

# KNO9 Herbivory in the Arctic – understanding large-scale patterns and processes of a key ecological interaction

2<sup>nd</sup> Arctic Biodiversity Congress October 9, 2018 Rovaniemi, Finland





### the Herbivory Network

Sep 2013

ep 2013 Apr 2014 Dec 2014 Sep 2015

Sep 2016 May 2017

Feb 2018 July 2018

Oct 2018





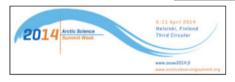














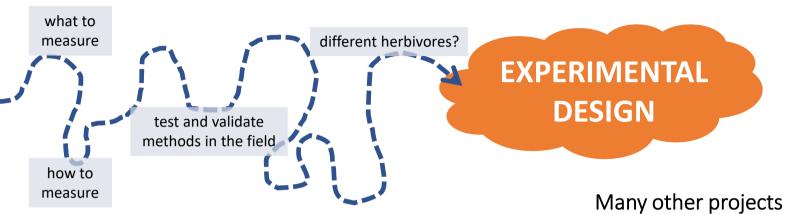
### Priorities of HN

- 1.- facilitate **communication** among researchers
- 2.- to integrate sites, methodologies, and metrics to study herbivory in the tundra
- 3.- to develop a set of common **protocols**
- 4.- to design long-term coordinated experiments and large-scale observational studies

### HERBIVORY NETWORK

STUDYING HERBIVORY IN ARCTIC AND ALPINE ECOSYSTEMS





#### Development of standardized protocols



ITEX herbivory protocol



Invertebrate herbivory protocol



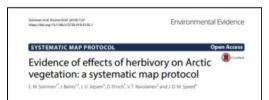
Soil protocol



Vertebrate herbivory protocol















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- **Eeva Soininen**, Arctic University of Norway: Biome-wide patterns and drivers of Arctic herbivores functional and phylogenetic diversity
- Isabel C Barrio, Agricultural University of Iceland: Establishing baselines for future monitoring of invertebrate herbivory in the Arctic
- Elin Lindén, Umeå University: Antiherbivore defences on birch across the Arctic
- Virve Ravolainen, Norwegian Polar Institute: Drivers of vegetation change in the High Arctic
- Katarina Inga, Arctic University of Norway: It takes two to make plants produce defences: Tundra herbivores create heterogeneous landscapes in palatability