Visitor survey and route analysis – on the way to a cross border tourism strategy

Pavel Bečka and Maria Hußlein
Bavarian Forest and Šumava National Park

- Bad Schandau
- Bavarian Forest National Park
- Prague
- Munich

GERMANY

CZECH REPUBLIC
The major issue, however, is how to manage this use effectively in ways that protect park, provide for satisfactory visitor experiences, and create a constituency of supporters for parks. (Dearden und Rollins, 2009)

TransParcNet 2015: Focus on visitor monitoring
- Number of visitors in one year
- Knowledge about the Bavarian Forest National Park

TransParcNet 2016: Focus on touristical aspects
- Preferred routes and attractions
- Economic benefits for the region
- Cross border tourism strategy
Spatial distribution of visitors (locals and tourists) in the Bavarian Forest National Park

Amount of questioned visitors per trail segment

Maximum visitor number per trail segment: 152, \( N = 849 \)
Locals…
... use more different trails than tourists
... have preferred trails (Gfäll, Trinkwassertalsperre, Schwellhäusl)

Tourists…
... visit national park centres more often
... are attracted by highlights (Watzlik-Hain, Seelensteig)
| Route analysis – dog owners

Dog owners, max. 20 visitors per trail segment, N= 132

Amount of questioned visitors per trail segment:
- 0%
- 1 - 5%
- 6 - 25%
- 26 - 50%
- 51 - 75%
- 76 - 100%
Route analysis – families with children

Families with children, max. 22 visitors per trail segment, N= 104

Amount of questioned visitors per trail segment:
- 0%
- 1 - 5%
- 6 - 25%
- 26 - 50%
- 51 - 75%
- 76 - 100%
Route analysis - cyclists

Maximum visitor number per trail segment: 19, N = 56

Amount of questioned visitors per trail segment
Route analysis - cyclists

Maximum visitor number per trail segment: 19, N = 56
| Route analysis - cyclists

Behaviour of visitors

$\Leftrightarrow$

National Park rules
Route analysis – use of public transport

Visitors using public transport, max. 10 visitors per trail segment, N= 42
Calculation of the regional economic effects of tourism

- Calculation of visitor numbers
  - one-year survey period (April 2013-April 2014)
  - 14 automatic counting devices - all year long
  - counting by staff - 12 single days

<table>
<thead>
<tr>
<th>Visitor type</th>
<th>Respondents</th>
<th>Extrapolation of visits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Over night visitor</td>
<td>490</td>
<td>49.95</td>
</tr>
<tr>
<td>Single-day visitor</td>
<td>136</td>
<td>13.86</td>
</tr>
<tr>
<td>Locals</td>
<td>355</td>
<td>36.19</td>
</tr>
<tr>
<td>SUMME</td>
<td>981</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Calculation of the regional economic effects of tourism

- Visits of various visitor types according to national park affinity
  - What was the role of the national park status for your visit today? → answer “important or very important role” → visitor of the national park in the proper sense (i. t. p. s.)

<table>
<thead>
<tr>
<th>Visitors type by national park affinity</th>
<th>Respondents</th>
<th>Extrapolation of visits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Over night visitor (NP Tourist i. t. p. s.)</td>
<td>277</td>
<td>28,24</td>
</tr>
<tr>
<td>Over night visitor (not NP Tourist i. t. p. s.)</td>
<td>213</td>
<td>21,71</td>
</tr>
<tr>
<td>Singel-day visitor (NP Tourist i. t. p. s.)</td>
<td>65</td>
<td>6,63</td>
</tr>
<tr>
<td>Singel-day visitor (not NP Tourist i. t. p. s.)</td>
<td>71</td>
<td>7,23</td>
</tr>
<tr>
<td>Locals (NP Tourist i. t. p. s.)</td>
<td>138</td>
<td>14,07</td>
</tr>
<tr>
<td>Locals (not NP Tourist i. t. p. s.)</td>
<td>217</td>
<td>22,12</td>
</tr>
<tr>
<td>SUMME</td>
<td>981</td>
<td>100,00</td>
</tr>
</tbody>
</table>
Calculation of the regional economic effects of tourism

- For the different types of visit gross daily spending and net daily spending were calculated
  - based on values determined by Job et al (2008) and Mayer (2013)
  - adjusted for inflation and current value-added tax, calculated for 2014

<table>
<thead>
<tr>
<th>Visitors type by national park affinity</th>
<th>Spending per day (gross)</th>
<th>Spending per day (net)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over night visitor (NP Tourist i. t. p. s.)</td>
<td>56,22 €</td>
<td>49,15 €</td>
</tr>
<tr>
<td>Over night visitor (not NP Tourist i. t. p. s.)</td>
<td>56,22 €</td>
<td>49,17 €</td>
</tr>
<tr>
<td>Singel-day visitor (NP Tourist i. t. p. s.)</td>
<td>13,94 €</td>
<td>11,69 €</td>
</tr>
<tr>
<td>Singel-day visitor (not NP Tourist i. t. p. s.)</td>
<td>13,67 €</td>
<td>11,41 €</td>
</tr>
<tr>
<td>Locals (NP Tourist i. t. p. s.)</td>
<td>10,36 €</td>
<td>8,69 €</td>
</tr>
<tr>
<td>Locals (not NP Tourist i. t. p. s.)</td>
<td>6,89 €</td>
<td>5,79 €</td>
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</tbody>
</table>
Calculation of the regional economic effects of tourism

- Calculated gross and net turnover for the period 2013/2014
- compared to calculations from 2007 made by Job et al. (2008) the turnovers increased by 55%

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<tr>
<th>Visitors type by National Park affinity</th>
<th>Gross turnover</th>
<th>Net turnover</th>
</tr>
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<tbody>
<tr>
<td>Over night visitor (NP Tourist i. t. g. S.)</td>
<td>20.770.591 €</td>
<td>18.158.565 €</td>
</tr>
<tr>
<td>Over night visitor (not NP Tourist i. t. g. S.)</td>
<td>15.971.652 €</td>
<td>13.968.803 €</td>
</tr>
<tr>
<td>Singel-day visitor (NP Tourist i. t. g. S.)</td>
<td>1.208.528 €</td>
<td>1.013.664 €</td>
</tr>
<tr>
<td>Singel-day visitor (not NP Tourist i. t. g. S.)</td>
<td>1.294.508 €</td>
<td>989.432 €</td>
</tr>
<tr>
<td>Locals (NP Tourist i. t. g. S.)</td>
<td>1.906.851 €</td>
<td>1.599.678 €</td>
</tr>
<tr>
<td>Locals (not NP Tourist i. t. g. S.)</td>
<td>1.994.152 €</td>
<td>1.674.870 €</td>
</tr>
<tr>
<td><strong>SUMME</strong></td>
<td><strong>43.146.282 €</strong></td>
<td><strong>37.405.012 €</strong></td>
</tr>
</tbody>
</table>
Visitor survey and route analysis is helpful ...

- ... to identify „hotspot“-areas
- ... to deploy the Ranger service along highly frequented trails
- ... to resolve conflicts (nature conservation ⇔ visitor, visitor ⇔ visitor)
- ... to communicate the National Park tasks and rules related to the needs and wishes of the visitors
Results and conclusions II

Deduced management activities

- Interpretation based on target groups is essential for an effective management of the protected areas
- Information and communication skills must be improved to reach the visitors
- The use of trails has to be connected with the sensitivity of the natural resources
- Visitor management needs solutions that the visitors change their behaviour in spite of themselves
See you tomorrow in workshop I: Visitor management

Arne Arnberger and Maria Hußlein