Contents

Schedule........................................................................................................................................4
Technological requirements........................................................................................................6
Net-iquette .....................................................................................................................................6
Room links....................................................................................................................................7
Poster hall link..............................................................................................................................8
Transcripts, slides & recordings....................................................................................................9
IT help..........................................................................................................................................9
Slack channel..............................................................................................................................10
Prizes...........................................................................................................................................11

Workshops & Panels
Making Polar research more inclusive......................................................................................12
Employability: Continuing in Research & Academia...............................................................13
Employability: Data acquisition, analysis & management.......................................................15
Employability: Journalism & Public Engagement.................................................................17
Employability: Industry & Consulting..................................................................................18
Employability: The Poles Outside of Academia.....................................................................20
Keynote Panel: Navigating the new research landscape: challenges and solutions for UK
Polar research in 2021................................................................................................................22
Co-design and co-production: salient science in the Arctic....................................................25
Adapting a project post-lockdown.............................................................................................28

Scientific Talk Abstracts
Atmosphere and Climate.............................................................................................................30
Ecosystems..................................................................................................................................33
Glaciology & Geology.................................................................................................................41
Oceanography.............................................................................................................................44
Social Sciences............................................................................................................................47
Interdisciplinary..........................................................................................................................52

Posters
Oceanography.............................................................................................................................55
Glaciology & Geology...............................................................................................................58
Atmosphere and Climate.............................................................................................................62
Ecosystems..................................................................................................................................64
Social Sciences............................................................................................................................67

Acknowledgments
Session chairs..............................................................................................................................71

Please see our website for the most up to date information, guidelines for presenters, and how we are making our conference as accessible as possible.

polarnetwork.org/polar-ecc

If you have any questions please feel free to contact us at polarecc@polarnetwork.org
## Wednesday 5th May
### Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Main Room</th>
<th>Room One</th>
<th>Room Two</th>
<th>Room Three</th>
<th>Room Four</th>
<th>Poster Hall</th>
<th>Help Desk</th>
</tr>
</thead>
<tbody>
<tr>
<td>10am</td>
<td>Break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:45 - 12:20</td>
<td>Rapid poster introductions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12pm</td>
<td>Lunch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2pm</td>
<td>14:30-15:55 Continuing in academia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3pm</td>
<td>16:10 - 17:10 Ecosystems talks</td>
<td>16:10 - 17:10 Oceanography talks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4pm</td>
<td>Break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Main Room</td>
<td>Room One</td>
<td>Room Two</td>
<td>Room Three</td>
<td>Room Four</td>
<td>Poster Hall</td>
<td>Help Desk</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------</td>
<td>-----------------------------------</td>
<td>-----------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------------------</td>
<td>----------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>9am</td>
<td>9:00 - 10:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9:00 - 17:15</td>
<td>9:00 - 17:15 Tech help &amp; chill out room</td>
</tr>
<tr>
<td>10am</td>
<td>Break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11am</td>
<td>Break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12pm</td>
<td>Lunch</td>
<td></td>
<td></td>
<td></td>
<td>12:30 - 13:55 Posters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2pm</td>
<td>14:00 - 14:55 Co-Production of Knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3pm</td>
<td>15:00 - 15:55 Adapting a project post-lockdown</td>
<td>15:20 - 16:00 Ecosystems talks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4pm</td>
<td>Break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5pm</td>
<td>17:15 - 17:30 Thanks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17:30 - 18:00 Social</td>
</tr>
</tbody>
</table>
MAIN ROOM
Link (day 1): https://plymouth.zoom.us/j/96052443582?pwd=a3YwQ3dkcWxmOGtMR3NONTBoQk43UT09
Link (day 2): https://plymouth.zoom.us/j/92948295438?pwd=0HB4TndQOVNOUWhLZEJVNjKd0Y5dz09
Password (day 1): 091585  Password (day 2): 444516

ROOM 1 - ECOSYSTEMS
Link: https://ukri.zoom.us/j/96674852730?pwd=M29SMXdsSEZxVjQwQTIUUVpnWTkwdz09
Password: 764555

ROOM 2 - ATMOSPHERE, CLIMATE & OCEANOGRAPHY
Link: https://universityofleeds.zoom.us/j/81514669421?pwd=bGJPWi9oa291UFhYRjJhVUFZ1pldz09
Password: PoECC21!

ROOM 3 - GLACIOLOGY & GEOLOGY
Link (day 1): https://plymouth.zoom.us/j/95140462914?pwd=SWPxNE5PUNWHeHkrNVVTL0lBbENIZz09
Link (day 2): https://plymouth.zoom.us/j/97935275456?pwd=RkxUzBTXg10Hk3emF0DDd5em91dz09
Password (day 1): 168179  Password (day 2): 168179

ROOM 4 - SOCIAL SCIENCES
Link: https://ukri.zoom.us/j/92581321225?pwd=RTIQbFNyQfQzTzBWclBBQXh3b1ZkUT09
Password: POLARECC21

Please do not share these links or passwords. This programme and its contents are for registered attendees of the PolarECC conference only. Zoom bombing is not a victimless crime!
Posters
These sessions are an informal environment and a great opportunity to hear about the posters available to view in the subsequent poster session in Gather town.

Poster presenters: If you would like to submit a slide for this presentation, you can do so when you submit their poster. We will then compile these preview slides for the rapid presentations. The presenter’s name will appear on the screen before their poster preview. The presenter will be unmuted and have a maximum of two minutes to pitch their poster, after which the slides will be moved on to another presenter.

Glaciology, Geology and Oceanography
11:45 – 12:20 5th May

Atmospheric Sciences, Social Sciences & Ecosystems
11:40 – 12:30 6th May
Ecosystems

Angus Aldis, University of Reading – stand 6
Title: Phenotypic plasticity's function and capacity within Bowhead whales; tracking 382 years of sighting data
Abstract: Global climate change infers major detriment upon highly mobile, but slow evolving Balaenidae. Bowhead whales (Balaena mysticetus) have perfected certain evolutionary domains but struggle when being forced to adapt rapidly. At consequence to their changing Arctic habitat, their endemic nature may ultimately serve a fatal blow to their survival. Thus, investment into behavioural ecology strategies may mitigate short-term issues but prolong expected crash. Using data spanning 382 years, this study's outlook maps and identifies scenarios where phenotypic plasticity is likely to occur within the East-Canada-West-Greenland stock. Populations are not universally likely to move across stock boundaries, but instead prefer to utilise areas of lesser resource over richer counterparts. Such confirmed active consideration and awareness of environment may aid bowheads recover from deleterious short-term scenarios. However, phenotypic plasticity does not offer long-term solution, and presents great negative capacity within climate altered habitats. Results demonstrate an interesting consideration of bowhead adaptive capability and the findings may perhaps act as a starting point for further sophisticated study and expansion on established bowhead literature.

Anna Bobrik, Lomonosov Moscow State University – stand 7
Title: Permafrost-affected soils and sustainable development of the Russian Arctic
Abstract: The interaction of cryogenic ecosystems with the atmosphere under conditions of global climate change is especially important for the overall development of the biosphere. Permafrost-affected soils are considered to be one of the important cryosphere elements within the climate system. The aim of our study was to assess the functional diversity of permafrost-affected soils along the bioclimatic and permafrost transect from the northern taiga to the southern tundra of Western Siberia from such parameters as the soil temperature regime, the composition of soil organic matter and the soil biological activity. The factor that has the greatest impact on the diversity of ecosystems and the biological activity of soils (zones of continuous, discontinuous and sporadic permafrost) is presence and depth of permafrost. Permafrost determines the type of ecosystems, temperature regime and the activity of the organic matter transformation processes in polar region. Soils represent a unique natural object and ensure the functional diversity and integrity of polar ecosystems. Our results show the important role of permafrost-affected soils in the sustainable development of the terrestrial ecosystems along the polar transect from taiga to tundra in Western Siberia.

Emily Broadwell, University of Bristol – stand 8
Title: Investigating the photophysiology of supraglacial microalgae
Abstract: The supraglacial environment on the surface of glaciers and ice sheets is home to a diverse assembly of microorganisms, with Chlorophyte snow algae and Streptophyte glacial algae representing the major primary producers within this cryospheric landscape. Both groups form widespread algal blooms when liquid water and sunlight are available to drive photosynthesis during summer melt seasons. Recently, these blooms have been highlighted to have far-reaching effects on both the physical and chemical characteristics of