THE NORFOLK NATTERJACK

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PROGRAMME NOTES

The following are additional details for some of the items in the 1995/96 programme. Please refer to the programme card for the full list of dates, times and grid references.

1996

Sunday 21*st* January It can be very cold on top of the cliffs at Hunstanton. Please come suitably dressed!

Bird watching meeting to Snape and Iken cliffs on River Alde led by Don Dorling: this will be on **Sunday 4*th* February.** Meet at 1100 hrs at Snape Maltings car park, TM 392575.

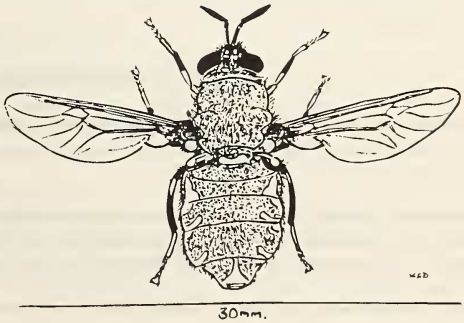
HORSEY 20th AUGUST 1995

We were welcomed on the much improved car park near Horsey mill by Mr. John Buxton.
Before lunch we took the field path towards the dunes. Painted lady butterfly caterpillars were soon found on a bed of thistles, whilst the nearby dyke was alive with six species of dragonflies, the Blue tailed Damselfly *Ischnura elegans*, Emerald Damselfly *Lestes sponsa*, Black tailed Skimmer *Orthetrum cancellatum*, Common Darter *Sympetrum striolatum*, Four-spotted Chaser *Libellula quadrimaculata* and the Brown Hawker *Aeschna grandis*.

After along walk across the fields we arrived at the dunes. A person who was just leaving informed us that there was a Camberwell Beauty butterfly near the beach but we did not see it. As there were lots of small red dragon flies darting about I was hoping to find the very similar Yellow winged Darter *Sympetrum flavcolum* which have migrated here in large numbers this summer, but they were all the Ruddy Darter *Sympetrum sanguineum*.

Silver Y moths were active amongst the Marram grass, the Sand Wasp *Ammophila sabulosa* was also seen, the Heteropteran bug *Chorosoma schillingi* which resembles a miniature stick insect could be found perfectly camouflaged on the Marram grass heads. A number of Wheatears and Stonechats were seen, also a Pied Flycatcher.

We returned to our cars for lunch, and afterwards made our way across the marshes to the Bograve level, on the way encountering yet more dragonflies, the Southern Hawker *Aeschna cyanea*, Common Hawker *A. juncea* and the Migrant Hawker *A. mixta*. Soldier flies *Stratiomys singularior (=furcata)* were frequent. Females were seen depositing their eggs on the leaves of plants overhanging the dykes.



Many Cigar galls were found on the Phragmites caused by the fly *Lipara lucens*. Biting flies *Chrysopa relictus* visited us but I think we escaped being bitten. Many of the Cocksfoot grass heads were found to be covered with numbers of little beetles *Anthocomus rufus*. The seedheads of the False Oat grass growing

amongst the reeds had many of their seeds swollen with the Ergot fungi *Claviceps purpurea*.

The afternoon was enhanced by the sighting of two pairs of Cranes across the fields, one pair obliged by flying over as we approached the Waxham cut. A number of plants of Deadly Nightshade were seen along the path. A family party with small children were admiring the shining black berries. We told the father not to let them touch them as they were extremely poisonous to which he replied," I'll give some to the wife then". An interesting day with ideal weather and good company.

Ken Durrant

A CLOUD OF RED, WHITE AND BLACK.

When travelling daily to Gt. Yarmouth from Sheringham during August I regularly passed through Dilham/ Smallbrough on the A149. On August 14th. 1995, as I passed an old "stag's-horn" Oak, north of the village, at around 6.30 p.m. I became aware of a large number of butterflies in its vicinity. As the road is narrow and generally busy it was, however, difficult to stop. Next morning and again in the evening butterflies were present in the immediate area. I could see no real source of nectar plants in the fields and surrounding hedgerows and as the days passed the numbers of butterflies, particularly in the evenings, remained unusually high. By Friday evening (August 18th.) I became determined to find a parking spot and to investigate. Further up the road I pulled into a field gateway and walked back. As I walked back along the field edge butterflies were flying up from the hedge and field in large numbers. They were all the same species - Red Admirals. I thought I had found a communal roost since many were landing on the trunk and branches of the old oak.

The following Sunday (August 20th.) as I headed to the NNNS excursion at Horsey with Ken Durrant and Alec Humphrey, I stopped again at the old oak to show them the phenomenon. Ken noted a large patch of nettles across from the oak and suggested that it was the breeding site and source of the large numbers of butterflies. As we investigated the nettle bed Alec started counting and soon noted some 50 plus individuals flying. We also noted that on the road beneath the oak around 50 butterflies had been killed by passing traffic. Again due to the narrow road and holiday traffic it was dangerous to investigate too far.

What the total numbers of individual Red Admirals were during the week is impossible to say. As Ken remarked, in the days of horse drawn traffic such road casualties would not have existed. Similarly in a less intensively farmed age such nettle beds would probably have been widespread producing a "cloud of red, white and black" plus other butterfly species enmass as the norm.

Francis Farrow.

DITCH PRAWNS

While visiting Horsey Mere on August 20th (NNNS excursion) I carried out some "dipping" for mayfly larvae along the dykes. It was without success, however, a dip in the New Cut, north of the mere produced some crustaceans. These resembled the prawns or shrimps generally associated with the marine environment. On checking various references it seems likely they were Ditch Prawns **Palaemonetes varians** which is apparently a very common brackish water species that frequently occurs in adjacent freshwaters. The prawns can live successfully in freshwater but cannot reproduce. Coincidentally these prawns were also reported in the current NNNS Transactions as being widespread in brackish ditches and as having been recorded from Broadland rivers (Driscoll, R.J. 1995 Freshwater Recorder's Report, *30*(3), 270-271).

Francis Farrow.

A NEW "DRAGON".

In early August, the local newspaper, **The Eastern Daily Press** reported the influx of a number of continental insects, particularly in the Gt. Yarmouth area. These insects included the Camberwell Beauty and the Yellow-winged Darter **Sympetrum flaveolum**.

On Saturday, August 12th, I walked over Beeston Common and found up to six of the dragonflies, all males, flying mainly over a small boggy area, but also around the margins of the main pond and stream. The abdomen appeared generally pinkish-red to scarlet with black along the sides and the amber-yellow blotched wings were very distinctive. When the insect flew overhead the view from beneath showed the pigmented wing areas as dark oval patches. The following day none of the dragonflies could be found. Francis Farrow.

MUSINGS ON A LARVA DECEASED.

My ten year old son wept bitterly and then swore a solemn oath with such fury that it quite unnerved me, "I'm going to squish every ichneumon I see from now on, I hate them ! I hate them !" His lovely Emperor Moth caterpillar had just died after months of care and attention.

I then started to explain that all living things have their place. One does not "Squish" toads because they eat interesting spiders or shoot Hobbies because they kill small birds and rare dragonflies. (We had observed a family of Hobbies at Upton feasting on a glut of the highly protected *Aeshna isosceles*). I pointed out that we must not show favouritism to one species over another. I told him of the Great Spotted Woodpecker I observed last year hammering its way into a hollow oak bough to plunder the chicks of a pair of Blue tits. We performed a post-mortem on his caterpillar and found no parasites inside. I felt a point had been made and a lesson learned. "Now how do you feel son?' I asked, placing a paternal arm around his tiny, sobbing shoulders. "I'm still going to squish every ichneumon I see". He has not though!

Garth M. Coupland.

ARACHNOLOGICAL OBSERVATIONS.

The hot April sunshine promised fine spider hunting for spring species this year as I set off for Winterton dunes. However, on arrival the cold north east wind dashed my hopes. I searched diligently but not a spider was seen except the innumerable webs of young *Agelena labyrinthica* in which the spiders sheltered deep down in their tubes from the wind. These would grow into spectacularly large and handsome spiders maturing in July when the males can be observed on what has now grown into enormous sheet webs tempting the females from their lairs. An *Agelena* facing towards the tube entrance in the web's centre is invariably a male.

I made my way homewards. It was then that I found a single, human footprint in the sand. Across the imprint of the heel was a spider spinning a straggly web. Black with white chevron spots, it was very striking and I had never seen it before. The trip proved worthwhile after all. This was a mature, female *Steatoda albomaculata,* and an unusual colour form. This is a rare find anywhere in the South of England but particularly so in our County.

Winterton Dunes have produced several rarities for me and they require peculiar hunting techniques to locate them.

The beautiful Crab Spider *Xysticus sabulosus* I found whilst searching on hands and knees looking for minute movements in the cracks between dried moss patches. It took three years of searching one particular ten foot square of hillock before a mature specimen was found for positive identification. (If pedantic readers think I spent three years on hands and knees they are mistaken as I only visit the site about three times a year!)

Another hunting technique, sitting stock still whilst observing a patch of ground on a hot sunny day, produced the match-head sized jumping spider *Attulus saltator*. Once spotted you then have to catch it! It is capable of astounding, flea-like leaps of up to three inches in rapid succession.

I have made several captures of what I firmly believe to be the rare jumping spider *Sitticus rupicola* at Winterton. Unfortunately I have never found a mature specimen.

For those that are unfamiliar with spider identification and may wonder why maturity is so important I should point out that a certain identification can often only be made by studying the genitalia. When a spider matures sexually the male palps and female epigynes take on a unique appearance for each species. I would like to acknowledge and thank Mr Rex Hancy for his assistance in identifying many of my finds.

Winterton Dunes offer many less rare but equally fascinating spiders which flourish on that small strip of coastal dune and heathland habitat. The dashing *Micaria pulicaria*, ant-like with "Union Jack" markings on its carapace is an incredibly fast runner. Its speed alone separates it from the ants it runs around with. *Zelotes electus* is another ant-like spider typical of coastal dunes.

Two "hunting spiders" or Lycosids found of the area are *Alopecosa accentuata*. Sometimes found in large numbers at Winterton this is a very large and strikingly marked spider. However my favourite is the Lycosid *Arctosa perita*. Its incredible camouflage renders it invisible on sand until it moves. It leaps on its prey, sometimes grasshoppers larger than itself, then drags it off to be eaten in a private spot. Truly the "Leopard" of the spider world.

With the publication of Michael Roberts' new field guide to spiders and Dick Jones existing field guide there is now

no excuse for the naturalist not to study this group of animals. They are diverse, colourful, fascinating and above all they are everywhere!

Garth M. Coupland.

SOME MORE NORFOLK GALLS, PART 2

In the last two seasons I have accumulated another list of galls that are additions to Ken Durrant's county checklist.

We have problems with bean galls of *Pnotania* sawflies on willows and sallows (*Salix spp.*). Present knowledge is that *P. vesicator* is a northern species not present in Norfolk, so the galls we've been calling *vesicator* would seem to be something else, but *vesicator* is confined to *S. purpurea*, which is a Norfolk willow. Bean galls on sallows (*S. cinerea* and *S. caprea* etc.) are not the same as those on willow (*S. alba* and *S. fragilis* etc.) - *P. proxima* is only on the willows, and it is *P. bridgmanii* on the Sallows. I have records of *P. bridgmanii* from Bawsey, Dersingham and Heacham.

There are similar problems with *Pontania* pea galls. *P. viminalis* galls osiers and willows, but not sallows, and there is now known to be a second rare pea gall on sallow, distinguished from *P. pedunculi* only by the colour of the larvae within. Confused? There is an excellent paper in Cecidology 7(2): 54-60.

Aphid Pemphigus gairi on Black Poplar. The eagle eyes of Dr. John Wells spotted not only a new example of our native Black Poplar at King's Lynn, but on it a new gall. When I later checked the single black Poplar we have in Heacham I found it too had these galls. Three species of *Pemphigus* cause indistinguishable galls, but specimens of the aphids from the Heacham tree were identified by Tony Irwin as *P. gairi*. I have since searched many other Poplars unsuccessfully, and wonder if it is confined to *Populus nigra betulifolia*.

Gallwasp *Andricus seminationis* on Oak catkins. A genuine rarity this, and not just one we've overlooked, at Ringstead Downs (in TF 73) in June 1995. The gall is a small spindle-shaped growth, but the entire catkin becomes swollen and is much more conspicuous than the gall attached to it. The gall can fall from the catkin before the catkin falls from the tree.

Mite *Aceria crinea (=Eriophyes tristriatus)* on Walnut. Dr. Wells pointed this one out to me, in his garden at Heacham, and asked it it was of interest. This was rather embarrassing, as I had just completed searfhing his grounds for galls, and had missed it. Stanley Manning lists this one in a paper in the 1981 transactions.

Mite *Epitrimerus trilobus* on Elder. At Courtyard Farm near Ringstead, and also listed in Manning's paper.

Mite *Therismoptes phragmitidis* on Reed. It looks like a Lipara lucens gall that has exploded, and is illustrated in Docters van Leeuwens' Gallenboek. I found one example near Dersingham early in 1994, and Jerry Bowdrey of the British Plant Gall Society later confirmed my identification, though he used a different name and called it Tarsonema something.

Weevil *Gymnetron villosulum* on Water Speedwell *Veronica catenata*. On the 1994 gall foray in Bradfield Wood, Jerry Bowdrey was very pleased to find this Nationally Notable species, and showed us how recognise it. This was when I realised that what I had seen many times, and always thought were the normal ripe seed capsules, are really this supposedly rare gall. The galled capsule swells up a lot, the un-galled capsule hardly at all. When I got back to Heacham I searched and found galls easily, and opened some to confirm that they contained beetle larvae instead of seeds.

Moth *Adaina Microdactyla*. An obscure swelling of the stem of Hemp Agrimony, caused by the larva of this plume moth. Another one we were shown at Bradfield that I was able to find in Heacham, once I knew what to look for.

Moth *Heliozela sericiella (=stencella)* on Oak Leaves. A swelling of the midrib which I have found at Heacham.

It is debatable which rust fungi count as gall causers, but *Puccinia smyrnii* on Alexanders (identified by Reg Evans) surely must, as it causes large pustules on the leaves and severe distortion and swelling of the petiole.

I now have a second locality for *Aceria genistae* on Broom, at Courtyard Farm, Ringstead, on cultivated *Cytisus scoparius* in a shelter belt, but not on the wild form of the same species close by. And I have found *Gypsonoma aceriana* galls again, and have been meeting *Iteomyia capreae* and *I. major* regularly.

Paul Cobb

PARASITES

Diastrophus rubi
A bramble patch found on one of our meetings had many swellings on the stems caused by the gall wasp *Diastrophus rubi*. One of these galls produced 21 gall wasps and 14 parasites (Chalcids).

Anisostephus betulinus
On a birch leaf two circular swellings were present caused by the gall midge *Anisostephus betulinus*. From these emerged parasites *Torymus Sp.* which had destroyed the midge larvae.

Pisaura listeri
The egg sacs of this spider are parasitised by an ichneumon wasp *Trychosis tristator* which lays an egg within each egg sac and the emerging larva feeds on the spiders eggs. Records for the past three years examining these in quantities of 100 or more indicate that the parasite is present in 6-7% of egg sacs. One egg sac had several small brown cocoons grouped together. These could be parasites on the ichneumon, or on the spiders eggs. Perhaps more will be known when they emerge.

Reg Evans

FUNGI

The dry weather has not been helpful to the recording of fungi - species of *Lactarius* and *Russula* were particularly down in numbers.

On September 2nd a meeting at St. Faiths Common failed to produce a single "Toadstool"! Although there is an improvement, it is likely to show records down on previous years.

Emilys Wood foray was an exception. There was an abundance of *Pluteus luteovirens* and single specimens of *Pluteus cinereofuscus* and *Pluteus phlebophorus*. Several specimens of the colourful *Calocybe ionides* were seen.

Reg Evans.

THOMPSON COMMON - POOL FROGS

The Sunday Telegraph featuer on 10*th* September was riddled with errors; worst of all was the photograph which was definitely not of a pool frog!! Again this year no speclmens have been recorded and the species may well be lost. In anticipation of deciding to start a reintroduction programme using continental specimens (rather like the red kite project), I'm helping to build up a large collection of photographs of these frogs and more are needed. The photographic collection will enable a full range of suitable specimens to be selected for a reintroduction programme. If you have any photographs please contact me so that arrangements to copy them can be made.

Many thanks, John Buckley.

Please send items for Natterjack to Colin Dack
12, Shipdham Rd, Toftwood, Dereham Norfolk NR19 1JJ

CHANGES IN NATURAL HISTORY PHOTOGRAPHY.

There have been many changes in photography over the years, most making it much easier with great improvements in cameras and film.

I can only go back just over 30 years. It was the desire to take close up (macro) photographs that got me interested in natural history photography. For this I needed a single lens reflex camera. I had tried with a twin lens reflex and range finder cameras but this was very unsatisfactory.

In 1965 I was in the R.A.F. serving in Aden. This was one of the best places to be if you wished to buy photographic equipment as prices were about a third of U.K. prices. So that is where most of my cash went for over a year. When I did come home on leave at the end of 1996 I went to see Ken Durrant. Ken told me I was a "jammy little devil "(that means very lucky), "Swanning around the world and being very over paid. Paid for by the taxes of hard-working people like my father and him. I then had two 35mm SLR's with 50mm f1.8 automatic diaphragm lens, a 135mm f2.8 auto, 28mm f2.8, 35mm f3.5, 250mm f4.5 pre-set lens and non auto tubes. Ken told me how hard it had been to acquire cameras in the U.K. In the 1958 Photography Year Book in the Leica advertisement this sentence appeared "Owing to import restrictions, new Leica cameras are far from being freely available in Britain but many forward-looking photographers eagerly await the day when the Leica can be the basis of their photographic enjoyment and success." Cameras were very expensive. In1964 the Kodak Retina Reflex III with f1.9 lens was £119.3s.2d a great deal of money in those days. Zenith 3M with f2 lens was £43. 5s 0d case £3. 7s 6d. Camers are much cheaper in relation to pay to day. The specifications are so much higher.

Developments in the 35mm SLR. The focal plane shutter is very much like that used in range finder cameras. In 1950 the first real advance came with Contax S from Zeiss Ikon of Dresden, with a five-sided prism on top of the ground glass screen, (the pentaprism). The next big break-through was the instant-return mirror, 1953. Before this the camera had to be cocked (film wound on). The Canon Pellix mirror was fixed, using an extremely thin, partially reflecting membrane known as a pellicle. While passing most of the light transmitted by the lens, this pellicle acts as a beam splitter to peel off part of the light and redirect it to the viewing screen. Thus, the image remains visible through the eyepiece even while the exposure is being made. This was Canon's first through the lens metering camera.

Next using a fresnel lens (the fresnel lens is a flat plastic screen) placed under the focusing screen to take the place of a very bulky glass condenser that once was used in SLRs to brighten the images to the very corners. SLRs without a fresnel lens have fairly bright images in the finder centre but the image darkens towards the edges and corners of the finder.
Lenses were given anti-reflection coatings to minimise internal reflections and flare, this allows up to 25 per cent more light to pass through the lens. The Automatic diaphragm lens was introduced. On older S.L.R. it was necessary to close the lens opening down by hand to the preselected opening before you took you took a photograph. With these developments when you used the SLR you could view at full aperture (brightness). So now the only time you could not see your subject at full aperture was when you actually took your photo.

The next big development was through-the-lens metering (TTL), using cadmium sulphide cells (Cds) as the light sensitive element. Later cameras use a faster reacting silicon sensor, (Canon AE1 & A1 onwards). The first TTL cameras (Pentax Spotmatic, Canon Pellix, Canon FT) had stop down metering (the lens was closed to the taking aperture). This was not as awkward as you may think for while making the meter reading you could also see the depth of field. Photographers who use stop down metering seem to always get what they want in focus. It was not long before full aperture metering was standard, (about 1970). Soon after came fully automatic exposure SLRs.

Then along came the electronic cameras with CPUs (central processing units). With many exposure modes, metering patterns and autofocusing modes. With zoom lenses as standard, auto film loading and rewinding, DX code for setting the film speed ISO (ASA)

But with all this if I could only have one camera if would have to be a Canon F1n all manual with TTL, 12% area metering reading . For me the two classic 35mm SlRs are the Pentax Spotmatic and Canon F1.
Not all slides shown at the Society meetings are full 35mm. Some are half frame 18 x 24 (24 x 36 Full frame) Notably by Max Smith using an Olympus Pen FT.
So next time you pick up your 35mm SLR. think of just how much research and development (innovation) has gone into the cameras of today.

Colin Dack.