



NTNU – Trondheim
Norwegian University of
Science and Technology

Bryophyte diversity in high and low Arctic Greenland

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¹NTNU University Museum

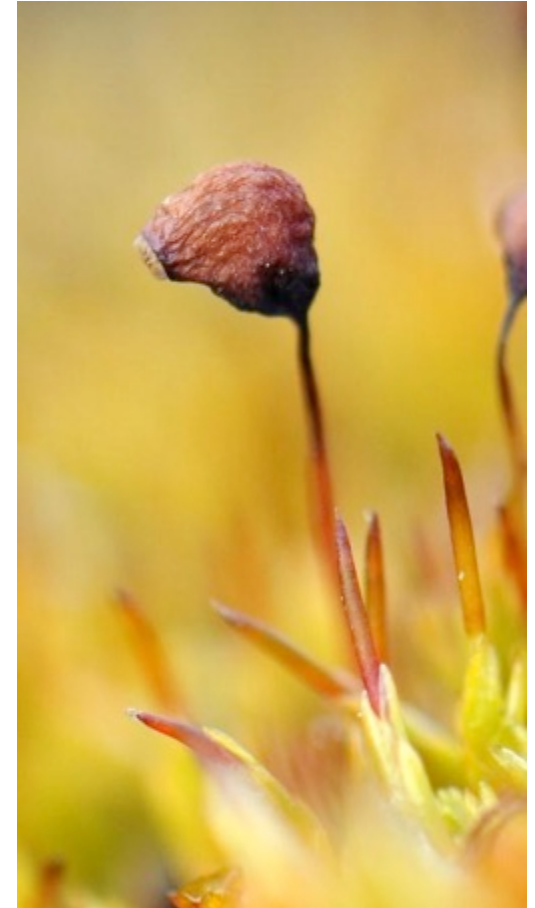
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Bryum cryophilum

Bryophytes of the Arctic

- What is a bryophyte?
- Bryophyte diversity of the Arctic
- Where do bryophytes grow?
- Case study: Zackenberg & Kobbefjord
- Conservation of Arctic bryophytes



Psilophilum cavifolium

What is a bryophyte?

- Land plants
- Dominant gametophyte
- Reproduction by spores
- Drought tolerant



Bartramia ithypylla

Bryophyte diversity of the Arctic

- About 900 species are reported from the Arctic (Daniëls et al. 2013)
- Steere (1976) list 67 bryophytes (mosses and liverworts) as circumpolar Arctic
- Konstantinova (2000) list 44 liverworts as Arctic



Voitia hyperborea

Where do bryophytes grow?



Where do bryophytes grow?



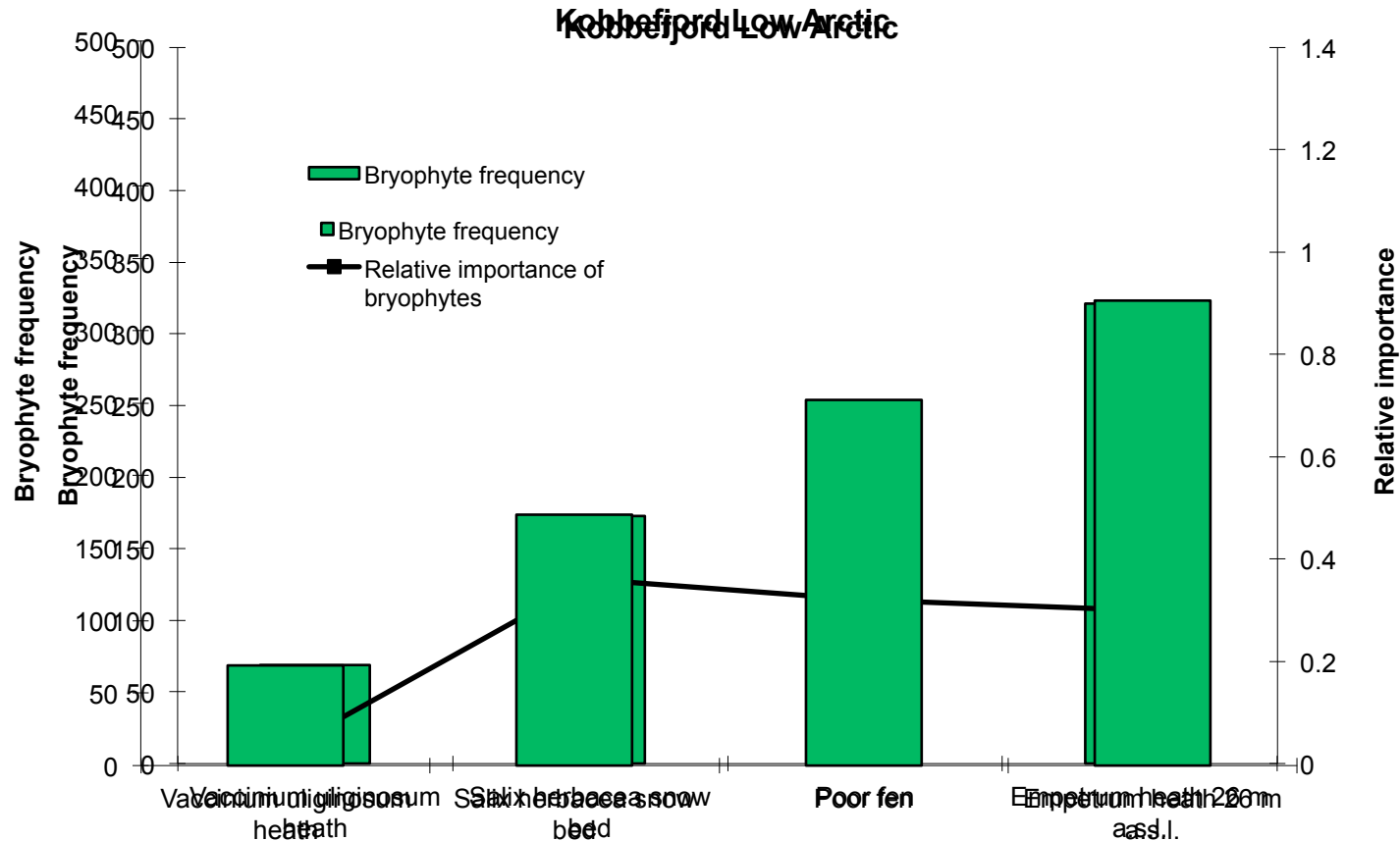
Where do bryophytes grow?



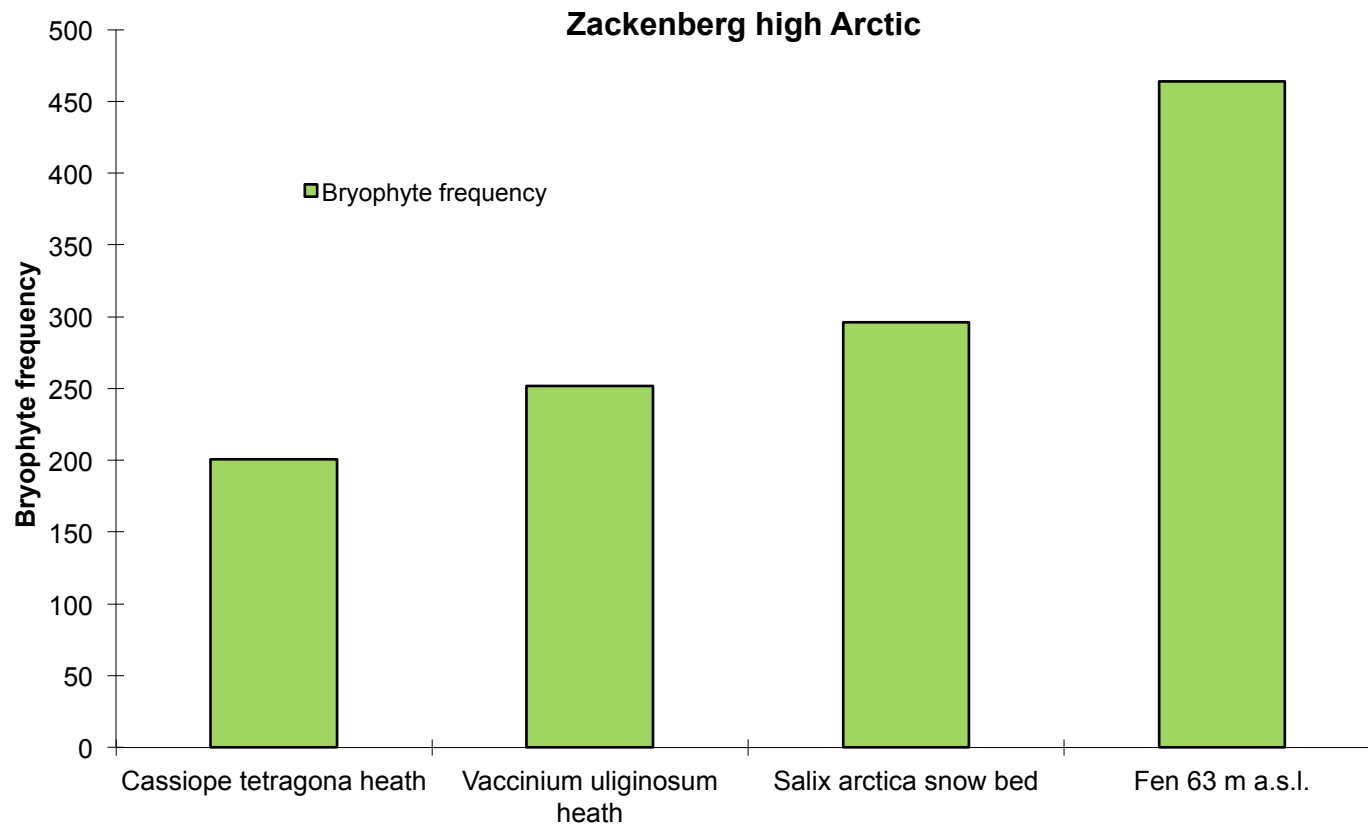
Case study: Zackenberg & Kobbefjord



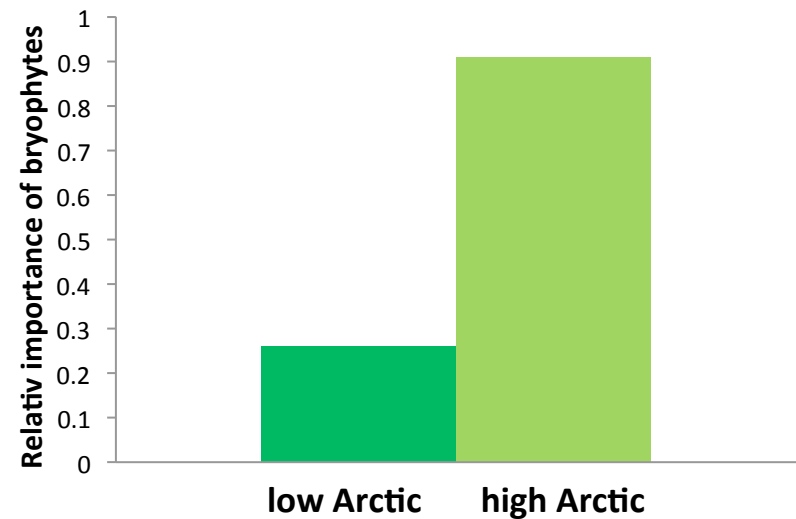
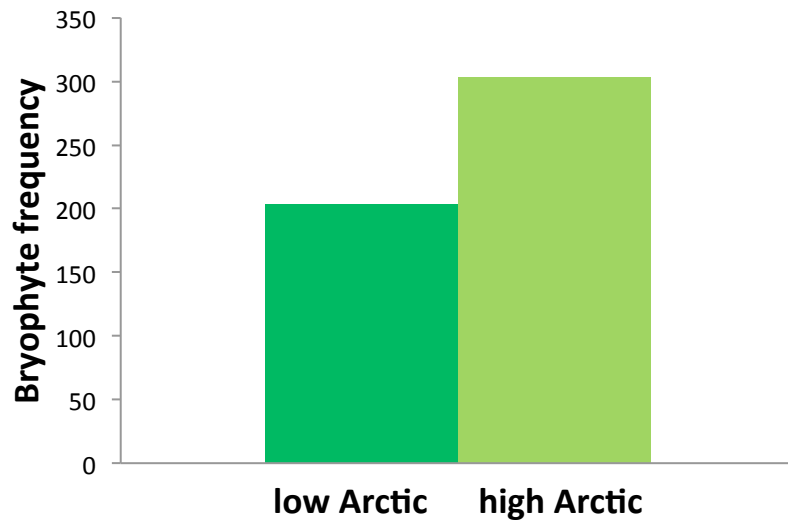
Case study: Zackenberg & Kobbefjord



Case study: Zackenberg & Kobbefjord

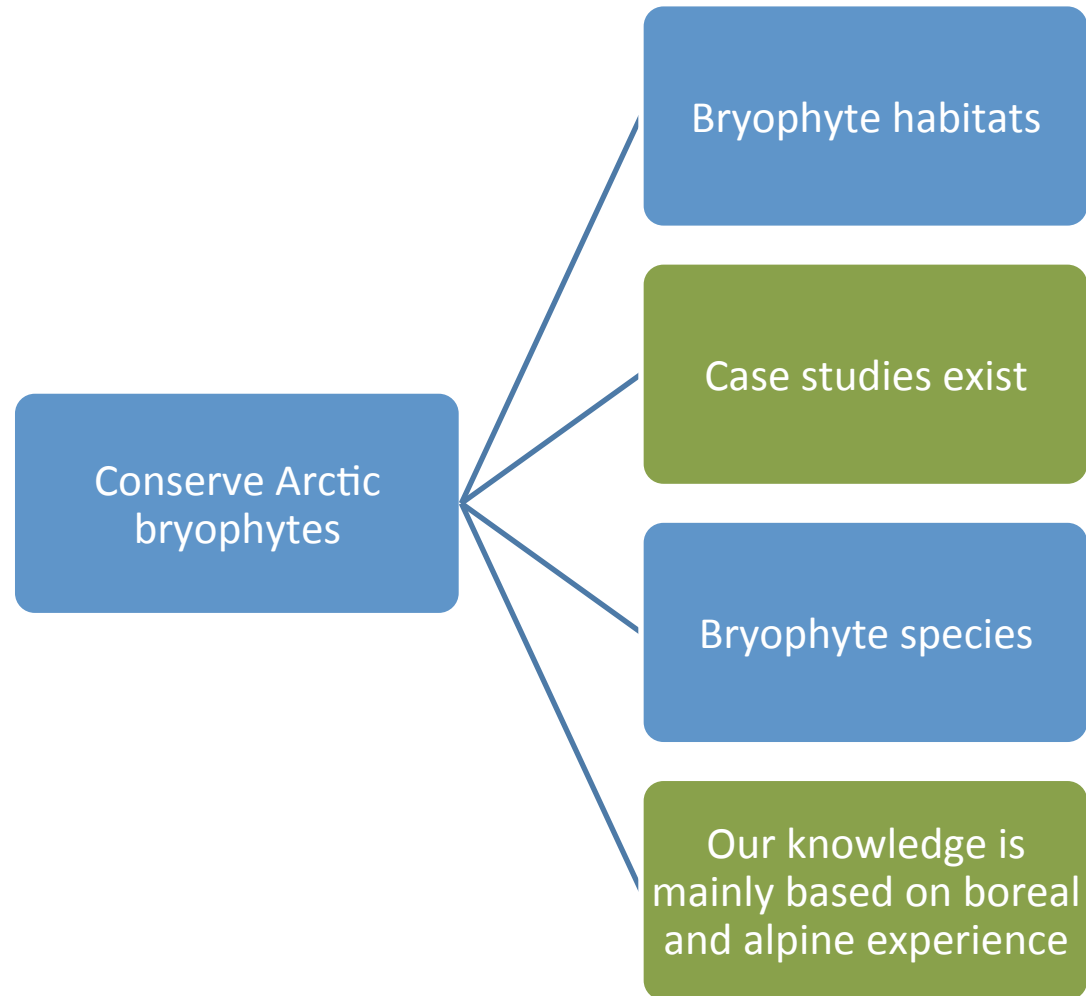


Case study: Zackenberg & Kobbefjord



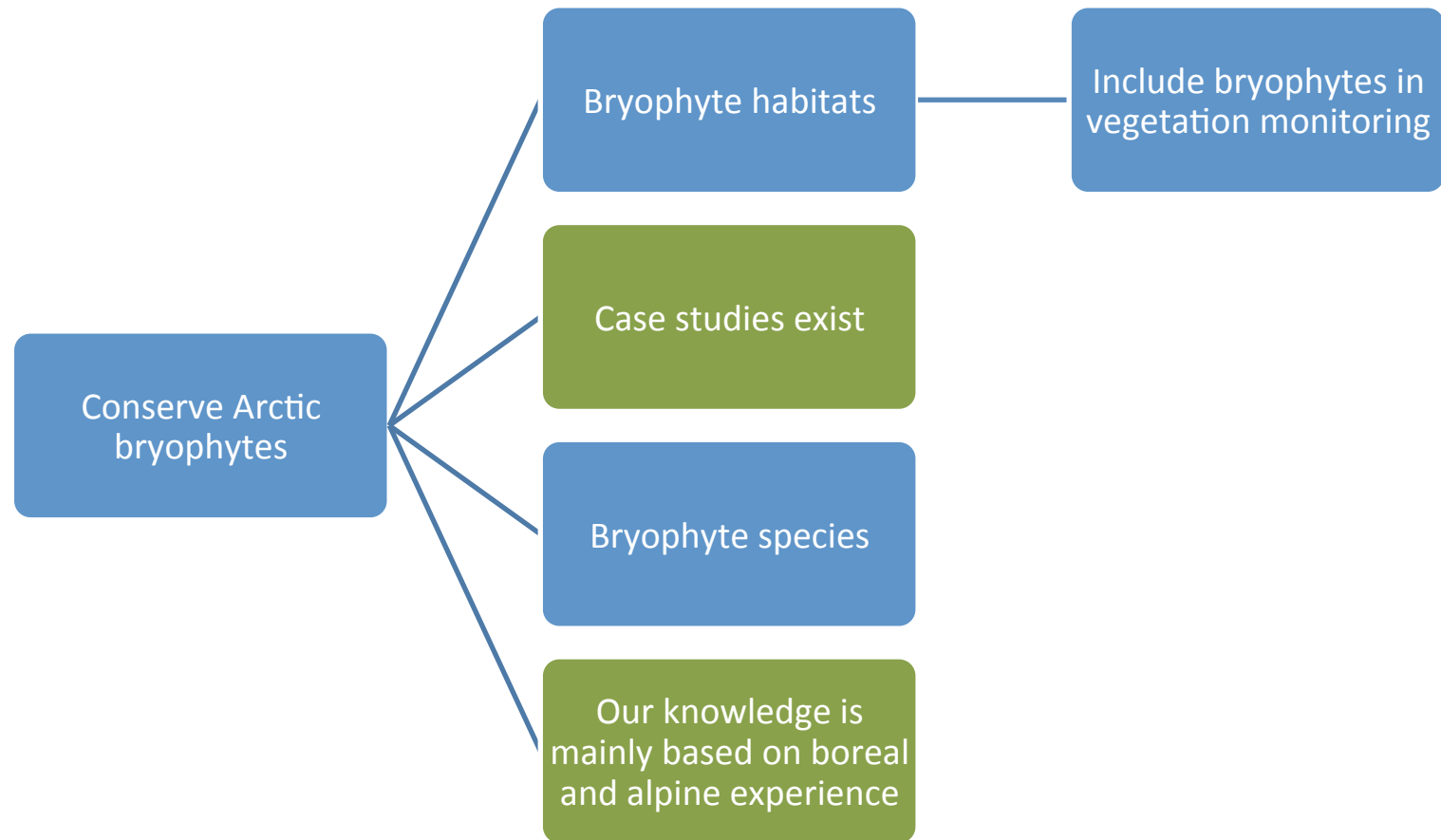
Conservation of Arctic bryophytes

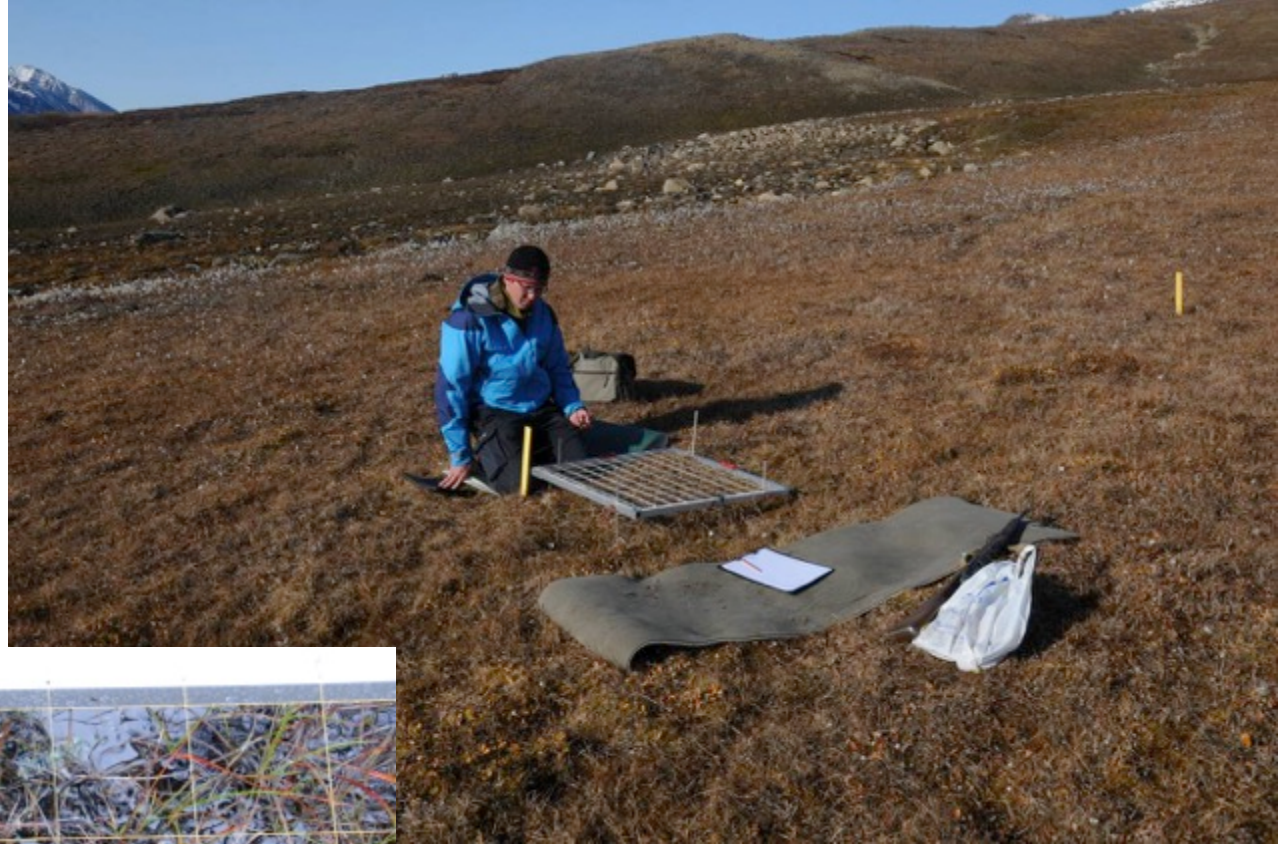
- Conservation must be based on knowledge!



Conservation of Arctic bryophytes

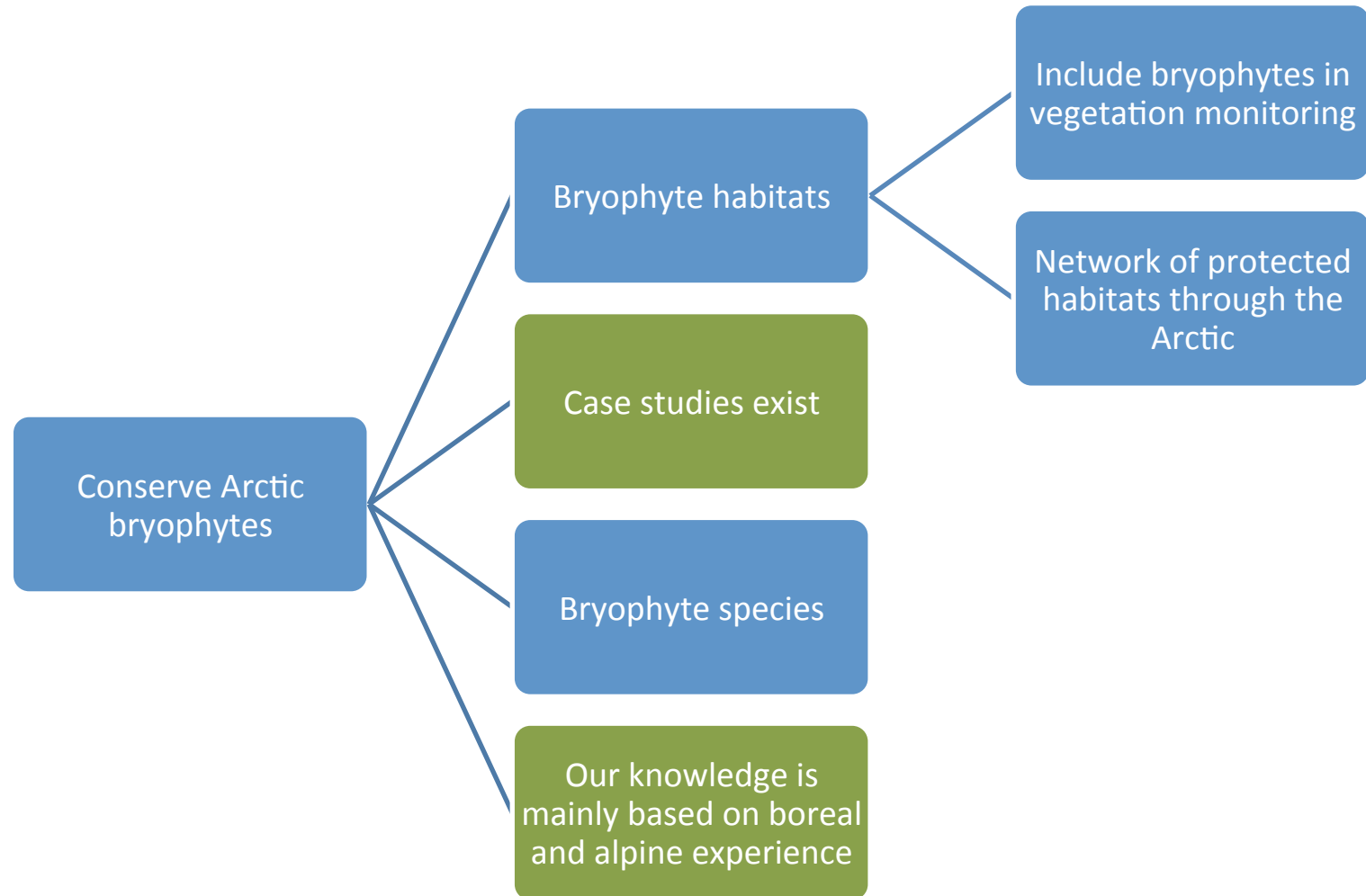
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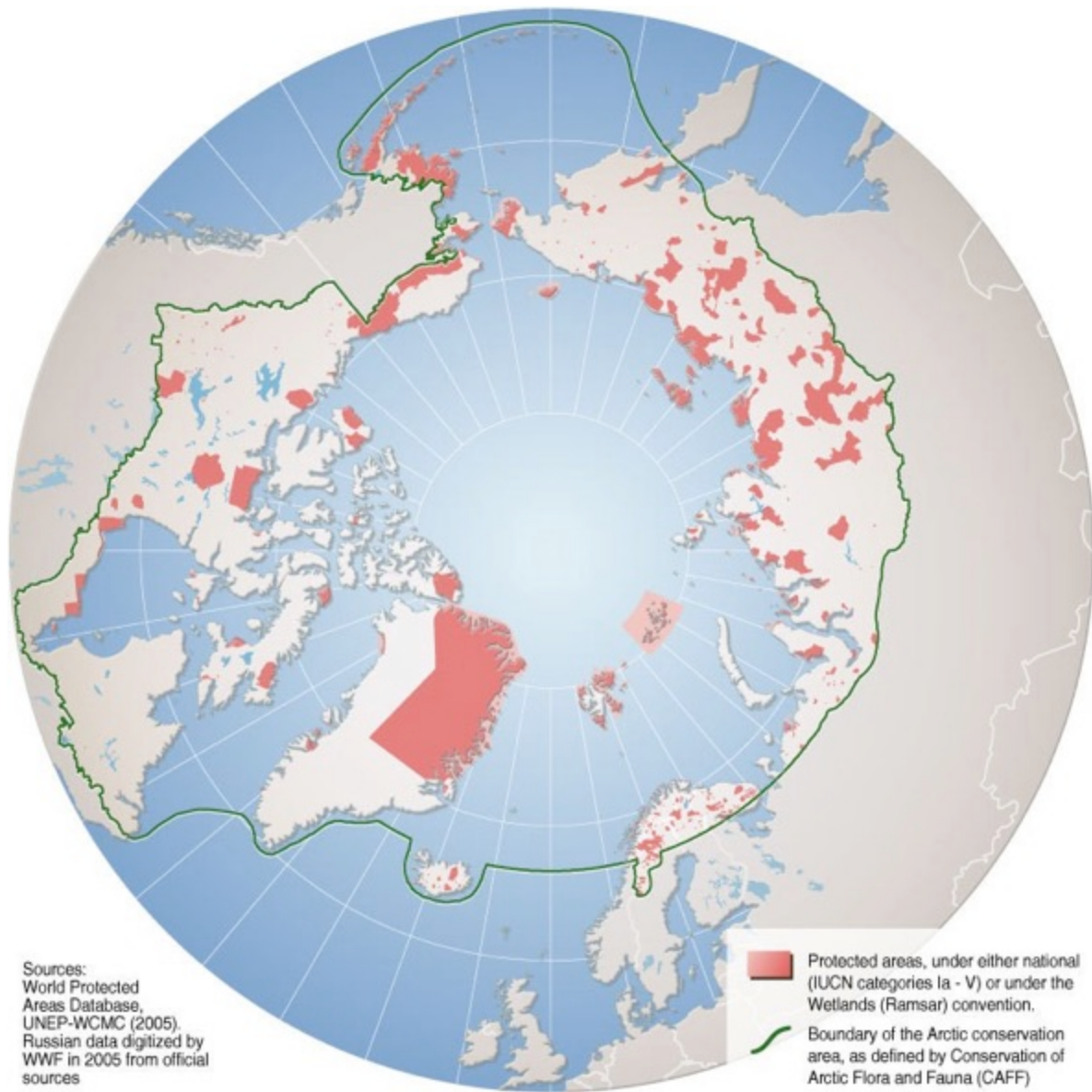




Conservation of Arctic bryophytes

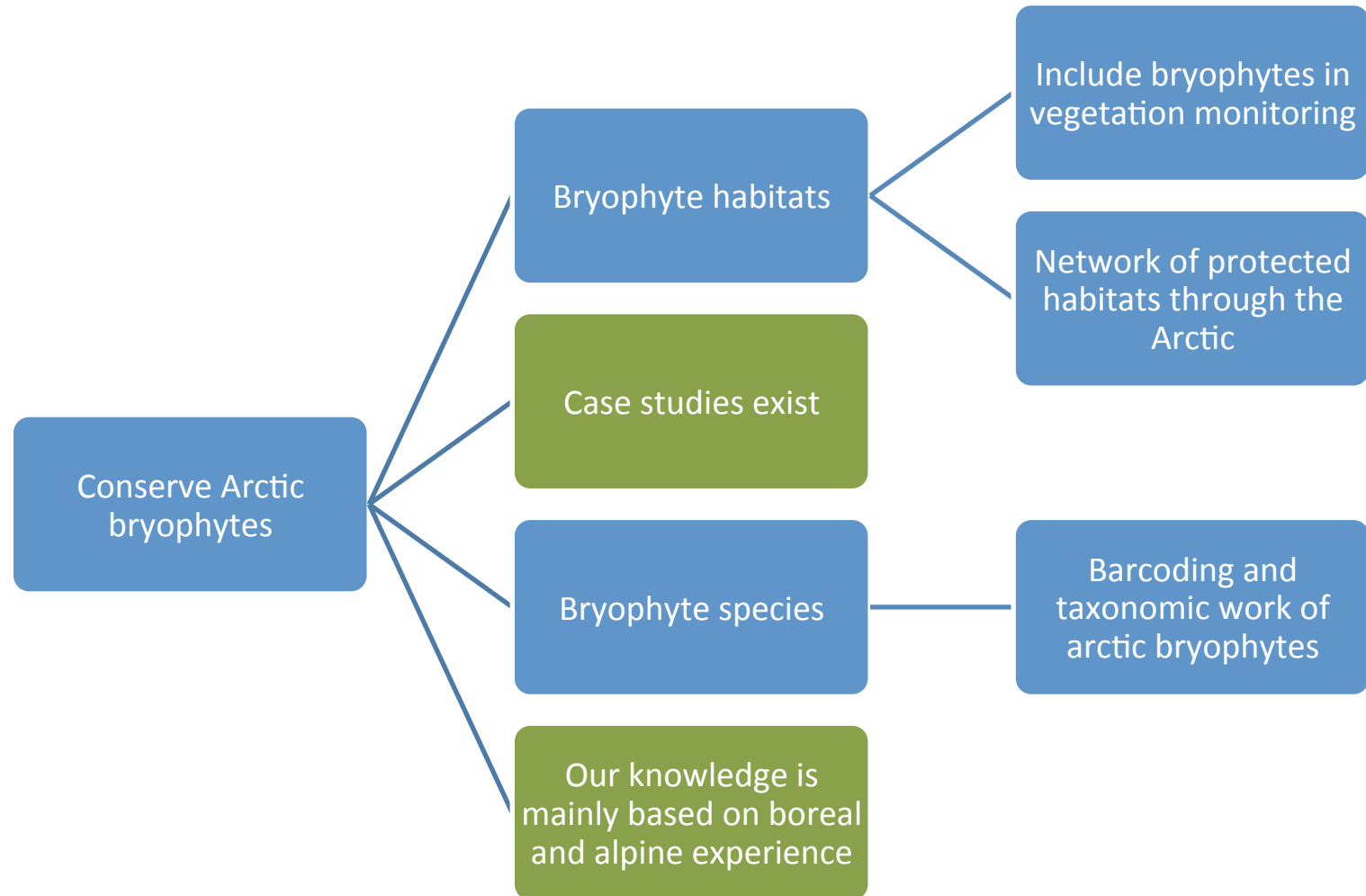
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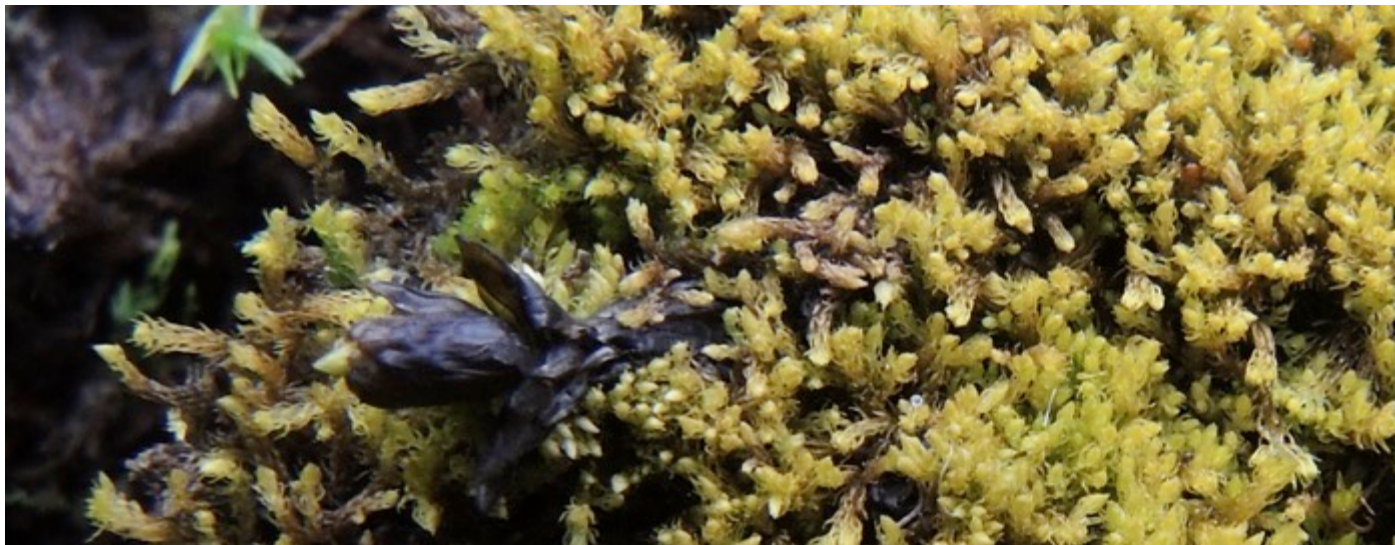




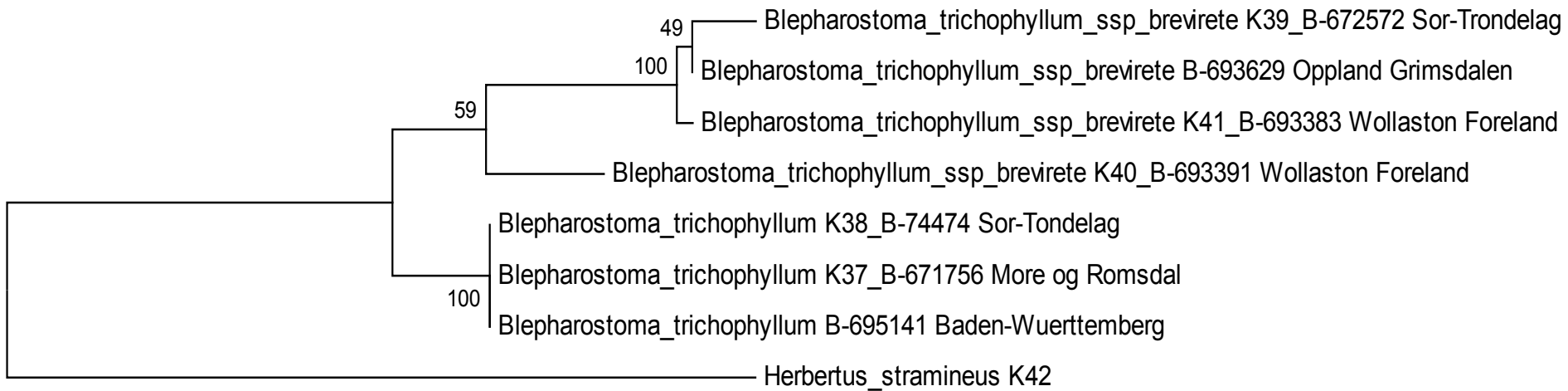
Conservation of Arctic bryophytes

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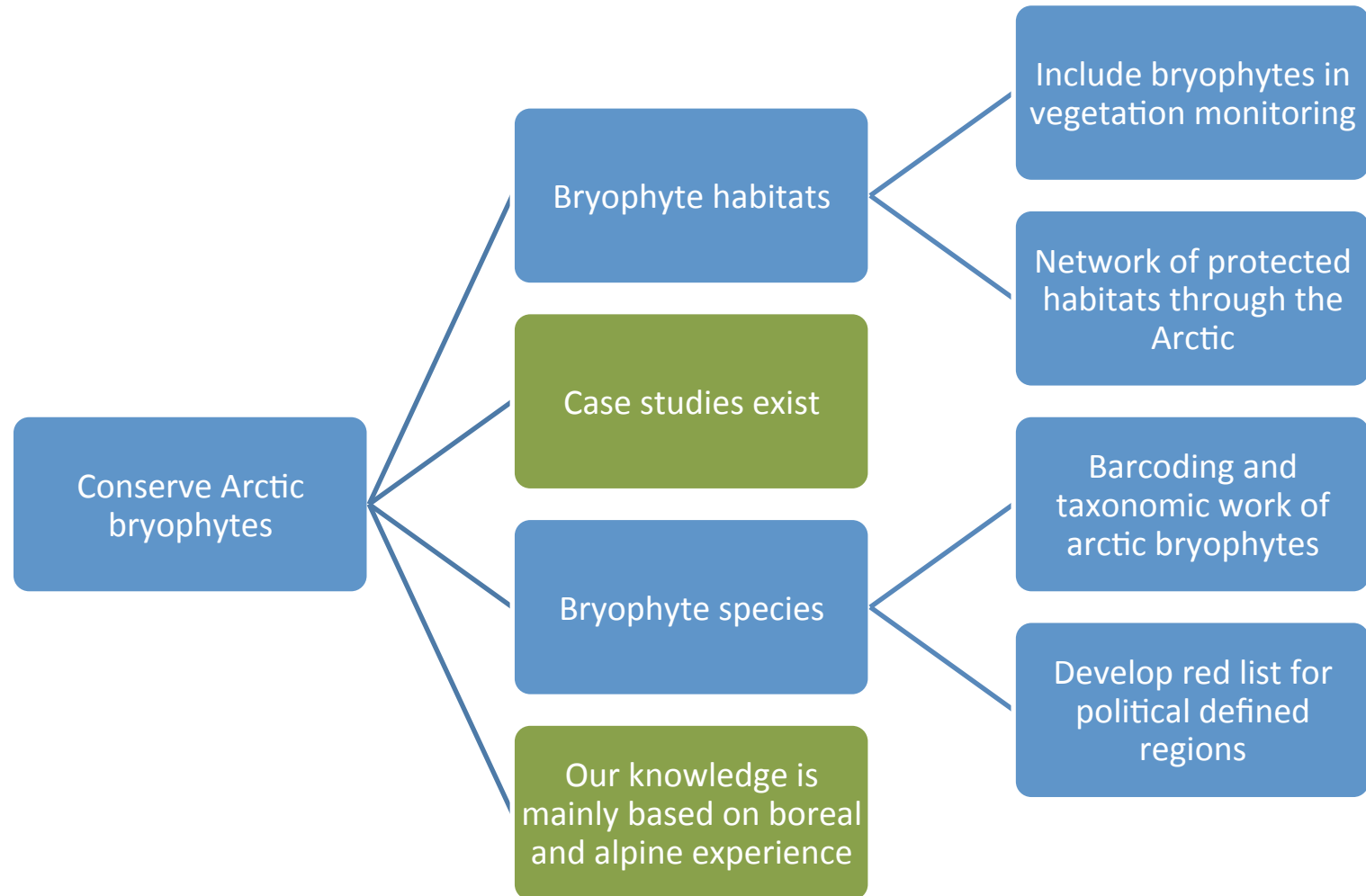
Blepharostoma trichophyllum

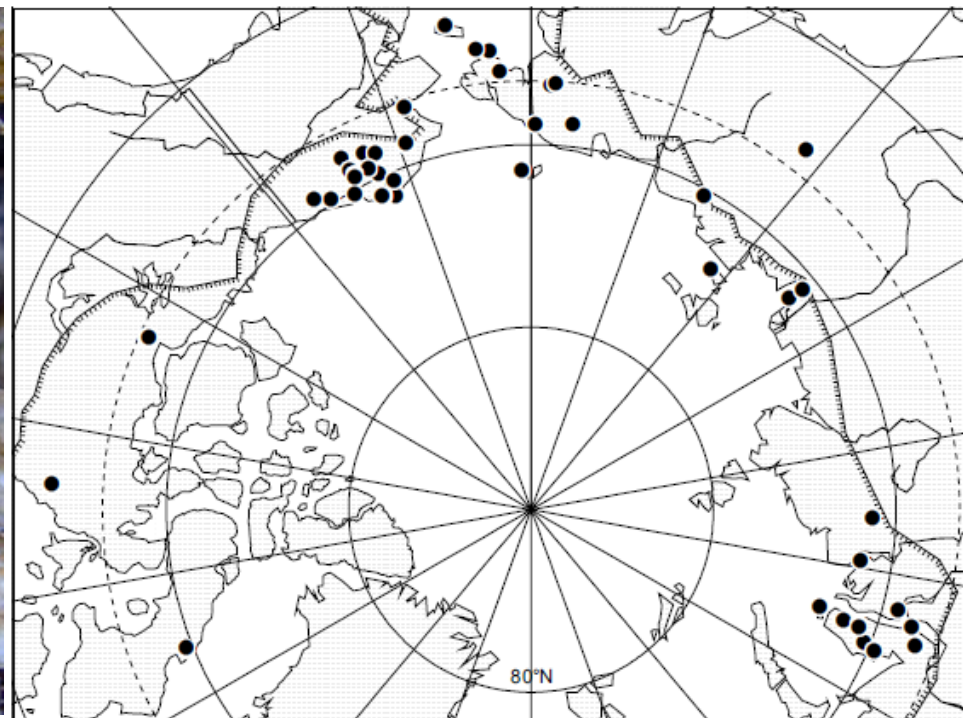
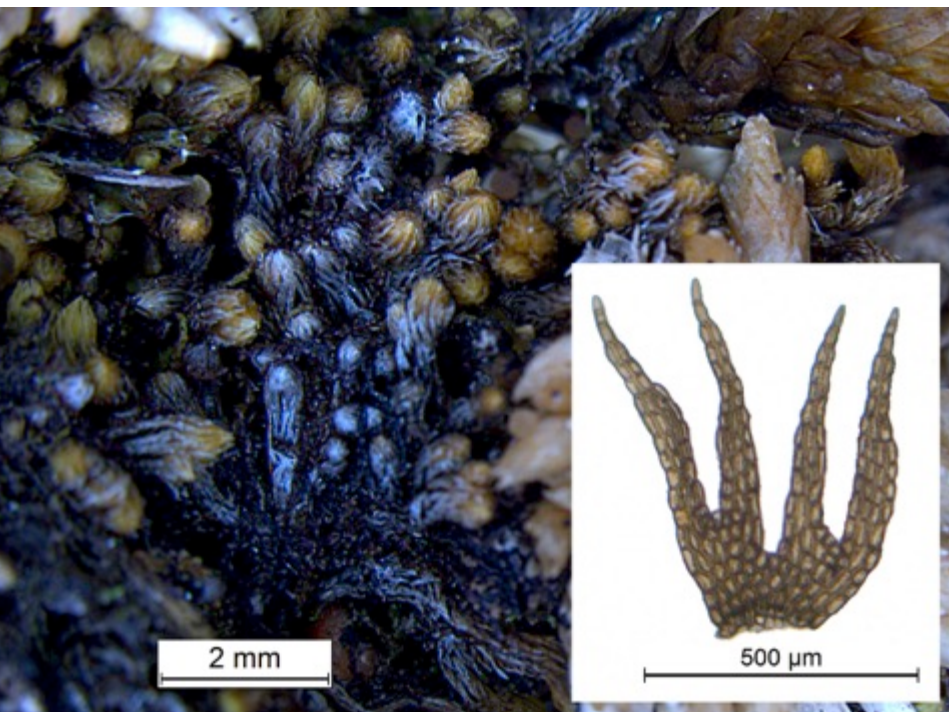


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Conservation of Arctic bryophytes

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14. *Pseudolepicolea fryei* (H.Perss.) Grolle & Ando

To do!

