

Jana Janočková / Jana Jablonská

# Understanding travel influences of overnight off-trail trekking: A case study of National Park Slovenský raj, Slovakia

## Abstract

*While adventure tourism has attracted attention of scholars, reported research to date is mostly concentrated on marketing. In contrast, research reported here is focused on adventure travellers in the context of visitor management in protected natural areas. Specifically, the aim of this study was to establish relationship between adventure travellers' motivation, their visiting behaviour, environmental awareness and readiness to compromise their enjoyment in order to minimise adverse environmental impacts. In this, the research was focused on hard-adventurers, that is those that partake in off-trekking and bivouacking that are contrary to the national park visiting rules. The study was conducted in the National Park (NP) Slovenský raj, one of the most popular national parks of Slovakia and Central Europe through visitor survey on attitudes towards the environment, activities, self-reflection and the situational factors. The outcomes indicate that the majority of respondents were willing to forfeit some freedoms if they would be educated on how this would preserve the natural environment. This emphasizes the need for management regulations to be complemented by strong educational strategies aimed at specific type of visitors.*

*Key words: National Park Slovenský raj; adventure tourism; off-trail trekking; tourism impacts; interpretation of natural resources; Slovakia*

## Introduction

In Slovakia, as in many other countries, off-trail visitor movement is a widely discussed management issue in protected natural areas, as it correlates with development of undesirable trails, soil erosion, trampling of vegetation and impacts on communities of organisms (NP Slovenský raj Administration, 2008; Leave No Trace Center for Outdoor Ethics, 2012; Jablonská, Timčák & Špičuk, 2007; Timčák & Vizi, 2010). These areas are mostly affected during the high summer season. With the peak in visitor numbers and lack of efficient control of hikers that stray from the designated paths the probability of illegal bivouacking and campfires increases significantly. Bivouacking is, in general, difficult to monitor. The off-trail walking is occasionally checked by the park rangers. For example, in the NP Slovenský raj, park rangers registered between fifty and three hundred off-trail movements annually from 2008

---

**Jana Janočková**, MSc, Institute of Geotourism, Technical University of Košice, Košice, Slovakia;  
E-mail: jana.janockova@tuke.sk

**Jana Jablonská**, CSc, Institute of Geotourism, Technical university of Košice, Košice, Slovakia;  
E-mail: jana.jablonska@tuke.s

to 2011 (NP Slovenský raj Administration, 2011). In general, a number of those that hike outside designated areas of national parks is not officially registered as, typically, they are warned of national park's rules and the problem is resolved by agreement. The NP managers are aware that controlling visitor movement in the parks is difficult to impose by the rules and, therefore, rely heavily on visitor environmental education through information tables, educational trails and information centres. Through these, visitors are given basic information on natural resources of the parks and, in principle, they work well for the broad audience that comply with the visiting rules. However, in search of how to appeal to the specific segments of visitors it might be that the educational program and site specific management practice targeting sub-segments of visitors are more effective. This study aims to explore such assumption through the case study of the NP Slovenský raj specifically dealing with off-trail trekking, including spending at least one night wild camping. Namely, much of the academic attention has revolved around segmentation of adventure travellers, the prime segment for the national parks, for marketing purposes. Although it is recognized that market segmentation can provide rationale for an effective site management (Pedersen, 2002), this stream of research seem to lack the context of adventurers causing impact in areas of sensitive ecological systems. Thus, instead of viewing adventure travellers as a homogenous market, the intention of this study is to recognise the distinctive characteristics and travel influences of those that trek and camp outside the designated areas.

## Literature review

A prevailing stream of studies refers to three principal motivations of adventure tourism - risk, personal challenge and physical activity (Malett, 2004; Swarbrooke, Beard, Leckie & Pomfret, 2003; Kane & Tucker, 2004). Other frequently mentioned motives for an adventure experience are to learn and gain new insights (Weber, 2001), gain experiences and enjoyment in natural environment (Sung, Morrison & O'Leary, 1996). Equally important is the opportunity to gain and test ones competence in facing physical risk imposed by an outdoor setting. These factors shape different segments of adventure travellers (Travel Industry Association of America, 1998; Otago Institute of Sport and Adventure, 2008; Hill, 1995; Tourism New South Wales, 2002). The activity of off-trail overnight trekking and wild camping often incline towards hard adventure. Certainly, this is the case with off-trail movement in NP Slovenský raj where there is safety risks imposed by terrain with limited accessibility, rough weather conditions and potential for wild animal encounters. The activities undertaken here push people beyond their comfort zone, involve high risk and require experience of a specific natural environment to satisfy the need for authenticity and challenge. It is not surprising then that Goodnow (2005) explores a correlation between hard adventure and the Plog's allocentric/psychocentric typology (1974, 2003, and 2004) in that the hard adventure traveller is consistent with traits of an allocentric by a strong desire for adventure and high risk levels, while near-allocentric is considered to fall within soft adventure segment. However, while a typical allocentric is unlikely to revisit a destination, in Goodnow's research of hard adventurers this assumption was not supported. This is helpful from the national park management perspective, as knowing visitor intention to retake the activity could help in devising educational programs for this group of visitors.

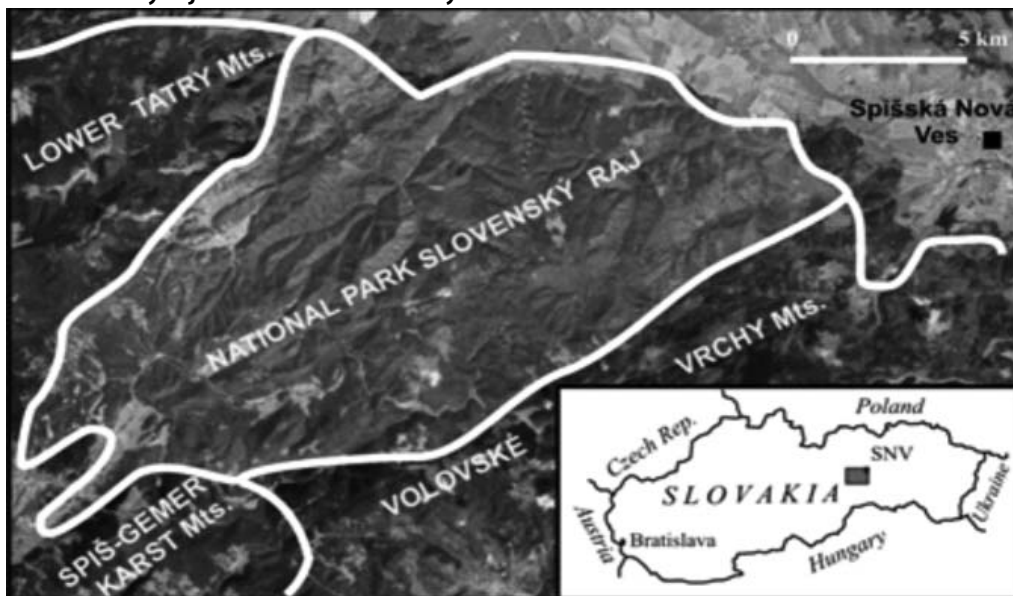
A vast array of studies reports a strong environmental consciousness of adventure travellers (Schneider & Heyniger, 2006; Swarbrooke, Beard, Leckie & Pomfret, 2003; Kane & Tucker, 2004). This is another issue that should be taken into account when balancing the needs of adventurers with environmental protection. Acting upon such knowledge can be initiated by interpretation which, as a communication process, is recognised to foster conservation attitudes, ecological knowledge and forge bonds between people and, both, the natural and cultural resources (National Association for Interpretation, 2012; Gaede, Strickert & Jurin, 2010). Thus, even the most important components of adventure travel may then be compromised if an effective educational interpretation appeals to the environmental consciousness of the adventurer. A rising number of natural areas seem to succeed with an effective educational interpretation of natural resources. This is the case of e.g. "Leave no Trace", a public awareness program for public lands use in United States (Leave No Trace Center for Outdoor Ethics, 2012), or the interpretation strategy of Booderee National Park Australia (Booderee National Park Board of Management, 2002). Both of these strategies actively educate visitors and communities (on-site, online, through the tourism industry and other sources) on responsible use of the natural resources.

The above brief examination of the literature covering a broad segment of the adventure travel market provides a framework for investigating the hard adventure market to the national parks, in particular in terms of their attitudes to safety issues, perceived authenticity of the environment, situational factors and environmental consciousness. Equally important, it provides a foundation for understanding how perceptions of the adventure experience may change when adding an element of safety that may impinge on authenticity, as many of the management measures aimed at minimising the negative environmental impact direct travellers to the designated visitor facilities. Thus, taking into account the motivation and desired outcome from adventure travel experience in natural environments, this study is guided by the two main questions. Firstly, to what extent is the adventure visitor in a wilderness willing to compromise his/her genuine experience of the pristine nature area in order to benefit its protection? Secondly, how best to communicate the interpretation/education of natural resources and their subsequent protection to these visitors? In a broader terms, this study also seeks to analyze the extent to which situational factors influence over-night off-trail trekking in national parks, as it is recognized that the travel patterns result from a compromise between needs, wants and other influential factors such as time, cost and travel distance (Hinch & Hingham, 2004).

## Methods

To fulfil the aims of this study, a survey of visitors to the NP Slovenský raj was conducted. This national park is situated in eastern Slovakia and covers an area of 197 thousand km<sup>2</sup> (Figure 1). The rivers Hornád and Hnilec formed the prevailing landscape of this national park - the deep canyons, gorges and ravines with numerous waterfalls, rapids and cascades. The area is also popular for a unique underground world of many caves and underground abysses. The inaccessibility of the terrain enabled very little human interventions which left the natural resources in an almost unchanged state until recently when many of the localities in the NP are made accessible to visitors by iron and wooden ladders, steps, chains and bridges.

Figure 1  
NP Slovenský raj - Location of the study area\*



\* The inserted map shows the position of the NP Slovenský raj (square) in Slovakia. SNV stands for Spišská Nová Ves.  
Source: Google maps

The population for this study was defined as all visitors to the NP Slovenský raj that were on an off-trail trekking that included spending at least one night wild camping (camping outside a designated camping area). The size of this population was difficult to estimate. The management of the NP Slovenský raj estimated that the activity of bivouacking associated with walking off-trails occurs no more than 100 times per year (V. Mucha, personal communication, February 12, 2012). However, bivouacking is likely to occur more often than estimated. Firstly, it can be gauged from contact during previous field work in the NP with people from Slovakia and neighbouring countries who trekked off-trail for several days. Secondly, a number of people reporting such experience on existing internet forums dedicated to trekking in national parks indicate that the activity might be more widespread than the NP's management estimated. Taking these into account, the population was estimated at 100 visitors and 75 was set as a sample size, as it was assumed that some visitors retake the activity several times over the year. Nevertheless, as there is a lack of specific data regarding bivouacking and previous research did not enable for a more precise calculation of the population size, further research is necessary to increase the power of these findings.

Data was collected at six randomly selected trails in three waves from February to May 2012. Potential respondents were approached mostly early in the morning and, only occasionally, during the day and, firstly, screened those that fit the population under the study. After a short introduction on the aims of this research, a question was asked to determine their experience with overnight off-trail trekking in the NP Slovenský raj. In total, 91 people were approached that met the criteria for this research of which 21 declined to participate. Therefore, 75 valid responses were obtained and used in this study.

This study utilised the self-completed questionnaire as a data collection instrument. The questionnaire consisted of five sections:

- a) *The adventure travel motivation factors* derived from the existing studies (Sung, Morrison & O'Leary, 1996; Weber, 2001, Swarbrooke, Beard, Leckie & Pomfret, 2003; Malett, 2004; Kane & Tucker, 2004) and included risk, competence and contact with nature, complemented by the importance of social interaction during the trekking or that of solitude. The importance of these factors was measured on a 5-point scale, with 1 being the most important and 5 not important at all.
- b) *Awareness on environmental issues associated with off-trail movement in pristine nature areas* consisted of two parts – understanding of the impacts that bivouacking might cause in the NP (trampling surface vegetation, soil erosion, disturbing wildlife, water pollution) was investigated by stating the level of agreement with those impacts. Second part consisted of ascertaining their level of compliance with the basic safety rules for wild camping, including bivouacking on durable non-vegetated surface, altering bivouac places, not taking shelter close to water, lighting fire, keeping low noise levels, taking the waste to starting point of trip. Both were measured on a 5-point scale.
- c) *Interest in interpretation* was also measured in two ways. Firstly, respondents were asked to indicate the level of their interests in variety of public education methods – participation in discussion regarding lessening the impact on nature when trekking and wild camping with rangers and other experts; web-page dedicated to the best practice when trekking and spending night in pristine nature areas, information on environmental impacts, current state of trails and ice-climbing conditions, including forums on related subjects; brochures informing about impact of leisure activities, best practice when trekking and bivouacking and information tables informing about impacts of leisure activities. Secondly, the effect of interpretation on visitors' behaviour and their willingness to make compromises were further investigated through examples of management actions. Two preventative measures that the management of the NP Slovenský raj will introduce in the case of positive reaction of these visitors, were given to the respondents for consideration - wooden platforms built above the ground that would serve for temporary encampment and allocating official areas where bivouacking would be permitted. Respondents were asked to rate the extent to which the wooden platform would limit their experience in terms of the adventure travel components - risk, outdoor competence, contact with nature, be away from other people, spend time with companions. Level of agreement with the measures that would, according to the respondents, limit the adventure travel components was compared with the agreement level solely in case of explained lessened impact on nature.
- d) *The situational factors and revisit intention* - the influence of a long distance between camps and the costs (paying for accommodation) was studied, complemented by a desire to be independent from visitor facilities. Respondents indicated intention to visit the park again for the purpose of bivouacking by choosing categories of visiting frequency during one year (less than 5 times, 6-10 times, more than 10 times).
- e) *The demographic variables* - while increasingly recognised that the behaviour of adventure travellers transcends demographics (Schneider & Heyniger, 2006), the questionnaire recorded age, education level and place of residence to allow for a general comparison in regard to preference of a particular season to visit the NP, and the influence of situational factors.

Finally, space for additional comments was also provided to reveal personal variables on the issue.

## Results and discussion

The demographic profile of the respondents showed that the participation in an overnight off-trail trek was dominated by men (89%). The activity was for the most part preferred by people under the age of 30 (28% aged 18-25, 37% aged 26-30, 24% aged 31-40, 4% aged 41-50, and 7% aged 51-65). The respondents were well educated with 44% having a university education and 15% completing a college.

Although the population under study is generally considered to belong to an allocentric travel group with preferences of altering tourism destinations, there was a high probability that those questioned would revisit the locality for another several day off-trail trek, with 64% intending to participate in this activity up to five times, 29% six to ten and 7% more than ten times per year. Such travel preferences confirm the presumption that bivouacking occurs relatively frequently in the NP Slovenský raj.

While the majority of respondents travelled to the NP for an overnight off-trail trek in the summer (80%), the activity also occurs in winter (25%), mainly in association with ice-climbing. Cross-tabulation showed correlation between the preferred time of visiting the NP and nationality.

Their motivation varied significantly (Table 1). Contact with nature was clearly the most important, followed by spending time with companions and that of solitude. Another important motivator was being able to develop the outdoor competence, while risk (as a potential threat to health) was least important. These patterns of travel motivation are different from that of the broad adventure travel segment, where the activity itself and/or the risk involved are prevalent (Malett, 2004; Swarbrooke, Beard, Leckie & Pomfret, 2003; Kane & Tucker, 2004).

**Table 1**  
**Motivations associated with overnight off-trail trek**

Motives	Importance (%)					Total	Mean score	SD
	1 (Most important)	2	3	4	5 (Not important)			
Risk	0.0	12.0	14.7	20.0	53.3	75	4.15	1.074
Competence	4.0	50.7	13.3	22.7	9.3	75	2.83	1.120
Contact with nature	76.0	20.0	4.0	0.0	0.0	75	1.28	0.534
Spend time with companions	49.3	44.0	0.0	0.0	5.3	74	1.66	0.940
Be away from other people	40.0	36.0	12.0	9.3	2.7	75	1.99	1.072

The situational factors of a perceived long distance between camps in the NP, and the financial aspect play a somewhat important role in influencing their decision to bivouac/camp off-trail (Table 2).

However, the majority of the respondents act from a desire to be independent from the provided visitor facilities. The influence of situational factors did not show any significant variations across the demographic profile of the respondents (age, place of residence, education level).

**Table 2**  
**Influence of situational factors on desire to be independent from visitor facilities**

Factors	Influence (%)				Total N
	To a great extent	Somewhat	Very little	Not at all	
The cost (paying for accommodation)	25.3	45.3	13.3	16.0	75
Long distance between camps	32.0	29.3	28.0	10.7	75
Independence from tourist facilities	64.0	28.0	4.0	4.0	75

A broad environmental awareness of the respondents was indicated by their self-reflection on their environmental responsibility in daily life. The respondents generally perceived themselves as environmentally responsible to a great extent (72%), while additional 28% perceived themselves as somewhat responsible. A contrasting trend seem to be present in practice, where they often inadequately follow some of the basic environmental principles while off-trail trekking in pristine nature areas (Table 3).

**Table 3**  
**Following of the basic principles of being off-trail in pristine nature areas**

Principles	Frequency (%)					Total N
	Always	Very often	Sometimes	Rarely	Never	
Bivouacking on durable non-vegetated surface	0.0	14.7	32.0	45.3	8.0	75
Altering bivouac places	9.3	33.3	33.3	10.7	13.3	75
Not taking shelter close to water	13.3	18.7	14.7	45.3	6.7	74
Avoid building campfire	13.3	17.3	44.0	8.0	17.3	75
Keeping low noise levels	53.3	30.7	12.0	4.0	0.0	75
Taking the waste to starting point of trip	74.7	22.7	2.7	0.0	0.0	75

The disparity between self-reflection of respondents on their environmental responsibility and the actual practice can be caused by lack of understanding of the frequency and impacts of off-trail trekking in the NP Slovenský raj. The respondents did not seem to be informed about the impacts; 20% were unsure whether an off-trail overnight trek can cause trampling of vegetation, 13% did not know whether the activity can support erosion, or if it can lead to contamination of water (4%). The respondents disagreed that their activities can have effects as trampling of vegetation (28%), erosion (79%), disturbing wildlife (23%), or water contamination (43%). The willingness to be educated on the subject was tested by indicating interest in several education/ interpretation methods. As Table 4 illustrates, the assigned interest of the respondents demonstrates openness to learning about impacts of trekking and bivouacking, and a relatively strong motivation to minimise these impacts.

**Table 4**  
**Interest in educational activities**

Type of activities	Level of interest			Total N
	Yes %	Maybe %	No %	
Discussions with experts about minimizing impacts of off-trail trekking and bivouacking in the NP	61.3	20.0	18.7	75
Courses with qualified instructors on how to lessen impact on nature when off-trail trekking and bivouacking in pristine nature areas	65.3	29.3	5.3	75
Web page on best practice when off-trail trekking and bivouacking in pristine nature areas, information on environmental impacts, current state of trail and ice-climbing conditions, including forums on related subjects	74.7	22.7	2.7	75
Brochures informing about impact of leisure activities, best practice when off-trail trekking and bivouacking in pristine nature areas	56.0	24.0	20.0	75
Information tables about impact of leisure activities	62.7	28.0	9.3	75

If the management took measures to reduce the impact of bivouacking (e.g. wooden platforms built above the ground for temporary encampment, designating official places for bivouacking), for a considerable part of the respondents this would decrease fulfilment of their motives for an authentic nature experience (Table 5). This seemed to question whether the population of off-trail trekkers would comply with the imposed restrictions.



Table 5

**Influence of measures to reduce negative environmental impacts on fulfilment of outdoor motivation**

Fulfilment of expectation	Impact (%)							
	Decrease		Decrease to an extent		Maybe decrease		No decrease	
	Designated bivouacking area	Wooden platform	Designated bivouacking area	Wooden platform	Designated bivouacking area	Wooden platform	Designated bivouacking area	Wooden platform
Risk	36.0	24.0	0.0	2.7	36.0	38.7	24.0	22.7
Testing of outdoor competence	17.3	8.0	14.7	17.3	8.0	9.3	53.3	54.7
Contact with nature	21.3	18.7	14.7	20.0	12.0	6.7	46.7	50.7
Solitude	36.0	22.7	0.0	0.0	45.3	38.7	8.0	28.0

Once respondents could be convinced that they protect the natural environment, these measures (wooden platforms built above the ground, designated bivouacking area) would gain greater support (Table 6). Such respondents' reaction complies with the general reference to adventure travellers as strongly environmentally aware (Schneider & Heyniger, 2006; Swarbrooke, Beard, Leckie & Pomfret, 2003; Kane & Tucker, 2004). The given response rate also illustrates a willingness to make compromises following education on the issues at hand, which emphasises the need for an effective delivery of educative interpretation complementing the visitor rules of the NP.

Table 6

**Acceptance of measures to reduce negative environmental impacts if explained to visitors**

Measures	Acceptance (%)							
	Yes		No		Maybe		To a certain extent	
	Designated bivouacking area	Wooden platform	Designated bivouacking area	Wooden platform	Designated bivouacking area	Wooden platform	Designated bivouacking area	Wooden platform
Agreement with the measure	56.0	40.0	13.3	13.3	22.7	13.3	0.0	0.0
Agreement in case of explained lessened impact	81.3	74.7	4.0	4.0	4.0	2.7	1.3	1.3
Disinterest in the measure	37.3	32.0	48.0	41.3	0.0	0.0	0.0	0.0

The issue of overnight off-trail treks was additionally commented by 16% of respondents, of which 11% regarded the matter of burglars from some of the local settlements as a personal threat when spending the night in the NP. The rest of the comments (5%) reported a lack of available accommodation in the winter season as the reason for bivouacking in the NP during that time.

## Conclusion

This study addressed the management issue of off-trail tourist movement from aspect of motivation and desired outcome from adventure travel experience in natural environments. The context was, as stated at the beginning, guided by two main questions; firstly, to what extent is the adventure visitor in a wilderness willing to compromise his/her genuine experience of the pristine nature area in order to benefit its protection? Secondly, how best to communicate the interpretation/education of natural resources and their subsequent protection to these visitors?

Theoretically, the primary research was framed by literature concerned with principal motivations of the broad segment of hard adventure travel market, and the actual and perceived environmental responsibility of these travellers. The reviewed characteristics and motivations were in the primary research specified for the studied population.

As indicated by findings of a wide array of studies referring to pro-environmental behaviour of adventure travellers, the respondents in this study were characterized by a positive natural environmental approach and openness to, both, learning about the issue and making compromises.

Contrary to expectation of hard adventure travellers being primarily motivated by the adventure activity itself and the involved risk, the key motive for pursuing off-trail trekking is being in a pristine natural setting with companions, away from the crowd and visitor facilities. In the choice to trek off-trail in the NP, the desire to be independent from modern civilization prevailed over the situational factors of, among other, availability of visitor services.

There was also a dissonance in the environmental awareness of the respondents and the actual behaviour in sensitive nature setting. The reality of visitors referring to themselves as environmentally responsible while illegally trekking and spending night in the NP Slovenský raj indicate breach of the visiting order of the NP. This can result, partly, from a lack of understanding rationale behind the visiting order, or from a subjective view on the issue. The main travel motives would be second to safeguarding the local environment if there is proper information about the problems associated with off-trail trekking and bivouacking. Education on the subject is essential, as the actual environmental awareness, for a majority of respondents, is not reflected in their behaviour when visiting the protected areas.

By focusing on hard adventures and their visitor behaviour in protected natural areas, this study fills the gap in understanding their behaviour and guide management practice towards this specific segment. In this way, future research should also overcome some of the limitations in this study dealing with sampling, also, further research needs to explore how the particular management measures would effect the environment and the occurrence of trekking off-trail.

## References

- Booderee National Park Board of Management, Director of National Parks. (2002). *Booderee National Park Management Plan*. Commonwealth of Australia.
- Gaede, D.B., Strickert, D. & Jurin, R.R. (2010). Nature-Based Tourism Businesses in Colorado: Interpreting Environmental Ethics and Responsible Behavior. *The Journal of Tourism Insights*, 1(1), 52-58.
- Goodnow, J. (2005). *The hard adventure group versus the soft adventure group traveller*. Paper Submitted for the 2000 Luray Caverns Graduate Research Grant National Tourism Foundation, Kentucky.
- Hill, J. (1995). Cited in J. Swarbrooke, C. Beard, S. Leckie & Pomfret, G. (2003). *Adventure tourism: The new frontier*. Oxford: Elsevier Science Ltd.
- Hinch, T. & Higham, J. (2003). *Sport Tourism Development*. Clevedon: Channel View.
- Jablonská, J., Timčák, G.M. & Špičuk, J. (2007). Correlation between tourism and environmental load in the "Slovak Paradise – Slovenský Raj", E. Slovakia. *Acta Montanistica Slovaca*, 12(4), 334-340.
- Kane, M. & Tucker, H. (2004.) Adventure Tourism. *Tourist Studies*, 4(3), 217-234.
- Leave No Trace Center for Outdoor Ethics. (2012). *Travel and Camp on Durable Surfaces- Leave No Trace*. Retrieved February 2, 2012, from [http://www.lnt.org/programs/principles\\_2.php](http://www.lnt.org/programs/principles_2.php).
- Malett, J. (2004). *Adventure Tourism Industry*. Retrieved March 5, 2012, from [http://siteresources.worldbank.org/INTCEERD/Resources/CBT\\_adventure\\_tourism\\_Mallet.pdf](http://siteresources.worldbank.org/INTCEERD/Resources/CBT_adventure_tourism_Mallet.pdf).
- National Association for Interpretation. (2012). *Mission, vision, and core values*. Retrieved March 5, 2012, from [http://www.interpnet.com/about\\_nai/mission.shtml](http://www.interpnet.com/about_nai/mission.shtml).
- National Park Slovenský raj Administration. (2008). *Program starostlivosti o návštevníkov Slovenského raja*. Retrieved March 5, 2012, from [www.sopsr.sk/projekty/lifeprojekt/images/annex2.doc](http://www.sopsr.sk/projekty/lifeprojekt/images/annex2.doc).
- National Park Slovenský raj Administration. (2011). *Priestupky a výruby r. 2006 – 2011*. Internal documents of National Park Slovenský raj Administration.
- Otago Institute of Sport and Adventure. (2008). *Adventure Tourism*. Retrieved May 20, 2011, from <http://www.slide-share.net/hillarypjenkins/intro-to-adventure-tourism-op-09-presentation>.
- Pedersen, A. (2002). *Managing Tourism at World Heritage Sites: A Practical Manual for World Heritage Site Managers*. Paris: UNESCO World Heritage Centre.
- Sung, H., Morrison, A. & O'Leary, J. (1996). Definition of Adventure Travel: Conceptual Framework for Empirical Application from the Providers' Perspective. *Asia-Pacific Journal of Tourism Research*, 1(2), 47-67.
- Swarbrooke, J., Beard, C., Leckie, S. & Pomfret, G. (2003). *Adventure tourism: The new frontier*. Oxford: Elsevier Science Ltd.
- Schneider, P. & Heyniger, Ch. (2006). *2006 Adventure Travel Industry Research Round-Up. US: Xola Consulting*. Retrieved April 10, 2012, from [http://www.xolaconsulting.com/xola\\_report\\_final.pdf](http://www.xolaconsulting.com/xola_report_final.pdf).
- Timčák, G.M. & Vizi, L. (2010). Organic climbing, surveying and exploring terrain fit for climbing and the subjective experience of climbing. *Acta Geoturistica*, 1(1), 25 – 39.
- Tourism New South Wales. (2002). Defining 'Nature Tourism': meaning, value and boundaries. *Understanding nature-based tourism*, (2). Retrieved January 7, 2012, from [http://archive.tourism.nsw.gov.au/Sites/SiteID6/objLib13/2\\_defining\\_nature\\_tourism.pdf](http://archive.tourism.nsw.gov.au/Sites/SiteID6/objLib13/2_defining_nature_tourism.pdf).
- Travel Industry Association of America. In Mill, R. Ch. (2001). *Resorts: Management and Operation*. New York: John Wiley & Sons, Inc.
- Weaver, D. & Lawton, L. (2006). *Tourism management*. (3<sup>rd</sup> ed). Milton: John Wiley.
- Weber, K. (2001). Outdoor adventure tourism: A review of research approaches. *Annals of Tourism Research*, 28(2), 360-377.

Submitted: 10/24/2012

Accepted: 03/14/2013