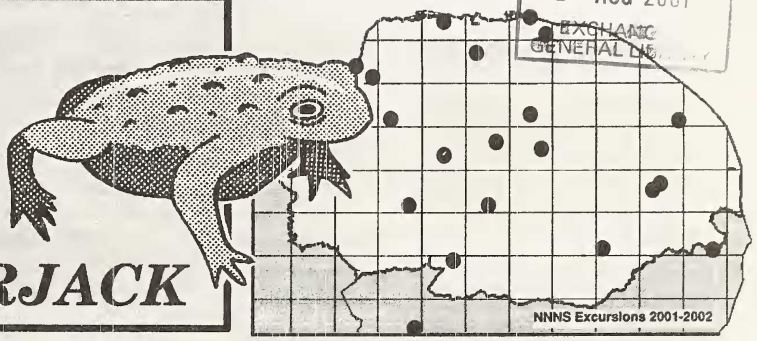
THE NORFOLK *NATTERJACK*



Toad-in-the-hole...

We are now well into summer - perhaps someone can tell the weather! Yet despite the changable nature of our local climate the excursions have been held, attended and enjoyed as the following pages will reveal. My thanks to all who have contributed to those reports and to the other authors of articles. Please keep on sending in your observations and natural history notes. FF

Village shows the way

A village south of Norwich has set the rest of Norfolk a good example by producing its own "Wildlife 2000".

The Natural History of Shotesham in the year 2000 is, like this Society's ongoing magnum opus, a snapshot of local wildlife at the millennium. It has been compiled by Frank Mitchell from records of birds, flowers, mammals, butterflies, dragonflies, amphibians and reptiles supplied by no fewer than 40 villagers - a splendid co-operative effort. And, having started, they intend to continue with some detailed recording of particular areas. What a good example for other communities!

David Paull

NNNS FIELD MEETINGS

I would like to apologise to anyone who failed to find the meeting point for the excursion to Life Wood. There were signs posted at the relevant junctions but we should have stated that this would be the case in the programme, so that members could be looking out for them. This was especially true as a housing estate is such an unusual place for us to congregate!

Some additional notes and reminders on the forthcoming programme:

Sunday July 29th 2001
Natural History Day
TED ELLIS TRUST - WHEATFEN
Events from 10.00 am

Computers and Wildlife
at Gressenhall.
Saturday October 13th.

The new Norfolk Biological Records Centre will demonstrate some aspects of the work on biological recording in a morning or an afternoon session. The room size will not accommodate too many people at one time so, please would interested people write briefly to John Goldsmith at NBRC, Union House, Gressenhall, Norfolk. NR20 4DR or e-mail **john.goldsmith.mus@norfolk.gov.uk** expressing an interest for either the morning or the afternoon. If demand exceeds supply, John has agreed to repeat the session at a later date.

Bob Ellis, Chairman
Programme Committee

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A Bittern's World

Much has been written in recent time about the rejuvenation of Broadland reed-beds, one of the objectives being to encourage the return of the bittern in significant numbers.

This is a bird which has enjoyed varying fortunes over the years. It was relatively common in the early part of the 19th century but by the end was regarded as being virtually absent as a breeding species.

Recolonization, presumably from the Continent, took place at the start of this century, the first nest being found near Sutton Broad in 1911. From that point, numbers increased, reaching a peak in 1954 with an estimated sixty 'booming' males in residence during the spring. Bittern populations are usually expressed in this way since, due to the secretive habits of the bird, it is not possible to count nests. Nevertheless, cock birds sing in spring, the song being the 'boom', more a grunt-like 'Bwump' of considerable carrying power and quite unmistakable.

The bittern's association with reed-beds is almost absolute. Unlike its close relation, the heron, which is often seen in the open on marsh-land or wading in shallow water, the bittern tends to remain hidden within the reed-bed, occasionally venturing to the margins where a thinning curtain of reeds borders a dyke or a stretch of more open water. Thus, for much of the time, the bird will be moving through the congested fen, scanning the sodden litter at ground level for aquatic insects, worms, frogs and, where there is sufficient water, fish. The position of the eyes facilitates this role. They are set at an angle on the sides of the head, looking down at the terrain over which the bird is progressing. Consequently, when the bird wishes to view any object immediately towards the front, as when it is disturbed, it freezes, raising its bill skyward so that both eyes. can now be focussed, not on the ground, but on the intruder. At such times, the striped, extended neck blends with the background of vertical reeds, the position often regarded as a typical bittern pose.

March onwards, nests are built within the dense cover of the reed-bed. A nest consists, for the most part, of strands of dead reed, crisscrossed to form a loose mound, the summit, where the eggs will rest, being almost flat. The appearance of the nest changes during incubation. Initially, the fragments of reed are their natural fawn colour. Later, they become coated with a greyish powder, the powder having been deposited from the powder-down feathers on the breast of the sitting bird. The normal use of this talcum-like material is in preening. If a bird has been feeding on a frog or an eel, some slime may have soiled the feathers and the powder is used to dry off the offending smear. On the nest, it is possible, with experience, to estimate how far the incubation has proceeded from the density of the powdery coating.

The eggs, pale olive-brown in colour, are laid at intervals of two or more days. The female starts sitting as soon as the first egg has been produced. As a result, the chicks do not hatch at the same time and, say, in a family of four, the eldest chick may be a week older than the youngest. The difference in size is very obvious.

The cock bird appears to play no part in the incubation nor does he assist in rearing the chicks. Consequently, the hen must leave her brood from time to time to obtain food and on such occasions she may fly to another reed-bed where supplies are more readily available. She may be away for an hour or two but the chicks are already clothed in down and do not chill quickly. On her return, she feeds her family by regurgitation, producing, in the early stages, partially digested food. Inevitably, the larger chicks tend to compete more effectively for what is on offer and sometimes the youngest may not survive. How is death dealt with? Certainly on one occasion, recorded photographically, the hen, having fed the active chicks, picked up the dead one and swallowed it. It was recycled! One has doubts about whether this is the usual way in which a corpse is disposed.

Young bitterns, like young herons, are incapable of flight before they are around eight weeks old. Nevertheless, they tend to wander from the nesting platform after little more than two weeks, being led through the jungle-like fen vegetation by the hen, feeding as they go. It may be that, at first, they return each evening to the nest where they can be brooded during the hours of darkness but it is not long before they spend all their time at large in the reed-bed pursuing their mysterious ways. Later in the year when the youngsters are fully mobile some dispersion occurs but no matter how far they travel another reed-bed will be their final destination.

Reg Jones

A Bee Orchid Bonanza

A great many Norfolk parishes were enclosed by Act of Parliament in 18th and 19th centuries (in fact, there were over 300 Acts, placing Norfolk third in the national league table of enclosures). In the county these acts mostly served to complete up the process of the abandonment of medieval open-field systems, and to bring commons and wastes into cultivation. We can lament the passing of the great areas of heathland with their associated mires, but the Enclosure Acts did produce one benefit for 21st century naturalists. In many parishes the Acts set aside one or more Surveyor's Allotment. These were small pieces of land designed to provide material for road repairs.

Naturally, as material was excavated many became pits, and inevitably these were used to tip rubbish. In the end, many such pits were tidied up with a capping of rubble or soil and came to be forgotten about. Some were incorporated into fields or gardens (incorporated being a euphemism for stolen) whilst others were simply bits of waste land that no-one had responsibility for.

It would be an interesting exercise for every member to try to locate the Surveyor's Allotments (if they exist) in their parish. It is easy to do, just make an appointment to view the Enclosure Act and Map for your parish at the records office in Norwich. These maps are a source of endless fascination, and will have the Allotments clearly marked on them. They can then be located on the OS map and tracked down on the ground.

In our parish there are three surveyor's allotments. One has become the village pond, one is more or less incorporated into a plantation, and the third lies forgotten behind a hedge. It was filled with rubbish and capped, but held a pleasant surprise for us. We first visited in May 1997 and found around 20 orchids. They had no flowers yet and were rather Rabbit-chewn, but aroused our interest. A return visit in June revealed that they were Bee Orchids *Ophrys apifera*, and there were ten robust and perfect spikes on show, a real discovery. Naturally, we continued to monitor this little forgotten corner. In 1998 we counted 40 spikes, and in 1999 found the astonishing total of 400 spikes. After this, things declined, with around 60 in 2000 and just 35 this year. All this in an area of around 50 m by 25 m.

There were a variety of other interesting plants too, and common grassland butterflies, making it a haven for wildlife. And, we know for sure that this is not an isolated case. We rent (from the District Council) another Surveyor's Allotment in Holt, in order to look after its wildlife interest.

It has Bee Orchids too, as well as hundreds and hundreds of Common Spotted Orchids *Dactylorhiza fuchsii*, Keel-fruited Corn Salad *Valarianella carinata* (a Norfolk rarity), and Saltmarsh Rush *Juncus gerardii* and Toothed Medick *Medicargo polymorpha* well away from the coast (perhaps brought in with the soil cap many years ago?).

The lesson is clear. Surveyor's Allotments are well worth knowing about and can have considerable conservation value (as they are set aside by Act of Parliament, they cannot be sold, but the threat, as usual, is likely to be neglect; the Parish or District Council are the people to talk to about management etc, and if they are good, they may qualify as County Wildlife Sites).

Simon & Anne Harrap

Glow Worms

In August, last year, I went with a small group of people to a fen near South Walsham. The object of the outing was to find and count glow worms that had been seen here before in fair numbers.

We were successful as over twenty were found. They were mostly seen in a part of the fen that had been cut a few weeks previously, but some were found in thick sedge and reed. The small greenish light emitted by the females could be seen several feet away.

As we had arrived at the site just before dusk it was interesting to see other denizens of this area. A hunting barn owl was seen flying over the fen edge as was a single woodcock. Several pipistrelle bats were flitting alongside a row of trees, a water deer went crashing off through the reeds. A fox and a tawny owl were both heard calling in the wood close by.

In all a very interesting experience.

Tony Howes

Out of the Blue

Whilst sitting, enjoying the sun, in my garden at Twyford, Dereham, on the afternoon of June 28th I was amazed to see a Swallowtail butterfly fly in and alight for a minute or two on Thyme (*serpyllum*) flowering in the Alpine patch. It then flew over to my neighbour's garden and fed on the perennial Wallflower still in bloom. Unfortunately it then flew away east. The weather was warm and sunny with a fresh west wind.

I had a good look at it to make sure that it was the English one — confirming it with one of my books. It was quite 'old' looking and not at all fresh.

My neighbour tells me that about ten years ago he had one in his garden.

Is it known that these butterflies fly at such distances from their normal habitat or could it have escaped from a Butterfly Farm?

I have contacted Pensthorpe Wildlife Centre a couple of miles down the road from here but they have none.

Roger Clarke.

Ken replies.....

Our Swallowtail butterflies *Papillo machaon* spp. *britannicus* have been reported several times outside their area of the Broads. Such sightings when they do occur have been mostly females though. For example in 1989 a female Swallowtail was witnessed, by Society member David Mower, laying eggs on Angelica on Beeston Common in North Norfolk. The males, however, rarely leave the humidity of Broadland, for if they do their genitalia becomes hardened and this prevents them from mating.

The continental form *Papillio machaon* spp. *gorganus = bigeneratus* is a renowned wanderer and has been recorded over many decades appearing in this country, mostly in the southern counties. Unless witnessed by an expert it is always uncertain to be precise as to which spp. it belongs.

A quick check if one can be seen with open wings is as follows:

If it is *britannicus* the ground colour is a bright yellow. The dark band running down the outer edge of the front top wings is broad and even broader at the hind end, whereas in *gorganus* the ground colour is a much paler yellow and the dark band much narrower, almost parallel sided and even thinner at the hind end.

There are also other minor differences, however, these require more expert examination than can be given in the field to be absolutely certain.

Ken Durrant

Seaweed Surprise

A couple of years ago (Transactions, 2000) I wrote of discovering Channel Wrack *Pelvetia calaliculata* growing attached to lumps of concrete in Wells. The unusual thing about this was that I had only previously seen this seaweed in Norfolk in its "free" form, caught up among the stems of saltmarsh plants at Blakeney Point. Subsequently I sent out a challenge to members of the Norfolk e-mail naturalists' forum to watch out for it. No response - I don't think many people can get worked up about Marine Algae!

However, on a recent walk to inspect the improved sea defences at Overy Staithe, I noticed a flourishing growth of seaweeds on the concrete lump groynes reaching out into the harbour and, lo and behold, the top level consisted of abundant clumps of Channel Wrack! (the next one down was Flat Wrack *Fucus spiralis*, by the way. I couldn't see what was below that, as the tide was in).

These groynes pre-date the recent work on the sea wall, so how long these particular species of Algae have been there I don't know. It does seem, however, that the "true", attached form of Channel Wrack is now well established on our coast.

Paul Banham

GOLDEN DAYS

I often take the camera with me and just wander about the countryside to see what insects I can find, this is very enjoyable on a warm sunny day. Time passes so quickly, it is pure joy just peering into bushes and looking for movement around you. Some of these finds have been imprinted on my memory like bright jewels and I look back on them with great pleasure.

The day at Upton when I saw my first Yellow Winged Darter *Sympetrum flaveolum*, a rare vagrant that turns up only very occasionally. Then the hot sticky day when I was walking down a fen path and saw a large dark butterfly coming towards me. I had on a blue sun hat at the time, as the butterfly reached me it circled my head a couple of times before continuing on its way, leaving me delighted and amazed at the sight of my first ever Camberwell Beauty. The short-winged Conehead I first saw at eye level in a reed bed, I took its portrait and only found out later what it was. Then there was the day on Postwick marsh when I was concentrating on keeping a Swallowtail butterfly in sharp focus on a buddleia stem, and then seeing out of the corner of my eye a Humming Bird Hawk Moth feeding from the same spray.

Not all sightings are identified. Several times in recent years I have seen a large yellow insect in flight at Upton Fen, I think it is a Hornet Clear-wing moth, one day I hope to spot it settled before it sees me, then I shall have another bright jewel to add to the collection.

T ony Howes

A risk too far?

Beavers in the Fens? Am I alone in being just a little bit anxious about the current moves to reintroduce this delightful but potentially destructive creature?

Some have already been released in Scotland. Kent Wildlife Trust has nine in quarantine in a sanctuary, destined for an ancient wetland in the county. The Trust wants beavers to be reintroduced to suitable sites across Britain - and high on the list of possible locations is the Fens.

Fossil discoveries show that beavers were once abundant in the Fens but became extinct a thousand years ago. Professor Stephen Harris, chairman of the Mammal Society, is all in favour of bringing back the European beaver - "not the dam-building American kind", he wrote in an article in The Times. "In the Fens," wrote June Southworth in the Daily Mail, "there was so much still water that the rodent had no need to fell trees and build the dams for which is it famous - a fact that should allay the fears of present-day landowners if the beaver is to make a comeback". But that was centuries before the Fens were drained. Conditions have changed dramatically.

European beavers do build dams - and fell trees to do so. There is a record of a beaver dam in Russia 400ft long, more than 3ft high and up to 3ft wide.

The return of the beaver has also been welcomed by Anthony Legge, professor of environmental archaeology at London University. But, in a letter to The Times, he noted that J.E. Harting, in his British Animals Extinct in Historic Times (1880), recorded that beavers were released by a Mr Barnes in Southerley Park, near Wangford, Suffolk. They prospered, so much so that their dams were destroyed because they were an eyesore. They moved downstream where they were killed because of the damage they did to forestry.

What if beavers were reintroduced to the Fens, thrived and spread to rivers like the Little Ouse, the Nar and the Stiffkey? The effect might be beneficial in improving wetland habitats. Or it might not. It took ten years and huge sums of money to rid East Anglia of the coypu. Muntjac are now a major pest. Mink are causing devastation to native wildlife. Various aquatic arrivals - Asiatic clams, crayfish, North American bullfrogs - are becoming a major problem.

Agreed, they are introductions, deliberate or accidental, rather than reintroductions. But the natural predators of those once-native species are themselves extinct. Dare we take the risk?

Perhaps I am just being paranoid. But isn't it ironic that, while Professor Harris is commending an EU Directive "instructing all countries that they ought to consider reintroducing once-native species", the Broads Authority will be taking part in a Government-sponsored investigation into the ecological damage caused by alien plants and animals.

I hope to read your views in future issues of *Natterjack*.

David Paull

EXCURSION REPORTS

Sporle Wood,

May 6, 2001

There was great relief when we heard from Mr Kilvert, owner of the wood, that we would be able to hold our field meeting as planned. Thus it was that about 30 members, eager to get out into the wild once more, arrived for this meeting. The fact that the wood had scarcely been visited before (except by intrepid Flora Recorders) also attracted experts in many fields.

Sporle Wood is at the south-westerly limit of the Central Norfolk woods and has been known since medieval times when it was owned by the Paston family. A description of it in 1472 shows it to have been considerably larger than it is now, but it is safe to say that the section which remains today has never been completely cleared though the lack of really old trees meant there were not many of the rarer mosses or liverworts. We began by walking the track outside the northern edge of the wood where the ditch bank was carpeted with dogs mercury and we could glimpse bluebells within. Once inside, the party split up, but those who remained with the leader had the advantage of the presence of Mrs Kilvert who was able to tell us something of the present management and use of the wood. One part of the wood had, in the past, been planted with larch, but four years ago these were cleared and new young hazel planted in anticipation of later coppicing. Four years ago when the leader visited the wood this area was almost completely carpeted with wood millet grass but now it was botanically the richest area and the grass has given way to carpets of bluebells, many early purple orchids, yellow archangel, hairy St. John's wort and a small colony of wood goldilocks which had been missed when recording for the Flora! We were interested that very few of the many plants of wood anemone were flowering and a closer look showed that almost every flower had been eaten. Several possible culprits were suggested including pigeons, pheasants and muntjac, all plausible but none could be proven. I wonder if anyone has noticed this in woods elsewhere? The lateness of the season hampered those looking for insects but blackcaps, chiff-chaff, willow warblers and marsh tits were singing and we felt that spring at last was really with us. *Gillian Beckett*

Wild Flowers Revealed at Foxley Wood NWT Reserve

Sunday 13th May 2001

Leader: Rob Yaxley

After worries about access due to foot & mouth and the extremely wet condition of the wood, in the event this was an extremely successful meeting, with 60-70 people present for the morning season (although rather fewer stayed on until the afternoon). We broke up into smaller parties, each led by an experienced botanist (although some were more experienced than others!) and quickly began to find some of the things which make Foxley such a wonderful place. Many of the spring flowers were showing well, including Wood Anemone *Anemone nemorosa,* Lesser Celandine *Ranunculus ficaria,* Common Dog-violet *Viola riviniana,* Wood-sorrel *Oxalis acetosella,* Bugle *Ajuga reptans,* Germander Speedwell *Veronica chamaedrys* and a fine showing of Bluebells *Hyacinthoides non-scripta* and Early Purple Orchids *Orchis mascula.* In some recently cleared coppice there were some rather weedy Herb Paris *Paris quadrifolia* and, most interestingly, some large patches of Orpine *Sedum telephium* too. One of Foxley's specialities, the Wild Service-tree *Sorbus torminalis,* was not yet in bloom, and best identified by the plastic bag tied around its trunk, but Midland Hawthorn *Crataegus laevigata* was in flower, and there was a debate over the identification of some trees which seemed to show variable numbers of styles. Indeed, the aim of the day was to introduce people to wild flower identification, and there was much poring over field guides and keys by both beginner and expert alike (we particularly liked the comparison of leaf shape and texture between Barren Strawberry *Potentilla sterilis* and Wild Strawberry *Fragaria vesca*).

In the afternoon more time was spent on grasses and sedges, with Hairy Wood-rush *Luzula pilosa* and Great Wood-rush *Luzula sylvatica* being notable, but the real stars were Thin-spiked Wood Sedge *Carex strigosa* at its only Norfolk locality and the rather localised Pale Sedge *Carex pallescens* (although neither was in flower let alone fruiting, and *C. strigosa* especially generated some scepticism). Rob showed us a very limited area of acidic podsol in the centre of an otherwise rather calcareous wood, with *Molinia* as well as Common Sedge *Carex nigra* and Pill Sedge *Carex pilulifera.*

We also managed to find Narrow Buckler Fern *Dryopteris carthusiana,* a species which our leader had yet to identify at Foxley. All this against a background of Willow and Garden Warblers, Chiffchaffs and Blackcaps, and it was a great day out.

Simon & Anne Harrap

Catfield Hall

Saturday 16th June 2001

Torrential rain, thunder and lightning directly overhead, the bent fenland reeds sodden with water and a warm humid atmosphere, yet twelve hardy naturalists assembled for the field meeting. We all first needed to spray our boots and cars with disinfectant because of the fears of foot and mouth disease before we ventured onto the fens. The weather broke kindly for us as we walked from our cars towards Middle Marsh where swallowtail butterflies were feeding on the thistle heads. After the heavy rain overnight and during the morning it was a surprise to see so many swallowtails active and even alive. The break in the weather was not to last and as the party split into the botanists-entomologists moving into the reed beds and the freshwater group following the dyke pathways the rain fell to mon soon levels. Trees for shelter always seemed to be on the other side of the dykes and we all got very wet. An experience we were to meet again after lunch.

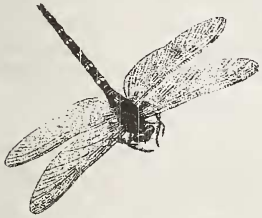
Caterpillars of the Garden Tiger moth *Arctia caja* L. were found on Marsh Fern and of the Emperor moth *Saturnia pavonia* L. on bog myrtle.

Emperor Moth (female)

Four species of leech live in the dykes and Broad: *Piscicola geometra* (L.) and *Hemiclepsis marginata* (Müller) are ecto-parasites of fish whilst *Theromyzon tessulatum* (Müller) is a parasite of waterfowl where it enters the nostrils and inserts its proboscis through the wall of the nasal and buccal cavities. The fourth leech *Erpobdella octoculata* (L.) is common throughout Norfolk. It is a carnivore of small insect larvae, waterfleas (fourteen species recorded at Catfield) and aquatic worms. An important discovery of mayfly larvae of *Caenis robusta* Etn. in the dykes and Broad brings the Norfolk records for this species to four. It has been noted in the adjacent fens at Catfield owned by Butterfly Conservation, at Wheatfen Broad and Scoulton Mere. The larvae are comparatively large and can be described as frequent in the Catfield waters.

The fens proved to be alive with dragonflies and damselflies. The dykes and Broad are rich in aquatic and marginal vegetation

and the many sheltered sites are of critical importance in maintaining the diversity and number of species. The list recorded includes the Azure, Variable, Blue-tailed, Red-eyed and Large Red damselflies. The Southern Hawker, Brown Hawker, Migrant Hawker, and the Norfolk Hawker, which is largely confined to the Broads where it favours clean dykes and water soldier plants, have been observed at Catfield. The Hairy Dragonfly, although generally scarce in the UK is plentiful near dykes with well vegetated margins. On this field visit both the Common Darter and Four-spotted Chaser were seen.



The fens proved to be rich in ferns. The Royal Fern *Osmunda regalis* L. is a fern of acid soils and some clumps were noted where the fern had grown to a large size. Marsh Fern *Thelypteris palustris* Schott is common in the fens, whilst both Male *Dryopteris filix-mas* (L.) Schott) and Broad Buckler *Dryopteris dilatata* (Hoffm) Gray ferns are widespread but occasional. An important discovery of two clumps of the Red Data Book Crested Buckler fern *Dryopteris cristata* (L.) Gray on mounds of Sphagnum is considered by Bob Ellis to show the Catfield fens as the best site in Norfolk for this rarity. Six species of bog mosses in a single site is rare and this clearly indicates the importance of the fens of this part of the River Ant valley. *Sphagnum subnitens, S. fimbriatum, S. palustre, S. squarrosum, S. capillifolium* and *S. fallax.*

Roy Baker

Kelling Heath

Wednesday 20th June 2001

The aim of this evening meeting, which we were leading, was to hear, and hopefully see, Nightjar. We had near-perfect weather, warm, still and not a cloud in the sky, and started off by looking around the heath itself, which straddles the road between Holt and Weybourne. A great deal of work has been done in recent years to restore the heath (mainly by the County Council) with remarkable success. We admired some vast sweeps of Wavy Hair Grass *Deschampsia flexuosa* and areas of Heather *Calluna vulgaris* and Western Gorse *Ulex galli* where, until recently, the ground had been dominated by Bracken *Pteridium aquilinum* and Silver Birch *Betula pendula.*

In the couple of hours before darkness some serious botanising took place. The alien Pirri-pirri Bur *Acaena anserinifolia* was admired, and then it was noses to the ground as we walked along the broad tracks through parts of the area. Heath Grass *Danthonia decumbens* was common in some areas, and another speciality was Mossy Stonecrop *Crassula tillaea*, now turned a beautiful red.

Sharp eyes spotted the white flowers of Bird's-foot Clover *Trifolium ornithopdioides* and also the rather larger (but still tiny) Bird's-foot *Ornithopus perpusillus.* There was also a useful comparison of Small and Common Cudweeds *Filago minima* and *F. vulgaris.* Even mosses got a look-in, with another alien, *Campylophus introflexus,* colonising bare ground and changing colour from silvery-green when viewed obliquely (due to the stars of scattered hairs at the leaf-point) to a rather drab grey-green when viewed from above.

At last, it was dusk, and a Nightjar began calling, almost on cue, at 2150 hrs. For a while this male seemed glued to his tree and well out of sight but eventually he appeared, wing-clapping and calling in flight, and some of us even saw him sitting, silhouetted, on a pine as the light really faded. His mate was also in evidence, flying Kestrel-like around us, and back at the cars we heard a second churring male to round off a fantastic evening.

Simon & Anne Harrap

Cley to Blakeney Point

Saturday 7th July 2001

More than 20 hardy souls braved the mist and the threat of rain to walk from the Wildlife Trust car park at Cley to Blakeney Point, ably led by Alec Bull. This was the second of the society's series of walks entitled "Wildflowers Revealed". As the tide was still fairly high, we decided to tramp the shingle and botanise on the way out, leaving the option of the less arduous walk along the beach for the journey back. We soon came across a splendid show of yellow-horned poppies *Glaucium flavum* and then, between scattered patches of sea-sandwort and shrubby sea-blite, we admired a colony of sea pea *Lathyrus japonicus* in full bloom. This species was first introduced at Blakeney by F.W. Oliver in 1912 but the colony was lost and following the 1953 floods Ted Ellis scattered seed on this shingle bank at Cley where it still persists - after nearly 50 years and many a storm and surge tide. According to Petch and Swann, the seed introduced in 1912 came from Chesil Beach but does anyone know where Ted acquired his seeds?

We soon paused to look at some of the plants of the salt-marsh - common sea-lavender, sea wormwood, sea purslane,

annual sea-blite, sea arrow-grass, cord-grass and reflexed salt-marsh grass. Much of the sea-lavender here was sporting the rust *Uromyces limonii* with its rings of tiny bright-orange cluster-cups (aecia). Continuing along the shingle, we passed a magnificent specimen of sea-kale *Crambe maritima*, the same plant that Alec has known since it was a seedling many years ago. Trudging on, we reached "Half-way House" and in areas here the silt, sand and gravely shingle form firmer patches which support a rather special flora including the pretty little sea heath *Frankenia laevis*, sea pearlwort *Sagina maritima*, now in seed, and the strange curved hard-grass *Parapholis incurva*. Along another long stretch of shingle known as "The Marrams", though there is little sign now of sand dune or marram grass, we compared the sticky groundsel with the heath groundsel and examined different species of orache.

When we reached the area of dunes known as "The Hood" we took a well-earned rest and a break for lunch, but botany was never far from our minds. Here we saw a wonderful spread of grey hair-grass *Corynephorus canescens* and amongst the sand-sedge were some seed-heads of smooth cat's-ear *Hypochaeris glabra*. On the seaward side of the dunes, the deep-pink, white-spoked trumpets of sea bindweed *Calystegia soldanella* inspired one member of the party to stop and sketch. Onward then to Blakeney Point itself and here our long walk was well rewarded by the sight of what I think of as the jewel of the North Norfolk coast - for in Britain it can now only be found in a few places between Holme and Blakeney Point - matted sea-lavender *Limonium bellidifolium*. Not only is this a "Red Data Book plant" but to my eye, when in full flower as it was on this occasion, it is one of the most attractive of our native wild plants and it is a minor miracle that something that looks so delicate is adapted to survive in what, to a small vascular plant, must be a very harsh environment. Here it is joined by more of the sea heath and another rare sea-lavender *Limonium binervosum* ssp. *anglicum*.

Although a few robust members of the party returned along the shingle, many of us chose the easier route along the now exposed beach. As we traipsed back, we were distracted by some bryozoans washed up on the strand line, were entertained by little terns fishing off-shore, and were briefly observed by a solitary seal. Finally back at the car park, you might have thought that our day was concluded - but no, Alec led us down to "Half-moon Pond" where we saw lesser pondweed *Potamogeton pusillus* and then spiral tassel-weed *Ruppia cirrhosa* with its long twisted peduncle bearing an umbel of shorter-stalked fruits. On the borders of the pond we examined long-bracted sedge *Carex extensa* and frog rush *Juncus ambiguus*. This latter plant was first reported here by Mr. K. K. Harrison in 1998, unfortunately just too late to appear in "*A Flora of Norfolk*". The margin of this brackish lagoon is its only known locality in the county and the presence of several locally rare plants in this one small area led to a debate about what will happen to the pond when the new sea defence across the marshes is commissioned. If the pond and its margins were to disappear under the spread of the shingle bank it could lead to a county extinction *Juncus ambiguus*, a vice-county extinction *Carex extensa* and the loss of a good colony of the nationally scarce spiral tasselweed (one of only four or so sites in the county, as far as I know). If this were to happen it would be a sad loss indeed, but this outcome is far from certain.

All in all, we saw almost 90 different species of plant, three of which are listed in the Red Data Book *Corynephorus canescens, Limonium bellidifolium* and *Limonium binervosum* and eight of which are considered nationally scarce (*Festuca arenaria, Frankenia laevis, Hordeum marinum, Limonium humile, Parapholis incurva, Ruppia cirrhosa, Sarcocornia perennis* and *Suaeda vera*). Several more are locally scarce. I'm sure this illustrates just what a treasure our diverse local flora is. Many thanks to Alec for leading such an enjoyable and botanically rewarding excursion.

Bob Ellis

Joyce Robinson

It is with sadness that we report the passing of Joyce Robinson after a short illness following years of incapacity due to arthritis. Joyce served this Society as Excursion Secretary for 17 years in the days when we met every two weeks throughout the spring and summer at sites over Norfolk and the bordering counties. Joyce was born in Norfolk and she knew the county intimately. It was this knowledge which she shared with us in planning and guiding the field visits for nearly two decades. She continued to be active in the Society for many years and in recognition the Norfolk and Norwich Naturalists' Society honoured Joyce with a lifetime position as Vice-President. *Roy Baker*

TED ELLIS TRUST

An invitation

Mark Cocker, author, broadcaster and environmentalist will be in Norwich on **9 October** to give an interactive, illustrated talk entitled **'Birds Britannica --- Folklore in Norfolk and Beyond .. .. ..'** The evening is being presented by the Friends of the Ted Ellis Trust at **7.30pm** at the **Friends Meeting House, Upper Goat Lane, Norwich.** Admission is £2.50 including refreshments. City centre carparks are available.

Further details may be found on:

www.tedellistrust.org.uk

A note to CONTRIBUTORS.

The next *Natterjack* will be in November. It would be much appreciated if any correspondence or disc could be sent to the following address, ***as soon as possible by Oct. 1st***, or by e-mail to: francis.f@virgin.net

FF

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