



Wild About Beds

Winter 2012/13

Ash dieback comes to Bedfordshire

On 7 November the Forestry Commission (FC) confirmed that cases of the tree disease Chalara dieback of Ash had been found in woodland in Bedfordshire and other counties after an unprecedented survey of Britain's established woodlands. FC went on to say:

'The discovery of the disease in these counties does not mean the disease is spreading rapidly. It is likely that the disease has been present in these areas for a number of years, originally caused by spores blown in from mainland Europe.'

Please see the article on page 3 for more information on *Chalara fraxinea* and its potential effect on our woodlands.



Characteristic *C. fraxinea* scar. Photo courtesy the Forestry Commission/Thomas Kirisitis



Photo courtesy of Fera

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Wild About Beds is the newsletter of:



The Bedfordshire Natural History Society
www.bnhs.org.uk
Registered charity number 268659



BedsLife
www.bedsbionet.org.uk

The BNHS

The BNHS was formed in 1946, its main function to record the fauna and flora of the county. It has over twenty active Recorders who cover many branches of natural history study and whose annual reports are published in the *Bedfordshire Naturalist* journal.

Members receive a quarterly newsletter, Wild About Beds, and programmes of meetings. These meetings include field meetings to Bedfordshire sites and occasionally farther afield. During the winter months, there are illustrated lectures normally held in Elstow, Haynes, Toddington and Maulden.

The Society depends on annual subscriptions which are devoted to its working, as all offices are honorary. Membership is open to anyone, whether resident in the county or not. If you would like to join the Society, please contact **Mary Sheridan**, Honorary Membership Secretary, 28 Chestnut Hill, Linslade, Leighton Buzzard, LU7 2TR. Tel: 01525 378245, www.bnhs.org.uk.

BedsLife

BedsLife - Bedfordshire & Luton Biodiversity Partnership is a consortium of government and non-governmental agencies dedicated to promoting the maintenance and enhancement of Bedfordshire's biodiversity. The Partnership oversees the implementation and monitoring of the Bedfordshire and Luton Biodiversity Action Plan, which can be found online at www.bedsbionet.org.uk.

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Your comments/notes on anything that you have observed in the field, on the road or in a past Wild About Beds issue are welcome/essential for continuity. Please do send articles to me either as an attachment via email or through the post. Pictures are always welcome; material required by **15 March 2013** please.

Thank you in anticipation.

The next Wild About Beds will be published in **March 2013**. Please note that any views are independent of the Bedfordshire Natural History Society and BedsLife.

From the Editor's desk

As I write this Mr Blackbird is at his post in the garden, vigilantly guarding the pile of windfalls from my neighbour's tree. He does this every year, perching on the largest of the mossy rocks and chasing away most of the other birds that come near his stash. He's not so fussed about the Robin, knowing that it's not after the precious Bramleys. But heaven help any Woodpigeon, Starling or other Blackbird that comes within ten feet of my garden perimeter.

The summer's horrible weather means this is likely to be a tough year for many of our garden critters. My bumblebee numbers seemed way down, and I didn't have anywhere near the usual number of species. I had a good honeysuckle crop though, and not only did I let the privet go to flower - much to my neighbour's dismay - but I even resisted cutting the hated *Pyracantha*. For which I was rewarded by seeing loads of bumbles eagerly collecting its pollen. My Knapweed was for the first time covered in honeybees, and I can only guess they couldn't find much else. Between them and the bully bumbles the poor butterflies had a tough time finding a quiet flower head on which to feed. Even the goldfinches came down to my back door to feast on Knapweed seeds: a first for me and a great chance to watch them close up.

Now everything has pretty much gone over so last weekend I cleaned and filled the tit feeder and put up another fat ball in the pear tree. I'm determined to take extra care of my garden friends this winter, ensuring that they have a good supply of protein, fat and water (and rotting apples) to help compensate for a lean summer.

I wish you all a very happy holidays, and please don't forget to spare a thought for our backyard wildlife. Like Santa Claus, they appreciate a little snack left for them.

Chalara causing ash dieback in Bedfordshire

by Graham Bellamy with *Chalara* advice from Alan R Outen

Many of you will have read about a new disease affecting ash trees in Europe that has recently been found in Britain. *Chalara fraxinea* is a pathogenic fungus causing ash dieback. It may have affected up to 90% of ash trees in some parts of Europe although this has been disputed. There are concerns that Chalara will have an impact exceeding Dutch elm disease on our woodlands and treescapes.

Ash is an important tree of many of our woodlands and is a familiar species in hedgerows and roadsides; it is estimated that there are 80 million ash trees in Britain.

Chalara has been increasingly found in Europe over the last ten years and has been spreading westwards. *C. fraxinea* is the anamorph, the imperfect or asexual reproductive stage, of a species of fungus called *Hymenoscyphus pseudoalbidus*. As so often the case in fungi, asexual and sexual forms are given different names — partly because they were described separately and in many cases the sexual telomorph or perfect form is not known. *C. fraxinea*, is the form that we have and what is doing the damage across Europe. This has tiny asexual spores produced in vast abundance and capable of being carried considerable distances by wind but the sheer fecundity of these is likely to be the cause of rapid spread. *H. pseudoalbidus* has not yet been found in the UK.

Many other *Hymenoscyphus* species do occur in Britain in the perfect or sexual state and the fruit bodies are small discs, usually pale coloured but may be yellow or even pale orange. Many of these are widespread and are completely innocuous.

Chalara was been found in Bedfordshire in 2012 east of Sandy and in some recently planted sites. Countrywide there are over a hundred locations many on planted sites. It is possible that the disease is here naturally as shown by its steady westerly progress across Europe in recent years. *Chalara* has also been introduced with trees grown on in Europe and then planted here and young plantations have been seriously affected. It would be wise if contemplating planting ash from a non-local source, not to.

When would we see infection next year? Infected trees will show symptoms, and new infections will be apparent from June to October. Trees up to 40 years old may take from 2 to 10 years to die depending on a range of factors including other pathogens and there is evidence that recovery is possible. It may be that mature trees will take longer to die, if at all.

It may well be that some trees will have some resistance, if so felling all ash trees in infected areas will remove these resistant trees as well as the infected ones. Our Wildlife Trust, www.wildlifebcn.org and other conservation bodies are likely to recommend that the infection will not be contained and by not felling all ash trees in infected areas then resistant trees will survive and will be able to re-populate naturally.

The Forestry Commission (FC) web site has updated information on the spread of die back in Britain with a map and details on how to identify it: www.forestry.gov.uk/website/forestry.nsf/byunique/infid-8zklv5.

With a video at www.youtube.com/watch?v=8sl7hgFZ-4g&feature=youtu.be

The FC asks that infection is reported and that the risk of visitors to woodlands spreading the disease is very small. They are not closing forests or advising owners of infected sites to do so. They do ask that if you are visiting an infected or suspected wood, to take the precautions on their web site: How realistic this is remains to be seen.

Chalara helpline: 08459 33 55 77 (open 8am - 6pm every day) plant.health@forestry.gsi.gov.uk

There is an Ashtag app to submit photos and locations.

So ash dieback caused by *Chalara* is with us. It will be interesting and perhaps distressing to see its spread and affect within the country in the coming years.

The wisdom that leads to importing plants from abroad complete with pathogens and planting them into the countryside fails me.

BNHS/Butterfly Conservation joint field meeting West Wood Knotting & Souldrop Civil Parish 14 July 2012

by Tony Smith

Unbelievably it is 11 years since our field meeting here, to monitor the Purple Hairstreaks in this oak wood. By hiring a cherry picker crane we were able to look at the tops of the trees from its platform. On one tree we counted in excess of ten, sunning themselves, walking and flying around its canopy. With the number of oaks in the wood, a total estimate should be in four figures. In the afternoon we saw at least nine White Admirals, the wood's speciality.

This year it was the White Admirals to be the primary objective. Prior to both meetings a large amount of rain had fallen, the latter more so, estimated at 50mm. It was continuing to do so heavily as Peter Glenister, Ian Woiod and Warwick Davies joined me.

Nevertheless, with no hope of seeing the White Admirals, we agreed to walk the hard track and some rides. The atmosphere was quite surreal, but not daunting, as lightning and thunder were absent. We were aware of the forces of nature, very much so.

Ditches were overflowing and where logs laid to make bridges over the rides, it was difficult to keep your footing. The stream running west to east alongside the central bridleway is some eight feet deep and this one had rushing water above it! Unforgettable.

The few insects braving the conditions were: Meadow Brown (3), Ringlet (3), Bloodvein (1) and Shaded Broad-bar (3). An unidentified Tortrix added to 3 Green Oak Tortrices completed the list.

In shallow pools Water Mosquito larvae were active. Interesting plants in flower were one Common Spotted Orchid in its usual mauve colour and another in white, Yellow Loosestrife and Great Burnet. The latter had been seen by me when doing a reconnaissance two days previously, at that time with a Green Shieldbug 3rd instar on one flower head. On that day, 12 July, in good conditions, only one White Admiral was seen. Skippers, one Silver-washed Fritillary and numbers of Ringlets and Meadow Browns were further butterflies on the wing. Two Brown Hawker Dragonflies and some Blue Damselflies were seen, but the surprise was to see as many as four Longhorn Beetles coloured yellow and black, *Rutpela maculata*.

Further visits on 28 July and 3 August only produced one White Admiral on each occasion. I believe the awful weather from May onwards affected the growth and lack of flowers on the insect's food plant: Honeysuckle. The larvae never therefore matured from pupae. 2012 must be a very poor year for the White Admiral.

After drying out at the excellent Bedford Arms in Souldrop, I took Peter Glenister to a large field between Felmersham Nature Reserve and Radwell village. Owned by Bedfordia, there is permitted access to its wide headlands, enabling the government to grant money to the owner under the Higher Level Stewardship Scheme. The rain had just stopped and myriad Marbled White butterflies were on the wing. Peter counted 569 — a wonderful sight.

Additional insects seen were Large Skipper (10), Small Skipper (1), Large White (1), Small White (3), Marbled Brown (88+), Ringlet (150), Red Admiral (1), Small Tortoiseshell (2), Small Heath (6), Narrow-bordered 5-spot Beconet Moth (1), Shaded Broad-bar (10), Yellow Shell (1), perlella micro-moths (3), Brown Hawker Dragonfly (1) and male Banded Demoiselle (2).

So the day finally finished on a high note.

Global warming or just another English summer?

On 15 July a further visit to the grass field produced the sight of Silver-Washed Fritillary.

The decline and conservation of bumblebees

by Colin Carpenter

Introduction

Bumblebees over the last 40 years have suffered serious declines due to a number of causes, none of which is down to any one single factor, although the intensification of agriculture and urban expansion have undoubtedly been main factors.

The loss of wildflower rich meadows and heather moorland due to intensification to improved grassland, or conversion to arable has greatly reduced the provision of valuable nectar sources. This has affected mainly those species which tend to specialise on foraging and nesting in this type of habitat.

The widespread use of pesticides and herbicides has had a massive effect on many insects and bumblebees and effectively kills off all weeds and wildflowers along hedge bottoms and field margins mainly due to spray drift. This drastically reduces available pollen and nectar sources.

Recent scientific research into the use of Neonicotinoid systemic insecticides has proven that this chemical is having devastating effects on both bumblebees and honeybees.

The chemical is used mainly as a coating for agricultural seeds, and in pot plants. The insecticide spreads throughout the plant and into the nectar and pollen that the bees then eat, and causes them to carry out less foraging and reduces breeding.

It is believed that this insecticide is contributing to Colony Collapse Disorder in honey bees, and reducing bees immune systems, and their ability to navigate properly. It has been shown that bees subjected to low level exposure over a long period of time is likely to be as damaging as high exposure over a short period of time, and the bees show a much higher susceptibility to disease especially Nosema.

Research work carried out by the Soil Association has proven that the insecticide also significantly reduces earthworm growth and activity in the soil.

It has prompted many bee keepers, Buglife, the Soil Association, Pesticides Action Network and Bumblebee Conservation, and the public to lobby the government to ban the use of these insecticides with immediate effect until more comprehensive research is carried out on the effects of these chemicals. Other countries in the EU have already introduced bans to prevent neonicotinoides from harming bees.

Bumblebee species and habitats

Species which specialise in feeding in flower rich meadows include the following:

Great Yellow Bumblebee *Bombus distinguendus* (BAP priority species)

Brown-banded Carder bee *Bombus humilis* (BAP priority species)

Large Carder bee *Bombus muscorum* (Subject to a Species Recovery Programme)

Mountain Bumble-bee *Bombus monticola* (Subject to a Species Recover Programme)

Large Garden Bumblebee *Bombus ruderatus* (BAP priority species)

Red-shanked Carder-bee *Bombus ruderarius* (Subject to a Species Recover Programme)

Short haired Bumblebee *Bombus subterraneus* (Extinct in Britain, but subject to a species reintroduction programme from New Zealand)

Shrill Carder-bee *Bombus sylvarum* (BAP priority species)

Ilfracombe Bumblebee *Bombus soroensis* (Subject to a species Recovery Programme)

Heath Bumblebee *Bombus jonellus* (A much more common species found on heaths and along the coast)

The loss of many Legume pea family species has affected particular species due to their physiology,



Garden Bumblebee *Bombus ruderatus*. Photo courtesy Wikimedia Commons

(tongue length) and specialisation to this particular group of plants. These species tend to establish their nests later than the woodland and garden species, and have been affected much more severely by agricultural intensification and development. As a result their distribution and range has become much more fragmented. This habitat can also extend to include open meadows, woodland rides, road verges, and undisturbed areas in parks and gardens which may exist close to flower rich or ancient meadows.

Environmental changes and specialisation on a specific type of plant such as the Legumes, will have significant effects on the survival of these species in the future.

Also changes in land use from hay rich meadows on unimproved grasslands to horse paddocks tends to eliminate all flowering herbs, and creates a very short sward which over time can become just grass with very few nectar sources. Adequate supplies of pollen and nectar must be available continuously for their colonies throughout the year, as bumblebees do not store large quantities of food in their nests as honey bees do.

The loss of hedgerows and banks in the 1970s and 1980s has also had a significant effect on the decline of many species, including some common species. Here nest searching and construction is mainly carried out along the base of hedgerows and underground in old small mammal nests.

Bumblebees do not tend to build nests as such, but tend to rely on small mammals for availability of nests, so their distribution can be very closely linked to the habitat requirements of voles, mice and shrews.

The other seven species of more common Bumblebee seem to have fared much better, probably due to their more diverse habitats and much greater range of flower species supplying their pollen and nectar requirements. These species include:

Buff-tailed Bumblebee *Bombus terrestris*

White-tailed Bumblebee *Bombus lucorum*

Red-tailed Bumblebee *Bombus lapidarius*

Early Bumblebee *Bombus pratorum*

Common Carder Bumblebee *Bombus pascuorum*

Garden Bumblebee *Bombus hortorum*

Tree Bumblebee *Bombus hypnorum* (More recently colonising Britain from the continent)



Red-tailed Bumblebee *Bombus lapidarius*. Photo courtesy Wikimedia Commons

Habitats of these species are much more diverse and widespread, and include woodlands, chalk downland, grasslands like golf courses and farmland, parks and gardens.

The Cuckoo Bumblebees on the other hand are very closely affected by the survival and distribution of the True Bumblebees, and most may be usurpers of the common or rarer species. No doubt if the nests of the commoner species are present, certain species will usurp these instead of the rarer species. Originally separated from the True bumblebees in the Genus *Psithyrus*, the Cuckoo Bumblebees include:

Barbut's Cuckoo-bee *Bombus barbutellus*

Gypsy Cuckoo-bee *Bombus bohemicus*

Field Cuckoo-bee *Bombus campestris*

Hill Cuckoo-bee *Bombus rupestris*

Four-coloured Cuckoo-bee *Bombus sylvestris*

Vestal Cuckoo-bee *Bombus vestalis*

Other habitats such as brownfield sites and abandoned industrial sites are particularly valuable for bumblebees, as they are often colonised very quickly by many wildflowers that are important nectar sources, and also provide excellent habitats for building or finding nest sites.

In recent years, the introduction of the farm set-aside and Countryside Stewardship schemes has



Gypsy Cuckoo-bee *Bombus bohemicus*. Photo courtesy Wikimedia Commons

significantly increased the amount of bumblebee habitat and foraging areas, especially on the provision of field margins, where legumes and other wildflowers have been sown. The ELS, HLS and Organic ELS have had a significant effect on the increase in bumblebee habitat mainly on field margins, and especially on organic farms where the introduction of crop rotation and the use of Legumes has again had a beneficial effect. More effective management of hedgerows and control of pesticides has also made a significant contribution to increasing bumblebee foraging habitat.

For effective conservation, it is important to get a clearer picture of the patterns of decline, and greater understanding of the causes of why certain species of bumblebee seem to be less able to adapt to environmental changes than others. It is important that the distribution and range of the common species are also studied as this may have a bearing on why other species are declining.

A new BNHS book coming soon: Bedfordshire's Wild Orchids

The aim of the book

The book will give an up to-date account of Bedfordshire's wild orchid flora, and is aimed at the general naturalist and general public as well as wild orchid enthusiasts. Searches of various habitats throughout the county will be made during the 2013 and 2014 springs and summers; new locations for these plants will undoubtedly be found. It is hoped that the BNHS will support this publication. Publication date to be September 2014. With under 30 species in the county about 100 pages should be sufficient, and a publication price of around £15 is the aim.

The content of the book

There will be three main sections:

1. A short chapter describing what an orchid is, and how they differ from other plants and any other interesting facts.
2. A chapter about orchid habitats in Bedfordshire, illustrated with photographs showing the county's best orchid sites that have public access (a list of sites to be drawn up)
3. The main chapter with accounts of the Orchids

Each species to have two or three pages dedicated to it, which will show a map of its known distribution (similar to the *Bedfordshire Flora* book), the time of flowering, a description of its habitats in the county, any interesting facts, and several photographs. Where possible the photographs will be of Bedfordshire plants. Hybrids and forms will be included. Also, extinct species will be included with a photograph of non-Bedfordshire specimens.

Action to be taken

It is hoped to form a "Orchid hunting Group", and everyone will be welcome to join. A few indoor meetings are planned, the first being **Wednesday January 30th 2013 at The Mission Hall, Haynes, at 7.30 pm** when the outline of the project will be given, together with a digital show. Everyone who we can think of who might be interested in doing some orchid hunting will be invited. A website to be set up to receive records. Also a phone number to be given for records from people who do not have a computer. In the spring local media be contacted asking the general public to send in records of any orchids they find.

Once underway sponsors to help with funding of the publication will be sought.

Richard Revels
Graham Bellamy
Chris Boon

Butterflies in Estonia

by Wilf Powell. A report on a trip attended by several BNHS members

The minibus driver had reported a large dark butterfly landing on the forest track, which had us scurrying back towards the vehicle. Could it be a Purple Emperor? The first day of our butterfly tour in Estonia had dawned grey and damp and so, having arrived at our first site in a wonderfully diverse, mixed deciduous/coniferous woodland (Järvselja Forest), we had spent a couple of hours following a slippery boardwalk through the trees and examining the fascinating flora whilst waiting for better butterfly weather. We had just emerged back onto the forest track when our driver reported his mystery butterfly. Scanning the trees near the vehicle soon revealed a large, dark butterfly shape, half hidden amongst the leaves above our heads. Intensive scrutiny with binoculars revealed that it wasn't a Purple Emperor but something even more exciting, a Poplar Admiral. This was confirmed when a dead specimen was found lying in the centre of the track, presumably hit by a passing vehicle. Then, to our delight, the one in the tree flew down onto the track and then obliging posed on John Pitts' boot.

This was a wonderful start to the trip as this large and impressive species is highly sought after by butterfly enthusiasts. The weather had now improved and more butterflies began to appear, including several of our target species: Small Pearl-bordered Fritillary, White Admiral, Black-veined White, Scarce Heath, Northern Chequered Skipper.



A Poplar Admiral *Limnitis populi* tries to stowaway on John Pitts' boot. Photo by Wilf Powell

There were nine of us on the trip, including several members of the BNHS: Graham & Pat Bellamy, John Pitts, Sheila Brookes, myself and my wife Julia, plus Marty Anderson and Liz Naughton from Northumberland, who Julia and I had met on a trip to Madagascar a few years previously, and an old friend and previous work colleague of mine, Ingrid Williams. Although Ingrid was born in the UK, her parents were Estonian and she now spends part of her time living over there, doing part-time consultancy work for Tartu University. It was through a recommendation from Ingrid that I was invited in 2011 to help Marika Mann, founder of Estonian Nature Tours, to design butterfly and dragonfly itineraries to add to her company's portfolio for 2012. Our 7-day tour was organised by Marika as a private trip and we were accompanied by one of her excellent guides, Peeter Vissak, who is an accomplished botanist.

We had taken an Easyjet flight from Stansted and were met at Tallinn airport by Peeter with a comfortable minibus and driver. A 3-hour drive to the south-east of the country, stopping for coffee/beer en route, delivered us to our accommodation at Mooste Viinavabrik in time for dinner. This was a splendid building that had originally been built as a vodka factory on a large estate, but in 2010 it was converted into a phototourism centre with very comfortable en-suite guest rooms. We were greeted with a shot of excellent vodka (accompanied by a short stick of rhubarb!) and whoever could guess the number of shot glasses used to make the large chandelier in the entrance hall got another free shot of vodka. This was our base for the next 3 days as we explored a series of butterfly-rich sites including a railway embankment, river flood meadows, bogs and forests. In the evenings we could relax with a beer before dinner, taking in the view across a large lake and noting the local bird life, which included a couple of cranes, white storks, icterine



The old vodka factory. Photo by Wilf Powell

warblers, northern wheatears and marsh and montagu's harriers.

One notable butterfly highlight was a track in Kärkna Forest where groups of 3 or 4 Poplar Admirals came down to source minerals from interesting animal deposits whilst the threatened Scarce Fritillary nectared on flowers at the roadside, together with Lesser Marbled Fritillaries and Large Chequered Skippers. The Scarce Fritillary is very local and widely in decline across central and eastern Europe and is now protected under European legislation. Also memorable was the sun reflecting off the bright orange wings of male Large Coppers in the damp meadows by the river at Vana-

Vastseliina, where we also saw a couple of late Clouded Apollos and the small but pretty Geranium Argus. Equally unforgettable was stumbling through a forested bog at Uulika in search of the elusive Cranberry Blue, with water seeping over the top of my hiking boots whilst voracious mosquitoes circled my head. The sensible members of the group had put on their wellies and placed their butterfly nets over their heads. To my relief a couple of Cranberry Blues were spotted and one was netted and temporarily placed in a pot for all to see.

Late in the afternoon on our final day in the south-east a light rain shower prompted us to retreat to Tartu, the second largest city in Estonia, for a coffee and a bit of sight-seeing before having dinner at a local restaurant. After dinner we set off for an evening boat trip on the nearby Emajõgi river to see European beavers. As it was the weekend there were people fishing along the river which restricted beaver activity. However, we did manage a good sighting of a swimming beaver, although on a quieter evening the previous year I had seen over a dozen along the same stretch of river.

The following morning we were up early to set off to the west coast and then on to Saaremaa Island, where we would be based for two nights. En route we stopped at a former railway station that was being renovated and converted into a home by an enterprising lady who provided us with an excellent lunch, including a cheesecake made with milk from her own goats and vegetables from her garden. Before boarding the ferry to Saaremaa we explored wooded meadows at Laelatu, a once widespread but now very rare and protected habitat which is ranked amongst the most species-rich plant communities in the world. Recent monitoring work at Laelatu revealed 76 different vascular plants in one square metre. Peeter, who does plant surveys in the wooded meadows was a fund of botanical knowledge. Unfortunately, we were too late to see the lady's slipper orchids in flower.



John and Sheila photographing Woodland Brown *Lopinga achine* on Saaremaa. Photo by Julia Powell

Having made the short ferry crossing we called in briefly at a small oak wood where I had seen Purple Hairstreak while on holiday there with Ian Woiod in 2010. It was now early evening and scanning the oak trees around the car park failed to reveal any Purple Hairstreaks but, even better, there were Woodland Browns starting to roost on the tree trunks. This is another species that is now protected by European legislation because it is in rapid decline across Europe. A very striking, large brown butterfly with prominent eyespots, we were to see further specimens at several sites on the Island.

The most fascinating habitat we visited was an "alvar" meadow, which occurs on very thin soil over limestone and can only be found in southern Sweden and Estonia. It was fascinating botanically, and we found burnt, fly and military orchids and dark red helleborines in the area. It also hosted a variety of butterflies, notably Glanville and Nickerl's Fritillaries, Small, Mazarine and Amanda's Blues and Chestnut Heath. Amanda's Blue was one of the commonest butterflies seen on the trip and at this site one posed



Male Amanda's Blue *Polyommatus amandus*. Photo by Wilf Powell

obligingly on Sheila's finger. Lunch was had in a family restaurant, based in an old schoolhouse, and included a traditional dish of mashed potatoes smothered in a tasty smoked ham sauce. We also visited Viidumäe reserve, which boasts more than 700 vascular plants, including one of the rarest plants in Estonia: ivy!

After two nights in the very comfortable Pilguse Manor, we headed back to the capital city of Tallinn, stopping on the way to add more species to the list, such as Purple-edged Copper, Swallowtail and Silver-studded Blue. The last night was spent in a hotel in Tallinn after a relaxing dinner in a local restaurant where we were joined by Marika Mann, the founder of Estonian Nature Tours. The next morning we were given a free conducted tour of the

old city before having the rest of the day to ourselves until we were taken to the airport in the late afternoon for our flight home.

Estonia is a small country (350km east-west by 240km north-south) with a small population (29.6 people per sq. km), 50% of which is forested, interspersed with over 1,400 lakes. In terms of its flora and fauna it stands on a crossroads, where species with predominantly northern and eastern distributions meet southern European species that just reach into the south-eastern corner of the country. The butterfly fauna numbers approximately 100 species, almost twice that of the UK. During the trip we saw 56 butterfly species, 13 dragonfly & damselfly species, including the very local Baltic Hawker (*Aeshna serrata*), plus a huge variety of interesting plant life, including 16 orchid species, and 92 bird species.

The trip was a great success and Marika has agreed to organise another tour in 2013, which will run from Tuesday 2nd to Tues 9th July. If anyone is interested in joining this trip, I can supply full details and answer any queries either via email (w.powell4@ntlworld.com) or telephone (01582 661328).



Examining another exciting catch in Karkna Forest. Photo by Julia Powell

Butterflies seen on trip

Northern Chequered Skipper
Dingy Skipper
Small Skipper
Clouded Apollo
Black-veined White
Black Hairstreak
Purple-shot Copper
Small Blue
Common Blue
Silver-studded Blue
Painted Lady
Small Tortoiseshell
Queen of Spain Fritillary
Small Pearl-bordered Fritillary
False Heath Fritillary
Scarce Fritillary
Speckled Wood
Scarce Heath
Large Heath

Chequered Skipper
Large Skipper
Grizzled Skipper
Swallowtail
Green-veined White
Large Copper
Sooty Copper
Large Blue
Amanda's Blue
Poplar Admiral
Red Admiral
Dark Green Fritillary
Lesser Marbled Fritillary
Glanville Fritillary
Nickerl's Fritillary
Woodland Brown
Large Wall Brown
Pearly Heath
Small Heath

Large Chequered Skipper
Essex Skipper
Olive Skipper
Brimstone
Wood White
Purple-edged Copper
Geranium Argus
Mazarine Blue
Cranberry Blue
White Admiral
Peacock
High Brown Fritillary
Pearl-bordered Fritillary
Knapweed Fritillary
Heath Fritillary
Ringlet
Meadow Brown
Chestnut Heath

Flora of Northamptonshire & the Soke of Peterborough currently available for pre-order

590 pages, 170mm x 245mm, hardback, limited edition

Pre-publication price £30 including post and handling

Price after 28 February 2013: £40 plus post and handling

Introductory chapters

And Mark the Flowers how They Grow: a discussion of change and the causes of change in the local flora, Geology and Soils, The Climate, The Landscape with descriptions of the different areas within the vice-county, and Plant Habitats.

Systematic Flora

Covering 1831 species with notes on habitat type, distribution, occurrence and historical information with the latest dates recorded at various locations for rarer species

Distribution maps

Over 600 species, including some rare species with interesting distribution patterns, are mapped, while some 77 species that can be found throughout the vice-county are listed. The maps show locations recorded within the last 25 years (1987–2012).

Appendices

All known extinctions with dates

Details of interesting aliens recorded on Northamptonshire Racecourse when it was an army camp during the First World War

Gazetteer of relevant sites and localities in vice-county 32

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Only a limited number of books will be printed and it will be available at a special reduced price of £30 if ordered before 28 February 2013.

For information or to pre-order please contact Rob Wilson, Northamptonshire Flora Group, 23 Cecil Street Rothwell Northamptonshire NN14 6EZ or email robwilsondesigns@hotmail.com.

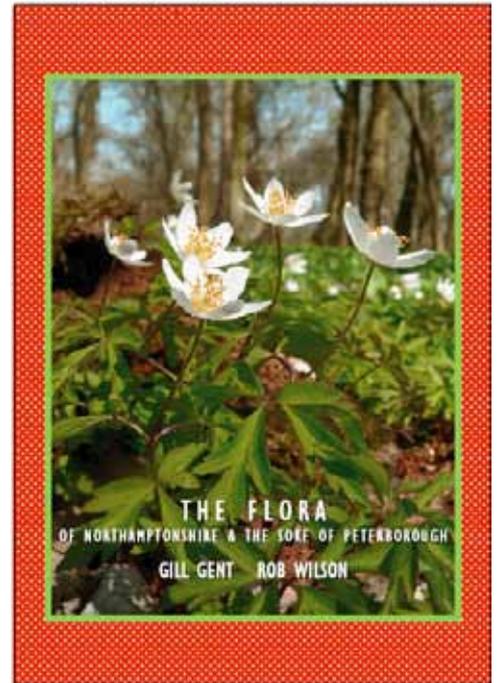
Editor's note:



With such a wealth of naturalist expertise in Bedfordshire it's rare that I'm in a position to actually make a correction to anything written in *Wild About Beds*. In this case though I would be remiss — and indeed my former employers at Ontario Nature would find it negligent of me — were I not to mention that alvar is not only restricted to the areas mentioned in this excellent article, but can also be found in the Great Lakes Basin. Ontario Nature itself owns two alvars: Stone Road Alvar and Bruce Alvar Nature Reserves.

Alvar species face extreme summer heat and winter cold due to their limestone or dolomite substrate. Trees which grow to great heights elsewhere are usually stunted on alvars, and in fact one of the threats facing Canada's alvar nature reserves is theft for the bansai industry. Alvars can be home to a wide range of habitats and their rarity means that much of Canada's alvar habitat is protected.

If you would like to know more about Ontario's alvar habitats please visit The Nature Conservancy of Canada 'Alvars of Ontario' website: www.natureconservancy.ca/en/where-we-work/ontario/our-work/alvars-of-ontario.html.



Upcoming events

15 Jan 'Meanders with Mammals' with Richard Woolnough, 7.45pm at Maulden Village Hall, TL048380. After many years with the Greensand Trust in Bedfordshire Richard is now enjoying life in Suffolk and beyond.

29 Jan 'Frontiers of Bird Identification' by ex-county birder and author Martin Garner, 8.00pm at Maulden Village Hall, TL048380. An inspirational presentation suitable for all levels.

30 Jan Bedfordshire' orchids: launch of a new BNHS book project, 7.30pm Haynes Mission Hall, Northwood End Road Haynes, TL100420. The book will be based on the new Flora, and will be a snapshot of the 'state of the orchid nation' in Bedfordshire. All are welcome.

10 Feb Morning walk around Priory Country Park, Bedford for a variety of wintering birds. Park and meet at 8.00 am in the visitor centre car park, TL072492. Leader: Dave Kramer.

19 Feb 'Neglected Insects in Bedfordshire' by Alan Outen, 7.30pm at Maulden Village Hall, TL048380. To raise the profile of groups of insects that are under-recorded.

10 Mar Annual General Meeting, 7.30pm at Maulden Village Hall, TL048380. Officers and Recorders will present their annual reports.

26 Mar 'The Impact of Bird Fair on Global Conservation' with Tim Appleton MBE, co-founder and co-organiser of the British Birdwatching Fair. Describing the achievements of the greatest birding event on earth, now in its 24th year. 8.00pm at Maulden Village Hall, TL048380.

14 Apr Morning walk over Pegsdon Hills for spring migrants. Park and meet at 8.00am in the car park of the Live and Let Live Inn, Pegsdon, TL121303. Leader: Jon Palmer.

20 Apr Small mammal trapping at the Wildlife Trust Old Warden Tunnel Nature Reserve. Park and meet at 8.00 am in the car park in the track off Southill Road TL112444. *Please note: the meeting point is about 2km south-east along the road from the grid reference in the programme. The meeting point is at the crest of the hill.* Leader: Richard Lawrence.

5 May Annual Dawn Chorus in Maulden Wood. Hot fried breakfast to follow, price £3.00. Please order 7 days in advance with John Adams on 01234 381532. Meet at 4.15am in the lay-by at the top of Deadman's Hill on the A6, TL072394. Leader: Pete Marshall.

In case you missed it

A few items from the recent headlines:

Bedfordshire featured at the Veolia Environment Wildlife Photographer of the Year awards. Owen Hearn won the Young Photographer of the Year title with his 'Flight Paths' photograph of a Red Kite and was taken near Luton Airport.

Luton Borough Council's Senior Landscape and Ecology Officer Trevor Tween was described as 'Luton's answer to David Bellamy' in Luton Today: <http://www.lutontoday.co.uk/news/local/luton-s-answer-to-david-bellamy-1-4500469>

Congratulations to the many winners from this year's Campaign to Protect Rural England Bedfordshire's Living Landscape Awards. Among the kudos were a Gold Mark for the Community Tree Trust in the Sustainable Living category, and a Silver Award in the Landscape Improvement category to the Wildlife Trust's Esther Clarke for her work at Galley and Warden Hills. Other winners included Rushmere Park, Carlton Lower School and John O'Gaunt Golf Club. You can read about them and all the other great projects at <http://www.cprebeds.org.uk/>. Well done everyone!