

ZSL SCIENCE AND CONSERVATION EVENT

Recovering nature in our cities: benefits, challenges and opportunities



Thursday 29 September 2022
6:00pm – 7:30pm UK Time (BST)

In-person event held at:

Huxley Lecture Theatre, Zoological Society of London, Regent's Park, London NW1 4RY

Tickets are free; registration required: www.zsl.org/RecoveringNature

AGENDA

Chaired by Dr Andrew Terry, Director of Conservation & Policy, ZSL

Dr Nathalie Pettorelli, Senior Research Fellow, Institute of Zoology, ZSL
Rewilding cities – how does it work, and what are the challenges

Dr Chris Carbone, Senior Research Fellow, Institute of Zoology, ZSL
Rewilding Cities: London HogWatch

Joe Pecorelli, Conservation Project Manager, Marine & Freshwater,
Conservation & Policy, ZSL
Restoring urban river ecosystems – the importance of working across sectors

ABSTRACTS

Rewilding cities – how does it work, and what are the challenges

Dr Nathalie Pettorelli, Senior Research Fellow, Institute of Zoology, ZSL

Large-scale nature recovery as a solution to jointly address the biodiversity, climate change and public health crises has gained significant traction in scientific and political circles in recent years. However, attention on recovery tends to be focused towards more natural ecosystems, with relatively little focus on the contribution of significantly more anthropogenically disturbed environments, like cities, where 68% of the global population are projected to live by 2050. Rewilding is a flexible, low-cost, hands-off management approach to biodiversity conservation that can be deployed across a wide range of situations in urban settings. Rewilding seeks to reinstate natural processes, promoting reorganisation and redevelopment of ecological systems under changing environmental conditions, which increases ecological resilience. As such, it may provide a more successful approach to managing a variety of urban sites to enhance wildlife within cities, particularly those experiencing rapid climatic changes. This presentation will discuss the potential contribution of urban rewilding approaches to enhancing biodiversity and climate mitigation and adaptation opportunities in cities. It will also highlight a number of challenges associated with urban rewilding, which, if not properly assessed and addressed, could ultimately lead to further biodiversity loss and increased threats to public health. Key steps to support the successful implementation of urban rewilding projects will also be discussed.

Dr Nathalie Pettorelli is a senior scientist at the Institute of Zoology, the research arm of the Zoological Society of London (ZSL). Her expertise includes climate change ecology, satellite remote sensing/conservation technology, biodiversity monitoring, population and ecosystem dynamics and rewilding. An applied ecologist, she is a Senior Editor for *Journal of Applied Ecology*, and the Editor in Chief of *Remote Sensing in Ecology and Conservation*, a scientific journal she founded with ZSL and Wiley in 2014 that focuses on the use of technology to advance ecological science and support wildlife management. She is the co-chair of the IUCN inter-commissional Rewilding Working Group, and authored a number of books and scientific contributions on biodiversity monitoring, satellite remote sensing and environmental management, and the science/policy interface.

Rewilding Cities: London HogWatch

Dr Chris Carbone, Senior Research Fellow, Institute of Zoology, ZSL

This talk will present recent findings from the London HogWatch Project focusing on our camera-trap surveys of hedgehogs and other mammals and birds across a gradient of London urban environments, but also our work developing species distribution models based on citizen science data and our own local ecological surveys. I will describe the programme objectives and introduce some on-going work with our partners, and highlight the active role of citizen science within the project as well as opportunities for future work with the public. Our results shed light on barriers to hedgehog movement and distributions, as well as identify existence of exciting species in the capital (including

a recent sighting of a pine marten in Kingston). All this work will be discussed in the context of urban mammal conservation in the capital and other urban centres.

Dr Chris Carbone is a Senior Research Fellow at the Institute of Zoology. His research focuses on broad scale patterns in ecology largely focused on mammals and how diet and body size influence their distributions and abundances and their ability to coexist with humans. His research also includes examining ways to improve wildlife monitoring methods, particularly focusing on the use of camera traps to estimate mammalian distributions. His recent work has focused on human-wildlife interactions across a range of landscapes, and this has led to an increasing interest in urban ecology. In 2016, Chris founded the London HogWatch Project, which represents an important ZSL urban ecology study with surveys so far being conducted in a third of London boroughs involving a wide network of collaborators.

Restoring urban river ecosystems – the importance of working across sectors

Joe Pecorelli, Conservation Project Manager, Marine & Freshwater, Conservation & Policy, ZSL

Urban rivers can provide important opportunities to restore nature to cities. The upside of years of neglect and modification, including the burial of many streams and rivers, is that the opportunities to restore from such a low baseline are considerable. In addition, they are often lined by semi-connected open spaces that, with strategic planning, can be linked as a network of interconnected wildlife sites. Another significant reason to focus on freshwater ecosystem recovery is that freshwater systems, compared to other systems, are disproportionately biologically rich. The 0.8% of our planet that is covered in freshwater is home to more than 10% of all known animal species.

In London, ZSL works with multiple partners to restore rivers. Since 2000, approximately 39 km of river (6% of the total length of rivers in London) has been restored, but we need to do more, and faster. The evidence is clear: when rivers are restored wildlife returns. In addition to benefitting wildlife, restoring rivers helps improve water quality, makes the city more resilient to the effects of climate change and the threat of flooding, and supports the wellbeing of local people.

Rising to the challenge of restoring London's rivers will require new ways of working and problem solving together, across sectors. This presentation will focus on the challenges and opportunities we face to restore and rewild rivers in London.

Never too far from a pair of waders, **Joe Pecorelli** is a freshwater Conservation Projects Manager at ZSL. He is a passionate advocate for wildlife conservation that engages and benefits from the skills, energy and knowledge of citizen scientists. As a Steering Group member of the Riverfly Partnership and the Catchment Monitoring Cooperative, he is at the heart of national developments in freshwater citizen science, and as a member of the London River Restoration Group he works collaboratively to accelerate the rates of urban river restoration. He is also a Trustee of the Friends of River Crane Environment, a charity dedicated to protecting the environment of his local river in West London.

Join us at our upcoming Science and Conservation events

Through the eye of the tiger: A future focused vision for the next 12 years

8 November 2022, 6:00pm – 7:30pm (GMT)

From an estimated 100,000 at the beginning of the 20th Century, the population of wild tigers had crashed to as few as 3,200 by 2010. The severity of this collapse inspired the 13 tiger range countries, funding agencies, NGOs, the conservation community, and other bodies to come together with the World Bank to form the Global Tiger Initiative (GTI). This year, 12 years after the initial Global Tiger Summit in Russia, the enormity of the decisions made during 2022 will decide the fate of this beloved species. This event will bring together experts from across across the tiger range countries to ground the outcomes in real-world scenarios, and discuss the next phase of this ambitious initiative.



This event will be held **online** on our [YouTube Channel](#).

Keep an eye on our [What's On page](#) for further information about this event coming soon.

Symposium: Ecological connectivity across temperate coastal habitats – moving towards seascape scale restoration

22 – 23 November 2022; 2-day in-person event; registration required

This two-day symposium will provide a comprehensive review of the current state of science surrounding habitat connectivity in temperate coastal systems and provide a firm basis for discussion and networking relating to the policy and practical importance of this understanding. It will bring together a varied audience of scientists, policy makers, restoration practitioners and interested parties looking to provide evidence and delivery of seascape restoration. All further information including ticket links, programme, and details of poster submissions can be found [here](#), or at zsl.org/Science/Whats-On.

Further Information

- **Recording:** This event will be filmed and published on our [Science and Conservation YouTube channel](#). Please be aware, by attending you consent to being recorded during the Q&A session.
- Please contact scientific.events@zsl.org if you have any queries about our Science events or podcasts.
- **ZSL Library & Archives** will be offering free introductory talks to its special collections from **4:45pm – 5:05pm** before the event; no need to book. Email library@zsl.org if you have any questions.
- Listen to our award winning **ZSL Wild Science Podcast** [here](#) or [subscribe](#) on your favourite podcast app.
- For press enquiries, please contact the **ZSL Press Office**: press.office@zsl.org.
- For more information about **ZSL Fellowship** please visit: www.zsl.org/membership/zsl-fellowship.
- To receive **email updates** about forthcoming ZSL Science and Conservation Events, please visit: www.zsl.org/science/whats-on/science-and-conservation-events-email-updates
- Read the latest **blog posts** from our scientists and conservationists here: www.zsl.org/blogs/science.
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Help us care for our amazing animals and continue our global work protecting wildlife.

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