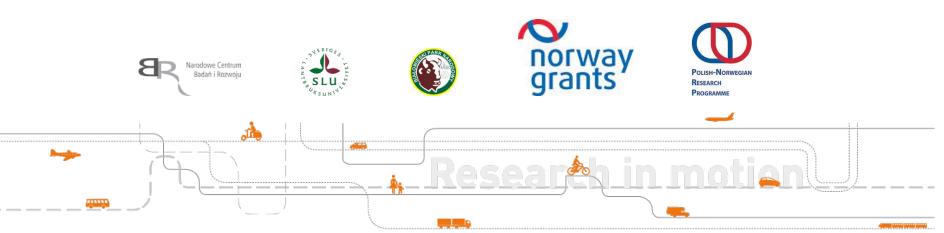
Institute of Transport Economics Norwegian Centre for Transport Research



Uniwersytet Warszawski **Warszawski Ośrodek Ekonomii Ekologicznej**



Thursday, 2nd of June 2016. Knappgården, Särna, Sweden





Gather knowledge on the study area/case

Account for various natural and socio-economic factors that might influence people's preferences

Assess whether the scenario makes sense from a natural perspective

Investigate reactions to the questionnaire draft in small groups of Swedes and Norwegians

A more realistic, plausible, easyto-understand questionnaire

Interdisciplinary Workshop – Fulufjäll case

- Oslo Airport Gardermoen, November 2013
- Participants (6) brought expertise from disciplines of nature management, landscape analysis, tourism and economics
- Starting point:
 - "extending the strictly preserved area within the park"
 - annual compulsory tax for adult citizens (SE,NO) collected by a Swedish-Norwegian Fund for Conservation of Fulufjället/Fulufjellet (possibly under the auspices of an international organisation like UNESCO or IUCN) and exclusively spent on the provision of undisturbed zones (to cover conservation costs and the lost profits of local populations due to the more strict protection regime).



Interdisciplinary Workshops – main outcomes

- "Extending the strictly preserved area within the park" makes little sense
- Importance of improving connectivity
- Inclusion of other areas outside Fulufjäll in the scenario?
- Proposals regarding survey:
 - Need for a comprehensive description of the background
 - Need for questions to determine prior knowledge of the park as well and place of residence
 - The Fulufjäll case could require developing a somewhat different scenario compared to Białowieża



Interdisciplinary Workshops – changes made

- The main changes made in the scenario and choice experiment design was the addition of adjacent forest areas to the national park and setting them up under "passive protection regimes".
- This implies a new perspective in nature protection management in Scandinavia, where selection of forest areas for protection has targeted already established oldgrowth forest in a near-natural state.

Focus groups

- Focus groups: gathering of a group of ordinary citizens for an assessment/discussion of a specific topic, headed by a (professional) moderator
- Our focus groups: assessing of <u>questionnaire draft</u> and proposing amendments
 - one in Stockholm and one in Oslo, February 2015
 - seven participants in each group
 - good distribution of age, gender and civil status among participants; they lived in different household structures and practiced different occupations



Focus groups – changes made

- Removing unnecessary/duplicated text about (wood) "production forest" and "natural forest"
- Simplifying and shortening the presentation of the Fulufjäll area, clarifying that forests in the area around the park are (mostly) not protected ("production forest" or "semi-natural forest");
- More clear and fluent introduction of the choice attributes in the presentation of the protection programme
 - stressing the issue of re-transforming (mostly) "production forest" back to "natural forest" by extending the national park
 - explaining better that size does matter, and
 - that it is a matter of how to share the protection extension and the cost between the countries that share the TNPA
- Removal of UNESCO as main body to handle the taxes of the protection programme, as this was perceived as strange/surprising in the Scandinavian case
- Use of square kilometres instead of hectares
- Reducing the number of statements after the choices, and restructuring these in blocks that were properly introduced

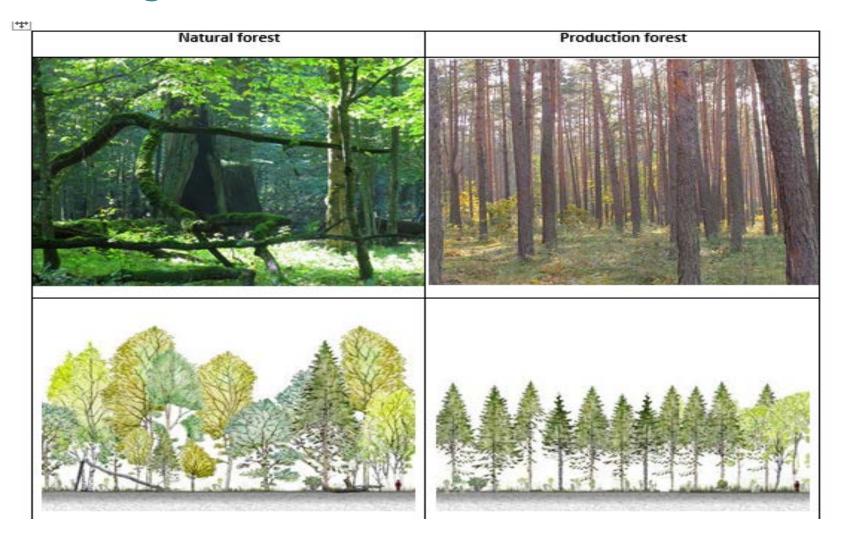


Final Questionnaire for the Survey

- (1) Introductory questions
- (2) Scenario
- (3) Discrete choice experiment
- (4) Debriefing block of attitudinal questions,
- (5) Questions on respondent's socioeconomic characteristics



Background information

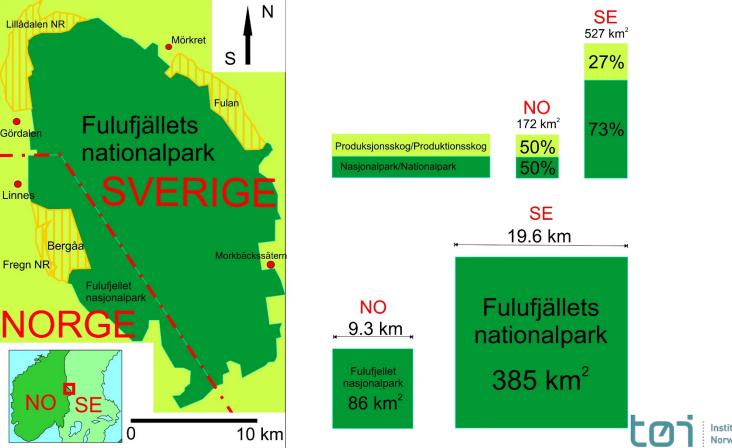


Background information

In the natural forest		In the production forest		
1)	Trees are not cut down. They are left in the forest until they get old, fall and decay.	 After attaining a certain age the forest is logge There are hardly any single old trees. 	ed.	
2)	Trees seed and grow naturally.	2) The majority of trees are being human-planted		
3)	Trees of various age are growing next to one another.	on the former cuts.		
		Trees are mostly of the same age.		
4)	There are usually many species of trees.	4) One tree species is dominant (in Norway it		
5)	There is a lot of dead wood (ca. 100 m ³ /ha).	usually the spruce or pine tree).		
6)	Greater diversity of species of plants, animals and fungi. Many rare (endangered) species grow	 There is a small volume of dead wood (c m³/ha). 	:a. 6	
	only in natural forests.	6) Relatively small diversity of species of pla		
		animals and fungi. Rare (endangered) specie	5 00	



The forests in Fulufjäll are located primarily on the peripheries of the mountain plateau, on the steep slopes and in some of the cirques. Some major forest areas currently not included in Fulufjället National Park, on both sides of the Swedish-Norwegian border, are mapped below (as yellow-striped areas).



The three yellow-striped areas and other forest areas outside the national park are now mostly closer to production forests than natural forest. However, because these areas border with natural forests in the national park, if **protection based on natural development** was also introduced in these areas, after **about 200 years** these forests would be close to natural forests, both as regards more large and old trees, more deadwood, and more species of animals, plants and fungi.

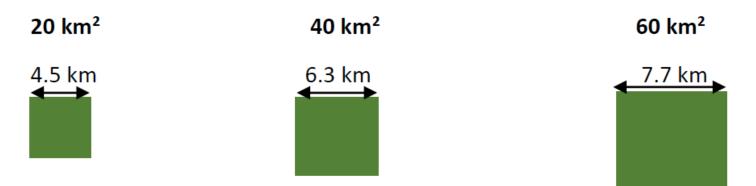
Increasing the size of the protected natural forest area in Fulufjäll would provide a larger living area for many rare and endangered species, thus increasing the probability for their survival.

However, increasing the national park area would imply restrictions on human activity. In addition to a ban on logging and use of motor vehicles, hunting and fishing might also be restricted.



It is currently being considered if the programme aimed at increasing the protection of selected forest areas of Fulufjället can be implemented in Sweden and Norway.

Three alternative levels of national park extension are considered, on each side of the border, that would cover forest areas that over time would resemble natural forest:



You can assume that all the forest areas that are considered, from 20 to 60 km², and on both sides of the border, **have the same protection potential in terms of providing future natural forest habitat for rare and endangered species**.



PLEASE, NOTE THE FOLLOWING:

- Financial means are necessary for the implementation of the new Fulufjället protection programme, including for payments to compensate the current owners of the new protected areas.
- Suppose that the Swedish and Norwegian governments are expected to establish a common Fund responsible for coordination of the forest protection programme and the Fund would have at its disposal means from taxes paid by each tax-payer in Sweden and Norway during a five-year period.

You will be presented with 16 comparisons of different options of the extension of the protection of forest areas on the slopes of Fulufjället. Each option in a comparison is described by

- the national park extension on the Swedish side,
- the national park extension on the Norwegian side, and
- the cost for yourself.



Choice example

Protection programme	No change	Alternative 1	Alternative 2	Alternative 3
National park extension on the Norwegian side of Fulufjället (share of the area protected on the Norwegian side)	0 km² (32 %)	+ 0 km ² (32 %)	+ 40 km² (47 %)	+ 20 km² (40 %)
National park extension on the Swedish side of Fulufjället (share of the area protected on the Swedish side)	+ 0 km² (72 %)	+ 60 km² (83 %)	+ 0 km² (72 %)	+ 40 km² (80 %)
Additional amount of income tax, which you would have to pay annually during five years	No additional tax	300 kroner	500 kroner	200 kroner
Your choice				

16 choices per respondent - the alternative changed

Some respondents faced only two alternatives per choice, and some only one



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Photo: Trygve Opseth