



SCIENCE AND
CONSERVATION EVENTS

CELEBRATING 10 YEARS OF GARDEN WILDLIFE HEALTH

DATE

Tuesday 23 January
2024

TIME

6pm – 7:30pm

LOCATION

Online, Zoom Webinar

Free to attend

Registration required



AGENDA

© Lewis Campbell

Dr Katharina Seilern-Moy

ZSL

An overview of the Garden Wildlife Health project at ZSL

Dr Will Peach

RSPB

Responding to disease as a growing threat to wild birds

Mike Toms

British Trust for Ornithology

Delivering effective disease surveillance through citizen science

Andrew Smart

Froglife

Amphibian Disease & Mortality – Citizen Science & Public Engagement

Chaired by **Dr Katharina Seilern-Moy**

ZSL

ABSTRACTS

An overview of the Garden Wildlife Health project at ZSL

Dr Katharina Seilern-Moy
MagMedVet PhD MRCVS, ZSL

The Garden Wildlife Health (GWH) project is one of ZSL's citizen science projects, which aims to monitor the health of, and study disease conditions in, British wildlife, focusing on garden birds, amphibians, hedgehogs, and reptiles. For this we rely on reports of ill-health and death in these species from the general public, submitted via the GWH website. We conduct pathological examinations on wild animals in order to diagnose the disease conditions affecting their health and to collate a sample archive to serve as an invaluable national resource for further study.

Following its predecessors, the Frog Mortality Project and the Garden Bird Health initiative, GWH was launched in its current form in 2013. Led by wildlife veterinarians at ZSL's Institute of Zoology, this collaborative project works in partnership with the BTO (British Trust for Ornithology), Froglife and the RSPB (Royal Society for the Protection of Birds). Together, we aim to produce evidence-based advice on prevention and control of disease in garden wildlife, and to provide best-practice guidance in order to safeguard wildlife health and welfare. We communicate our surveillance findings to a wide range of audiences, including the general public, government, academic collaborators, and conservation and welfare organisations. Our website provides access to resources in a variety of formats including scientific

publications and disease factsheets on common conditions. Our surveillance findings from the past decade are diverse, covering a range of topics from monitoring well-known conditions to screening for and investigating new emerging diseases, aiming to gain an understanding of their impacts on wildlife as well implications for human and domestic animal health.

More detailed information on the GWH project, and how to report a disease incident in garden wildlife can be found on our website www.gardenwildlifehealth.org

Katharina graduated from the Veterinary University Vienna in 2011, specialising in Conservation Medicine, and pursued her PhD on Elephant Endotheliotropic Herpesvirus infection at the University of Surrey and the Animal and Plant Health Agency in the UK. In 2016, Katharina joined the Institute of Zoology as a wildlife veterinarian and postdoctoral researcher, coordinating Garden Wildlife Health, a citizen science project aiming to monitor the health of, and study diseases and their impacts in, British wildlife by collating disease reports from the general public.

Responding to disease as a growing threat to wild birds

Dr Will Peach, RSPB

Will's talk will focus on the increasing importance of infectious disease as a conservation challenge for RSPB. While RSPB has been an active partner of Garden Wildlife Health (and its predecessor projects) for more than 20 years, the advent of finch trichomonosis and more recently highly pathogenic avian influenza (HPAI) have required conservation organisations like RSPB to prioritize infectious disease as a conservation threat to wild birds. The emergence of a lethal strain of *Trichomonas*

gallinae has caused the population declines of two widespread garden bird species and threatens several other priority species, whilst HPAI has recently caused severe mortality amongst internationally important seabird and waterfowl populations in the UK.

Improving our understanding of the impacts of these diseases, their transmission routes and avian immune responses has become an urgent evidence need both for governments and many conservation NGOs. In this talk, Will will discuss some of these challenges and review how RSPB is responding to the increasing threat of avian disease to wild birds.

Will is currently Head of Conservation Science for England & Wales at the RSPB where he leads a team of 15 ecologists working on a variety of applied conservation problems. These include autecological studies of declining species, trial conservation management and the development of sustainable farming practices. He is currently leading a collaborative research project between RSPB, IoZ and BTO that aims to improve our understanding of finch trichomonosis with the ultimate aim of developing mitigation measures. Will has previously specialised on the ecology of farmland birds including species-focused diagnostic studies, trial management, agri-environment evaluation and pesticide impacts.

Delivering effective disease surveillance through citizen science

Mike Toms, British Trust for Ornithology

Understanding the potential impacts of disease on birds and other garden wildlife requires wider knowledge of how the populations of these species change over

time, and what other factors might be contributing to these changes. BTO collects information on how and why bird populations change through its core monitoring programmes, some of which extend back to the 1930s. These programmes cover a range of habitats, including gardens, the latter monitored through a weekly study called BTO Garden BirdWatch (www.bto.org/gbw).

In addition, BTO surveys collect data on the processes that drive population change, namely mortality, movements and productivity – the latter a measure of the numbers of young birds entering a population. Information on mortality and movements comes from bird ringing, while that for productivity comes from both nest recording and standardised ringing.

This talk will explore how these different sets of information can be brought together to both identify the role of disease in population change and the scale of its impact. Using a case study of finch trichomonosis – which has brought about significant declines in UK Greenfinch and Chaffinch populations – the talk will underline the vital role that structured citizen science projects play in our response to disease in wild birds and other wildlife.

Mike is Head of Communications at the British Trust for Ornithology (BTO) and is responsible for how the organisation communicates the results of its scientific work to a broad range of audiences. He has overseen the BTO's Garden Ecology Team for more than a decade, collecting information that improves our understanding of how and why birds use gardens and the resources that they provide. He is author of a number of books on garden (and other) birds.

Amphibian Disease & Mortality – Citizen Science & Public Engagement

Dr Andrew Smart, The Froglife Trust

Froglife acts as the portal for members of the public to submit reports of reptile and amphibian disease and mortality. These reports are submitted via email and our social media platforms, namely Facebook, X, and Instagram. In 2015 Froglife set up a database to log all email enquiries it receives. The database categorises the nature of the enquiry, which enables Froglife to analyse the different types of enquiries received. All enquiries relating to reptile and amphibian disease and mortality are signposted to the Garden Wildlife Health website. These are logged onto a database managed by the British Trust for Ornithology (BTO) and are picked up by the Vets working within the Garden Wildlife Health project at the Zoological Society of London (ZSL). Froglife presented the findings of the email enquiries received between 2015 and 2017 at the 2017 Garden Wildlife Health Forum. This presentation covers the period from 2017 to 2023 which included both the email and social media enquiries. However, we are only

able to analyse email enquiries, hence the data within this presentation covers email enquiries only. Over recent years there have been a drop in email enquiries as people increasingly use social media.

The presentation analyses the data from email enquiries into type of enquiry, the nature of mortality reports, monthly and seasonal analysis. It provides examples of enquiries received and highlights how much those reporting disease and mortality incidents care and want to help our native reptiles and amphibians. It also highlights the low level of reptile disease and mortality reports, evidencing the low level of awareness of reptile species in the UK.

Andrew joined Froglife after 25 years teaching conservation and running 'HE in FE' University Centres. He has worked on Mediterranean loggerhead and green turtles, common toads on the Avon levels, freshwater lakes in Kenya and was part of the formative research group at the Durrell Institute of Conservation and Ecology. More recently he worked with the University of Cardiff and Cornwall College Newquay in the Kinabatangan River basin, surveying frogs and toads in Borneo rainforest. Now based in Cornwall, he is involved in projects on palmate newts and invasive species as well as lizard surveys on the coast path.



EVENT FORMAT

- This event will take place online via Zoom and will be filmed and published on our Science and Conservation YouTube channel (zsl.org/IOZYouTube). Please be aware, by attending you consent to being recorded during the Q&A session.
- Places are allocated on a first-come, first-served basis.
- Before attending, please read our Code of Conduct found [here](#).
- The event will run from 6-7:30pm
- It will consist of short introductions from the speakers, followed by a Q&A and panel sessions.
- To submit a question to a speaker prior to the event, please send it to scientific.events@zsl.org. Please be aware we may not be able to answer all questions.
- There is no charge for this event, but registration is required.



COMING UP...

The impact of lockdowns on human-wildlife interactions and biodiversity conservation efforts

13 February 2024, 6-7:30pm

In person; Huxley Lecture Theatre, ZSL

The consequences of the COVID-19 global lockdowns on human's interactions with nature remain to this day poorly understood.

Drawing on individual case studies and global synthesis, this event will reveal the many ways in which the pandemic lockdowns have impacted human-wildlife interactions, in order to draw positive lessons for maintaining biodiversity conservation efforts during future global shocks.

www.zsl.org/science/whats-on

STAY IN TOUCH

- Contact scientific.events@zsl.org for any event related enquiries.
- For press enquiries, contact the **ZSL Press Office**: press.office@zsl.org.
- Listen to our **ZSL Wild Science podcast** [here](#).
- For more information about how to join the **ZSL Fellowship programme**, [click here](#).
- [Sign up here](#) to receive email updates about forthcoming ZSL and Conservation Events.
- Read the latest science **blog posts** [here](#).
- Follow us on **Twitter** [@ZSLScience](https://twitter.com/ZSLScience) to hear about new publications, upcoming events and podcast episodes.
- Follow us on **Facebook** [@ZSLScienceAndConservation](https://www.facebook.com/ZSLScienceAndConservation) to receive notifications about new events.
- To catch up on our previous events, you can find them on our [YouTube channel](#), or on our [Events page](#).