Citizens' views on the management of trans-border national parks

(Oslo 2013-11-25)

- Bialowieza
  - Poland and Belarus
- Fulufje/ället
  - Norway and Sweden

Variables affecting results

- Framing of the study
  - biocentric
  - anthropocentric
  - valuation philosophies
- How the background description is made
  - can it be made neutral?
- What do the respondents know?
- What is the problem to be solved?
  - based on what analyses?
- What solutions should be proposed?
  - based on what analyses?

Frameworks for design of study

- Conservation of nature
- Human well-being
- Land covers
- Land use
- Valuation

Conservation

- Biodiversity
  - species
    - choice of species?
  - habitats
    - area or functional networks?
  - processes
    - wilderness or cultural landscape?

Human well-being

- Ecosystem services
  - provisioning
  - regulating
  - supporting/habitat
  - cultural

Just about choosing interface!

		Biodiversity		
		Species	Habitats	Processes
Ecosystem services	*Provisioning (goods)*	Species providing food, wood, fibre and energy		Water quantity
	Regulating	Pollination Human health and well-being		Climate regulation Carbon sequestration Flood regulation Disease regulation Water purification Nutrient uptake Decomposition
	*Supporting, or habitat**	Primary production	Resources for species and populations	Nutrient cycling Soil formation
	Cultural	Aesthetic, spiritual, educational, intellectual		

Land cover

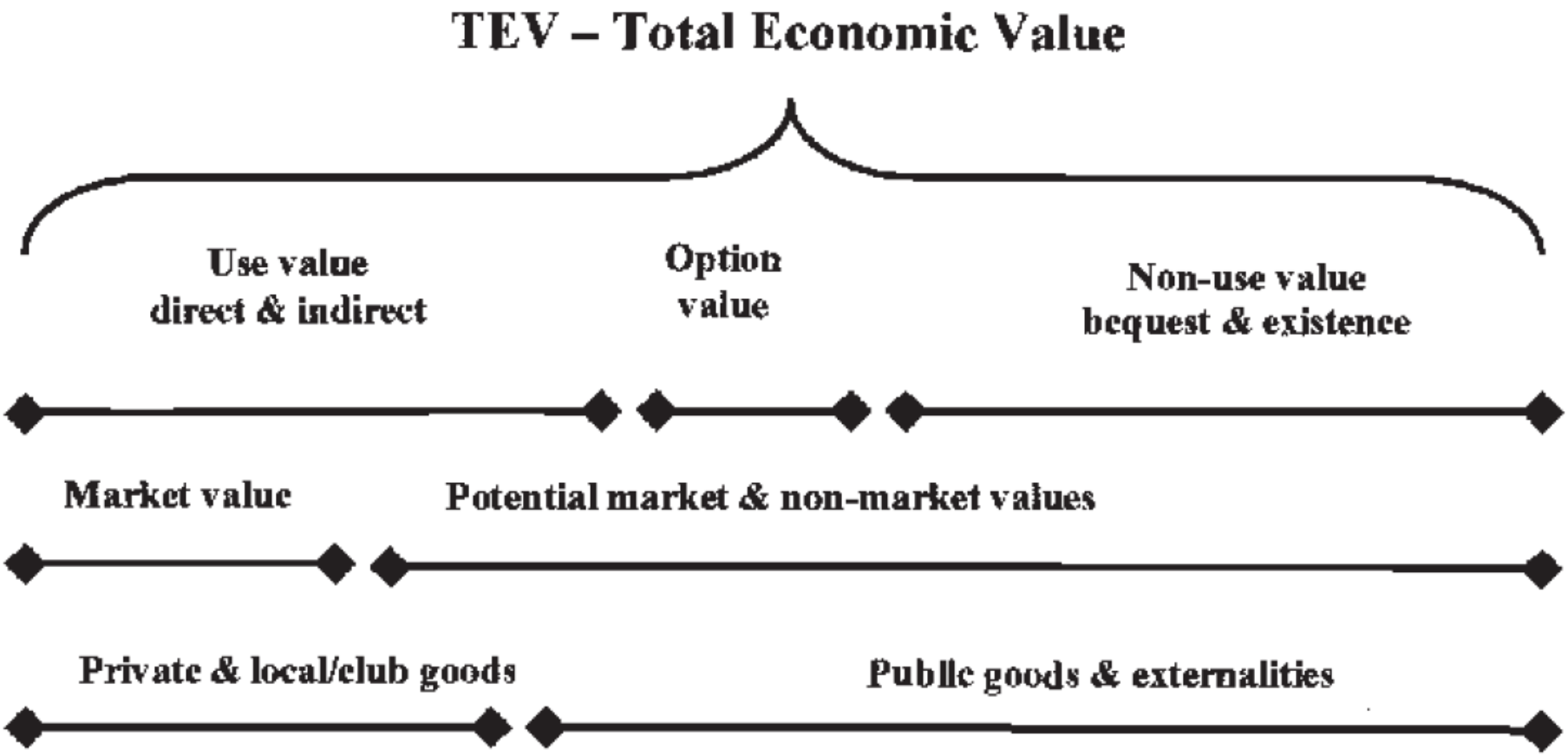
- Mountain
- Mires
- Forest
  - mountain birch
  - mountain spruce
  - managed age class mosaic
- Infrastructure
  - roads
  - for residents and tourists

Fulufjället land covers

Land use

- Nature conservation
- Hunting
- Skidoos
- Wood production
- Water regulation
- Wind power
- Tourism
  - ski resort
  - skiing
  - hiking

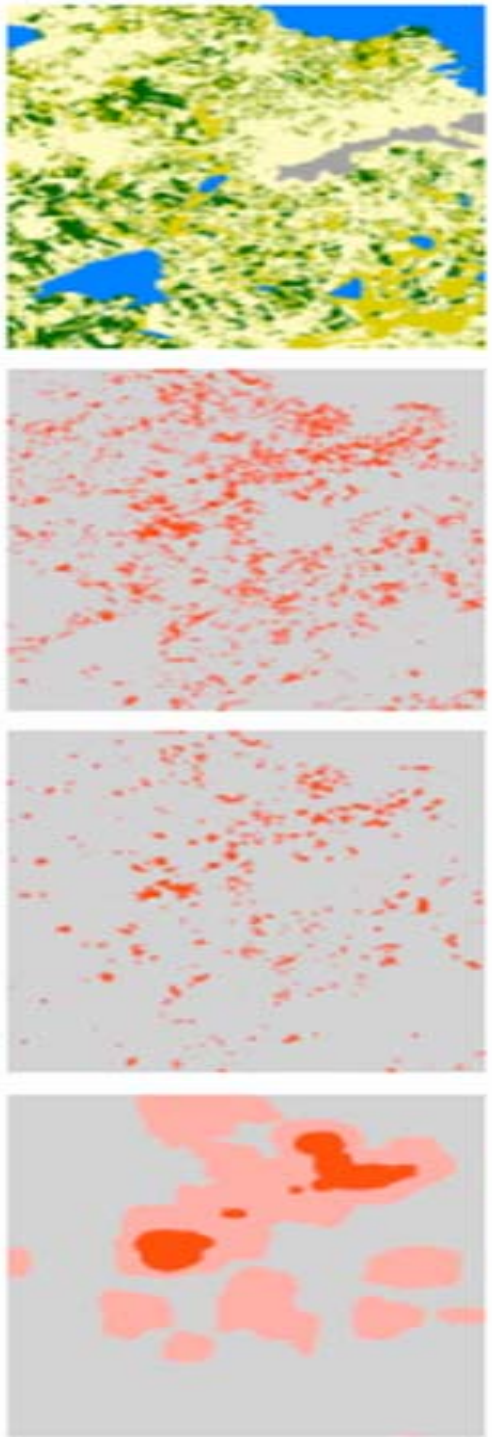
Valuation systems



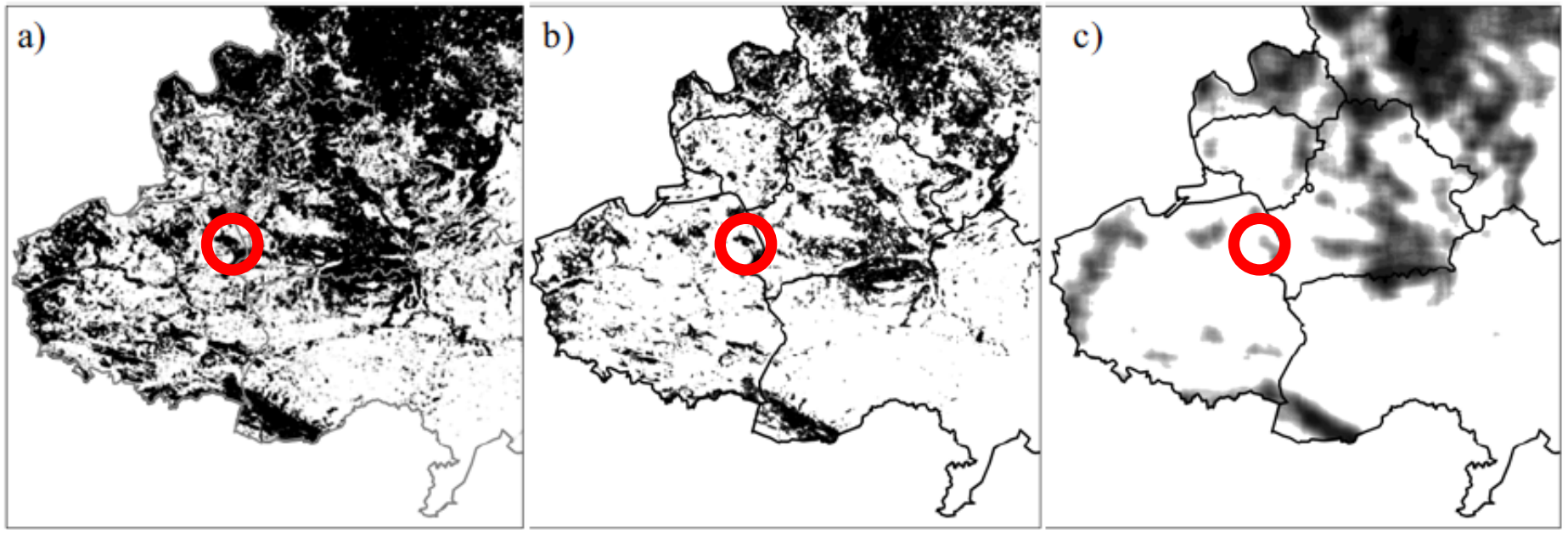
Green infrastructure

- Do administrative networks of conservation areas form habitat networks with functional connectivity?
  - stratification of conservation areas by representative ecosystems
  - spatial analyses of connectivity
- Diagnoses
  - ecological system/s
  - social system/s

- Land cover data base
- The land cover providing resources (=all)
- Sufficiently large (=stands)
- Sufficiently close together (=tracts)



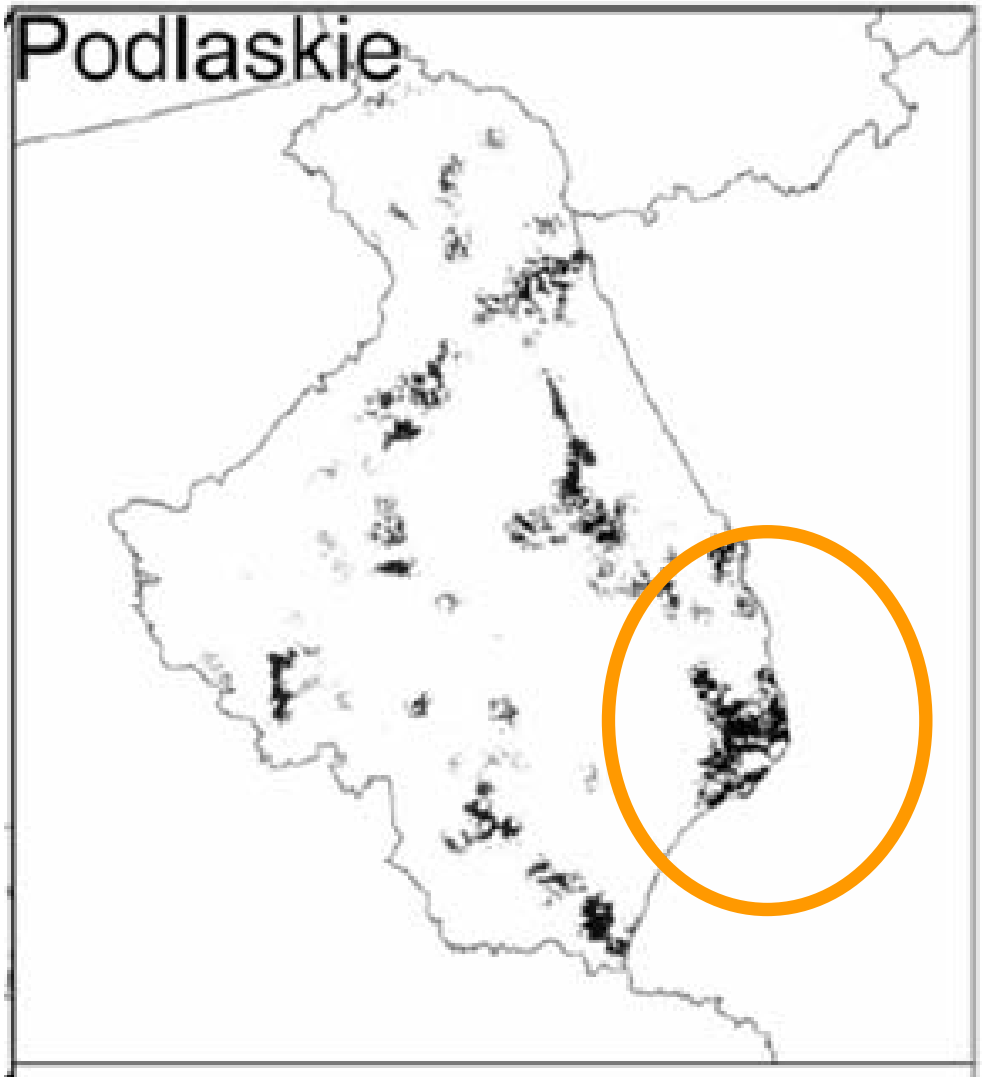
All forest - Stands - Connectivity

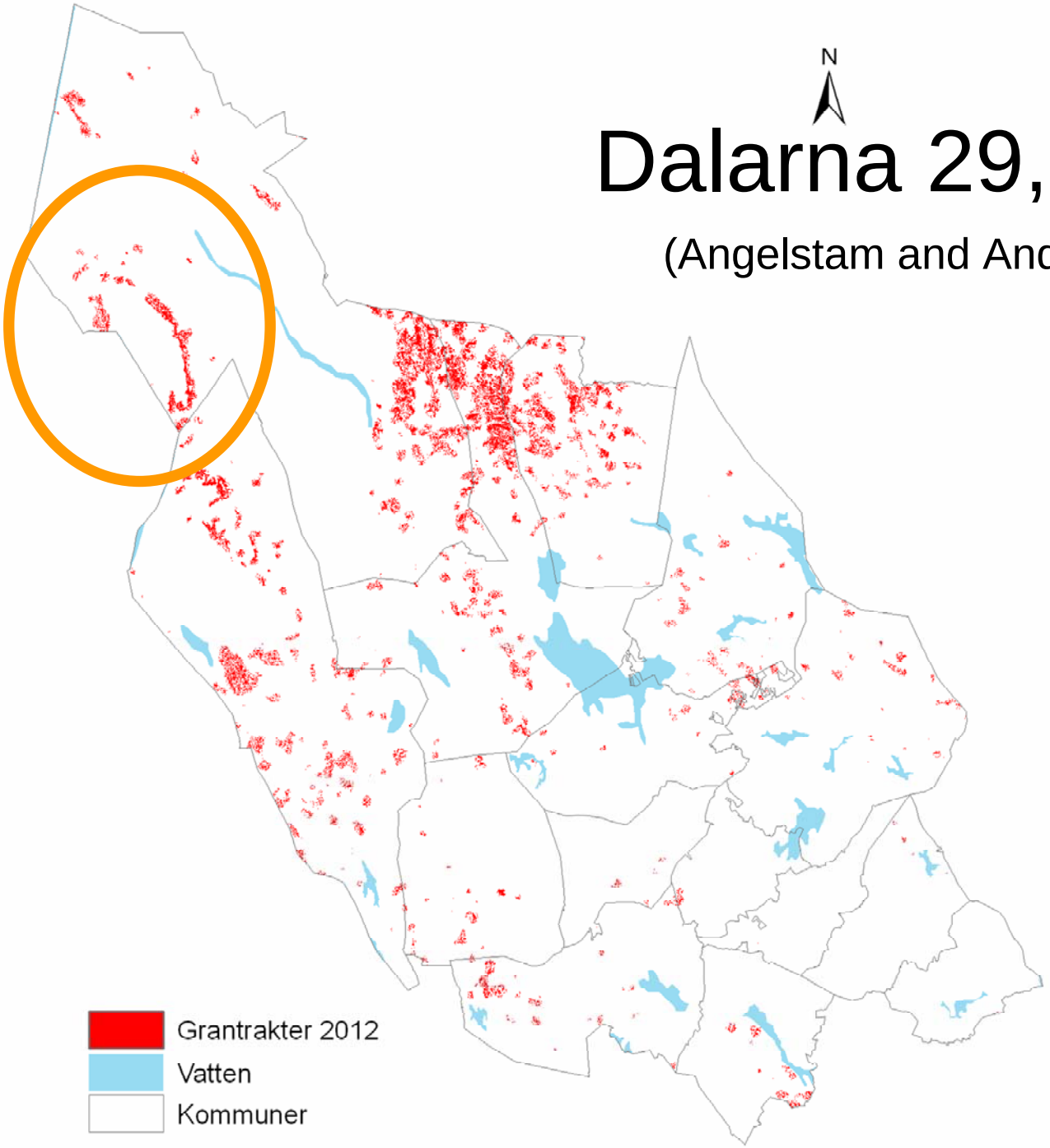


Podlaskie 20,180 km^2

(Edman et al. 2011)

- Deciduous forest
- White-backed woodpecker
- Connectivity
- Validation with Polish bird atlas data





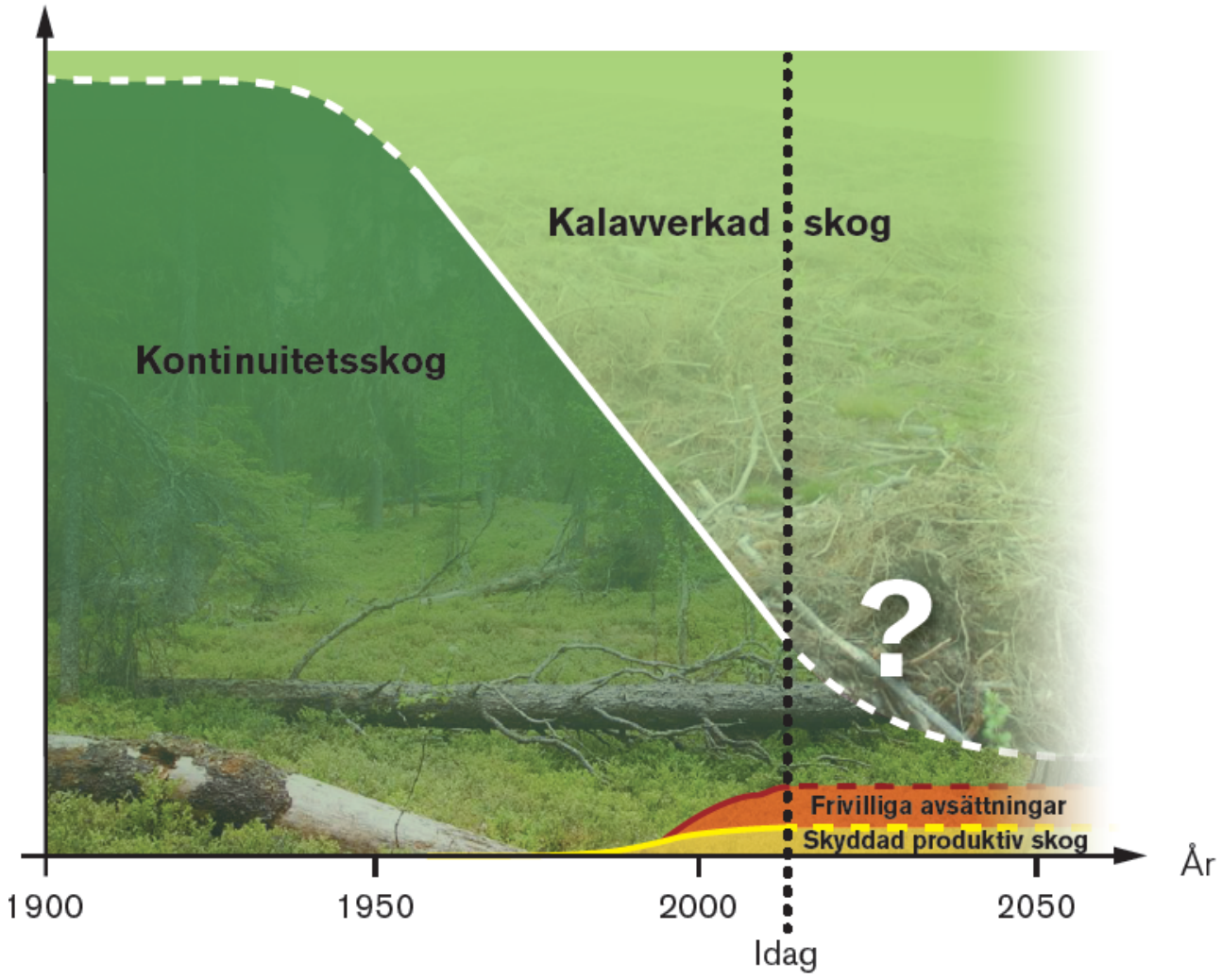
Dalarna 29,086 km^2

(Angelstam and Andersson 2013)

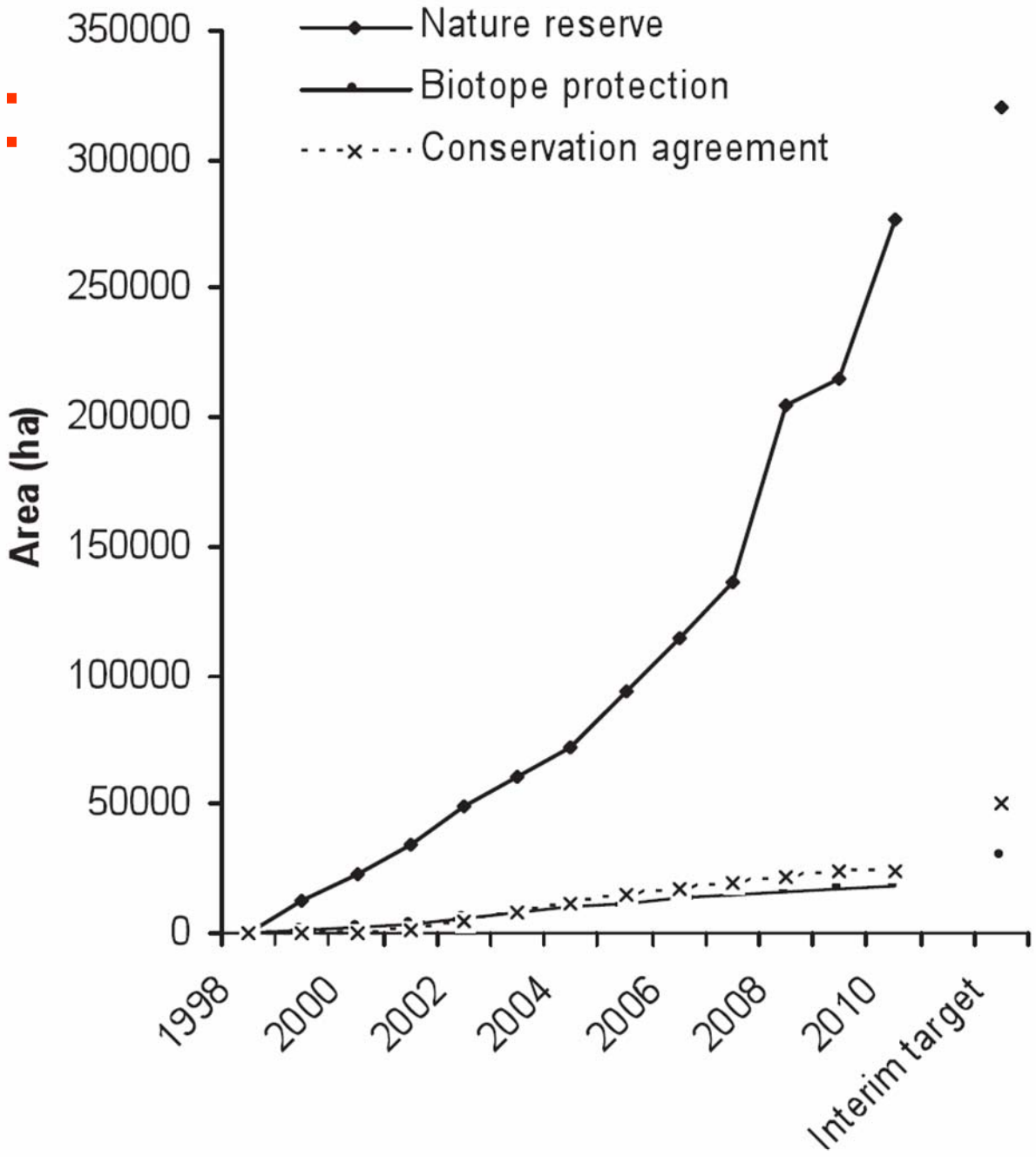
Who’s reality counts?

- Pressure
  - conservation groups complain about habitat loss
- Response
  - more protected areas
  - forestry is certified
- State
  - understanding functionality requires evidence-based knowledge and analyses

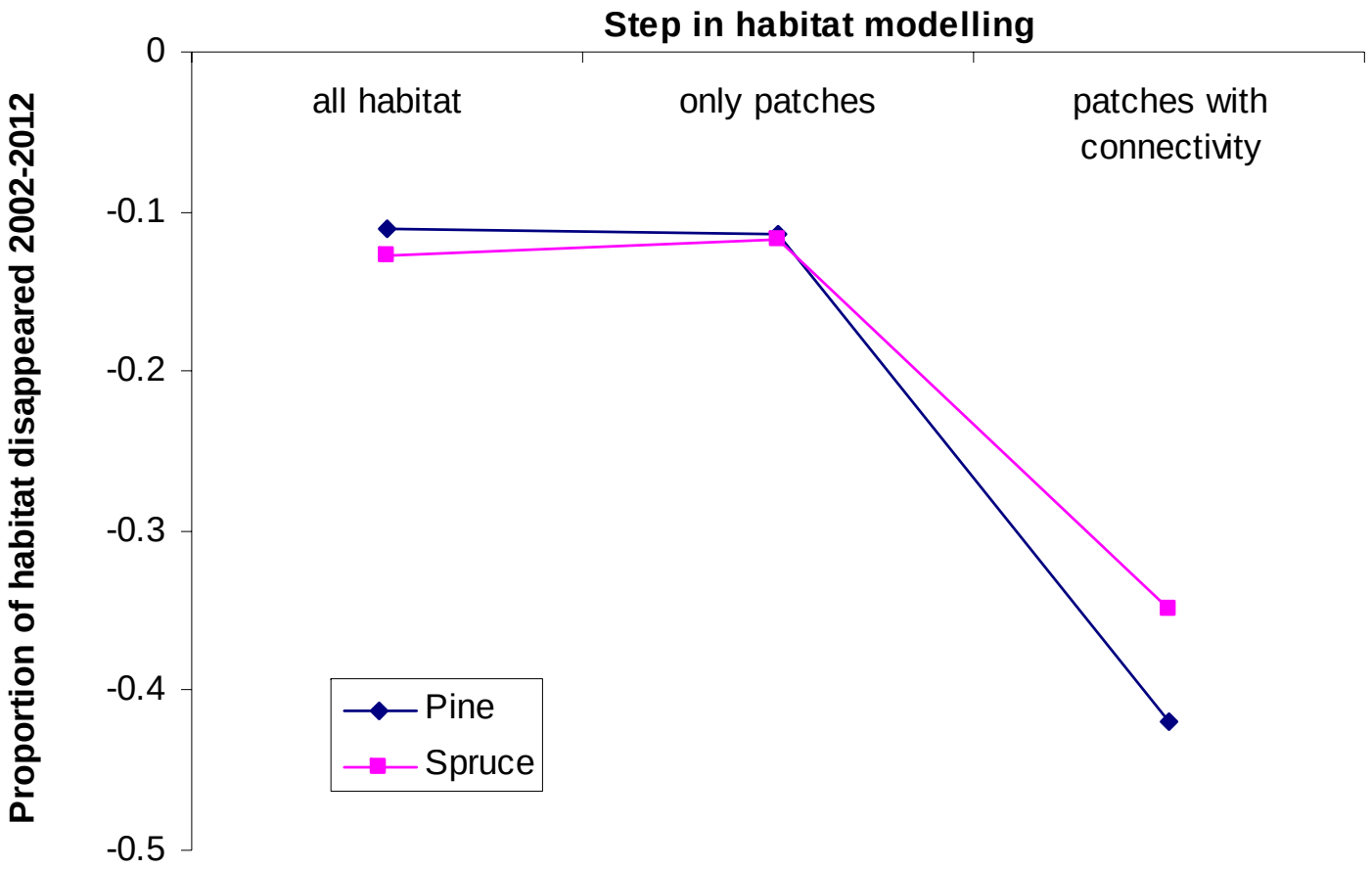
PRESSURE:
Natural forests do disappear!



RESPONSE: More protected areas!!



STATE: Fragmentation continues!!



Improving quality of NP

- Within the park
  - Laissez-faire to increase dead wood
  - Increase the size
  - Change/manage zones differently
- Outside the park
  - Connectivity
  - Corridors
  - Publicity

Who we are


Kjell Andersson


Per Angelstam


Robert Axelsson


Marine Elbakidze


Pablo Garrido


Ida Hansen


Michael Manton


Vladimir Naumov


Simen Pedersen


Natalie Stryamets


Sara Teitelbaum


Johan Törnblom

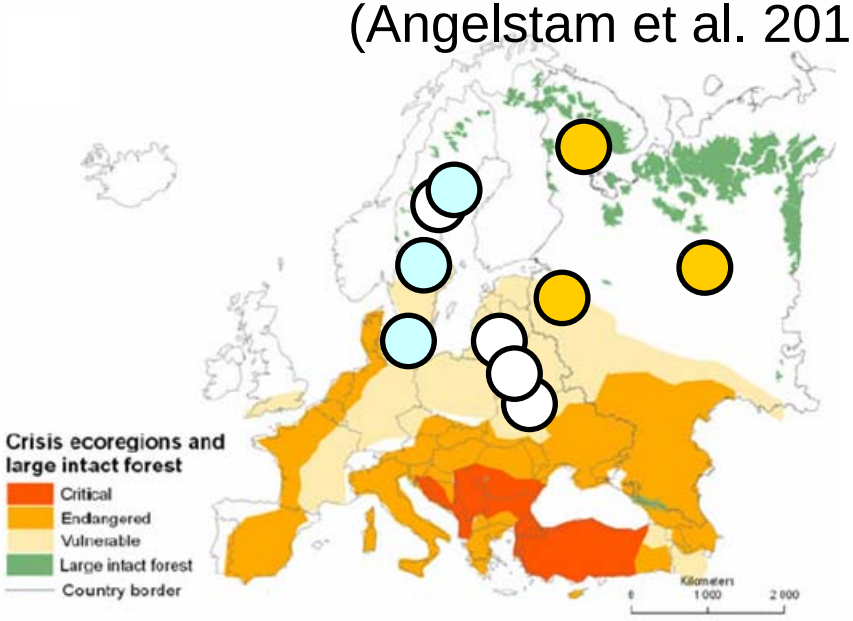

Slava Valasiuk

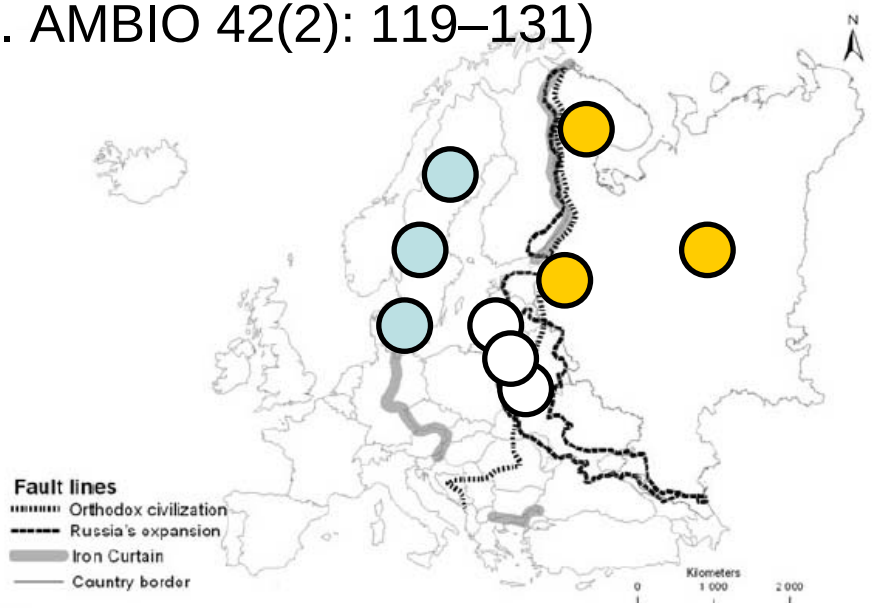

Taras Yamelynets

Forest Landscape Society

Multiple case studies of social-ecological systems

(Angelstam et al. 2013. AMBIO 42(2): 119–131)





Landscape history	Governance system		
	"Western civilization", west of the former Warsaw Pact	Countries in transition	"Orthodox civilization", east of the western border of the Orthodox religion
Shorter	Ångermanälven catchment and Vilhelmina Model Forest (northwest Sweden) (64°N; 16°E)	Bialowieza forest (northeast Poland) (52°N; 24°E)	Kovdozersky Model Forest (Murmansk oblast, northwest Russia) (66°N; 32°E)
Intermediate	Bergslagen region (south-central Sweden) (60°N; 15°E)	The Carpathian Mountains in Lviv region (west Ukraine) (49°N; 23°E)	Priluzie Model Forest (Komi Republic, northwest Russia) (60°N; 49°E)
Longer	Helge å catchment and Kristianstad Vattenrike (south Sweden) (56°N; 14°E)	Roztochya Biosphere Reserve (west Ukraine) (49°N; 24°E)	Pskov Model Forest (Pskov oblast, west Russia) (57°N; 28°E)

www.bergslagen.org

Sustainable Bergslagen

Landscape | Collaboration | Sustainability | LTSER | Model Forest | Publications | Projects | About

Sustainable Bergslagen for regional development

The informal region Bergslagen in south-central Sweden has a more than 2000-year long history of integrated use of ore, forests and water.

The legacies of the past landscape use involve several challenges that require cross-sectoral planning for sustainable rural development and ecosystem restoration.

Landscape is about coupled human and nature systems.

Collaboration, participation,and learning among stakeholders from civil, private and public sectors, academia and schools, are needed for sustainable use and management of natural resources and landscape values.

To understand ***sustainability*** requires data, analyses and visualisation. There is thus a need for continuous

News

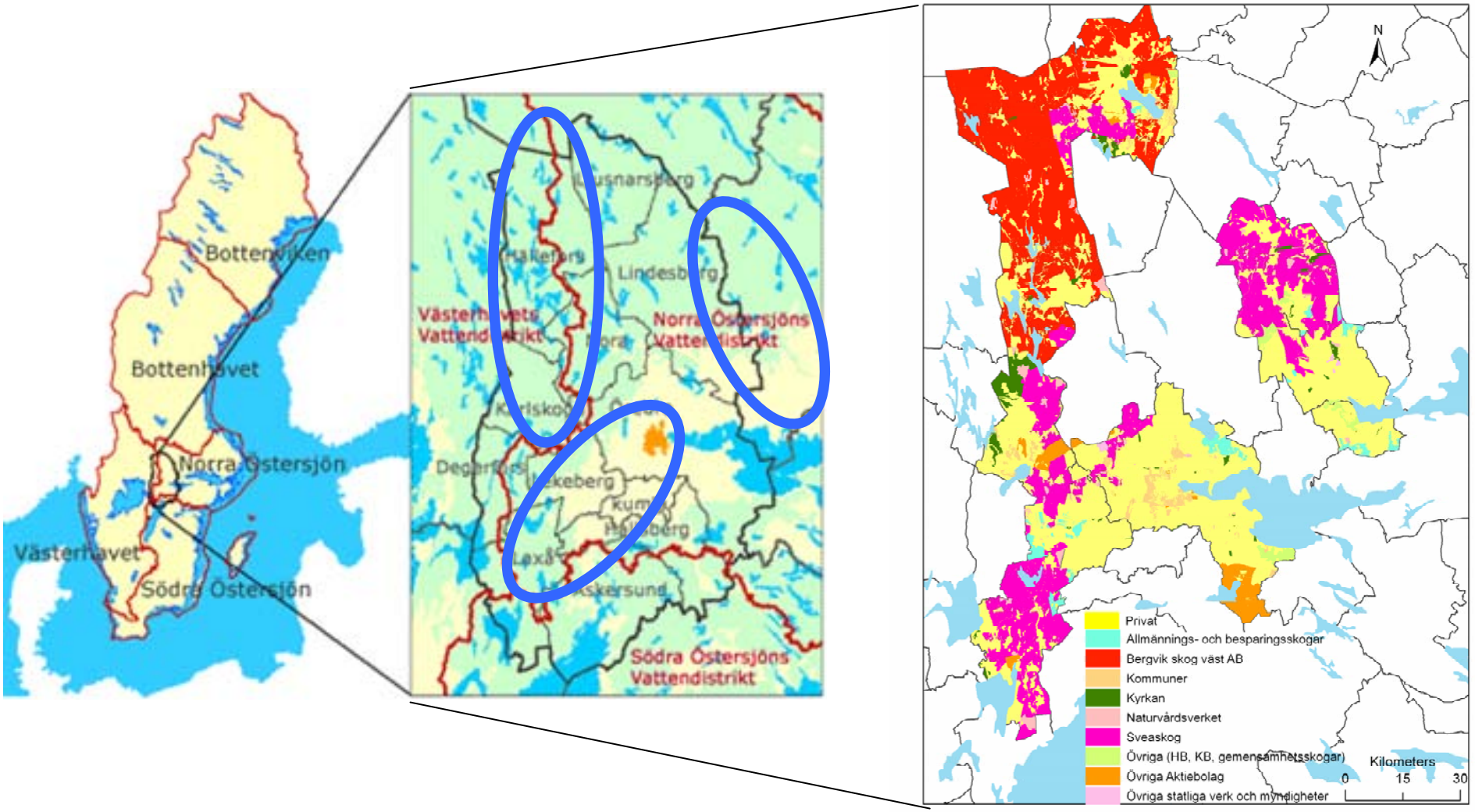
Belarussian delegation came learn from Sustainable Bergslagen
13 August 2013
A Belarussian delegation with 1 persons visited Bergslagen to learn about conservation, protected areas tourism and related business. Read more

Sustainable Bergslagen now designated as Model Forest
13 August 2013

Landscape a tool

- Measure sustainability
  - Biophysical
  - Anthropogenic
  - Percieved
- Space and place for collaborative learning
- Multiple landscapes for transdisciplinary research

Catchments and municipalities



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AMBIO

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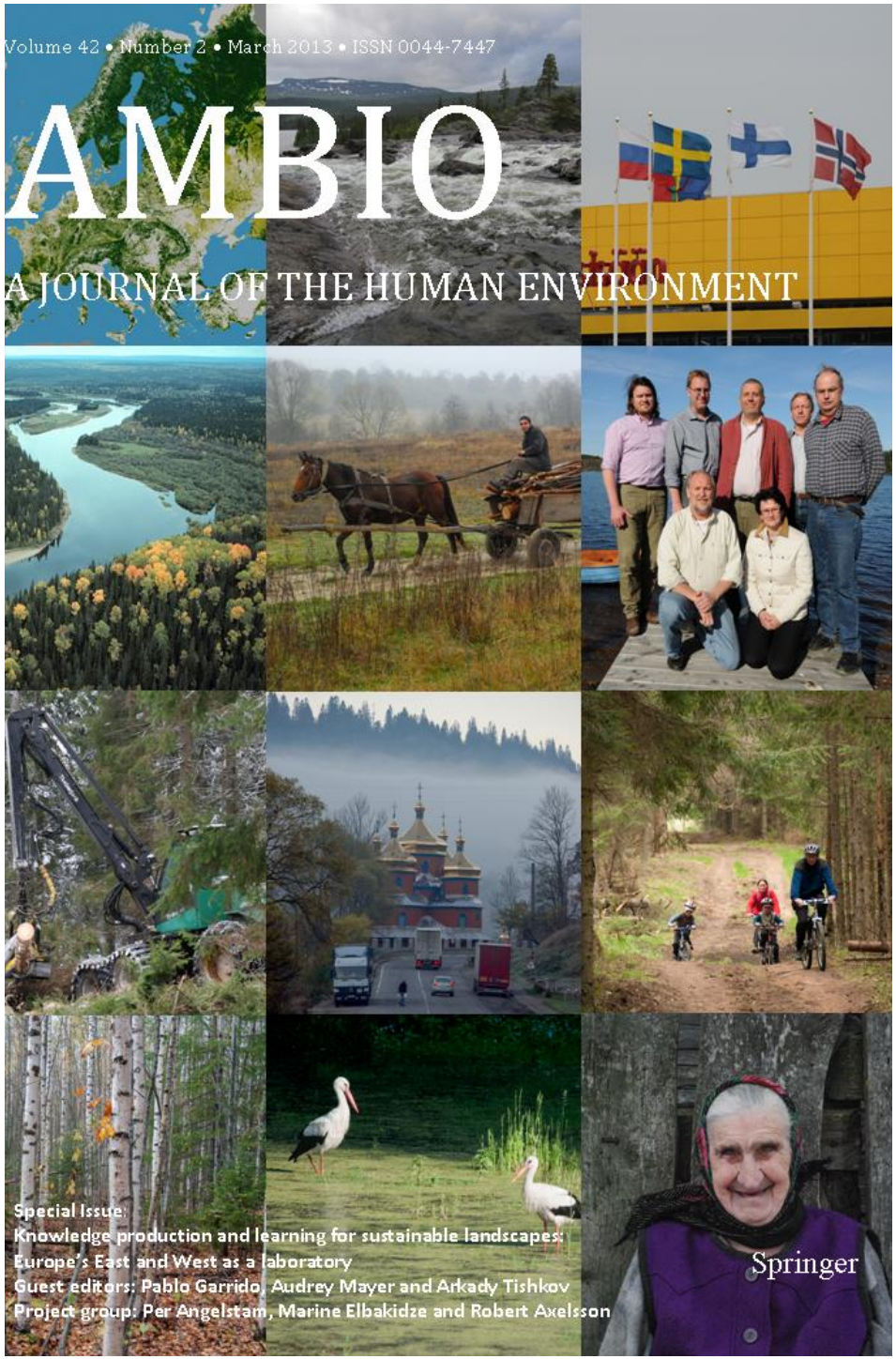
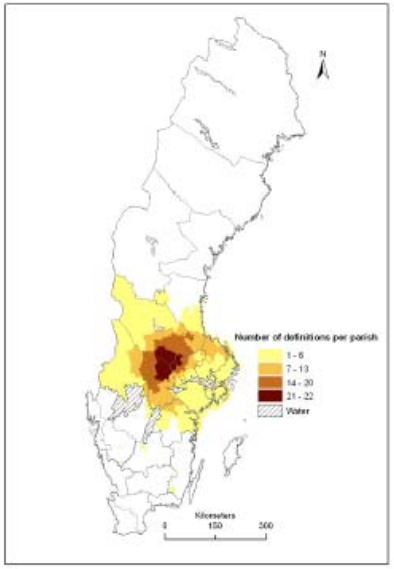


Special Issue:
Knowledge production and learning for sustainable landscapes: Europe's East and West as a laboratory
Guest editors: Pablo Garrido, Audrey Mayer and Arkady Tishkov
Project group: Per Angelstam, Marine Elbakidze and Robert Axelsson

Springer

SLU | EUROSCAPES

Communication 2013:2



Bergslagen in south-central Sweden is an informal region with many spatial definitions, which are located in 9 counties.

During the 17th and 18th centuries the integrated use of ore, forests and water in Bergslagen resulted in accumulation of wealth for both businesses and the Swedish state.

Per Angelstam, Robert Axelsson, Lennart Myhrman, Egil Aas, Kjell Andersson, Lars Andersson, Jens Brorsson, Marine Elbakidze, Charlotta Englund, Ida Heurlin, Arne Hjorth, Milis Ivarsson, Thomas Kullberg, Lars Lundin, Anders Olsson, Lotta Sartz, Stefan Sädbom, Johan Törnblom

Sustainable Bergslagen

– *collaboration and learning*

- The informal region Bergslagen in south-central Sweden has a more than 2000-year long history of integrated use of ore, forests and water.
- The legacies of the past landscape use involve several challenges that require cross-sectoral integration for sustainable rural development and ecosystem restoration.
- Landscapes need thus to be viewed as coupled human and nature systems.
- Collaboration and learning among stakeholders from civil, private and public sectors, academia and schools, are needed for sustainable use and management of natural resources and landscape values.
- Learning for sustainability requires data, analyses and visualisation. There is thus a need for continuous knowledge production about material and immaterial landscape values relevant for the management of ecological, economic, social and cultural dimensions.
- To contribute to satisfying these needs the Sustainable Bergslagen initiative emerged as a regional-level partnership for sustainable landscapes (www.bergslagen.org).
- By joining the International Model Forest Network (IMFN) and the network for Long Term Socio-Economic and Ecological Research (LTSER) stakeholders can learn from other regions' sustainable development processes, and make Bergslagen more visible internationally.

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