

# Recreation Monitoring and Research in Finland

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# Content of the presentation:

Visitor monitoring on state lands

Visitor data applications

National recreation monitoring

Some specific research topics

Future challenges



# Visitor monitoring on state owned land

Visitor surveys and counting in national parks and recreation areas (1992 -> 2013, more than 50 in total)

Manual for visitor counting, 1997 (Horne, P. et al.)

Manual for visitor surveys, 2001. (Erkkonen, J. & Sievänen, T.)



Kajala et al. 2007. Visitor monitoring in nature areas – a manual for the Nordic and Baltic countries. ([www.naturvardsverket.se](http://www.naturvardsverket.se))

# Visitor monitoring on state land by Metsähallitus

Systematic, harmonized methodology across whole country since 2000

Volume of visitation, continuously in most national parks and hiking areas

- number of visits

Visitor information, standardized visitor survey questionnaire, once in 5 years in each park

- visitor profiles: visit motivation, socioeconomic information, area of residence etc.
- status of service satisfaction
- money spending

Metsähallitus established a visitor information database ASTA in 2006



# Number of visits in national parks

<b>Vuosi</b>	<b>National parks, total number</b>	<b>Total number of visits</b>	<b>Change per year, %</b>
2012	37	2 087 300	0
2011	37	2 086 500	7
2010	35	1 958 500	1
2009	35	1 943 500	11
2008	35	1 755 500	11
2007	34	1 586 700	6
2006	34	1 493 000	6
2005	34	1 410 000	18,2
2004	34	1 153 900	2,7
2003	34	1 123 200	9,9

# Applications of visitor information

- Management plans
- Local economic impacts information, updated annually
  - Use number of visits and visitor money spending information gained by visitor survey
  - In 2012, economic impacts of 37 national parks were 109,5 billion euros, 1412 man year of employment; one euro input makes 10 euros in local economy
- Annual reporting of use and management includes and indicator of visitor satisfaction provided by visitor surveys

# Examples of Visitor survey reports

Riisa Anttila

## Riisitunturin kansallispuiston kävijätutkimus 2012



Metsähallituksen tutkimusraportteja, Sarja B 181

Minna Rytönen

## Helvetinjärven kansallispuiston kävijätutkimus 2012



Metsähallituksen tutkimusraportteja, Sarja B 182





Photos: Raimo Peuraniemi/Metsähallitus

**METLA**



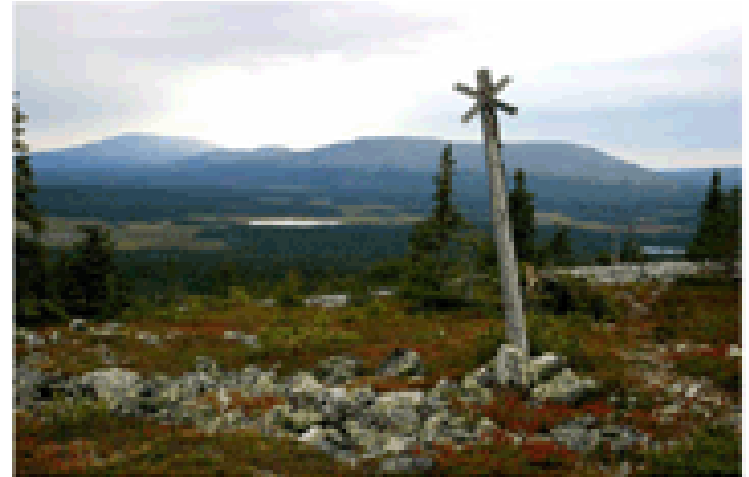
# Examples of Management Plans

## Tammisaaren ja Hangon itäisen saariston hoito- ja käyttösuunnitelma



Metsähallituksen suunnittelujulkaisu. Sarja C 78

## Pallas-Yllästunturin kansallispuiston reitistösuunnitelma 2011



Metsähallituksen suunnittelujulkaisu. Sarja C 120

# National Recreation Demand Inventory (LVVI)

[illegible]

# National Recreation Demand Inventory (LVVI)

## ■ Population-based, random sampled survey

- Whole population 15-74 years
- Data collection with Statistics Finland

## ■ LVVI 1

- Combined telephone & postal questionnaire survey
- Data collection in 12 samples over 24 months
- Sample size 12 000, N=10 600
- Response rate 84 %/ 65 %

## ■ LVVI 2

- Combined web and mail survey
- Data collection in 6 samples over 24 months
- Sample size 24 000, N= 9000
- Respond rate 38 % (25 % by web)

■



# National Recreation Demand Inventory (LVVI)

## ■ Products

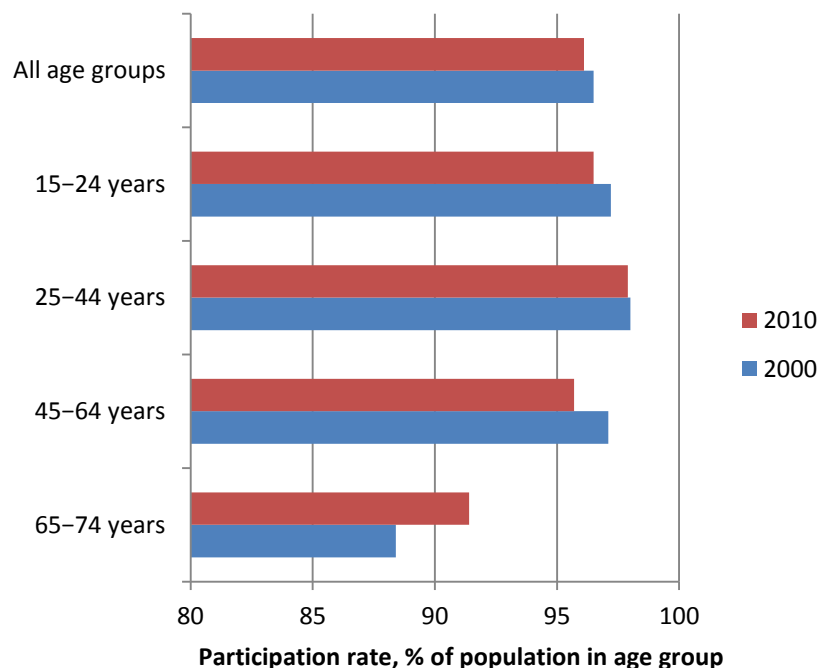
- Outdoor recreation statistics, all Finland 2001, 2011
  - 62 tables
- Regional outdoor recreation statistics 2002, 2013
  - 15 regions

# OUTDOOR RECREATION STATISTICS

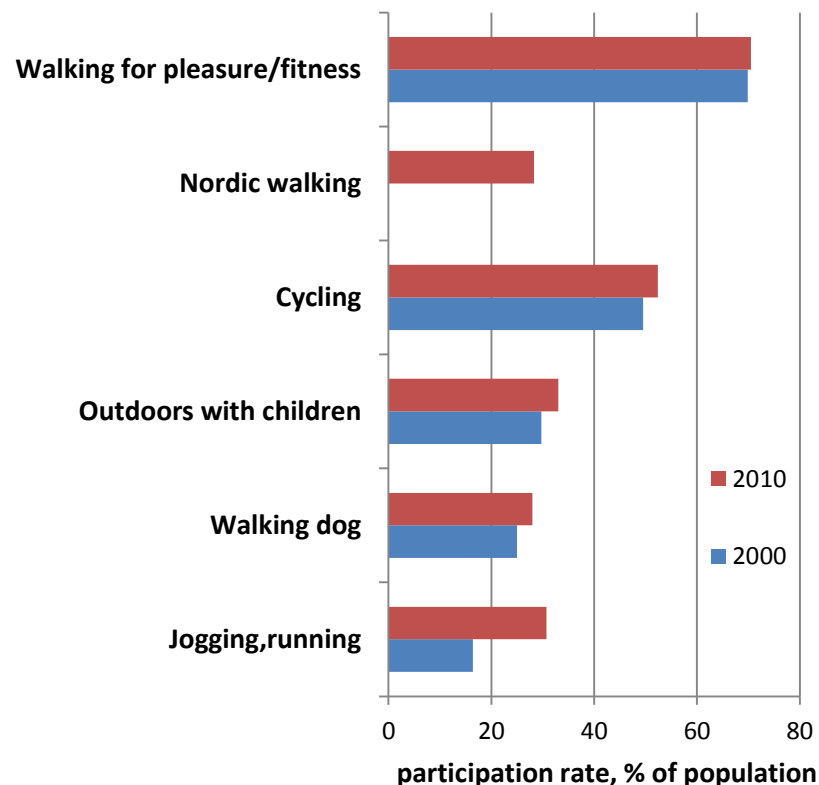
[www.metla.fi/metinfo/monikäyttö/lvvi](http://www.metla.fi/metinfo/monikäyttö/lvvi), also in English

- Participation rate was 96,5 %, average number of occasions was 2-3 times a week

**Participation in outdoor recreation by age groups in 2000 and 2010**



**Participation**



Sievänen & Neuvonen 2011

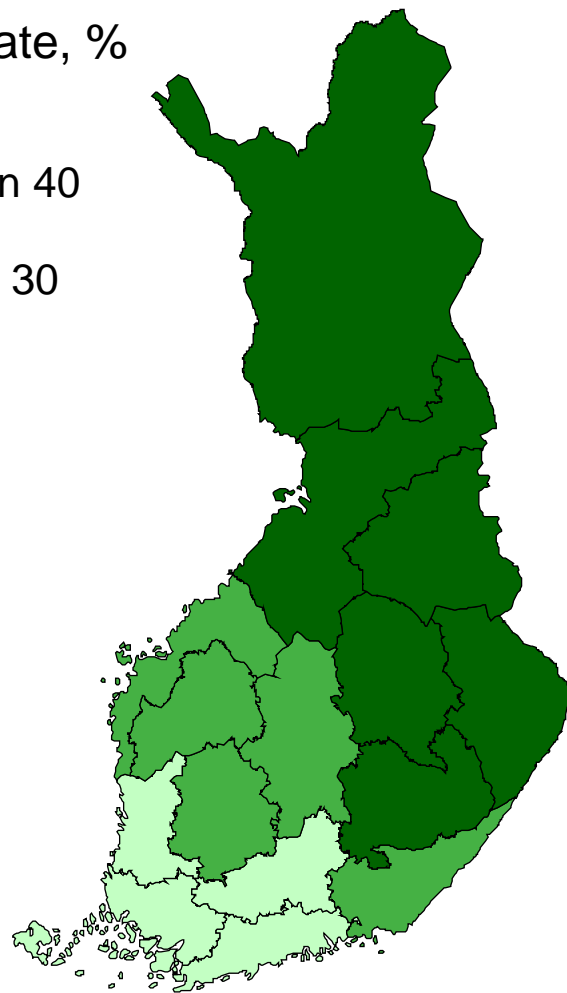
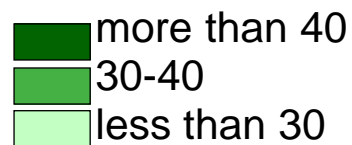
# National Recreation Demand Inventory (LVVI 1 & 2)

- **LVVI – specific research topics 2002-2013**
  - Profiles of recreationists; recreation behavior research
    - wild berry pickers; wild mushroom pickers; boaters; recreation home users
  - Recreational use of state owned land
  - Regional differences of recreational behavior among Finns
  - Close-to home outdoor recreation and wellbeing and health benefits: access to nature related to perceived health
  - Nature-based tourism (choice of nature trip destination, spending on nature trip)
  - Climate change and outdoor recreation
  - Foresight, prognosis and trends

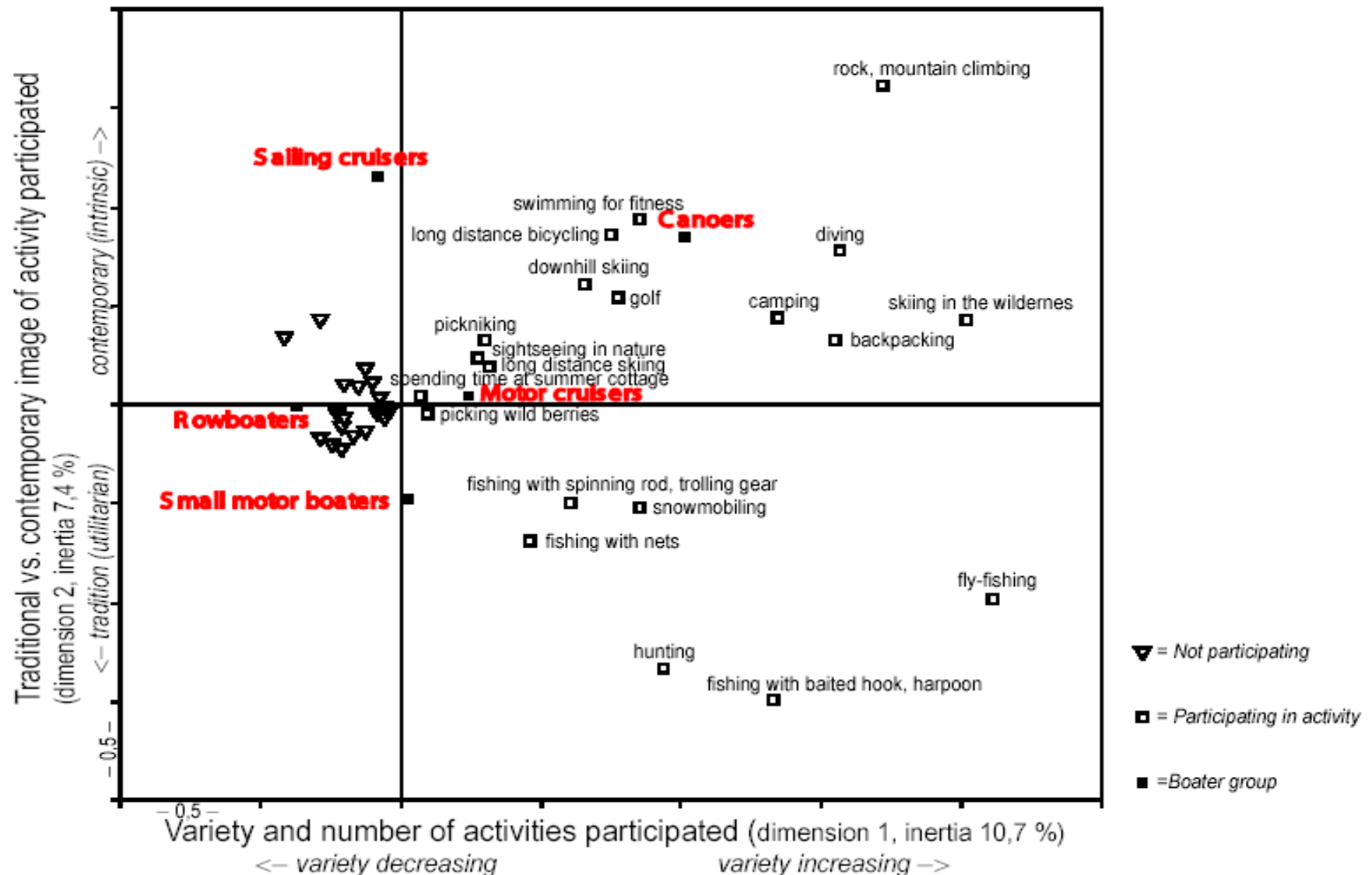


# Regional differences in cross-country skiing

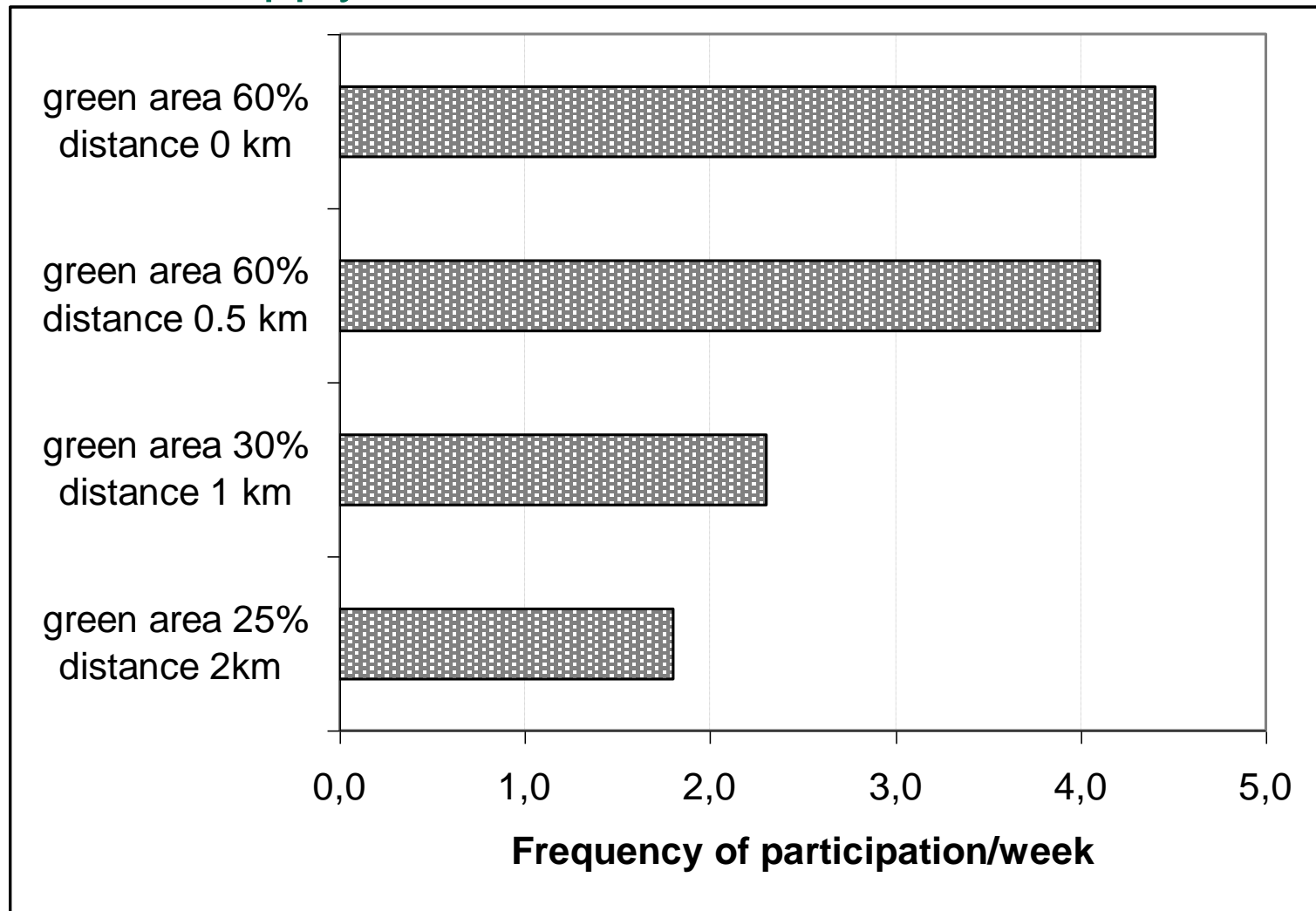
Participation rate, %



# Multiple correspondence model of boaters and their recreation participation profiles



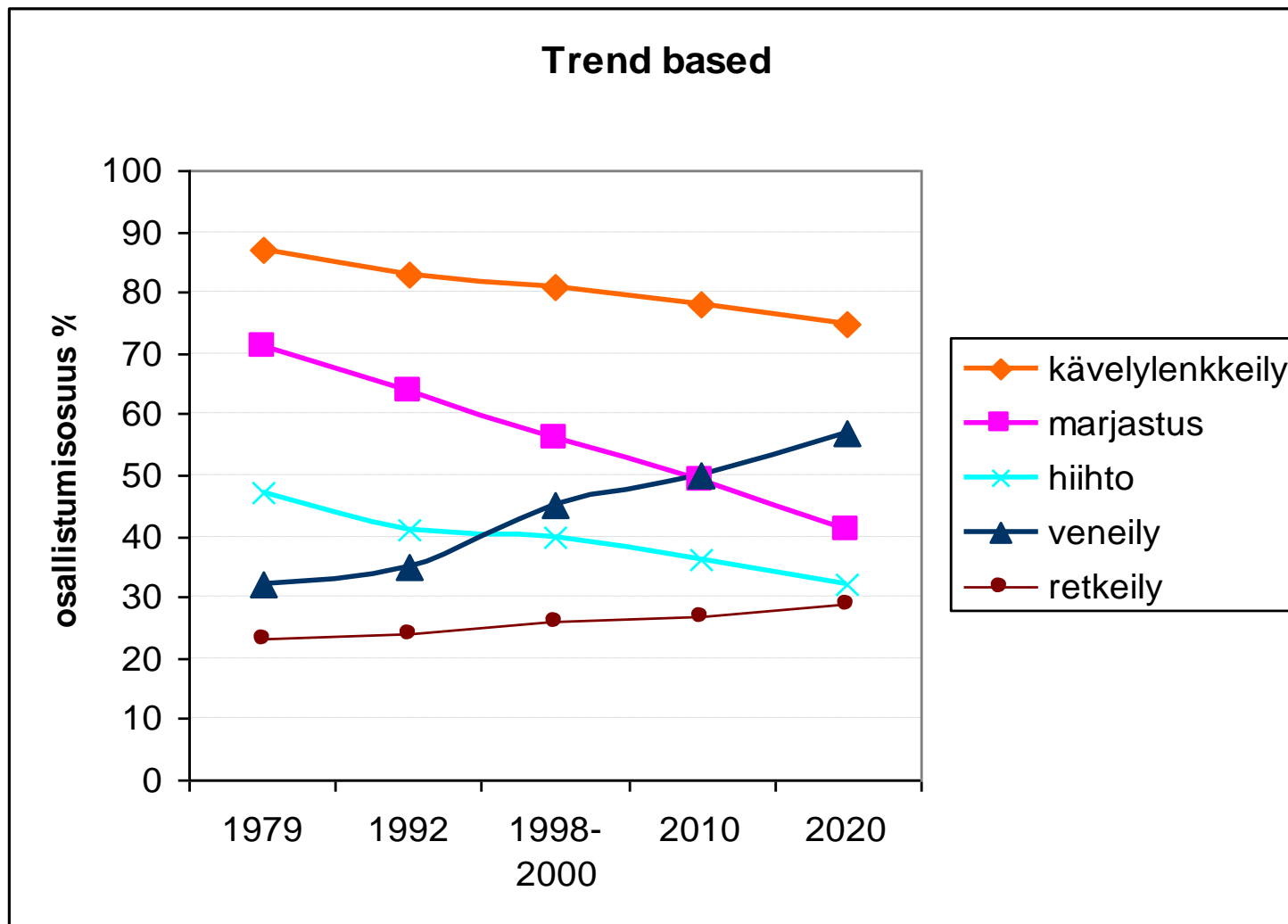
## Close-to home visits in Helsinki: expected frequencies related to supply factors; results based on Logit -model



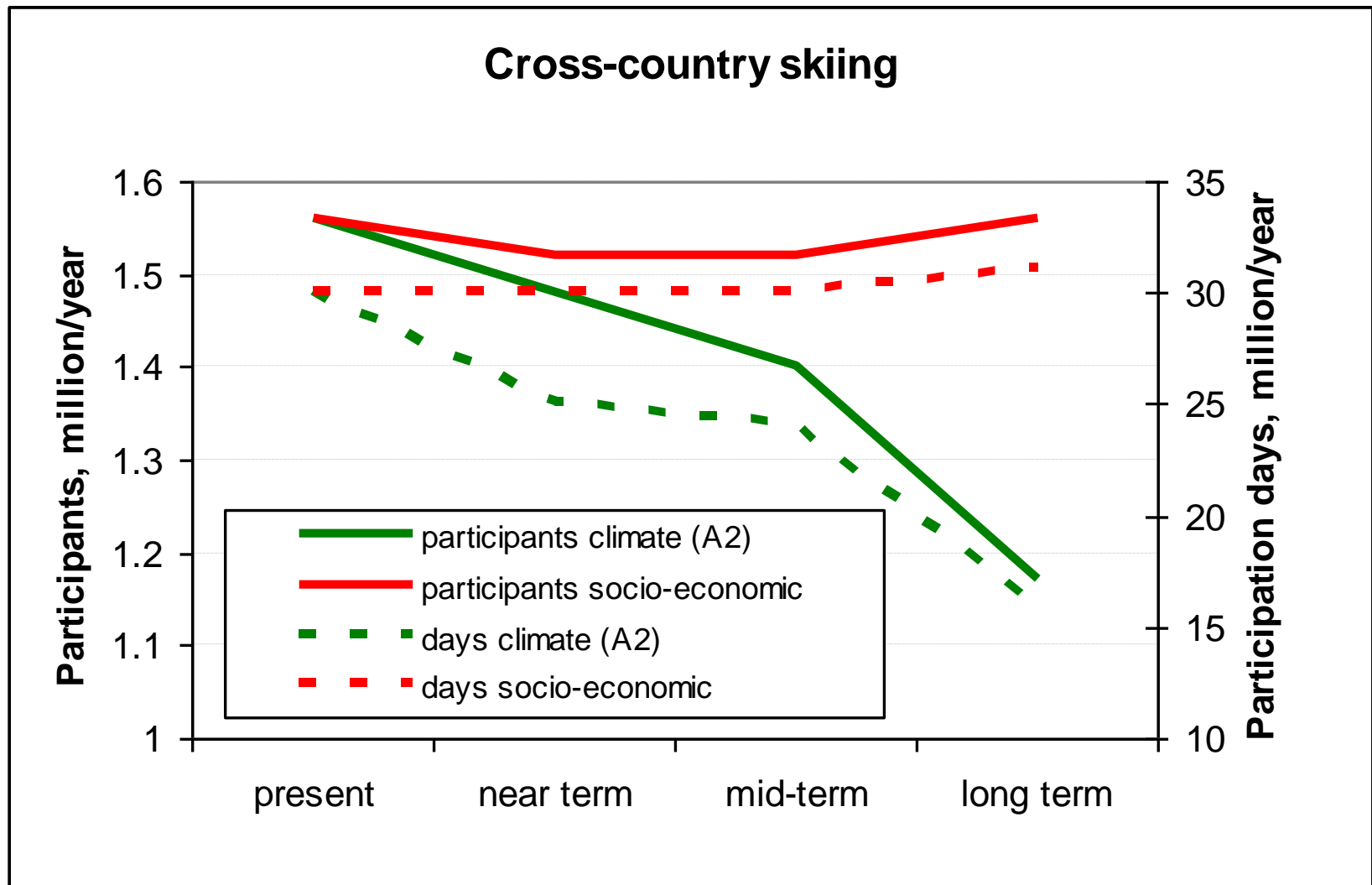
Neuvonen et al. 2007



# Participation in outdoor recreation in future Recreation Scenarios and Trends

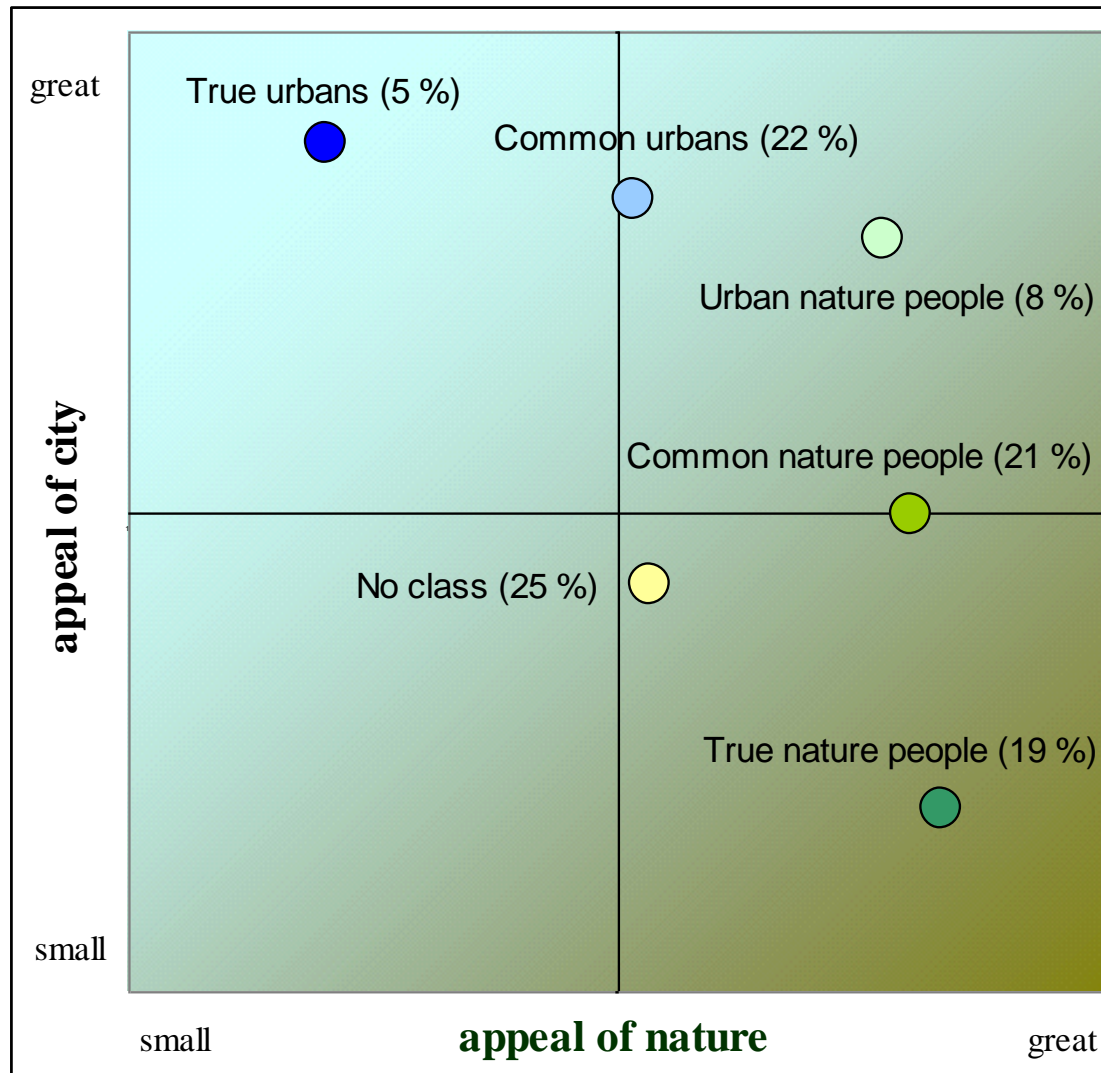


# Scenarios of Cross-country Skiing and Changing Climate



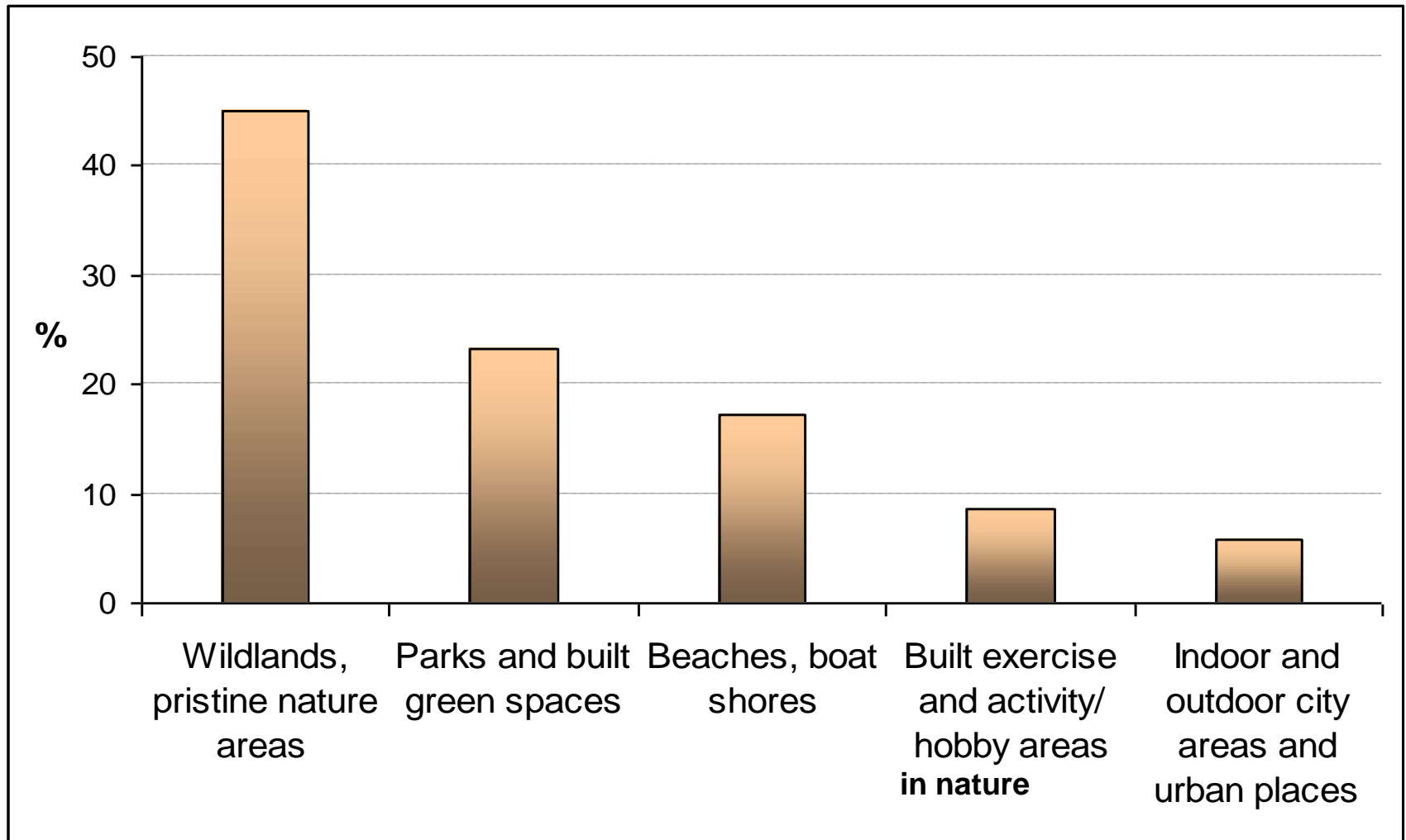
Sievänen et al. 2005

# Classification of inhabitants in Helsinki & Tampere



Tyrväinen et al. 2008)

# Favourite places in Helsinki and Tampere



**Tyrväinen et al. 2008**



# Forests and wellbeing– Research Program (2008-2013) METLA



Liisa Tyrväinen, prof. (nature tourism) & Tuija Sievänen (recreation)



# Future challenges

- Emerging research topics in coming years
  - Recreation in green areas and human health benefits -> **indicators**
  - **Environmental changes**; climate change, quality of water, timber harvesting, landscape quality and nature tourism
  - Recreation **monitoring and indicators** of sustainable development
- Challenges of financing
  - commitment for long-term monitoring programs
  - continuity of expert know-how



Thank You