

Climate-related terrestrial ecosystem change

Pekka Niemelä

University of Turku, Finland

Baltic Sea Basin

Unique archipelago ecosystems

Unique land uplift ecosystems, especially on coastal areas of the Gulf of Bothnia

Focus? :

Climatic change and these unique terrestrial ecosystems

How far should we go to Fennoscandian forests and tundra?

Unique Baltic Sea Basin ecosystems

- Climatic change and invasive species:

mammals (mink, rocoon doc, white-tailed deer...)

birds (cormorant...)

insects (nun moth, gypsy moth, pine sawflies)

plants (Rosaceae, Umbelliferae...)

- Climatic change and biodiversity
New species entering to Fennoscandia

connected with invasive species
connected with land use, forest
management, etc

- Earlier studies mainly on single-species level studies
- Community level changes
 - vegetation communities
 - animal communities
- The role of abiotic factors in ecological interactions

Trophic level interactions

- horizontal interactions
- vertical interactions

If primary production changes also trophic level interactions changes

- Review – type analyses
- Rapid accumulation of publications since 2006
- Meta-analyses

