



**UKTEPoP 2024 Festival Workshop: Building Strategies on Diversity,  
Equity, and Inclusion into Citizen Science Monitoring Schemes**

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# 1 Summary/Introduction

The UK Terrestrial Evidence Partnership of Partnerships (UKTEPoP) held a workshop to discuss Diversity, Equity, and Inclusion (DEI) in our citizen science monitoring schemes, specifically focusing on developing strategies for improving DEI within our schemes and organisations. During the workshop, participants listened to presentations about the impetus for strategy building; building trust in underrepresented communities; a recently developed mapping tool for understanding engagement and impact; and working with young people and creating strategies for organisations. Participants also discussed the goals of building DEI strategies, potential easy wins, and the accessibility of current schemes to new citizen scientists.

The workshop coincided with the launch of the [UKTEPoP DEI Strategy](#), on the 19<sup>th</sup> of November 2024. This strategy outlines broad DEI objectives for UKTEPoP Monitoring Schemes: to break down barriers to inclusion, and engage a wider diversity of people in biodiversity monitoring. It also outlines a framework within which schemes can work to build scheme-specific ambitions and strategic actions for DEI.

A [recording of this event](#) is available on the JNCC TEPoP YouTube channel.

# 2 Presentations

UKTEPoP were thrilled to host four speakers at the workshop, all of whom brought a unique perspective and vision to our discussion.

Gemma Harper, CEO of the Joint Nature Conservation Committee (JNCC), commenced the workshop with a talk about the impetus behind and importance of DEI in citizen science and biodiversity monitoring. Gemma defined environmental justice as a movement that allows historically marginalised communities to engage more in learning and making decisions about previously inaccessible natural spaces. She discussed the importance of thinking about environmental justice and intersectionality in monitoring work, and the ways in which these thoughts are at the forefront of the UKTEPoP DEI Strategy and the work that we will engage in going forward.

We then heard from Kate Merry, Head of Engagement at Butterfly Conservation (BC), who spoke about their recently developed mapping tool for measuring engagement activities against location and population demographics. This will enable better understanding of how and where to target engagement activities to reach potential new scheme participants from underrepresented demographics. Secondly, this tool will allow BC to assess in future whether these activities are having an impact on who is participating in monitoring. BC have an ambition to make the tool open access for other organisations across UKTEPoP.

Philip Briggs, Head of Monitoring at the Bat Conservation Trust (BCT) spoke about building trust in underrepresented communities through active outreach and codesign. A key take-home message was to engage with and understand the

community's current perspective, and work within their comfort levels to build in new experiences gradually. Philip highlighted the importance of different methods of outreach, working to ensure people have multiple routes of entry to citizen science. Kate and Philip's talks together emphasise the necessity of working on DEI initiatives at multiple levels: it is important to understand current overall volunteer demographics in order to focus engagement work to bring in new citizen scientists, whilst simultaneously working with existing volunteer communities to encourage ongoing active participation.

Imani Clough-Brown, Founder and Director of the Imani Academy, then spoke about building strategies for engaging young people. Imani's talk stressed the need to focus on co-development and co-design through DEI work, emphasising the need to focus on citizenship in the context of citizen science.

All together, these presentations highlight themes of community understanding, engagement, and active outreach, all of which are vital for increasing diversity amongst UKTEPoP's citizen science volunteers.

### **3 Discussions**

Workshop participants then discussed the following questions:

- What is the ultimate goal for building a DEI strategy into your scheme/organisation?
- Are you already incorporating DEI into your work? If not, what are some easy wins?
- Do you think your current citizen science scheme/programme/organisation is friendly and/or accessible to beginners/new citizen scientists?

The following are the key themes that emerged from the discussions in the workshop.

#### **3.1 Barriers to Success**

Participants identified a few challenges throughout discussions. Not being sure of appropriate contacts to work with in engagement activities was mentioned frequently. This is also reflected in a feeling of uncertainty as to whether those outside the current volunteer base would be interested in citizen science for biodiversity monitoring, and whether the current volunteer base would be interested in engaging with the process of increasing diversity. Another issue noted by multiple participants is the difficulty of ensuring accommodations for a wide variety of different new audiences. It may not always be possible to make all activities accessible to everyone, especially given limited time and resources, but there can be co-designed solutions to increase access in many ways. For example, access issues might include some monitoring sites not being accessible to everyone; some species may need a high level of expertise to identify; or there may be religious reasons to avoid certain days or months (e.g. Ramadan, Shabbat days, or Easter). Here, co-designed solutions might include identifying accessible monitoring sites, developing appropriate training, and working around holy days.

## 3.2 Engagement

Across all of the schemes, programmes, and organisations represented, there is a desire to increase engagement with a greater diversity of communities across the UK, in particular younger people. Participants also noted the difference between increasing engagement (i.e. increasing initial contact with a scheme) and increasing *active participation* (i.e. people taking up and annually repeating scheme surveys), and many expressed the need to turn interest into participation and increase expertise amongst new volunteers. Many of the schemes, programmes, and organisations involved in UKTEPoP have a strong online presence, and use social media, online training, and online collaboration and cross-promotion in order to increase awareness of their work. Recruiting youth advisors and working with them online has allowed schemes to consider where, when, and how to hold events for volunteers that will better suit younger audiences.

## 3.3 Co-Development and Co-Design

Across all of the discussions there were very clear themes of needing to co-design and develop strategies and activities going forward, even if these terms were not explicitly used. Participants highlighted where they have (or are planning to) hired representatives from underrepresented demographics, engaged with DEI experts, and involved volunteers in multiple stages of project development. When thinking about building strategies that work to engage more of society in monitoring, there is clearly consensus about the importance of working with communities and experts. Trialling methods of working with communities to co-develop ways to increase access and participation for the schemes could be a next step for UKTEPoP members.

## 3.4 Increasing Accessibility

Across all three of the questions participants spoke about the knowledge required to start biodiversity monitoring, and how this may present an inherent accessibility barrier. Different training formats have been developed across schemes and organisations specifically to assist beginners, including online training and 'Bird Camps'. Different methods of recording wildlife have also been used to allow volunteers with less experience to engage in schemes, including the British Trust for Ornithology (BTO) acoustic pipeline, and the NightWatch programme from BCT. Some partners have also created national annual participation events and long-running projects aimed at engaging interested non-experts and boosting experience and knowledge, including the Ripple NI Project and The Botanical Society of Britain and Ireland's New Year Plant Hunt. Another option posited by multiple schemes and partners is having 'entry level' options for recording as part of the scheme. This allows volunteers with less experience or expertise to participate, such as the National Plant Monitoring Scheme wildflower level.

Participants tended to have a focus on youth inclusion or engaging people from racially diverse backgrounds, but across all of the questions, there was interest in generally increasing the demographic diversity of people taking part in schemes. In

the future, an interesting avenue for exploration may be further exploring concepts of intersectionality and racial and environmental justice in citizen science work. Intersectional thinking in biodiversity monitoring would involve thinking about how biodiversity monitoring schemes can be used to increase access to nature for people of colour across the UK, how different marginalised identities can intersect, and addressing the imbalance that historic lack of access for marginalised groups has left us with. Understanding, and working to address, the ways in which marginalised groups have historically been kept out of both natural spaces and environmental decision making is a key part of pursuing environmental justice. Including this in our work and our interactions with communities will allow us to consider, as environmental experts, the ways in which people are impacted by a lack of access to nature – especially those with intersecting marginalised identities, e.g. Black women, disabled youth.

Through this workshop, participants outlined some clear ideas and plans, as well as noting the need for continued work on increasing DEI in citizen science biodiversity monitoring. We must now design and adhere to strategies for action, with the understanding that we will be continuously learning and improving as we move forward.

## **4 Next Steps**

Throughout the workshop, participants outlined a series of challenges which schemes face when trying to improve DEI in biodiversity monitoring, as well as outlining a number of desired goals for citizen science. By looking at these challenges and goals, we can think about next steps and long-term strategies and solutions. These can broadly be placed into the following actions, which UKTEPoP can work together to achieve:

1. **Work together to build relationships with new communities and experts:**  
Working together as UKTEPoP to engage with communities and community leaders could allow us to work more efficiently across the sector with potential new participants, exploring their needs and interests in relation to a range of schemes and taxa.
2. **Co-develop adaptations with communities and experts to ensure accessibility of biodiversity monitoring schemes for underrepresented demographics:**  
Co-developing strategies and opportunities for engagement of a wider audience is important to ensure that we are not being patronising or inaccessible in our outreach.
3. **Ensure continued support for current volunteers, whilst exploring sustainable financing to support activities to engage new volunteers:**  
Working together as UKTEPoP, we can explore potential opportunities for additional long-term funding across schemes to support both new and current volunteer bases.

4. **Involve current volunteers in engagement activities for new communities:**  
UKTEPoP schemes can work to involve current volunteers in activities to engage new volunteers, helping to create a collaborative and supportive monitoring community.
5. **Share lessons learned about effective engagement strategies across UKTEPoP:**  
Knowledge sharing about findings and experiences will help to work more efficiently with limited resources.
6. **Turn outreach and interest into long term active participation:**  
As people become involved in monitoring through a variety of activities, we can help them to build confidence and understanding of schemes and species identification, to empower them to monitor a site in the longer term. We could also explore the feasibility of communities adopting the long-term responsibility for monitoring a site, rather than individuals.
7. **Expand beginner options – building inroads to biodiversity monitoring:**  
Creating and supporting different routes to getting involved with biodiversity monitoring will be important for engaging more people, especially those that have not been previously involved. Continuing to engage new volunteers is essential to ensuring a sustainable future for monitoring schemes.
8. **Bringing environmental justice into the mainstream:**  
By modelling the principles of breaking down barriers to inclusion, engaging a diversity of people in our work, and building accessibility for all to be involved in environmental science, UKTEPoP can both be a force for change and challenge others in our field to do the same. By working across UKTEPoP in a strategic way, and showing the value of this work, we can work towards mainstreaming environmental justice.



## Appendix 1

**Table 1.** Compiled responses from participants attending workshop discussion groups.

Question	Answers
General Thoughts and Ideas	<p>Perceived issues:</p> <ul style="list-style-type: none"> <li>• Progress is slow – part of the problem is where to direct effort.</li> <li>• Part of problem is bringing all volunteers along on the process of increasing diversity. Surveys to assess volunteer demographics got both positive and negative responses (e.g. what's this got to do with birds?)</li> <li>• Safeguarding issues can arise with youth engagement work and make it hard (e.g. to communicate with U18 youth reps as a county recorder).</li> </ul> <p>Current or desired focus:</p> <ul style="list-style-type: none"> <li>• Generally, there is more funding available for youth engagement, so some organisations have focused efforts here.</li> <li>• Environmental sector is typically white dominated, how can we invite and maintain participation with marginalised groups?</li> <li>• Youth Engagement is important, we need the next generation of surveyors/naturalists to ensure we maintain the scale of our volunteer networks and taxon skills.</li> </ul> <p>Needs:</p> <ul style="list-style-type: none"> <li>• Outside experts have been involved to give training to organisational Diversity Working Group. This was then rolled out as mandatory training to all employees in the form of videos.</li> <li>• We need collectively to improve knowledge, interest and value of nature, starting at schools.</li> <li>• Some schemes need a baseline survey for demographics of volunteers, to understand who is currently participating.</li> </ul>

Question	Answers
General Thoughts and Ideas (continued)	<p>Behaviours and Goals:</p> <ul style="list-style-type: none"> <li>• Current survey requires experience so is already very selective; need to create an inclusive pathway to this experience.</li> <li>• Are we clear what the ‘business case’ is for DEI, as well as the moral case? Can we quantify the impact of lack of diversity on data quality, etc.? For instance, when/why do we actually need more data from urban areas, which tend to be more diverse?</li> <li>• What would transformative change look like (e.g. New Zealand has a foundationally different relationship with land/indigenous rights)?</li> <li>• We really need to be careful with arrogance – who are we to say what is right for other communities?</li> </ul>
What is the ultimate goal for building a DEI strategy into your scheme/organisation?	<p>Demographics:</p> <ul style="list-style-type: none"> <li>• To have a higher proportional representation of under-represented demographics.</li> <li>• To have citizen science participants who are representative of the whole population.</li> <li>• Improve DEI across volunteer base and staff.</li> <li>• More diverse and representative range of volunteer surveyors.</li> <li>• Making sure our organisations better represent society and draw from a wider range of influences.</li> </ul> <p>Engagement and volunteer journeys:</p> <ul style="list-style-type: none"> <li>• Increased engagement with biodiversity, regardless of whether it leads to people doing surveys.</li> <li>• Bring those that engage at an accessible level on the journey towards high expertise.</li> <li>• No one from any background feels excluded from participating in a recording scheme/CS project.</li> <li>• Get people interested in ecology – engagement is ok but getting people interested in topic/survey participation.</li> <li>• Making schemes still usable for science while engaging people.</li> </ul>

Question	Answers
<p>What is the ultimate goal for building a DEI strategy into your scheme/organisation? (continued)</p>	<p>Strategy building:</p> <ul style="list-style-type: none"> <li>• Commitment to educating ourselves, reducing and removing the barriers to equity and diversity, and creating an inclusive environment.</li> <li>• DEI goals to be embedded into every project.</li> <li>• Balance accessibility, inclusivity, and science.</li> <li>• Develop DEI action plans to improve our inclusion of people from different demographics and monitor progress.</li> </ul> <p>Wider scheme and increased opportunities:</p> <ul style="list-style-type: none"> <li>• Include volunteer voice in comms (e.g. providing blogs and photos provides different perspectives), so wider community can relate to volunteers.</li> <li>• Collect missing data from areas (gaps) that are often more diverse areas (e.g. cities).</li> </ul>
<p>Are you already incorporating DEI into your work? If not, what are some easy wins?</p>	<p>Problems and Barriers:</p> <ul style="list-style-type: none"> <li>• Barrier to easy win – who to contact in community?</li> <li>• Barrier – how to reach communities?</li> <li>• Limits to survey site accessibility or difficulties getting landowner permission.</li> <li>• Barrier – promoting biodiversity monitoring to new audiences.</li> <li>• Majority of people already interested are already engaged, how to engage new people?</li> <li>• Barrier – resource issues within organisations leading schemes.</li> <li>• Not sure there are easy wins except making visible areas more accessible.</li> </ul>

Question	Answers
<p>Are you already incorporating DEI into your work? If not, what are some easy wins? (continued)</p>	<p>Volunteer support:</p> <ul style="list-style-type: none"> <li>• Online training reaches more people – even better if free.</li> <li>• Provide grants for people to access ID training.</li> <li>• Welsh language translations in recording forms.</li> <li>• Tailoring the language to suit different audiences; avoiding or explaining jargon.</li> <li>• Support and encourage new citizen scientists via social media.</li> <li>• Prioritise consideration of where/when/how of events are being held to maximise participation of marginalised groups.</li> </ul> <p>Communities:</p> <ul style="list-style-type: none"> <li>• Engaging young people has been a reasonably easy win – easier to get involved.</li> <li>• Engaging with or developing localised, but impactful, projects to learn how to engage with communities.</li> <li>• Collaboration and cross-promotion of events/activities with relevant organisations to boost participation from marginalised groups.</li> </ul> <p>Communication and outreach:</p> <ul style="list-style-type: none"> <li>• Incorporate DEI aspects more directly into regional/landscape projects.</li> <li>• Design citizen science projects guided by user stories of target audiences.</li> <li>• Involve participants in multiple stages of a citizen science project (not just data collection).</li> <li>• Support and encouragement for new citizen scientists via social media.</li> <li>• Collaboration and cross-promotion of events/activities with relevant organisations to boost participation from marginalised groups.</li> </ul>

Question	Answers
<p>Are you already incorporating DEI into your work? If not, what are some easy wins? (Continued)</p>	<p>Demographics</p> <ul style="list-style-type: none"> <li>• Incorporate capturing DEI information in volunteer registration process – allows better analysis of current demographics.</li> <li>• Evaluate demographics of participants with post-activity questionnaires.</li> <li>• Survey of current volunteers for demographic accessibility info.</li> </ul>
<p>Do you think your current citizen science scheme/programme/organisation is friendly and/or accessible to beginners/new citizen scientists?</p>	<p>Increasing access:</p> <ul style="list-style-type: none"> <li>• Some partners have engaged youth advisory panels that recruit people through social media each year. Engaging young people as trustees can be particularly powerful.</li> <li>• Fill ‘gaps’ lower down in monitoring ladder with more accessible entry-level options.</li> <li>• Increased use of AI in species ID can lower barrier to participation.</li> <li>• Some organisations run different schemes that are suitable for volunteers of different abilities/experience, so there is an option for everyone.</li> <li>• NPMS currently building in survey square accessibility info.</li> <li>• Intermediate survey to encourage those with less experience.</li> </ul> <p>Communication:</p> <ul style="list-style-type: none"> <li>• Short summary media to explain what is involved – wider audience reached.</li> <li>• Short videos on social media to show what is involved.</li> </ul>

Question	Answers
<p>Do you think your current citizen science scheme/programme/organisation is friendly and/or accessible to beginners/new citizen scientists? (continued)</p>	<p>Barriers:</p> <ul style="list-style-type: none"> <li>• Inherent barrier to beginners for some taxa that require reasonably high expertise</li> <li>• ‘Culture of Expertise’ can be a barrier to involvement for people that do not feel they have the required knowledge</li> <li>• Some schemes require a relatively high level of expertise, or involve quite complex methods for beginners, so thought is being put into entry-level surveys to engage people wanting to develop their skills.</li> <li>• The Ripple NI Project – BTO pilot in NI engaging diverse communities not previously involved in biological recording. More about engagement than structured scientific recording</li> <li>• Birds for Green Spaces – planned for next year. Has two levels of recording, one which just requires recording anything that they see – allows those with low bird ID skills to participate.</li> <li>• NPMS squares have been set up in NI that are beginner friendly. Plots have already been chosen and landowner permissions already agreed, reducing burden on recorders</li> <li>• Bird Camps – run by BTO in each of the 4 countries – train around 15 young people in each year</li> <li>• Acoustic pipelines enable volunteers to run their own bat acoustic recordings through the classifier and get results straight to their computer</li> <li>• A great example of accessibility for new citizen scientists is the BSBI’s New Year Plant Hunt – attracted a record number of new participants</li> </ul>