

**Birmingham
Natural History
Society**

Founded 1858

Registered Charity No 500819

President: Ms Kat Clifford

Internet address: bnhsoc.org.uk

NEWSLETTER No 114 – September 2018

Lecture Programme 2018-2019

Friends Meeting House, Selly Oak, starting at 7.30 pm

19 October 2018

Lisa Worledge – The evolution of bats

Lisa, a member of the Society for many years, is Head of Conservation Services at the Bat Conservation Trust. She writes, 'Fossil evidence for bats goes back many millions of years and it is likely that the earliest bats were around when dinosaurs roamed the earth. But what ancestor did bats evolve from? What was the first bat? Which came first flight or echolocation? How are the bat species around today related to one another? This presentation will consider all of these questions and look at what the latest research tells us about the evolutionary history of these amazing animals'.

16 November 2018

Katrina van Grouw – Unnatural selection: evolution at the hand of man

'When Darwin contemplated how best to introduce his controversial new theory of evolution to the general public, he chose to compare it with the selective breeding of domesticated animals. In her new book, *Unnatural Selection*, marking the 150th anniversary of Darwin's great work on domesticated animals, *Variation under Domestication*, author and illustrator Katrina explains why this analogy was more appropriate than even Darwin had realised. Artificial selection is in fact more than just an analogy for natural selection – it's the perfect example of evolution in action.' More on Katrina over the page

18 January 2019

Dr Peter Coxhead – Introduction to spiders

Covers spider classification and anatomy, illustrating some of the species common around where Peter lives in Sutton Coldfield

15 February 2019

Hein van Grouw – Not every white bird is an albino: some black-and-white facts about colour aberration in birds

Hein is Senior Curator (Birds) with the Natural History Museum, based at Tring. He writes, 'Aberrantly-coloured birds have always intrigued people, resulting in many records in the ornithological literature. In these publications a variety of names are used to identify and classify the pigment abnormalities. This terminology, however, is often conflicting or incorrect and therefore confusing. Most commonly, the terms albino, partial albino or leucism are used for almost all different forms of aberrant feathering, even if it is not white, but in only a tiny proportion of cases are they used correctly. Also, in the past, when little was known concerning plumage pigmentation and mutations, aberrant-coloured birds were often viewed as being new taxa, and were even described scientifically as distinct species. In this talk Hein will give examples of aberrant individuals being named as new species, explain the nature of the most common colour abnormalities in birds, and present a nomenclature for these abnormalities.' More on Hein over the page

15 March 2019

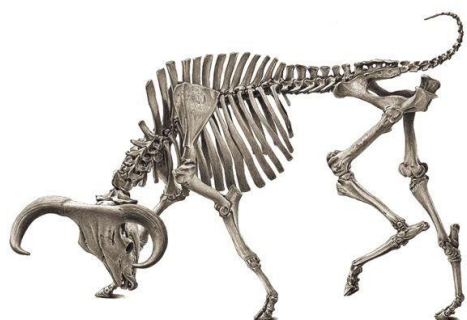
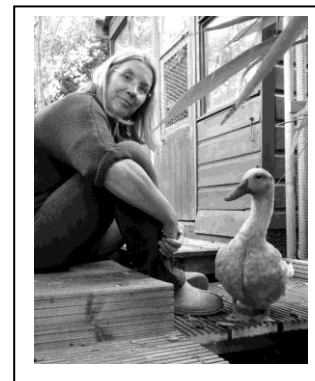
Rosemary Winnall – The nature of Wyre.

Rosemary, for many years Education Officer at the Wyre Forest Discovery Centre, is a founder member of the Wyre Forest Study Group, a committee member of Worcestershire Recorders, and, as we saw in her talk 'Nature in focus' last March, a keen wildlife photographer. She organised and was one of the editors of *The Nature of Wyre* (Pisces Publications, 2015)

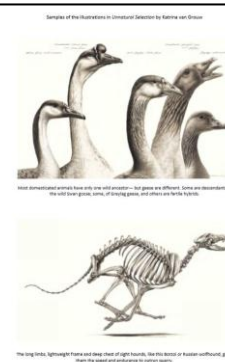
19 April 2019

AGM and Presidential lecture

Katrina van Grouw, author of *The Unfeathered Bird* (which was the basis for her talk to the Society in 2015) and *Unnatural Selection*, inhabits that no-man's land slap bang between art and science. She holds degrees in fine art and natural history illustration, and is a former curator of ornithological collections at a major national museum. She's a self-taught scientist with a passion for evolutionary biology and its history. After a long and varied career on both sides of the art/science divide she now devotes her time exclusively to her books which, for her, 'tick all creative and intellectual boxes'.



Aurochs



Goose ancestry and borzoi



Hein and Katrina

Hein van Grouw is one of the five NHM's Bird Curators based at Tring, having worked there since 2009, and appointed Senior Bird Curator in 2015. Before that he worked for nearly 12 years in the bird collections and later also the mammal collections of Naturalis, the Dutch Natural History Museum, now called Naturalis Dutch Centre for Biodiversity.

Hon Treasurer

Margaret Kingsbury has resigned as Hon Treasurer to the Society, a position she has held since 2006. At its meeting on 21 September Council expressed its tremendous gratitude to Margaret for her work over the years, not only in dealing with financial matters but also taking responsibility for membership.

A measure of Margaret's hard work is that Council felt that the position should now be taken by three people rather than a single person. Dr Peter Coxhead has agreed to serve as Acting Treasurer until the next AGM in April 2019, and Dr Geoff Barnbrook has agreed to take on the new role of Assistant Treasurer. Dr Peter Jarvis will take over responsibility for membership.

WARWICKSHIRE FUNGUS SURVEY - Foray programme for the remainder of 2018

Sunday 14 October 2018

10.30 am Waverley Wood VC 38 Landranger sheet 140. Park on ride inside recessed gate off A445 (take care - fast traffic!) at SP351710.
Contact: John & Val Roberts. (J) 01926 421544)

Sunday 21 October 2018

10.30 am Wolford Wood, Landranger sheet 151. Meet at the entrance to the woodland track at grid reference SP242332 on minor road linking Great Wolford to the A44. Park inside the gate.
Contact: Bert Brand. (J) 01789 267402)

Sunday 28 October 2018

10.30 am Brueton Park, Solihull, VC 38, Landranger sheet 139. Park in the main car park off Warwick Road at grid reference SP164789. There is alternative street parking.
Contact: John Williams. (J) 0121 745 6395)

Sunday 4 November 2018

10.30 am Tasker's Meadow NR VC38 Landranger Map 151. Park just north of pub in canal layby on minor road to Birdingbury at SP438653. Take great care crossing A426 to Reserve entrance opposite pub (fast traffic and poor visibility) or (better) take canal footpath to emerge on the other side of A426.
Contact: John & Val Roberts. (J) 01926 421544)

Sunday 18 November 2018

10.30 am Brandon Marsh NR, VC 38, Landranger sheet 140. Access off minor road towards Brandon from southbound A45 (Brown Sign) just east of Tollbar. Meet in WWT car park at grid reference SP386758.
Contact: Dave Champion. (J) 07896 752138)

Sunday 25 November 2018

10.30 am Draycote Meadows NR, VC 38, Landranger 140, at grid reference SP449706. Park off the road by the gate into the meadow.
Contact: Kay Reeve. (J) 01926 632400)

Sunday 6 January 2019

10.30 am AGM.
Contact: John & Val Roberts. (J) 01926 421544)

If you want to attend a foray, please inform the contact person a few days beforehand. This will ensure that you do not arrive at a foray that has been cancelled or moved to a different location. The contact person will send a reminder by email to group members two days before a meeting. Please reply stating your intention to attend the meeting or not. If the contact person decides to cancel a meeting, he will notify group members by email.

After a foray, please check *A Fungus Flora of Warwickshire* and the additions to the Flora or the contact person to confirm that any of the less-common species that you have collected have already been recorded for the County. If they have not, PLEASE KEEP DRIED MATERIAL for the herbarium.

Please send lists of species that you have found on the forays in Warwickshire to John Sells, 57 Craven Avenue, Binley Woods, Coventry CV3 2JS or David Antrobus. Where possible, please state the habitat and associated trees and plants for each record.

If you find an interesting fruiting of fungi, and think that others would be interested, please ring John Williams at the number below. It may be possible to arrange a foray at short notice. Permission has been obtained from landowners to collect for scientific purposes. In the interests of conservation, please do not collect more specimens than necessary for your personal use. We do not encourage collection for culinary purposes on our forays.

The Warwickshire Fungus Survey is affiliated to the British Mycological Society. Our web address is:
<http://wfs.bnhsoc.org.uk/>

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Secretary: David Antrobus
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LIBRARY

We had hopes of being able to move the Society's Library to the Birmingham Midlands Institute by this summer, but the BMI may now not be able, literally, to accommodate us. Books remain in storage, and are not currently available for borrowing. Also we are not currently purchasing new books. Any member having ideas on a solution to this on-going problem – do please contact the Hon Secretary. Meanwhile, many thanks to Geoff Barnbrook for his talks with BMI.

Dominance at bird feeders

The pecking order of garden birds is determined by their size and weight

In a study of bird feeders, researchers from the University of Exeter and the British Trust for Ornithology (BTO) found larger species like house sparrows and greenfinches monopolised the best food and spent longer feeding than smaller birds such as blue tits and coal tits, who fed quickly and on lower value food.

Previous studies of dominance have mostly focused on within-species interactions. In this study the researchers examined competitive interactions between ten species of garden birds that came to feeders containing a high-value food, such as sunflower hearts (husk off), and a lower value food such as black sunflower seeds (husk on).

They then ranked each species in order of dominance by recording any interaction between two individuals that resulted in one retreating from the food source, with the bird that stayed being classified as the more dominant individual.

Socially dominant, heavier species monopolised access to a food that had a relatively short handling time (sunflower hearts), spent longer on supplementary feeders, and pecked at lower rates. In contrast subordinate, lighter species were constrained to feed on a food that had a relatively long handling time (sunflower seeds with the hull intact).

Though the results do not show the ten species in exact weight order (see table), there is a strong correlation between weight and dominance. The two heaviest birds (based on average body weight) were rated most dominant – house sparrow (27.3g) and greenfinch (27.7g) – while the two lightest – blue tit (10.9g) and coal tit (9.1g) – were bottom of the list.

Megan L. Francis *et al* (2018) Effects of supplementary feeding on interspecific dominance hierarchies in garden birds.
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0202152>

Order of dominance	Species	Average weight in grammes (from BTO BirdFacts)
1	House sparrow	27.3
2	Greenfinch	27.7
3	Nuthatch	22.1
4	Robin	19
5	Goldfinch	15.8
6	Great tit	18.6
7	Dunnock	21.2
8	Chaffinch	21.8
9	Blue tit	10.9
10	Coal tit	9.1



© Derrick Knight (2015)

Butterflies in 2018

Generally speaking the long hot summer of 2018 has greatly benefited butterflies in the British Isles, though with an important exception: the small tortoiseshell has continued its puzzling decline, suffering its worst summer in the history of Butterfly Conservation's Big Butterfly Count, with sightings falling by almost a third on 2017. (Indeed, numbers have declined nationally by 75% since 1976.)

Many species, however, have done really well, with a record 100,000 or so people recording 97,136 butterflies and day-flying moths during the three-week count (20 July – 12 August), the world's largest butterfly survey.

Most common was the small white, with numbers up 161% on the last year. Indeed the three 'cabbage whites' (large white, small white and green-veined white) made up 55% of records.

After worries about the decline in numbers of the common blue, this butterfly had its best results since records began in 2010, while the holly blue (the commonest blue seen in the garden) had the highest numbers in the count's history.

The hot weather did cause a number of common species to emerge earlier in the summer, before the count began, so marbled white, ringlet and meadow brown were under-recorded. And records of red admiral and comma were down on the previous year, but this was because numbers in 2017 had been exceptionally high.

Maps for all or individual species are available at <https://www.bigbutterflycount.org/results> – there are prompts for location, habitats (including 'all' and 'garden') and species.



Small tortoiseshell and holly blue (female)
(Commons Wikimedia)

To contact the Hon Secretary or to provide copy for the next Newsletter:

Dr Peter Jarvis: 23 Crosbie Road, Harborne, Birmingham B17 9BG 0121 427 1010 peterjarvis668@gmail.com

SAVE paper, printing and postage costs: could members let me know if they would be happy to receive the Newsletter by email.
Many thanks to the increasing number of members who have already done this.