

**BRYOPHYTES**  
**IN**  
**KOILLISMAA (Ks)/REGIO KUUSAMOENSIS**  
**BIOGEOGRAPHICAL PROVINCE,**  
**FINLAND AND RUSSIA**

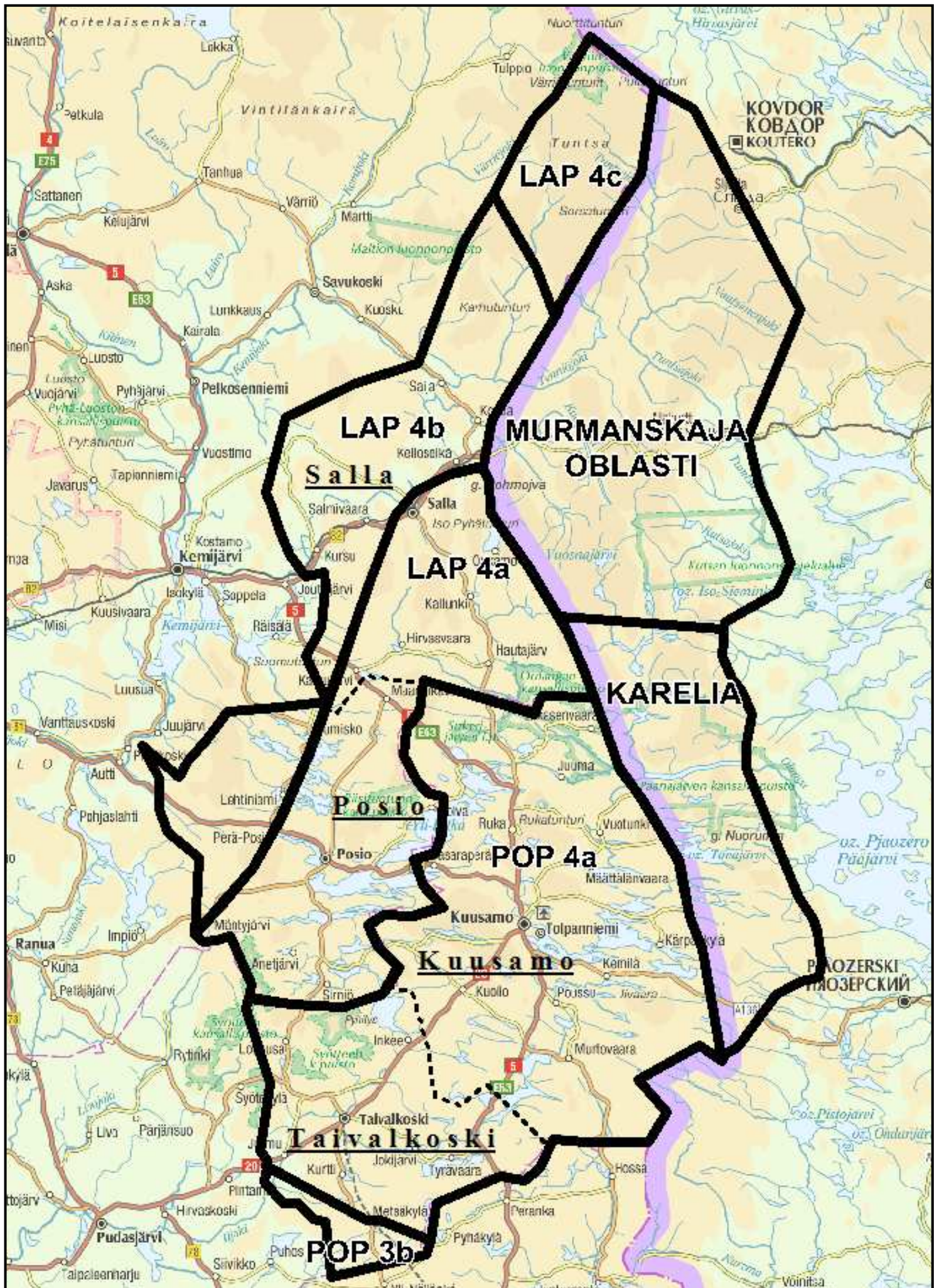
Ulvinen Tauno & Juutinen Riikka  
11.8.2014

Nordic Bryological Society's excursion to Kuusamo, Finland  
21.-24. August, 2014

This table is a detailed version based on checklists of Finnish bryophytes (Sammaltyöryhmä 2014, Ulvinen & Juutinen 2014). Regional distribution of bryophytes in Finland is traditionally presented according to biogeographical provinces (Appendix 1). To complicate matters, two latest assessments of threatened species, in years 2000 and 2010 in Finland have used forest vegetation zones as a basis for regional assessment (regionally threatened species, RT) and on top of that Sammaltyöryhmä (Finnish Committee for Bryophyte Conservation) has added a division based on administrative areas of environmental governance (Appendix 1). At least for time being tables based both on biogeographical provinces and vegetation zones are maintained yearly. For the purpose of this table the information of both tables is combined and distribution within Koillismaa biogeographical province is presented in subdivisions of vegetation zones.

Koillismaa province is situated partly in Russia as a result of World War II.

Majority of Finnish Koillismaa belongs to area 4a. Oulanka national park (e.g. Aventojoiki, Jyrävä, Jäkälävuoma, Kitkajoki, Kiutaköngäs, Korvasvaara, Lammasvuoma, Sirkkapuro, Tulilammenpuro) is in POP 4a except for its northern parts which are in LAP 4a (e.g. Kyökkäkallio, Savinajoki) (Appendix 2). Other well known locations belonging to POP 4a in Kuusamo are Närängänvaara, Paljakka and Ruka and in Taivalkoski Kylmäluoma and Syöte national park. Northern part of Syöte national park (the part belonging to Posio) is in LAP 4a. Also Riisitunturi national park (Posio) and Sallatunturi (Salla) are LAP 4a.



Takkaselkätunturi, Tuntsa and Värriö strict nature reserve in Salla are situated in area LAP 4c. Korouoma is in area LAP 4b. Metsäkylä area in Taivalkoski belongs to POP 3b. The subdivisions POP 3b, LAP 4b and LAP 4c are large and only a minor part of them is situated within Koillismaa province. The amount of collected specimens in POP 3b, LAP 4b and LAP 4c from Koillismaa is scanty.

Distribution in Russian Koillismaa, in provinces of Murmanskaja oblasti and Karelia are based on literature listed at the end of this text. Murmanskaja oblasti consists of area VII in Schljakov and Konstantinova (1982). Koillismaa biogeographical province in Russia included in area 1 by Volkova and Maksimov (1993). That area also includes a part of Pohjois-Viena (Karelia Keretina, PV/Kk), e.g. Kivakkatunturi. Occurrences probably from Pohjois-Viena are removed from Koillismaa list.

Locations with bryophyte collections in Murmanskaja oblasti include Kutsa strict nature reserve (e.g. Hirveäkallio, Hosiotunturi, Jänisköngäs, Kunnusoja, Kursukuru, Perävääntämänjänkä, Pääjärvi, Rajjärvi, Riekinlammit, Ruskeakuru, Vuosnatunturi, and Tuoruskuru) and in Karelia e.g. Ortsastunturi, Mäntyunturi, Nuorunen, Paanajärvi area (e.g. Ahvenvaaranlammit, Helotuksentunturi, Kulmakkapuro, Mäntykoski, Ruskeakallio), Sieppijärvet and Ukonvaara.

A significant amount of Finnish occurrences have been checked in OULU and H by Ulvinen and from database Hertta (Finnish Environment Institute, SYKE) by Juutinen. Teuvo Ahti kindly provided us with data from Värriö strict nature reserve in Salla (area LAP 4c).

Nomenclature follows Hill et al. (2006) and Söderström et al. (2002) with few exceptions.

<b>IUCN 2010 - National classification</b>		
Regionally Extinct	RE	
Critically Endangered	CR	
Endangered	EN	
Vulnerable	VU	
Near Threatened	NT	
Least Concern	LC	
Data Deficient	DD	
Not Evaluated	NE	
Found after 2010 evaluation	-	
Not found from Finland	(blank)	
<b>Regional classification</b>		
	Detected 1940 onwards	Detected before 1940
Common	●	○
Rare	●	○
Indicator species	★	☆
Regionally threatened	RT	rt
Unchecked specimen	?	
Regionally Extinct	RE	
Not known from region	-	

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## **CHECKLISTS OF FINNISH BRYOPHYTES:**

### **With biogeographical provinces:**

Ulvinen, T. & Juutinen, R. 2014: Suomen sammalien levinneisyys eliömaakunnissa. – Suomen ympäristökeskus.

3.2.2014. [http://www.ymparisto.fi/fi-FI/Luonto/Lajit/Lajinsuojelutyo/Eliotyoryhmat/Sammaltyoryhma/Suomen\\_sammalet](http://www.ymparisto.fi/fi-FI/Luonto/Lajit/Lajinsuojelutyo/Eliotyoryhmat/Sammaltyoryhma/Suomen_sammalet)

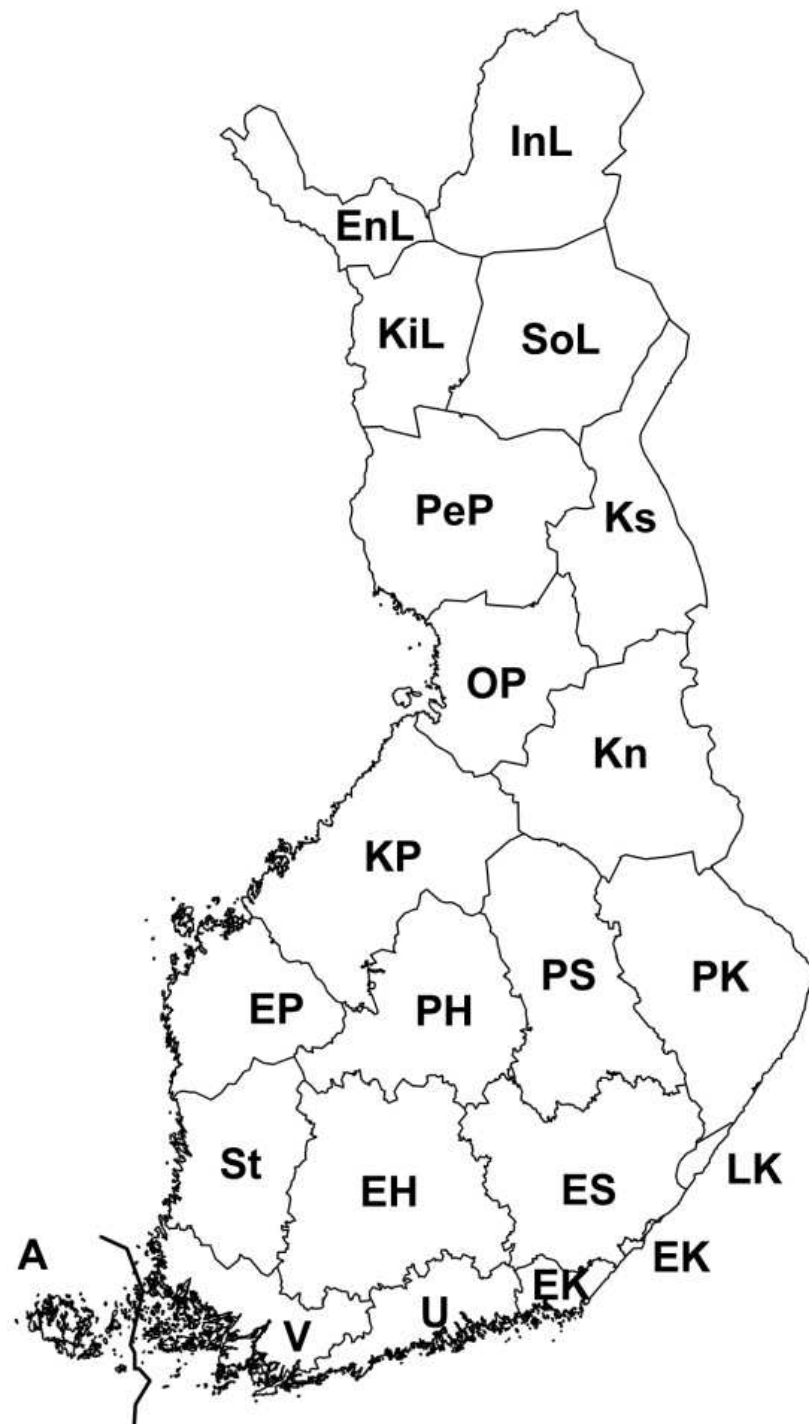
### **With vegetation zones and regionally threatened species:**

Sammaltyöryhmä 2013: Suomen sammalien levinneisyys metsäkasvillisuusvyöhykkeissä ja ELY-keskuksissa. – Suomen ympäristökeskus. 3.2.2014. [http://www.ymparisto.fi/fi-FI/Luonto/Lajit/Lajinsuojelutyo/Eliotyoryhmat/Sammaltyoryhma/Suomen\\_sammalet](http://www.ymparisto.fi/fi-FI/Luonto/Lajit/Lajinsuojelutyo/Eliotyoryhmat/Sammaltyoryhma/Suomen_sammalet)

## Appendix 1.

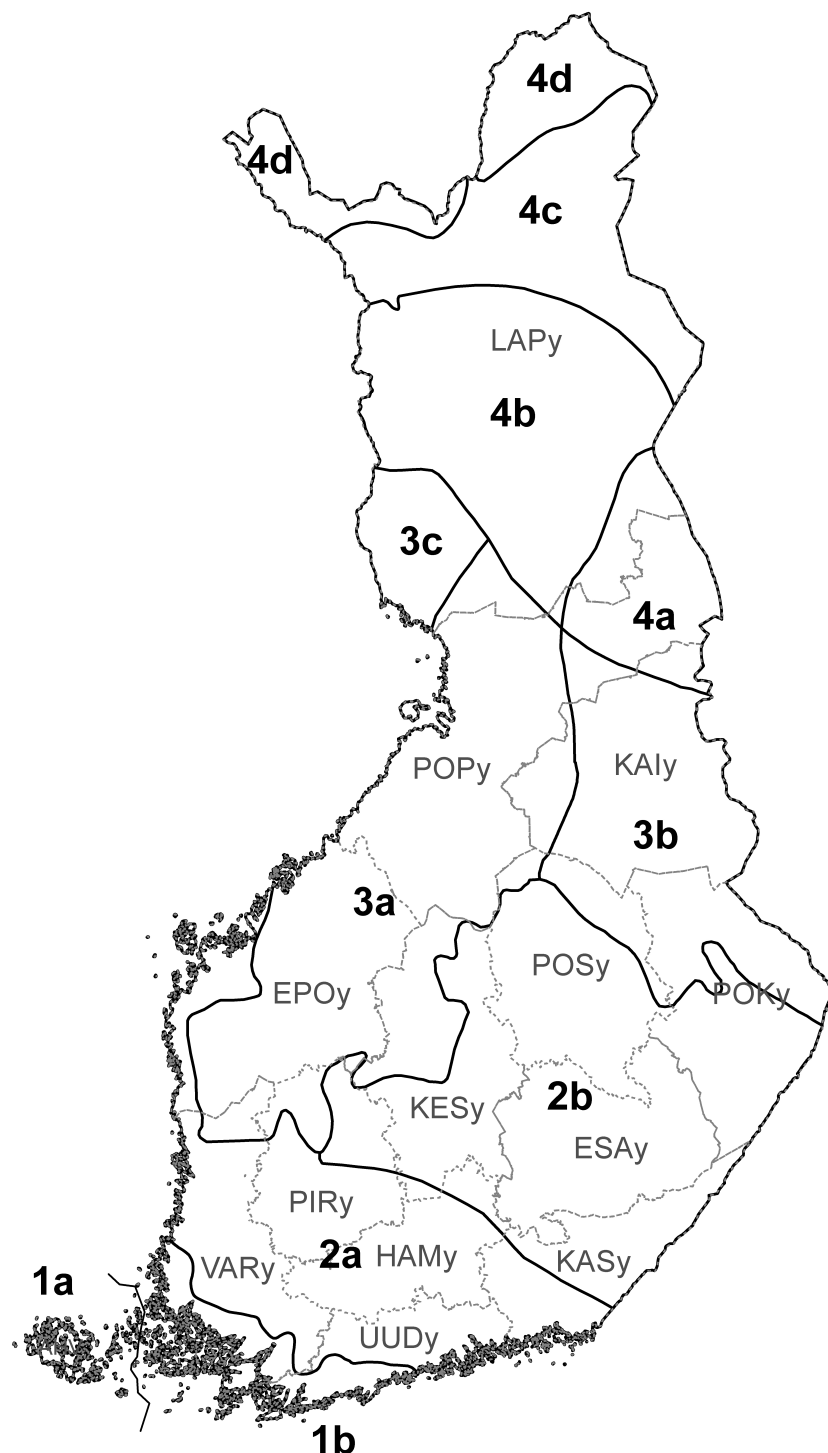
### BIOGEOGRAPHICAL PROVINCES IN FINLAND:

A/A	Ahvenanmaa (Alandia)
V/Ab	Varsinais-Suomi/ (Regio aboënsis)
U/N	Uusimaa (Nylandia)
EK/Ka	Etelä-Karjala (Karelia australis)
St/St	Satakunta (Satakunta)
EH/Ta	Etelä-Häme (Tavastia australis)
ES/Sa	Etelä-Savo (Savonia australis)
LK/Kl	Laatokan Karjala (Karelia ladogensis)
EP/Oa	Etelä-Pohjanmaa (Ostrobothnia australis)
PH/Tb	Pohjois-Häme (Tavastia borealis)
PS/Sb	Pohjois-Savo (Savonia borealis)
PK/Kb	Pohjois-Karjala (Karelia borealis)
KP/Om	Keski-Pohjanmaa (Ostrobothnia media)
Kn/Kn	Kainuu (Ostrobothnia kajanensis)
OP/Obo	Oulun Pohjanmaa (Ostrobothnia ouluensis)
PeP/Obu	Perä-Pohjanmaa (Ostrobothnia ultima)
<b>Ks/Ks</b>	<b>Koillismaa</b> <b>(Regio kuusamoënsis)</b>
KiL/Lkk	Kittilän Lappi (Lapponia kittilensis)
SoL/Lks	Sompion Lappi (Lapponia sompiensis)
EnL/Le	Enontekiön Lappi (Lapponia enontekiensis)
InL/Li	Inarin Lappi (Lapponia inarensis)



## VEGETATION ZONES IN FINLAND:

- 1a Hemiboreal, Åland
- 1b Hemiboreal, Oak zone
- 2a Southern boreal, Southwestern Finland and Southern Ostrobothnia
- 2b Southern boreal, Lake district
- 3a Middle boreal, Ostrobothnia
- 3b Middle boreal, Northern Carelia – Kainuu**
- 3c Middle boreal, Southwestern Lapland
- 4a Northern boreal, Kuusamo district**
- 4b Northern boreal, North ostrobothnia**
- 4c Northern boreal, Forest Lapland**
- 4d Northern boreal, Fjeld Lapland



# Appendix 2. Oulanka national park

