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... Researching
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Toad-in-the-hole...

Welcome to the first edition of 'Natterjack' for 2023. My thanks to all contributors who have sent in such diverse and interesting articles or contributed photographs. At the back of this edition are a list of events from March to May, the Society is getting back on track after the disruption of the 'covid years'. Let's hope this year will be full of discoveries in Norfolk and should we encounter further temperature extremes as in 2022 we can monitor our wildlife and document the changes around us. One change last summer I noticed was that Purple Hairstreaks, which are normally feeding high in the canopy were coming down to ponds to drink. **FF**

Hoof Fungus co-habiting

Chris Durdin

The Hoof Fungus *Fomes fomentarius* (lower, right) and the Birch Polypore *Fomitopsis betulina* (upper, left) are on the same birch trunk at Mousehold Heath, Norwich, 22 November 2022. In my experience it's usually one or other species on any given birch, though this is the second time I've seen both on one tree trunk in different parts of Mousehold Heath.



Birch trunk on Mousehold Heath with two fungus species not usually found together

Image / *Chris Durdin*

It pays to be a generalist. The beauty of looking for life in general is that you find things you weren't expecting.

At the end of November 2022 Vanna and I spent a morning with James Emerson searching for harvestmen in Whitlingham Woods (just outside Norwich, part of Whitlingham Country Park).

Vanna turned over a big piece of rotten wood and found a group of small but very beautiful cup fungi growing on its underside. We took photos and, when we arrived home, identified them as the Olive Salver, *Catinella olivacea* (using Læssøe and Petersen[1]).

The cup surface of *Catinella olivacea* is a dark olive-green bordered by a yellowish furrowed margin. Its overall appearance is like a decorative ceramic dish,



Olive Salva grows under rotten logs and uses invertebrates to disperse its spores.

Image / Jeremy Bartlett

making the English name of Olive Salver very appropriate. Individual cups can eventually reach 13mm across but ours were much smaller than this.

Like other cup fungi *Catinella olivacea* is an Ascomycete. The cup (the apothecium) is the fruiting body of the fungus and contains the contains the spores inside special, elongated sacs known as *asci*.

Most cup fungi grow on top of soil, wood or other substrates and their spores are dispersed in air currents but *Catinella olivacea* is tucked away under rotting logs and has evolved another strategy to disperse its spores. The fertile surface of its apothecium is gelatinous at maturity and when the ascospores are shot out they are trapped in sticky droplets. Any passing invertebrate walking across the surface of the cup will inadvertently pick up the spore-filled droplets and move them elsewhere[2, 3]. Rotting logs are home to springtails, woodlice, millipedes, centipedes and other arthropods, including the harvestmen Vanna was looking for, so there is no shortage of potential spore spreaders.

At the time of writing there are 125 UK records of *Catinella olivacea* in the NBN Atlas, from Cornwall in the south, north to Cumbria and North Yorkshire and Northern Ireland[4]. There have been eight previous sightings in Norfolk (all by

Reg Evans) between 1981 and 1999, with no records since[5].

The Global Biodiversity Information Facility (GBIF) website shows the global distribution of *Catinella olivacea*: it occurs in other parts of Europe and in North America. There are outlying records from Asia (the far east of Russia), South America (French Guiana) and Africa (Democratic Republic of Congo). The latter record, from 1907, is the holotype of the species (the original type specimen upon which the description and name of the species is based)[6].

Who knows how common *Catinella olivacea* actually is? Læssøe and Petersen describe it as “occasional”[1] and Sterry and Hughes say it is “uncommon to rare”^[7] but the NatureSpot website says it is “quite common”[8].

Suitable habitat is not always present for *Catinella olivacea* as logs are often cleared away, used for firewood or removed to make the place “tidy”. Some logs are unsuitable: they need to be well rotted and have enough of a gap underneath for Olive Salvagers to grow.

However, I suspect that *Catinella olivacea* is under-recorded. Some logs are just too big to lift and in the course of a normal fungal foray *Catinella olivacea* would be an unlikely find because everyone looks on top of logs, rather than beneath them.

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Psyllids, also known as Jumping Plant Lice, are a rather neglected group of insects in the superfamily *Psylloidea*, which includes *Aphalaridae*, *Psyllidae* and *Triozidae* plus a small number of other species. They are currently do not have a county recorder and there is also not an active national recording scheme to verify records. Whilst a few species are well known (mostly those that cause plant galls) I have not been able to find a county list or any articles covering the county fauna. I have therefore decided to write one, which will be published in the NNNs Transactions.



Psylla alni at Whitlingham



Trioza remota nymph

To make sure that the county list is as accurate as possible I will be researching existing published records, requesting records held by the Norfolk Biodiversity Information Service (NBIS) and checking online sources such as iRecord, which is well used for record submissions by many knowledgeable local naturalists. I would however be pleased to hear about any Norfolk Psyllid records that have not been submitted. I can be contacted via the email address at the end of this article. As well as the key information for biological records (what is it, where



did you see it, when, who is recording it) it would be very helpful to know the life stage (adult/nymph/gall), plant that it was found on and how you identified it (e.g. matched photo, keyed out using RES handbook).

If you have never recorded a Psyllid and would like to, then my suggestion would be to look in your garden or local park for some Red Valerian *Centranthus ruber*. A widespread species *Trioza centranthi*, causes thickened leaf roll galls (see photo above) and is easy to find when present. If you do find it then please record it via any of the methods mentioned above – add to iRecord, send in to NBIS or email me and I will record for you.

When I started paying attention to the solitary bees visiting my Acle garden last year, I soon started to see 'styloped' individuals, i.e. with the head of a parasitic styloid (itself an insect) protruding from under one of their abdominal plates (there are two on the *Andrena* in the photo). Having developed inside a bee larva, the stylops pupates in this way in the adult bee, without killing it, but rendering it sterile. Females remain *in situ*, with just the head sticking out of their puparium; but winged males emerge and search out styloped bees to mate with their female parasites, through an opening in the puparium. Totally unexpectedly, in April I was rewarded with a brief view of a pairing in progress (second photo). The styloid larvae will hatch out inside their mother, emerging as 'triungulins': like those of oil beetles, these then wait on a flowerhead to hitch a ride back to the nest of an unsuspecting female bee. It's amazing what you find going on out in the garden, when you look closely!



The abdomen of an *Andrena* bee showing two stylopids protruding from its abdominal plates.

Pairing of winged male and an *in situ* parasitic female stylopids. Images / Martin Greenwood

Record update

Paul Cobb

I was somewhat concerned to read in the last *Natterjack* (November 2022) that there were no Norfolk records of the Walnut Gall-mite, *Aceria tristriata* held in the County database as I had previously submitted a record as follows:

Aceria tristriata found on 11/07/2012 at Staithe Road, Heacham, TF675372.

I had noticed one affected leaf among the usual profusion of *A. erinea* on next door's Walnut that hung over the garden fence.

Its always a shame when records go astray and although such instances are uncommon, sometimes, such as during transition periods between new County Recorders it can happen - Ed.

The Hidden Lives of Big-headed Flies revealed by DNA Barcoding

Tracy Money

DNA barcodes are short, unique patterns within DNA sequences that can be used to identify organisms to species level. In 2022 Sixth form students at Wymondham College, a Norfolk secondary school, have been given the opportunity to participate in 'Barcoding the Broads', a program coordinated by Sam Rowe at the nearby Earlham Institute as part of the Darwin Tree of Life project [1, 2]. Twenty-six invertebrates collected from grassland on the College campus and a site adjacent to Ashwellthorpe Lower Wood have been barcoded by the students. By comparing the DNA barcodes to online sequence databases, most of the barcodes generated could be matched to individual species but a few could only be matched to a genus or wider taxonomic group. There have been several interesting finds but one, from the Ashwellthorpe site, had us scratching our heads for a while as there was an excellent barcode match to a species but that species looked nothing like the photograph of the original insect!

DNA extracted from a small, green insect, possibly a planthopper nymph (Auchenorrhyncha) [fig.1], was used in a Cytochrome Oxidase subunit I (COI) DNA Barcoding PCR. The COI barcode sequence obtained was compared with online databases and the best match was to 2 sequences from *Pipunculus zugmayeriae*, a parasitoid fly in the Pipunculidae family. Only 2 database COI sequences are currently available for this species [3, 4] but our barcode sequence matched one of these perfectly and the other with one mismatched base out of a 489 bases (the next 2 closest matches were to *Pipunculus elegans* with 6 and 8 mismatched bases respectively). Flies in the Pipunculidae have very large eyes which make up most of their heads [fig.2] - they are also known as big-headed flies. Quite a distinctive look and clearly nothing like our original insect. What was going on?

A bit of online research revealed that most big-headed flies are endoparasitoids of planthoppers and leafhoppers – the fly larvae develop inside their hosts and eventually kill them [6]. It is likely that DNA from a Pipunculid larva growing inside the planthopper had been preferentially amplified in the barcode PCR leading to a DNA sequence from the parasitoid rather than the host.

Our Head of Science at Wymondham College, Ben Dewhurst, whose student had found the *Pipunculus* barcode, wanted to know more and contacted Dr Sam Mugford, who works on aphid-plant interactions at the John Innes Centre, Norwich, about our find. Interestingly, Dr Mugford told us that DNA contamination from parasitoids is not uncommon in DNA barcoding and can be a major headache for researchers generating whole genome sequences for species (the

goal of the Darwin Tree of Life project). Amplification of COI barcode DNA from parasitoids, mainly wasps, is actually used to screen out infected samples before using material in whole genome sequencing of aphid species. The first version of the Soybean Aphid, *Aphis glycines*, genome turned out to be, as Dr Mugford describes it, 'a cocktail of aphid and wasp' which was later put right, partly by using screened material for sequencing [7].

Parasitoids themselves are of interest to researchers in agriculture and horticulture as potential biological control agents of insect pests such as plant hoppers, leaf hoppers and aphids [6].

Unfortunately, we no longer have our specimen for morphological identification of the host species which is a pity as little is known about Pipunculid hosts [5, 6]. The insect was destroyed in the DNA extraction process and the extracted DNA does not store well. Learning from this, we are now attempting to perform barcode DNA extractions at least partially non-destructively (though this is tricky with tiny insects). We are also looking at ways to produce better photographs of specimens before processing. However, in this particular case, if the student had just removed a leg or 2 from the insect instead of grinding up the whole thing, they might not have extracted DNA from the endoparasitoid fly hidden within its body, and I wouldn't be writing this article!

It is difficult to say whether this find can be used as a species record without a specimen. There do not appear to be any records of *P. zugmayeriae* from Norfolk [5] so this would be a nice addition to the county Diptera records if it can be used. I can provide further details about the barcoding and sequence comparison results if anyone is interested in pursuing this. I would also be interested to hear the views of county recorders on the use of DNA barcoding as its use is likely to become more widely available in future.



Fig 1: Student photograph of insect prior to DNA extraction (length approx 5mm). Note, head has become detached and is positioned at the end of the abdomen.



Fig 2. Pipunculidae showing distinctive large eyes. (Photo copyright Saxifraga)

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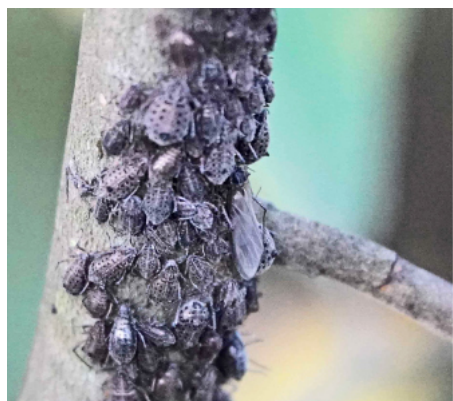
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New to the menu?

Francis Farrow

The Giant Willow Aphid is a strange insect in that it seems to appear on willow trees on Beeston Common in November and then disappears in December/early January. When it is visible it can form dense colonies of adults (female only) and young, winged and un-winged individuals, usually on small outer branches. They are considered the largest UK aphid and at 5mm in length possibly one of the largest in the world. The aphids are most active in the winter months and once they leave the willow branches no-one knows where they go although it has been speculated that they may

A colony of Giant Willow Aphids of different ages and including a winged form. Image / *Francis Farrow*



retreat to the roots of the willows. Being around in the winter months it would not be unreasonable to think they would provide a ready and easily found meal for local birds such as Great and Blue Tits. It is not the case, however, and it is possible that the aphids accumulate toxins as they feed on the willow sap and the birds have learned to leave them alone. It was something of a surprise then when Mark Clements observed a couple of Chiffchaffs on 7th December picking off some of the aphids and apparently eating them. Whether the Chiffchaff was accustomed to the aphids or indeed was new to them and may well get a nasty surprise later is not known. It is interesting to think that as more Chiffchaffs over-winter many of the birds may have a first encounter with these aphids and will attempt to eat them and in time may also learn to leave them well alone if they find them distasteful.



Chiffchaff with a Giant Willow Aphid
Image / Mark Clements



Insect studies at Broadland Country Park

Leaders: Tony Irwin and Mark Collins

In 2023 there will be three opportunities to join County Recorders and other experts in sampling the insects and other invertebrates on five ecological transects that have been laid out in Broadland Country Park. We hope to undertake comparable studies at each transect, through the seasons, using standardised methods such as sweep-netting, suction-sampling and yellow dish traps, amongst others to be discussed. Later in the year, there may be an opportunity to come together at Wheatfen to work together in identifying what has been discovered.

The dates to pencil in your diary are all Thursdays, specifically the 20th of April, 22nd of June and 14th of September, and we will meet at 10:00 in the car park at Broadland Country Park (TG182175 / nearest postcode NR10 4DF).

To express an interest and get involved as we plan the work in more detail, please register with Mark Collins, Chair, NNS Research Committee (collinsmark@gmail.com), with a copy to Tony Irwin (dr.tony.irwin@gmail.com).

The two mentions in the last 'Natterjack' of House Martins reminded me of my own recent experiences.

About two years ago I knocked down two house martin nests in the apex of the gable end of my bungalow. The original nest had been there over 15 years but the second was more recent, eight or ten years, but neither had been regularly used for the last five years. Inside one nest were the dried remains of some young Martins and was the reason I presumed the second nest had been built.

In spring 2022 a single male house Martin returned and began to sing, either hanging on the remains of the nest or on the overhead cables nearby, he stayed for several days then disappeared for a week or so then returned. No nest building or potential mate was seen all summer.

In late July I noticed some common gnat larvae in one of the smaller plastic bowls of water around the garden, prior to this I had seen no gnats in any of my water containers for about a year. About the same time I noticed small lumps of mud on the window sill below the old Martin nests. Closer inspection of the lumps suggested the Martins had started to rebuild the nest but the mud was not the normal yellowish clay used on the original nests but gritty, almost sand like, material and I doubted if it would hold together to form a strong nest.



House Martins gathering mud - sadly a rare sight in Norfolk in recent years. These birds were photographed in Cordoba, Spain (2017).

Image / *Hans Watson*

I was aware that in a grass field across the road from my property was a pond where there had been cattle in previous years but now it was grazed by horses. I approached the horse keeper and enquired if the horses had, like the cows, access to the pond explaining my martins appeared to be using 'the wrong sort of mud'. We walked across the field and ducked under a perimeter fence that kept the horses out of the pond. There the steep clay bank was dry and hard while the moist 'beach' comprised of a centimetre of fine sand overlaying the soft clay. We both agreed that the lack of animals churning up the mud was depriving the martins of well puddled clay. The horse keeper seemed quite concerned and said she would do something about it.

Over the next few days the martins completed building their nest and by mid August I began to notice the large white dropping of baby martins adorning the window sill.

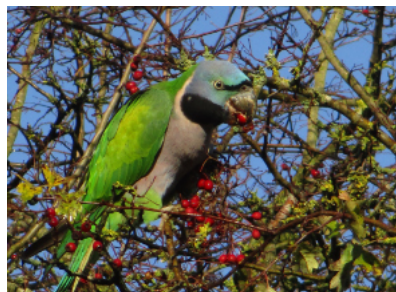
By the end of August at least three faces were peering out the entrance hole. In the last few days that I noticed the birds there a section of the mid part of the nest fell out but the young birds hung on and successfully fledged.

I have long thought that House Martins fed predominantly on gnats and mosquitoes that bred in the water butts, the birds decline matching the removal of the butts and replacement with soak away drainage, but I had not appreciated the loss of well puddled mud when livestock had access to ponds. Thinking back to my childhood we had few local ponds in fields with cattle or horses but there was a couple of smallholders with free range pigs whose wallows would have provided the necessary mud.

With regards to artificial nests I wonder if, as the birds don't seem to clean out debris from the nest, relying on clothes moth and beetles to eat the sparse nesting material over winter, a couple of bad seasons will result in the artificial nests becoming too cluttered for reuse.

An Exotic Visitor!

Janet Negal



Lord Derby's Parakeet / *Janet Negal*

Since the middle of October 2022 and up to the time of writing (January 2023) there has been an exotic visitor feeding on Hawthorn berries near my house in Flordon. It has been identified as a female Lord Derby's or Derbyan Parakeet. They are often kept in captivity as they are considered one of the best 'talking' parakeets. This one is obviously an escapee as the birds are native to China and SE Tibet.

The following is a continuation of the report published in the November 2022 'Natterjack' on the Little Terns at Winterton - Ed

Winterton is a regular stop-off point for Little Terns from colonies around the North Sea, so visiting birds can add to the local numbers towards the end of the season. Colour-ringing has really increased our understanding of the Little Tern movements around the North Sea 'super colony'. The story of green Z48 (see below) is one such example and is a regular visitor, hopefully with young of it's own having bred successfully on a Danish beach. The Danish colonies which total 600-700 pairs over several small sites also had a very successful season this year.

Green Z48 sightings record card held by NW European Little Tern Project:

Date	Age	Location/site	Lat./Long.	Country	Km	Dir.	Finder	Remarks
27.06.2020	2 cy+	Søren Jessens Sand, Fanø, Wadden Sea	55°28'N 08°21' E	Denmark	1	W	U. M. Berthelsen	Darvic ring read (video), incubating re-laid clutch (2 eggs) Partner: DKC 8263122 Clutch swept away by storm surge 30.06.2020
09.06.2021	3 cy+	Grønningen, Fanø, Wadden Sea	55°28'N 08°23' E	Denmark	1	E	U. M. Berthelsen	Darvic ring read (photo), feeding chick in colony area
17.08.2021	3 cy+	Winterton N Dunes, Norfolk	52°44'N 01°42' E	Great Britain	533	WSW	A. Daniels	Darvic ring read (photo), roosting on beach in colony area
18.08.2021	3 cy+	Winterton N Dunes, Norfolk	52°44'N 01°42' E	Great Britain	0		M. Davis	Darvic ring read (photo), feeding fledgling (1 cy,noring) on beach in colony area
16.07.2022	4 cy+	Winterton N Dunes, Norfolk	52°44'N 01°42' E	Great Britain	0		L. Ibbitson-Elks	Darvic ring read (photo), feeding fledgling (1 cy, noring) on beach in colony area

Aerial predation is a big challenge for Little Terns but they obviously have strategies to try to deal with it, rotating through colony sites may be one of these, and why our large sites at Eccles and Winterton are so important for the UK/North Sea population. When the colony goes quiet, it's usually a sign there is Hobby around, and the adult birds head off out to sea as a group 'in dread'. The terns try to confuse the attack by murmuring, and this is much easier with bigger numbers. As wardens it's a tense time watching outcomes, you don't want the birds away from the colony for long periods, and you particularly don't want to see a breeding adult taken. You especially don't want to see one taken and then dropped, as was the case for a nine year old bird that had been metal ringed at Winterton as a chick.

We continue to monitor aerial predators at all our main sites, particularly the two pairs of Kestrels at Eccles. Through the winter we put up nest boxes to be

able to better manage any attempts at diversionary feeding. One of our boxes was adopted by one pair which successfully raised three young, and were ringed by Stephen Vickers. The second pair showed interest in another box but in the end decided a natural site was better.



Green Z48 feeding fledgling - Winterton July 2022.

Image /L. Ibbitsen-Elks

So this season, our Little Terns definitely had safety in numbers. It's also worth noting that the Ringed Plover benefited from this too, with 17 clutches producing 18 - 25 fledglings across all sites. The team of RSPB staff and volunteers were able to support the birds by fully focusing attention 24/7 at Winterton. There was a huge sense of relief that the colony escaped the impacts of AI seen in other seabird colonies, and that so many birds fledged

successfully, with luck we will see many of them back again next year. Please get in touch with any colour-ringed sightings, or to join us on the beach: @littleternskies

Hybrid Puzzles

Hans Watson

Many members will occasionally be faced with identification of species dilemmas, which are often caused by hybridisation. For botanists, orchids are one of the plant families that regularly present identification problems because of hybridisation, and for birdwatchers it is mainly waterfowl that cause difficulties. Most of the waterfowl hybrids are escaped from private collections, where many different species are kept in fairly close proximity. Many of these collections contain exotic species not normally found in Great Britain, but may be closely related to species that are found here. This is where some of the biggest puzzles have their origin. Closely related species that hybridise often produce fertile hybrids, that can themselves hybridise with yet other related species, and so on. It is possible to come across birds that are hybrids of more than two species. Hybrids between species that are not closely related, are not generally fertile, or possess very low fertility, and so do not produce a further generation of hybrids.

Last year, whilst birdwatching along the coast in Dorset, I came upon a very strange looking duck. Some plumage features seem familiar, and after talking to other birdwatchers I learned that it was a well known bird, and enquiries had established that it had escaped from a waterfowl collection. It was a Common Shelduck/ Eider hybrid.



The unusual hybrid of a Common Shelduck and an Eider seen in Dorset was an escapee from a wildfowl collection

A commonly encountered hybrid in Norfolk is between a Greylag and a Canada Goose

Images / *Hans Watson*



In Norfolk, probably the most commonly encountered hybrid is the Greylag / Canada Goose hybrid. As Greylags belong to the *Anser* group of geese, and Canada Geese belong to the *Branta* group, the hybrids do not appear to be fertile. About five years ago, a number of Bean Geese that had been shot by Finnish hunters, were taken for genetic analysis which revealed that most of the geese showed extensive introgression between the Taiga and Tundra varieties, one bird carried mitochondrial DNA from a Pink-footed Goose, and another bird carried mitochondrial DNA from a Greater White-fronted Goose. This will in future be my excuse when I have trouble deciding whether a Bean Goose is a Taiga or a Tundra.

When you walk a 'patch' regularly such as Beeston Common you are sometimes treated to a special moment as Mark Clements was on October 26th 2022 when he spotted two Waxwings feeding in some Rowens. A month later (November 26th) some seven Waxwings appeared and over the following eight days built up to a flock of 10. They fed mainly on the Rowen berries but also did a lot of fly



Waxwing / *Mark Clements*

catching in the manner of a Spotted Flycatcher ie launching themselves off a branch, catching the fly (with some aerial dexterity) and then returning to the same or nearby branch. These birds delighted a great number of birders during their stay.

Another group of visitors that Mark

found were four Bearded Tits which stayed briefly in the main reed bed (October 27th). Bearded Tits tend to turn up during late October/early November on the site when they are moving around locally. The third wonderful visitor was a Dartford Warbler, which Mark located on December 4th and was seen briefly. The Dartford Warbler



Waxwing / *John Furse*



Bearded Tit / *Mark Clements*

seen on a few occasions, up to and including mid January 2023. These warblers appear to be expanding in Norfolk and as well as their traditional hold in north Norfolk they are being seen more frequently in coastal east Norfolk.

Dartford Warbler / *Francis Farrow*

was re-found when I went out to photograph the hoar frost, December 13th. A low 'chirring' was coming from a patch of gorse on the central marsh and as I waited the Dartford popped up and perched in a birch sapling. It seems that the Dartford has 'wintered' on the Common as it has been



I always try and get at least one trip up to the north Norfolk coast during the winter months, mainly for the Snow Buntings. This year I caught up with a group on the beach at Titchwell, they were feeding at the high water mark among the jetsam, and also among the Marram Grass at the top of the beach. Always very pleasing to see these beautiful little sprites from the north. On the same day we also called in to the Lakenheath RSPB reserve, here we were able to see and photograph both Kingfisher and Grey Wagtail.



The beautiful Snow Bunting from the north Norfolk beaches to the Kingfisher and Grey Wagtail at Lakenheath 'captured' on the same day.

The two places I enjoy going to much nearer home are the RSPB reserves of Strumpshaw and Buckenham, the former is excellent in the summer for butterflies, dragonflies, and other

insects generally. The bird life too can be very interesting, almost anything can turn up, but Buckenham, (just next door) during the winter months has a special attraction, the wide, flat landscape here can at first seem rather daunting and lifeless, that is until you really start to look. Each winter this marshland is home to thousands of Wigeon, Pink-footed Geese, Golden Plover, Lapwing, and with a chorus line of Little and Great White Egrets, Canada, White-front, Greylag, and Bean Geese, there are also lots of Chinese Water Deer, scanning the marsh with binoculars can often bring the count to thirty or more.

Standing by a gate recently a Sparrowhawk came past, it continued along a fence line before landing on a post, I kept one eye on it and a couple of minutes later it came back the same way, as I could see it coming I was able to get off a quick burst of shots as it went past.



A Sparrowhawk 'caught' as it flew past

Watching some Black-tailed Godwits trying to feed on the marsh recently was interesting, the numerous Lapwings would not let them settle, continually chasing them off, I have never seen that behaviour before.



Lapwings are numerous this winter and a friendly Kestrel is often seen at Buckingham.

Images / [Tony Howes](#)

There is a very confiding Kestrel that I sometimes see at Buckenham, it often hovers and perches well within camera range, and usually there is at least one Peregrine sitting on a gate out in the marsh, sometimes two. They certainly don't go short of food.

For many editions of 'Natterjack' Tony has given us a taste of the wild through his excellent pictures both from in and out of the county. I'm sure he will not mind if I mention that he celebrated his 90th birthday last year. I am sure also I can speak for all our members in that we wish him well and long may he be out with camera in hand 'capturing' the wildlife - Ed.

Norfolk's Biological Recorders hold a successful conference

On Saturday 19th November almost 60 County Recorders and their research associates met in the Recreation Centre at the John Innes Centre in Norwich for a conference on "Recording Biodiversity Through Partnerships". In addition to enjoying eight presentations, delegates viewed more than 20 high-quality and informative posters and tabletop demonstrations.

Keynote speaker Andrea Kelly from the Broads Authority noted the importance of biological records in establishing that Broadland has more than 11,000 species, about 1500 of which are of conservation concern. Sam Neal of NBIS put Norfolk's biodiversity records into the context of national schemes used for addressing regulations, government policy and international obligations. Andy Musgrove, County Sawfly Recorder, described his work at Burnham Deepdale, establishing a baseline for a farm adopting regenerative agriculture. Rob Yaxley of Wild Frontier Ecology described how records are used in implementing planning laws, and RSPB's Tim Strudwick, County Recorder for Solitary Bees and Wasps, emphasised how important records are in the management of Norfolk's precious nature reserves.

After a break, the Earlham Institute's Sam Rowe looked at the ways recorders are using DNA barcoding technologies, while Sarah Burston from Broadland District Council introduced the exciting biological research programme at Broadland Country Park. Finally, Mark Collins summarised how the records collected at Buckenham Carrs have helped to prioritise management interventions on this private estate.

President Pam Taylor and Chair Tony Leech topped and tailed the conference, emphasising the huge contribution made by the voluntary recording of biodiversity across Britain and particularly in Norfolk. The conference successfully highlighted that the work of our biological recorders reaches out to organisations in all walks of life, helping to slow and reverse the decline in national and regional biodiversity across the landscape.

Special thanks are due to the organising group, Mark Collins, Anne Edwards, Janet Higgins and Sam Neal, for ensuring the smooth execution of the conference, to the John Innes Centre for allowing the use of their splendid facilities and to all speakers, contributors and participants for supporting this successful event. Costs were shared by NNS and NBIS, and a full account of the event is planned for the next available volume of *Transactions*.



Scenes from the Recorder's conference held at the John Innes Recreation Centre - 19th Nov. 2022 showing the poster/table-top exhibition and socialising (Images / *Anne Edwards*) followed by some of the speakers - Andy Musgrove, Tim Strudwick and Sam Neal addressing conference attendees (Images / *Mark Collins*)





Saving Wildlife Begins at Home

Cromer Green Spaces - Wildlife Garden Question Time

Kate Bradbury, award-winning author and journalist specialising in wildlife gardening, and Nick Acheson, of the Norfolk Wildlife Trust and Trustee of the Felbeck Trust will be offering advice at a Question Time organised by the Cromer Green Spaces. This will offer the opportunity to learn how to make a garden “wildlife friendly”.



Kate Bradbury

The evening will also see the launch of the annual Cromer Green Spaces Wildlife Garden competition, to find the best gardens for nature in Cromer. Every green space in Cromer is important for wildlife – none more so than our own gardens.

Wildlife Garden Question Time will be on Friday 24th March 2023, at Cromer Community Hall, Garden Street, Cromer. Time 7-9pm / Doors open at 6pm

Tickets £10 to include refreshments, will be available from Constance and Thyme, Garden Street, Cromer



NB: The CGS annual competition that started in 2021 has the backing of the NNNS. The Society have sponsored a cup which is awarded to the overall winner of the best wildlife garden.

The 2022 Cromer Green Spaces
Wildlife Garden Winner

Image / *Anne Frostick*

NNNS Events Programme 2023 - March to May

The following programme of events are those arranged up to publication of this edition of 'Natterjack'. Please check the events listing online at www.nnns.org.uk for up to date information and any other events/excursions.

Tuesday, 14 March, 19:30 – 21:00

Presidential Address - 'The changing fortunes of our Dragonfly species'.

by Dr. Pam Taylor

St. Andrew's Church Hall, 41 Church Lane, Eaton, Norwich NR4 6NW

Tuesday, 28 March, 19:30 – 21:00

Annual General Meeting followed by

'Discover Beeston Common – its management and biodiversity'

an Illustrated talk by Francis Farrow, Honorary Warden

St. Andrew's Church Hall, 41 Church Lane, Eaton, Norwich NR4 6NW



Saturday, 15 April, 11.00

Joint full-day meeting with the Norfolk Flora Group at Lynford Arboretum for spring flowers and trees with Richard Carter (West Norfolk recorder for vascular plants). Wear suitable clothing and stout shoes/boots and please bring your own lunch/refreshments. Meet at the free car park on the northern side of Lynford Road, Thetford (near Munford) at TL822943 / nearest postcode IP26 5HN.

Thursday, 20 April, 10.00 - afternoon

Insect Studies at Broadland Country Park with leaders Tony Irwin and Mark Collins. This is the first of three opportunities to join County Recorders and other experts in sampling the insects and other invertebrates on five ecological transects that have been laid out in Broadland Country Park. We hope to undertake comparable studies at each transect, through the seasons, using standardised methods such as sweep-netting, suction-sampling and yellow dish traps, amongst others to be discussed. Later in the year, there may be an opportunity to come together at Wheatfen to work together in identifying what has been discovered.

NB: To express an interest and get involved as we plan the work in more detail, please register with Mark Collins, Chair, NNNS Research Committee (collinsmark@gmail.com), with a copy to Tony Irwin (dr.tony.irwin@gmail.com).

Sunday, 14 May, 10.30 - 13.00

Joint meeting with Norfolk Flora Group - 'An introduction to plant identification, Blickling Estate' with Dr. Bob Leaney to see Bluebells and other spring flowers in Great Wood, together with some Small-leaved Lime and a wide range of tree species, before exploring the road verges, wet pasture and carr woodlands along the River Bure. Society members are welcome to join the NFG for a further walk in the afternoon. Meet at Woodgate NT car park (there is a charge unless you are a National Trust member although permits may be available - see the NNNS website events page nearer the time for any updates), Great Wood, TG16152971 / nearest postcode NR11 6PY. Please bring your own lunch/refreshments if staying for the day.

Your Society needs *YOUR* Email!

Due to rising postal costs and on-going uncertainties with the delivery service it is proposed that the Annual Report and all papers relating to the AGM will be sent by email to as many members as possible. **If you have an email address and have not yet passed it on to the membership secretary, Jim Froud at membership@nnns.org.uk then please do as soon as possible.** Alternatively type the following link into your browser: <https://nnns.org.uk/wp/email/#main> which will open at the email page. If you wish to skip all the "explanation" and just link directly to the email form enter: <https://tinyurl.com/email-nnns> Fill in the three line form, click the permission box then the subscribe box and you are done. For information about NNNS privacy practices please visit the website: www.nnns.org.uk

Notice of the Norfolk & Norwich Naturalists' Society Annual General Meeting

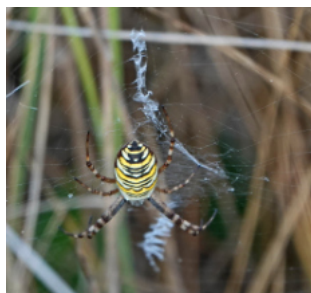
The AGM will be held on 28th March 2023 at Eaton Village Hall - 7.30pm

Can you be our next Norfolk Bird Report Editor?

Due to planned retirement NNNS is looking to appoint a new Editor for the Norfolk Bird Report. A good knowledge of the county's birds, good writing/editing skills and the ability to work with a team are essential. Further details from Andrew Stoddart andrew.stoddart@tiscali.co.uk



Help us build a Spider's Web!



Wasp Spider / *Francis Farrow*

Following the call for interested NNNS members to step forward and help rebuild the Norfolk Spider Group, we have a few names already but would like to hear from some more enthusiasts, experts and beginners to swell the ranks. The aim is to hold a field meeting in the New Year, and perhaps to organise a training event, with help from the Society. Please contact Mark Collins, Chair, NNNS Research Committee (collinsmark@gmail.com).



The next issue of 'The Norfolk Natterjack' will be
May 2023

Please send all
articles / notes and photographic material
to the editor as soon as possible by
April 1st 2023 to the following address:

Francis Farrow, 'Heathlands', 6 Havelock Road,
Sheringham, Norfolk, NR26 8QD.

Email: francis.farrow@btinternet.com

All photographs / images are very welcome, especially to accompany an article or document a record, occasionally however, because of space limitations, preference may have to be given to Norfolk-based images, or to those subjects depicting interesting or unusual behaviour, or are less commonly (or rarely) seen in print.

Membership subscriptions

The N&NNS membership year runs from 1st April to 31st March.
During this time members will receive four copies of the quarterly newsletter, 'The Norfolk Natterjack', and annual copies of the Transactions of the Society, and the Norfolk Bird & Mammal Report. A full summer programme of excursions and a winter programme of talks are also organised annually.

New memberships and renewals can be made by credit card or 'PayPal' by visiting the Society's website at www.nnns.org.uk

Alternatively a cheque payable to
'Norfolk & Norwich Naturalist's Society' can be sent to:

Jim Froud, The Membership Secretary, Westward Ho, 4 Kingsley Road,
Norwich NR1 3RB

Current rates are £20 for individual, family and group memberships
(£30 for individuals living overseas).

The FSC - Forest Stewardship Council - label indicates that materials used in the production of this bulletin are recyclable and sustainably sourced.



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