CIEEM

# Awards 2023

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# President's Introduction

## Joy and healing

First of all, I would like to say huge congratulations to all shortlisted nominees. I understand that the quality and quantity of entries this year is truly impressive. Also, a huge thank you to our Judges - they must have had a hard time judging this year's many excellent entries. I am also extremely grateful to the sponsors of the awards. You make the event what it is through your generosity. Thank you.

Together the nominees, judges and sponsors bring joy and healing into our lives. I don't think 'joy' is overstating it. I am sure the nominees and winners experience joy and pride, and by the way I expect to see that expressed on stage at the Awards ceremony. I certainly get a real buzz from watching others receive their awards, and I know I am not alone in that. I think we all feel the success of the award winners as a win for all of us and for nature.

The nominees, those shortlisted, and of course the winners demonstrate the professionalism, knowledge, and passion of our sector. And they demonstrate how we can protect and restore nature and live more sustainably when we bring the right people and organisations together and work collaboratively. There is joy and hope in that.

There is also healing. A quote that resonates with me more and more is something Aldo Leopold said – 'One of the penalties of an ecological education is that one lives alone in a world of wounds.'[1] I feel that everyday at work and in my private life. I think it is something we need to talk about more, but not here and now, because the Awards make it clear that we are not alone and that we are having some success in preventing and healing those wounds, both literally and metaphorically. I know we are doing that day-in day-out, but the Awards are our annual opportunity to recognise, reward, celebrate and showcase the brilliant work of our members. For me that feeds into optimism, determination, hope and some relief. I hope you feel that too and enjoy the Awards as much as I do.

**Richard Handley CEcol MCIEEM**

CIEEM President

Richard Handley CEcol MCIEEM

1. Aldo Leopold, A Sand County Almanac

# Brief Summary of Awards

## CIEEM Medal

The CIEEM Medal is the Chartered Institute's highest accolade and is awarded annually. Recipients of the Medal must have made an outstanding and/ or lifelong contribution, in relation to ecology and environmental management. The Medal is open to both CIEEM members and non-members.

## *In Practice* Award

This award recognises the invaluable contribution to knowledge sharing that authors of feature articles in our members' bulletin, *In Practice*, make. The judges will be looking for the most influential and thought-provoking article of the year. All feature articles published in *In Practice* during 2022 were considered for this award, irrespective of whether the article was written by a CIEEM member or non-member.

## Higher Education Programme of the Year Award

This award is a valuable opportunity for further education institutions, delivering a programme related to ecology or environmental management, to showcase their high standards of teaching and receive formal endorsement of their work in promoting employability and entrepreneurship within their programme(s). This is awarded for demonstrable evidence of the way students are prepared for their future careers in ecology and/or environmental management, particularly for examples of innovation and those that go above and beyond the national requirements.

## Postgraduate Student Project Award

The Postgraduate Student Project Award recognises achievement in planning, undertaking and reporting a postgraduate project/dissertation in a relevant aspect of ecology or environmental management. It is awarded to one Masters degree project/ dissertation undertaken in the 2021/22 academic year, or equivalent if a different academic year system is used. The Postgraduate Student Project Award is open to CIEEM Student members, those who have upgraded to Qualifying level but were Student members whilst undertaking the submitted project as well as students on a CIEEM-accredited degree programme.

## NGO Impact Award

This award recognises the achievement of NGOs in delivering a specified initiative, including campaigns and projects, that has had a major impact in benefitting nature and society. The initiatives can be local, national or international, sitebased or species-based, campaigning or awareness raising. It can involve, for example, effective local engagement, influencing local or national policy, mobilising public support or utilising innovative communication methods. NGOs of any size and based in any global location are eligible for this award. There is no requirement for there to have been any CIEEM member involvement in the initiative for it to be eligible.

## Climate and Nature Action 2030 Award

This award seeks to recognise individuals or organisations who have had or are having the most impact in raising awareness, engaging others and/or leading action in relation to the climate emergency and/or the biodiversity crisis. The award is for an individual or initiative that can demonstrate impact. This may have been by influencing others through raising awareness of the issues and the need for action. Or it could have been an initiative that purposely addresses the issues and makes a difference. These can be at a local, national or international scale. The judges were particularly keen to recognise individuals or initiatives that highlight the inter-relationship between the climate emergency and biodiversity crisis.

## Promising Professional Award

This individual award recognises the exceptional achievements of a CIEEM member (Associate or Qualifying) during the early stages of their career. The winner will have demonstrated above-average competence and a strong commitment to their professional development. This can be demonstrated through their achievements, knowledge, skills, leadership, passion and commitment, and inspiration for others in the field of ecology and environmental management.

## Member of the Year

This award recognises the consistently high commitment and achievement of a CIEEM member in their work to protect and enhance nature, support and help others in the profession and/ or contribute to the success of CIEEM. All membership grades are eligible.

## Best Practice Awards

These flagship project-based awards recognise high standards of professionalism and ecological and environmental management practice by CIEEM members. There are six separate award categories:

1. Small-Scale Practical Nature Conservation
2. Large-Scale Practical Nature Conservation
3. Large-Scale Project Mitigation, Compensation and Enhancement
4. Innovation
5. Stakeholder Engagement
6. Knowledge Sharing

Projects must display high standards of professionalism including a sound evidence base to inform and support the project's aims and objectives; a well-conceived plan, staff schedule and budget, with appropriate risk assessment; and that the project has achieved (or is achieving) its objectives.

## Consultancy of the Year Awards

These awards recognise successful consultancies delivering high quality ecological services whilst being an exemplar employer and advocate for the profession. There are three award categories for different sized consultancies; over two thirds of each company's ecologists and environmental managers must be members of CIEEM. Criteria include delivery of high quality practical outcomes that benefit business and the economy; evidence of shared learning and good practice; commitment to undertaking CPD and/or supporting the professional development of staff; and promotion of the profession.

## Tony Bradshaw Award

The Tony Bradshaw Award for Outstanding Best Practice recognises exceptional projects that set an overall impressively high standard. Category winners for each of the six Best Practice Awards are automatically entered. The Award is made at the judges' discretion and will not necessarily be presented each year.

2022 Awards





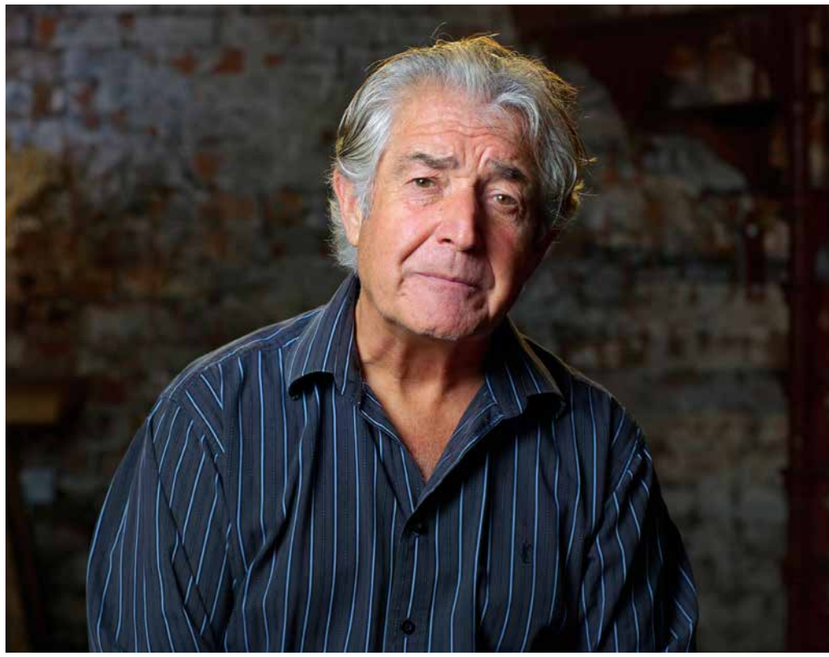
### Dr Tony Juniper CBE

Throughout his distinguished career, Tony Juniper has worked for change toward a more sustainable and nature-friendly society at local, national and international levels. He has campaigned on a wide range of issues including species conservation, recycling, tropical rain forest conservation, climate change and plant-based alternatives to plastics. He has also written a number of award winning and influential books including *What Has Nature Ever Done For Us?* (2013) and a sequel *What Nature Does For Britain* (2015).

An ornithologist by background, his specialist area is parrots and he is a global ambassador for the World Parrot Trust. He co-published the definitive identification guide to the parrots of the world (1998) and spearheaded a programme with Birdlife International to try to prevent the extinction of the critically endangered Spix's macaw (2003).

Tony has held a plethora of senior organisational management and adviser roles. From 1990 he worked at Friends of the Earth, initially leading the campaign for tropical rainforests. In 1998 he became Policy and Campaigns Director and in this role played a leading part in many initiatives, including on genetically-modified crops, world trade policy, industrial pollution and biodiversity. From 2003 to 2008 he was the organisation's Executive Director and from 2001 to 2008 he was elected Vice Chair of Friends of the Earth International. He contributed to many of charity's most important achievements, including legislation enacted to protect the UK's finest wildlife habitats, new laws to require more recycling and policy changes in the transport and farming sectors and a very effective campaign to reduce greenhouse gas emissions.

Tony went on to become Executive Director for Advocacy and Campaigns at WWF-UK, a Fellow with the University of Cambridge Institute for Sustainability Leadership and President of the Wildlife Trusts. Until January 2018, he was an independent sustainability and environment advisor, including as Special Advisor with The Prince of Wales's International Sustainability Unit having previously worked (2008-2010) as a Special Advisor with the Prince's Rainforests Project.



Tony Juniper, interviewed for Save Our Wild Isles: *The Business of Nature*. © Jacob Parish / Silverback Films / WWF-UK / RSPB / National Trust'

In 2019, he was appointed Chair of Natural England (NE), the statutory body that works for the conservation and restoration of the natural environment in England. He has provided strong leadership to Natural England, bringing his passion for biodiversity and the environment more generally as well as a wealth of knowledge and experience to the organisation. In this role he has helped to restore energy and direction to the organisation, creating a clearer strategic plan and mission and securing a significant increase in resources. Major achievements under his stewardship include making progress toward the creation of a Nature Recovery Network, working towards the implementation of Biodiversity Net Gain in the planning system, the declaration of new National Nature Reserves and notification of new SSSIs, better public connection with nature as well as advising government on nature-based solutions to climate change and how best to join up new farming policy with nature recovery.

Tony is the recipient of many awards and honours including the Charles and Miriam Rothschild Medal (2009), honorary DSc degrees from Bristol & Plymouth Universities (2013), CBE (2017) and since 2011 he has been a patron of CIEEM.

In summary, Tony Juniper is one of the top environmental figures of the last 30 years. He has had a major role in elevating environmental issues including biodiversity conservation and has influenced the policies, programmes and agendas of governments and a wide range of organisations in the public and private sectors. He has increased the public understanding of the environment including wildlife. Importantly while he stresses the seriousness of the biodiversity and climate crises, he manages to do so in a way that suggests hope and a positive outcome if we have the courage and determination to take the necessary action.

He has made an outstanding contribution to ecology and environmental management and is a very worthy recipient of the CIEEM Medal.

Winner

## Dr George Smith CEcol

### Know Thy Sphagnum: Species-Specific Lessons for Understanding Bogs

### Published September 2022

This article challenged the idea and that Sphagnum species are difficult to identify and encouraged practitioners to avoid 'lumping' species together in ecological assessments by taking readers through basic field identification techniques for the main bog Sphagna. The author argued that, given the useful of *Sphagnum* spp in assessing conservation condition, hydrology and restoration potential of bogs, the reward is well worth the effort.

The author went on to describe species that are commonly found and easily identified but that also have good peat-forming properties, therefore being key to bog restoration. Other species were described that are indicators of high-quality raised bog or high water tables. Indicators of poor condition were also covered as some *Sphagnum* species respond favourably to the disturbance or drier conditions that are detrimental to bog restoration.

The judges felt that the article gave excellent encouragement to ecologists too daunted by the carpet of greeny-browny-red moss to have a go at identification, arguing that it really isn't as difficult as it looks and identification of species can tell us so much more about the condition of the bog and the likely direction of travel for its future conservation status without intervention.

Highly Commended

## Penny Anderson CEcol FCIEEM(rtd.) & Neil Barden

### Waxcap Grasslands: The Forgotten Treasure

### Published September 2022

In this article the authors described how grassland fungi are often overlooked in ecological surveys and yet can have high levels of diversity, especially on upland sites and even where plant diversity is poor. The UK is home to some of the most important waxcap grasslands in the world, particularly in Wales, Scotland and the Pennines.

The authors describe a well-recognised grassland fungi assemblage of waxcaps, spindles, club and coral fungi, pinkgills, earthtongues and crazed caps, collectively known as CHEGD assemblages (based on the initials of the different genera). They describe how CHEGD grasslands characteristically have short turf, well-drained soils, no evidence of recent disturbance, no liming and low nutrient levels. Loss of waxcap grasslands due to agricultural improvements has led to almost 90% of waxcap species appearing on one or more European national Red List for threatened fungi.

Given the threats to waxcap grasslands and their national and regional importance, a strong case is made for improved field survey of potential CHEGD assemblages, augmented by eDNA analyses. Identification of important waxcap sites can inform land management strategies, ensuring that damaging disturbance, such as tree planting, which would damage our biodiversity as well as increasing loss of carbon, is avoided.

Commended

## Ann Skinner CEcol CEnv FCIEEM(rtd.), Emma Rothero, Olivia Nelson, Prof. David Gowing & Dr Irina Tatarenko

### Floodplain meadows: an entirely sustainable nature-based solution that is centuries old

### Published June 2022

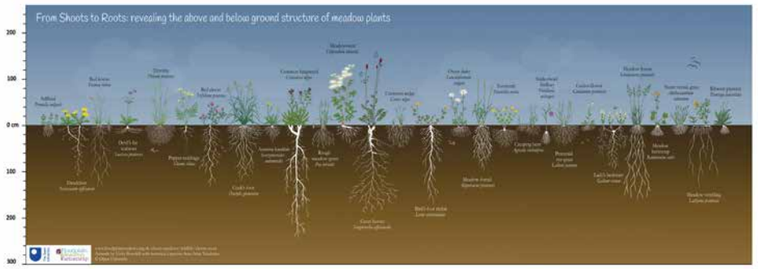
With the well-documented loss of species-rich flood-plain meadows during the 20th century has come a growing realisation of the significance for climate change through the removal of substantial carbon reserves. The authors make a strong case for flood-plain restoration as an effective nature-based solution to help take forward nature's recovery.

The article evidences the biodiversity and climate mitigation benefits of flood-plain meadows as part of a sustainable approach to agricultural land management. Carbon storage, natural flood management and aquifer recharge, improved water quality and biodiversity restoration are all described along with the intrinsic and iconic landscape value associated with these threatened habitats.

The authors argue that land use in flood-plains needs to be optimised to allow them to perform their ecological function effectively. By slowing, storing and filtering the flow of water they are a cost-effective nature-based solution that can reduce flood risk and diffuse pollution, store carbon at volume and restore biodiversity. Substantial investment is now needed to restore flood-plains at a landscape-scale.

Oxford meadows in flood. Photo credit: Mike Dodd

GB05 Species rich meadows Copyright Mike Dodd




Shoots to Roots image - Reproduced from Bowskill and Tatarenko (2020) under CC BY-NC-SA 2.0 UK. © Open University.

Winner

## MSc Conservation Management – Edge Hill University

For 15 years Edge Hill has been committed to developing in their students' high-quality practical skills that are underpinned by sound ecological theory, to enable them to secure relevant conservation jobs and to take up leadership roles in the responsible management and protection of our natural capital. Employability is intrinsic to the curriculum, assessments, and opportunities on offer.

Since 2007 85% of course graduates secured employment within 12 months after completing the course with 89% of these within relevant graduate jobs. Key graduate destinations include ecological consultancy (32%), conservation NGO's (29%), government conservation jobs (15%), research/academia (13%) and others (11%). Organisations that regularly employ Edge Hill graduates include Natural England, Wildlife Trusts, Centre for Ecology & Hydrology, National Trust, RSPB, Avian Ecology, Wardell-Armstrong and Atkins.

There is a strong emphasis on practical and field work so that graduates have strong skill portfolios. With over 25 days of fieldwork, plus a six-day residential field trip and 10-20 days of placement work at a relevant consultancy or conservation business, students learn-by-doing. Furthermore, it is important that students graduate not only with a MSc in Conservation Management, but also recognise the relevant skills they have for employment in the sector. The Placement module (MCM4006) incorporates an assessment based upon the CIEEM competency framework, where students use the self-assessment tool to reflect on their competencies. Students complete this work using Pebble pad, which allows them to continue their self-evaluation after graduation.

Through the course teaching, students are directly exposed to practitioners to enhance their employability skills and gain a better understanding of what a career in the sector entails. For instance, on Vertebrate Monitoring and Management (MCM4008) students have a lecture on bat surveying and licencing from practising consultants at Wardell-Armstrong and meet conservation rangers from the National Trust and a local council, to find out directly how they apply knowledge in practice. On Restoration & Conservation Planning (MCM4015) students submit a 5-year management plan for a conservation site. Their work in 2021 & 2022 was included in the 5-year plan of Gorse Hill Nature Reserve. During the Management in Practice (MCM4011) residential trip to Worcestershire, each day sees students meeting conservation practitioners from a range of sites and organisations to explore different management questions (agriculture, forestry, water catchment etc.). All expenses of these trips are covered by EHU.

Many of the course assessments are directly relevant and, in some cases, used to inform conservation efforts locally. In some modules, students have also the opportunity to sit additional examinations such as the Field Identification Skills Certificate (FISC) following the Field Botany module (MCM4014). Of the students that took the FISC in 2022, most scored between 3-4. The subject specific and transferable skills students develop from these assessments are directly relevant to future employment.

Since 2017, there have been six final Research Projects published in scientific journals in collaboration with external stakeholders. Many of these publications have resulted in direct positive conservation outcomes and benefited nature and people's connection with nature. The University frequently financially supports students to present their work at relevant conferences.

Commended

## HND Wildlife & Conservation Management – Oatridge Campus, Scotland's Rural College

Students are trained in a variety of surveys, including habitats and vegetation, such as Phase 1, UKHab and NVC, alongside protected species, such as badgers, which has led to some students registering for their Scottish Badgers Level 1 certificate, and great-crested newt, where a licence signature can be provided for students following up their GCN training. They use their survey results as the source for their data analysis projects. They utilise their knowledge of freshwater and habitat management to visit sites such as to Eddleston Water to observe flood management projects, then engage with the River Tweed Forum in conservation skills to aid this work. Students also deliver educational and interpretive materials in real visitor management contexts, for example through a collaboration with and guidance from Cashel Forest Trust and Royal Scottish Forestry Society.

Students have the option of undertaking a Work Placement module with a conservation organisation during the second semester. They must devise a personal development plan to achieve their goals, then review their achievements at the end. This all contributes to their qualification. Additionally, they can apply for funding (for which almost all are accepted) to further their career. Popular qualifications are Scottish Badgers Level 1, PA1 &PA6 (Pesticides) and Brushcutter & Trimmers licenses.

The programme regularly draws on external speakers in industry and government, such as the Local Authority Planning department and planning professionals, to discuss items such as sustainable drainage systems (SuDS). Also, the academic team use their growing network of past students, including working with graduates from Forest & Land Scotland

to share their knowledge in a work-based context, resulting in on site monitoring and habitat management training. Both on-site presentations and practical work activities aid ongoing conservation / ecology projects, such as joining forces with the Butterfly Conservation Bog Squad and constructing hedgerows and dry-stone walls for local country parks.

An Annual Industry Liaison Day includes representatives from the voluntary sector (e.g., RPSB, Scottish Wildlife Trust), statutory bodies, such as Forestry and Land Scotland, NatureScot and Historic Environment Scotland, local authority ranger services and environmental consultancies, as well as large multinationals. These attendees review modules to be included in the programme, as well as advising on making the assessments relevant.

Commended

## Level 3 Advanced Diploma in Wildlife, Ecology and Conservation – Kingston Maurward College

This programme is based on a rural estate at the edge of an urban conurbation in the county of Dorset which is home to the Purbeck Peninsula, two AONB's, the Jurassic Coast, a broad heathland complex and babbling chalk streams - the perfect setting for a course aiming to inspire the next generation of ecologists, rangers and engagement professionals.

The course aims to give learners the theory of a range of subjects which is then applied - linking practical to theory. For example, learners are introduced to Phase 1 Habitat survey theory, then immediately apply this to an area on campus.

Alongside ecology and habitat units, other core areas include estate skills and machinery. This combination aims to develop workers with both the abilities and knowledge to understand the cycle of environmental management, from conception and planning, to undertaking and evaluation.

Within the first week of the course, recent job opportunities within the sector are analysed for soft skill requirements. Once identified, students are asked how they can evidence these throughout the academic year, helping them to understand what is needed besides the qualification that they are undertaking.

Following on from last year, some additions to the programme have been made to adapt to both current and likely future demands of the workforce, this includes developing a short course with a local conservation grazier, to enable students to gain livestock handling experience, the development of a workshop in Resilience in Conservation with WildHub - with an aim to roll this out to industry as well as educational institutions. For a unit in Environmental Interpretation, there is a session from the National Trust's stakeholder engagement officer in how to help communities understand and support beaver

reintroductions, as well as a workshop from the New Forest National Park team in how to use TikTok to increase nature connection for younger and often harder to reach audiences. The Campaign Manager from the Wildfowl and Wetlands Trust delivers a session on campaign conception and rollout.

Work placements are a mandatory element, with students needing to complete 465 hours across two years. Host employers include Wildlife Trusts, National Trust, Local Authorities, Countryside Regeneration Trust, private estates and farms.

Winner

## Murray Borthwick

## Edinburgh Napier University

### Land-use correlates of the spatiotemporal distribution of four wading bird species in southeast Scotland from 1988-2013

The aims of this study were to investigate the tetrad-scale land-use correlates (crop area, number of cattle, area of broadleaf woodland, coniferous woodland, arable and horticulture, heather, bog and montane, improved grassland and unimproved grassland habitats) of;

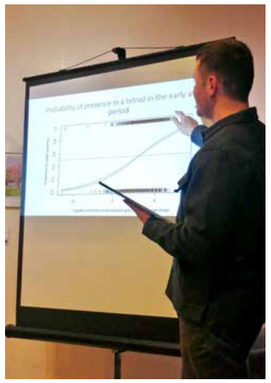
(1) the probability of the presence of a target wader species in a tetrad;

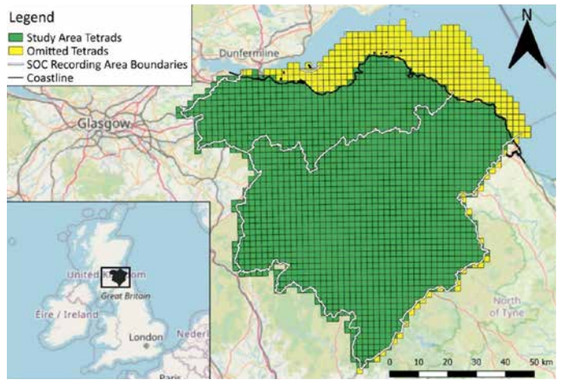
(2) the probability of a target wader species being lost or gained in a tetrad between atlas periods.

Empirical modelling was used to find the most representative explanation of the direction and extent of relationships of the land-use correlates and the probability of a species occurring within a given set of land-use characteristics. Modelling would allow practitioners to make predictions of the effects of future land-use changes on the target species, with model- comparison used to evaluate the accuracy of candidate models and identify the variables most accurately predicting wader distribution.

This study was the first to utilise the extensive datasets of the Scottish Ornithological Club bird atlases of southeast Scotland. Using a long-term citizen-science-built dataset allowed this study to investigate correlates of distribution in multiple wader species across an extensive spatiotemporal range, while producing results which agreed with the extensive literature and made sense ecologically. Conclusions could be drawn from the evidence presented in identifying the land-use variables which influence the occurrence of the target wader species, allowing for inferences to be made on the suitability of habitats and the impacts on population trends which could arise as a result of land-use change. Further work in terms of more thorough analysis of discrete land management strategies would allow for more solid conclusions to be drawn and could be used to inform policy and development in the future. This study shows that if global populations of wading birds (and wider bird groups) are to be effectively supported and efforts made to slow or reverse population declines, an understanding of the underlying relationships of land-use and distribution will provide a key component in the direction of conservation strategies.

The judges commented that this was a very well written piece of work, especially given the complexities behind the data extraction/compilation, and it showed an excellent appreciation of the limitations of the data being worked with. The statistical approach was clear and logical with an explanation of the reasoning underpinning the decisions made in the analysis. The focus of the project is on an area of strong relevance to environmental management and conservation. There is a clear and obvious application to the work in relation to predicting changes in the success of wading birds in agricultural landscapes and the role of different factors in determining the patterns of distribution and change, but it also helpfully identifies other areas where further work would illuminate our understanding further.





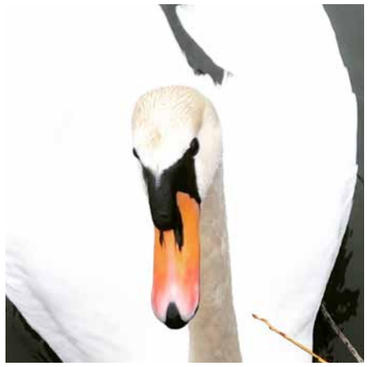


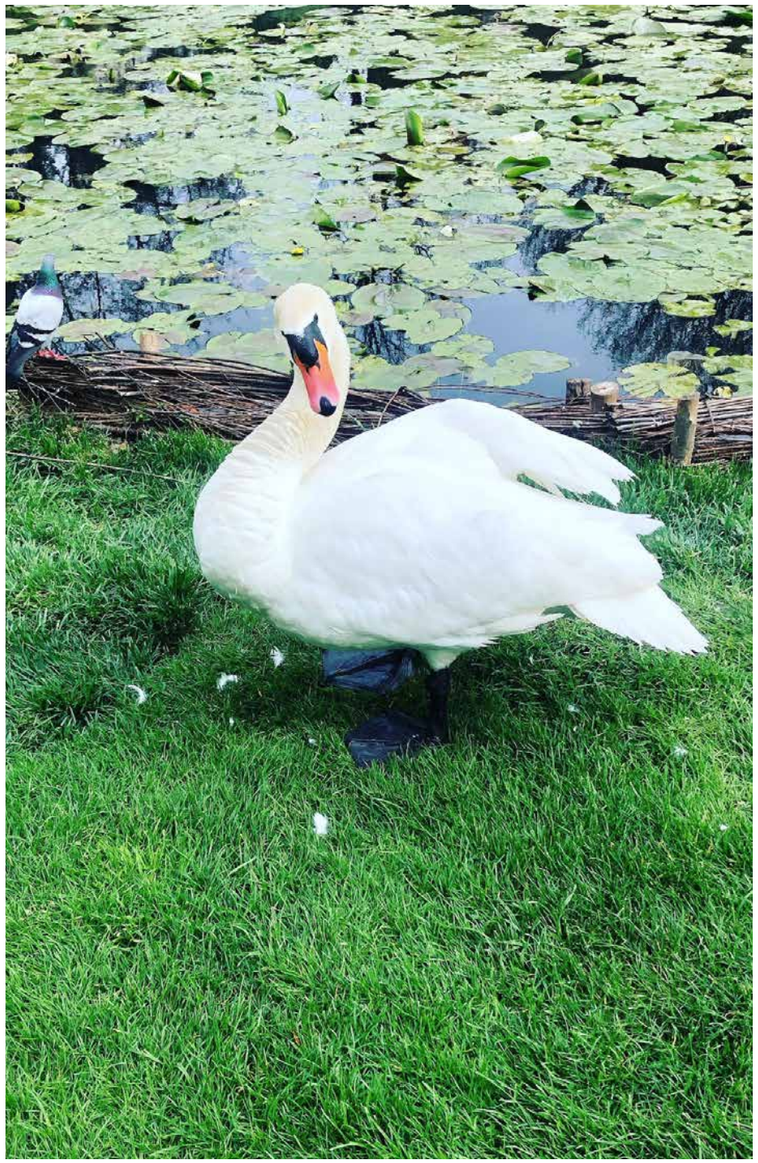

Highly Commended

## Cristina-Julia Constantinescu

## Bournemouth University

### Stable isotope analysis describes trophic levels of seabirds in the South Georgia ecosystem





Southern Ocean cephalopod communities are highly vulnerable to biodiversity loss in the Anthropocene. Therefore, Procellariiformes have to maximize their foraging efficiency to offset the lower density of cephalopods and mesopelagic fish within prey hotspots, caused by climate-induced modifications in phytoplankton ecology.

In this study, stable carbon and nitrogen isotope ratios were used to infer the trophic status of eleven sympatric species from Bird Island in South Georgia. The investigation discovered three distinct ecological niches, with wandering albatross being an apex predator. There was spatial segregation, but not resource partitioning, between black-browed and grey-headed albatrosses. Wandering albatross foraged with higher trophic-level prey than light-mantled sooty albatross, thus indicating that the chicks of light-mantled sooty albatross received smaller cephalopods and carrion. Bayesian methods confirmed dichotomy in foraging strategies of wandering and black-browed albatrosses, perhaps as a result of wandering albatross breeding later and consuming bigger cephalopods.

This investigation recommended the designation of Protected Areas for declining assemblages of seabirds. Combined with further research, this study could prove that seabird top predators have shifted their foraging ranges, perhaps as a result of climate warming, and are feeding with prey from distinct-trophic levels.

The judges noted the clarity of Cristina-Julia's style of writing, with strong hypotheses and the use of appropriate techniques to test them.

Winner

## BatChat Podcast – Bat Conservation Trust / Steve Roe

Launched in 2019, the BatChat podcast is now in its fourth series. Produced on an entirely voluntary basis it's the only active podcast amongst three million podcasts worldwide that concentrates on bringing its listeners stories and news from the world of bat conservation. Each episode sees the show's host, Steve Roe, interview conservationists and ecologists alike in the field whilst they undertake their work. BatChat has made a significant difference to the conservation of the natural environment through education. The show is increasing the profile of bat conservation projects being run all over the country, including by many volunteers and voluntary organisations such as bat groups. This is not only helping to increase public support for bat conservation, and in turn funding, but encourages those doing the work and is inspiring young and older ecologists to do the same and set up their own projects.

The show allows guests to share their work, research and stories with an audience like never before. The process of publishing data in formal reports often dissuades people from getting their work out there. However they know their work inside out and BatChat's interviews not only showcases their work to a huge audience but it delivers their stories right to the ears of listeners.

The value of podcasting in communicating expertise and sheer unbridled enthusiasm for the natural world is best summed up by BatChat. The show fires our imaginations by opening our minds to ideas which would be difficult to portray in pictures alone; the listeners add their own images and take themselves out into the field thanks to the immersive field recordings helping give the show its character.

Unlike most other nature and environment podcasts, the majority of its 40 episodes have been recorded out in the field. Listeners say that they look forward to each new episode which brings the world of nature conservation to them with no other distractions around them as listening to podcasts is almost always done alone (RAJAR 2022). Sponsorship for the show through advertising is now raising additional funds for the conservation of the UK's 18 native bat species.

Each series acts as a reminder to the listeners of the considerable amount of bat conservation work taking place around the UK as well as further afield and brings the work of the Bat Conservation Trust into regular view of the public. The show has had over 48,000 downloads (a 50% increase since last year). The worldwide audience and responses from listeners in 105 countries other than the UK combined with the number of downloads and total listening time to date (1.5 years) demonstrates just how much of a positive impact and global reach the show is having.


Highly Commended

## Green Recovery Challenge Fund – Canal and River Trust

The Green Recovery Challenge Fund is a project focused on priority species habitat restoration delivered by engaging communities with wildlife. This engagement demonstrates the importance and benefits of nature conservation for both wildlife and wellbeing and connects people to their local green spaces.

It is an ambitious project, covering a large part of the West Midlands. There are several priority focus species and habitats that the project ecologists have researched, produced strategies for and implemented restoration works in the 14-month project time frame. Key highlights from the last 12 months include;

- Over 1km of water vole habitat created and improved, connecting and restoring remnant water vole populations on the Staffs & Worcs canal.
- Use of citizen science to gather large amounts of data on target species to inform conservation aims.
- Urban Pollinator Enhancement plans researched and produced for 7 key urban areas. These plans identified 24 priority pollinator species for targeted conservation strategies. These enhancements were delivered by local communities through engagement and conservation skills programme promoting wellbeing and connectivity to nature.
- The Wyrley and Essington canal was a focus for restoration and remediation of heathland – the project created a 14km heathland 'stepping stone' corridor connecting 11 CWS, LNR and SSSi fragmented heathland sites.
- There has been 7km of habitat creation for the priority species, Brown hairstreak butterfly, using blackthorn in hedgerow restoration and new planting, with additional management changes to delay flailing.
- Over 500 fruiting trees have been planted along approximately 70km of canal stretching between Wolverhampton and Worcester as part of The Great Canal Orchard project.
- The project has focused on designing and implementing enhancements towards favourable status at 5 SSSi and 2 SSSI/SAC reserves. This has involved 15 pond creations for GCN and invertebrates, scrapes and ditches for shoveller ducks, vegetation management conserving geological value, installation of reedbed rafts for water quality remediation, coir rolls to mitigate hard banks and reduce siltation and positive interventions for heathland management.

Commended

## Nottinghamshire Wildlife Improvements – Nottingham Wildlife Trust and Severn Trent Water

Nottinghamshire Wildlife Trust (NWT) have implemented a wide range of improvements to priority habitats, and created new habitats on over 480ha of land, (390ha is SSSI), with funding from Severn Trent's (ST): Great Big Nature Boost & Boost for Biodiversity.

Within the schemes, some of the rarest habitats have been enhanced and expanded, scarce species such as turtle dove and woodlark brought into recovery, and beavers reintroduced as keystone habitat engineers after over 5 centuries absence from Nottinghamshire.

The projects encompassed are all very bespoke in character, reflecting the individual requirements of each habitat and focussed on the need to conserve and expand populations of the scarcest species. At the Idle Valley Nature Reserve some of the most valuable and scarce wet grassland, marsh, reedbed and wader islands were compromised by the inability to manage water levels. Severn Trent funding allowed NWT to install water control structures and restore ditches to reinstate optimal water management regimes. Scrub encroachment has been an issue, so beavers were reintroduced during November 2021 to manage scrub naturally and create new shallow wetland habitat features for amphibians and water voles. Since introducing the colony to their 58 ha enclosure, 2 beaver kits were born.

Scrub clearance has taken place at multiple high priority sites, re-creating suitable habitats for protected species such as nightjar and woodlark. The cleared scrub has also reduced the risk of fire, previously from anti-social behaviour.

Through working with farmers, some of the rarest breeding birds in the county, such as redshank, now have new wet grassland and waders scrapes to help boost their populations.

Winner

## Moor Water

### Severn Trent Water & Moors For The Future Partnership

This project adopts a landscape scale approach. While it is a specific restoration area, it is linked to associated projects considering the whole catchment (e.g. it is linked to a nearby Severn Trent-funded tree-planting project led by the National Trust), and extends an area restored by previous projects.

Key stakeholders comprise the Moors For The Future Partnership (MFFP), Severn Trent Water (ST) and the National Trust (NT). The MFFP carry out the practical elements; ST and NT both provide funding and expertise. The Upper Derwent Valley in Bamford Catchment is jointly owned by ST, the NT and Forestry Commission.

So far, 318 hectares at 3 locations have been planted with sphagnum moss. Moss retains water, supporting varying heathers, microscopic species, invertebrates, frogs, mammals, and birds. Biodiversity and water quality (colouration, sedimentation, heavy metals, DOC and phosphates) are being monitored at several of the replanted sites, with improvements already seen.

Severn Trent has been a partner of MFFP since 2002. The MFFP board ensures that impacts beyond Bamford Catchment are considered and ensures Moor Water links to connected projects to maximise impacts. The restoration project has delayed the need for the water company to build a new water treatment works by 89 years (saving an anticipated £5m plus operational costs), due to the improvement in effluent water quality already from the peatbog. The further investment planned (2025-30) would push the requirement back another 30 years.

Restoring 613 ha of peatbog to favourable condition will save 294,953 tonnes carbon, helping to progress net zero. Moor Water shows nature-based solutions have the potential to halt, then reverse biodiversity loss.

Previous project MoorLIFE returned £4 for every £1 invested in saved water treatment costs, helping keep customer costs low and slowing flow by 20 minutes, increasing local flood resilience. The same is anticipated from Moor Water – water holding capacity and quality has already improved, reducing the release of DOC and phosphates, delaying the need for a new water treatment plant, avoiding further carbon emissions (c.£22.5k in benefit) from new infrastructure.

The Partnership also explicitly works with the local community and actively encourages them to be part of the project via events, meetings, volunteering and monitoring impacts, meaning the impact of the project can be seen and felt beyond the specific area restored. A 'Bogtastic' van communicates the importance of peatbogs to the public, engaging 14,000 people over 50 events. By 2025 it will have held another 30 Moor Water events on Severn Trent sites. Public engagement will continue via installation of an information panel and fixed-point photography posts so the public can help monitor the sites restored.

Moor Water has a dedicated webpage and fortnightly social media updates. Final reports and a project video will be uploaded in 2025 for public use. MFFP is engaging local farmers and communities about the benefits of restoring peatland, and taking schools out onto site visits with National Trust.

Youth and school engagement has been carried out by MFFP and the National Trust.

Schools visit-specific locations are being restored to learn about reducing the risk of wildfires, the importance of peatlands, and the benefits of restoration.

Severn Trent's work aligns with several Sustainable Development Goals (SDGs); The specific goal for SDG target 15.3 is for Severn Trent to restore 809 hectares of peatland across England and Wales by 2025. There are another 5 locations already identified for Moor Water to improve.

Highly Commended

## Manchester City Council

The City of Manchester is leading the way in its unswerving commitment to deliver meaningful sustainable, integrated action to combat the effects of Climate Change.

Like many cities, Manchester faces a range of future challenges, not least those stemming from the threat of climate change. The pursuit of a progressive climate resilience agenda across policy and action initiatives is nurturing a society, economy, and city better equipped to meet all the challenges that we will encounter in the future.

Manchester has a target of becoming a zero-carbon city by 2038 – ahead of UK Government targets. The Council's Climate Change Action Plan (CCAP) 2020-25 was updated in 2022 to include SMART objectives and milestones.

Manchester City Council (MCC) has a strong citywide strategic backdrop that recognises, supports and enhances the natural environment, commissioning and delivering new evidence, plans and strategies for green and blue infrastructure (GBI), biodiversity, river valleys, parks, trees and woodlands.

At a local level, MCC are building bridges between Departments to breakdown silo working, with Planning, Education and Highways appointing new Climate Change Roles to integrate and mainstream the agenda. A key component of the CCAP is working in neighbourhoods to enable and support community groups and residents to engage in the climate change agenda through the development of new Ward specific CCAPs, building capacity to take positive action, with communities reducing their carbon impact.

MCC has provided over £600,000 funding annually though it's Neighbourhood Investment Fund (NIF) to provide communities with funding to make their neighbourhoods better places to live. NIF is available for each of the city's 32 wards. In 2021 and 2022 68 local climate friendly schemes were supported through NIF.

The newly refreshed Gi Action Plan builds on the success of the CIEEM award-winning (2018) GBI Strategy Manchester's Great Outdoors and looks to take forward new approaches and concepts such as Sponge City thinking in order to future proof the city against the effects of Climate Change.

More than £150million will be invested over the next five years to deliver major environmental improvements across the city. That's on top of some £100million already invested over the last five years. In total, nearly a quarter of a billion pounds will be invested over the lifetime of the GBI Strategy – demonstrating progressive, sustainable climate resilience.

Manchester continues to work with its Sister City of Wuhan to integrate the concept of Sponge City thinking, creating a more permeable landscape to cope with extreme flooding events. MCC became the first major City in England to register its concern about Biodiversity loss by signing the Edinburgh Declaration, which encourages Cities globally to support the delivery of a new Global Biodiversity Framework – recently approved at COP15.

Locally, Manchester opened its first new city centre park in over 100 years, a stunning £23million intervention that will become a benchmark for landscape-led development nationally and Internationally.

The Our Rivers Our City Strategy, a new plan for the City's River Valleys was a finalist in the Landscape Institute Awards, and through the £1.2 Million Resilient River Valleys programme, significant access and habitat management, supported by training and education, was undertaken across 12 sites in Manchester.

MCC delivered the most comprehensive audit of its treescape ever undertaken, with recommendations to sustainably and appropriately enhance the city's tree and woodland canopy, with individual ward-based assessments to support local CCAPs.

As a response to signing the Edinburgh Declaration, MCC has again led the way, delivering a people powered Nature Recovery Network through its newly approved 2022-2030 Biodiversity

Strategy. This was co-developed through an extensive and creative community engagement project My Wild City (CIEEM finalist 2021) and partnership working.

This is already yielding results, with over 60 planned species action plans in development and a new Local Nature Reserve declared in December 2022.

Nature is also giving us its own seal of approval, with Trout visible in City Centre rivers, Barn Owls and Black Redstarts breeding and Otters sighted for the first time in 50 years.

Winner

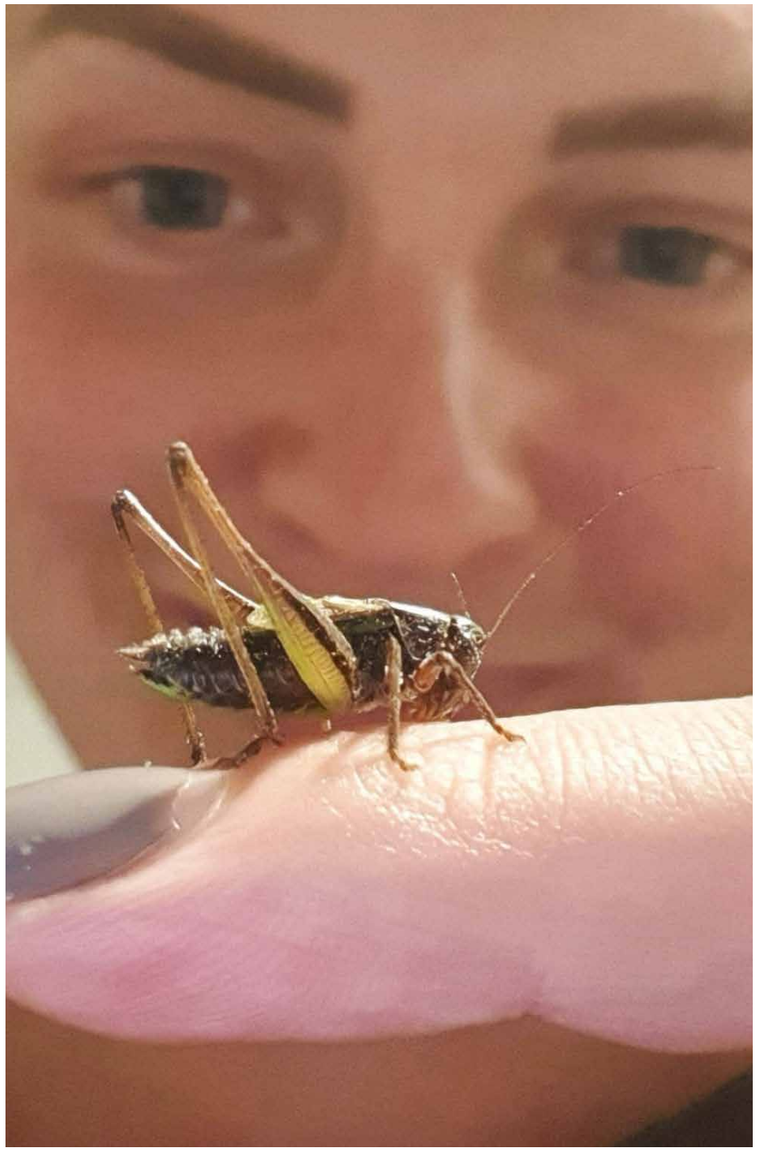
## Lucy Pocock

Lucy has led on project design, delivery, technical input and management of surveys teams for a range of projects. These include: M60 Simister Island baseline Terrestrial and Aquatic Invertebrate Survey,; M6 Jct 33 Baseline Aquatic Invertebrate surveys, East Anglia Hub (Nationally Significant Infrastructure Project) Terrestrial and Aquatic Invertebrate surveys and Swinden Quarry, Aquatic Invertebrate surveys for water quality monitoring.

Lucy has developed Bowland Ecology's in house entomological capability in both terrestrial and aquatic ecology survey and assessment. She has taken it upon herself to develop her technical skills, building on her personal passion for invertebrates, through achieving a distinction in her MSc in Entomology at Harper Adams University. Lucy continued to work full-time while undertaking her MSc, committing to study at weekends and during annual leave. Lucy partnered with The National Trust for her dissertation, which focussed on invertebrate diversity and availability for nesting Whinchats on the Long Mynd, Shropshire. Her study helped to inform effective evidence-based habitat management practices for heathland habitats, to benefit Whinchat prey levels. She also achieved 96% and passed the FBA Invertebrate Identification for Biotic Assessment, an exacting examination that accredits Lucy's skills and allows her to provide QA input to aquatic invertebrate identification. This is above the expected grade of her appointment.

Lucy's ability to build rapport with a wide range of professionals has led to clients contacting her directly for follow up projects, thus winning the Company new work– for example, Blackburn with Darwen Borough Council are now a regular client for whom she conducts a range of surveys. She has proven herself to be a team player, helping out with general tasks but also able to mentor colleagues with more specialist identification of insects/invertebrates. Other team members also feel comfortable approaching Lucy for advice and help on their projects, whether that be physically attending surveys/sites or for certain general technical advice.

Lucy achievements are more remarkable given that she did not take a traditional route into ecology. After leaving school she worked in retail for 8 years before discovering a passion for wildlife herself. She is committed to furthering this passion to provide a positive impact for wildlife through her work and in her spare time. For example, she continues to provide habitat management advice on a voluntary basis as part of the NT Whinchat Project Group.



Highly Commended

## Jessica Llewellyn-Evans

Jessica has worked on numerous projects covering a variety of sectors including highways, rail, local infrastructure, and government security. She has supported on UK Habitat Classification (UKHab) and Biodiversity Net Gain (BNG) condition surveys for the Ministry of Justice (MOJ) preparing Ecological Management Plans (EcMPs) and guidance notes for prison sites nationally. Jessica works with South Wales Trunk Road Agency undertaking environmental screening reports throughout Wales and undertakes BNG assessments for National Highways to support their BNG KPI aims.

Jessica is confident and reliable whilst being decisive and compassionate, forming connections across the national team as the Cardiff team equipment coordinator and supporting the Amey National Lead in organising the annual Away Day. She has also mentored an apprentice on bat survey techniques and report-writing skills under her own steam and offers botany coaching to colleagues, directing their CPD outside of work time.

Jessica has dedicated over 150 hours of volunteering to ecological surveys and management of projects, including the National Dormouse Monitoring Programme, CIEEM National Otter Survey, managing Crymlyn Burrows SSSI by invasive plant species removal, and conservation efforts for the Marsh Fritillary butterfly.

Highly Commended

## Chris Moss

In a relatively short space of time Chris has worked on multiple innovative projects for both his former employer, the UK Green Building Council, and his current employer Greengage Environmental. At UKGBC, Chris was project lead for IGNITION, a €4.5 million research initiative where he produced evidence bases and defined business cases for urban Nature-based Solutions (NbS). The project has developed a pipeline of NbS projects across Greater Manchester, which utilise an innovative payment for ecosystem services model.

At Greengage, Chris has helped to develop Grosvenor Property UK's (GPUK's) Biodiversity Strategy, which sets evidence-based targets and actions to deliver Biodiversity Net Gain (BNG) across their portfolio. Chris has also led the production of a forestry biodiversity strategy and delivery guide for an Investment Management firm managing large forest assets across the world.

Through his work Chris has helped to deliver and assess biodiversity and ecosystem service value uplifts on high density urban sites, with a focus on accessibility, biophilia, and acute climate adaptation, to landscape-scale estates, where connectivity and climate mitigation have been central.

Making a positive difference is central to Chris's motivation and his dedication to creating better places for people and biodiversity was recognised when he was accepted onto IEMA's Biodiversity and Natural Capital Steering Group.



Highly Commended

## Courtney Tonks

Whilst working for Mott MacDonald, Courtney has acquired knowledge beyond her grade, evidenced by the range of reports she has worked on and her ability to discuss complex topics confidently and knowledgeably. She has rapidly developed her abilities in report writing and production, producing preliminary ecological appraisals, Biodiversity Net Gain assessments and her first Habitat Regulations Assessment.

Due to challenging timescales Courtney assisted with preparing survey programmes for a major infrastructure project. She worked effectively with the rest of her team to complete surveys; taking on extra when others were unable to and even taking over the coordination when the lead surveyor was on leave. Courtney demonstrated great leadership and responsibility through her involvement.

Courtney has consistently raised the team's morale through this season. Her can-do attitude and light-hearted personality can motivate anyone through a dawn survey! Her proactiveness in and out of the office has pushed other team members to look for volunteering positions; where Courtney has offered to carpool and drive her colleagues to visits with Brumbats and other local groups to help them get involved. Courtney herself currently volunteers in six roles across three volunteer groups including as a bat ambulance driver and carer and as part of the NE 'Purple Horizons' project.

Her selflessness and drive is an inspiration to the MottMac team.

Highly Commended

## Thomas Webb

Since joining RSK Biocensus on a student placement in 2021 Tom has developed his confidence, expertise and breadth of experience to the extent that he secured a fast-track promotion to consultant and has quickly progressed to managing significant projects. Through his self-motivation to learn and progress his development he has authored multiple complex reports, including Environmental Statements and Habitat Regulations Assessments and demonstrated exemplary management skills by leading projects that have fee values exceeding £140k.

He uses strong leadership and communication skills to support junior colleagues, senior peers and clients alike, confidently chairing client meetings and inspiring less experienced colleagues to practice their bird ID through teaching songs and calls. He has also led companywide webinars on his voluntary and project work. His voluntary work includes bird ringing with the BTO which has allowed him to contribute towards the study of bird population changes, informing conservation strategies in his local area.

One thing that Tom is particularly proud of is being involved with and promoting RSK's LGBT+ network, 'RSK with Pride', a cause for which he feels strongly. Within this network there is a positive and inclusive environment where he was able to share his own and other's 'coming out stories'. Creating a more inclusive and diverse workplace is a driving force for Tom that he believes will help lead to more positive outcomes for biodiversity.

Winner

## Dr Julia Baker CEnv MCIEEM

Julia's career, from her early days as a nature campaigner and conservationist, through to her research and consultancy experience, has been dedicated to protecting biodiversity and mainstreaming nature within policy and practice, especially with Biodiversity Net Gain (BNG). Now Nature Services lead with Mott MacDonald, Julia works with specialists to provide a consolidated nature service from advisory to practical solutions.

Julia's passion and energy has undoubtedly made a significant difference to our industry and it is a commonly held view amongst her fellow practitioners that, without her, the Biodiversity Net Gain (BNG) approach now becoming a major tool to protect and enhance biodiversity through the planning system would not be where it is today.

Julia pioneered BNG on infrastructure projects including pilots on Network Rail's Thameslink Programme, East West Rail, and the Greater Western Electrification. Julia ran workshops to engage stakeholders in BNG, and shared lessons learnt to gain momentum for BNG more widely. This led her to propose and then develop the UK's first Good Practice Principles on BNG.

Julia collaborated with government, statutory organisations, NGOs, professional institutes, consultancies and contractors to draft the Principles, to gather feedback, and revise the Principles for wider consultation before they were published in 2016 by CIEEM, CIRIA and IEMA. The Principles themselves set a benchmark of "what good looks like" for BNG and have become widely referenced, e.g. Defra's Metric User Guide and several local authority Local Plans.

These Principles became the foundation for the "BNG: A Practical Guide", co-authored with Tom Butterworth and Rachel Hoskins. This guide, published in 2019 by CIEEM, CIRIA and IEMA, helped to gain momentum for BNG ahead of the now fast-emerging biodiversity policies across the UK. The next step was to co-chair the committee working on the first British Standard on the process to design and implement BNG(BS8683), Julia worked with experts on drafting the Standard, addressing comments following consultation, finalising the Standard and hosting webinars to promote it. Julia won the British Standard Institute's (BSI) 2021 Leadership Award for "exceptional communication skills and creativity in steering the development of this complex and, at times, controversial publication.

Julia's work to mainstream BNG continues. She has co-led the development and delivery of CIEEM training courses on all aspects of BNG, delivered numerous webinars and is a member of Natural England's Sounding Board for the Biodiversity Metric, helping to shape its design.

Julia is providing technical direction into new BNG guidance for the Treasury Green Book, on a project led by Oxford University. Given the wide-ranging application of the Green Book, this new guidance will greatly influence how BNG is accounted for within the appraisal of polices and projects.

Julia generously shares her knowledge with others. In addition to leading numerous training courses and webinars Julia also regularly delivers presentations at conferences and promotes inter-disciplinary collaboration by presenting at events for non-ecologists.

In 2022 Julia was named on the ENDS Power List of the UK's 100 most influential environmental professionals, in recognition of her work to embed BNG good practice within infrastructure development.

Highly Commended

## Dr Tim Hounsome CEcol FCIEEM

Tim has been a professional ecologist since 1998. As a Science Officer in Central Science Laboratory, Tim undertook his PhD research looking at the effects of badgers and livestock on ground nesting birds, completed in 2005. He became a full member of IEEM in 2003.

During his professional career, Tim has been involved in multiple initiatives to protect and enhance biodiversity. The biggest impact has been via the establishment and running of the ecological consultancy Biocensus, where its central purpose is to protect and enhance biodiversity, something that has been done for thousands of projects. In 2019 he co-founded RSK Wilding which aims to change land use in the UK and overseas, for the benefit of biodiversity and the wider natural environment. This is achieved using emerging mechanisms such as Biodiversity Net Gain and other natural capital methods such as nutrient neutrality and regenerative agriculture. In 2019 Tim co-founded Nature Positive and is the Managing Director. This business supports major corporate clients in their aspirations to minimise their impacts on nature. Nature Positive helps them to measure biodiversity impacts across their operations, and provides advice to reduce this. These two businesses are still young, but their potential to protect and enhance biodiversity is huge.

Tim is a passionate advocate for raising standards and has always promoted evidence-based practice. Through his work as a specialist ornithological consultant, he identified that there was a lack of scientific data to support guidance on how many visits were required to characterise the importance of a site for birds. He co-supervised an MSc to estimate the number of visits required to detect over 90% of birds. At the CIEEM Conference in 2016 Tim called on the profession to improve the evidence base and methods around ornithological impact assessment. To address this, Tim formed and chairs the Bird Survey Guidelines (BSG) Steering Group to establish best practice guidelines for bird surveying in consultancy.

Highly Commended

## Simon Bates MCIEEM

Simon has spearheaded work on realising the Clyst Valley Regional Park, from concept to practical delivery for the past 10 years. The concept of the Clyst Valley Regional Park was originally identified in a 2009 Green Infrastructure (GI) Strategy. A concept diagram in the strategy shows the 'clyst meadows' as a "well defined network of accessible semi-natural greenspaces and less accessible biodiversity rich areas…creating a strong buffer between [Exeter] and the countryside".

Simon was appointed as Green Infrastructure Project Manager in 2013, establishing a 'GI Board' to support the delivery of the projects within the strategy soon after commencing his role. Through Simon's stewardship, the partnership supporting the Clyst Valley Regional Park has grown to a blend of 17 public, private and charitable organisations and the level of ambition increased. The masterplan therefore defines a shared vision, objectives, and values for the next 25 years, and a 5 year action plan. The unique social, environmental and economic context is described, and the masterplan won the Regional Royal Town Planning Institute award for excellence in plan making.

Throughout the delivery of this work Simon has focused on protecting and enhancing biodiversity, seeking opportunities to respond to climate change, seeking opportunities for knowledge sharing and innovation, as well as creating opportunities to inspire and enthuse.

Simon willingly shares his knowledge and experience to enthuse and educate others. For example, Simon is presently mentoring a fellow CIEEM member in Northern Ireland. He has been an active member of the CIEEM SW committee for 6 years, setting up field events, for example a joint visit to National Trust 'rewilding' project to share knowledge on floodplain meadow restoration. His focus is broad, committing equal time and commitment to supporting young people in the infancy of their careers as well as supporting longer term CIEEM members.


Winner

## Shanakyle Bog Restoration and Habitat Enhancement Project EIP

### Shanakyle Bog Restoration Group

Shanakyle Bog Restoration and Habitat Enhancement Project EIP (European Innovation Partnership) is an agri-environmental project that is funded by the Department of Agriculture, Food and the Marine's (DAFM) locally-led EIP scheme. This is the first raised bog restoration and rewetting project to be carried out in County Clare, Ireland. Shanakyle Bog Restoration Group was awarded funding in May 2021 to carry out a number of conservation actions including:

- rewetting and restoration work of 30 acres of raised bog habitat;
- management of 10 acres of grassland for wildflower meadow creation;
- creation of a wildlife pond and stone hibernaculum for smooth newt;
- installation of over 30 bird nest boxes for endangered and threatened species for specialist groups (including red and amber listed bird species of conservation concern);
- installation of over 20 bat roost boxes on mature oak treelines and bog woodland;
- removal of problematic invasive species;
- installing wildlife signage and creation of a nature trail.

The work commenced in August 2021 and was completed in September 2022.

The restoration and rewetting of degraded peatland habitats has the primary objective of creating favourable baseline conditions for the establishment of Sphagnum mosses (peat forming mosses); and the recovery of the EU Annex I habitat 'active raised bog (7110)'. Currently, there is <1% of active raised bog remaining in Ireland due to threats and pressures associated with peat extraction and drainage and the national conservation status of the habitat is assessed as 'bad'. Rewetting work involved installing a network of peat dams, peat bunds and overflow pipes for Sphagnum development. The project has added significance due to the limited geographic range of active raised bog in the west of Ireland and County Clare in particular. Monitoring data of permanent quadrats was carried out to assess Sphagnum recovery (peat forming mosses) of rewetted bog pools with regenerating peat forming mosses confirmed almost one year post-restoration.

A wildlife pond and stone hibernaculum were constructed to provide a wildlife refuge for amphibians, damselflies, dragonflies and wetland plants; and now supports marginal wetland vegetation (*Typha latifolia* and *Glyceria fluitans*) and several species of invertebrates including pond skaters and damselflies. The installation of over 30 bird next boxes and over 20 bat roost boxes for specialist species has served as a biodiversity enhancement feature for birds of conservation concern and five species of bat confirmed onsite. The project site currently supports five red listed bird species of conservation concern in Ireland (snipe, meadow pipit, kestrel, barn owl and woodcock).

One of the main benefits of restoring and rewetting 30 acres (12 ha) of raised and cutover bog is managing the peatland habitats as a carbon sink and to restore the bog hydrology and hydrochemistry to function as active raised bog habitat once more; and to enhance the peatland ecosystem for specialised groups including recyclers, decomposers and xeromorphic plants. The restoration of peatland habitats has also provided a range of ecosystem services such as improving water quality of surrounding watercourses by blocking drains and intercepting silt run-off from open drains; water retention to alleviate flooding in the sub-catchment (on a local scale) by reducing stormwater run-off from the bog and increase water retention; a wildlife refuge and to provide an education resource for third level institutions and local interest groups. In addition to providing a wildlife refuge, the project is having knock on positive effects for threatened and endangered bird species of conservation concern. The successful eradication of Rhododendron has removed threats and pressures that could otherwise disrupt natural processes and functions of healthy peatland ecosystems.

This is the first raised bog restoration project to be carried out in County Clare and one of only a handful of peatland restoration projects to be carried out on privately owned lands in Ireland. Thirty acres of degraded raised bog is now actively transitioning to peat forming 'active raised bog'. This is a flagship project which has set a precedent for nature conservation in County Clare and nearby County Limerick.

In delivering this project Shanakyle Bog Restoration Group has partnered with the Irish Wildlife Trust, National Parks and Wildlife Service, BirdWatch Ireland, Irish Farmers Association; University of Limerick and Limerick School of Art and Design.

Highly Commended

## Garrell Burn River Restoration

### North Lanarkshire Council/SEPA/WSP

The Garrell Burn, located in Kilsyth, North Lanarkshire was straightened approximately 250 years ago during the industrial revolution which disconnected the burn from the adjacent floodplains, causing a lack of morphological diversity and therefore reducing biodiversity both within the watercourse and the surrounding area. This straightening also included weirs which have prevented the passing of various species further along the watercourse. A joint restoration project by North Lanarkshire Council and SEPA aimed to restore biodiversity through re-meandering 600m of the burn and adding other ecological enhancements. The meandering created a new channel through an old marsh wetland, which has been receding over the years, and rediverted the flood plain to restore the wetlands.

Invasive Non-Native Species (INNS) are present on site and were mitigated by backfilling the old channel with the soil (burying the INNS). The regrowth is now monitored by an INNS specialist. Mature trees along the banking of the old channel were protected and retained along with the addition of bat boxes for roost features, five kingfisher houses, and bird perches. A pond was also created using recycled materials from site to add another opportunity for increasing biodiversity along with scrapes to increase wetland areas.

The design phase began in 2017 and the works completed in early 2022 with the site work lasting two years. Monitoring of the site is ongoing with organisations having volunteer days to bird watch, conduct bat box checks, count invertebrates and monitor the pond. The council is aiming to involve schools by welcoming field trips for education days including monitoring what wildlife they find compared to the baseline. The Clyde River Trust is monitoring the burn for usage by fish and eel species to determine the success of the enhancements.

The river habitat was surveyed by Clyde River Foundation and found to have improved from 'poor' to 'good' under Scotland's River Basin Management Plan. This status improvement was aided by the return of Atlantic salmon to the burn for the first time in over 100 years adding to the biodiversity of the burn. Sand martins have already been witnessed nesting at the created wall within the first year of its creation which is another gain for the local area.

A plethora of additional ecological benefits were created at little extra cost to the original design, including creating additional habitats and food sources such as the basking banking and hibernaculas, scrapes and grass areas to entice the endangered lapwing formally recorded back to the site, bird perches using trees removed, and deep/shallow areas created within old access routes to allow wetting/drying and shallows/riffles within the new channel for the fish.

The social impact of the project to the local community is significant with the addition of walking paths, footbridges and board walks to the site. Local volunteer groups are visiting the site for education days, and dog walkers are in abundance demonstrating the importance of restoring urban greenspaces to connect the local community with nature.

Winner | Tony Bradshaw Best Practice Award Winner (see page 4)

## Eddleston Water Restoration

### Tweed Forum and Partners

The Eddleston Water restoration project is an outstanding example of a long-running, multi-partner initiative using nature-based solutions (NbS) to deliver ecological restoration at a landscape scale. The project started in 2010, and uses NbS to enhance biodiversity across the whole catchment, alongside reducing flood risk to local communities; focussing on enhancing ecosystem functioning and service delivery, whilst also maintaining sustainable livelihoods of local farms.

The Tweed Forum works in partnership with the local community, key agencies and NGOs. This includes scoping possible NbS options and locations; 'negotiating' agreements with potential landowners; identifying risks; sourcing and managing funding; delivering physical measures on-the-ground; community engagement; coordinating research and delivery; and demonstrating success and value for money.

The Eddleston catchment suffered land use intensification over centuries, leading to loss of natural habitats and species. This includes straightening the river (losing 16% length), embankment and channelisation, agricultural drainage, woodland clearance, habitat fragmentation, loss of wetlands and nutrient enrichment.

Working across the 69km$^2$ catchment on over 20 farms, the project has:

- Planted 207ha of riparian and headwater woodland (>330,000 native trees) increasing biodiversity and slowing overland flow. Riparian tree planting also enables development of 'thermal refugia' for salmon and other wildlife - shading from bankside trees provides climate change adaptation.
- Created 36 new ponds and wetlands in the headwaters and 2 large floodplain ponds. Environmental-DNA analyses show ponds provide additional new habitats for aquatic invertebrates from over 50 families (including 25 high scoring water-quality indicator species of mayfly, stonefly and caddisfly), in addition to enhancing drought resilience and providing temporary flood storage.

- Re-meandered 3.5 km of once-straightened, embanked river - reconnecting it with the floodplain; adding in-stream diversity; enhancing habitats for aquatic biodiversity; creating deep-water temperature refugia; and increasing channel length. Different re-meandered sections have added 8-46 % length of new river habitat. The numbers of salmon and trout have increased in line with increase in channel length.
- Placed 136 high-flow log structures in tributary streams – low-tech solutions creating in-stream diversity and encouraging out-of-bank flow. Studies have shown that nature-based measures at the landscape scale help reduce the impact of climate change-derived flood events - woody debris dams, ponds and tree planting in headwaters delay flood peaks by 3-7 hours, and reduce flood peaks by c.30%;
- Undertaken weir removal and enhancing passage for salmon, lampreys, eels.
- Discovered and taken action to conserve native Black poplar.

There is a comprehensive project website and ongoing publications, sharing learning with others and numerous visits and study-tours have been hosted. Eddleston is used as a case study nationally/internationally, including IUCN, WWF, British Ecological Society, UNESCO, World Bank, US Army Corps of Engineers, Environment Agency, SEPA and CIRIA.

NbS entail introducing changes in land use/land management, co-designed to improve biodiversity and integral to ecosystem functioning. The project enhances hydroecological connectivity at the catchment scale, promoting biodiversity and natural flood management alongside delivering for climate change, water quality and other regulatory ecosystem services. It also delivers on cultural services (recreation, education, access, tourism, landscapes).

Stakeholder engagement is key throughout, led by Tweed Forum's own staff. Choice of type and location of NbS measures is negotiated with farmers so as to enable them to sustain their farming operations whilst enhancing biodiversity and delivery of other ecosystem services. Both landowners and the local community are involved through a detailed programme of two-way engagement, including community events, leaflets, site visits, school talks and press promotion.

Cost-benefit analysis shows NbS to be highly effective and great value for money. Using best practice and detailed data, it was calculated the NbS measures already in place deliver £4.4million NPV (net present value) from biodiversity, carbon management, water quality, recreation and other benefits, in addition to delivering £950k NPV from flood damages avoided to communities downstream. Importantly, these benefits are recognised by the local community and are increasing. To date, total project costs are £2.8 million.

Highly Commended

## Scottish Invasive Species Initiative

### NatureScot (on behalf of Scottish Invasive Species Initiative Partnership)

The Scottish Invasive Species Initiative is an exciting and ambitious multi-year partnership project delivering an innovative community-based strategic approach to the management of invasive non-native species (INNS) across 43 river catchments in north Scotland.

The Initiative:

- enables local communities/volunteers to systematically tackle a suite of invasive plant species in river catchments
- monitors and controls American mink across more than a third of Scotland
- raises awareness about invasive species and biosecurity through public engagement and education activities
- protects Scotland's native biodiversity at a landscape scale.

The 5-year project (2018-2023) employs six full-time and three seasonal staff and is led by NatureScot on behalf of ten delivery partners (fishery trusts/boards) and one academic partner (University of Aberdeen).

Invasive non-native species are a major threat to global biodiversity and the single biggest factor impacting protected site condition in Scotland. Because rivers and lochs provide ecological transmission corridors they are vulnerable to invasion by and spread of invasive species. The importance of the Initiative to Scottish biodiversity conservation is shown by its priority project listing in the 'Scottish Biodiversity Route Map 2020' and recognition in the 'Biodiversity strategy to 2045: tackling the nature emergency'.

Its plant control programme operates at scale and has so far treated >2,936 km of giant hogweed infested riverbank, injected 171,520 Japanese knotweed stems and delivered 567 volunteer days pulling Himalayan balsam.

American mink have adverse impacts on native wildlife – particularly water voles and ground nesting birds. Annually the project works with up to 357 volunteers to establish and maintain our network of up to 680 mink rafts and traps. To date, 545 mink have been dispatched, helping protect native wildlife from this invasive predator.

INNS cost the Scottish and GB economies £300M/year and £2B/year respectively. The project (value £3.34M) tackles priority, high impact invasive species using a strategic approach and adding value by harnessing volunteer effort.

Volunteers have contributed 104,159 hours to the project – the equivalent of 71 full time people working for a year. It is anticipated that this network of inspired, enthused, experienced and qualified volunteers will deliver nature conservation benefits beyond the lifetime of the project.



Highly Commended

## Idle Valley Nature Reserve – Wetlands for Wildlife

### Severn Trent Water and Nottinghamshire Wildlife Trust

Idle Valley Nature Reserve (IVNR) is the largest of Nottinghamshire's wildlife reserves at 375 ha. It is of core importance to the county containing nationally rare wet grassland , wet woodlands, reedbed, wood pasture, marsh and old grazing pastures. The majority of the Reserve is designated as a SSSI for its breeding and overwintering wildfowl and waders. During 2020, Nottinghamshire Wildlife Trust (NWT) began a large project at Idle Valley, encompassing several schemes including water level management, conservation grazing, scrub management and species reintroduction.

Severn Trent (ST) funding allowed NWT to install water control structures and restore ditches, reinstating water management regimes during 2020. Extensive scrub management was undertaken, but also to combat reedbeds scrub encroachment, beavers were reintroduced during November 2021. This created new shallow wetland habitat features for amphibians, aquatic invertebrates and water voles. Since introducing the colony to their 58 ha enclosure, 2 beaver kits were born in Nottinghamshire during summer 2022, for the first time in over 5 centuries! The introduction of this keystone species is vital for re-defining and enhancing the Idle Valley ecosystem.

Monitoring established that swards in trial areas had established well and scrub removal on grassland had provided a better quality wet grassland for breeding waders as planned. Amphibian surveys showed that the beaver area had markedly increased juvenile amphibian abundance compared to the control area and baseline survey. Aquatic invertebrate surveys of the beaver and control area have shown an improvement in diversity. Managing water levels created more wader breeding habitat in spring 2022 benefiting species such as lapwing and avocet.

Beaver re-introduction has reduced scrub, opening up reedbeds, and cleared glades leading to greater, diverse habitats for amphibians and water voles. Beavers have also created standing deadwood, a scarce habitat essential for bats, woodpeckers and many invertebrates.

Restructuring scrub in woodland edges also increases breeding habitat for vulnerable bird species.

The project has increased biodiversity within the local area, as well as creating a corridor and migration destination for scarce wildfowl and waders. The area is now an important steppingstone in the wider local network.

Winner

## Whitewool Stream Wetland Project

### Meon Springs / Tetra Tech

In February 2021, Tetra Tech obtained planning permission for the first strategic wetland project in England designed to reduce nutrient impacts upon Habitats sites (in this case the Solent). The project, conceived by Meon Springs and Tetra Tech from an original aim of reducing nitrogen outputs, has developed into part of a whole business approach for the landowners, transforming an intensively farmed landscape into a productive, regenerating landscape to improve water quality and flows, whilst staying a productive farm.

The wetland has been designed for its headwater location and, using permaculture principles, it creates various environments and microenvironments to slow flows and remove nutrients from the water. Part of the area is wet woodland, where swales have been formed to develop an extensive "edge area" along which wetland plants planted to create diverse micro ecosystems. The main part has been developed by broadening what was a highly incised channel to a wide flat area, where the water can find multiple flow channels. This is known as taking the stream back to "Stage Zero". In between the various wetlands are riparian buffers and trees which reconnect the previously severed stream corridors to the north and south of the site.

Through careful design the project will attenuate peak flows, reducing winter flooding downstream, reduce low flows in summer and deliver biodiversity net gain with c.6ha of wet woodland and other habitats.

Baseline ecological and hydrological surveys commenced in 2020 and the construction phase was completed in April 2022 with ongoing monitoring. The original concept was limited to a c.2ha area providing the targeted nutrient removal to enable development. This was expanded to deliver c.6ha of riparian woodland, grassland and other habitats. These habitats are not necessary for mitigation (i.e. removal of nutrients) and therefore represent significant biodiversity gains above and beyond the project requirement. Baseline habitats were of low distinctiveness comprising managed arable land. The created habitats in addition to the wetland itself comprise neutral grassland (medium distinctiveness) and wet woodland (high distinctiveness).

Although BNG was not requested at the time of the application, the LEMP uses Biodiversity Metric good condition criteria for created habitats as monitoring targets. Post-development monitoring has already shown a reduction in total nitrogen concentrations downstream of the wetland with target habitats successfully establishing and evidence of increased activity by target species so in addition to the quantitative gain in habitat creation, there are qualitative gains through improving ecological

connectivity along the valley. The riparian woodland planting provides continuous cover between existing wooded and tree-lined reaches of Whitewool Stream through a previously open section of c.365m. Even in the relatively short time since the completion of the construction phase, there have been other key indicators of success with two pairs of lapwing breeding on site in 2022.

Highly Commended

## Clifton Wastewater Treatment Works Integrated Construction Wetland

### Yorkshire Water, Penny Anderson, Stantec and Barhaleenpure JV

As part of Yorkshire Water's £700M Water Industry National Environment Programme (WINEP), 80 regional wastewater treatment works (WwTW) require nutrient reduction measures. This is the largest/most complex environmental programme that Yorkshire Water has delivered.

Yorkshire Water, the Environment Agency (EA), Stantec, Penny Anderson Associates and Barhaleenpure JV worked together, creating a nature based solution (NbS) to replace the existing conventional treatment process serving the village of Clifton.

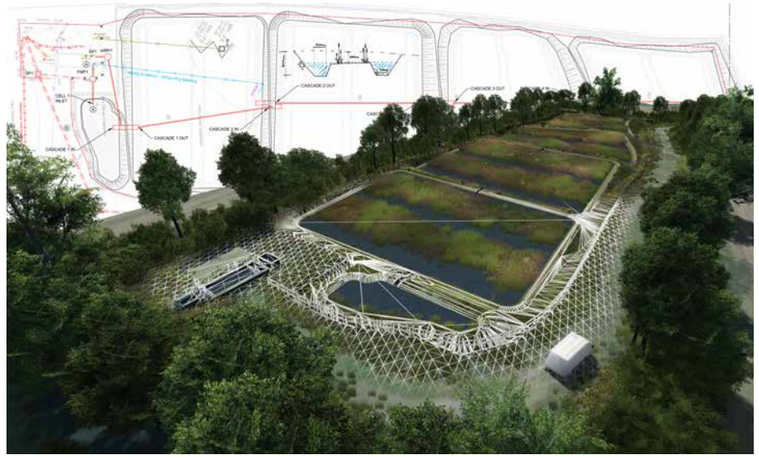
Clifton WwTW Integrated Constructed Wetland (ICW) is a low energy, environmentally friendly method of wastewater treatment – the first in England to treat all flows and the first ever Biodiversity Net Gain (BNG) positive WwTW. Operational carbon saving 79%, embodied carbon saving 50%. 24,000+ plants used to create an innovative, low carbon nature-based solution.

The project was completed at 35% lower cost than building a conventional solution (£1/3m saving) and has operational costs 64% lower over the lifetime. Started in 2020 it was operational in 2021 with a robust monitoring programme in place from 2021 until 2024.

Working extensively with the EA, granting the first ever constructed wetland Operating Techniques Agreement (OTA) in the UK, the site comprises 5 ponds (over 3000m$^2$), with open water ponds and shallow vegetated marshes. This provides aerobic and anaerobic environments, sustaining a diverse population of microbial activity and plant life. Wastewater treatment within ICWs is achieved by a combination of filtration, biological treatment, sedimentation, plant absorption, and adsorption to sediment and plant surfaces.

The project aims to achieve the EA phosphorus permit of 4mg/l with current performance on average being 2 mg/l. No chemicals are used, increasing resilience, reducing reliance on global supply chains.

This project is being used as a valuable case study, replicated within Yorkshire Water as well as other water companies throughout the UK.



Commended

## Mayfield Park

### The Mayfield Partnership

Mayfield is transforming a 24-acre area of central Manchester into a vibrant new district with sustainable ecology at its core as part of the 6.5-acre park. The project tackles long term biodiversity loss and has reopened a long-forgotten section of river. Fundamental to the aspirations of the government's 25 Year Environment Plan, the Park meets the following objectives; Recovering nature and enhancing the beauty of landscapes, Connecting people with the environment to improve health and wellbeing and Protecting and improving our global environment.

An ecological report concluded that the provision of the park provides a significant (90%) net gain in biodiversity.

Recognising that delivering green open space is one of our best tools in fighting the climate and biodiversity emergencies in urban areas, the Mayfield Partnership has delivered a park, naturalised a river channel, including "daylighting" a culverted section, and delivered a mosaic of natural habitats.

Designed with a focus on sustainability, 80% of the site's materials were reused reducing Carbon emissions by an estimated 240 tonnes including:

- Reusing old hogback beams to support three new bridges saving an estimated 23.8 tonnes of $CO_2e$.
- Using wells from an old brewery onsite, to water the park, saving three million litres of water and one tonne of carbon a year.
- A reduction of c. 650m$^3$ of concrete for civil structures estimated to have saved between 112 and 175.5 tonnes of $CO_2e$ based on embodied carbon of conventional structural concrete.
- Potential reduction of off-site water consumption by 3,375,000l of water per year, saving 0.9 tonnes of $CO_2e$ per year
- Working with existing site topography to minimise the amount of engineering required
- Reinforced earth techniques to retain existing heritage walls reducing potential carbon impacts

Commended

## Meon Vale, Long Marsh, Warwickshire

### Tyler Grange / St Modwen Developments

Tyler Grange has advised St Modwen Developments since 2008 with respect to the ongoing re-development of the 190ha former MoD site at Long Marston, Warwickshire to create the large, green infrastructure-lead multiphase development comprising 1,050 homes, leisure facilities and public open space, containing a recreational route linking to Stratford upon Avon.

This is the first major site to use Warwickshire's pilot biodiversity metric (a pre-cursor to the Defra biodiversity metric), used for the 2014 outline consent, to demonstrate measurable gains. Tyler Grange influenced the designs to create a variety of wetland and terrestrial habitats, restoration and de-culverting of modified watercourses and access designed to allow enjoyment whilst minimising disturbance.

Prior to stream restoration, it was necessary to undertake translocation of water vole from concrete lined stream channel, requiring novel use of chicken wire to exclude from stream once trapping complete. Novel bat mitigation to compensate for roost losses, including translocation of a roost in a tree limb and two dedicated bat houses.

The design included restoration of woodland, grassland and streams and creation of local and national priority habitats (wetland and grassland). Warwickshire's biodiversity metric demonstrated a net gain of 37.98% (note, this excludes development completed under the earlier consent). Monitoring confirmed that the desired state of most habitats has been reached or is on course to being reached.

Winner

## Mayfield Park

### The Mayfield Partnership

Mayfield Park is a ground-breaking piece of environmental design and engineering, that has led to the creation of the first city centre park in Manchester in over 100 years.

Designed by Studio Egret West, the park was made possible by a public-private partnership between Manchester City Council, Transport for Greater Manchester, LCR and developer U+I, and is a visionary move to establish a high-quality landscape scheme that can respond to the climate crisis as well as creating a nature-rich haven for visitors. The park is the first phase of the new green quarter which will eventually include 13 acres of green space.

Recognising that delivering green open space is one of our best tools in fighting the climate and biodiversity emergencies in urban areas, the Mayfield Partnership has delivered a park, naturalised a river channel, including "daylighting" of a heavily culverted section, and delivered a mosaic of natural habitats along its length. The park will act as a flood zone for the River Medlock during extreme weather events, to help minimise flood risk elsewhere in Manchester.

In addition, the Park provides a connection to groundwater for surface water discharge, with four rain gardens infiltrating flow to the ground. Remaining flow will be discharged to the river via several discharge points, including two that discharge water to a wildscape area prior to the river, further slowing flows whilst providing natural irrigation.

Discharge from the entire Mayfield development, including future buildings, will be routed via the park and peak flows will be reduced by approximately 1,000 litres per second. Importantly, no surface water from the Mayfield development will discharge to sewers, reducing strain and flood risk on the ageing piped infrastructure below. All impermeable footpaths fall towards soft landscape areas, reducing the need for traditional drainage channels.

Planting 63,000 plants, 60,000 bulbs and 140 trees (40 different species) will improve air quality, reducing nitrogen dioxide and particulate matter. They will also provide local benefits of reducing

air temperatures, meaning that, coupled with the river, they will provide a respite for city residents during our warmer summers. The Park will also offer climate resilient habitats for flora and fauna to thrive, creating space that includes a 1.5 acre wildscape area, to support an urban ecosystem. Geomorphological modelling of the river has identified opportunities for fluvial and riparian habitats that have been incorporated into the design, as well as 26 different habitat features on land.

The flora of the Park is specified to be resilient to the local climate. If irrigation is required, three existing wells have been reactivated and will provide water for the Park, eliminating irrigation demand on city-wide water networks. This intervention will save an estimated 3 million litres of water and one tonne of carbon a year.

Whilst monitoring programmes are due to commence from spring 2023, kingfishers, sand martins and bats have already been sighted and brown trout are now swimming in this stretch of the river.

The park also includes a destination play area to attract families back into the city and inclusive and accessible design throughout. Latent provision has also been made for park events at a range of scales including power supplies, cabling and the provision of wide footpaths.

Mayfield Park leads the way, in terms of using landscape to combat the challenges presented by climate change. The park is an instant benchmark of what successful city planning and innovative environmental design can look like. It's about what can be achieved, with strong bold, city leadership, visionary design and effective partnerships to deliver a meaningful, practical and transformative response to the climate emergency.

Many of the component parts of the curated space are directly replicable to many city parks or other greenspaces from wildflower rich borders, sensitive and appropriate tree planting to the inclusion of swales, ditches, soakaways and rain gardens and the ambition to recycling existing materials on site.

It will make the integration of nature-based solutions into challenging urban landscapes the norm, not the exception, when it comes to planning the cities of the future.

The project was delivered collaboratively, with effective engagement and involvement of planners, ecologists, environmental managers and specialists from a range of organisations from the outset. They supported the forming of the basis of design at the Strategic Regenerative Framework stage and continued through detail and implementation stages to support a successful collaborative approach to delivering a tangibly environmentally and ecologically beneficial scheme.

Highly Commended

## Digibat

### Mott MacDonald

New interim guidelines on the role of night vision aids (NVAs) for bat surveys were released in July 2022. The guidelines specify the use of Infra-red (IR) or Thermal Imaging (TI) cameras (night vision aids, NVAs) to be utilised during bat surveys. Mott MacDonald recognised early on in 2022 this technology may be adopted and that there are a number of opportunities and constraints for implementing these guidelines and worked on solutions to counteract the constraints and maximise the opportunities for the benefit of bats, ecologists, their company and clients. Mott MacDonald have had a team of ecologists and automation experts undertaking cross checks on the automation through manual reviews during and after the 2022 bat survey season to develop Digibat.

This project demonstrates the epitome of new technology by automating bat surveys. The initial concept was to improve methods and the outcome of bat surveys whilst adhering to the guidelines and ensuring that the quality of data is maintained. Internal funding was obtained to develop a system based on the new guidance and the constraints and great opportunities that had been identified.

A system has been developed that uses artificial intelligence to identify bats from how they fly and behave from other species such as insects and birds.

The system is able to identify bats when the human eye will struggle to detect bats in darker backgrounds (a human limitation) even when analysing the data after surveys. There is a demonstratable improvement in accuracy with Digibat compared to detection by the human eye.

There are a number of benefits of Digibat for bat surveys, data management and clients as follows:

- Reduced the time needed for manual review by an average of between 70-90%.
- Reduced the volume of data by up to 90% of the data collected from a survey which saves potential IT issues with the volume of data collated, stored and worked.
- Reduction in health and safety risks by reducing the amount of night time working.
- No need to train new ecologists to be able to have confidence to detect bats in real time, as the IR cameras and automation process will capture all bats and training can be given in the office.
- Removal of mental stress and wellbeing issues for ecologist of all levels and experience.
- Substantial savings for clients compared to the new guideline surveys with increased costs for the new IR/TI processing.
- Vastly increasing the accuracy of results compared to the human eye.
- The creation and centralisation of reliable datasets that provide further opportunities for analysis and understanding.
- Reduce the management time required to find large resources for staff; and creating a LEAN solution.

Digibat methodology can be replicated and adapted for building and tree emergence surveys, transect surveys and crossing point surveys. For crossing point surveys, this could greatly impact the way in which mitigation is designed as there would be clear evidence of how bats cross features of interest. The automation has been successfully used on roost surveys across different sites with buildings of varying sizes, structure and complexity with different surroundings. Through a set of reliable datasets that have been created further opportunities for analysis and understanding of bat activity are avilable. Next steps are to automate the surveys more by linking sound files to the motion detection. Additionally, there are plans to extend the exact same process of Digibat automation for use in TI cameras, so that either system can be used depending on situational requirements.

Winner

## Jersey Tree Strategy

### Dialogue Matters and the Government of Jersey and Jersey communities and stakeholders

This project is the story of a government making decisions with (not for) other stakeholders, co-creating Jersey's first tree strategy. The strategy celebrates the multiple benefits of urban and rural trees, woodlands, and hedgerows and fulfils climate and nature commitments.

Dialogue Matters designed and facilitated a Consensus Building process enabling inclusive and principled negotiation. The Government of Jersey resourced the process and put forward volunteers to be trained by the Dialogue Matters team to neutrally facilitate. The co-creation process spanned July 2021-March 2022, with ongoing co-delivery and implementation.

This project brought stakeholders and decision makers together, going well beyond standard engagement practice. To achieve this Dialogue Matters and the Government of Jersey worked together to put local communities at the heart of the decision-making and deliver genuine empowerment.

Initially, Dialogue Matters assessed the situation and found active tension e.g., between citizens and developers around loss of valued trees and replacement with poorly cared-for tree whips. Fundamental to the project was the importance of enabling mutual understanding of interests and concerns, harnessing all forms of knowledge. Time was provided between workshops for participants to reflect on what was emerging, checking with those whose interests they represented before consolidating conclusions. Ensuring a balanced invitation list of 44 people including biodiversity specialists, youth and farming voices, tree management, and various other stakeholder groups meant that all stakeholder groups were fairly represented. The discussion took an asset-based approach, focusing on strengths and identifying resources for change whilst laying the foundations for ongoing participation and influence.

The Consensus Building process requires collaborative knowledge sharing approach (avoiding biased outcomes. Accordingly:

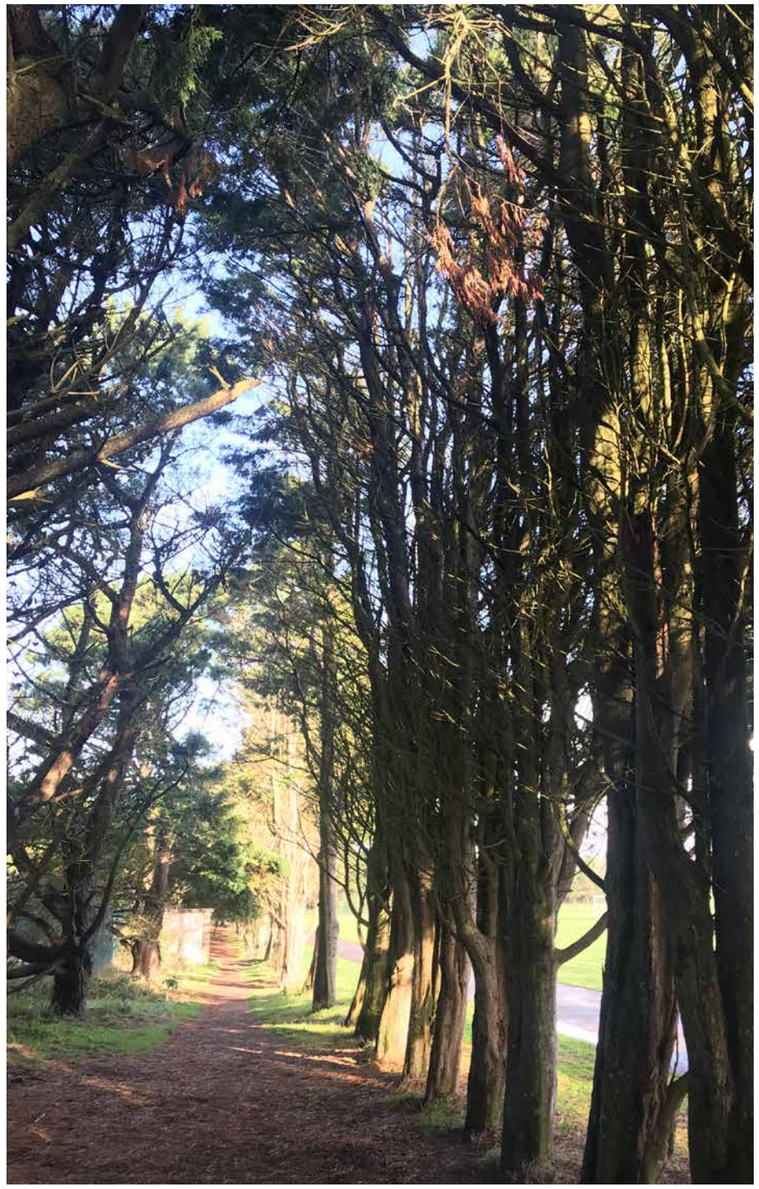
- Everyone was regarded a specialist e.g., young people about their needs or communities about culturally important trees
- Concise unbiased introductory information was used, explaining the task and level of influence
- Workshop 1 started with creating a vision, exchanging many knowledges and views
- Online and paper surveys tested Workshop 1 outputs, with the wider community able to feedback to the deliberative group
- Workshop 2 started with a summary of findings and information about existing knowledge around Jersey's tree stock, and then worked up priorities.

The asset-based approach surfaced existing initiatives and progress as well as resources for change. Despite the impacts of the Covid-19 pandemic, progress was still able to be made and wider online and paper engagement enabled 323 people to provide 1071 comments. By reassuring participants that they brought their own specialist knowledge the team was able to enhance people's confidence and ability to contribute, thereby facilitating the exploration of option from multiple perspectives. A new stakeholder 'Sounding Board' was agreed to guide strategy implementation and a key outcome was the increased levels of trust among stakeholders and well-informed policy decisions.

### Impacts

The main impacts of this project were changes to planning law and environmental policy, and a government commitment to share responsibility for the planting, management, and protection of Jersey's trees with stakeholders. Short- and long-term impacts included improved mutual understanding built between stakeholders about how better to protect trees and an agreed vision, principles, and priorities for the future strategy that were well-supported. Jersey's first ever Tree Strategy was published on 10th May 2022.

In the longer term trees have been brought under the protection of planning law and there is a review of existing legal provisions to protect trees of special importance. A stakeholder 'Sounding Board' has been created to engage stakeholders in ongoing dialogue about tree protection and management A Jersey tree database is being produced to aid future assessment of tree stock and partnerships are developing between the Government and the private sector for tree planting and protection.



Highly Commended

## The Chester Wetland Centre – Design Development

### Binnies UK Ltd; The Land Trust; The Environment Agency; Cheshire West and Chester Council; Friends of the Countess of Chester Country Park; The Conservation Volunteers Merseyside; Bangor University; The Canal and Rivers Trust

The Chester Wetland Centre is now a multi-agency project aiming to create biodiverse wetland habitats with community access benefits, whilst improving the water quality and channel morphology of a heavily modified contaminated watercourse. Proposed upstream interventions (including treatment wetlands, a new de-canalised meandering channel, scrapes and pools) will deliver WFD benefits including improved water quality, channel morphology, ecological condition and floodplain connectivity. Downstream, the cleaner water will reach the Countess of Chester Country Park where it will feed a wet meadow.

A Project Steering Group was established to ensure transparency and collaborative approach. The Steering group comprises:

- Cheshire West and Chester Council (CW&C) (key landowner)
- The Land Trust (key landowner)
- The Environment Agency
- The Friends of The Countess of Chester Country Park
- The Conservation Volunteers Merseyside
- Bangor University
- Canal and Rivers Trust

Monthly meetings of the Steering Group were held throughout each project stage, enabling continual access to information including risks and opportunities, and timely decision making. BUK provided up-to-date information at each meeting. Feedback provided within workshops and meetings, followed by more detailed responses.

Topic-specific consultation and feedback was sought from key stakeholders - examples include:

- Materials management
- Archaeology
- Biodiversity Net Gain (BNG)
- Natural Capital valuation methodology
- Water Quality and Flow Monitoring requirements.

Drop-in consultation events were advertised through mainstream local and also partners' social media. Exhibition boards were also displayed for several weeks at two local libraries and shared via social media. All draft deliverables, including design work, main reports and supporting technical studies, were formally submitted to stakeholders for review, with a minimum of 2 weeks for provision of feedback. The feasibility study report consultation period was extended from 2 to 4 weeks to allow all feedback to be provided. All comments were addressed, with a comprehensive comments tracker recording all comments and responses, along with the final updated deliverables.

Highly Commended

## Watercress and Winterbournes Landscape Partnership

### Hampshire and Isle of Wight Wildlife Trust and Wessex Rivers Trust co-coordinate this chalk stream focused scheme on behalf of 16 partners

The Watercress and Winterbournes Landscape Partnership Scheme puts communities at the heart of action to protect, enhance, and celebrate the seven headwater chalk streams of the Rivers Test and Itchen. The Scheme aims to secure the future of these precious places for people and wildlife through over 20 distinct projects.

Supported by the National Lottery Heritage Fund (NLHF) and uniting 16 partners with local communities, the Scheme is improving habitats, protecting vulnerable species, and addressing key pressures like pollution, flooding, and resilience to climate change. The five-year Scheme started in summer 2020.

The Scheme grew organically, with stakeholder involvement from the outset, emerging in 2016 from concerns discussed at the Test and Itchen Catchment Partnership (T&ICP) about issues in the Test and Itchen headwaters. To research this further, 2 community-based workshops were held, attended by 60+ individuals, as well as over 20 stakeholder meetings.

In 2017 the T&ICP secured development funding which allowed the partnership to take on a Project Manager and Community Catchment Officer (and subsequently a wider team). Working with stakeholders, seven Community Catchment Groups (CCGs) i.e., one for each catchment, were established. Populated by local people, these fora facilitated knowledge exchange and open debate about issues and solutions to develop the proposals and activities which would form the basis of the final full application to the National Lottery Heritage Fund in 2019.

Information exchange with and between stakeholders is facilitated by a bespoke webpage and e-newsletter. Stakeholders shape and run events and training; feedback is invited and the Scheme has responded to issues that have emerged.

Regular feedback from stakeholders and volunteers forms the basis for reviewing and planning future Scheme activities to ensure they are fulfilling the needs of the intended audiences; and surveys from these two groups were central to a recent independent interim evaluation process. The Scheme embraces diverse, inclusive, and participatory stakeholder engagement to enable everyone to have their say.

Stakeholder engagement sought to involve: landowners and managers, local residents, parish councils, specialist interest groups, artists, universities, local businesses, NGOs, and statutory / regulatory bodies. It was recognised that some groups and individuals needed more bespoke engagement. The use of demographic and socio-economic profiles and focused research and community consultation during the development of the scheme helped the team to identify less visible audience groups, for example, reaching out to Nepalese and Polish communities in Andover through their key representatives.

Winner

## Academy9

### Transport Scotland

Launched in 2015, Academy9 is an exciting educational initiative from Transport Scotland, linked initially to the A9 dualling programme. This was created in collaboration with consultancies (Atkins, WSP, Fairhurst, CH2M and Jacobs), education consultant The Knowledge Exchange Partnership, schools along the A9 corridor and industry professionals working on the programme (engineers, ecologist, geologist, archaeologist etc.) The education team and technical professionals are all integral to this programme, working with young people from nursery to university, as well as providing teacher CLPL (Career Long Professional Learning) and an SQA qualification.

Recognising the power of partnerships between industry and education, Academy9 is building a legacy of STEM-related skills and achievement through a series of progressive STEM activities and experiences, providing future generations with the opportunity to learn both hard and soft skills and consider STEM-related careers.

Headline statistics show over 7000 pupil interactions, over 665 STEM professional hours, and 740 education practitioners hours, over 220 events.

Academy9 seeks to not only engage with young people in schools along the A9 dualling corridor, but also with their parents, relatives, carers, other community members and nationally across Scotland. Impact is greatly enhanced through valued partnerships such as, Highland's & Islands and Perth and Kinross Councils, networks like the RAiSE (Raising Aspirations in STEM Education) and DYW (Developing the Young Workforce) and STEM Learning UK.

The Academy9 programme is designed to create knowledge exchange between education and industry and to provide pupils with a robust understanding of sustainability. The programme brings together expertise and input from various sustainability experts in different professions and sectors, using core lessons and activities to create a knowledge sharing space and improve environmental literacy. These are organised to include elements of each

of the 17 UN Sustainable Development Goals, such as the Sustainable Solutions Road Design Challenge. This interface between classroom and active learning encourages innovation and deep understanding within young people, as well as displaying the real-world processes and decisions necessary within the sustainability sector. This educational opportunity allows pupils to take part in important conversations around future policy and use their experience to promote and extend best practice across all areas of their personal lives and spread this out to the wider community.

Through outreach efforts, the programme has been invaluable in providing an insight into the world of environmental management and STEM opportunities. Combining the educational curriculum with career events and long-term mentorship opportunities with environmental professionals and stakeholders, such as engineers, ecologists, and geologists, also raises awareness of potential jobs and provides career advice on routes into roles and job applications. Events create enthusiasm in young people for green jobs and play a critical role in inspiring future environmental specialists to prevent skills gaps and create the diverse, net-zero aligned workforce aimed for in the Learning for Sustainability Vision 2030+ and 2023 National Improvement Framework.

With knowledge exchange between education and industry at the heart of its ethos, Academy9 aims to promote the educational opportunities of young people within a wide range of STEM industries, as well as providing chances for graduates working in STEM to undertake CPD through experience as STEM Ambassadors.

- At 'Roadshow' events, during which young people get the opportunity to 'become' ecologists, geologists and engineers, they learn more about what these roles entail and are able to consider whether a career in one of these industries might be of interest to them.

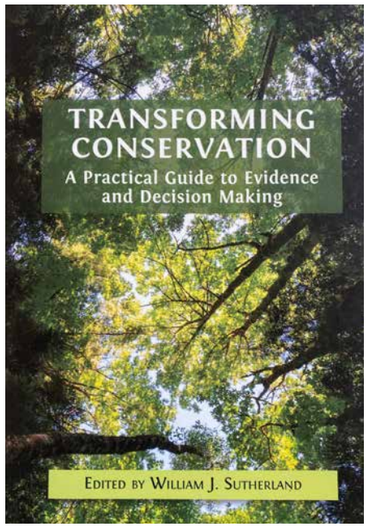
- As part of an 'Apprenticeship Academy', S2 and S3 pupils learn from professionals about their careers, including challenges they may have faced, their interests at school, as well as their own career pathways.
- A 'Career Mentoring Programme' matches pupils with a person working in an area of STEM that interests them. Pupils then have a number of sessions to help them explore potential career options, what a day in the life of the mentor is like, pathways to potential careers and CV or personal statement writing.

Further to this, Academy9 is committed to ensuring teachers are supplied with the tools required to deliver a high quality sustainability lessons and STEM education. Training has been provided for Scotland wide Primary Science Development Officers (those who support teachers in providing a STEM curriculum in schools).

Highly Commended

## Transforming Conservation – A Practical Guide to Evidence and Decision Making

Professor Bill Sutherland CBE, Miriam Rothschild Professor of Conservation Biology, University of Cambridge



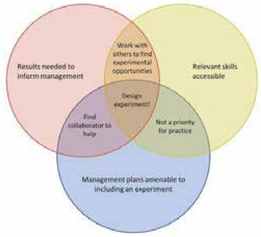

This book (published in December 2022) and associated work aims to transform the practice of nature conservation. The core principle is that conservation could be considerably more successful from the effective use of evidence in robust and transparent decision making. A global team of 76 authors have come together to look at the main components of decision making - working with communities, identifying the problem, collating the evidence, assessing the evidence, working with experts so as to reduce bias, and identify the processes to make these more effective. A series of checklists suggest practical and verifiable means of improving processes.

Evidence-based conservation was first suggested by Professor Bill Sutherland in the Conservation Handbook in 2000. In 2004 he worked with colleagues to create the Conservation Evidence website, which has since reviewed over 3,500 conservation actions and interventions based on reading 1.5 million paper titles in 17 different languages (January 2023).

The drive for embedding ecosystem services in decisions, especially by businesses, is only likely to be effective if the actions are known to be effective, are correctly implemented and the gains can be measured in a rigorous manner. It is thus a key tool in the delivery of ecosystem services. Without it the projects are likely to underdeliver and the claimed, and sold, biodiversity or carbon net gains may not withstand rigorous scrutiny. The messages of this book are thus fundamental to restoring and delivering fully-functioning ecosystem services.

Inspired by this work, over the last few years a broad set of conservationists have been involved in creating tools and processes to improve evidence use. These range from funders making processes evidence based to journals ensuring evidence is incorporated, to practitioners thinking about how tests can be embedded in scheme design.

This book is the summary of the collaboration of over 1100 authors. In the first month this open access book has been downloaded over 8,000 times from across the globe. Twelve Masters courses have already included it in their reading lists and the RSPB and Woodland Trust already have 'reading groups' discussing it.



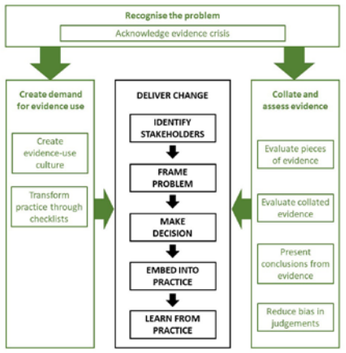




Photo credit: Jonathan Settle

Highly Commended

## BatChat podcast

Bat Conservation Trust / Steve Roe

Launched in 2019, the BatChat podcast is now in its fourth series and has published 40 episodes. Produced on an entirely voluntary basis, it's the only active podcast amongst three million podcasts worldwide that concentrates on bringing its listeners stories and news from the world of bat conservation.

BatChat has made a significant difference to the conservation of the natural environment through education and its ability to take listeners out into the field. The show is increasing the profile of bat conservation projects being run all over the country. This is not only helping to increase public support for bat conservation, and in turn funding, but encourages those doing the work and is inspiring young and older ecologists to do the same and set up their own projects.

The show allows guests to share their work, research and stories with an audience like never before. The process of publishing data in formal reports often dissuades people from getting their work out there. However they know their work inside-out and BatChat's interviews not only gets their work out to a huge audience (over 48,000 downloads) but it delivers their stories right into the ears of listeners, often whilst the data collection is taking place out in the field.

Each series acts as a reminder of the considerable amount of bat conservation work taking place around the UK as well as further afield and brings the work of the Bat Conservation Trust into regular view of the public. An audience from 106 countries, combined with the number of downloads and total listening time (1.5 years) to date, demonstrates just how much of an impact and wide reach the show is having. In January 2023 the show was ranked 9th in the 50 best UK wildlife and nature podcasts by FeedSpot.


Winner

## Focus Environmental Consultants

Focus is an independent company that consistently punches well above its weight in delivering the highest-quality outcomes. Exemplar projects include New Community Hospital where Focus managed substantive ecological constraints inherent within the 2.19ha scheme, including land functionally-linked to the nearby 'Bat SACs', hazel dormice and reptiles. The scheme establishes a net increase of 90 trees, 700m² of scrub (c.36.8% increase) and 130m of species-rich hedgerow. The design further incorporates bird, bat and dormouse boxes and habitat enhancement for reptiles.

Since 2018, Focus have partnered with Ramboll to deliver a major development at Redditch Gateway, where GCN represented a significant ecological constraint. As an important infrastructure project, work progressed throughout the COVID-19 lockdown, and safe working methods were developed to allow ongoing development. The scheme incorporates 3 new ponds, traditional orchard creation, native woodland planting, species-rich hedgerows, wildflower meadows and wildlife boxes. GCN monitoring commenced in 2021, confirming that the meta-population has increased from small to medium.

Focus educates its clients on good practice to deliver sustainable development. It has delivered free face-to-face 'Ecology Briefings' since 2018, which have received excellent feedback

Staff take paid days off for voluntary activities, with recent examples including local public bird ringing demonstrations as well as internationally-important schemes like 'Operation Baltic'.

Focus is committed to reducing its carbon footprint and has implemented several practical initiatives to achieve this including:

- Development of a bespoke travel calculation tool. This identifies the most appropriate surveyors for a job based on minimising travel and mileage costs. Local surveyors are identified to assist with surveys. The tool also facilitates ride-sharing and minimising the carbon footprint for a given job.
- Significant steps to reduce its carbon footprint by:
  - Replacing 66 inefficient bulb-panels with 35 energy-efficient LED lights.
  - Fitting additional switches to allow greater control of lighting.
  - Nominating a 'Carbon Champion', who actively enforces the policy by reminding staff to turn off unused lights and energy-draining devices.
  - Improving the thermal efficiency of its office by fitting radiator-reflector foils, reflecting heat and thus reducing the energy required to heat the office.
- Focus only require staff to attend the office two days per week, significantly reducing unnecessary travel to the office.
- Encouraging virtual meetings with clients to reduce the collective carbon footprint.
- The company's pool-van was selected for its excellent fuel efficiency to minimise the company's carbon footprint during surveys.
- Focus utilises its social media platforms to inform and encourage its followers to reduce their carbon footprint.
- Focus donates to causes that combat fight climate change and offset carbon emissions.

A recent CIEEM Registered Practices Audit confirmed a 'GREEN' grading across all areas, which confirms the strong commitment that Focus makes to the welfare and personal development of staff. Training combines in-house and external events to deliver the >30hrs of CPD required by CIEEM and helps staff reach their professional goals.

Focus have recently committed to the long-term development of senior staff through 'Impact Leadership Coaching'.

Key outcomes have included increased resilience, heightened self-awareness and emotional intelligence, improved problem-solving and solution-focus and momentum. The coaching delivers sustainable long-term results through the creation of a bespoke, effective leadership blueprint. Three members of the team have now successfully completed this professional development programme.

Commended

## Lepus Consulting

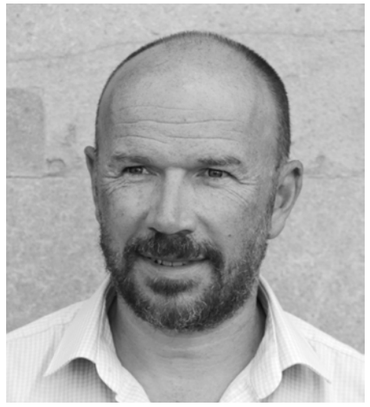
Lepus Consulting is an established environmental assessment practice whose team of professional environmental planners, ecologists and landscape architects work with clients to develop high quality assessments and produce targeted guidance.

Its service provision focuses on landscape ecology, planning and urban sustainability. Specific products include habitats regulations assessment (HRA), strategic environmental assessment (SEA), green infrastructure planning, landscape ecology, landscape assessment and sustainability appraisal. Staff also regularly appear as expert witnesses.

Lepus works closely with local authorities and neighbourhood planning groups across the country supporting all aspects of the SEA process, including screening, scoping, reasonable alternatives reports, post adoption statements and at Examination in Public. Their experience in SEA means that they are able to react to key local issues and identify bespoke solutions to promote sustainability.

Lepus Consulting reinvests in local communities and shares its learnings by broadening the understanding of the importance of environmental planning and environmental assessment. Lepus does this through providing pro bono lectures on Green Infrastructure to those studying Landscape Architecture at the University of Gloucestershire. Besides Lepus' partnership with Universities, it also hosts an internship programme which allows it to meet a wide range of students to share its expertise and encourages them to pursue a career within the field.

Lepus Consulting considers the potential environmental impact of completing a project at its inception to allow for the mitigation of risks. Lepus requires all staff members to adhere to a code of practice which asks staff to incorporate sustainability to the highest standards in their business and professional activities.



Winner

## Wildwood Ecology Limited

Wildwood Ecology provides ecological services to a diverse portfolio of clients, but its expertise lies with providing support to architects, planning consultants, heritage organisations and local authorities. Although the focus of its work is planning and development, this diversity ensures that we are not dependent on any one sector, such as new residential developments. In Autumn of 2022 they introduced arboricultural services that both complement and augments their ecological work.

Wildwood believes that all businesses can and should be a force for good, so it became a proud member of the B Corp community in July 2019 and successfully re-certified in 2022. Improvements made over the past two years – in areas such as investment in technology, training and development and recruitment – have enabled Wildwood to grow in alignment with its vision and values.

Key staff have both established and supported bat groups across Wales and England. They have Richard Dodd (Managing Director) is a mentor under CIEEM's scheme and has supported ten mentees that include undergraduates and career changing individuals seeking a career as an ecologist and early career ecologists looking to advance their careers.

Wildwood Ecology launched the Ecology Academy in 2020, which provides on-line and hybrid training courses for aspiring and practising ecologists. The platform provides a growing resource of learning for individuals, and it offers bespoke training for ecological consultancies and universities, including Nottingham Trent University (NTU).

Wildwood Ecology has set ambitious emissions targets and commits to reduce its baseline absolute scope 1 and scope 2 greenhouse gas emissions 50% by 2025 and 100% by 2030. To help reduce both Scope 1 & 2 emissions, in 2022 Wildwood Ecology moved its primary office to a more efficient building with no gas emissions: heating and hot water is now delivered via a water-source heat pump, and electricity is provided by a green energy supplier. An order for an electric vehicle was also made to join the existing company owned vehicles and they will replace end-of-life vehicles with greener vehicles.

The company also sought to address the more challenging Scope 3 emissions. They have developed an internal policy and review work that is greater than 65 miles from their office location, making use of local subcontractor labour or passing over the request to a local provider. Wildwood Ecology have also developed a procurement policy for goods and services purchased, preferring to use local suppliers or those with a sustainability policy.

Based on their full emissions for 2021 (Scopes 1-3) the company off-set 20 tonnes of $CO_2e$ in 2022 and are currently carbon net-negative.

In 2022 the Managing Director became a STEM Ambassador and continued as guest lecturer at the Royal Agricultural University (Cirencester), delivering their Ecological Consultancy module to final year students. He uses these opportunities to actively promote the profession, and the role of CIEEM, to aspiring ecologists, as well as educate individuals how ecologists and environmental managers can make a positive impact in resolving global issues, including biodiversity loss and climate change.

Highly Commended

## Stantec

Stantec's award-winning ecology team are recognised for their trusted ecological consultancy advice, providing effective and innovative solutions for high-quality practical outcomes to benefit biodiversity, business and local communities. Working collaboratively with colleagues, clients and stakeholders throughout the planning lifecycle, the team identifies improvement opportunities to enhance the natural world.

Clients, including the MOD, Homes England, IDB, Southern Water, LPAs, and housing developers, repeatedly trust Stantec to provide multi-faceted pre-planning support regarding their landholdings.

Their proportionate ecological assessment and proactive advice influence masterplan designs to deliver genuine biodiversity enhancement and access to nature. The ecology team supports the design of high-quality masterplan solutions which enable the delivery of wider green-blue infrastructure benefits and increase people's access to natural spaces, with the associated well-being and social gains.

Nutrient neutrality is now a key consideration for many developments. Stantec recently led the design of the first consented Integrated Constructed Wetland (ICW) in Somerset that will mitigate the phosphorous impact of a circa. 700 home development in Staplegrove.

The team's success depends on the creativity, integrity and collaboration of our people. We invest approximately 2% of annual turnover into learning and development. A series of Graduate development events working with Unify Partnership to launch our new graduate programme to 385 graduates, including those from the ecology team. 'TalentHub', an online learning and development platform, tracks an individual's performance targets, career, and learning opportunities.

Fortnightly, the ecology team hold a lunch and learn session to share knowledge with their own and other technical teams. Biannually, we host "All Plays", where the UK ecology team come together to share knowledge, best practice, routes to chartership and the benefits of professional memberships.

Commended

## Woodrow part of the APEM Group

Woodrow, part of the APEM Group, offers a full suite of ecological services from field surveys through to impact assessments. Terrestrial ecologists have undertaken botanical and habitat surveys for numerous development proposals including use of both Phase 1 (Northern Ireland) and Fossitt (Republic of Ireland) survey approaches. The team has supported the advancement of 60+ wind farm and solar farm projects across Ireland, building relations with stakeholders within Local Authorities, NPWS, Inland Fisheries Ireland, Waterways Ireland, Coillte, Forest Service, and many other statutory and non-statutory organisations. These advances have contributed to recent headlines that nearly 50% of Ireland's energy is from wind power alone.

Woodrow has a strong history of outreach projects with communities to help build their social capital in biodiversity. In 2021, Woodrow won a tender to Sligo LEADER company for the provision of community-led biodiversity training for 10 Sligo communities. Adapted due to Covid-19, Woodrow presented six online lectures with resources for the community to use on an ongoing basis and during Biodiversity Week 2022 the team had numerous face to face activities including bat, nature and pollinator walks for community engagement.

Commended

## Clarkson and Woods Ltd

Clarkson & Woods continue to aspire to be a leading ecological consultancy. Their work spans a very broad array of projects, in particular planning applications for housing and ground mounted solar including four Nationally Significant Infrastructure Projects over the last 24 months. The team is passionate about improving best practice as evidenced by their involvement with Solar Energy UK in the development and the publication of "Natural Capital Best Practice Guidance" which describes best practice guidelines on the development, management and monitoring of solar farms across the UK.

The work extends beyond development work. The team obtained great crested newt conservation licences in collaboration with FWAG SW to allow DEFRA-funded climate change resilience and floodplain restoration projects to occur in Somerset and Gloucestershire. These projects covered 100ha with large scale habitat and species successes already being seen.

Significant effort is put into providing a topical, engaging and stimulating programme of training sessions each year with a minimum of 30 hours training per staff member. In addition to the structured training programme, staff have the paid equivalent of 2 'reading' days per year.

By adopting the 4-day week, full-time staff have an extra day in which to pursue leisure activities. Many staff have chosen to use this day to support their professional development through voluntary work such as bird ringing schemes and furthering species and habitat ID skills.

Winner

## Tetra Tech

Globally Tetra Tech undertakes 70,000+ projects annually in more than 100 countries, delivering sustainable developments using a *Leading with Science*® approach. The UK Ecology team has contributed extensively to the company's global environmental ambitions through numerous impactful projects.

These include supporting sustainable residential developments such as Sandleford Park which will deliver 2000 houses and create a 70ha Country Park (64% of total site) and Llanilid, South Wales providing 2100 homes including the management of over 50ha of land for biodiversity.

Tetra Tech are leading the industry in nutrient neutrality with projects including Stoneham, Atlee Acre and Meon Springs, which together have provided 3000 kg of nutrient mitigation. This has facilitated c.2500-4000 new homes whilst benefiting sensitive ecological sites. The team are also supporting clients in the minerals and aggregates industry from planning through to restoration, providing significant biodiversity enhancements (e.g. at Needingworth Quarry), yet meeting the quarries economic and business needs.

One particularly challenging project was designing building upgrades for over 5000 military properties, undertaking the necessary surveys and including enhancements for bats allowing residents to live alongside nature whilst improving roost suitability;

The team share their knowledge with clients, stakeholders and more wisely with the profession.

In 2022, their ecologists had two articles published in CIEEM's In Practice and 15 papers and articles in other magazines including BSBI News and Curtis's Botanical Magazine. Presentations at external events included the IUCN International Otter Congress and presentations to clients on best practice, including Biodiversity Net Gain presentations to National Grid, Countryside Properties and Engie.

Tetra Tech ecologists regularly engage with the next generation by speaking at schools and colleagues have attended 15 events in 2022, including presentations and careers fairs, at local universities. Staff collaborate on research projects that help shape future decision making by statutory agencies such as Vascular Plant Dossiers and *Stachys Alpina* Research Report for NRW and *Hieracium* and *Sorbus* surveys for Killarney National Park. Staff have also supported International research projects including trapping bats in Zakynthos, Greece to determine the bat assemblage.

Tetra Tech are committed to being Climate Positive and Carbon Negative and the 2022 Sustainability Report reaffirms their commitment to creating more resilient and sustainable communities. The Report includes new baseline sustainability metrics for 2021, interim targets for 2025, and goals for 2030. Tetra Tech are reporting on Scope 1, 2 and 3 CO2 emissions. Further measures to be implemented include the decarbonisation of the electricity supply, increased electrification of the company vehicle fleet and requiring the supply chain to be Net zero companies.

Investing in the professional development of staff is important to the organisation and Tetra Tech supports and encourages professional development by a range of initiatives including bi-annual appraisals and regular discussions to discuss professional development with information stored on a database so that the Head of Ecology can review all training needs and run appropriate training. There are multiple career pathway options for ecologists including specialist technical and generalist routes. Each pathway includes clear criteria for each grade and relates back to the CIEEM competencies.

The annual in-person all Ecology team meeting is a useful avenue to share experience and provide targeted training whilst specialist ecological technical groups cover 14 subject areas which share new guidance, policies and case law with the wider team. Lunch and Learn sessions have covered more than 40 topics including Nutrient Neutrality and Biodiversity Net Gain and have included guest speakers such as Nature Metrics and feedback from external courses and conferences.

Highly Commended

## AECOM

Whatever the scale and demands of a project, AECOM aims to consistently deliver high-quality, practical outcomes that benefit business and the economy as well as nature / and people's connection with nature. The UK & Ireland Ecology team includes national and global leaders in their fields who provide clients with specialist advice resulting in high-quality outcomes in areas such as habitat creation, impact assessment, site restoration, enhancement and management, including biodiversity net gain (BNG).

The terrestrial, marine, and aquatic ecology teams cover the full life cycle of survey, planning, assessment, implementation, and feedback. Capabilities range from small single-species surveys to bespoke services for project scoping, through to full suite of ecology surveys, mitigation design, supervision and delivery of mitigation, enhancement and construction plans, and long-term planning.

Examples of AECOM projects in 2022 that demonstrate delivery of high-quality practical outcomes include:

- Our Natural Capital Laboratory (NCL)
- Appropriate Assessment Screening and Nature Impact Statement in support of the National Cycle Network Plan for Transport Infrastructure Ireland
- Mersey Gateway
- Network Rail Kent Pilot
- Invasive Non-Native Species Surveys for Translink
- BioInstinct

AECOM is committed to supporting the professional development of staff, including through embedded Equity, Diversity and Inclusion (EDI) initiatives, consultancy skills and mandatory H&S annual training. AECOM offers a generous training budget and in addition to external training courses, the team run annual training for graduates, including great crested newt training with Froglife, and a two-day plant identification course as well as a suite of training courses delivered electronically and accessible to all on e.g., protected species; legislation; tree identification; and botanical training, to keep the team's skills current. A virtual internal UK&I Ecology Conference included contributions from colleagues across the globe.

Highly Commended

## Arcadis Consulting (UK) Ltd

Arcadis aims to improve quality of life through the quality of the space it creates for clients' and for nature. The team designs and assesses it's projects using natural capital and ecosystem services principles while demonstrating that biodiversity underpins functionality. Messaging to clients that best for biodiversity is best for business has resulted in Arcadis ecologists being centred within the advisory and design space allowing them to maximise their positive impact.

Examples of Arcadis projects include

- Strategic and dedicated nature-based solutions (NbS) delivering nutrient neutrality and BNG/ENG including the design and creation of over 8 wetlands for three counties in Wales, one in Kent and one in Suffolk, protecting SACs and SPAs from development and reducing wider environmental phosphate pressures.
- Lower Thames Crossing (with partners Jacobs) submitting the DCO with over 10% BNG and NbS carbon reduction plus a £1.5M Community Tree Planting programme.
- Delivering innovative detailed designs on HS2, including no net loss GIS dashboard, protected species mitigation, green bridges, Water Framework Directive objectives, nearly 100 Ecological Management Plans all over a route section spanning around 80km delivering a lasting legacy for nature.

The Arcadis Ecology team is passionate about knowledge sharing to advance delivery of a healthy environment. In 2022 team members delivered and contributed to 14 presentations and participated in 11 industry working groups.

The company's grow, perform, succeed process drives training and monitors advancement. Personal development plans support career advancement, with transparent promotions processes to ensure equal opportunities. Training and mentoring provide a strong platform for development which is monitored by a competency matrix.

Internal training for ecologists in 2022 includes an extensive graduate training


programme, an ecology away day, over 30 webinars by internal experts covering topics including EIA, climate resilience, biodiversity monitoring and contaminated land and the Arcadis Community of Practice for Biodiversity and Natural Capital delivered over 20 knowledge shares. External training is also funded.

Highly Commended

## Atkins Ltd

The Atkins team ranges from graduates just starting their careers to seasoned professionals and industry leaders. Utilising this wide breadth of expertise and high standards of professional conduct, the team consistently delivers high-quality practical outcomes across all their work.

The Moors at Arne project showcases their ability to deliver large scale projects that benefit the local economy while keeping nature at the core. This project tackles 'coastal squeeze' by allowing tides further inland to protect people and property in Poole Harbour from rising sea levels. As a result, compensatory intertidal habitat was required within an area of high ecological importance that contains many priority and protected species. The Atkins team worked closely with a group of partners, local wildlife groups, and engaged with the local community throughout the scheme.

Another exemplar project involved working with the Spains Hall Estate to enhance ecosystem services delivery though land management changes. The Estate has become a template for rewilding and has demonstrated the diversification of incomes for landowners possible when nature becomes the focus.

The land management changes on the Estate, habitat creation and reintroduction of beavers have boosted income from tourism through wildlife photography courses, holiday cottages and camping.

Atkins continuously focusses on developing innovative techniques to ensure high-quality outcomes. In 2022 they developed in-house artificial intelligence software to analyse trail camera footage, collaborated with NatureMetrics on various Environmental DNA innovations, utilised drones for protected species surveys, and used conservation detection dogs on over 30 occasions.

From early careers to experts, the Atkins philosophy is to support all staff to achieve their career ambitions. Colleagues have access to targeted training, providing the skills necessary to progress their careers in the areas that interest them. Over 300 environment staff have been trained in using the new innovative project management system, Pangea and ecologists are core members of the Pangea team. FISC training has been rolled out internally with 29 colleagues assessed during 2022, with the majority scoring FISC level 4 or above.

Highly Commended

## Jacobs UK Ltd

The Jacobs Ecology team works with clients and colleagues to deliver the best outcomes for nature, people and business. The depth and breadth of skills and experience in the Ecology and related teams, along with the emphasis on agile careers, makes Jacobs able to respond rapidly to the changing needs of its clients.

As a company Jacobs is undergoing a digital evolution that will see projects become "Digital by Default" and increase the company's ability to share learning and global connectivity. The Ecology team is embracing innovation and the need to work 'smarter' with data so that it can inform multiple assessments (e.g. natural capital and carbon, as well as biodiversity) and all staff are enthusiastically seizing the challenges that come with these new digital ways of working.

Exemplar projects include the largest current UK project, Lower Thames Crossing, where Jacobs ecologists are working with National Highways and stakeholders to leave a positive legacy for biodiversity. Other examples of high-profile infrastructure projects in the UK and Ireland include A9 Dualling in Scotland and Irish road schemes such as the N2 and N21. The team is also supporting projects further afield, including airports in the Middle East, Gibraltar coastal development and water runways in the Red Sea.

Within the Ecology team, survey efforts represent the biggest contributor to organisational carbon and the team are challenging themselves to reduce its carbon footprint. This is primarily through reducing business travel by embedding innovation into the survey programmes. This includes increasing the use of remote sensing, drone surveys, long-term data loggers, genomics (eDNA) and the automation of repetitive tasks. Where surveys cannot be delivered remotely the team is increasingly looking at using electric vehicles to travel to site, maximising car share and remain committed to undertaking as much of the journey as possible by public transport. Combined with a move from 'paper to digital' this has reduced the carbon footprint, which is contributing to the Jacobs successes being recognised globally. The team also embeds its approach to carbon reduction into all of the projects and work with clients to reduce their impacts.

Jacobs' 176-strong Ecology team is working together with its clients and colleagues to achieve the ..... missing text.....

Highly Commended

## Mott MacDonald Ltd

The Mott MacDoald purpose is to improve society by considering social outcomes in all they do, relentlessly focusing on excellence and digital innovation, transforming clients' businesses, local communities and employee opportunities.

In 2022 the company formed its Nature Services team to develop and combine its expertise in this area. This has led to a strengthening of the goal to become Nature Positive, implementing new technical skills, innovation and publicising those skills to internal teams and clients.

Examples of major projects include:

- The Black Rock rejuvenation project aimed to improve the public realm including a sea wall realignment, provide safer non-vehicular travel routes and increase beach accessibility, requiring a board walk. Mott MacDonald ecologists designed an innovative vegetated shingle translocation to facilitate the improvements, translocating 1,000 shingle plants and achieving a 15% biodiversity net gain.
- Winning a Construction Excellence digital innovation award for the Leeds Flood Alleviation Scheme through developing a Woodland Carbon Code tool enabling the clients, the Environment Agency and Leeds City Council, to engage with landowners. The tool incentivised them to create woodland, and calculated the carbon credit funding derived from woodland carbon sequestration.
- For the Witches Oak floating wetland project the team designed and helped install 30 new floating wetlands on gravel bed lakes as a preliminary water treatment solution, improving the resilience of drinking water and providing a valuable biodiversity resource in light of the climate and ecological emergency.

Engaging externally is fundamental to the purpose and progression of the team and people are encouraged to engage with as many external opportunities as possible. Team members have authored articles published in CIEEM's In Practice magazine, provided external training to clients and universities, and presented at external events e.g. to the Environment Agency, Supply Chain Sustainability School and Writtle College Landscape Architecture MA students. The team has also presented ecological topics at the CIEEM, MAST, Highways UK, British Ecological Society, Ports conference on Greening the Grey, and the Environmental Analyst Conferences.

# Award Sponsors

## MFL INSURANCE GROUP — VIP SPONSOR

CIEEM Insurance Services is administered by MFL Insurance Group.

We have worked alongside CIEEM for many years and have had the privilege of being the preferred provider of insurance solutions to CIEEM Members since 1997. During this time, we created a suite of products to cater to the demands and needs of Members.

The availability of these bespoke solutions enables CIEEM members to benefit from a wide scope of insurance protection that may not be readily available to them on an individual basis.

We already represent many CIEEM members with their insurance, and together with our commitment to professionalism, meant that sponsorship of this event was an easy choice.

Events like the Annual Awards are an important part of our collective responsibility to acknowledge the great achievements of Members, share knowledge, and network with our peers.

We are now looking forward to being part of this successful event.

## TETRA TECH — SILVER SPONSOR

Tetra Tech is a leading provider of high-end consulting and engineering projects with 27,000 associates, working across the full project life cycle worldwide Leading with Science® to solve our clients' most complex problems.

Our operations in the UK and Europe include more than 5,000 employees working alongside local, national and international clients to develop their strategies and provide the services they need to take plans forward.

Our ecology team supports national projects through feasibility, planning, and beyond from habitat survey work to protected species licensing. We also have specialist expertise in relation to Biodiversity Net Gain, Nutrient Neutrality and Habitats Regulations Assessment. At Tetra Tech we focus on positively impacting the lives of those around us by protecting our natural environment by developing and designing nature positive and sustainable solutions to help address the current biodiversity and climate crisis.

## ARCADIS — VIP SPONSOR

One of the world's leading companies, delivering sustainable design, engineering and consultancy solutions for natural and built assets. We have more than 28,000 people in over 70 countries, dedicated to improving quality of life. We understand the dynamic needs of our people, clients, and collaborators and we appreciate the enormous contribution that CIEEM and their members have made by creating, inspiring and sharing knowledge for and within the ecological community.

Diversity and flexibility drive innovation which is vital to thrive in such a dynamic political, legislative, physical and social environment and work towards achieving our sustainability goals. All Arcadians embrace diversity and focus on innovative and agile approaches for design, implementation and management. We draw on the support of our professional communities to deliver our vision of improving quality of life.

CIEEM is a community that drives change and innovation within our profession for the benefits of society at large. A community that continues to collaborate and acknowledges that it needs to reach a wider and more diverse audience to accelerate the vision of our profession. We are very proud to be sponsoring the innovation, knowledge sharing and stakeholder engagement awards. We are excited by the potential for inspiration, action and legacy that the ecology profession can deliver.

## Stantec — BRONZE SPONSOR

Growing public awareness of the benefits of the natural world, along with current pressures facing biodiversity, increasingly puts ecological considerations at the forefront of our client's projects. Stantec's ecology team provides trusted advice to clients pursuing and delivering infrastructure and community development projects, and to those clients involved in asset management. We work collaboratively with colleagues, clients and stakeholders to provide effective and innovative advice that aims for high quality outcomes benefitting biodiversity and business, whilst delivering with community in mind.

Stantec are delighted to support the post-graduate student award project which has the potential to shape positive biodiversity outcomes in the future, as well as providing recognition to the worthy winner.

## WILDCARE Nationwide Ecology Supplies — SILVER SPONSOR

We are delighted to be supporting the CIEEM 2023 Awards in not only one, but two inspirational categories. This prestigious event embodies our values and mission here at Wildcare – to support ecologists and wildlife enthusiasts so they in turn can support our environment and natural ecosystems. We're always growing and evolving, and support of these landmark events allows us to continue to work within the community of industry leaders and connects us with ecologists.

Our chosen sponsored categories were selected carefully. We chose the Member of the Year Award as we feel this strongly ties with our value to support the community. This award is dedicated to those who selflessly go the extra mile, often unnoticed. We are extremely proud to celebrate this valuable partnership.

The Promising Professional Award is all about encouraging and supporting junior ecologists who are taking the first steps in their ecology career. At Wildcare, our products and services support students and education too, not just wildlife enthusiasts and established professionals. Therefore, this award is something we strongly endorse and encourage.

It is a privilege for us to have a longstanding partnership with CIEEM and support the wonderful work they do in inspiring youth, supporting professionals and raising awareness of the natural world and challenges it faces. Its very mission is selfless – to promote the highest standards and practices for the benefit of nature and society. Therefore, we are honoured to support the charity in these awards and wish every success to the nominees and participants.

## RSK biocensus — SILVER SPONSOR

RSK Biocensus is a market leading ecological consultancy comprising a team of over 150 highly qualified in-house staff, supported by a network of more than 700 quality assured consultant ecologists. We therefore have the scale to tackle the largest of jobs and the range of expertise to deliver on any ecology project.

At RSK Biocensus we work with our clients to make their projects great for people and great for biodiveristy. Our experts will not only identify ecological impacts and risks but will always identify the opportunities to enhance developments for the benefit of nature.

## temple — SILVER SPONSOR

Ecology is exciting, dynamic and challenging and never more so than the past year. The unpredictability of climate change, combined with political, legal, economic and social drivers for change mean we must think beyond our boundaries in terms of strategic, targeted and functionally connected opportunities for mitigation. To succeed, we need to step up, take responsibility, collaborate and innovate, whilst avoiding net gains in biodiversity being seen merely as a target score to be achieved peripherally. At Temple, our enthusiastic, forward-thinking team provides strategic advice specialising in environment, planning and sustainability. We help our clients make the most of opportunities and support them in achieving their long-term environmental aims. In addition, The Southwood Foundation, a registered charity set up by Temple founder Mark Southwood, aims to deliver sustainable systems in the built environment. This includes continuing our work with the Vincent Wildlife Trust and Sussex Bat Group to support the reintroduction of greater horseshoe bats in Sussex.

## ecus — part of CuraTerrae

Ecus provides future-facing solutions that protect the delicate balance between the environment and development. We offer our environmental expertise across the UK and provide services to the construction and building, transport, energy, utilities, and government sectors, using our 30 years of experience to support them in working with the environment as sustainably and safely as possible.

Our multi-disciplinary range of consultancy services include air quality, arboriculture, carbon advice, ecology, environmental services, habitats, heritage & archaeology, landscape, and water.

We are part of Cura Terrae – a leading UK environmental group providing consultancy, services and solutions to help take care of the Earth. We're proud to support CIEEM as we enter an exciting new chapter of growth in the environmental sector and our ecologists work to protect the environment and be guided by the professional standards of this valuable group of peers.

## WSP — BRONZE SPONSOR

WSP is a leading engineering and environmental professional services consulting firm which supports significant projects in both the built and natural environments. WSP is working to transform what it means to be an Ecologist. We are transforming the skill set we build through in-depth ecological training for all our staff. We are transforming our work life balance, putting health, safety and wellbeing at the heart of what we do and how we work. We are transforming how we gather and process data, whether remotely or in the field, using eDNA, AI on camera trap data, bio-acoustics or digital data capture in the field. We are transforming what we do, expanding the work of the ecologist to include corporate biodiversity assessments, natural capital, arboriculture and forestry, aquatic and marine ecology and more. We are transforming who we are, diversifying who becomes an ecologist through apprentice schemes and working with colleges and universities. We are working globally and acting locally. We are Future Ready. We are WSP.

WSP is delighted to sponsor the CIEEM NGO impact award. Wherever we work, we know that local context and knowledge is vital, and the UK is very lucky to have so many excellent conservation charities. As well as expertise, NGOs provide a fantastic link between nature and people, helping everyone access and enjoy nature. Working with these NGOs is a deeply rewarding experience, bringing together our different perspectives and areas of expertise to work for the restoration of our natural world. This builds on our shared goals of ecological restoration, supporting people and communities and fully valuing biodiversity. All the applicants show this dedication for nature and people, which we are proud to support.

## greenhouse — BRONZE SPONSOR

Design | Print | Signage | Display

Greenhouse Graphics is a multi-award winning graphics and print company, Greenhouse is recognised as one of the UK's leading sustainable print centres and partners with some of the UK's leading environmental organisations for a wide range of graphic communications projects including design, print, signage and exhibition graphics. Greenhouse was established in 1993 with the aim to provide a greener choice in print. Now in its 30th year, Greenhouse services clients from multi-national organisations to sole traders and from a global to a local reach. Our pioneering carbon calculator has, over the years, provided clients with an informed choice for the lowest impact print production and a calculation of their carbon used. In addition, we offer carbon balancing, via the World Land Trust, through the protection of tropical rainforests under the imminent threat of deforestation or degradation. From concept to complete job delivery, examples of our work include brand design, development, management, and adherence; design and production of brochures, annual reports, books, magazines, interpretation boards, exhibition design, internal and external signage. We'd be delighted to hear from you to discuss your project. Please call Emma on 01256 880770, or visit www.greenhousegraphics.co.uk.

## Countryside Jobs Service

Countryside Jobs Service is an ethical business working in harmony with environmental professionals to conserve the British countryside and natural world. Motivated by conservation success, not profits. Although primarily known for our job service, CJS is much more than a recruitment site. We've been publishing countryside, conservation and wildlife sector information since 1994. Ecology and Environmental Management are integral parts of caring for our natural world and to ensure this continues long into the future we are delighted to sponsor the University Programme/Department of the Year award, helping promote excellence in the teaching of this complex subject to give the next generation of rangers, ecologists, wildlife warriors, landscape managers and environmental educators a good understanding of all things ecological and to make the best start on their careers.

# Judges

We are very grateful to the following members who volunteered their time to judge the awards:

| Postgraduate Student Project Award |
|---|
| Dr. Eirene Williams CEnv FCIEEM (rtd) |
| Sally Cowley CEnv MCIEEM |
| John Rose MCIEEM (rtd) |
| Nick Coppin MCIEEM (rtd) |

| Climate and Nature Action 2030 |
|---|
| Chiara Magliozzi MCIEEM |
| Kat Stanhope CEnv FCIEEM |
| Tom Butterworth MCIEEM |
| Robin Buxton FCIEEM (rtd) |

| Best Practice |
|---|
| Dr David Parker CEcol CEnv FCIEEM |
| Dr Sue Lawley CEnv MCIEEM |
| Andrew May FCIEEM |
| Kathryn Edwards CEcol MCIEEM |
| Gabrielle Graham CEcol MCIEEM |

| Member of the Year |
|---|
| Sarah Price MCIEEM |
| Aidan Marsh CEcol CEnv MCIEEM |
| Bruce Shortland MCIEEM |
| Sarah Jane Chimwandira CEnv MCIEEM |
| Martyn Kelly CEcol FCIEEM |

| Promising Professional |
|---|
| Ben Aston CEnv MCIEEM |
| Liz Anderson CEnv MCIEEM |
| Nina Birkby MCIEEM |
| Liz Allchin CEnv MCIEEM |
| Chris Smilie MCIEEM |
| Steve Pullan CEcol CEnv FCIEEM |
| David Tyldesley FCIEEM |
| Dorian Latham CEnv FCIEEM |
| Mark Webb CEcol CEnv FCIEEM |

| NGO Impact |
|---|
| Maggie Hill MCIEEM (rtd) |
| Tanith Cook CEcol MCIEEM |
| Joanne Rathbone CEnv MCIEEM |
| Simon Boulter CEnv FCIEEM |
| Lisa Kerslake CEcol FCIEEM |

| Higher Education Programme of the Year |
|---|
| Dr Debbie Bartlett FCIEEM |
| Paul Rooney CEnv MCIEEM |
| Patrick White MCIEEM |
| Jim Littlemore CEcol MCIEEM |

| Consultancy of the Year |
|---|
| Daniel Gotts CEnv MCIEEM |
| Katherine Dale CEcol FCIEEM |
| Rob Marrs CEcol FCIEEM |
| Sarah Cane Ritchie CEnv MCIEEM |
| James Adler MCIEEM |

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