Natural Environment Research Council

Advancing equity, diversity and inclusivity in the environmental sciences

Contents

Document Revisions

Version	Date	Revisions
1	31/08/2021	First published
1.1	06/09/2021	Use of more inclusive language
1.2	25/10/2021	Update to list of acknowledgments

Foreword

Professor Sir Duncan Wingham
NERC Executive Chair

UK environmental sciences are not as diverse as we would wish them to be. As a result, we are missing the chance for a wide range of people to contribute their talent and skills to furthering the excellence of environmental science and help us understand, predict and tackle many of society's most pressing challenges.

As the nation's leading environmental science research council, I know that we at NERC have a key role in working to change this situation and should be doing more to enable equity, diversity and inclusion (EDI). We are therefore making this one of our key priorities, acknowledging that it is not something that we can or should change working alone.

Several levers of change exist within the wider environmental science community and this was our rationale for bringing together a group of researchers and stakeholders, through a virtual roundtable series in June, to begin a targeted approach to taking action in this area. Through this series we were able to focus on listening and valuing lived experience, sharing best practice and identifying actions to improve equity, diversity and inclusion in the environmental sciences.

To address the issues highlighted in this report we will do two things. The first is to pursue a joint action plan with higher education institutions (HEIs) and other research institutions to move together on increasing diversity and inclusion in environmental sciences. We understand that we can use our position as a funding body to enable wider change. Therefore, we will strengthen our own approach whilst working with HEIs to provide them with clear mandates and frameworks to improve EDI.

The second is to be more effective working in collaboration with partner organisations and the community where collective action is required across institutional boundaries. For example, in how we attract more interest from a wider group to consider undergraduate degrees in the environmental sciences and related fields, how we value the technical skills required to support environmental science and encourage those non-conventional career backgrounds to consider joining us.

Our framework for a living EDI action plan will be shared for feedback in October this year. This will set out the steps we plan to take as NERC and in partnership with others (UK Research and Innovation, external partners and the community), with defined timescales, demonstrating our commitment to transparency and accountability

On behalf of NERC, I would like to thank all members of the community and organisations who contributed to the Collaborative Inclusivity roundtable series. We recognise and value your inputs which are shaping our approach. As a result of the roundtables, when we are developing guidance, we will acknowledge contributing sources, recognising the breadth of work already going on in the equity, diversity, and inclusion space.

Our engagement with the community and partners has been, and will continue to be, invaluable in challenging and shaping our thinking and identifying actions. In the near-term, it has resulted in NERC setting out our EDI statement of intention and, in the medium term, it will enable collective action to deliver on our shared ambition to improve equity, diversity and inclusion in the environmental sciences.

NERC statement of intention

NERC is committed to creating and sustaining a positive, fair, and inclusive environment for both our research community and our employees. In our stewardship role (where we commission new research, infrastructure, and training), embracing diversity in thinking will unlock creativity and enable innovation.

We wish to recognise, celebrate and value everyone as an individual with unique backgrounds, experiences and identities, which they can bring to environmental science. It is NERC's responsibility to equitably provide opportunities for inclusive participation, to realise the broadest spectrum of talent, skills and innovation. Supporting this broader community will enable us to respond better to the environmental challenges we face today and in the future.

We acknowledge that diversity goes beyond protected characteristics and can also include other differences, for example socio-economic background, having caring responsibilities, and unconventional career backgrounds. We also recognise that everyone's experience is unique and complex. Identities are multifaceted and overlap, so should be considered through an intersectional lens.

NERC is committed to challenging ourselves, listening to our community and stakeholders, and taking action to be fair, diverse and inclusive. We will take an evidence-based approach using robust data and indicators to ensure:

- our actions, systems and processes have a meaningful purpose
- evaluation to review outcomes and/or impact of interventions
- taking stock of our direction of travel to ensure we are making a difference.

We also recognise our wider role in the environmental sciences. In addition to our work within NERC we will work in partnership with other organisations e.g., HEIs and the environmental sciences community, to take joint action across institutional boundaries.

> **As people and organisations are at very different stages of their EDI journey, NERC has produced a glossary of terms at the end of this report, whilst appreciating that they are simplified explanations of complex issues.**

Acknowledgements

Roundtables facilitated by
Collaborative Capacities

Collaborative Capacities

1 Summary

During spring 2021, the Natural Environment Research Council (NERC) commissioned Collaborative Capacities to help us engage with the environmental science community, institutions and stakeholders in a unique way to improve equity, diversity and inclusion in the environmental sciences. At the core of this approach was the need to listen and value lived experience, share best practice, and identify actions to overcome barriers. And to signal that NERC wants to move with HEIs and key partners to take joint action to increase diversity and inclusion in our science.

This report is a summary of the Collaborative Inclusivity Roundtable Series, convened by NERC in June. The approach to this series is detailed in Annex 1. The partners and stakeholders who took part in the series can be broken down into researchers and innovators, Communities of Practice (COP), learned societies, professional bodies, organisations for under-represented groups, Higher Education Institutes (HEIs) from across the UK, and funders. What we heard and took from the discussions at the six roundtable events (topics outlined below) can be summarised in two statements:

i) NERC has a responsibility to improve diversity by leveraging its position as a national funder of research to drive change in HEIs. The evidence of lack of diverse representation in environmental science exists, therefore the challenge is to start implementing actions now. We heard that NERC has a clear role in signaling and influencing change across our system. Participants recognised that NERC needs to act in partnership and welcomed a joint action-oriented approach with other institutions and players across environmental sciences.

ii) There is a need to hear people's stories to help understand their point of view. Equally, we need to stop relying on people exposing their trauma repeatedly before action is taken. People should not need courage to speak out, they need confidence that the research and innovation environment is fair and inclusive.

The roundtable series generated many rich insights, ideas and actions. High levels of constructive input and interaction are detailed in the infographic below, with ideas and actions included throughout this report.

Research culture, in general, was discussed at each roundtable. As a result, points of focus by roundtable participants are highlighted in section 2. Whilst the roundtables were focused at the topic level, there were cross-cutting themes which emerged as 'Action Hotspots', detailed in section 3. The fieldwork and data sessions were practical, action-driven discussions, therefore specific insights have been drawn out of these roundtables in sections 4 and 5.

Section 6 sets out our plans to take recommendations and actions forward, including NERC's objective to work collaboratively.

Engagement indicators

Over 60 participants in 6 roundtables over 2 weeks
Creation of a safe space for challenge, openness and honest, empathic conversations.

Over 1,100 inputs (notes or comments) – over 50% were ideas and actions
Evidence of willingness to contribute included calls for actions, ideas and offers to work in partnership.

Over 60 weblinks shared
Participants highlighted relevant research, best practice and codes of practice/conduct which can act as a shared resource bank.

Roundtable topics

1. Making systemic advances in equity, diversity and inclusion through decision-making.
2. Collecting, measuring and analysing equity, diversity and inclusion data.
3. Building confidence in recognising, listening to and addressing equity, diversity and inclusion.
4. Making fieldwork more equitable, diverse and inclusive in practice.
5. Advocating and promoting the environmental sciences to create an inclusive pipeline.
6. Realising our shared commitment for inclusivity in the environmental sciences through action.

2 Research culture

Participants highlighted that a positive research culture is fundamental to improvements in equity, diversity and inclusion. The importance of this being a priority in all settings, including funders and HEIs, was recognised, with clear policies needed to enable the challenge of systems within a supportive framework.

Decolonisation of scientific knowledge was highlighted, particularly in the context of addressing inequity and the need to ensure that we include a wider community in research. The need for innovation and creativity in what we fund, and funding streams came across strongly.

The impact of COVID-19 and austerity on under-represented groups was highlighted as further compounding the equity gap. The need for equity to be an early focus in the development of strategic mechanisms to help address this gap was recommended. Specifically, the provision of funding and support for partnerships that consider cultural contexts and lived experiences.

Participants recommended that the challenges above require collaborative action and can only be addressed if they are tackled across the system.

3 Action hotspots

A core objective of the roundtable series was to identify actions that can be taken forward in the short-, medium- and long-term. In the initial analysis of the roundtable discussions, common clusters of actions emerged which are referred to as Action Hotspots and are set out in the following sub-sections. These Action Hotspots all identify the need for transparency and strong leadership. Roundtable participants reinforced the critical need for inclusive leadership in setting the cultural tone of institutions and funding bodies. Therefore, organisations should lead by example, demonstrating inclusive leadership practices and developing robust frameworks to enable equity, diversity and inclusion in research and innovation.

The Action Hotspots identified by participants in the roundtable series are:

- Directed opportunities
- Fair policies and processes
- Diverse representation
- Training and development

3.1 Directed opportunities

There is a need to recognise the difference between equality and equity and provide opportunities (including, but not limited to funding) for under-represented groups. There is also a need to understand and address differential funding rates for under-represented groups including successful grants and levels of living allowances for doctoral students (stipends).

It was highlighted that support for Early Career Researchers to build a track record, through pre-application advice and specific schemes, could increase representation in environmental sciences. For example, by developing specific opportunities across the higher education and training pipeline to support under-represented groups via funded internships, placements/secondments, studentships and fellowships.

The co-development of calls with the community was highlighted, as a means to scope opportunities for funding, with a recommendation for EDI to be a central component.

3.2 Fair policies and processes

Participants identified the need for NERC to clarify flexibilities that currently exist in funding criteria and alternative mechanisms, and review policies and processes to ensure equity of access to opportunities for under-represented groups. For example, clarifying whether NERC funding covers the cost of carer and/or accessibility needs, and flexibility for deadline extensions based on disability. Establishing a clear policy on reasonable adjustments for grant applicants and members of the research team was a recommendation by participants.

Participants highlighted best practice developed by other (non-UKRI) funders addressing the need for a bullying and harassment policy as part of grant conditions, with sanctions that can be deployed at an individual or institutional level. The need for all funders to have aligned policies, sanctions that are linked to specific misdemeanours, and a transparent and fair process for applying these consequences, was reinforced. This is an idea that NERC will take forward in partnership with UKRI.

Participants highlighted the need to ensure that equitable funding assessment processes are led by funding experts and chairs trained in inclusive decision-making and bias, providing confidence to address diversity, equity and inclusion challenges. The importance of Codes of Conduct for peer reviewers was highlighted, in addition to the need for more open approaches (community agreements, for example) and learning from good practice.

Discussion considered the value of mandatory reporting and setting (time-bound) targets including:

- Principal Investigators to demonstrate inclusive leadership behaviours (noting that measuring this would present challenges)
- Regular publication of application and success rates to show that no one is being unfairly advantaged or disadvantaged in accessing funding (likewise for studentships and committee membership)
- Mandates that Doctoral Training Partnerships (DTPs) and Centres for Doctoral Training (CDTs) have policies for inclusivity and requirements for reporting on diversity monitoring across pre-application and award stages through to completion and attrition.

3.3 Diverse representation

Participants highlighted the need to embrace different perspectives and lived experience in decision-making fora, particularly as boards and funding review panels navigate complex and dynamic issues. Funders and funding panels have a role to play in enabling diverse researchers and they should be mindful of this responsibility.

Representation in general should be more reflective of the population and organisations should challenge themselves to achieve improved diversity. Ideas suggested in the decision-making roundtable mainly applied to HEIs and funders, for example:

- Rising targets for diverse representation on decision-making fora such as HEI internal sifts and NERC committees
- Rising targets for all staff from under-represented groups to be reflected across all levels of seniority (achieved via equal or higher rates in appointment, progression and retention)
- Establish ways to incentivise diverse representation on grants, under-represented investigators, researchers and technicians.

In the advocacy and pipeline roundtable, lack of diverse representation was highlighted as a barrier to engagement with, and a limiting factor in the appeal of, environmental sciences as a career destination. There is a need for diverse representation via case studies across the education and career pipeline, including more creative options that support scientists to tell their stories.

National STEM activity in different sectors can showcase best practice to learn from. For example, establishing a network of engaging role models and advocates in the environmental sciences – who engage with people at all stages of education from early years to apprenticeships and beyond – could stimulate wider participation and interest from under-represented groups.

Engagement with other sectors was also recommended as there are skills and expertise that can be translated to solve environmental challenges.

3.4 Training and development

Roundtable participants highlighted the need to value, recognise, and respect diversity and its value in research and innovation, and beyond. This tone needs to be set at the highest level in organisations. Therefore, leaders should model inclusive behaviours and ensure that there is a robust framework for equity, diversity, and inclusion.

Participants suggested that (accredited) training to ensure best practice, which is updated on a regular basis throughout careers (research or otherwise), could be taken forward as a joint action. As there is a need to improve competencies in organisations, training should draw on lived experience and improved practices (as opposed to Q&A style training packages). There is also an opportunity to undertake research to understand what training might work best for the sector. Specific training needs were highlighted at the various roundtables:

- EDI fundamentals including individuals' roles and responsibilities
- Disability awareness and reasonable adjustments
- Preventing bullying and harassment through inclusive practice
- Bias, micro-aggressions and culture including bystander intervention
- Anti-racism and anti-sectarianism
- Transgender and LGBTQ+ awareness
- Anti-oppression training.

Participants highlighted that the peer review process could be more constructive if it were viewed as a developmental tool. There were suggestions that experienced PIs could provide mentoring support to researchers from under-represented groups. More creative options including secondments for NERC staff and the community to co-create approaches to improve equity, diversity and inclusion.

It was suggested that recipients of research grants should complete appropriate training in leadership, management, equity, diversity and inclusion, and tackling bullying and harassment.

4 Fieldwork

4.1 Best practice

During the fieldwork roundtable over 100 suggestions came from participants including best practice outlined in recently published journal papers and existing guidance.

Fieldwork was considered as a loose definition for environmental science research being undertaken in a range of settings including in the field, research centres in wide-ranging environments, research ships, and aircraft. Accessibility and disability are often overlooked in these settings and addressing this failing should be a priority.

It was noted that the community should refrain from talking about fieldwork as 'essential' to being a real geologist/biologist and that there are no adverse impacts if individuals are unable to attend fieldwork for accessibility/personal issues. Alternative models of engagement should be provided via virtual participation and the development of digital data platforms to access remotely. The use of existing samples and data can provide this flexibility, whilst reducing carbon footprint.

4.2 Ideas to improve accessibility

There were many practical suggestions to improve accessibility at platform monitoring and research sites including the provision of parking, wheelchair access, accessible facilities, and amenities. For example, unisex toilets on research ships and other platforms would help. Research facilities in urban areas, although less common, may also be more accessible.

4.3 Safeguarding through risk assessments

Participants reinforced that supporting EDI ambitions should be an integral part of risk assessments, to encourage field leaders to think about the challenges under-represented groups will face. The location needs to be safe and accessible, but, in parallel, travel needs should be factored in. The organisation evaluating health and safety should undertake an assessment of the destination country, co-designed with people who are likely to be at risk, making sure that locations are chosen which are safe for under-represented groups. When deciding on fieldwork destinations and practices, colonial past and sensitivities should be a core consideration, as well as the environmental cost. Other alternatives could include local travel and remote fieldwork, for example.

4.4 Codes of conduct

Clear behavioural expectations should be set out in Codes of Practice, provided by institutions hosting or leading fieldwork. It was recognised that there is a need for advocated practice to be rolled out more extensively. Specific points highlighted include:

- Harassment incidents should be dealt with as safety incidents
- Provision of named points of contact in each field party to report inappropriate behaviour
- Detailed information and FAQs on what to expect in the field on a day-to-day basis to allow personal planning
- A contact in the fieldwork country who can advise on navigating the culture, as, for example, an LGBTQ+ person
- Addressing the drinking culture which is not inclusive, and overconsumption of alcohol can result in inappropriate behaviour.

4.5 Overcoming barriers

Several barriers to inclusivity of fieldwork were identified in this roundtable. The need for funding to be available and clearly communicated, to support individuals to cover the costs of the following was highlighted:

- Participation in field trips, appropriate field gear, and PPE in inclusive sizing
- Field support (equipment, staff and field assistant etc.) and travel considerations for disabled people.
- Hiring local experts to overcome language barriers, safety, and negotiating cultural awareness where needed
- Research on EDI in fieldwork to understand barriers affecting underrepresented groups.

> Sharing of best practice is key, therefore funders, HEIs, charitable trusts, field studies centres and facilities should work together collaboratively. The roundtables will directly result in fieldwork guidance which brings best practice together in one place for the benefit of the collective.

4.6 Training and support

Team leaders and individuals providing pastoral support need to be confident in recognising mental health conditions, bystander intervention, reasonable adjustments in the field etc. There is also a need for support for individuals new to fieldwork. A practical suggestion was to introduce mentors or 'buddies' for first time participants and develop training programmes for undergraduate field demonstrators to enable a pipeline of inclusive leaders.

5 Data

5.1 Relationship between trust and disclosure

The data roundtable identified a challenge around the disclosure of personal information for diversity monitoring that limits capacity to understand where processes are biased and how to redress. The reasons for non-disclosure were shared including fear of discrimination, the fact that respondents are not confident that data is being utilised, and poorly designed, inconsistent, and non-inclusive questionnaires do not encourage sharing. There is a perception that data collection is merely a 'tick-box' exercise as the outcomes using these data are rarely reported.

5.2 Model questionnaires and monitoring

Many of the organisations at the data roundtable highlighted that 'they were not where they wanted to be' in data collection and reporting. Lack of standardisation and guidance was reported as a shared challenge, which could be addressed in partnership, following the roundtables.

Participants identified characteristics and complexities that are often overlooked including:

- Intersectionality of characteristics
- Details on disability, for example mental health, neurodiversity and learning differences
- Sexual orientation
- Inclusive gender
- Socio-economic background
- Social mobility
- Employment
- Granular ethnicity data
- 'Sandwich carers' - i.e., those caring for adults (e.g., parents, partner) as well as children
- Exit data for why and when trainees or professionals leave the sector.

5.3 Gaps in understanding and our data needs

The participants in this roundtable started to identify the data needs and big questions to be asked, to better understand barriers across the environmental science sector. For example:

- Collection of data at multiple points to understand barriers at advertisement, application, shortlisting, interview, offer stage and acceptance stages
- Understanding pathways into environmental science including the barriers to entry and progression as a researcher
- Understanding the characteristics of a job specification which lead to poor EDI outcomes (e.g., long lists of overly specified requirements)
- Sharing of attrition rates, from Undergraduate level to Masters, PhD and beyond
- Reporting of bullying and harassment incidents
- Collection and reporting of data on internal sifts and demand management
- Funder and HEI diversity data – for all protected characteristics.
- Consistent definitions of disadvantaged/socio-economic status
- Understanding financial barriers to pursuing studies and/or further training. For example, affordability of kit and trips, living on a stipend with dependants.

6 Next steps

NERC is working through the rich insights and large number of ideas and actions collated via the roundtable series. Some actions may sit firmly with NERC or they may require collaboration with UKRI and/or HEIs and Communities of Practice, for example.

The roundtables series reinforced how senior leaders play a leading role in embedding equity, diversity and inclusivity in their organisations. Therefore, NERC will engage with senior leadership in HEIs to enable improved representation, progression and success of under-represented groups. We will use the outcomes of this report as the basis for this engagement, noting it will need more joint work to determine an approach.

Our framework for joint action (a living EDI action plan) will be shared in October, setting out the actions that will be taken by NERC, and those in collaboration with other stakeholder groups. We recognise the need to engage with and learn from best practice and existing investments including (but not limited to) the Community for Engaging Environments, to help shape future approaches to improve equity, diversity and inclusion.

Additionally, we currently have a pipeline of activities to support research to enable a more diverse, inclusive and equitable environment science community:

- **Seed-funding for EDI enrichment** projects to improve diversity in environmental sciences
- **A NERC-led digital online 'hackathon'** to develop digital technologies that improve equity, diversity, and inclusion in the environmental sciences
- **A joint NERC-AHRC call** for research to uncover how UK environmental science can learn from the past, considering colonial history and different cultural perceptions.

Collaboration with partners is now progressing in earnest and engagement will be at the core of NERC's approach going forward.
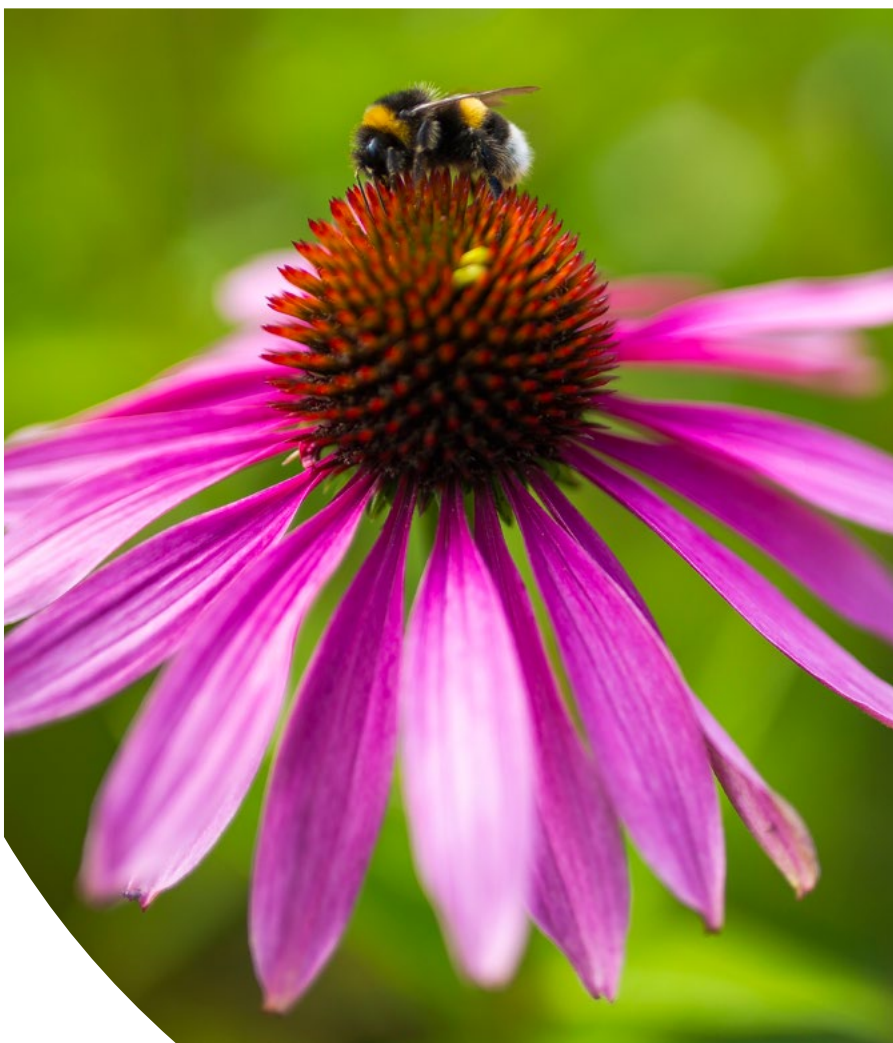
Glossary

Accountability: ways individuals and communities hold themselves to their goals and actions, while acknowledging the values and groups to which they are responsible.

Affirmative Action: the practice of increasing opportunities to under-represented parts of society.

Anti-oppression: recognising oppressions that exist in society, and ways to mitigate its affects to equalise the power imbalance in communities.

Anti-Racism: to actively oppose racism by advocating for political, economic, and social change.

Anti-Sectarianism: the prevention of sectarianism, that is created over time through consistent social, cultural and political habits, leading to the formation of group solidarity that is dependent on inclusion and exclusion.

Bias: a prejudice against groups or individuals that are not similar to yourself or showing preference for people that are similar to yourself.

Bullying: behaviour which is intended to hurt someone either emotionally or physically and is often aimed at certain people or groups.

Bystander intervention: the ability to recognise a potentially harmful situation or interaction and choosing to respond in a way that could positively influence the outcome.

Decolonisation: the process of undoing colonising practices, confronting and challenging practices in the past, which are still present today.

Disability: a physical or mental impairment which has a substantial and long-term adverse effect on a person's ability to carry out normal day-to-day activities. A wide range of physical, mental and sensory impairments are covered under this definition.

Diversity: individual differences between groups based on abilities, age, disability, learning styles, life experiences, neurodiversity, race/ethnicity, class, gender, sexual orientation, country of origin, cultural, political or religious affiliation, and any other difference that exists.

Equality: treating everyone the same and giving everyone access to the same opportunities.

Equity: creating fair access, opportunity, and advancement for people from under-represented groups.

Harassment: unwanted behaviour which is offensive, intimidating or humiliating. It can happen on its own or alongside other forms of discrimination.

Inclusion: the process of bringing people that are traditionally excluded into decision-making processes, activities, or positions of power. It enables individuals or groups to feel safe, respected, motivated, and engaged.

Intersectionality: the intertwining of social identities like gender, race, ethnicity, social class, religion, sexual orientation, or gender identity which causes unique opportunities, barriers, experiences, or social inequality.

LGBTQ+: stands for lesbian, gay, bisexual, transgender, queer (or sometimes questioning), and others. The 'plus' represents other gender identities and sexual orientations that are not specifically covered by the five initials.

Lived Experience: the representation of the experiences and choices of a given person, and the knowledge that they gain from these experiences and choices.

Microaggression: daily behaviour (verbal or nonverbal) that communicates hostile or negative insults towards a group, either intentionally or unintentionally.

Neurodiversity: where neurological differences are recognised and respected as any other human variation. These differences can include Dyspraxia, Dyslexia, Attention Deficit Hyperactivity Disorder, Dyscalculia, Autistic Spectrum, Tourette Syndrome, and others.

Oppression: systemic and institutional abuse of power by a dominant or privileged group at the expense of targeted, less privileged groups.

Racism: prejudice, discrimination, or antagonism directed against someone on the basis of their membership of a particular racial or ethnic group.

Reasonable Adjustments: the legal need to take positive steps to remove barriers faced due to disability.

Safe space: a place where people can feel confident and be comfortable expressing themselves without fear or exposure to discrimination, criticism, harassment and any other physical or emotional harm.

Systemic: something that affects the whole and not just parts of a system

Under-represented group: a person or group of people who are insufficiently or inadequately represented (holding a smaller percentage within a significant subgroup than the subset holds in the general population).

Annex 1
Roundtable results – overview
Facilitated by Collaborative Capacities

Purpose of the roundtables

To make advances in ED&I in Environmental Science

- **Aim:** Identity joint action we can take to promote equity, diversity and inclusion in environmental science research and identify practical interventions that we can take together.

- **Challenge:** Data tells us that there is less diversity in UK environmental sciences than we would wish to see with, for instance, lower proportions of females to males as well as low levels of racial and ethnic diversity and diversity broadly, in terms of protected characteristics as well as including those from disadvantaged backgrounds or with unconventional career trajectories.

- **Working together**: NERC cannot act alone. It does not have responsibility for undergraduate or for secondary education where choices about future career paths are often made. Hence collaboration is crucial.

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Roundtables

Five roundtables each focused on a different theme, with a concluding plenary

15th June 14:30 – 16:00. Influence and Policy (Convened by Iain Williams)
Making systemic advances in equity, diversity and inclusion of environmental science through decision making

16th June 10:30 – 12:00. Data (Convened by Victoria McMyn)
Collecting, measuring and analysing equity, diversity and inclusion data in environmental science, and to understand whether what we are doing is making any difference

17th June 14:30 – 16:00. Confidence (Convened by Alison Robinson)
Building confidence in recognising, listening to and addressing equity, diversity and inclusion in environmental science

23rd June 10:30 – 12:00. Fieldwork (Convened by Nigel Bird)
Making fieldwork in environmental science more equitable, diverse and inclusive in practice

24th June 14:30 – 16:00. Careers (Convened by Susan Waldron)
Advocating and promoting environmental science to create an inclusive talent and skills pipeline

30th June 11:00 – 12:30. Plenary (Convened by Duncan Wingham)
Realising our shared commitment for inclusivity in Environmental Science through action

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Annex 1
Roundtable results – overview

Overall – The numbers

	Total Number			
	Notes	Actions	Links	Zoom Chat
Theme 1. Policy	190	187	0	27
Theme 2. Data	204	58	4	14
Theme 3. Courage	199	95	5	19
Theme 4. Fieldwork	161	122	36	38
Theme 5. Careers	258	89	10	33
Plenary		33	11	114
Totals	1012	584	62	245

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Overall – people

This data reflects participants from all the roundtable series as a whole

Legend:
- Academic
- DTP/CDT Director
- Institute Director
- Professional Body
- Learned Society
- Student
- NERC Staff
- Other

Other, 1; Academic, 26; NERC Staff, 9; Student, 3; Learned Society, 5; Professional Body, 11; Institute Director, 8; DTP/CDT Director, 3

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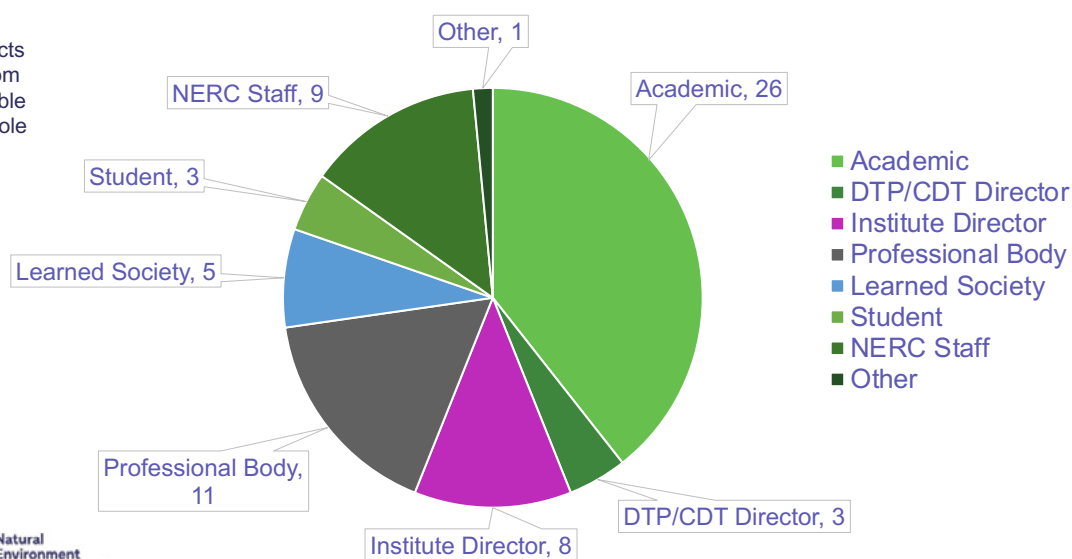
N.B. It was optional for participants to complete the anonymous questions regarding their characteristics. The data shown here reflects that which was submitted by participants

Annex 1
Roundtable results – overview

Overall – people

This data reflects participants from all the roundtable series as a whole

Gender	
Male	10
Female	16
Non-binary	1
Other	0
Prefer not to say	0

Age	
Less than 20	0
20-29	2
30-39	6
40-49	9
50-59	9
60-64	1
65+	0
Prefer not to say	0

Ethnicity	
White	22
Black	2
Asian	1
Mixed	2
Other	0
Prefer not to say	0

What type of school did you attend?	
Non-selective	17
Selective	5
Independent	4
Don't know	0
Prefer not to say	1

Did your parents or guardians complete a degree?	
Yes	12
No	15
Don't Know	0
Prefet not to say	0

Do you consider yourself to be trans?	
Yes	0
No	26
Prefer not to say	1

Do you consider yourself to be disabled?	
Yes	3
No	22
Prefer not to say	2

What is your religion?	
Christian	4
Muslim	0
Jewish	0
Sikh	0
Hindu	0
Atheist	21
Other	1
Prefer not to say	1

Did you receive free school meals?	
Yes	5
No	20
Don't know	1
Prefer not to say	1

Did your household receive income support?	
Yes	8
No	17
Don't know	2
Prefer not to say	0

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N.B. It was optional for participants to complete the anonymous questions regarding their characteristics. The data shown here reflects that which was submitted by participants

15th June 14:30 – 16:00. Influence and Policy (Convened by Iain Williams)
Making systemic advances in equity, diversity and inclusion of environmental science through decision making

Conversation starters:

1. What does institutional progress look like, what are we aiming for, what are our targets?
2. How would we recruit to Boards, make EDI in the charter for Board members, ensure effective oversight of EDI offices within institutions?
3. What approach might we take to achieve equity, diversity and inclusion in peer review?

Agenda
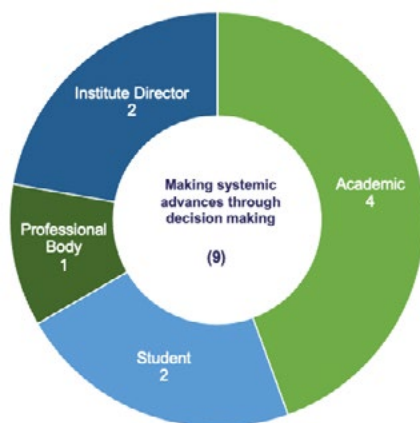|	
14:30	Iain - Welcome, purpose, rallying call
14:35	Sawsan - Setting the scene & station tips
14:45	Who is around the table? Name, Org, on a scale of 1-5 how inclusive is your world?
14:55	CS1. On mural, then discuss
15:10	CS2. Discuss first then capture on mural
15:25	Quick debrief
15:30	CS3. From perspective of… in mural
15:45	Open discussion. Where are the actions, and whose are they?
15:55	Convener, concluding remarks. Invite to plenary and EDI form
16:00	END

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NERC observers: Corrina, Clegg

Annex 1
Roundtable results – overview

Influence/ Policy
Tues 15th June

9 Attendees

Participants

On a scale of 1-5 how inclusive is your world?

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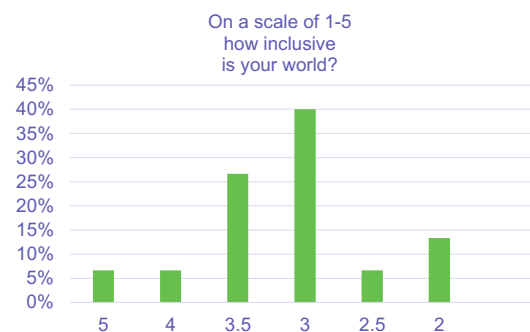
Key Takeaway Messages
Policy

1. Recruitment to match population demographics.
    e.g. introduce quotas, outreach to communities

2. Identify those who work against EDI and make them accountable.
    e.g. review unsuccessful applications/papers to check for bias/gain statistics

3. Directly address barriers for entry, simply stating "equal opportunities" is not enough.
    e.g. identify disadvantages and ways to address them, and continue to reflect on how this is going

Natural Environment Research Council

Annex 1
Roundtable results – overview

16th June 10:30 – 12:00. Data (Convened by Victoria McMyn)
Collecting, measuring and analysing equity, diversity and inclusion data in environmental science, and to understand whether what we are doing is making any difference

Conversation starters:

1. What data are we missing?
2. What data will inform when and why we lose people?
3. How do we evaluate our success?

Agenda

10:30	Victoria	Welcome, purpose, rallying call
10:35	Sawsan	Setting the scene & station tips
10:45		Who is around the table? Name, Org, what type of data might your organisation have?
11:00		CS1. On mural
11:10		CS2. On mural (this is deeper dig question and may need to be further clarified)
11:20		Debrief, open discussion
11:30		CS3. What does success look like and how do we measure it
11:45		What actions have we missed and who should do them?
11:55		Convener, concluding remarks. Invite to plenary and EDI form
12:00		END

NERC observers: Sarah T, *Corrina, Clegg*

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Data
Wed 16th June
Participants

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Collecting, measuring and analysing data that will make a difference (12)

- DTP/CDT Director 1
- Institute Director 1
- Professional Body 2
- Learned Society 1
- Student 1
- Academic 6

What type of data might your organisation collect?

| Full Data | Partial Data | No Data |

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Annex 1
Roundtable results – overview

Key Takeaway Messages
Data

1. Intersectional data of attrition at multiple points

    e.g. application stage, shortlisting, interview and point of exit

2. Identify EDI barriers across all career pathways

    e.g. women in HR and men in the field, invisible elements

3. Standardise data collection and identify process shortfalls

    e.g. entry to undergraduate, entry to jobs, funding

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17th June 14:30 – 16:00. Confidence (Convened by Alison Robinson)
Building confidence in recognising, listening to and addressing equity, diversity and inclusion in environmental science

Conversation starters:
Recognise, Listen to, Address

1. Lessons from lived experience (confidential, no notes)

2. What would have helped you gain confidence?

3. Who else needs this confidence?

4. How might we share best practice across organisations to build capacity at institutional levels?

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Agenda
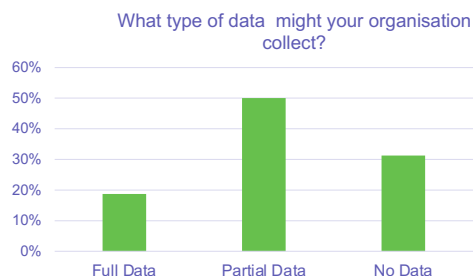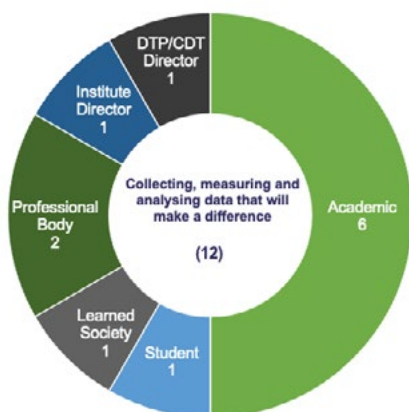|		
14:30	Alison	Welcome, purpose, rallying call
14:35	Sawsan	Setting the scene & station tips
14:45		Who is around the table? Name, Org, on a scale of 1-5 how confident are you in speaking out if you see EDI microaggression against you or someone else?
14:55		CS1. Breakout rooms, 9 minutes
15:10		CS2. Capture directly on mural (they may be quiet)
15:20		Debrief and open discussion
15:30		CS3. 360 view, what sort of training might work? Capture actions as they go along
15:50		What actions have we missed and who should do them?
15:55		Convener, concluding remarks. Invite to plenary and EDI form
16:00		END

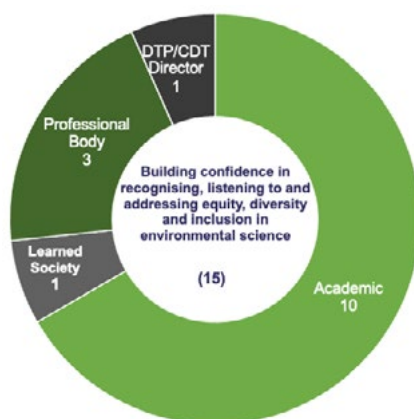NERC observers: Corrina, Clegg, Beth, Mary G/Sarah T

Annex 1
Roundtable results – overview

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Annex 1
Roundtable results – overview

23rd June 10:30 – 12:00. Fieldwork (Convened by Nigel Bird)
Making fieldwork in environmental science more equitable, diverse and inclusive in practice

Conversation starters:

1. Lessons from lived experience (confidential, no notes)

2. What would have helped you in the field?

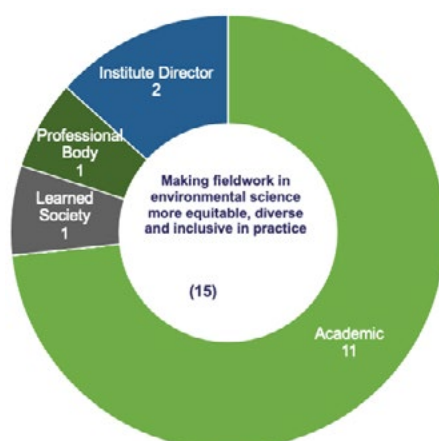3. What should we provide in the way of policy and resources?

Agenda

10:30	Nigel	Welcome, purpose, rallying call
10:35	Sawsan	Setting the scene & station tips
10:45		Who is around the table? Name, Org, where on the globe has your field work taken you?
10:55		CS1. Breakout rooms, 20 minutes
11:15		CS2. Capture directly on mural
		Debrief as they go, begin to capture actions and by whom
11:30		CS3. 360 view, tangible, intangible, training…
		Capture actions as we go along
11:45		Debrief, take a breath
		What actions have we missed and who should do them?
11:55		Convener, concluding remarks. Invite to plenary and EDI form
12:00		END

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NERC observers: Corrina, Clegg, Beth, Chris

Fieldwork
Wed 23rd June

Participants

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Where on the globe has your field work taken you?

Australia Namibia Asia Americas Africa Arizona Ireland Central Europe Belgium Antwerp Amsterdam Portugal Southern Europe Europe Finland Switzerland Antarctica UK Western US China Abu Dhabi Malaysia Singapore Southeast Asia Eastern Europe Argentina India Egypt Mediterranean sea Tanzania Oman Canadian Islands Israel New Zealand Sicily Lake Skegness South Africa Crete Monaco Turkey Hawaii Lebanon France Germany Brazil Russia

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Annex 1
Roundtable results – overview

Key Takeaway Messages
Fieldwork

1. Code of conduct
    31 links to existing guidelines and policies
    e.g. Royal Geographic Society, European Geoscience Union

2. Colonial impact needs to be addressed
    e.g. include local partner in grant and publications

3. Enhance ways to attract inclusivity in recruitment
    e.g. images on websites, highlight alternative career avenues that support field work without being out there
    (alternative environmental science careers…)

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24th June 14:30 – 16:00. Careers (Convened by Susan Waldron)
Advocating and promoting environmental science to create an inclusive talent and skills pipeline

Conversation starters:

1. What does a career in environmental science look like?
2. How might we make this more appealing to a more diverse population?
3. How might we engage?
    a. *Institutions to provide insights into work-experience, paid secondments etc*
    b. *Educational curriculum*
    c. *Role models*
    d. *Citizen science project with prizes*
    e. *Community action projects*

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Agenda

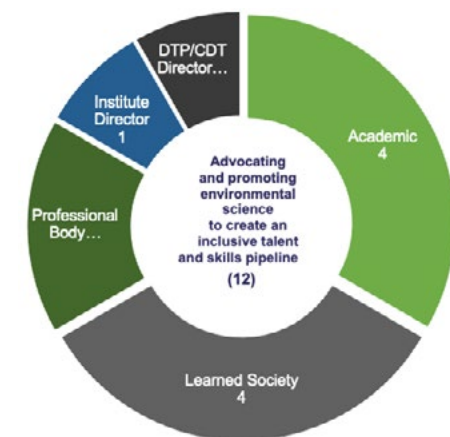| 14:30 | Susan | Welcome, purpose, rallying call |
14:35	Sawsan	Setting the scene & station tips
14:45		Who is around the table? Name, Org, which age groups are you mostly working directly with, and is that the age group we should start with?
15:00		CS1. On mural
15:10		CS2. On mural (this is deeper dig question and may need to be further clarified)
15:20		Debrief, begin to pull out actions and by whom
15:30		CS3. Who might we approach as additional partners?
15:45		What actions have we missed and who should do them?
15:55		Convener, concluding remarks. Invite to plenary and EDI form
16:00		END

NERC observers: Corrina, Clegg
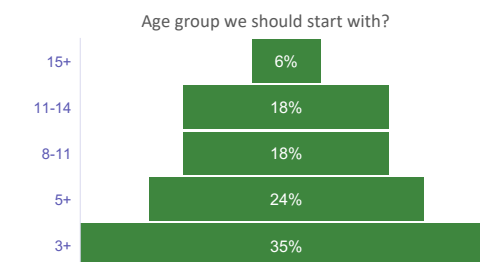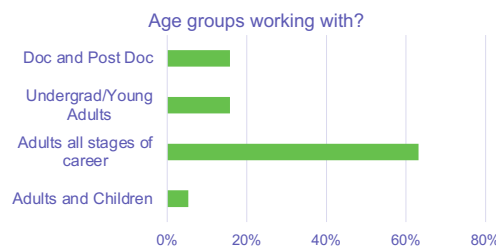
Annex 1
Roundtable results – overview

Careers/Advocacy
Thurs 24th June

Participants

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Age groups working with?

Age group we should start with?

15+	6%
11-14	18%
8-11	18%
5+	24%
3+	35%

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Key Takeaway Messages
Careers

1. Encourage younger and inclusive role models

   e.g. non-linear career paths, exciting does not only mean expeditions

2. Prepare a pack for showcasing to schools and careers fairs

   e.g. or provide funding for preparation of a pack, for PGCE training

3. Work on curriculum development

   e.g. skills reform, Scouting, citizen science projects

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Annex 1
Roundtable results – overview

30th June 11:00 – 12:30. Plenary (Convened by Duncan Wingham)
Realising our shared commitment for inclusivity in Environmental Science through action

Purpose of session:

- Review key takeaways

- Showcase the three **change action hotspots**: Communication, transparency, accountability

- Open discussion

Agenda
10:45 Arrivals
10:50 Duncan   Welcome, purpose
11:00 Sawsan and Corrina - Summary of five themes with key takeaways

11:15 Alison   **Leadership at institutional level**
11:30 Susan   **Rethinking funding structures**
11:45 Iain and Bea   **Working in partnership**

12:00 10 min for Q&A
12:10 Duncan, concluding remarks.
12:15 END

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NERC observers: Corrina, Clegg

Plenary Session Wed 30th   June:
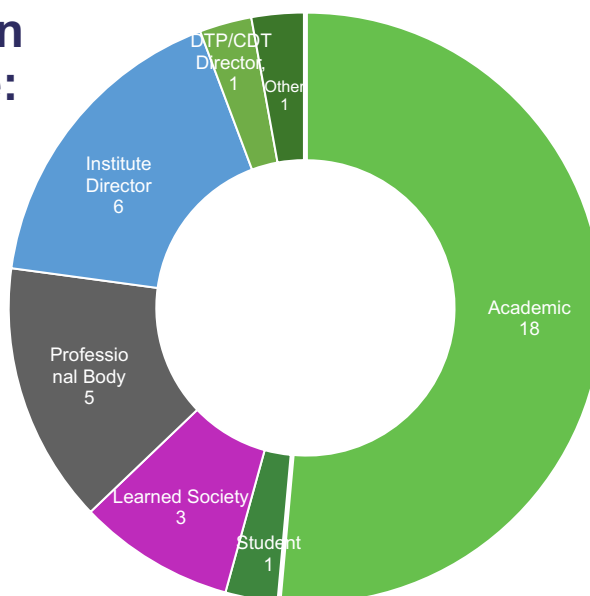
35

Recap of main actions, joint actions, and identification of interconnected themes

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Annex 1
Roundtable results – overview

Main Action Points - summary

	Short Term (3-6 months)	Medium Term (6-15 months)	Long Term (15 months +)
1	**Funding**: Put together a "dedicated EDI pot" which may start with perceived simple measures. *For example, a recurring theme in the sessions was child care costs during field trips and gender neutral toilets on research vessels. Collect data in harmony with HEIs and use the data to inform how funding is allocated and to innovate new funding mechanisms.*	**Funding**: Make evidence-based (ie data driven) changes in the funding mechanisms to reduce barriers to entry, ensure a more equitable and inclusive sector, and provide accountability. *For example, specific funds for child care or elder care for those who need it; capture exit information of all EDI parameters to know where the leaks in the pipeline are and work on fixing them; link eligibility to presence of a Race Equality Charter and other EDI policies at the receiving institution.*	**Accountability**: Perhaps we should not fund those unwilling to engage. They are harming the science! [see link 48 in LinksAndResources]
2	**Communicate** with NERC-related and broader community about the EDI measures that you *are* taking so people can see that you are walking the talk. *Publish data continually, accompany it with actions that have been taken and that will be taken in the future. Provide a portal for all relevant documentation and links and keep it updated. Clear messaging from senior leadership that is backed by action.*	**Communicate**: Publish a Code of Conduct and put in place the accountability to adhere to it. Publish consequences of not following the guidelines such as revoking a grant etc. *Partner with communities on this, listen to their voices, incorporate their needs in their vocabulary [paraphrased for summary, examples provided in links document]*	**Communication**: How do we reach the folk that are not willing to engage with these conversations?
3	**Training**: Meaningful EDI training that is a lot more than a cursory 2-hour session and that includes follow up (42 calls to action on meaningful training)	EDI mentoring and **training** for leaders and managers. Make it mandatory and have regular follow up. Include how to recognise mental health issues.	**Training**: Science curriculum being a huge part of it - make it relevant (can we afford to leave this to long term? Is there anything we can do now that can start this off?).

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