Tagamõisa Peninsula. 2005 Matsalu

Charlock 2004. Varangu Sinapis arvensis

Coralroot Bittercress Cardamine bulbifera In seed in woods. 2005 Vidumae 2005 river by the Beaver Trail Cardamine amara Large Bittercress

Bunias orientalis Warty Cabbage 2005 widespread

Perennial Honesty Lunaria rediviva Very local in Lahemaa. 2005 Varangu

Common. 2005 Altmoisa Arabis hirsuta Hairy Rockcress

Widespread. Ball Mustard Neslia paniculata Capsella bursa-pastoris Shepherd's Purse Common.

Lepidium latifolium Dittander Scattered records, 2005 Vilsandi

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

Cakile maritima baltica 2004. Tagamõisa Peninsula

Sisymbrium altissimum 2005 Vilsandi 2005 Varangu Barbarea stricta [Barbarea vulgaris Common Wintercress 2004. Kohala]

Rorippa palustris 2005 scattered

Erysimum cheiranthoides Treacle-Mustard 2004. Kohala. 2005 widespread

Thlaspi arvense Field Pennycress Scattered records. Berteroa incana Scattered records. Hoary Alison

Droseraceae

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

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

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

Crassulaceae

[Sedum telephium Orpine Scattered records.] Biting Stonecrop Sedum acre Widespread White Stonecrop Scattered records. Sedum album

[Sedum anglicum English Stonecrop 2004. Saaremaa. This and the next record

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

2004. Varangu] [Sedum ewersii

Saxifragaceae

Chrysosplenium alternifolium Alternate-leaved Golden Saxifrage 2005 Oandu

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 chamaemorus Cloudberry Common in bogs.

Rubus saxatilis Stone Branble 2004. Scattered Rubus idaeus Raspberry 2004. Scattered

[Rubus nessensis 2004. Locally common in east] [Rosa rugosa In flower near the coast at Lahemaa.]

Widespread and common. Agrimonia eupatoria Agrimony Scattered records.] [Agrimonia procera Fragrant Agrimony Geum rivale Water Avens Scattered records.

Geum urbanum Herb Bennet Scattered records. [Geum macrophyllum 2004. Locally common in woods]

Potentilla palustris Marsh Cinquefoil Wet areas throughout.

Potentilla anserina Silverweed Widespread and very common.

Potentilla argentea Hoary Cinquefoil Widespread. 2005 Vilsandi Potentilla argentea demissa

[Potentilla norvegica Scattered records.] Norwegian Cinquefoil Potentilla erecta Tormentil Common.

Potentilla reptans Creeping Cinquefoil Widespread and common.

Scattered records.] [Potentilla impolita

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 aucuparia Rowan Scattered records.

Sorbus intermedia Swedish Whitebeam Scattered records. [Sorbus x hybrida 2004. Vidumael

Cotoneaster scandinavicus Local on Saaremaa. Hawthorn Crataegus monogyna Uncommon.

[Prunus avium Wild Cherry Scattered records.] Prunus padus Bird Cherry Scattered records.

Fabaceae

Astragalus glycophyllus Wild Liquorice Puhtu Mets [Lupinus polyphyllus Roadsides.]

[Oxytropis pilosa Saaremaa.] Tufted Vetch Vicia cracca Widespread. [Vicia tenuifolia Fine-leaved Vetch

Scattered records.] Vicia villosa 2005 grown as a crop near Kohala Fodder Vetch

[Vicia sativa Common Vetch Scattered records.]

Vicia sylvatica Wood Vetch Vidumae

2004. Near Vidumae Vicia hirsuta Hairy Tare Vicia tetrasperma Smooth Tare 2005 Kohala [Vicia cassubica Danzig Vetch Scattered records.] Lathyrus pratensis Meadow Vetchling Scattered records. Lathyrus sylvestris Narrow-leaved Everlasting Pea 2004. Near Vidumae

Lathyrus vernus Spring Vetch 2004. Pohja Körvemaa-Maastiku-Kaitseala Lathyrus maritimus Sea Pea Was subspecies of *japonicus*. 2004. Near

Oandu

Black Pea Lathyrus niger 2004. Tagamõisa Peninsula

2004. Tagamõisa Peninsula. 2005 also Matsalu Lathyrus palustris Marsh Pea

and Puhtu

Tetragonolobus maritimus 2004. Tagamõisa Peninsula where common Ononis arvensis

Local on roadsides

Melilotus albus White Melilot Widespread. Melilotus officinalis Ribbed Melilot Scattered records. Medicago lupulina Black Medick 2004. Scattered Medicago sativa Lucerne Scattered records. Medicago sativa ssp. falcataSickle MedickWidespread.Trifolium montanumMountain CloverLocal.

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 arvenseHaresfoot CloverScattered records.Trifolium alpestreAlpine CloverSaaremaa.

[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

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. 2005 scattered

throughout

Linaceae

Linum catharticum Purging Flax Scattered records.

Euphorbiaceae

Mercurialis perennis Dog's Mercury Lahemaa. 2005 Varangu

Euphorbia helioscopiaSun SpurgeKohala[Euphorbia peplusPetty Spurge2004. Kohala]

Euphorbia palustris Marsh Spurge 2004. Kohala. 2005 Vidumae

[Euphorbia esula Leafy Spurge 2004. Kohala]

Polygalaceae

Polygala amarella Dwarf Milkwort 2004. Varangu. 2005 Laelatu

Polygala vulgarisMilkwortScatteredPolygala comosaTufted Milkwort2005 ?Kohala

Aceraceae

Acer platanoides Norway Maple Widespread.

Balsaminaceae

Impatiens noli-tangereTouch-me-not BalsamLocally common.Impatiens parvifloraSmall BalsamLocally common.

Celastraceae

[Euonymus europaeus Spindle Scattered records.]

Rhamnaceae

Buckthorn Widespread. Rhamnus catharticus Alder Buckthorn Widespread. Frangula alnus

Tiliaceae

Tilia cordata Small-leaved Lime Widespread.

Thymelaeaceae

Daphne mezereum Mezereon Local, e.g. seen at Vidumae. 2005 Puhtu

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 Widespread 2005 Laelatu Hypericum hirsutum

Violaceae

Viola pumila Meadow Violet Tagamõisa Peninsula

Viola elatior 2005 Laelatu - in leaf Viola epipsila 2004. Scattered Scattered throughout n leaf

Viola uliginosa

[Viola tricolor Wild Pansy Local.] Viola arvensis Field Pansy 2004. Scattered

Lythraceae

Lythrum salicaria Purple Loosestrife Common and widespread.

Onagraceae

Circaea alpina Alpine Enchanter's Nightshade 2004. Oandu

Rosebay Willowherb Epilobium angustifolium Widespread and abundant. Great Willowherb Epilobium hirsutum Common.

[Epilobium parviflorum Hoary Willowherb 2004. Scattered]

Haloragaceae

Myriophyllum spicatum 2005 in the waters around Vilsandi

Hippuraceae

Hippuris vulgaris 2005 Scattered

Cornaceae

Cornus sanguinea Dogwood Widespread and common.

Araliaceae

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

Saaremaa. 2004. Kohala!]

Apiaceae

Hydrocotyle vulgaris Marsh Pennywort Tagamõisa Peninsula Sanicula europaea Sanicle Scattered in woods.

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

Eryngium maritimum Tagamõisa Peninsula Sea Holly Anthriscus sylvestris Cow Parsley Scattered records. Pimpinella major Great Burnet Saxifrage Tagamõisa Peninsula

Pimpinella saxifraga Burnet Saxifrage 2004. Pohja Körvemaa-Maastiku-Kaitseala.

2005 Laelatu

Widespread and common. Aegopodium podagraria Ground Elder

Sium latifolium Greater Water Parsnip 2004. Near Risti between Tallinn and Virtsu.

2005 Kohala, Varangu and Matsalu

2004. South of Tallinn (Ian – after group left). Berula erecta Lesser Water Parsnip

2005 Tagamõisa Peninsula

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

Cicuta virosa Cowbane In aquatic habitats.

Carum carvi Caraway Scattered

Cnidium dubium Cnidium 2004. Tagamõisa Peninsula. 2005 Altmõisa

Angelica sylvestris Angelica Common.

Angelica archelangica Garden Angelica Recorded in Matsalu area Peucedanum palustre Milk Parsley Widespread in wetlands.

Oenanthe aquatica 2005 Kohala and Beaver Trail (rare in Estonia) Libanotis montanum Moon Carrot 2005 Laelatu

Pastinaca sativa Wild Parsnip Common and widespread.

Heracleum sibiricum Local.

Heracleum mantegazzianum Giant Hogweed Local Laserpitium latifolium Broad-leaved Sermountain Vidumae

Torilis japonica Upright Hedge Parsley Scattered records. Daucus carota Wild Carrot Scattered records.

Pyrolaceae

Pyrola chlorantha Green-flowered Wintergreen 2005 scattered in Lahemaa area Round-leaved Wintergreen Pyrola rotundifolia 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? 2005 certainly by the Beaver Trail

2004. Scattered in east. 2005 scattered in the Pyrola media Intermediate Wintergreen

Scattered – mostly in east Pyrola minor Common Wintergreen

One-flowered Wintergreen Moneses uniflora Scattered

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

on the Tagamõisa Peninsula. 2005 not in good

flower - little too early

Orthilia secunda Toothed Wintergreen Common in forests. Yellow Birdsnest

Monotropa hypopitys Near Viru Bog. 2005 Kohala

Ericaceae

Calluna vulgaris Heather Widespread and abundant. Ledum palustre Labrador Tea Very common in bogs.

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

Chamaedaphne calyculata Endla Bog

Vaccinium oxycoccus Locally abundant. Cranberry Vaccinium microcarpum Small Cranberry Common in bogs.

Vaccinium vitis-idaea Cowberry Widespread and abundant. Widespread and abundant. Vaccinium myrtillus Bilberry Vaccinium uliginosum Northern Bilberry Widespread 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 – in seed

Lysimachia vulgaris Yellow Loosestrife Widespread.

Lysimachia nummulariaCreeping JennyScattered records – in leafLysimachia thyrsifoliaTufted LoosestrifeLocal, e.g. Varangu, Oandu

Trientalis europaea Chickweed Wintergreen Scattered records.

Glaux maritima Sea Milkwort 2004. Vilsandi and Tagamõisa Peninsula. 2005

also Matsalu

Androsace septentrionalis 2005 in seed on gravel flats at end of

Tagamõisa Peninsula

Oleaceae

Fraxinus excelsior Ash Widespread.

Gentianaceae

Centaurium littoraleSeaside CentaurySaaremaa.[Centaurium erythraeaCommon CentaurySaaremaa.]

Centaurium pulchellum Lesser Centaury 2004. Matsalu. 2005 Tagamõisa Peninsula

Menyanthaceae

Menyanthes trifoliata Bogbean Bogs in Lahemaa and Saaremaa

Asclepiadaceae

Vincetoxicum hirundinaria Swallow-wort 2005 Puhtu Mets

Rubiaceae

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

Galium verum Lady's Bedstraw Widespread and very common.

Galium x pomeranicum 2005 – the hybird between Lady's Bedstraw and Hedge Bedstraw with creamy flowers was

noted at Kohala

Galium odoratumWoodruffPuhtu MetsGalium aparineCleaversScattered records.Galium albumUpright BedstrawWidespread.Galium palustreMarsh BedstrawCommonGalium uliginosumFen Bedstraw2005 Kohala

Convolvulaceae

Calystegia sepium Hedge Bindweed Scattered records.

Convolvulus arvensis Field Bindweed Common.

Boraginaceae

Echium vulgare Viper's Bugloss Common.
Pulmonaria officinalis Lungwort Lahemaa.

Symphytum officinalis Common Comfrey 2004. Varangu. 2005 Matsalu

Anchusa officinalisAlkanetScattered records.Myosotis arvensisField Forget-me-notScattered records.

Myosotis scorpioides Water Forget-me-not Common in suitable habitat

Myosotis laxa 2005 Kohala – probably this species

Lappula squarrosa Bur Forget-me-not Tagamõisa Peninsula

Lamiaceae

Ajuga reptans Bugle Tagamõisa Peninsula. Teucrium scordium Water Germander Tagamõisa Peninsula

Scutellaria galericulata Scull-cap Scattered.

Scutellaria hastifolia Spear-leaved Skullcap Tagamõisa Peninsula Bifid Hemp-nettle Galeopsis bifida Scattered records. Galeopsis speciosa 2005 Matsalu

White Deadnettle

Lamium album Scattered records. [Lamium purpureum Red Deadnettle 2004. Kohala etc.]]

[Lamiastrum galeobdolon Yellow Archangel Lahemaa. Stachys palustris Marsh Woundwort Widespread. Stachys sylvatica Hedge Woundwort Matsalu Glechoma hederacea Ground Ivv Widespread. Prunella vulgaris Self-heal Widespread.

Basil-Thyme Scattered throughout Acinos arvensis Wild Basil Scattered records. Clinopodium vulgare Origanum vulgare Marjoram Scattered records. Thymus serpyllum **Breckland Thyme** Locally common. Lycopus europaeus Gypsywort Scattered records.

Water Mint Mentha aquatica Scattered. Mentha arvensis Corn Mint Scattered

[Salvia nemorosa Wild Sage Occasional on roadsides.]

Solanaceae

Solanum dulcamara Bittersweet Scattered

Scrophulariaceae

Veronica spicata

Verbascum thapsus Aaron's Rod Locally common. Verbascum nigrum Dark Mullein Common. Scrophularia nodosa Widespread. Common Figwort

Chaneorhinum minus Small Toadflax 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!]

Scattered records. Veronica longifolia Long-leaved Speedwell

Spiked Speedwell

Veronica austriaca teucrium Large Speedwell 2004. Recorded as Veronica teucrium in the Baltic Flora. Kohala

Scattered records. Scattered records.

Veronica officinalis Heath Speedwell Veronica chamaedrys Germander Speedwell Scattered records. Veronica arvensis Field Speedwell 2005 Laelatu

Veronica beccabunga Brooklime Widespread in suitable habitat.

Veronica anagallis-aquatica Blue Water Speedwell Scattered records. Veronica scutellata Marsh Speedwell Matsalu and Saaremaa

Odontites vulgaris Widespread.

Odontites littoralis Vilsandi Island and Tagamõisa Peninsula

Common Cow-wheat Melampyrum pratense Widespread and very common.

Melampyrum sylvaticum Small Cow-wheat Common.

Melampyrum arvense Field Cow-wheat Scattered records.

Melampyrum nemorosum Widespread and locally abundant.

Melampyrum cristatum Crested Cow-wheat Tagamõisa Peninsula Euphrasia nemorosa Wind Eyebright Tagamõisa Peninsula

Euphrasia rostkoviana 2005 Laelatu

2004. Vidumae. 2005 Endla Pedicularis palustris Red Rattle Pedicularis sceptrum-carolinum Moor King Some fine plants near Vidumae!

Rhinanthus minor Rhinanthus serotinus Rhinanthus osiliensis Yellow Rattle

2004. Pohja Körvemaa-Maastiku-Kaitseala 2004. Very rare endemic of western Saaremaa seen in a couple of places on the Tagamõisa Peninsula. 2005 Probably this species in a fen

near Kihelkonna!

Scattered records.

Orobanchaceae Orobanche sp.

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

maastiku-kaitsealu. 2005 Laelatu

Orobanche elatior

Lentibulariaceae

Pinguicula vulgaris Common Butterwort [Pinguicula alpina Alpine Butterwort

In leaf on Saaremaa. 2004 in flower at Varangu 2004. In leaf in the ditch by the HQ at

Vidumae]

Utricularia minor

Utricularia ochroleuca

2005 scattered by the boardwalk in Viru Bog and also seen at the bog near Kihelkonna 2005 bog near Kihelkonna. This should be checked as only recorded in Latvia and Lithuania from region but had the characteristic

Local in boggy forests. Very common at Oandu

leaflets? 2005 bog near Kihelkonna

Utricularia vulgaris

Plantaginaceae

Plantago major Plantago media Plantago lanceolata Plantago maritima

Greater Plantain Hoary Plantain Ribwort Plantain Sea Plantain

Caprifoliaceae

[Sambucus racemosa Red-berried Elder Sambucus nigra Elder Viburnum opulus Guelder Rose Wayfaring Tree [Viburnum lantana Lonicera xylosteum Fly Honeysuckle Linnaea borealis Twinflower

Widespread. Not native.] Scattered. Not native. Scattered records. 2004. Scattered] 2004. Scattered

Adoxaceae

Adoxa moschatellina Moschatel

2005 scattered

Valerianaceae

Valeriana officinalis

Valeriana sambucifolia

Common Valerian

Scattered 2004. Widespread

Dipsacaceae

Knautia arvensis Succisia pratensis Field Scabious Devil's-bit Scabious

Widespread and common. Scattered

Campanulaceae

Campanula rotundifolia Campanula persicifolia Campanula patula

Harebell

Peach-leaved Bellflower Spreading Bellflower

Widespread and common. Widespread and common.

Widespread.

Campanula glomerataClustered BellflowerWidespread and common.[Campanula latifoliaGiant BellflowerScattered records.]Campanula tracheliumNettle-leaved BellflowerScattered records.

[Campanula rapunculoides Creeping Bellflower Widespread and common.]

Jasione montana Sheepsbit Scabious Scattered records. 2005 Tagamõisa Peninsula

Asteraceae

Eupatorium cannabinum Hemp Agrimony 2005 Varangu

Solidago virgaureae Golden-rod Widespread and very common.

Bellis perennisDaisyWidespread.Aster tripoliumSea AsterLocal on coasts.Erigeron acerBlue FleabaneWidespread.Inula salicinaIrish FleabaneLocally common.

Antennaria dioica Mountain Everlasting Scattered

Gnaphalium uliginosum 2005 Beaver Trail
Anthemis tinctoria Yellow Chamomile Scattered records.

Achillea millefoliumYarrowCommon.Leucanthemum vulgareOx-eye DaisyWidespread.Artemisia vulgarisMugwortCommon.[Artemisia absinthiumWormwoodWidespread.]

Artemisia maritimum Sea Wormwood Western Saaremaa coasts.

Artemisia campestrisField WormwoodWidespread.Tanacetum vulgareTansyWidespread.

Senecio vulgaris Groundsel Senecio jacobaea Ragwort

Senecio viscosus 2005 Tagamõisa Peninsula

Tussilago farfaraColtsfootScatteredPetasites hybridusButterburKohala etc.

Arctium tomentosum

[Arctium lappa

Matricaria discoideaPineapple MayweedCommon.Matricaria perforataScentless MayweedKohala etc.

Greater Burdock

Matricaria recutita2005 MatsaluCarlina vulgarisCarline Thistle2004. Saaremaa[Carduus nutansMusk ThistleWidespread.]Carduus crispusWelted ThistleCommon.

| Saussurea esthonica | Finished flowering at Varangu. Endemic to

the Baltic Countries.]

Serratula tinctoria Saw-wort 2005 Laelatu

Cirsium arvense Creeping Thistle Very common.

Cirsium vulgare Spear Thistle Very common.

Cirsium palustre Marsh Thistle Common.

Cirsium acaule Dwarf Thistle Saaremaa.
Cirsium heterophyllum (helenium) Kohala

Cirsium oleraceum Cabbage Thistle Widespread and common.

Centaurea cyaneus Cornflower 2005 Altmõisa – Estonia's national flower!

Centaurea scabiosa Greater Knapweed Scattered.

Centaurea jacea Brown Knapweed Widespread and very common.

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

2005 Laelatu

Cichorium intybusChicoryRoadsides.[Arnoseris minimaLamb's SuccoryScattered records.]Tragopogon pratensisGoatsbeardScattered records.

Scorzonera humilis Viper's-Grass 2004. Saaremaa
Sonchus arvensis Field Sowthistle 2005 Matsalu and Puhtu

Mycelis muralis Wall Lettuce Common.

Lapsana communis Taraxacum officinale Leontodon hispidus

Leontodon autumnalis Crepis paludosa [Hieracium umbellata Hieraceum pilosella Nipplewort Scattered records
Dandelion Widespread.
Rough Hawkbit 2004. Kohala. 200

2004. Kohala. 2005 Varangu 2005 Tagamõisa Peninsula

Autumn Hawkbit 2005 Tagamõisa Marsh Hawk's-beard Widespread Leafy Hawkweed 2004. Scattered] Mouse-ear Hawkweed Widespread

Monocotyledons

Alismataceae

Alisma plantago-aquatica Water Plantain Scattered in aquatic habitats.

Hydrocharitaceae

Hydrocharis morsus-ranae Frog-bit 2005 coastal dykes at Letipea

Striotes aloides Water Soldier 2005 Endla

Scheuchzeriaceae

Scheuchzeria palustris Rannoch Rush Very common in seed in bogs.

Juncaginaceae

Triglochin maritimumSea Arrow-GrassVilsandi Island. 2005 also MatsaluTriglochin palustreMarsh Arrow-Grass2004. Varangu and Vilsandi

Potamogetonaceae

Potamogeton natans Broad-leaved Pondweed Endla Lake

Potamogeton graminifolius 2005 Tagamõisa Peninsula

Potamogeton pusillus 2005 Vilsandi

Potamogeton berchtoldii2005 Tagamõisa PeninsulaPotamogeton crispusCurled PondweedWidespread

Potamogeton filiformis
2005 Vilsandi
Potamogeton pectinatus
2005 Vilsandi

Ruppiaceae

Ruppia maritima 2005 Vilsandi

Ruppia cirrhosa 2005 Tagamõisa Peninsula

Zosteraceae

Zostera marina Eel-Grass Tagamõisa Peninsula

Zostera noltei/angustifolia 2005 Vilsandi Island – but not recorded in

Baltic Flora, possibly not separated?

Hydrocharitaceae

Elodea canadensis Canadian Waterweed 2005 Kohala

Sparganiaceae

[Sparganium glomeratum Scattered records.]

Sparganium erectum 2005 scattered in Lahemaa

Sparganium angustifolium 2005 in narrow channels behind Endla Bog

Liliaceae

Allium ursinum Ramsons Abundant near Kunda. 2005 also Puhtu –

apparently a rare and protected species in

Estonia

Allium schoenoprasum Chives Tagamõisa Peninsula

Allium vineale Crow Garlic 2004. Tagamõisa Peninsula. 2005 and Puhtu

Allium oleraceum Field Garlic Vilsandi Island. 2005 also Kohala Convallaria majalis Lily of the Valley Widespread and very common in leaf.

Maianthemum bifolium May Lily Common.

Tofieldia calyculata German Asphodel 2004. Tagamõisa Peninsula. 2005 only near

Virtsu!

Paris quadrifolia Herb Paris Scattered records.

Polygonatum odoratum Angular Solomon's Seal Scattered records.

Polygonum multiflorum Matsalu

Iridaceae

Iris pseudacorus Yellow Flag Scattered records

Iris sibirica 2005 in fruit at Matsalu

Juncaceae

Luzula pilosa Scattered

Luzula multifloraWidespreadJuncus gerardiiScattered coastally

[Juncus filiformis Thread Rush Scattered throughout

Juncus balticus 2005 Tagamõisa Peninsula

Juncus effususSoft RushScattered[Juncus conglomeratusCompact RushScatteredJuncus compressusRound-fruited RushVaranguJuncus bufoniusToad RushWidespread

Juncus ranarius 2005 Tagamõisa Peninsula

Juncus articulatus Jointed Rush Widespread

Juncus bulbosus 2005 Laelatu and Vidumae

Poaceae

Festuca gigantea 2004. Varangu. 2005 Beaver Trail

Festuca altissimaWood FescueScatteredFestuca ovinaSheep's FescueKohalaFestuca rubraRed FescueWidespread

Lolium perenne Perennial Ryegrass Widespread in fields

Poa annua Annual Meadow-grass Widespread in ruderal habitats

Poa nemoralis 2005 Puhtu Mets

Poa trivialis Rough Maedow-grass 2005 widespread in damp meadows

Dactylis glomerataCocksfootWidespreadBriza mediaQuaking GrassWidespreadMilium effusumScattered

Millium effusum Scattered
Melica nutans Scattered

Gylceria notata 2005 scattered throughout Brachypodium pinnatum 2005 Laelatu

Brachypodium pinnatum
Brachypodium sylvaticum
Bromus (Bromopsis) benekenii
Bromus inermis
Hungarian Brome
2005 Laelatu
2005 Laelatu
Widespread

[Bromus hordeaceus Soft Brome]

Avena fatuaWild OatVilsandiDeschampsia cespitosaTufted Hair-grassWidespreadDeschampsia flexuosaWavy Hair-grassKohala etc

[Hierochloe australis Southern Holy Grass 2005 scattered Hierochloe odorata Holy Grass Sweet Vernal Grass Anthoxanthum odoratum Laelatu Mets Agrostis canina Velvet Bent Laelatu Mets Agrostis stolonifera Creeping Bent Scattered Purple Small-reed [Calamagrostis canescens [Calamagrostis arundinacea Rough Small-reed Phleum bertolonii 2005 Kohala [Phleum pratense Timothy Alopecurus arundinaceus 2005 Kohala Alopecurus geniculatus Marsh Foxtail 2005 scattered Alopecuros pratensis Meadow Foxtail Scattered Hordeum jubatum Tagamõisa Peninsula Elytrigia arenaria Kohala etc Couch Reed Canary-grass Widespread along rivers etc Phalaris arundinacea Phragmites australis Common Reed Locally abundant! Molinia caerulea Purple Moor-grass Scattered - locally dominant [Nardus stricta Mat Grass Helichtotrichon pratense Kohala etc Leymus arenarius Lyme Grass Coasts Araceae Calla palustris Bog Arum Scattered in bogs. Acorus calamus Sweet Flag 2005 leaves noted in a few localities Lemnaceae [Lemna minor Common Duckweed 2004. Varangu. 2005 Kohala Lemna trisulca 2005 Endla Spirodela polyrhiza Typhaceae Typha latifolia Bulrush Widespread. Scattered records. Typha angustifolia Lesser Bulrush Cyperaceae Scirpus sylvaticus 2004. Widespread Bulboschoenus maritimus 2005 Saaremaa coasts Schoenoplectus lacustris 2004. Matsalu Schoenoplectus tabernaemontani 2004. Matsalu. Apparently often grows in the sea in Estonia so presumably this was the S. maritimus we saw at Virtsu? Blysmus compressus Blysmus 2004. Tagamõisa Peninsula Blysmus rufus 2005 common on Saaremaa coastal marshes Eriophorum vaginatum Harestail Cotton Grass Common in bogs. Trichophorum cespitosum 2004. Widespread in bogs Trichophorum alpinum 2005 Saaremaa Eriophorum angustifolium 2005 Viru Bog Eriophorum latifolium 2005 common in Saaremaa fens Eriophorum gracile 2005 Tagamõisa Peninsula Eleocharis uniglumis 2005 common along coasts Marsh Horsetail 2005 widespread Eleocharis palustre Eleocharis acicularis 2005 coasts of Saaremaa Eleocharis quequinqueflora 2005 Saaremaa Schoenus nigricans 2005 Tagamõisa Peninsula

Schoenus ferrugineus

2005 Laelatu

Cladium mariscus 2004. Tagamõisa Peninsula by lake

Rhynchospora alba White Beaked Sedge 2004. Viru Bog

Carex pauciflora Few-flowered Sedge 2005

Carex pulicaris Flea Sedge 2004. Vilsandi Island. 2005 Matsalu and Puhtu

[Carex dioica Dioecious Sedge

Carex davalliana 2005 locally abundant in wet areas of Puhtu and

Laelatu, also near Vidumae

Carex hirtaHairy SedgeWidespreadCarex lasiocarpaSlender SedgeScattered in east

Carex riparia Greater Pond Sedge 2005 Kohala and Matsalu

[Carex acutiformis Lesser Pond Sedge Varangu]

Carex pseudocyperus Cyperus Sedge Scattered throughout

Carex rhynchophysa Bogs and Mires in the east of the country
Carex rostrata Bottle Sedge Standing water including rivers in east

Carex vesicaria Bladder Sedge Scattered throughout

Carex sylvaticaWood Sedge2005 EndlaCarex capillarisHair Sedge2005 PuhtuCarex flaccaGlaucous SedgeWidespreadCarex paniceaCarnation SedgeWidespread

Carex vaginata Sheathed Sedge Common in wooded areas such as Puhtu and

Vidumae

Carex distans Distant Sedge Coastal areas such as Vilsandi Island and

Matsalu

Carex hostiana Tawny Sedge Widespread

Carex pallescens

Carex flava Large Yellow Sedge Varangu. 2005 Kohala

Carex lepidocarpa Long-stalked Yellow Sedge 2004. Vilsandi Island. 2005 also Endla

[Carex demissa Common Yellow Sedge 2004. Vilsandi Island]

Carex serotina Small-fruited Yellow Sedge Vilsandi Island, Tagamõisa Peninsula and

Matsalu

[Carex (x) bergrothii 2004. Tagamõisa Peninsula & Vilsandi Island]

Pale Sedge Widespread in meadows

Carex ornithopoda Bird's-foot Sedge Varangu along woodland paths. 2005 Woods

east of Kohala and also at Puhtu where grows

with digitata!

Carex digitataFingered Sedge2005 PuhtuCarex montanaSoft-leaved Sedge2005 Tagamõisa Peninsula

Carex ericetorum Rare Spring Sedge 2005 Woods around Viru Bog

Carex globularis

Carex tomentosa

Downy-fruited Sedge

2005 Endla and also woods east of Kohala
2005 common at Matsalu, Laelatu and Vidumae

Carex magellanica Bog Sedge Bogs – e.g. Viru and Endla

Carex limosa Mud Sedge 2005 wettest parts of bogs – e.g. Viru and Endla

Carex hartmanii 2005 Tagamõisa Peninsula

Carex buxbaumii Club Sedge Common in seasonally inundated parts of the

Tagamõisa Peninsula

Carex acutaSlender Tufted SedgeScatteredCarex nigraCommon SedgeCommon

Carex aquatilis Water Sedge 2005 a large stand at Varangu Springs

Carex elata Tufted Sedge 2005 scattered in the east

Carex cespitosa Scattered in east

Carex trinervis 2005 this wou

2005 this would be new to Estonia (and the Baltic States) if correct. It was growing in a large stand in water to the right of and left of the path to Viru Bog just a hundred yars from

the carpark – one to check!

Carex appropinquataFibrous Tussock SedgeVarangu, Endla and Tagamõisa PeninsulaCarex diandraLesser Tussock SedgeEndla, Varangu and bogs on Saaremaa

Carex vulpina True Fox Sedge 2005 ditches at Matsalu Carex otrubae False Fox Sedge Varangu, Matsalu and Laelatu – apparently rare in Estonia? Carex divulsa Grey/Leers' Sedge 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 species? Prickly Sedge 2005 Endla Carex muricata Carex contigua Spiked Sedge Laelatu, Vidumae and Tagamõisa Peninsula Carex disticha Brown Sedge Viru and Varangu Sand Sedge Coasts of Tagamõisa Peninsula Carex arenaria Oval Sedge Formerly known as Carex ovalis. Scattered Carex leporina Carex echinata Star Sedge Scattered Elongated Sedge 2005 scattered in the east Carex elongata Carex canescens Widespread Carex brunnescens Damp woods at Viru and Oandu Orchidaceae Cypripedium calceolus Lady's Slipper Many plants in seed at Varangu. Marsh Helleborine Epipactis palustris Very common on the Tagamõisa Peninsula and Vilsandi Broad-leaved Helleborine Scattered in leaf and some very large plants in Epipactis helleborine bud on Saaremaa Dark Red Helleborine Scattered records. Epipactis atrorubens Cephalanthera rubra Red Helleborine Common in north of Tagamõisa Peninsula Listera cordata Lesser Twayblade Oandu and Tagamõisa Peninsula Listera ovata Twayblade Scattered throughout Neottia nidus-avis Bird's-nest Orchid Scattered throughout, very local [Spiranthes spiralis Autumn Lady's Tresses A few in early flower at Lahemaa.] Goodyera repens Creeping Lady's Tresses Common in forests. 2005 scarce - only in bud Corallorhiza trifida Coralroot Orchid 2005 a few plants at a very nice site on the Tagamõisa Peninsula Herminium monorchis Musk Orchid Vilsandi National Park. 2004. Several places on the Tagamõisa Peninsula. 2005 ditto plus Altmõisa Fen Orchid Liparis loeselii 2004. A large colony near Kihelkonna with one still in good flower and another smaller colony seen, both Tagamõisa Peninsula. 2005 ditto except many in good flower and additional colony found Platanthera bifolia Lesser Butterfly Orchid Widespread – many in flower Platanthera chlorantha Greater Butterfly Orchid Scattered records. 2004/5 only in flower on the Tagamõisa Peninsula Gymnadenia conopsea Fragrant Orchid 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. 2005 ditto also Kohala (seed)

Early Marsh Orchid In flower at Toolse. 2004/5 Scattered 2004. Flowers just finishing. Couple of places on the Tagamõisa Peninsula. 2005 ditto – in

ditto plus Laelatu

2004. In flower Tagamõisa Peninsula. 2005

flower

Burnt-tip Orchid

Orchis ustulata

Dactylorhiza incarnata

Dactylorhiza cruenta

Dactylorhiza ochroleuca 2005 seen in flower at a bog with Fen Orchid on the Tagamõisa Peninsula – this species is unrecorded from Estonia so needs checking 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 maculata 2005 scattered – assuming you believe it is separate from *fuchsii*! Dactylorhiza curvifolia AKA D. russowei. In flower at Letipea. 2004. In good flower at three locations on the Tagamõisa Peninsula Dactylorhiza ruthei In seed at Puhtu Mets the only known certain site in Estonia. However a few plants at Vidumae which were in flower so closely resemble this species though apparently they are regarded as hybrids by Estonian orchid experts Fly Orchid In flower at several spots on the Tagamõisa Ophrys insectifera Peninsula c.8 at Letipea, and several at Varangu. 2004. Malaxis monophyllos One-leaved Bog Orchid

Several localities in the east. 2005 ditto

Systematic List Number 2 Butterflies

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

Summary 6	of I	Locations
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Day 1	July 6 th	Tallinn to Kohala
Day 2	July 7 th	Kohala and Letipea
Day 3	July 8 th	Lahemaa – Viru Bog and Pohja Körvemaa-Maastiku-Kaitseala
Day 4	July 9 th	Lahemaa – Oandu, Beaver Trail and Palmse
Day 5	July 10 th	Endla Bog and Varangu Springs
Day 6	July 11 th	Kohala to Matsalu – Suitsu & Klootsi watchtowers & Altmoisa
Day 7	July 12 th	Puhtu Mets, Laelatu Puisniit and Saaremaa
Day 8	July 13 th	Saaremaa – Vidumae & the western Tagamõisa Peninsula
Day 9	July 14 th	Saaremaa - Vilsandi Island & the northern and eastern Tagamõisa
		Peninsula
Day 10	July 15 th	Vidumae/Virtsu & Riispere – then to Tallinn

Papilionidae Swallowtail

Swallowtail Papilio machaon 3 on the Tagamõisa Peninsula

Pieridae

Large White	Pieris brassicae	Scattered
Black-veined White	Aporia crataegi	Several seen at Matsalu and Saaremaa
Green-veined White	Artogeia napi	Widespread
Moorland Clouded Yel	llow Colias palaeno	3 at Viru Bog and several at Endla Bog
Brimstone	Gonepteryx rhamni	Scattered

Lycaenidae

Green Hairstreak	Callophrys rubi	i at viiu bog
Large Copper	Lycaena dispar	2 nice colonies found at Kohala one with about ten butterflies
Scarce Copper	Lycaena virgaureae	Unnaccountably scarce this time with just a few seen on
		Saaremaa
Purple-edged Copper	Lycaena hippothoe	A male at Kohala
Little Blue	Cupido minimus	Noted at Kohala
Large Blue	Maculinea arion	Noted on Vilsandi
Silver-studded Blue	Plebejus argus	Scattered
Cranberry Blue	Vacciniina optilete	Locally common in Lahemaa
Amanda's Blue	Agrodiaetus amanda	Widespread and common
Common Blue	Polyommatus icarus	Amazingly <i>not</i> seen!

Nymphalidae

Purple Emperor	Apatura iris	Locally quite common
Lesser Purple Emperor	Apatura ilia	Locally common especially atMatsalu and Vidumae
White Admiral	Limenitis camilla	Scattered at Matsalu and on Saaremaa
Red Admiral	Vanessa atalanta	Just one seen on Vilsandi Island
Small Tortoiseshell	Aglais urticae	Widespread
Map Butterfly	Araschnia levana	1 at Puhtu
Silver-washed Fritillary	Argynnis paphia	Rather uncommon on Saaremaa
Dark Green Frtillary	Argynnis aglaja	Locally abundant on Saaremaa
Lesser Marbled Fritillary	Brenthis ino	Widespread

Small Pearl-

bordered Fritillary Clossiana selene 2 at Endla

Pearl-bordered Fritillary Clossiana euphrosyne 1 on the Tagamõisa Peninsula Heath Fritillary Mellicta athalia Widespread and common Nickerl's Fritillary Mellicta aurelia 1 on the Tagamõisa Peninsula

Satyridae

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

Meadow Brown Maniola jurtina Widespread.

Ringlet Aphantopus hyperantus Very common and widespread

Chestnut Heath Coenonympha glycerion Locally common

Speckled Wood Pararge aegeria Oandu

Woodland Brown Lopinga achine Several at Vidumae Nature Reserve and on the Tagamõisa

Peninsula

Hesperiidae

Essex Skipper Thymelicus lineola Rather uncommon

Small Skipper Thymelicus sylvestris Scattered

Large Skipper Ochlodes venatus Reasonably common

List Number 3 Moths

The following is taken entirely from the 2004 tour when 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

Lackey Lappet

Lackey Lapped

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

Cormorant Phalacrocorax carbo Scattered records – common on Saaremaa.

Bittern Botaurus stellaris Heard at Puhtu Mets Grey Heron Ardea cinerea Common & widespread

White Stork Ciconia ciconia Very common & widespread on the mainland, less

so on Saaremaa Island.

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

Vilsandi Island.

Greylag Goose Anser anser Scattered records across Saaremaa Island

Barnacle Goose Branta leucopsis c.25 on the small islands on the way to Vilsandi

Island

Gadwall Anas strepera 2 at Kohala Mallard Anas platyryhnchos Scattered

Pintail Anas acuta Noted off Vilsandi

Bucephala clangula

Shoveler Anas clypeata 1 off the ferry between Saaremaa and Virtsu

Scattered records.

Red-breasted Merganser Mergus serrator Letipea

Goldeneye

Honey Buzzard Pernis apivorus One at Oandu and 2 en route from Kohala to

Matsalu

Marsh Harrier Circus aeruginosus 5+ at Matsalu

Montagu's Harrier Circus pygargus A male between Kohala and Letipea Goshawk Accipiter gentilis 1 on the Tagamõisa Peninsula

Sparrowhawk Accipiter nisus A female at Viru Bog Common Buzzard Buteo buteo Scattered in Lahemaa

White-tailed Eagle Haliaectus albicilla 1 adult over Oandu and 2-3 birds seen very well off

Vilsandi Island

Lesser-spotted Eagle Aquila pomarina Just the one bird seen at Kohala

Kestrel Falco tinnunculus Singles twice

Water Rail Rallus aquaticua One calling at Matsalu Nature Reserve.

Corncrake Crex crex Very common at Kohala – seen just the once (IG)

Coot Fulica atra Scattered

Common Crane Grus grus Uncommon this year (earlier than before?). 2 in

Lahemaa, 2 on the Tagamõisa Peninsula and 5 on

Vilsandi Island

Oystercatcher Haematopus ostralegus Scattered records Little Ringer Plover Charadrius dubius Altmoisa

Ringed Plover Charadrius hiaticula Recorded along the coast at Tagamoisa Penisula.

Snipe Gallinago gallinago 5 at Altmoisa

Woodcock Scolopax rusticola 1 seen roding late evening at Kohala

Lapwing Vanellus vanellus Widespread Green Sandpiper Tringa ochropus Scattered records Wood Sandpiper Tringa glareola 1 at Altmoisa Actitis hypoleuca Common Sandpiper 1 at Altmoisa Lesser Black-backed Gull Larus fuscus Scattered records Black-headed Gull Larus ridibundus Locally common Common Gull Larus canus Common & widesread.

Herring Gull Larus argentatus Scattered

Common Tern Sterna hirundo Scattered records

Arctic Tern Sterna paradisaea Sightings at Tagamõisa Peninsula & Vilsandi Island.

Little Tern Sterna albifrons Recorded on the small islands, on the way to

Vilsandi Island

Caspian Tern Sterna caspia 1 adult on the Tagamõisa Peninsula

Rock Dove Columba livia Feral Pigeon scattered Woodpigeon Columba palumbus Common & widespread

Turtle Dove Streptopelia turtur Singles three in te Lahemaa area

Cuckoo Cuculus canorus Heard at Kohala

Short-eared Owl Asio flammeus Feathers found on a beach on the Tagamõisa

Peninsula

Common SwiftApus apusCommon & widespread.KingfisherAlcedo atthisingles thrice at KohalaGreat Spotted WoodpeckerDendrocopos majorScattered recordsThree-toed WoodpeckerPicoides tridactylus1 seen at Oandu

Skylark Alauda arvensis Widespread in the meadows. Swallow Hirundo rustica Common & widespread. House Martin Delichon urbica Common & widespread. Common & widespread. Tree Pipit Anthus trivialis Meadow Pipit Anthus pratensis Scattered records. White Wagtail Motacilla alba Common & widespread. Wren Troglodytes troglodytes Scattered records. Robin Erithacus rubecula Scattered records Phoenicurus phoenicurus Only seen at Matsalu Redstart

Whinchat Saxicola rubetra Common in Lahemaa region absent in the west!

Northern WheatearOenanthe oenantheScattered records in the westBlackbirdTurdus merulaCommon & widespread.Mistle ThrushTurdus viscivorusOnly noted at EndlaSong ThrushTurdus philomelosOnly seen at Varangu

Redwing Turdus iliacus Widespread though not commonly seen Fieldfare Turdus pilaris Common around Kohala & Lahemaa.

Grasshopper Warbler Locustella naevia Heard around Kohala

River Warbler Locustella fluviatilis Heard over the river from Kohala

Marsh Warbler Acrocephalus arundinaceus Heard at Kohala

Icterine Warbler Hippolais icterina Several pairs around Kohala where particularly

loud in the tree by the back door!

Barred Warbler Sylvia nisoria Heard at Matsalu

Lesser WhitethroatSylvia currucaKohalaCommon WhitethroatSylvia communisKohalaBlackcapSylvia atricapilla1 at Varangu

Greenish Warbler Phylloscopus trochiloides Several at Oandu & on the Tagamõisa Peninsula

Wood Warbler Phylloscopus sibilatrix Oandu and Varangu

Chiffchaff Phylloscopus collybita Heard regularly, common & widespread.

Willow Warbler Phylloscopus Recorded at several sites.

Goldcrest Regulus regulus Scattered records in Lahemaa Spotted Flycatcher Muscicapa striata Common & widespread.

Pied Flycatcher Ficedula hypoleuca Quite common at Kohala, scattered elsewhere.

Red-breasted Flycatcher Ficedula parva A male at Kohala.

Marsh Tit Parus palustris Scattered records.

Willow Tit Parus montanus Several individuals recorded.

Crested Tit Parus cristatus Lahemaa where quite common. Also at Vidumae

Great Tit Parus major Common & widespread.
Blue Tit Parus caeruleus Common & widespread.

Nuthatch Sitta europaea Heard only Common Treecreeper Certhia familiaris 1 at Puhtu

Golden Oriole Oriolus oriolus A male at Kohala and heard several times there

Red-backed Shrike Lanius collurio Common & widespread.

Jay Garrulus glandarius Heard. Feathers found.

Magpie Pica pica Common & widespread

Nutcracker Nucifraga caryocatactes Heard on the Tagamõisa Peninsula and at Vidumae

Jackdaw Corvus monedula Only noted near Rakhvere.

Rook Corvus frugilegus Scattered records

Hooded Crow Corvus (corone) cornix Common & widespread

Raven Corvus corax Common in Lahemaa area

Starling Sturnus vulgaris Common & widespread on Saaremaa Island.

House SparrowPasser domesticusScattered on the mainland.ChaffinchFringilla coelebsCommon & widespread.GreenfinchCarduelis chlorisOnly seen at MatsaluGoldfinchCarduelis carduelisLocally common

Linnet Carduelis cannabina Matsalu

Common RosefinchCarpodacus erythrinusScattered throughoutBullfinchPyrrhula pyrrhulaScattered recordsReed BuntingEmberiza schoeniculus1 at Kohala

Yellowhammer Emberiza citrinella Common & widespread

Systematic List Number 5 Mammals

Fox Vulpes vulpes Singles twice on Saaremaa.

Lynx Lynx lynx Territorial scratch markings on a tree at Oandu

nature trail.

Beaver Castor fiber Dams and much sign seen at the Beaver Trail.

Wild Boar Sus scrofa Rooting activity seen at several sites.

Roe Deer Capreolus capreolus Several seen on Saaremaa and en route to Tallinn.

Elk Alces alces A mother with two calves seen near Riispere between

Virtsu and Tallinn on the last day

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

nature trail.

Systematic List Number 6 Reptile & Amphians

Grass Sanke Natrix natrix 1 in Vidumae and one seen en route to Tallinn.

Common FrogRana temporariaScattered records.Common ToadBufo bufoScattered sightings.

Common Lizard Lacerta vivipara Common sightings along the board walks.

Systematic List Number 7 Crickets & Grasshoppers

This list was not added to in 2005 and so is retained merely as a record of 2004 sightings.

Large Speckled Bush-cricket Wart-biter	Isophya pyrenea Decticus verrucivorus	1 female seen at Vidumae in the meadow 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.
Bog Bush-cricket	Metrioptera brachyptera	Common & widespread in marshy & bog areas.
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	Chorthippus mollis	Widespread in the meadow sites visited.
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
Large Gold Grasshopper	Chrysochraon dispar	Matsalu. 1 female recorded in the damp ditches near Matsalu.

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Systematic List Number 8 Dragonflies and Damselflies

The taxonomy and systematic order follows Askew 1998.

Beautiful Demoiselle Calopteryx virgo Widespread
Emerald Damselfly Lestes sponsa Scattered throghout

Scarce Emerald Damselfly Lestes dryas Only seen at Viru and Endla Bogs

White-legged Damselfly Platycnemis pennipes Matsalu and Saaremaa

Large Red Damselfly Pyrrhosoma nymphula Roadside river stop east of Virtsu
Red-eyed Damselfly Erythromma najas A male at the lake by Endla reception

Irish Damselfly Coenagrion lunulatum Endla Bog

Norfolk Damselfly Coenagrion armatum Several at the lake by Endla reception
Variable Damselfly Coenagrion pulchellum Noted at the lake by Endla 'reception' and at

Varangu

Common Blue Damselfly Enallagma cyathigerum Locally abundant

Blue-tailed Damselfly Ischnura elegans Vilsandi Island
Aeshna viridis Viru Bog

Aeshna subarctica Noted at Viru Bog, Matsalu and probably Endla

Aeshna serrata Several seen at Endla Bog!

Brown Hawker Aeshna grandis Widespread

Hairy Dragonfly Brachytron pratense Viru and Endla Bogs

Downy Emerald Cordulia aenea Widespread

Brilliant Emerald Somatochlora metallica Noted at the Beaver Trail, Endla and Matsalu

Four-spotted Chaser Libellula quadrimaculata Endla Bog, Varangu and Matsalu

Black-lined Skimmer Orthetrum cancellatum Widespread

Yellow-winged Darter Sympetrum flaveolum Widespread and common Red-veined Darter Sympetrum fonscolombei Quite common on Saaremaa

Black Darter Sympetrum danae Very common at Viru Bog not seen elsewhere

Leucorrhinia caudalis Endla Bog and probably seen at Viru Bog too

Leucorrhinia albifrons Common at Viru Bog

White-faced Darter Leucorrhinia dubia Endla Bog

Leucorrhinia rubicunda With certainty only from Viru Bog

Leucorrhinia pectoralis Oandu in Lahemaa

The following species were recorded in 2004 but not in 2005

Banded Demoiselle Calopteryx splendens Just one seen at Varangu Spring

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

Azure Damselfly Coenagrion puella Widespread

Azure Hawker Aeshna caerulea Oandu in Lahemaa
The Emperor Anax imperator A female at Endla
Broad-bodied Chaser Libellula depressa 1 at Varangu Spring

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