

## ASSESSING TOURISM DEVELOPMENT IN THE TATRA REGION AND THE VISITORS' PERSPECTIVE

HODNOTENIE VPLYVU ROZVOJA TURIZMU V TATRANSKOM  
REGIÓNE AJ Z POHLĀDU NÁVŠTEVNÍKOV

**Streberová E., Baus P.**

Department of Landscape Ecology, Faculty of Natural Sciences, Comenius University,  
Mlynská dolina, 842 15 Bratislava, Slovak Republic

E-mail: streberova@fns.uniba.sk

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### ABSTRACT

The article starts with an introduction on the role and influence that tourism development has had in Slovakia's oldest and largest national park – the Tatra National Park throughout the centuries on local communities, settlements and environments in the High Tatra Mountains and the High Tatra municipality. The second part of the article presents preliminary results of a visitor survey aimed at visitors' perspective of the park, the surrounding region, tourism development and nature conservation and future development paths in the study area. In the Tatra national park, as in many other protected areas, the local economy is very much dependent on tourism development as it constitutes the major financial income, because other economic activities are perceived as a considerable threat to the nature conservation priority. Thus tourism development can become a big opportunity as well as a great threat for the study area. Knowing the visitor perspective of optimal visitor experience and visitor use is economically important, however meeting visitor expectations should be done in a way that necessarily does not negatively impact on the environmental, socio-cultural and economic sphere in the study area. The following paragraphs outline some of the results of the web-based survey carried out during the summer season 2012 in the High Tatras. According to the survey results, the majority of visitors prefer outdoor recreation especially hiking and taking pictures of wildlife and the landscape. It is obvious that the natural potential of the area is a synonym for an active holiday in a well preserved natural environment. In terms of nature protection, most of the respondents claimed they would prefer if service suppliers and owners of leisure facilities more environmentally responsible and that natural reserve should be in a strict conservation regime. When taking a look into the future, visitors preferred a future scenario of qualitative development and conservative regime rather than if current development trends would continue („business as usual“ scenario). Thus any further building and urbanisation processes should be carried out very carefully considered in the study area, as well as an increase of visitor numbers, because visitor nuisance proved to have a negative influence on the visitor experience.

**Key words:** protected areas, tourism development, Tatra national park, visitor use

**Acknowledgments:** This research and presentation is supported by the VEGA project No. 2/0016/11.

## INTRODUCTION

Undisturbed areas of nature have been always attracting visitors searching for a getaway from busy daily routines. Protected areas are therefore sought after nature experiences and related recreational activities. However, recreational use of protected areas has created new and exciting opportunities to serve and provide different sorts of visitor experiences, it has also created difficult environmental and social problems or conflicts - like for example conflicts among user groups, vandalism, crowding, etc. In many protected areas, the local economy is very much dependent on tourism development as it constitutes the major financial income, because other economic activities are perceived as a considerable threat to the nature conservation priority. Visitor use impacts are primarily attributable to visitor behaviour, use levels, types of use, timing of use, and location of use and can be managed effectively to avoid overuse of natural resources and preserve cultural values attached to this site or area (Belnap, 1997, Eagles et al., 2002, Manning, 2007).

The study area for this article is the High Tatras as part of the Tatra Mountains. The Tatra mountains create a natural border between Poland and the Slovak Republic and are the highest mountain range within the province of Western Carpathians of the Carpathian biogeographical sub region (Boltízar, 2007). The elevation reaches the maximum over the Slovak border at Gerlachovsky peak (2 654 m a.s.l.). The mountain range occupies an area of 785 km<sup>2</sup> of which 175 km<sup>2</sup> (approx. 25%) of which lies in Poland, while 610 km<sup>2</sup> (75%) belongs to the territory of the Slovak Republic (Lukniš 1973, Izakovičová et al. 2008, Vološčuk et al., 2004, Vološčuk 2011).

The Tatra mountains have a long tradition in hosting visitors not only for recreational purposes but also for supporting nature research since the 18<sup>th</sup> century and have been always attracting people for their uniqueness as well as for their climatic conditions suitable for building health spas. Especially in the Eastern part of Tatras – the High Tatra mountains are well known. What in the 19<sup>th</sup> century were only scattered groupings of recreational and leisure houses, later on became 15 settlements which today constitute 15 districts of the cadastral territory of the Town of High Tatras.

Currently, the cadastral territory of High Tatras spreads over a total area of 359,8 km<sup>2</sup>, thus the area ranks among Slovakia's largest cadastral territories. Administratively the High Tatras belong to Poprad City district within the Prešov self-governing region. Despite the fact that the High Tatra municipality is located in the national park territory and is one of Slovakia's tourism hotspots (especially Starý Smokovec, Tatranská Lomnica and Štrbské Pleso) there is a continuous decrease in population since the 1980s. According to the Population census (2011) currently there are only 4,250 inhabitants living in the High Tatras municipality and the population is growing old (High Tatra Municipal Corporation, 2005, [www.vysoketatry.sk](http://www.vysoketatry.sk), [www.statistics.sk](http://www.statistics.sk)).

Because of its favourable alpine climate conditions as well as hot springs, in 1957 the High Tatras were declared a health spa resort with the following functions: tourism development, health treatment, protection of nature and research. The Tatras became accessible through a dense network of hiking trails and also cable cars – in 1937 a cable car was built at the Lomnický peak, later on cable car to Solisko and Hrebienok were built. Nowadays cable cars are being renovated and their capacities upgraded, especially in winter sport resorts like for example Tatranská Lomnica, Starý Smokovec and Štrbské pleso (Andrássy, 1991, High Tatra Municipal Corporation, 2005, Izakovičová, 2008, [www.lanovsky.sk](http://www.lanovsky.sk)).

With further building and development in the socialist era, the High Tatras were chosen as the hosting destination for the Skiing World Championship in 1970. During this event the High Tatras and the surrounding region absorbed 130,000 visitors. The Tatras became criticised for their “noisiness, crowdedness, amount of vehicles and rather urban character of settlements”. The development trend followed several years later until the number of visitors started to decline in the early 1980s rapidly and thus nature protection measures became more stricter towards new building activities and the number of beds was downscaled (Harvan, et al., 2010, High Tatra Municipal corporation, 2005). In the beginning of the new millennium there was an evident increase in number of leisure and accommodation facilities of all categories by 40%. In 2002 the number of beds was not on a rise anymore, although building processes continued. However the number of overnight stays has not copied this rising trend in facilities and the overall occupancy of accommodation facilities remains on a 60-65% level until today. The daily visitation rate reached its 10-year maximum in 2009 when there were 21,000 visitors counted per day in the mountains, according to the visitor census in 2011 there have been only roughly 17,00 visitors per day (Huba et al, 2005, Municipality of high Tatras, 2009, 2011, [www.minzp.sk](http://www.minzp.sk)).

In the following paragraphs we will present some of the findings from a visitor survey and draw linkages between these findings, opportunities and threats relevant for future development of the study area in terms of sustainable development of tourism and nature conservation.

## **MATERIALS AND METHODS**

During field research in the summer season of 2012 a visitor survey, observation and photodocuemntation were carried out. Questionnaires can be designed to be either administered by the interviewer (face-toface) or intended for self-completion by survey participants (paper-based, web-based) (Brace, 2008, Tomal, 2010). For the purpose of this research a web-based survey has been carried out, which is continuing until winter 2013.

Visitors – respondents were asked to participate in a web-based survey, and their email addresses were collected. Within a short period of time they have received an email with a hyperlink to the online questionnaire. The questionnaire comprised of different types of questions, however in this article, several preliminary results from the survey are presented.

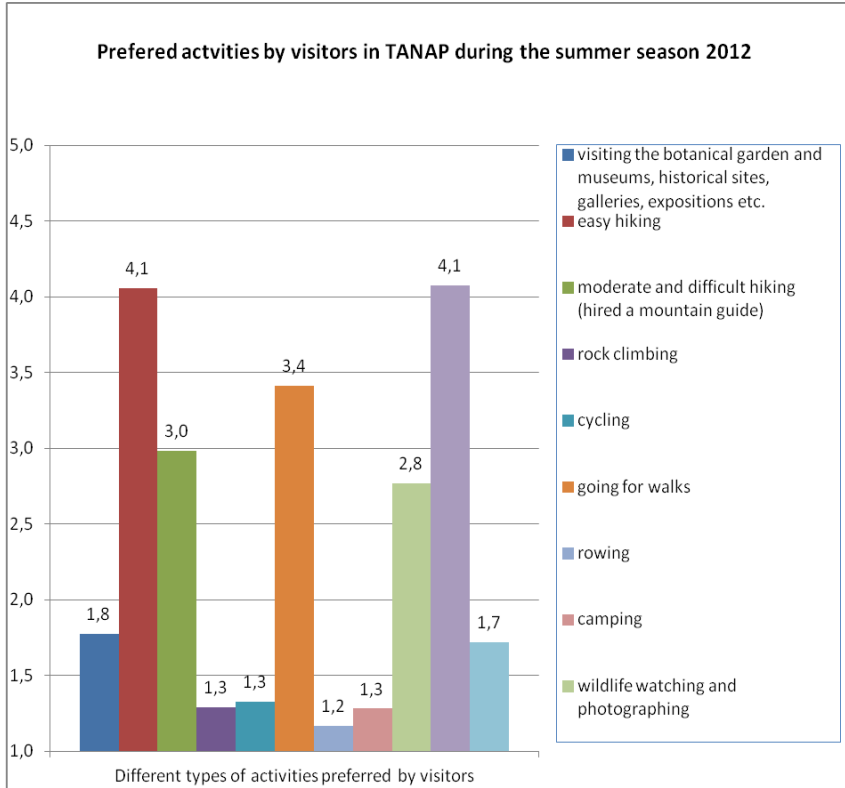
Observation and photodocumentation are largely applied in social sciences and qualitative approaches to research. The focus of observation varies with the research goal – it can be participant observation – to capture their “natural” behaviour, descriptions of individuals, descriptions of physical environment (surroundings), etc. (Schensul et al., 1990, Padgett 1998, Berg, Ketchen, 2011).

## RESULTS AND DISCUSSION

Tourism has many aspects especially in connection to protected areas, where tourism development can become a big opportunity as well as a great threat. We argue that these threats can be in some cases eliminated by respecting the visitor perspective and preferences when managing for a sustainable visitor experience and tourism development. In the following paragraphs we will focus on visitor use in terms of preferred visitor activities, factors that have a negative effect on visitor experiences. Subsequently we will touch upon often discussed issues like perspectives of nature protection and future development paths (scenarios) by visitors themselves.

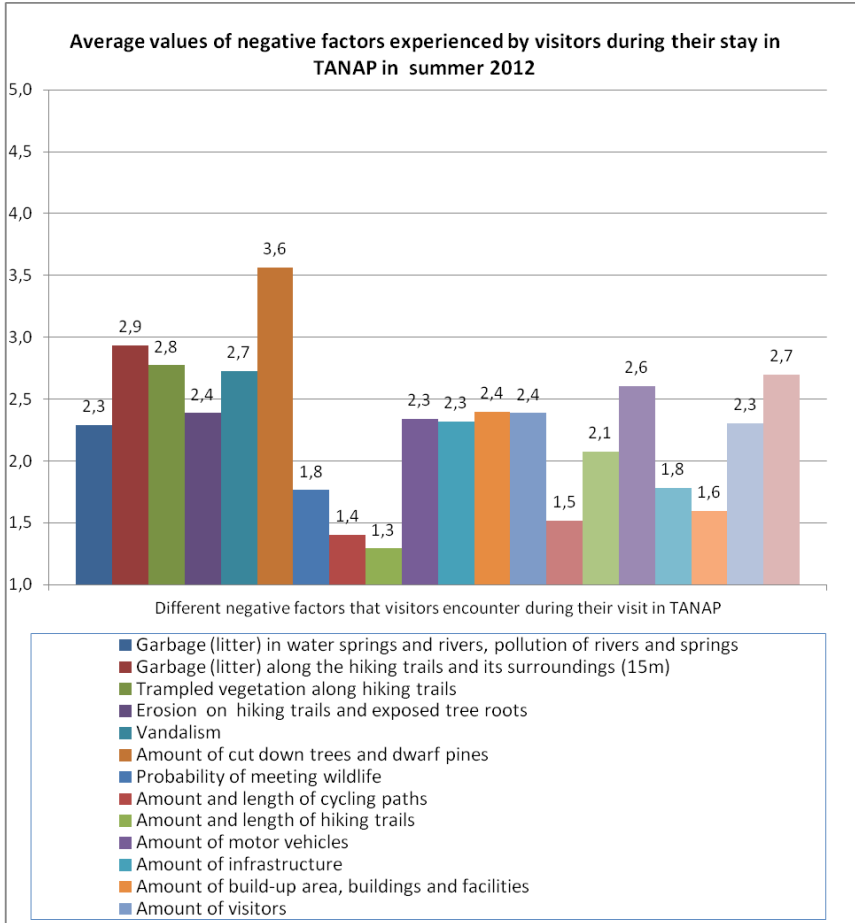
The survey results showed that visitors spent their leisure time mostly with the following activities: *hiking on easy trails, taking pictures of the scenery and sightseeing, as well as hiking more difficult trails, going for walks and taking pictures of wildlife*. On the other hand the least carried out activities were *cycling, rock-climbing, camping and rowing*. More details and the average values for each activity are shown in the Figure 1. below, where visitors had to attach a value from a scale of 1 to 5 (where 1 meant „I have not participated in this activity at all“, 5 meant „I have participated in this activity the most“).

Fig. 1. Preference of activities among the respondents – visitors in TANAP in summer season 2012.



Another set of relevant findings is related to different negative factors that can have an effect on the visitor experience. The respondents were asked to evaluate a set of listed negative factors by choosing a value from 1 to 5, where 1 meant “it is not disturbing at all”, and 5 meant “it is absolutely disturbing”. The highest mean average was for the factor of “Amount of cut down trees and dwarf pines” followed by several factors with approximately the same value: “Amount of garbage and litter along the hiking trails”, “Trampled vegetation on hiking trails” and “Availability of toilet facilities”. From the results it is evident that the least stressful for the visitors were noise created by motor cars, cable cars, length of cycling and hiking trails and pets that visitors take with them for hiking trips. The whole list of assessed factors is shown in the graph in Figure 2.

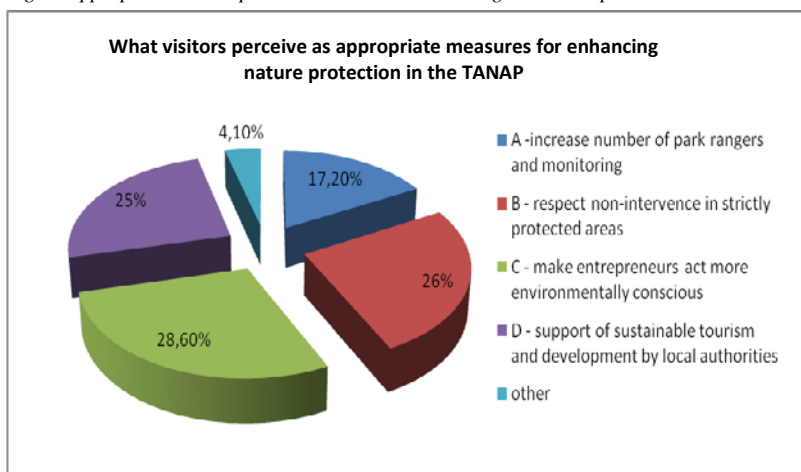
Fig. 2. Different negative factors that visitors encounter during their visit in TANAP.



Out of total 108 respondents, only 15% answered that they think it is *not* necessary to protect nature better. Out of the positive answers for nature protection measures, the respondents could then choose several options from a multiple-choice answer provided in the questionnaire. As we can see in Figure 3., the majority - 28,6 % answered *they think nature protection should be protected better by making service suppliers (sports and recreational activities, accommodation services, etc.) and owners of leisure facilities more environmentally responsible* or engage in enhancing the natural environment (for example: revitalisation activities in areas exposed to tourism load, pressure from human activities or visitor use). Subsequently, 26 % believe nature should be protected by leaving *the nature (in the most valuable areas – natural reserves) to self-development without any human*

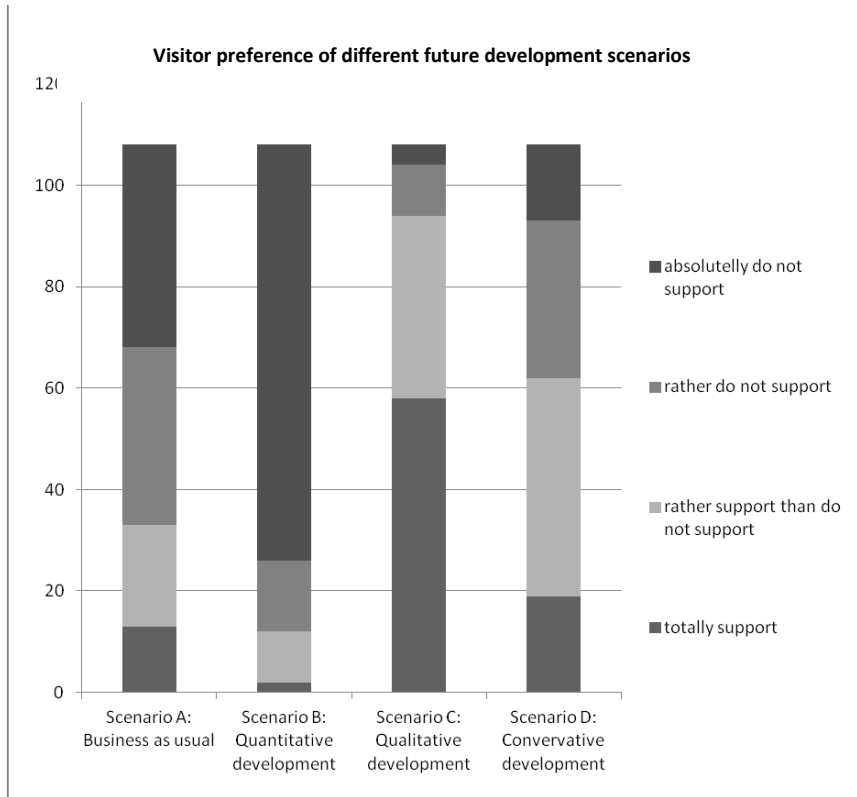
intervention (forest management and hunting). Additionally 24,9 % of respondents think that local authorities should promote and support sustainable forms of tourism (e.g. hiking, climbing, skialpinism), which do not require greater infrastructure capacities, building construction or further interventions into the natural environment of the national park. Thirty-three respondents (17,2 %) believe that an increase of staff (rangers) is necessary to monitor the state of natural environment and visitor safety. Only 4% of respondents think that nature protection would benefit from other activities – for example investing revitalising activities to help minimise the impact of the windbreak from 2004 and the subsequent bark-beetle infestation or that it is the visitors, that should be re-educated to behave more appropriate during their stay in a protected area. A graphic illustration of these results is below in Figure 3.

Fig. 3. Appropriate nature-protective measures according to visitor opinion



The last survey question that we will mention in this article is the one dealing with an overall vision - a future development scenario of Tatra mountains, the park and the town of High Tatras. Four different development scenarios adapted from a study developed shortly after the windbreak in 2004 (Huba et al., 2005) were described in the questionnaire. Basically these were 4 different development paths for the upcoming 50 years: a) *business as usual* (current development continues), b) *quantitative development*, c) *qualitative development*, d) *conservative development* (for more detailed information see Annex 1.). The respondents then rated each of the scenarios using values from the scale of 1 to 4 (Figure 4.). The visitors prefer the *Scenario C (Qualitative development)* the most, the second most preferred was the nature conservative *Scenario D (Conservative development)*. The visitors preferred this option more, than if current development path would continue (*Scenario A – Business as usual*). The last preferred as the Figure 4. below shows, is *Scenario B – Quantitative development*.

Fig. 4. Visitor preference - perspective on future development paths (scenarios).



From existing strategic documents for the study area, it is evident that local authorities and other relevant organisations in the local tourism and nature protection sector are aware of the visitors needs, which the documents divide as follows: needs of sufficient quality of environment, quality of accommodation and restaurant services, spectrum of guided tours and related services, spiritual experiences, sport and recreational activities, educational activities and leisure activities (High Tatra Municipal Corporation, 2005).

From an economical point of view, “satisfying the customers is inevitable” thus if the visitors that have an enjoyable visitor experience they are more likely to return or extend their visit and also give good reference to their relatives and friends. Because of this, visitor experience has to be viewed “as a product and as a product it has to be sold”, which “ in order to be successful, must be a quality product, which satisfies the wants and needs of as wide a range of buyers as possible”



while “the process of producing and selling the product must not be done in a manner that negatively impacts on the environmental, socio-cultural and economic sphere in the area” (Tayler 2004:10).

## CONCLUSIONS

We believe that the results of the survey are part of the missing knowledge on the entangled host-guest or development-nature conservation relationships. First of all it is very interesting, that despite local ambitions of widening the spectrum of additional services (leisure and sport activities) people prefer to spend their free time in TANAP and the High Tatras outdoors, mostly with hiking or going for walks, and enjoy watching the scenery of the alpine landscape or taking photographs of wildlife and the mountains the most. From the results it is evident, that visitor experience was in the most cases negatively affected with the current state of forests – especially the effects of the windstorm and barkbeetle infestation that followed. However on the other hand, several respondents recognised that a recovery process of this scale simply needs a lot of time. Next to this, visitor nuisance – especially littering along the trails, crowding and related impacts (trampling of vegetation along trails) were also bothering the visitors. The majority of visitors think that nature protection in the park is not sufficient and that entrepreneurs should take-over their environmental responsibilities. Additionally they think that areas of strictest nature protection regime, should be left to self-development (natural reserves should be without human interventions). Last but not least, the visitors prefer a rather qualitative development or conservative development path instead of the current state or quantitative development in the study area. Especially in this case, the survey yielded somewhat surprising findings, especially in terms of visitors preferring the conservative development scenario rather than the business as usual scenario. Because the majority of visitors have spent their leisure time with outdoor recreation (hiking) and taking pictures of wildlife and the landscape, we claim that natural potential of the area is a synonymum for an active holiday in a well preserved natural environment. Thus any other building and urbanisation processes should be very carefully considered in the study area, as well as an increase of visitor numbers, because visitor nuisance proved to have a negative influence on the visitor experience as well.

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Ministry of Environment of the Slovak Republic: [www.minzp.sk](http://www.minzp.sk)

State Nature Conservancy of the Slovak Republic: [www.sopsr.sk](http://www.sopsr.sk)

State statistical office: [www.statistics.sk](http://www.statistics.sk)

**ANNEX 1.**

Four different development paths (scenarios) outlining the future of Tatra region (Huba et al., 2005).

**Scenario A: "Business as usual"**

": The amount of visitors continues to increase, as well as the capacities of infrastructure (also ski lifts and ski slopes; pistes) and number of motor vehicles. Surface sealing and construction continues on the foot of mountains (apartment houses, hotels, villas, parking lots, etc.). This contributes to gradual load and pressure on the environment - air, water and soil pollution and increases the demand for freshwater and noise levels. The recreational, climatic (health & spa) and research functions of TANAP are jeopardized. Forest management focuses on clearing the forests from trees infested after the calamity of 2004 and timber logging. In the High Tatra municipality slight decrease of population continues, the overall orientation of the municipality remains focused on tourism related services

**Scenario B "Quantitative development"**

Fast increase in accommodation and transportation capacities, surface sealing and building and ski-facilities construction enables great increase in visitor numbers beyond the carrying capacity of the park, which affects the environmental, psychological, hygienic and overall quality of life of local inhabitants as well as visitors. Forest management focuses on timber logging. Parks' ecosystems degrade quickly and the area loses its naturalness. It is highly probable that part of the income made locally is re-invested elsewhere outside the national park. In the end the attractiveness of the area is threatened by unregulated development directly in the park boundaries, which leads to loss of natural values and visitor interest.

**Scenario C: "Qualitative development"**

The region and the national park focuses on balanced long-term gains (economical, social, environmental), which build upon the diversity of natural, cultural and historic values of the area. Besides tourism, the High Tatra municipality promotes also traditional activities and ceremonies, arts and crafts, which also serve as additional income. Preserved natural ecosystems are left for self-development without human intervention. Tourism is developing rather in terms of quality than quantity, and respects the environmental carrying capacity of the park and social carrying capacity of visitors and local inhabitants, quality than quantity, and respects the environmental carrying capacity of the park and social carrying capacity of visitors and local inhabitants.

**Scenario D "Conservative development"**

The existence of TANAP is an economical gain in the long-term. The territory of the park is enlarged by its buffer-zone on the foothills. Norms and regulations for nature protection are strictly complied with and no surface sealing and construction outside the already build-up area is not possible under any circumstances. In the areas of strictest conservation, the natural reserves, ski slopes and other recreational facilities and areas are being re-forested. In the park, the principle of non-intervention is dominant, whereas human interventions are completely minimised. The visitors are restricted to enter only certain valleys and peaks in the park. Sport and other recreational facilities are re-settled into the buffer-zone of the national park and the underlying podtatranská valley.