Open data sets on spectral properties of boreal forest components

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Spectral libraries of forest components have diverse uses

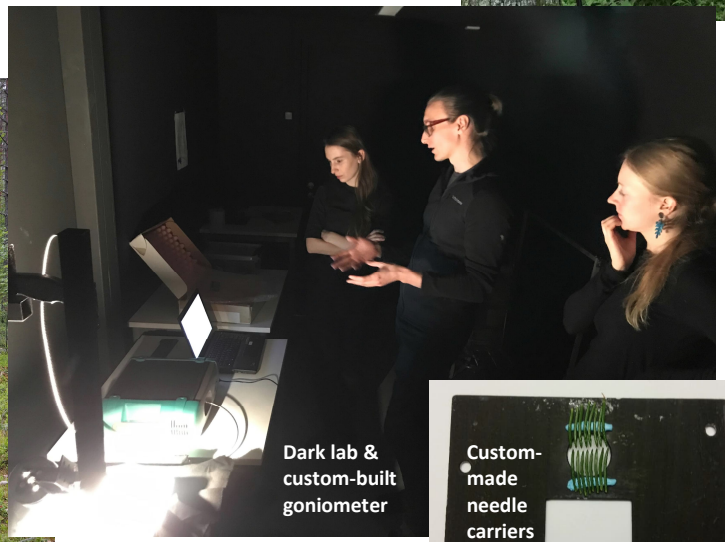
- For development of remote sensing methods and land surface models.
- For understanding the shortwave radiation regime and ecophysiological processes of canopies.
- Educational purposes.

Open spectral data sets (VIS-NIR-SWIR) of boreal forests are rare.

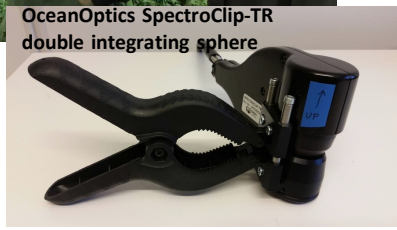
Our spectral lab & data sets

All our data sets (8) available in Mendeley Data.

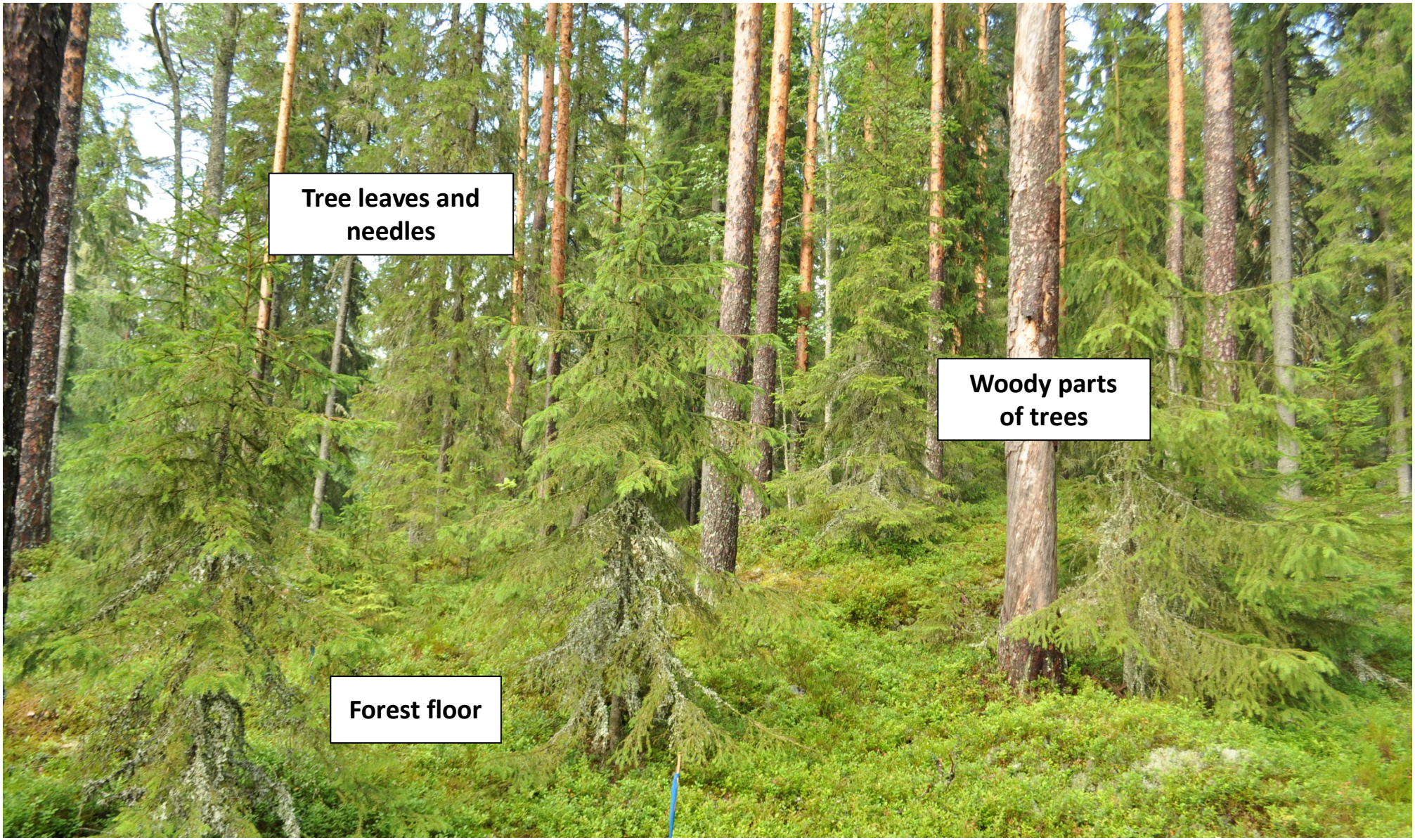
Measurement methods & analyses published in peer-reviewed articles.



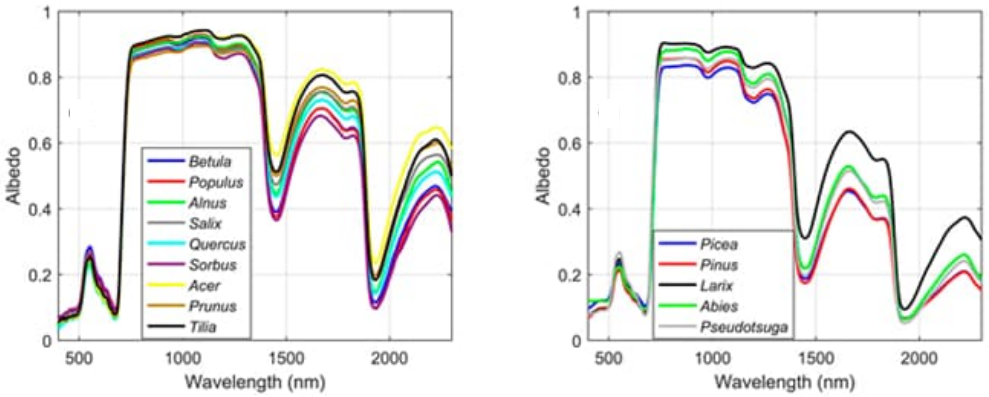
OceanOptics SpectroClip-TR
double integrating sphere



ASD RTS-3ZC single integrating sphere

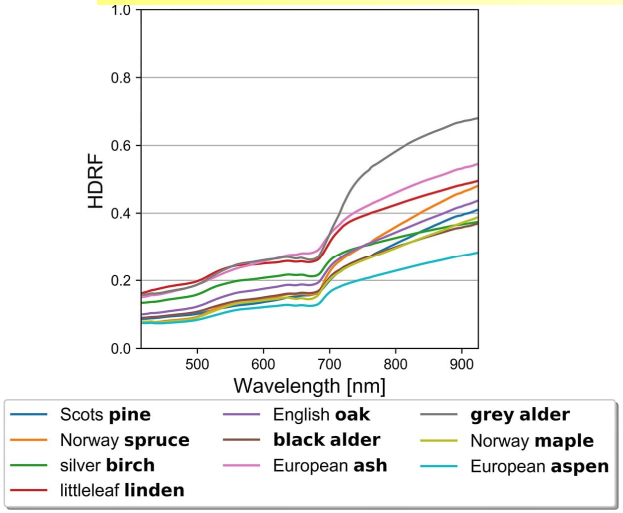

Tree leaves and needles
Woody parts of trees
Forest floor

Tree leaves, needles & bark

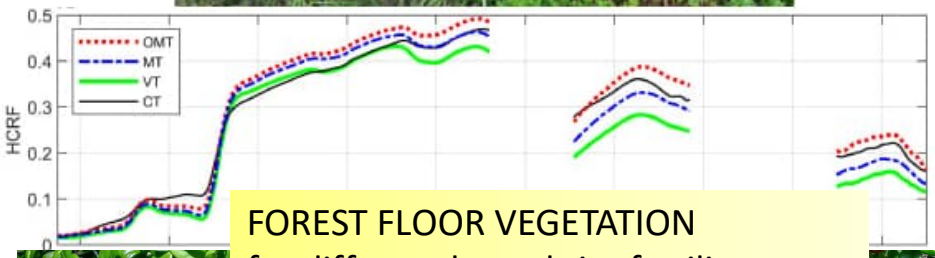


TREE BARK SPECTRA
for 10 boreal & temperate tree species
Jussi Juola et al. 2022.
in Mendeley Data.

TREE LEAF / NEEDLE SPECTRA
for 25 boreal & temperate tree species
Aarne Hovi et al. 2022.
in Mendeley Data.

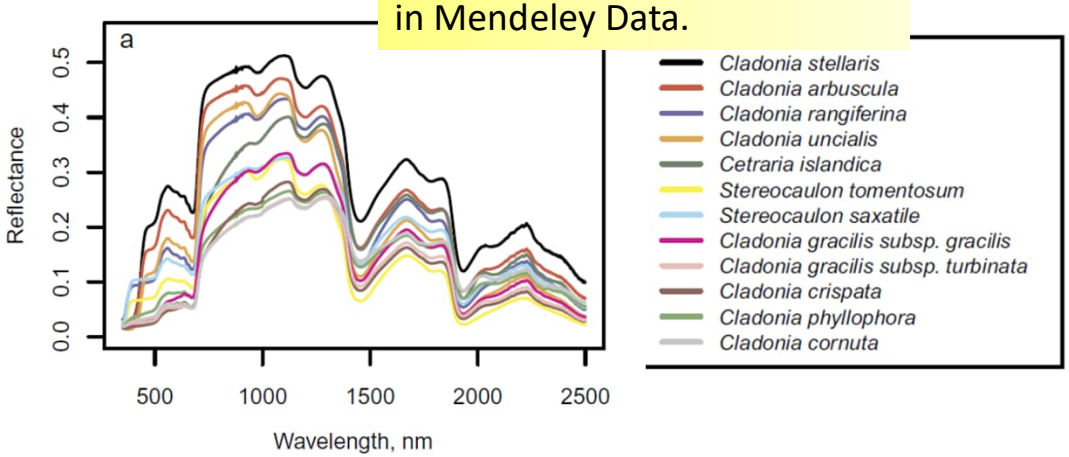


Forest floor



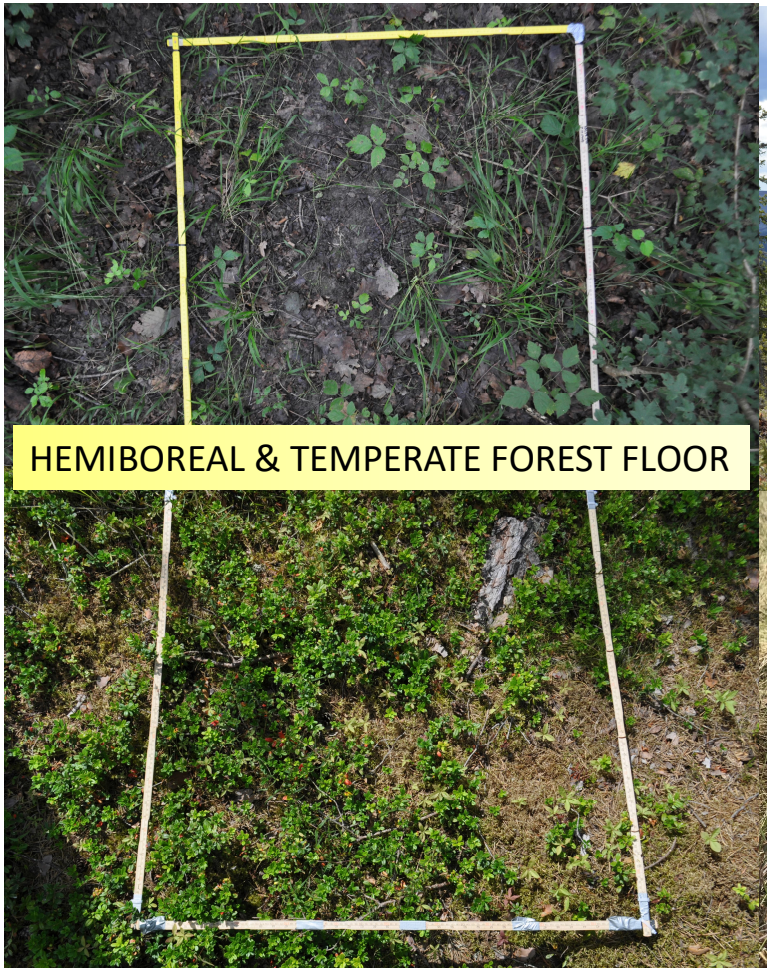
FOREST FLOOR VEGETATION
for different boreal site fertility types
Petri Forsström et al. 2021.
in Mendeley Data.

LICHENS: Spectra of 12 species
Nea Kuusinen et al. 2022.
in Mendeley Data.

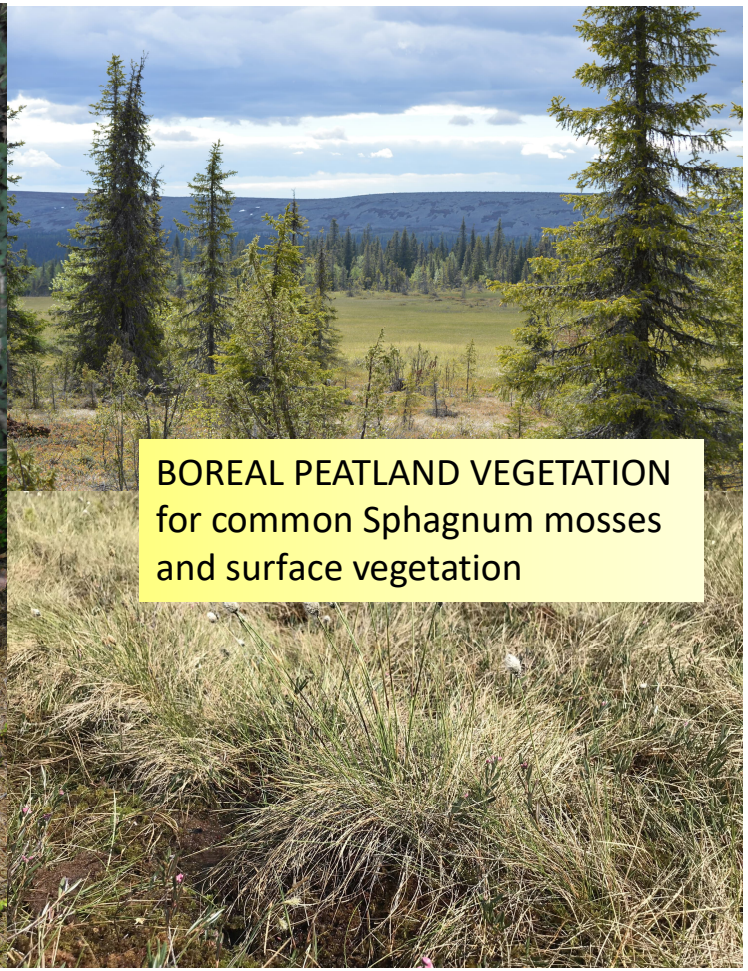


Forthcoming spectral libraries

To be published 2022-2024



HEMIBOREAL & TEMPERATE FOREST FLOOR



BOREAL PEATLAND VEGETATION
for common Sphagnum mosses
and surface vegetation

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Scan this QR code to access our spectral data sets in Mendeley Data.

Sharing is encouraged