Memorandum 2/11/2018

IAB2: Hot spots, connectivity and sensitive areas for biodiversity conservation benefit

This memo provides a summary of reports submitted on the session IAB1 organized at the Arctic Biodiversity Session in Rovaniemi, Finland, October 9-12 organized by the Norwegian Environment Agency and the US National Park Service.

Attendance: 40

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

- Addressing stressors
- Improving knowledge and public awareness

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

- Rediscovery of walruses in Pechora Bay. Main message—female walrus stayed local and males tended to be more transient.
- Abundance & species diversity hotspots were analysed from available literature to try and find the overlap of species richness of 121 species to make recommendations on where to designate protected areas. Minimum overlap between conservation areas and where species richness was highest. Also, minimal overlap between areas of high biodiversity between winter and summer.
- Abundance & distribution of marine mammals off the coast of Greenland. North waters determined to be richer than that of the south. Abundance and biodiversity was highest in the North Water. Abundance was lower in the NE water.
- Arctic Islands—climate driven habitat fragmentation. Marginalized habitat for arctic species as the climate warms, leaving ecological islands. Arboreal species moving north, and squeezing habitats for arctic species. Difficult to predict which species will adapt to an increased fragmentation rate.
- What traits make species sensitive to climate change? Trying to predict which traits will help species adapt more quickly than others. Used a literature survey approach to attempt to predict helpful traits. Also focused on potential adaptation measures.

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

- No clear recommendations, except to follow up on studies discussed in session

Take home message from the session:

- Existing protected areas are insufficient to retain important habitats for arctic species.