Nation-wide outdoor recreation demand monitoring

Tuija Sievänen, Marjo Neuvonen and Eija Pouta

MMV5 – conference
Wageningen, The Netherlands
31.5.-3.6.2010
Recreation monitoring

- **What:** recreation inventories made frequently using standardized methods across different areas and time slots, e.g. continuous systematic series of data collection

- **Why:** to monitoring changes over time, to providing indicators, statistics etc.

- **Benefits:**
  - Sustainable use of natural resources
  - Sustainable recreation management
Background

- The **first** Finnish nation-wide outdoor recreation demand inventory (LVVI 1) was conducted in 1998-2000
- The dataset of nation-wide survey has been used for several separate studies
- The team (Sievänen, Neuvonen, Pouta et al.) has published about 100 reports, of which 15 in peer reviewed journals, about 45 international conference presentations and 40 presentations in national conferences and seminars
The objectives of the second outdoor recreation demand inventory (LVVI 2) in Finland

- to produce updated outdoor recreation statistics
- to conduct studies of three themes
  1. green environment and human health and wellbeing
  2. environmental changes and outdoor recreation
     - climate change, vulnerability and adaptation
     - water quality and water recreation
  3. recreational use of private land
     - recreational use and recreation homes
     - interest and willingness to pay for quality of recreational environment/ choice of tools to pay; recreation value trading
Measurements of LVVI 2 statistics

- Information collection for outdoor recreation statistics
  - participation in 87 outdoor activities and frequency of occasions during 12 previous months
  - participation and frequency of close-to home recreation visit; different attributes of the visit
  - participation and frequency of nature trips; different attributes of the trip
  - time patterns and money spent on outdoor recreation
  - recreational use of different types of areas; parks, urban nature, forests, protected areas, shore-line areas, rural areas, etc.
Methodology of LVVI 2 data collection

- Nation-wide sample, population age 15-74 years
- Sample size 24,000 divided into six sub-samples, each 4,000
- Expected number of responses about 9,000
- Principal data collection by web-questionnaire supported by mail questionnaire
- Data collection over two years, 2009-2010
  - January-March
  - April/May-June
  - September-November
- Data collection managed by Statistics Finland
- Principal conductor Finnish Forest Research Institute
Summary of data collection

<table>
<thead>
<tr>
<th></th>
<th>Winter 2009</th>
<th>Summer 2009</th>
<th>Fall 2009</th>
<th>Winter 2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two weeks after, the 1. reminder</td>
<td>544</td>
<td>311</td>
<td>444</td>
<td>420</td>
<td>1719</td>
</tr>
<tr>
<td>Four weeks after, 2. reminder with postal questionnaire</td>
<td>840</td>
<td>778</td>
<td>839</td>
<td>742</td>
<td>3199</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1597</td>
<td>1463</td>
<td>1617</td>
<td>1349</td>
<td>6026</td>
</tr>
<tr>
<td>% of respondence</td>
<td>39,9</td>
<td>36,6</td>
<td>40,4</td>
<td>33,7</td>
<td>37,7</td>
</tr>
</tbody>
</table>

Sample = 4000 per one round of data collection

<table>
<thead>
<tr>
<th></th>
<th>Winter 2009</th>
<th>Summer 2009</th>
<th>Fall 2009</th>
<th>Winter 2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web respondents (brutto)</td>
<td>1001</td>
<td>908</td>
<td>997</td>
<td>815</td>
<td>3721</td>
</tr>
<tr>
<td>Postal respondents (brutto)</td>
<td>596</td>
<td>555</td>
<td>620</td>
<td>534</td>
<td>2305</td>
</tr>
<tr>
<td>Web (including dropped outs)</td>
<td>1115</td>
<td>1033</td>
<td>1122</td>
<td>921</td>
<td>4191</td>
</tr>
<tr>
<td>Dropped outs (partly useful responses)</td>
<td>114</td>
<td>125</td>
<td>125</td>
<td>106</td>
<td>470</td>
</tr>
<tr>
<td>% of dropped outs</td>
<td>10,2</td>
<td>12,1</td>
<td>11,1</td>
<td>11,5</td>
<td>11,2</td>
</tr>
</tbody>
</table>
Survey process: CONTACTS

Outdoor Recreation Survey 2009 - 2010, Response Rate, Path I - IV, Mixed-Mode
 I Winter 2009, II Summer 2009, Autumn 2009, Winter 2010 and Summer 2010...

Duration of the survey, days

Response Rate

new ’hand written’ reminder postcard
Preliminary results of LVVI2

- Participation in and frequency of
  - Everyday outdoor activities
  - Winter activities
  - Water recreation activities
  - Forest recreation activities

- Change from 2000 to 2009
Outdoor recreation trends 1

Participation in everyday outdoor activities

- Walking for pleasure
- Nordic walking
- Cycling
- Jogging

Participation, %

0 10 20 30 40 50 60 70 80

Participation, %

- 1998-2000
- 2009

Outdoor recreation trends 1

Number of occasions of everyday activities

- Walking for pleasure
- Nordic walking
- Cycling
- Jogging

Frequency, mean

1998-2000 2009

11
Preliminary trends

Participation in winter activities

- Cross-country skiing
- Downhill skiing
- Snowmobiling
- Long distance ice-skating/Nordic skating

Participation rate, %

1998-2000 2009
Number of occasions of winter activities

Cross-country skiing

Dow hill skiing

Snow mobiling

Long distance ice-skating/Nordic skating

Frequency of participation, mean (of those who have participated)

1998-2000 2009
Participation in water or shore related activities

- Swimming for pleasure
- Spending time at vacation home
- Boating
- Fishing
- Spending time near the shore

Participation %
1998-2000 2009

Participation %
0 10 20 30 40 50 60 70

METLA
Number of occasions of water or shore related activities

- Swimming for pleasure
- Spending time at vacation home
- Boating
- Fishing
- Spending time near the shore

Frequency of participation, mean (of those who have participated)

1998-2000 vs 2009
Participation in forest recreation activities

- Berry picking
- Mushroom picking
- Forest management in leisure time
- Hunting

Participation, % of population

0 10 20 30 40 50 60

Participation, % of population

1998-2000 2009
Number of occasions of forest recreation activities

- Berry picking
- Mushroom picking
- Forest management in leisure time
- Hunting

Frequency of participation, mean

1998-2000 vs 2009
Summary

- Nordic walking as a new activity replacing walking for pleasure
- Some activities such as snowmobiling and boating have been keeping its popularity, but is done less occasions
- Spending time at vacation home has increased both in popularity and in number of days
- Traditional forest related activities have different trends: picking berries and mushrooms, hunting, and forest work
Thank you!

Metla Recreation Research, see