

Memorandum 2/11/2018

KNO1: Arctic biodiversity education and outreach

This memo provides a summary of reports submitted on the session KNO1 organized at the Arctic Biodiversity Session in Rovaniemi, Finland, October 9-12 organized by the Canadian Committee for IUCN.

Attendance: 30

Arctic Biodiversity Assessment recommendation themes most prominently addressed in the session:

- Improving knowledge and public awareness

Key points raised in the session that were important to note:

- Education focused on Arctic biodiversity and climate change requires innovative approaches to reach a diversity of audiences.
- Traveling interactive exhibitions are one method for communicating across languages and borders. Multimedia exhibitions combine photography and videography in support of conveying scientific findings, and do so in novel interactive exhibits; for example, visitors can listen to audio recordings of the sounds of climate change (e.g. storms) played through earphones while lying in a tent inside an exhibition hall. Children especially are eager to act after experiencing these interactive exhibits.
- Youth programming can harness the enthusiasm and energy of youth, and provides a place for youth to have their voices and opinions heard. All institutions can benefit by incorporating youth programming into their mandate. Challenges to actually incorporating youth programming are superficial engagement, "check box" inclusion of youth for reporting purposes, and limited funds.
- Museums play a central role in mainstreaming stories about Arctic biodiversity – “science uncommunicated is science unfinished”. Museums can communicate scientific stories about Arctic biodiversity. Ideally, museums can also provide a platform for others to tell their own stories. This is especially important in the context of Indigenous Arctic residents having a platform to tell their own stories. Communicating biodiversity can be fun for the public: Arctic plant yoga is an innovative public program to teach visitors Arctic botany through movement!
- How do educators build value and importance into the ways they teach youth? Moreover, how do educators encourage a love of areas that most people will never visit? Creating empathy is easy when we focus on polar bears, but perhaps more difficult for lichens. The solution is to make learners part of the story they are hearing. Therefore, thought must go into how we create stories in the first place. Fictional literature can be used for teaching biology, and fostering emotional engagement. Reading fiction fosters interpersonal and emotional engagement skills. This discovery from psychology can be used in service of teaching biology.
- How can science, art and technology work together in engaging audiences on the Arctic? Dialogus Arcticus provides the bridge that allows us to connect these worlds and experiences, join intellect and heart, create excitement and inspiration, and make a gateway to the beautiful and the mysterious. Communication is not enough to inspire action. Artistic expression stimulates action.

Recommendations/actions identified for how to deal with the issues raised in the session:

- Creating interactive exhibits to fully engage visitors on topics of climate change, biodiversity, and to stimulate active responses to these issues
- Developing youth engagement programs that listen to the recommendations of youth, have long-term vision for youth programs, and carefully evaluate program successes and challenges with a view to improving future programming
- Entertaining before educating is sometimes necessary for certain outreach technologies
- Innovative public outreach engages the public through activity, socialising, humour
- Literature can be the tool in environmental education that most viscerally and emotionally engages readership and youth
- The intersection of art and science is a fruitful place for eliciting emotional and active response from audiences

Take home message from the session:

- The creativity of educators in engaging people on Arctic biodiversity and climate change is limitless. There is energy in the involvement of youth, and the youthful response of audiences when engaged through literature, art and communication methods that promote socialisation, humour and empathy.