Hertfordshire Natural History Society Management Committee Report for the year April 2021-March 2022

Aim and purposes

Hertfordshire Natural History Society promotes the study and recording of the flora and fauna of Hertfordshire and encourages a wider interest in natural history, including the conservation of wildlife, habitats and geological features, for the purpose of environmental protection or improvement.

Achievements and performance

Covid-19 pandemic

Continuing rules and restrictions to prevent the spread of the Covid-19 virus were in force for all but a few, final weeks covered by this report. This inhibited some survey activities and led to the cancellation or postponement of events. Among the latter was the two-day Festival of Wildlife, previously held in July at Panshanger Park, which the Herts and Middlesex Wildlife Trust has decided will no longer take place. The Society's Autumn Meeting and AGM was held online (in November 2021) for a second year, as was the Bird Club/British Trust for Ornithology Conference (in March 2022). The Gerald Salisbury Memorial Lecture was given online (in February 2022) by chalk geology expert, Dr Haydon Bailey. The Society continued publishing and updating website advice on safe outdoor behaviour, linked to Government rules. This ceased in spring 2022 following a lifting of Government restrictions.

Wildlife recording

Most wildlife records collected and collated by the Society and its network of county recorders are submitted electronically. This facilitates data sharing. Out of more than three million records collected by the Hertfordshire Environmental Records Centre (HERC) since 2013, the majority have been submitted through the Society.

We encourage volunteers and professionals to collect and submit wildlife records through our own websites, or using national schemes such as BTO Birdtrack, the Mammal Society and iRecord. The Society currently maintains website recording portals for birds, mammals, amphibians and reptiles, and dragonflies. Further opportunities for information and image sharing are enabled through Facebook, Twitter and Flickr. Records can also be submitted to the relevant county recorder by email or on paper.

Surveys and projects

Dragonfly and damselfly atlas survey The start of this survey was postponed for a second year in 2021 because of the Covid situation, but it is now underway. The atlas survey is the second to be carried out in the county following the ground-breaking work of Alan Reynolds, the Revd. Tom Gladwin and Christine Shepperson, published in 2008. It is mapping species by 2km-square tetrads with all records welcome, not least from garden ponds. Recorder Roy Woodward not only aims to map all species present in the county, but also to record evidence of breeding, measure flight periods, estimate abundance and gain an indication of habitat preferences. A survey sub-site has been created on the HNHS website where observers are encouraged to provide six-figure grid references for their sightings. Advice on identification and how to find evidence of potential breeding is also provided.



Small Red-eyed Damsel Erythromma viridulum at Amwell in June 2022 (photo H. Lewis).

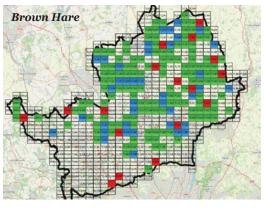
Mammals, amphibians and reptile atlas (Herts

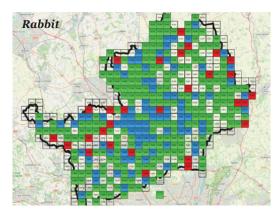
MARA) Surveying in 2021 was again hampered by Covid restrictions, but more fieldwork was completed than in 2020. The survey aims to achieve the best possible, countywide coverage for six amphibian, three reptile, 32 mammal and 12 bat species. At least one species has been recorded for almost all the tetrads that are more than 25 per cent within the Hertfordshire boundary. This indicates that some recording has happened everywhere in Hertfordshire.

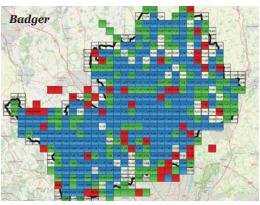
By January 2022 we had 4,300 verified records submitted to the HNHS website record page (https://hnhs.org/submit/mammals-amphibians-and-reptiles). The distribution maps can be viewed on the Mammals atlas pages which are updated every six months. Additional records submitted via iRecord are being verified by Chantal Helm and Jenny Jones and will be added to the final distribution maps, along with any records obtained from other recording schemes.

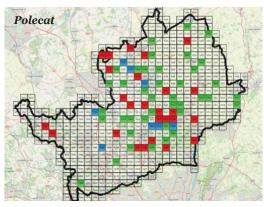
A preliminary analysis was undertaken at the start of 2022 identifying gaps in the survey results across the county in order to focus efforts for the final year. The figures below show a red green blue colour coded map

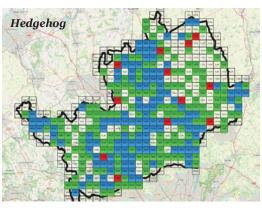
of tetrads showing records collected between 2000 and 2021 for selected species. **Red** indicates those tetrads where records were obtained for a species between 2000 and 2014, but no record has been obtained since 2015 when the Atlas project started. For these species, it is the red tetrads we are focusing on to fill the remaining gaps in the dataset for the rest of 2022. The **blue** tetrads indicate that we have records for both the pre-2015 and post-2015 periods and **green** tetrads are those where we only have records from 2015 onwards. Renewed thanks go to everyone who has submitted records to date, with a plea to continue to do so, focusing on the gaps identified on the preliminary

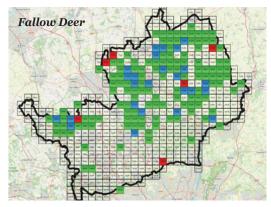












distribution maps. These are available on the Herts MARA Atlas pages (http://mammal-atlas.hnhs.org/).

Herts Invertebrate Project The Herts Invertebrate Project held five meetings in 2021, visiting Aldbury Nowers, Amwell, Beane Marsh and Frogmore Meadows HMWT Nature Reserves and Wilbury Hill. Highlights of the recording year included finding the UK-rare beetle Omaloplia ruricola at Aldbury Nowers – its first record from the site since 1892. It is only the second site in Herts where the species has been recorded this century. Anyone wanting to join the invertebrate group's field meetings should email to orthoptera@hnhs.org. Information has, meanwhile, been added to the HNHS website about all 22 grasshoppers, bush-crickets, groundhoppers and allied species so far located in Hertfordshire, written by county recorder Ian Carle. It includes a downloadable identification guide to the grasshoppers and bushcrickets, illustrated with his own photographs of nymphs as well as adults.

Monitoring at Heartwood Forest Activities at Heartwood were able to continue throughout the year. A detailed overview of results from monitoring for the past six years and their implications as the site develops can be found on pp. 15 to 35.

Tree Sparrow Recovery Project Sadly, but perhaps inevitably, this year may mark the end of breeding Tree Sparrows in Hertfordshire, a species whose population in the southeast of England has been in freefall for some time. Despite the efforts of Herts Bird Club volunteers over the last 30 years – providing yearround feeding, nest-boxes and monitoring through nest-box surveys, tagging and ringing – the local population has not grown to a sustainable level.

The summer of 2021 saw no breeding birds at traditional sites in the Tyttenhanger area at Coursers and Tyttenhanger Farms. Some hope was raised by birds choosing to breed in one of the new compounds provided nearer Colney Heath as part of the Tree Sparrow Recovery Project. Seven nests produced 14 fledged birds. However, these birds quickly dispersed and by the beginning of 2022 just two birds remained in the Tyttenhanger area. With a long history of population decline and poor adult survival it seems little hope remains for further breeding. At the time of writing, no Tree Sparrows have been seen or recorded on site since April 2022. It is not clear why the Tree Sparrow population has suffered this year, but a number of factors may have combined to work against them – notably significant disturbance from gravel excavations near Coursers Farm and increased exposure to human visitors during Covid-related lockdowns.

If there is a positive to take from the past year it is that the presence of Tree Sparrows on site helped rebuff the immediate threat of housing development on part of the site, proposed as part of Hertsmere Borough Council's Local Plan. Thanks to the efforts of volunteers and objections from many members of the public the draft plan was withdrawn in April this year.

In the absence of Tree Sparrows, the current Tree Sparrow Recovery Project may bring its activities to a close. However, other avenues for its support are being explored based on evidence, for example, of wintering birds visiting farms in the north of the county. The support by the would-be developer, Urban & Civic Plc, in funding the new feeding enclosures at Tyttenhanger is gratefully acknowledged, as is the support by ecologist Rob Forbes of EDP working as a consultant for the developer. Thanks go to Richard Geary who continues to monitor and maintain the feeding stations. We can still hope that the Tree Sparrows reappear.

The Herts Flora Group An easing of Covid restrictions during spring and summer 2021 allowed recording activity to resume. However, the Herts Flora Group held only one field meeting – at Woodoaks Farm, Maple Cross, being used by the Soil Association to demonstrate sustainable farming practices. In addition to useful discussion on ways to increase floral diversity, the tour resulted in discovery of a nationally-rare arable weed, Torilis arvensis, at the site. By contrast with the two previous years, the Group is running a full programme of field meetings in 2022, and a workshop on grasses at Bayfordbury. New findings and developments are summarised in the flora recorders' report on pp.9-14.

Publications

Transactions of the Hertfordshire Natural History Society 2021, Volume 53

Part 1: The Hertfordshire Naturalist 2021 was published in October 2021. Thanks go to the Editor, Judy England and her editorial team.

Part 2: The Hertfordshire Bird Report 2020 was published in November 2021. Editor Clifford Smout and his team deserve thanks for, once again, completing their report by the autumn following the recording year.

Events

Autumn Meeting and Annual General Meeting

The continuing Covid pandemic meant the Autumn Meeting and AGM, on 27 November, took place online for a second year. Josh Kalms, People and Wildlife Officer with the Herts and Middlesex Wildlife Trust, gave a keynote talk describing the careful process by which 150 Water Voles had been reintroduced to the River Ver that summer. Fifty years ago, Water Voles were still a relatively common species in Hertfordshire's chalk streams. But the species has since undergone a catastrophic decline.

The meeting, attended by 45 members and guests also heard from recorder Roy Woodward about his plans to start the six-year county-wide survey of dragonflies and damselflies that had been postponed because of the Covid pandemic (see above). Roy noted that the number of species confirmed for Hertfordshire has risen from 24 at the time of the last survey from 1998-2007 to 33. New arrivals include a Southern Emerald Damselfly found in a St Albans garden in July 2021. A further appeal for county records was made by Chantal Helm for the mammal, amphibian and reptile survey (Herts MARA) which has reached its final year in 2022 (see above). Chantal underlined the importance of obtaining more records from tetrads with five or fewer species currently confirmed.

Gerald Salisbury Memorial Lecture

Although hopes of an 'in-person' lecture were again disappointed, an online audience in February 2022 heard a fascinating talk by chalk micropalaeontology expert Dr Haydon Bailey on the last 100 million years of Hertfordshire's geological history. He began with the Late Cretaceous period when different chalk strata were laid down, progressing to the early Eocene 55 million years ago when high global temperatures enabled shoreline flint pebbles to become cemented into silcrete rocks known today as 'Hertfordshire Puddingstone'. Haydon also highlighted cosmogenic



Waffle House Hertfordshire Puddingstone (photo Haydon Bailey).

dating results indicating that sands near Berkhamsted are beach deposits from 2.57 million years ago. This suggests the Chiltern Hills have risen an impressive 165 meters since then. He, semi-seriously, concluded by considering the consequences for Hertfordshire if global warming returned the Earth to temperatures

100 million years ago. Sea levels could rise 100 meters turning the Chilterns into an archipelago of small islands.

The Gerald Salisbury Memorial Lecture is jointly organised by Hertfordshire Natural History Society and Welwyn Natural History Society.

Herts Bird Club/British Trust for Ornithology (BTO) Conference

Hertfordshire's increasing breeding population of Peregrine Falcons and the influence of climate change on wintering wildfowl in the Lee Valley were the main topics considered at the annual Herts Bird Club/BTO conference. More than 70 members and guests joined the online event in March 2022 to hear Barry Trevis talk about steps being taken to monitor and assist breeding Peregrines. Barry is the only ornithologist in Herts currently licensed to (briefly) handle and ring their chicks. He has also been active in building and installing bespoke platforms at sites after potential breeding pairs are located. He described a decade during which Peregrine records in Herts have advanced from spring sightings of individual birds in 2012 to anticipated breeding this year at five sites.



Peregrine chicks on silo ledge Wheat Quarter, June 2020 (photo Barry Trevis).

In a second keynote presentation, Graham White, the RSPB's recently retired Head of Reserves Ecology, reported trends from 30 years of winter bird records gathered in the Lee Valley as part of the BTO's Wetland Bird Survey (WeBS). His title 'The Rise and Fall of the Coot Mugger' referred to kleptoparasitic behaviour by Gadwall ducks, grabbing weeds brought to surface by Coots. In the 1980s, the Lee Valley held 10 per cent of the estimated UK Gadwall population but that has fallen to just 2 per cent in the past decade. Also at the conference Graham Knight reviewed the bird record highlights of 2021 whose highlights included confirmed breeding for Hawfinch - emblematic species of the Herts Bird Club – for the first time in some years. Thanks go to Tim Hill and all involved in organising the Society's events during the year.



Stuart Warrington receiving his Trevor James Award, at Digswell Lakes 2021 (photo David Utting).

The HNHS Awards for 2021

The Society's annual Awards recognise an outstanding Hertfordshire naturalist and an individual who has made an outstanding contribution to natural history in Hertfordshire on a voluntary basis. In 2021, the former was re-named in honour of Trevor James, a remarkable and much missed natural historian, author and county recorder for both plants and beetles, who sadly died in 2020.

The first Trevor James Award for an outstanding naturalist went, appropriately, to Stuart Warrington, a professional ecologist and expert on water beetles and bugs, for which he is county recorder. Stuart's field and identification skills have greatly increased knowledge about species present in Hertfordshire. But his award also recognises his wide-ranging contribution to habitat and nature reserve management.

The Society's 1875 Award for an outstanding contribution to natural history in Hertfordshire went to Bob Reed who has been involved in conservation work for more than 60 years in his home area of Sawbridgeworth and Bishop's Stortford. Bob is a 'Living River Champion' for the Herts and Middlesex Wildlife Trust and played a leading part in reintroducing Water Voles along the River Stort. He is warden of Sawbridgeworth Marsh SSSI and recently concluded a successful seven-year campaign to have Pishiobury Park designated as a Local Nature Reserve.

Financial review

Following a policy decision taken by the Management Committee in April 2020 the Society's accounts are now published separately at a time nearer to the Annual General Meeting, rather than in the *Hertfordshire Naturalist*.

Volunteers

The Society is managed and run entirely by volunteers. We warmly thank all our volunteers for their hard work, not least the county recorders, the editors of our



Bob Reed, with his 1875 Award, at Pishiobury Park 2021 (photo David Utting).

two journals and those moderating and updating the websites.

Members news

The Society has introduced a fully online system for membership applications and renewals. This uses the 'member MOJO' app that facilitates debit and credit card payments via the website. Payments by standing order, bank transfer or cheque are still welcome, however, and save HNHS commission payments. The new system also generates automatic email reminders when renewals are due (and overdue). Thanks go to our Membership Secretary, Martin Ketcher, for managing the necessary changes.

We learned with sadness of the deaths of three members: Colin Clark (Harpenden), Rob Harris (Watford) and David Leigh (Stanstead Abbotts). We are also sorry to report that C. Gordon Hanson, the Ware-based expert on exotic and invasive plant species, has died. An obituary can be found on p.88.

Structure, governance and management

The Society (full name: Hertfordshire Natural History Society and Field Club) is a registered charity, governed by a formal constitution last amended in 2007. The Trustees of the Society and other members of the Management Committee are elected each year at the Annual General Meeting in October or November. In November 2021, 15 members of the Society's Management Committee were elected at the AGM, 12 of whom also serve as trustees (see table below). The MC was delighted to welcome Chris James to the committee, but very sorry - six months after the AGM - to lose the services of Alan Gardiner, for family reasons. The committee is most grateful for Alan's contribution over the years and pleased that is continuing his work with Herts Bird Club and as county Bird Recorder.

The committee also extends its warmest thanks to Judy England, who has edited the Hertfordshire

Naturalist since 2017, but will be moving away from Hertfordshire. We are grateful to Stuart Warrington, a former editor, who has kindly agreed to take up the reins again in her place. During the year the Committee met five times, in April, July, September, October and January. Membership of the Society

increased during the year to an historic 'high' of just over 500 members.

Administrative information

The Society's registered address is 250 Sandridge Road, St Albans, AL1 4AL.

Members of the Management Committee (elected in 2020 and 2021)

Role	2020/21	2021/22
Chair	Peter Tallantire*	Peter Tallantire*
Treasurer	Dan Fletcher*	Dan Fletcher*
Secretary and Registrar	David Utting*	David Utting*
Membership Secretary	Geoff Hill	Martin Ketcher*
Chair of Recorders' Committee	Veronica Edmonds Brown*	Veronica Edmonds Brown*
Editor, Hertfordshire Naturalist	Judy England	Judy England
Events	Tim Hill*	Tim Hill*
Herts Bird Club	Rupert Evershed*	Rupert Evershed*
Herts Bird Club	Jack Fearnside	Jack Fearnside
Herts Bird Club	Alan Gardiner*	Alan Gardiner
Recording	Agneta Burton*	Agneta Burton*
Recording	Ian Carle*	Ian Carle*
Recording	Alex Waechter ^c	Alex Waechter*
Special projects	Chantal Helm*	Chantal Helm*
Special projects	Jenny Rawson	Chris James*

^{*} MC members who are also HNHS Trustees; co-opted during the year.

HNHS Management Committee Draft dated July 2021 for presentation at the Society's AGM.

Hertfordshire biological recorders

County Recorders are local experts who have volunteered to help the Society to collect, verify, collate and keep records of the wildlife and other natural history features of the county. Records of the county's wildlife are essential to the work of the Society, so please keep notes and send your records to the appropriate recording scheme. All records are shared with the Hertfordshire Environmental Records Centre and (as appropriate) relevant national recording schemes.

Please submit your records through our website at

www.hnhs.org or directly to the relevant recorder. When submitting records please include:

- what has been recorded (species and number seen);
- where (location including grid reference and nearest town);
- when (including the year); and
- who (name of recorder).

Recorders may also be able to help to identify specimens, but please do contact them before sending material in the post.

County Recorders list

Flora: vascular plants: Alla Mashanova, Astrid Biddle and Ian Denholm; email: a.mashanova@herts. ac.uk Bryophytes (mosses and liverworts): Dr Agneta Burton, 33 Ox Lane, Harpenden, AL5 4HF; e-mail: mas.burton@btinternet.com