

2023 AUTUMN CONFERENCE PROGRAMME 22ND & 23RD NOVEMBER 2023 MODERNISING ECOLOGY – TECHNIQUES AND APPROACHES

SESSION 1. Modernising ecological approaches

Chair: Richard Handley CEcol MCIEEM, CIEEM President

09:45	Welcome and Introduction
09:50	Keynote: evidence based approaches to transform ecology Prof Bill Sutherland CBE FRS, University of Cambridge
10:15	Modernising the monitoring and assessment of SSSIs in England Richard Askew, Natural England
10:40	Conservation and restoration in a changing climate – complexity, resilience and restoring forwards Prof Jim Harris, FRSB FIAgrE, Cranfield University
11:05	Break
SESSION 2. Innovative approaches to monitoring biodiversity	
11:35	The Good Practice Guidelines for Long-term Ecoacoustic Monitoring in the UK Dr Carlos Abrahams FCIEEM, Baker Consultants
12:00	Innovating radio-tracking of bats: an approach to remote data collection Charlotte Wevill MCIEEM and Chris Kerfoot CEnv MCIEEM, Jacobs
12:25	How Natural England is collecting and using DNA derived data in monitoring Dr Harriet Knafler, Natural England
12:50	Lunch
SESSION 3. Workshops / Breakout Sessions	
13:50	<ol style="list-style-type: none"> 1. Using open source tools to automate analytics and reporting Dr Dan Carpenter CEnv, Digital Ecology 2. Software and apps for planning and monitoring the implementation of Biodiversity Net Gain <ul style="list-style-type: none"> - Using data management software to help Local Planning Authorities monitor the implementation of Biodiversity Net Gain. Dr Helen Markland MCIEEM, and Dr Mikael Forup CEnv MCIEEM, Verna - The UKHab Survey application – Streamlining Habitat Surveys and BNG assessments for Professional Ecologists. Dave Kilbey, Natural Aptitude 3. Mainstreaming molecular methods in survey and monitoring <ul style="list-style-type: none"> - The pros and cons of traditional microscopy and eDNA as indicators of forest-to-bog restoration success. Dr Angela Creevy AFHEA, Liverpool Hope University - Soil environmental DNA metabarcoding can quantify local plant diversity for biomonitoring across varied environments. Emma Duley and Dr Julian Donald, University of Plymouth and Eden Project University Centre 4. Revisiting satellites and remote sensing <ul style="list-style-type: none"> - The truth about satellites - advantages and limitations of utilising an ever-present and growing source of information for environmental monitoring. Chris Burnett, Map Impact

	- Mapping the wetlands without getting wet; how technology is helping tropical wetland monitoring. Christopher May, TCI Gov, and Dr Katie Medcalf CEnv MCIEEM M.I. Soil Sci, Environment Systems
14:50	Break
SESSION 4. Innovation in landscape scale planning and assessment Chair: Dr Carlos Abrahams FCIEEM, Baker Consultants	
15:20	Using innovation to build Derbyshire's Natural Capital Strategy Gemma Bell CEnv, MCIEEM, Environment Systems
15:45	A landscape-scale approach to ecological impact assessment and net gain delivery Lucy Fay CEnv MCIEEM, and Neil Madden CEcol MCIEEM, Arcadis
16:10	Green bridging with AI: quantitative analysis of ecological connectivity for green infrastructure Dr Lewis Deacon CEnv MCIEEM, and Dr Peter Hurley, AECOM
16:35	Summary and Close Day 1

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09:00 - Welcome and Introduction AGM 09:00 – 09:55	
SESSION 5: Modernising our profession Chair: Sally Hayns CEcol FCIEEM, CEO CIEEM	
10:05	New approaches to Raising Standards in ecology and environmental management Dr Mark Nason MCIEEM CERP M.I. Soil Sci, CIEEM
10:15	New routes into the profession – could vocational career paths help reach capacity crisis goals? Dr Alina Congreve, Resources for Change
10:40	Hidden barriers and breaking taboos Sarah Simons CEnv MCIEEM, Amey, and Naomi Webster, Bat Conservation Trust
11:05	Break
SESSION 6. Workshops / Breakout Sessions	
11.35	1. Improving the wellbeing of ecologists and environmental managers through new methods of working. CIEEM Early Career Special Interest Group members - Marcus Kohler MCIEEM (MKA Ecology), Rachel Bentley MCIEEM, Environment Agency, and Laura Roberts, Swansea University 2. Challenges and opportunities of the four-day working week. Julian Arthur Cecol MCIEEM (Tyler Grange), Tom Tew MCIEEM FRSA FRSB (NatureSpace Partnership), and Gavin Ward CEnv MCIEEM PIEMA, Baker Consultants 3. Transforming access to careers in ecology and environmental science – build your dream team. Dr Alina Congreve and Neil Smith (Resources for Change) 4. The Miseducation of Lauryn Hornbill: The role of arts practices in driving conservation change, representation and wellbeing. Daniel Flenley MCIEEM, WSP, and Lea Nightingale, CIEEM
12:35	Lunch
SESSION 7: New applications and analysis of spectral data Chair: Dr Penny Lewns CEcol CEnv MCIEEM, AtkinsRéalis	
13:35	Using LiDAR to detect hazel dormouse hibernacula Dr Leo Gubert CEnv MCIEEM, University of Exeter / Royal HaskoningDHV

14:00	Vegetation indices from UAV imagery using open source tools Dr Dan Carpenter CEnv, Digital Ecology
14:25	Digibat Dave Byett MCIEEM, Jo Bates CEnv MCIEEM and Tom Doughty CEng, Mott MacDonald
14:50	Break
SESSION 8: New directions	
Chair: Richard Handley CEng MCIEEM, CIEEM President	
15:20	Robotics and Autonomous Systems: silver bullets or threats for ecologists? Dr Stephen Pringle, University of Kent
15:45	The use of AI and bioacoustics for short and long term monitoring of biodiversity Geoff Carss, Wilder Sensing, and Ken Lipscomb CEnv MCIEEM, AtkinsRéalis
16:10	Soil acoustics – the sounds of the underground Karthik Ashok and Dr Carlos Abrahams FCIEEM, Baker Consultants
16:35	Summary and Close