# Gotland

# Sweden's Baltic Isle

## A Greentours Trip Report

3<sup>rd</sup> - 11th June 2010

Led by Terry Underhill

Day 1 Thursday 3<sup>rd</sup> June London to Visby and Ljugarn

Within minutes of landing at Visby at 21.50 we had collected our luggage and left the arrival hall. Mia arrived with a large VW mini-bus and the paper work. The drive to Ljugarn in twilight only took 45 minutes, so that by 11.15 we had been allocated our rooms. With an excellent forecast for the next 4-5 days we could all enter the land of nod after a long day, with the prospects of a great trip ahead.

## Day 2 Friday 4th June Kallgateburg

A number of the group woke up at around 5.30 with bright sunlight streaming through their windows so that by 8am when we gathered for breakfast some had walked down to the beach, where the dunes were a mass of Pulsatilla pratensis seed heads. The sea was a little choppy with a strong breeze, and only a few 'comic' terns were on the wing. We were all able to sit outside basking in the warm sunshine while indulging in a Frejus breakfast - fried eggs and bacon, boiled eggs, various cereals and different milks, cheese, ham, salad, fruit juices, various breads and warm rolls, marmalades, jams, tea and coffee.

We had only driven a few kilometers when the ever increasing display of roadside orchids combined with drifts of Polygonatum odoratum made a stop imperative. Orchis mascula was in every shade imaginable of purple, pink and white. There were patches of pink and white Antennaria dioica and bright yellow Scorzonera humilis along with a fine selection of grasses and creeping Rubus saxatilis. Under a mixture of birch, juniper, Scots Pine and various Sorbus we again enjoyed specimen Orchis mascula, both singly and in groups, along with Geranium sanguineum. We made a similar stop only a short distance away for fine clumps of Globularia vulgaris, Saxifraga granulata and Sedum album all growing in very thin soil above limestone pavement. The Sedum attracting a Green Hairstreak.

Ala Church was visited, entry needing some effort to turn the key. In the ditch by the parked minibus Jean found Geum x hybrida. Progress was slow as the roadside windmill by Kraklingbo was too photogenic to pass, likewise Anga Church. Then followed a stop as we reached numerous roadside military orchids, a plant at the top of Rosemary's 'wish' list. A turning to the left into a roadside wood where a car park is indicated led to a little waterside paradise. The ruins of an old mill still with a selection of grinding stones stands alongside a very shallow river, the bed being sheet limestone. Deep-brown bodied Libellula quadrimaculata and other Libellula dragonflies hawked up and down, sometimes clashing with each other. Orange tip and Brimstone butterflies flitted around, which was not surprising with so much Ladies smock and Alder buckthorn around. There was only one clump of the yellow-green Euphorbia palustris and moisture loving Dactylorhiza incarnata. In the river the small white buttercup flowers above submerged feathery foliage was Ranunculus confervoides. Violets and Lily of the Valley grew under a canopy containing small flowered Lonicera xylostemon, Ribes and Corylus. A few Hepatic nobilis were still in bloom. Neottia nidus-avis grew alongside our vehicle and in a nearby ditch was Goldilocks Buttercup.

Midday and well-defined spikes of Orchis spitzelli which were flowering to perfection along with large spikes of Cephalanthera longifolia. Our third church stop was Norrlanda Church, it was then a case of keeping an eye open for suitable seating for our lunch-time picnic.

Afterwards we reached the 3km track to Kallgateburg nature reserve. It was now 3pm and with the knowledge that the season was about two weeks later than average we wondered if the Lady's Slipper Orchids were going to be in bloom - which were the main reason for us visiting this reserve. We decided that we would try and resist the temptation to stop until we had reached the orchids. The route is fairly well defined by numerous people's footprints, although somewhat spread out when negotiating some of the wetter areas without boardwalk. The path quickly slopes downwards; this area being the dividing line between the quickly draining limestone and the low lying belt of dense marlstone which stretches across the whole island in a south westerly direction and is characterised by many swamps. The Yew wood we passed through is one of the largest stands in the country and is growing on the remains of a shingle beach formed about 8,000 years ago when the Baltic Sea was at a much higher level. The forest area is ideal for Solomon's Seal and Lily of the Valley, while the open grassy meadows usually provide a long list of orchids. While negotiating a particular wet area attempting to use the slightly higher mounds with stunted Juniperus communis we temporarily lost the path and had to retrace our steps for a few minutes. Finally after a total time of about 45 minutes of walking, and without getting our feet wet, although our boots were very muddy, we reached the wood, where it was only in 1950 that the thousands of plants of Cypripedium calceolus were discovered. Much to our delight one clump catching most of the sun was in full bloom and perfect for photographing. Most of the other clumps were not quite fully open. Kypris is one of Venus's Greek names and podium the word for little foot, with calceolus meaning little slipper, all give the derivation of the name.

The walk back to the car park was to take much longer as we stopped to admire many plants, such as Dactylorhiza incarnata subspecies cruenta with leaves spotted on both surfaces, white-flowered

Pinguicula alpina, Anacamptis ustulata and the abundant Primula farinosa. A visitor had just seen a Lesser spotted woodpecker but we were unlucky.

Back at the car park it was 5.30 so a non stop route took us just under an hour to reach Ljugarn. Half an hour later we were at the Bruna Dorien for a sumptuous meal. We all needed a little exercise afterwards, so we drove along the coastline track stopping to admire female Eider, some being nursery mothers with young, and numerous Red-breasted Mergansers before walking around Ljugarn marina-harbor. The wind was picking up and the temperature dropping so this part of the evening was cut short and we returned to the warmth of our chalets and beds.

#### Day 3 Saturday 5th June Faro, Ullahau & Langhammars

The sun was shining brightly again at 5.30 and the slight breeze making the young apple-green foliage of Aspens tremble slightly. At 8am the weather was so warm that we all had our Frejus 'special' breakfast outside on the terrace and were all ready for a prompt 9am departure.. Our first major stop was to photograph numerous good specimens of Orchis militaris growing in the lawn outside a roadside cottage, having passed numerous specimens.

The second major stop was between Anga and Gothem, where there was a water channel both sides of the road. The left hand side was the widest (just wide enough to demand a good leap if one wished to keep one's feet dry. Terry, foolishly still wearing his sandals and not hiking boots, leapt over with ease but landed in a puddle. The margins of the channel were favoured by numerous Primula farinosa, and various Salix species. The reason for crossing the channel was to investigate the yellow Dactylorhiza incarnata subsp ochroleuca and the purple-flowered subsp cruenta with leaves spotted on both surfaces. A brief stop was made at Klinteberget, the site of an ancient hill fort about 500m from Klinte parish church. The area is a 25m high inland cliff with the remains of stacks. It is a good site for Red Helleborines later in the year and the nearby woodland has planted beech and larch.

The photographers couldn't resist capturing Gothem church with its clean architectural lines standing beyond a field of yellow rape. The lake below Slite was very unproductive as all the waterfowl had been disturbed by a group of people on the jetty. The only visible duck, when viewed through a scope, was probably a Long-tailed Duck.

At Farosund we drove down to the ferry and were squeezed into a little gap at the back of the ferry for the short trip across to Faro island. No waiting this time. The ferry, like all Swedish ferries, is run very efficiently and within a few minutes we were across the water and driving to the hamlet of Faro. We turned off onto a track where a group of old thatched farm buildings were clustered together, the largest having two branches of a tree fixed at either end and the centre of the ridge decorated with a cross in a circle, all made of supple woody twigs. Alongside is a field, with its upper side having the limestone on the surface with large boggy areas below. A perfect place for decent sized spikes of Dactylorhiza incarnata. Just where the rocks join the wetter areas there were thousands of chives about to break into bloom. Drier spots supported Juniperus

communis. The cry of Curlew is a beautiful sound and prompted us to stop and watch a few of them and also some Lapwings landing and taking off. While viewing them with the scope Terry caught a fleeting glimpse of a Pied Flycatcher moving among distant shrubby conifers.

By now it was approaching lunchtime so Terry took a short track to the coast where beyond the sandy upper beach were a collection of fisherman huts. One with a table outside which we borrowed and a bench along one side, catching the sun and out of the slight breeze. While the picnic was being prepared Christopher and Anthea did a little bird watching, seeing Shelduck, Common and Little Terns, gulls and female Eider.

Just as all the picnic was being packed away, Jean found some plants of Androsace septentrionale in the sand above the pebble beach. Jean had Linnaea borealis on her wish-to-see list so we made four searches at Ullahau. She eventually found some trailing plants, but still in bud. On the nearby roadside flourished a good plant, still in flower, of Pulsatilla pratensis.

We drove a short distance and down to Faro lighthouse. Just offshore female eider looked after numerous little black young, but the highlight was a huge skein out at sea of over 2000 male Eider. As we drove around the headland we hoped to find Greylag and Brent Geese, but instead we watched a pair of Shelduck with 14 little black and white young. Christopher spotted Little Terns at rest and flying. Our final stop on Faro was at Langhammers, where harder ancient corals remained as large picturesque stacks; the softer limestone having been eroded . The headland is dominated by low, salt-laden wind and rain-sculptured Juniperus communis with numerous Vincetoxicum hirundinaria although Jean and Rosemary found Saxifraga tridactylis and Botrychium lunaria fern.

We had to wait for the ferry, and then had a 80km drive back to Ljugarn. Just past Larbro a very pale ginger-coloured fox, looking in perfect condition, was standing by the roadside waiting for the traffic to pass before crossing.

Back at Lovangen we gave ourselves 15 minutes to prepare for visiting the Bruna Dorien for supper. Afterwards, Rosemary, Jean and Elizabeth worked through the plant lists with Terry. So ended another superb day.

## Day 4 Sunday 6th June Galrum, Storsund, Hammars & Liste Angar

Today was the warmest morning to date, and sitting outside having breakfast at Lovangen was a positive delight. We took the short journey to Alskog. As soon as we stepped over the stile we were surrounded by a herd of very friendly horses, all trying to 'kiss' us. We only walked a little of the signposted 3km circular route as our main objective was a stone by the river reputed to have been used for sharpening swords - the site with its ruins has been dated early Iron Age to Mediaeval.

Our short drive to the Galrum burial grounds was interrupted by Crested Larks on the road and a Grey Partridge. Galrum is one of the most varied burial sites in Gotland with mounds of stones and half a dozen stone ships. Burials of a deceased's ashes with artifacts were placed in an urn on the perimeter of the ship settings as early as the Bronze Age. Northern Wheatear were abundant. At Ardre we photographed the standing stone. It is a replica of the original, which, because of the detailed pictures, is in Visby Museum. Many pictures were taken with the church in the background. Our next stop was Gothem church where a young girl was removing epimorphic growths from a line of trees bordering the churchyard. The paintings in the 13th century church are remarkable, one even showing Papa meeting Mohammed. The wooden choir stalls are 14th century, the large pulpit dated 1709 and a wooden font, dated 1741. It is said that the church bells have the best chimes in Sweden.

It is only a short distance to the track which leads for about 2km to Storsund reserve. Last year the open area was alive with butterflies, whereas this year only half a dozen individuals were seen, these included Pearl-bordered Fritillary, Northern Grizzled Skipper and a Green Hairstreak. A boardwalk leads to the two-tier tower where on the top level we disturbed a middle-aged couple with a dog, having a picnic. We watched, using at times Terry's scope, a couple of Cranes and Whooper Swans, Tufted Duck, Grey Herons, and a Reed Bunting.

The foot of the bird hide was surrounded by a mixture of willows, Bog Myrtle, Marsh Marigold and Yellow Flag iris. The industry for Bog Myrtle anti-mosquito cream, was a direct result of walkers being free of mosquito attacks after walking through scrub consisting of Bog Myrtle, and horses found to be free of visiting insects after rolling on plants of it.

It was only a short drive to Hammars where we found 'our' picnic table in the little sheltered meadow close to the shore, free - a perfect place for a picnic, in perfect weather. Almost unbelievably, like last year, we had just started our meal when an ice-cream van arrived ringing out its tune - we were not tempted as we had a banquet of our own.

After lunch we walked a short distance northwards up the coast spotting various terns and Long-tailed ducks before walking through a wood and finding the first available crossing of a stream, a short distance ahead was a gate, one of the type that you remove the bars to pass through. A track then wended its way, mostly among Silver Birch, shrubby willows, Juniper and Bilberry, aiming for a marshy gully close to an abandoned wooden water mill. Arriving at the boggy area, using the scope, we located a few Dactylorhiza longifolia (baltica) which prefers to stand in water or very waterlogged marsh and can reach over 1m tall. Terry, Christopher and Rosemary attempted to reach one of the orchids by scrambling over rocks which made a dam wall, while Elizabeth walked across the solid areas of marsh right up to the best specimen. After taking numerous photographs we congratulated ourselves on not only finding it but being able to photograph it.

Our final call was to the nearby Liste Angar meadow (ang is the Swedish word for meadow), but not before admiring a ditch full of Paris quadrifolia and Listera ovata. The season being late resulted in the meadow not only being far less floriferous than previous years but being virtually devoid of

butterflies. All that were seen was a single Orange-tip, a Wood White and half a dozen Geranium Argus flitting around Geranium sanguineum.

We had another tasty meal at Bruna Dorien, afterwards driving the 2km to the fishing huts of Vitvar, where the stone building are 18th century and the wooden ones 19th century. The huts and small harbour were used by the fishermen of Ardre and not Ljugarn, who had their own harbour. We then drove a couple of hundred meters to Folhammars, a series of limestone stacks.

We had eaten well so were not envious of a young lady cooking sausages and finger baps on a barbeque among the rocks for her handicapped companion.

### Day 5 Monday 7th June Grogarnsberget & Norrlanda Fornstuga

Breakfast outside at 8am, farewells and thanks to Frejus and departure for Tofta Strand at 9.30 as Terry needed time to stock up on picnic provisions. Despite a complete cloud cover the light was exceptionally good, producing a luminous effect to all the various green foliage.

The first part of the day's itinerary was a tour of the Ostergarn headland. Our first call was at Gynge, a little fishing hamlet of about 20 houses of stone and wood, all huddled together. Originally built with slab stone roofs, they are now mostly holiday homes, although some are still used by fishermen, and have net and fish drying racks nearby. There are two dry stone wall beacons and a look out post. Rosemary suggested that a square stone lined pit could have been for cooking fish - hot rocks from a fire dropped into shallow water. (After visiting Visby Museum, we wondered if it was an ancient burial chamber - the ground up bones after cremation being placed in an urn and put in this 'grave'). The open position and rocky surface with minimal soil in places produced an interesting low-growing flora. A common combination was silver-leaved plantain and thyme, with the occasional Acinos arvensis. Where the soil was deeper, Vicia sativa and hirsuta grew along with Maritime Bedstraw and Greater Celandine. Crambe maritima grew in the beach shingle.

Nearby comic terns dived for their meals while a group of Mergansers left their resting place on the beach for the safety of the sea. We passed a series of limestone cliffs, eroded by the sea a long time ago and now well above sea level, as the sea level has dropped and the land risen having been depressed during the ice age by a very thick and heavy layer of ice. Some areas were covered with ivy. We paid a non-stopping fleeting visit to Herriv harbour with its modern fishing boats and equipment, before taking the bumpy coastal track to Grogarnsberget. A huge headland with cliffs about 30m above sea level. It was an ideal place for a fort and excavations have shown that it was very important during the Viking period. In the corner of the little wooden toilet shed by the car park, sat a blackbird on its nest, and as last year, would not budge, despite performances taking place only 60 cm away.

The headland is home for various ferns such as Asplenium trichomanes and ruta-muraria. A dominant plant was Vincetoxicum, along with numerous chives. Terry disturbed a Badger and we

dispersed a small flock of Fieldfare as we drove off aiming for the coastal hamlet of Baju. There we found a somewhat sheltered set of picnic tables by one of the wooden huts where we could lay out the day's picnic. During our lunchtime a pair of Avocets made a brief appearance in the nearby coastal bay.

After lunch we drove a little further north taking the track towards Hammers, but turning off after about 3km to Trullhalsar (troll necks). Here over 350 graves, with excavations indicating that the graves are of the Merovingian period (700AD) when the dead were cremated, usually with their possessions, and then covered with a mound of sea-washed boulders. Some graves have been retained within low walls of flatter stones. The graves are thought to have been associated with a nearby harbour when the sea level was higher and virtually alongside the site. Our final detour was to the Norrlanda Fornstuga open air museum, which consisted of a series of buildings and contents illustrating life in a small place during the 17th-18th century. Entrance is via an honesty box and without supervision, visitors are requested not to touch the numerous artefacts. The buildings included a home, carpenters, blacksmith, hunter and dairy, with outside features of a well and a 24 hour sundial.

Afterwards it was a non-stop drive to Tofta Strand Pensionat arriving just before 5 pm. Shortly after settling into our rooms it began to rain. Lists were gone through from 6.45 to supper time.

#### Day 6 Tuesday 8th June Gannarve, Mallgard & Visby

A brief stop was made at Tofta Strand mini-market, situated in the corner of a huge car park - The area must be heaving with visitors later on in the year. The ship setting at Gannarve is directly alongside the main road, offering splendid views over the sea and Karlso islands. The ship setting dates to the late Bronze Age. It has been restored by skilful excavations finding grooves and hollows in the underlying gravel allowing stones to be replaced accurately.

Nearby were clumps of Melampyrum arvense with a red-purple crest, and Silene nutans, which tends to open up its flowers overnight. A short distance to the south is a road on the left which goes back to Klinte. A track leads to the reserve and parking. Here we found a number of Cephalanthera damasoniuim which has fewer flowers than Cephalanthera longifolia and are a yellow green instead of pure white. The flowers were not yet open, with the exception of one plant which had one bloom open. A Speckled Wood flitted around in sun-lit areas. We looked for the red coloured Cephalanthera rubra but were unlucky.

We parked at the end of the track, then crossed a stile, walked through a narrow forest of mainly of birch and hazel, before the track opened out into an extensive wet area, showing a lot of damage by Russ ponies. However without the ponies the so called damage the habitat would change along with its specialised flora. We noted Pinguicula alpina, and vulgaris, Menyanthes trifoliata standing in water and in mud, and a Potamogeton flourishing under the water and another on the surface. There were masses of Primula farinosa and a few Dactylorhiza incarnata, the most common subspecies being cruenta. We also found the pale yellow subspecies ochroleuca.

We then made a brief stop at Tofta Strand Pension before driving into Visby for the afternoon. Everyone enjoyed the Museum, before spending the remainder of the afternoon wandering about town. We all enjoyed our evening meal. Afterwards, Rosemary, Jean and Liz joined Terry for a quick trip to nearby Gnisvard fishing hamlet with 40 or more wooden buildings, many of which are now holiday chalets. The nearby ship setting is 47m long and 7m wide, and built with a northwest, southeast orientation, After photographing the ship setting and watching three Hares, while listening to a distant Cuckoo, and a Corncrake (similar sound to that made by scraping Terry's comb on his camera case as demonstrated by Jean)

#### Day 7 Wednesday 9th JuneThe South

An early morning stroll to the beach rewarded Terry and Rosemary with good views of a flotilla of Black-necked Grebes.

Three guests and the Greentours group were the only people having breakfast as the coach loads of visitors had left just after 6am. We were away at 9am. The weather was overcast but dry as we travelled south. As we approached Fide a sea mist was rolling in, which rapidly changed to a moderately low cloud base. Fide Church with its strong-looking square tower and the churchyard, like all those in Gotland is meticulously maintained. Some of the paintings were fading, but then they were carried out about 800 years ago. I suspect that there are millions of churchgoers who would like their 'preaching' minister to have a set of hour glasses similar to the set of four by the pulpit in this church. Outside is a large working hand pump. We were welcomed and given farewells by at least two Cuckoos calling from trees either side of the road.

Oja Church and its meadows, of which Linnaeus extolled their beauty when he visited the area on 8th July 1741, was our next major stop. The interior paintings really set one wondering just what religious message the artist was attempting to portray. The meadows are outstanding with a vast range of flowers, changing with the seasons. There were numerous spikes of Long-spurred fragrant orchid Gymnadenia conopsea. Eagle-eyed Jane found the Adder's tongue fern. Care was taken not to trample all over the meadow looking for a better specimen to photograph or a new sighting.

A short distance south the squat, little wooden windmills had to be photographed, but after looking inside one we wondered just what had been their function as there was very little space for equipment. How fortuitous that we over-shot the turning to Faludden as there was a field on our left with a windmill surrounded by its four wooden sails, and a number of large, silvery pink patches. These patches turned out to be drifts of many hundreds of Military Orchids. We were able to take shots of the drifts with one of the little wooden windmills in the background.

Our destination was Stockviken reserve with a bird viewing tower overlooking a large lake with the foreground being a dense mass of reeds. The ground was home to thousands of Anacamptis morio - Green-winged Orchid, mostly a deep purple, although we did find some cerise pink and a virtually pure-white form. However it was Terry who found a group of Botrychium lunaria -

Moonwort. A surprise was to find some damp hollows sporting large drifts of silver weed. Just outside the reserve was a roadside stand of old Black Poplars.

As it was approaching lunchtime and the light breeze was damp and cold, we opted to use a little wooden bus shelter, for eating our food, with the food laid out in the back of the mini-bus. Afterwards Christopher was brilliant with the map and quickly had us en route to Muskmyr, passing on the way a new windmill. Terry mentioned that last year it was only partly built. Rosemary noticed a Wheatear going frantic behind a window as it tried to find a way out. The window could not be opened but there was a broken window on the other side of the room so we hoped that it would find a way out.

At Muskmyr the highland cattle had been moved, although their hoof prints and dung were in evidence. The viewing tower did not produce anything worth seeing, but Jean spotted a Fly Orchid so we all began a more frantic search finding more and more of them as well as numerous Dactylorhiza incarnata cruenta. We were surprised that the low, but still very moist mounds, were the favored home for Ophrys insectifera. A walk around part of the lake on the boardwalk turned out to be very productive. After the second stile, on an area of pebbles with the spaces filled with a calcareous marl, were numerous specimen Ophrys insectifera. It was here that Anthea spotted a very diminutive orchid, with just two stems less then 10cm high topped with a couple of upward pointing buds - Liparis loeselii - the Fen Orchid. The weather began to deteriorate with a light drizzle so we made our way back to the mini-bus, just in time for the drizzle to stop. We therefore decided to make a circular tour of the nearby southern tip of the island. Hoburgsgubben is a rocky hummock, just asking to be climbed. Our efforts were rewarded with views north along the coast while enjoying the fragrance of trampled thyme which filled many of the cracks. Inland the many dry stone walled fields also had various Sorbus trees on their boundaries, which were just coming into bloom.

The coastal road north for the next 3-4 kilometers is of special importance being a series of ancient coastal ridges created when the Baltic was at different levels and as the land has risen after being depressed under the huge weight of deep ice. A Merlin, or was it a Hobby, shot past us, then did a quick turn round some conifers before returning again at breakneck speed just a couple of meters above ground level. We made a stop to look for Adonis vernalis but only found the foliage. Where there had been a bonfire the circles were now orange-brown moss.

At Vamlingbo we visited the government funded Natura for books and cards, Terry getting a bargain when his book had been priced wrongly and the management refused to accept his offer of paying the extra amount. It was then a drive back to Tofta, food and bed.

#### Day 8 Thursday 10th JuneStora Karlso

On landing at Stora Karlso the main group of visitors which included a large contingent of young, excited school children, were welcomed by the chief warden for about 15 min, before the 20

English speaking visitors had their brief welcome. We then had 30 minutes to make ourselves comfortable and book lunch before meeting up with our guide, David. He is a medical student in his 2nd of 6 years and is on Stora Karlso for his 2nd annual holiday job. He was an excellent leader, pitching his topics to suit all levels of interest. Topics covered how the island had been almost cleared of birds through the collecting of eggs and birds by hundreds of resident fishermen and sheep farmers until purchased by a conservation minded Willy Wohler in 1880, to the geology of the island, Linnaeus's visit, and his observation of male and female Mercurialis perennis triggering his thoughts on evolution, and some ones sense of humour in putting a picture of Mercurialis perennis on a Swedish 100sek note as Mercury is the Roman God for stealing. We looked at various plants and bugs, discussed the introduction of non-native species such as the rampant Prunus mahaleb, which now provides home for some of the 233 species of birds recorded on the island. We walked through a natural rock arch, but the folk lore of it reducing one's age by 10 years seemed to be fictitious, although we did get excited over the nearby Anemone ranunculoides. High up on the island, drifts of orchids included Dactylorhiza sambucina, Orchis mascula and Neotinea ustulata. To many the highlight was the close encounter of thousands of Guillemots and Razorbills on the cliffs with Velvet scoters on the sea and a couple of seals at the water's edge. While visiting the lighthouse Anthea pointed out a couple of the not so common Common Rosefinch and Terry spotted a solitary Greenish warbler.

At 1.30 we had our hot meal in the restaurant, and then wandered around the main buildings and beach, keeping within the designated areas, thus avoiding disturbing breeding birds. At 3pm the boat took us back to Klintehamn. We drove to Kovik - a fishing hamlet museum. This is a collection of various fishing hamlet buildings on a peninsula with stone lined landing jetties and a basket lantern originally looked after by elderly fishermen, before the introduction of lighthouses. This was the one and only site where we found Thrift.

We spent some time looking at a Wheatear on one of the buildings, Avocets, a beautiful boat moving fast out at sea under half a dozen sails, and a large patch of Twayblade. Our last photograph of the trip was a large drift of Saxifraga granulata intermixed with spikes of Orchis mascula. After supper we finalised the various lists before retiring to bed.

#### Day 9 Friday 11th June Visby - and home

We had a leisurely breakfast and left Tofta at 10am to catch our flights home. At Arlanda, Stockholm, Elizabeth said farewell as she planned to spend a few days in Stockholm, then Rosemary took a flight to Copenhagen on her way back to Edinburgh, Jean flew to Manchester, while the rest of us had an uneventful flight back to Heathrow. So ended a very enjoyable trip, with great company, good weather, and despite the season being late a good range of plants and birds were seen, in some fantastic scenery.

## **Systematic List Number 1**

This list is based upon those compiled by previous leaders.. Taxonomy and Nomenclature taken from Den Nordiska Floran by Stenbery & Ericsson (1993), though a newer Flora - Den Nya Nordiska Floran by Mossberg & Stenberg (2003) is recommended for its beautiful unparalleled pictures especially of sedges! Very many thanks to Jean for help especially with Grasses, rushes and sedges. Marked by days single 1, 3, 5, 6, etc/ and inclusive 1-3, 5-7, etc. S = seen but day not recorded.

**Plants** 

- Day 1 Ala, Kranklingbo, Anga, Norrlanda, Fjale, Kallgateburg, Ljugarn
- Day 2 Kranklingbo, Klintebeget, Slite, Faro, Ullahau, Langhammars
- Day 3 Alskog, Visne Angar, Galrum, Ardre, Gothem, Storsund, Hammars, Liste Anga, Vitvar
- Day 4 Gynge, Ostergarn headland, Grogornsberget, Baju, Trullhalsar, Norrlanda Fornstuga, Tofta
- Day 5 Gannarve, Mulde, Mallgard, Visby, Gnisvard

Equisetaceae Horsetail Family

- Day 6 Fide, Oja, Stockvicken, Muskmyr, Hoburgsgubben, Vamlingbo,
- Day 7 Stora karlso, Kovik
- Day 8 Departure

Variegated Horsetail	1, 7 Dune-slack, Tofta Strand
6-8 black teeth, white band above	
Field Horsetail	1, 4-7 common
Sterile stems, 6 - 19 grooves and teeth	
Marsh Horsetail	3, 6 common
stems bright green, 4 - 8 grooves	
Water Horsetail	4 growing in water, rare
stems 10 - 13 very fine grooves	
Wood Horsetail	4 Trullhalsar
Branches divided	
ns	
ns Adder's-tongue	7 Many in Stockviken meadow
	7 Many in Stockviken meadow
Adder's-tongue	7 Many in Stockviken meadow 2, 7 Many in Muskmyr meadow
Adder's-tongue single oval leaf, fertile spike	2, 7 Many in Muskmyr meadow
Adder's-tongue single oval leaf, fertile spike Moonwort	2, 7 Many in Muskmyr meadow
Adder's-tongue single oval leaf, fertile spike Moonwort single pinnate leaf, branched fertile sp	2, 7 Many in Muskmyr meadow ikes
Adder's-tongue single oval leaf, fertile spike Moonwort single pinnate leaf, branched fertile sp Bracken	2, 7 Many in Muskmyr meadow ikes 1-7 common and dominant
Adder's-tongue single oval leaf, fertile spike Moonwort single pinnate leaf, branched fertile sp Bracken Maidenhair Spleenwort	2, 7 Many in Muskmyr meadow pikes 1-7 common and dominant 4, 7 Stora Karlsö, and
Adder's-tongue single oval leaf, fertile spike Moonwort single pinnate leaf, branched fertile sp Bracken Maidenhair Spleenwort many narrow pinnate leaves	2, 7 Many in Muskmyr meadow ikes 1-7 common and dominant 4, 7 Stora Karlsö, and Grogarnsbergete
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Adder's-tongue single oval leaf, fertile spike Moonwort single pinnate leaf, branched fertile sp Bracken Maidenhair Spleenwort many narrow pinnate leaves Wall Rue small two pinnate fan-shaped leaves	2, 7 Many in Muskmyr meadow sikes 1-7 common and dominant 4, 7 Stora Karlsö, and Grogarnsbergete 2, 4 common: rocks and walls]
	Field Horsetail Sterile stems, 6 - 19 grooves and teeth Marsh Horsetail stems bright green, 4 - 8 grooves Water Horsetail stems 10 - 13 very fine grooves Wood Horsetail

Male fern tufted fern Pinaceae Pine Family

Pinus sylvestris Scots Pine 1-7 widespread

leaves: two needle, pink trunk

Picea abies Norway Spruce 1-7 widespread

Cupressaceae Cypress Family

Juniperus communis Juniper 1-7 widespread & locally dominant

both upright and prostrate forms

Taxaceae Yew Family

Taxus baccata Yew 1 locally common at Kallgatburg

Larix decidua Larch S Local in some woods

Salicaceae Willow Family

Salix pentandra Bay Willow S widespread] small tree or shrub, leaves

glossy, pale beneath

Salix triandra Almond Willow 3 widespread along streams]

tree or shrub, lance-shaped leaves

Salix cinerea Grey Willow 1, 3 widespread

shrub, leaves obovate, hairy

Salix caprea Goat Willow 1-3, 5-7 scattered
Salix repens ssp. repens Creeping Willow 5-7 scattered in bogs

Salix repens ssp. argentea Creeping Willow 5-7 scattered in mires, dune-slacks

Populus tremula Aspen 1-7 common

tree, round leaves

Myricaceae Myrtle Family

Myrica gale Bog Myrtle 3 locally common in mires, Storsund

small aromatic shrub

Betulaceae Birch Family

Betula pubescens Downy Birch 1, 2 widespread

tree or shrub, leaves ovate toothed:

Betula pendula Silver Birch 1-7 scattered

tree, leaves irregular toothed, leaf tip acute

Alnus glutinosa Alder 1, 6 scattered

tree, dark green leaves female cones

Corylus avellana Hazel 1-7 widespread

large, multi-stemmed shrub

Fagaceae Beech Family

Quercus robur Pedunculate Oak 1-7 widespread

tree, peduncle 2 - 9 cm

Ulmaceae Elm Family

Ulmus glabra Wych Elm 1-3, 5-7 widespread

tree, leaves rough on upper side

Ulmus minor Small-leaved Elm 6 Vamlingbo - Lars Jonnson museum

Urticaceae Nettle Family

Urtica dioica Common Nettle 1-7 scattered

gregarious perennial.

Polygonaceae Knotweed Family

Rumex crispus Curled Dock 2, 3, 7 widespread

narrow undulate leaves

Rumex palustris Marsh Dock 3, 6 Hammers

very tall

Rumex acetosa Common Sorrel 1-7 widespread

leaves sagittate

Rumex acetosella Sheep's Sorrel 7

smaller than above, leaves hastate

Chenopodiaceae Goosefoot Family

Chenopodium bonus-henricus - Good King henry 7 Korvik Atriplex patula Orache 7 Korvik

annual, colonising in sand

Caryophyllaceae Pink Family

Arenaria serpyllifolia Thyme-leaved Sandwort 7 Stora Karlso

lvs. oval unstalked, petals shorter than sepals

Honckenya peploides Sea Sandwort 2-5, 7 widespread on coast

creeping, fleshy leaves, white flowers

Stellaria media Common Chickweed 3, 4 Widespread

semi-prostrate, oval leaved small white flowers

Stellaria holostea Greater Stitchwort 4

showy white flowers, petals notched to less than halfway

Cerastium fontanum Common Mouse-Ear 1, 3 Common

hairy, mat-forming perenn. ascend. flower shoots

Cerastium semidecandrum Little Mouse-Ear 7 Stora Karlso

hairy annual, petals about 3/4 length of sepals

Sagina procumbens Pearlwort 1, 4

Scleranthus annuus Annual Knawel 2, 4, 5, 7 Common in dry bare places

Lychnis flos-cuculi Ragged Robin 6 Mallgards

petals pink with 4 spreading segments

Lychnis viscaria Sticky Catchfly 1-5 common on limestone pavement

showy clusters of purple-pink fls.

Silene nutans Nottingham Catchfly 1, 3, 5, 6 Widespread

sticky, flowers white, drooping

Silene vulgaris Bladder Campion 6 Tofta flowers white, calyx inflated Silene latifolia alba White Campion 4 white flowers, notched petals Silene dioica Red campion 4-7 Nymphaceae Waterlily Family Nymphaea alba White Waterlily 5 lakes & ponds] large showy white flowers Ranunculaceae **Buttercup Family** Anemone nemorosa Wood Anemone 1-6 common: woods white petaloid sepals (6-12) Anemone ranunculoides Yellow Anemone 7 Stora Karlso bright yellow flowers Anemone sylvestris Snowdrop Windflower 1,2,4,5 Common on West side of island 5 large oval petaloid sepals Hepatica Hepatica nobilis 1, 2 4-7 comm. woods 3-lobed leaves Pulsatilla pratensis Small Pasque Flower 1-7 Common, esp. around coasts drooping dark purple flowers Caltha palustris Marsh Marigold 1,3, 5, 7 common: marshes. Storsund kidney-shaped leaves, 5 yellow sepals Adonis vernalis Yellow Pheasant's-eye 6. 7 Stora Karlsö fine pinnate leaves, lge. yellow flowers Ranunculus acris Meadow Buttercup 1-5 common: grassy places hairy perennial, yellow flowers Goldilocks Buttercup Ranunculus auricomus -Creeping Buttercup 1-6 common Ranunculus repens rooting runner with narrow segments Ranunculus sceleratus Celery-leaved Buttercup 3 scattered in or near water annual, shiny leaves, very small flowers Ranunculus bulbosus **Bulbous Buttercup** 1-7 grassland hairy perennial, sepals reflexed, yellow fls. Ranunculus flammula Lesser Spearwort 1, 3, 6 scattered: wet places stems procumbent - decumbent. Achenes smooth Ranunculus ficaria Lesser Celandine 1. 5 scattered Heart-shaped leaves, narrow tepals Ranunculus baudotii Brackish Water-crowfoot Deeply divided palmate leaves or spreading rigid segments

Ranunculus confervoides (trichophyllus) Thread-leaved Water-crowfoot

1 Old mill after Ala

1 4 6 1 1 11

white flowers, leaves all capillary

Aquilegia vulgaris Columbine 1-7 woods and roadsides. Common

violet tepals with spurs, some pink

Thalictrum minus Lesser Meadow Rue 1, 2, 7 scattered

yellow panicle

Thalictrum simplex yellow panicle, leaflets narrow 3 scattered

Berberidaceae Berberis Family

Berberis vulgaris Barberry 4, 5, 7 woods, frequent

spiny shrub

Papaveraceae Poppy Family

Papaver rhoeas Common Poppy 1-3, 6 scattered

capsule round

Papaver dubium Long-Headed Poppy 2, 6 common, scattered

capsule long

Chelidonium majus Greater Celandine 1-7 common

perennial, small yellow flowers

Brassicaceae Cabbage Family

Sisymbrium altissimum Tall Rocket 5

yellow flowers

Alliaria petiolata Garlic Mustard 1, 2 6, 7 common

flowers white, garlic smell

Isatis tinctoria Woad 7 Stora Karlso

tall, yellow flowers, clasping stem leaves

Barbarea vulgaris Common Wintercress 1-6 Scattered

tall, yellow flowered cress basal leaves with 2-5 lobes

Barbarea stricta Small-flowered Wintercress 1 wet area

as above but with 1-2 lobes on basal leaves

Cardamine pratensis Cuckoo-flower 1-3, 5 Common in wet areas

small perenn- white - lilac flowers

Rorippa palustris Marsh Yellow-cress 2, 7

Arabis hirsuta Hairy Rockcress 1, 2, 6 grassland, rocks on lime, common

white flowers, long erect pods

Capsella bursa-pastoris Shepherd's Purse 1, 2, 5, 7 waste ground, common

white flowers, triangular fruit

Erophila verna Common Whitlow-grass 2, 6, 7 Scattered

Thlaspi caerulescens Alpine Pennycress 1

annual, white fls., winged seeds

Crambe maritima Sea Kale 4

large plant, white flowers, lge. round leaves

Resedaceae Mignonette Family

Reseda lutea Wild Mignonette 1, 3-7 common

Leaves pinnate, fls. yellow, 6 petals

Crassulaceae Stonecrop Family

Sedum telephium Orpine 4

Large greyish often red-tinged - flowers variable

Sedum album White Stonecrop 1-7 common

mat forming white flowers

Sedum acre Biting Stonecrop 2, 3, 5-7 common

yellow flowers

Saxifragaceae Saxifrage Family

Saxifraga tridactylites Rue-leaved Saxifrage 2, 7

reddish sticky annual rocks and walls

Saxifraga granulata Meadow Saxifrage 1-7 common in meadows

white fls., cordate leaves

Parnassia palustris Grass-of-Parnassus 6 Stockviken

solitary white flowers

Grossulariaceae Currant Family

Ribes spicatum Downy Currant 1 Scattered in woods

Ribes uva-crispa Wild Gooseberry 4, 5

Rosaceae Rose Family

Filipendula vulgaris Dropwort 1-7 comm. dry grassland on lime

inflorescence of many white flowers

Filipendula ulmaria Meadowsweet 1-7 common: damp meadows

flowers dense clusters: fragrant

Rubus saxatilis Stone Bramble 1-3, 5, 6 common groundcover

creeping small white flowers

Rubus idaeus Raspberry 1

erect shrub

Rosa villosa(mollis) Soft Downy Rose 4

tomentose shrub, fls. deep pink, prickles straight

Rosa rubiginosa Apple scented Rose 7 Stora Karlso

Sanguisorba officinalis Great Burnet 1-3 scattered in damp places

Perennial. Pinnate leaves, dense pink flowerhead

Sanguisorba minor Salad Burnet 3, 6 dry places, scattered

smaller paler flowers, leaflets deeply toothed

Geum rivale Water Avens 1-7 common, damp places

pink flowers

Geum urbanum Herb Bennet 1-3, 5, 7 common

yellow flowers

Geum x intermedium (Geum rivale x Geum urbanum) 1 With both parents in wood, Öja

Potentilla anserina Silverweed 1-3, 5-7 common

prostrate silver pinnate leaves

Potentilla argentea Hoary Cinquefoil S common

erect, silvery leaves

Potentilla recta Sulphur Cinquefoil 1-3 scattered
Potentilla tabernaemontani mat forming 1, 7 scattered

hairy, mat forming

Potentilla erecta Tormentil 1-3, 5-7 common

creeping, flowers 4 petals

Potentilla reptans Creeping Cinquefoil 1. 3 common Wild Strawberry Fragaria vesca 1-7 common long runners Fragaria viridis smaller than above, short runners 7 Stora Karlso Alchemilla glaucescens A Lady's-mantle 3, 6, 7 scattered Alchemilla monticola hairy leaves, 9 - 11 lobes 1, 6, 7 common Wild Apple Malus sylvestris scattered Mountain Ash Sorbus aucuparia 1-3, 5-7 scattered tree: pinnate leaves Sorbus rupicola shrub, leaves coarsely toothed 2. 3 scattered white tomentose beneath Sorbus hybrida Swedish Service Tree 7 leaves partially pinnate, last 2 prs. free leaflets Swedish Whitebeam 3-7 common Sorbus intermedia leaf lobed similar to Hawthorn Cotoneaster integerrimus A Cotoneaster: shrub, fls. pink, fruit red 1, 3, 5 common Cotoneaster niger A Cotoneaster 3 scattered Crataegus laevigata Midland Hawthorn leaves lobed, less 4-7 seen than halfway to midrib, styles 2 Crataegus monogyna Hawthorn 1. 4. 6 common leaves deeply lobed, more than halfway to midrib, 1 style 1. 2. 4-7 common Prunus spinosa Blackthorn thorny shrub, forms dense thickets Prunus avium Wild Cherry 1, 2, 4,, 5, 7 Prunus padus 1-3.5 Bird Cherry Prunus mahaleb St. Lucie's Cherry Invasive alien on Stora Karlsö Fabaceae Pea Family Astragalus glycophyllos Wild Liquorice 7 Farö large perennial, greenish cream flowers Vicia cracca **Tufted Vetch** 2, 3, 7 common clambering perennial., dark blue flowers. Fine-Leaved Vetch Vicia tenuifolia 3 scattered narrow leaflets, white flowers Hairy Tare Vicia hirsuta 3, 4, 7 small annual, pale lilac flowers Vicia sativa 2, 4, 6 2, 5, 7 Vicia tetrasperma prostrate, purple/blue flowers Meadow Vetchling Lathyrus pratensis 1, 5, 6 scattered yellow flowers Melilotus lupulina Tall Melilot 5. 6 Medicago lupulina Black Medick 1-3, 7 common yellow flowers, cluster of black curved pods 3. 7 scattered Trifolium montanum Mountain Clover

pale yellow flowers, narrow trifoliate leaves.

Trifolium repens White Clover 2, 4, 6 scattered, grasslands

creeping, white flowers, trifoliate leaves with white crescent

2-4, 6-7bcultivated, common

Trifolium hybridum Alsike Clover 5, 7

Trifolium campestre Hop Trefoil 1, 3-6 scattered]

flowers yellow: 20/30 florets

Trifolium dubium Lesser Yellow Trefoil 1 common

flowers yellow, smaller than above: up to 12 florets

Trifolium alpestre Alpine Clover 3, 6 Anga Prästänge
Trifolium medium 7, 7 ag Clover 5, 7 agettered

Trifolium medium Zig-Zag Clover 5, 7 scattered

Trifolium pratense Red Clover globular red flowers

Lotus corniculatus Bird's Foot Trefoil 1, 2, 4, 6 7 very common

prostrate showy yellow flowers

Tetragonolobus maritimus Dragon's Teeth 1-3, 5, 6 Very common

large solitary pale yellow flowers

Anthyllis vulneraria Kidney-vetch 1-3, 5-7 common

Oxalidaceae Wood Sorrel Family

Oxalis acetosella Wood Sorrel 4-7 Some woods

white flowers

Geraniaceae Geranium Family

Geranium sanguineum Bloody Crane's-bill 1-7 very common

flowers bright magenta

Geranium sylvaticum Wood Crane's-bill 1-7 very common

flowers mauvish, white centre

Geranium pyrenaicum Hedgerow Crane's-bill 1-4, 6, 7, scattered Geranium molle Dove's Foot Crane's-bill 1, 2 common

hairy, prostrate, pink flowers

Geranium columbinum Long-stalked Crane's-bill 1, 4-7

leaf segments narrow, small pink flowers

Geranium lucidum Shining Crane's-bill 2, 3, 7

leaves round, glossy, small pink fls.

Geranium robertianum Herb-Robert 1, 6, 7 common

strong-smelling, fern-like lvs. pink fls.

Erodium cicutarium Common Stork's-bill c1-4, 7 ommon

narrow pinnate lvs, pink fls.

Linaceae Flax Family

Linum catharticum Purging Flax 2, 3, 7 common in dry, short grassy places

small annual, white flowers

Polygalaceae Milkwort Family

Polygala vulgaris Common Milkwort 1-3 scattered,

lvs. lanceolate, pointed, fls.. blue, pink or white

Polygala comosa lower leaves blunt, fls. usually pink 4, 7 scattered

Polygala amarella Dwarf Milkwort 1, 3-7 scattered

lower leaves in rosette, bitter tasting flowers blue or pink

Euphorbiaceae Spurge Family

Euphorbia cyparissias Cypress Spurge 4-7 Tofta

Euphorbia palustris Marsh Spurge 1, 3-5 Scattered wet areas

tall, grey leaves, fruit short warts

Mercurialis perennis Dog's mercury 7 Stora Karlso

Aceraceae Maple Family

Acer platanoides Norway Maple 1-7 common

tree, leaves sharply pointed lobes

Rhamnaceae Buckthorn Family

Rhamnus catharticus Buckthorn 1, 3, 5, 7 common on lime

shrub or sm. tree, lvs. broad, finely toothed

Frangula alnus Alder Buckthorn 1, 3, 5 common: damp heaths & woods

shrub or small tree, lvs. broad, untoothed

Tiliaceae Lime Family

Tilia cordata Small-leaved Lime 2, 3, 6 scattered

trees, heart-shaped leaves

Clusiaceae St John's Wort Family

Hypericum perforatum Perforate St John's Wort 7 scattered

yellow flowers, black dots, leaves with translucent dots

Violaceae Violet Family

Viola rivinana Common Dog Violet 1-6 Common

blue-violet, stout creamy notched spur

Viola canina Heath Dog Violet 1, 3 Liste Angar

blue flowers, spurs greenish-white

Viola pumila Meadow Violet 3

pale blue flowers, spur greenish, short

Viola tricolor Wild Pansy 5, 6

flowers violet, yellow or both

Viola arvensis Field Pansy 2

small flowers, cream, sometimes tinged

yellow or blue

Cistaceae Rock Rose Family

Helianthemum nummularia Common Rock-rose 1-7 very common on lime

prostrate sub-shrub, yellow flowers

Onagraceae Willowherb Family

Epilobium angustifolium Rose Bay Willowherb 3, 5, 7 scattered

(Chamerion) tall, patch-forming, flowers bright pink

Epilobium hirsutum Great Willowherb 1, 3, 5

Araliaceae Ivy Family

Hedera helix Ivy 4, 7

Apiaceae Carrot Family

Hydrocotyle vulgaris Marsh Pennywort 6 scattered, damp places

leaves circular

Sanicula europaea Wood Sanicle 1, 3, 5-7 woods, common

flower clusters pale pink, greenish white

Anthriscus sylvestris Cow Parsley 1-7 common, banks &hedgerows

leaves 2-3 pinnate, rays many, white fls.

Aegopodium podagraria Ground Elder 1, 5-7 Scattered near habitation

low growing, patch forming

Conopodium majus Pig nut 1

Angelica sylvestris Wild Angelica 2 scattered

tall, hairless, inflated sheathing stalks

Peucedanum palustre Marsh Hog's Fennel 1

tall, stems hollow, ribbed, leaf segments lanceolate

Heracleum sphondylium Hogweed 2, 4 scattered

tall, coarse ovate leaves, large flowers

Heracleum mantegazzianum Giant Hogweed 4 waste ground near Norrlanda

Daucus carota Wild Carrot 2, 6, 7 scattered

umbels large, lower bracts pinnate or 3-forked

Pyrolaceae Wintergreen Family

Pyrola minor Common Wintergreen 2, 5-7 Tofta Strand

flowers white, style not protruding

Pyrola rotundifolia Round-leaved Wintergreen 5, 6 Tofta dunes

flowers pure white, protruding s-shaped style

Ericaceae Heath Family

Calluna vulgaris Heather 1-3, 5 very common

Vaccinium vitis-idea Cowberry 1-5 common

prostrate shrub, lvs. glossy inrolled, petals spreading, pink/white

Vaccinium myrtillus Bilberry 1-3, 5 common

shrub, leaves bright green, flowers pink, mouth constricted

Arctostaphylos uva-ursi Bearberry 1-3, 5 common

mat-forming to 2m, leathery leaves, petals

pink, constricted

Primulaceae Primrose Family

Primula veris Cowslip 1-7 common

nodding, one-sided yellow flowers

Primula farinosa Bird's Eye Primrose 1-6 damp grassy places

flowers pink

Trientalis europaea Chickweed Wintergreen 2-5 Ullahau, Hammars

flowers white, solitary

Glaux maritima Sea Milkwort 2 Follhammer

prostrate, pale pink flowers

Androsace cf septentrionalis 2, 4

Plumbaginaceae Sea Lavender Family

Armeria maritima Thrift 7 seashore - Korvik

leaves linear, flowers pink

Oleaceae Olive Family

Fraxinus excelsior Ash 1-7 common

tree, leaves pinnate

Menyanthaceae Bogbean Family

Menyanthes trifoliata Bogbean 3, 5, 6

leaves trefoil, fls. pink/white fringed

Asclepiadaceae Milkweed Family

Vincetoxicum hirundinaria Swallow-wort 1-4, 6, 7 common

heart-shaped opposite leaves, flowers greenish-yellowish

Rubiaceae Bedstraw Family

Sherardia arvensis Field Madder 1, 2

Asperula tinctoria lower leaves whorls of 6, white fls, 3 petals 3. common Galium palustre Marsh Bedstraw 3, 6, 7 Scattered

straggling, lvs. whorls 4-5, fls white, anthers red

Yellow flowers

Galium aparine Goose Grass 1, 2, 7 scattered

straggling and clinging with prickles

Boraginaceae Borage Family

Lithospermum officinale Common Gromwell 3

well branched, leaves with prominent side veins, white flowers.

Echium vulgare Viper's-bugloss 1, 3-7 common

roughly hairy, flowers pink-vivid blue

Symphytum x uplandicum Comfrey hybrid 4, 6

Anchusa officinalis Alkanet 1-3, 6 scattered

softly hairy, flowers blue-purple

Myosotis arvensis	Field Forget-me-not	6, 7 scattered
	annual, tiny flowers	
Myosotis ramosissima	Early forget-me-not	2-5, 7
Myosotis scorpioides	Water Forget-me-not	1, 3, 5 wet places
	blue flowers, petals notched	
Cynoglossum officinale	Hound's-tongue	3-7 Scattered
, c	med/tall, softly hairy, flowers dull purp	ole
	1 1	
Lamiaceae	Mint Family	
Ajuga reptans	Bugle	1, 3
Lamium amplexicaule	Henbit Dead Nettle	1-4
Stachys sylvatica	Hedge Woundwort	7 Faro
Glechoma hederaeae	Ground Ivy	1
Prunella vulgaris	Self-Heal	3, 6
Trunena vuigaris	creeping, flowers violet	3, 0
A since amonais (Saturais asinos)		17
Acinos arvensis (Satureja acinos)	Basil Thyme 4, 7	
0	fls. violet, white markings on lower lip	4 7 C+ Vl-=
Origanum vulgare	Wild Marjoram	4, 7 Stora Karlsö
Thymus serpyllum	Breckland Thyme	2, 3, 5- 7, Common
	scattered mat forming aromatic shrub,	•
Mentha aquatica	Water Mint	1, 3, 5, 6, wet places,
	aromatic pink fls. in terminal heads	
Salvia pratensis	Meadow Clary	2
Scrophulariaceae	Figwort Family	
Verbascum densiflorum	Dense-flowered Mullein	6
	decurrent stem lvs., Stigma elong. & spathulate	
Verbascum thapsus	Great Mullein	7 scattered
[Scrophularia nodosa	Common Figwort	Russ Park]
Cymbalaria muralis	Ivy-leaved Toadflax	1, 5 walls in Visby
	scrambling perennial, small purple/yellow flowers	
Veronica chamaedrys	Germander Speedwell	1-7 common
, or orrive originated for	hairy perenn., bright blue flowers	1 7 0011111011
Veronica officinalis	Heath Speedwell	1, 3 Kallgatburg
Veronica serpyllifolia	Thyme-leaved Speedwell	1 scattered
Veronica beccabunga	Brooklime	3, 5, 6 scattered
veronica beccabanga	creeping branched perenn., blue fls.	o, o, o scattered
Veronica arvensis	Wall Speedwell	1-4 scattered
Veronica an vensis  Veronica anagallis-aquatica	Blue Water Speedwell	1, 3 Kallgatburg
veronica anagams-aquatica	Similar, blue flowers, lanceolate leaves	i, 5 Kangatburg
Varanica parcica	Common Field Speedwell	S. Gotland]
Veronica persica	-	S. Gonanuj
V	Sticky, hairy pinnate leaves	7.0
Veronica hederifolia	Ivy-leaved Speedwell	7 Occassional
Malanananan	sprawling downy annual	4
Melampyrum pratense	Common Cow-wheat	4 scattered
	yellow flowers, mouth closed	

Melampyrum sylvaticum Small Cow-wheat 5, 6

deep yellow flowers, open mouth

Melampyrum cristatum Crested Cow-wheat 3

Melampyrum arvense Field Cow-Wheat 3, 5, 6 scattered, roadsides

flowers pink & yellow, bracts finely pinnate

Bartsia alpina Alpine Bartsia 5 Mallgårds Fen

flowers & bracts purple

Rhinanthus serotinus Greater Hay-rattle 6 common

erect to 60cm, yellow flowers stigma exerted

Globularia Family

Globularia vulgaris Common Globularia 1, 2, 5-7 common

blue flower heads

Lentibulariaceae Butterwort Family

Pinguicula vulgaris Common Butterwort 1, 3, 5-7 Common wet areas

violet flowers, white throat

Pinguicula alpina Alpine Butterwort 1, 5, 6 Kallgatburg

white flowers

Plantaginaceae Plantain Family

Plantago major Greater Plantain 1, 2 common

leaves broad, oval, fls. long spikes

Plantago media Hoary Plantain 1-3, 5-7
Plantago lanceolata Ribwort Plantain 1-7 common

lanceolate lvs. short brown spikes

Plantago maritima Sea Plantain 3, 7 coast

leaves fleshy, flowers greenish spikes

Caprifoliaceae Honeysuckle Family

Sambucus racemosa Red-berried Elder 1-3, 6, 7

inflorescence ovoid, white flowers

Viburnum opulus Guelder Rose 1, 4, 6 common

leaves lobed, flowers white in flat corymbs

Linnaea borealis Twinflower 2 Ullahau, Fàrö

creeping, mat-forming, fls. pendulous pink

Lonicera xylosteum Fly Honeysuckle 1-7 scattered woodland margins

shrub, pairs of small yellow flowers

Valerianaceae Valerian Family

Valerianella locusta Common Cornsalad 7 scattered

erect, tiny pale fls. fruit corky

Valeriana officinalis Common Valerian 3 damp woods

tall, lvs. pinnate, clusters of pale pink fls.

Valeriana sambucifolia Elder-leaved Valerian 7

Campanula Family

Succisa pratensis Devil's-bit Scabious 1 scattered - Campanula rotundifolia Harebell 3 scattered

pale blue flowers

Asteraceae Daisy Family

Eupatorium cannabinum Hemp 6, 7

Bellis perennis Daisy 1-7 common in grass

mat-forming white flowers

Erigeron acer Blue Fleabane 3 Anga

heads many, ray florets short, mauve

Antennaria dioica Mountain Everlasting 1-7 common

creeping, leaves white, woolly beneath, flowers white or pink

Inula britannica leaves linear pubescent, flowers yellow 3 Liste Angar Achillea millefolium Yarrow 1-6 common

aromatic, white-pink flowers in flat umbels

Matricaria discoideaPineapple Mayweed5 scatteredLeucanthemum vulgareOx-eye Daisy1, 6 scattered

leaves dark green, ray petals white, disc yellow

Tanacetum vulgare Tansy 6 Gnisvärd

Artemisia vulgaris Mugwort 7 roadsides, common

tall, leaves pinnate, silvery beneath

Artemisia absinthium Wormwood S scattered

strongly aromatic. leaves white, downy

Artemisia maritimum ssp. humifusa Sea Wormwood S scattered, coastal

short grey perennial, aromatic endemic to Baltic Is.

7 Stora Karlso

Artemisia rupestris

Tussilago farfara Coltsfoot 2, 4-7 scattered

yellow flowers, large round leaves

Senecio vulgaris Groundsel 1, 7 scattered

Carlina vulgaris ssp. stricta Carline Thistle 1-3, 6, 7 scattered on lime

low spiny, flowers yellow bracts

Carduus nutans Musk Thistle 2 Fàrö Carduus acanthoides Welted Thistle S

Cirsium arvense Creeping Thistle S grassland, scattered

spiny, pink flowers

Cirsium vulgare Spear Thistle 1, 2 scattered

spiny, pink flowers, leaves decurrent

Cirsium palustre Marsh Thistle 1-3, 6 wet places, scattered

Centaurea scabiosa Greater Knapweed 3 scattered

leaves deeply lobed, flowers solitary large

reddish-purple

Hypochoeris maculata Spotted Cat's Ear 1-3, 7 Scattered

leaves spotted, flowers pale yellow

Scorzonera humilis Viper's-grass 1-7 Common

flowers pale yellow, phyllaries in several rows

Tragopogon pratensis Goat's-beard 1, 5, 6 Common

yellow flowers, one row of phyllaries, grass-like leaves

Taraxacum spp. Dandelion 1-7 Common

Lapsana communis Nipplewort 1, 3

Pilosella officinarum Mouse-ear-Hawkweed 1, 2, 4-7 common

long runners, lemon-yellow sol. flowers.

#### **MONOCOTYLEDONS**

Alismataceae Water Plantain Family

Alisma plantago-aquatica Water Plantain 3

Alisma lanceolatum Narrow-leaved Water Plantain 1 wet areas

Juncaginaceae Arrow Grass Family

Triglochin palustre Marsh Arrow Grass 6, 7

fine leaves, carpels adhering at tip

Triglochin maritima Sea Arrow Grass 6 Tofta

leaves linear, fruit ovoid

Liliaceae Lily Family

Tofieldia calyculata German Asphodel 5 marshy places

yellow-greenish flowers

Allium schoenoprasum Chives 2, 4 Scattered, common

cylindrical lvs. fls. purple/pink

Allium scorodoprasum Sand Leek 7 Stora Karlso

tall, large head of lilac-purple flowers

Allium ursinum Ramsons 1, 2 Kallgatburg

strong-smelling, carpeting. Infl. white

Allium vineale Crow Garlic 4, 5, 7 Scattered

nfl. mixed with bulbils

Convallaria majalis Lily-of-the-Valley 1-3, 5-7 common in woods

patch-forming 2 ñ op. lvs. on each stem

Maianthemum bifolium May Lily 2, 5-7 common in woods

patch forming 2 lvs. on each stem not opposite

Paris quadrifolia Herb-Paris 3, 6, 7 Hammars-Liste angar, Tofta

whorl of 4 leaves, fls. star like

Polygonatum odoratum Lesser Solomon's-seal 1-4, 6, 7 Scattered on limestone rocks

stems angled, fls. cyl. often solitary

[Polygonatum multiflorum Solomon's-seal 1, 6

flowers constricted, in clusters

Asparagus officinalis Wild Asparagus 1

stems prostrate, minute leaves

Iridaceae Iris Family

Iris pseudacorus Yellow Flag 1-3, 5, 6 common

showy yellow flowers

Orchidaceae Orchid Family
Cypripedium calceolus Lady's-slipper

Epipactis palustris Marsh Helleborine

Epipactis helleborine Broad-leaved Helle

Epipactis helleborine Broad-leaved Helleborine Epipactis atrorubens Dark Red Helleborine

Cephalanthera damasonium White Helleborine
Cephalanthera longifolia Sword-leaved Helleborine
Neottia nidus-avis Bird's-nest Orchid

Listera ovata Twayblade

Platanthera chlorantha Greater Butterfly Orchid Gymnadenia conopsea Fragrant Orchid

Dactylorhiza sambucina Elder-flowered Orchid

Dactylorhiza incarnata var. ochroleuca Early Marsh Orchid

Dactylorhiza incarnata var. incarnata Early Marsh Orchid

Dactylorhiza incarnata var. cruenta Flecked Marsh Orchid

Dactylorhiza longifolia

Anacamptis (Orchis) morio Green-winged Orchid

Neotinea (Orchis) ustulata Burnt-tip Orchid Orchis militaris Military Orchid

Orchis spitzelii Spitzel's Orchid

Orchis mascula Early Purple Orchid

Ophrys insectifera Fly Orchid Liparis loeselii Fen orchid 1 c.400 in fantastic flower at Kallgatburg

- we were there spot on time!

5-7 Hundreds not in flower on dune,

Tofta Strand

3 Leaves noted in a variety of spots 4-7 Scattered, not in flower on sand-

dunes at Tofta Strand

5 In flower in Mulde Reserve 1-6 Widespread in flower

1-6 In flower. Scattered throughout,

1-7 In flower. Widespread

1, 2, 6, 7 6 Oga

3, 7 Stora Karlsö, Liste Angar

2, 6 In flower. Noted at most mires and

wetlands

1-7 In flower. Typical pale flesh-pink

form

In flower. Locally common in many of the mires. Most easily distinguished from the rest of the early marsh group by the leaves spotted on both sides and stems and bracts heavily marked too, 3 In flower. Formerly 'baltica'. This fantastic metre tall marsh orchid was just coming into flower in a stream on the east coast. It is not recorded from Gotland according to Delforge though it would be within the expected range of this species. There is a reference to it in Gotland (Hansen 1994) but Ian Green has yet to find the paper – so it looks like Greentours weren't quite the first to find

3, 6 In flower. Common Liste Angar,

Stockviken

1, 3, 4, 6, 7 In flower. Widespread 1-4, 6-7 In flower. Widespread and common One of the 'sights of Gotland'!

1 Many in flower near Fjäle. .

this species on the island!]

1-7 In flower Widespread and common

6 In flower Stockvicken.

6 Stockvicken (nb – surely these must be Musk Orchids Herminium monorchis? –

IG)

Juncaceae Rush Family

Juncus articulatus Jointed Rush 2 Fáröl

leaves flattened & curved, much branched inflorescence

Luzula pilosa Hairy Woodrush S woods

inflorescence: forking cluster of single flowers, leaves long hairs

Luzula campestris Field woodrush 1, 2, 6, 7,

Cyparaceae Sedge Family

Bolboschoenus maritimus Sea Club-rush 3 Follhammer

forms large stands 1.2m tall

Schoenoplectus lacustris ssp. tabernaemontani Grey Club-rush 1-3 coastal, Ljugarn

1.7m tall, glaucous stems

Blysmus rufus 3

Eriophorum latifolium Broad-leaved Cottongrass 1, 5, 6 Kallgatburg

stems 70cm, 3-sided throughout, no ligule

Cladium mariscus Great Fen-sedge S lake shores, common

tall, patch-forming

Schoenus nigricans Black Bog-rush 1 common: damp grass

tufted to 60cm. black inflorescence

Carex vulpina True Fox Sedge 5 common

Carex arenaria Sand Sedge 2 coastal sand, widespread

creeping through sand in long lines

Carex hirta Hairy Sedge 5 scattered

Carex sylvatica Wood-sedge 6

Carex flacca Glaucous Sedge 1, 5, 6 common

creeping, leaves glaucous beneath

Carex panicea Carnation Sedge 1, 2, 5-7 common

shortly creeping, leaves glaucous both sides

1

Carex distans 3 Liste Angar]

tufted: 40cm

Carex hostianaTawny Sedge1 commonCarex demissaCommon Yellow-sedge7 common]Carex ornithopodaBird's Foot Sedge1-4, 6

Carex tomentosa Downy-fruited Sedge 6 South Gotland

Carex pilulifera

Carex nigra Common Sedge 1, 7 common ]

**Grass Family** Poaceae Festuca ovina Sheep's Fescue Festuca rubra **Red Fescue** Dactylis glomerata Cock's-foot Briza media Quaking-grass Sesleria caerulea Blue Moor-grass Melica ciliata Ciliate Melick Mountain Melick Melica nutans Leymus arenarius Lyme-grass

Deschampsia flexuosa Wavy Hair-grass Holcus lanatus Yorkshire-fog Ammophila arenaria Marram

Phleum arenarium Sand Cat's-tail
Alopecurus arundinaceus Reed Foxtail
Alopecurus geniculatus Marsh Foxtail
Phragmites australis Common Reed

Poa annua Annual Meadow Grass
Poa nemoralis wood Meadow-grass
Poa pratensis Smooth Meadow-grass
Cynosurus cristatus Crested Dog's-tail

Bromus hordaceus Soft Brome

Anthoxanthum odoratum Sweet Vernal Grass

## Systematic List Number 2 Birds

Many thanks to Christopher and Anthea for help with the list.

Day 1 Ala, Kranklingbo, Anga, Norrlanda, Fjale, Kallgateburg, Ljugarn

Day 2 Kranklingbo, Klintebeget, Slite, Faro, Ullahau, Langhammars

Day 3 Alskog, Visne Angar, Galrum, Ardre, Gothem, Storsund, Hammars, Liste Anga, Vitvar

Day 4 Gynge, Ostergarn headland, Grogornsberget, Baju, Trullhalsar, Norrlanda Fornstuga, Tofta

Day 5 Gannarve, Mulde, Mallgard, Visby, Gnisvard

Day 6 Fide, Oja, Stockvicken, Muskmyr, Hoburgsgubben, Vamlingbo,

Day 7 Stora karlso, Kovik

Day 8 Home

The taxonomy and order of the following list largely follows Voous (1977, List of Recent Holarctic Bird Species).

Black-necked Grebe Cavia arctica regularly seen at Tofta
Cormorant Phalacrocorax carbo around the coasts.
Shag Phalaceocorax aristotelis a couple sighted on Faro
Grey Heron Ardea cinerea Scattered throughout.

Mute Swan Cygnus olor Widespread,

Whooper Swan Cygnus cygnus A couple at Storsund and at sea

Greylag Goose Anser anser Locally common. Faro

Barnacle Goose Branta leucopsis A few Faro

Shelduck Tadorna tadorna Common along coasts.

Mallard Anas platyrhynchos Scattered.

Pintail Anas acuta Scattered along coast
Tufted Duck Aythya fulgigula A couple at various lakes

Common Eider Somateria mollissima Widespread on coasts. Over 2000 males

gathered out at sea from Faro lighthouse

Velvet ScoterMelanitta fuscaOn sea, Stora Karlsö.Golden EyeBucephala clangulaA couple notedRed-breasted MerganserMergus serratorCommon along coastGoosanderMergus marganserA few on the coast

Common Buzzard Buteo buteo Rather scarce – only 2 seen.

Common Kestrel Falco tinnunculus Scarce.

HobbyFalco subbuteo1 at S. GotlandGrey PartridgePerdix perdixA couple of sightingsCorncrakeCrex crex1 heard at Gnisvard

Pheasant Phasianus colchicus Scattered.

Coot Fulica atra Locally abundant on a couple of lakes

Moorhen Gallinula chloropus A few at Storsund
Common Crane Grus grus 4 at Storsund

Oystercatcher Haemotopus ostralegus Widespread and common.

Avocet Recurvirostra avosetta A few along coast Ringed Plover Charadrius hiaticula A few along coast Lapwing Vanellus vanellus Widespread.

Common Snipe Gallinago gallinago 1 flushed along roadside

Curlew Numenius arquata Only a few. Along coast especially Faro

Spotted Redshank Tringa erythropus A group at Korvik
Common Redshank Tringa totanus Widespread.
Green Sandpiper Tringa ochropus A few seen
Black-headed Gull Larus ridibundus Widespread.

Common Gull Larus canus Scattered around coasts.

Lesser Black-backed Gull Larus fuscus Scattered around coasts. And at Stora

karlso

Herring Gull Larus argentatus few.

Great Black-backed Gull Larus marinus A few sScattered around coasts,

Sandwich TernSterna sandviciensisfewCommon TernSterna hirundoCommonArctic TernSterna paradisaeaCommon

Little Tern Sterna albifrons Locally common around coasts.

Guillemot Uria aalge At least 4000 on breeding colonies on Stora

Karlso - superb views!

Black Guillemot Cepphus grylle A few on Stora karlso

Razorbill Alca torda At least 1000 on breeding colonies on Stora

Karlso - even better views!

Collared Dove Streptopelia decaocto seen a few and heard Woodpigeon Columba palumbus Rather common.

Collared Dove Streptopelia decaocto Scattered.

Cuckoo Cuculus canorus Heard a number of times and seen

once Fide

Crested Lark Galerida cristata A number at Alskog

Common Swift Apus apus Widespread. Alauda arvensis Skylark Widespread. Swallow Hirundo rustica Widespread. House Martin Delichon urbica Widespread. Meadow Pipit Anthus pratensis Few seen. White Wagtail Motacilla alba Widespread. Troglodytes troglodytes 1 seen? Wren

Thrush Nightingale Luscinia luscinia Heard on Stora Karlsö,

Common Redstart Phoenicurus phoenicurus 1 seen

Whinchat Saxicola rubetra 1 seen trapped in a barn

Northern Wheatear Oenanthe oenanthe Scattered. Very common S.Gotland

Blackbird Turdus merula Widespread.

Fieldfare Turdus pilaris Widespread and very common.

Song ThrushTurdus philomelosA few seen and heard.Reed WarblerAcrocephalus scirpaceus! Seen and heardCommon WhitethroatSylvia communisA couple seenBlackcapSylvia atricapillaA few seenChiffchaffPhylloscopus collybitaheard

Willow Warbler Phylloscopus trochilus heard and seen
Greenish Warbler Phylloscopus trochiloides 1 on Stora Karlso
Spotted Flycatcher Muscicapa striata A few seen
Pied Flycatcher Ficedula hypoleuca 1 seen
Coal Tit Parus ater I Seen

Blue Tit Parus caeruleus A few scattered

Great Tit Parus major Heard

JayGarrulus glandariusFew Scattered.MagpiePica picaWidespread.

Jackdaw Corvus monedula Widespread near habitation.

NutcrackerNucifraga caryocatactes1 seenHooded CrowCorvus corone cornixWidespread.

Common Crow Corvus corvus A few seen on one day

Starling Sturnus vulgaris Widespread.

House Sparrow Passer domesticus A few near habitation.

Chaffinch Fringilla coelebs Widespread and fairly common. 5/8

Greenfinch Carduelis chloris 1 seen

Siskin Carduellus spinus Seen on a couple of days
Linnet Carduelis cannabina Seen on a couple of days
Common Rosefinch Carpodacus erythrinus Rare, 2 on Stora Karlso
Yellowhammer Emberiza citrinella Widespread. Heard and seen

Reed Bunting Emberiza schoeniclus 1 at Stockviken

## Systematic List Number 3 Butterflies

The taxonomy and nomenclature in this list is taken from Tolman's 'Collins Field Guide to the Butterflies of Britain and Europe' (1997).

Orange tips seen every day, and numerous Geranium Argus at Liste Anga, otherwise all others seen as only ones or twos.

Swallowtail Papilio machaon Large White Pieris brassicae Wood White Leptidea sinapis Clouded Yellow Colias crocea/hecla Geranium Argus Eumedonia eumedon Amanda Blue Polyommatus amandus Common Blue Polyommatus icarus Pearl-bordered Fritillary Clossiana euphrosyne Heath Fritillary Mellicta athalia Meadow Brown Maniola jurtina

Small Heath Coenonympha pamphilus

Speckled Wood Pararge aegeria Grizzled Skipper Pyrgus malvae

Orange Tip Anthocharis cardamines

Green Hairastreak Callophrys rubi