SPATIUM
No. 43, June 2020, pp. 1-7

UDC 338.483.11(497.113)
338.484:502.131.1
Original scientific paper
DOI: https://doi.org/10.2298/SPAT2043001T

THE SIGNIFICANCE OF PROTECTED NATURAL AREAS FOR TOURISM IN THE VOJVODINA PROVINCE (NORTHERN SERBIA) – ANALYSIS OF SUSTAINABLE TOURISM DEVELOPMENT

Igor Trišić[1], Faculty of Hotel Management and Tourism Vrnjačka Banja, University of Kragujevac, Vrnjačka Banja, Serbia
Snežana Štetić, Association of Tourist Guides of Serbia, Belgrade, Serbia
Marija Maksin, Institute of Architecture and Urban & Spatial Planning of Serbia, Belgrade, Serbia

This paper presents experimental research into the attitudes of tourists towards the significance of protected areas with regard to tourism in the Autonomous Province of Vojvodina, in the northern part of the Republic of Serbia. It is an area with significant rare plant and animal resources, as well as wetlands, ecosystems, and hilly and mountainous areas. Several research methods have been used in the paper. The first method is to collect data using a written questionnaire that was completed by 215 visitors to different protected areas in AP Vojvodina. Their answers revealed their attitudes toward sustainable tourism in selected protected areas. After examining the differences in the answers using the Kruskal-Wallis test, the results of the survey conducted by the authors were examined by means of two comparative analyses of identical, related, and similar answers in selected case studies. Based on the results of the Kruskal-Wallis Test, it can be concluded that there is a statistically significant difference in the assessments of the importance of activities and the forms of tourism chosen when visiting protected areas. The most important forms of tourism are ecotourism and adventure tourism. Tourists also identified hiking, cycling, and wildlife watching as the most important activities.

Key words: **protected areas, sustainable tourism development, AP Vojvodina.**

INTRODUCTION

The development of tourism in areas with weaker economic potential and preserved natural and ethno-social values leads to the revival and preservation of flora and fauna (Fennell, 2015a). This contributes to economic, socio-cultural and ecological prosperity (Butzmann and Job 2017; Job *et al*., 2017) because previously non-tourism areas can become significant sightseeing destinations (Carr *et al*., 2016). In addition, the money gained from this kind of tourism can be invested in improving environmental protection (Holden, 2016). The idea that tourism can lead to regional development has been well-documented by various researchers. According to Manente *et al*. (2014), tourism has a multidimensional impact on the host destination. The main objectives of the tourism planning strategy are to use the high potential of tourism by developing all of its possible forms in a specific area and to preserve and conserve the environment and the tourism objectives (Oprea *et al*., 2015; Batman and Demirel, 2016). Tourism in protected areas can unite the three concepts of protection, economic benefit, and social well-being of the local community (Rodary and Milian, 2011; Hoang *et al*., 2020). The concept of sustainable tourism in protected areas and landscapes is based on this principle (Kruger *et al*., 2017). The European Landscape Convention defined "Landscape" as an area whose character is the result of the action and interaction of natural and/or human factors (Polat and Demirel, 2016; Trišić, 2019). Natural areas are regions that have not been significantly altered by humankind and this equates to intact landscapes that contain their original vegetation, and are unspoiled, wild (IUCN 2017), maintained by natural processes, and

[1] Vojvođanska bb, 36210 Vrnjačka Banja, Serbia
trisici@hotmail.com

the original biodiversity is present (Newsome *et al*., 2013). Ecosystem-based management is required at temporal and spatial scales to maintain ecosystems and sustain human welfare (Fennell *et al*., 2015b; Mitchell, 2019). Therefore, when managing a destination, special models are used, such as the VICE model (Robinson *et al*., 2013; Štetić and Šimičević, 2015; Trišić *et al*., 2020). This is based on managing an area with the cooperation of all participants, in order to accept and meet the demands of tourists, to achieve positive economic effects (Leković, 2019), to benefit the local community (Holden, 2013), and to protect and improve the environment and culture (Štetić and Šimičević, 2014). Creating a promotional plan is important in preparing protected areas for visitors, to ensure the best connection between landscapes (Ali and Frew, 2013) and visitors (Pfueller *et al*., 2011; Štetić and Trišić, 2018). Tourists are starting to look for quiet and peaceful places far away from city centers where they can relax and use all the benefits that nature offers, complemented (Grujičić *et al*., 2008; Janssen, 2009; Maksin *et al*., 2011; Malenović-Nikolić *et al*., 2016) by diverse offers from farmers and landlords (Tisdell and Wilson, 2005). They have a preference for a product and an experience that is authentic, linked to local foods, culture and heritage in a destination, and a willingness to pay a premium price for such an experience (Koens *et al*., 2009; Ciglovska, 2016). For several tourists, the natural environment and resources constitute the main reason for traveling to a destination (Kim *et al*., 2015; Mowforth and Munt, 2016; Muñoz *et al*., 2019).

This paper defines the roles of protected natural areas in the territory of Vojvodina in terms of the development of tourism. Written data on the number of protected areas and species will also be analyzed, along with the results from a questionnaire conducted among potential travelers regarding their opinions about these areas. The results can be used to develop tourism in Vojvodina.

MATERIALS AND METHODS

Context of the study

The territory of Vojvodina covers 135 natural sites, on a total area of 141,044,65 ha under protection (Delić *et al*., 2017) (Figure 1). This covers 6.56% of the total area of Vojvodina. The protected natural areas include 1 national park, 2 landscapes of exceptional characteristics, 16 special nature reserves, 9 nature parks, 8 strict nature reserves, 26 natural monuments and 2 protected habitats, as well as natural sites in other categories (Sl. list AP Vojvodine, br. 10/2016; Delić *et al*., 2017). There are also: 8 Ramsar sites (total area of 57,255 ha), and wetlands continue to be cited as the most valuable parts of our landscape in ecosystem service assessments (Mitsch *et al*., 2015); 21 Important Bird Areas – IBA (354,786 ha); 27 IPA - Important Plant Areas (328,208 ha) and four Prime Butterfly Areas – PBA (91,107 ha) (Puzović *et al*., 2015; Stojnić *et al*., 2015; Delić *et al*., 2017; Sl. list AP Vojvodine, br. 10/2016).

Proper development of tourism can be a conservator and a catalyst for the development of protected areas in Vojvodina. Since this process starts from the aspect of the wishes and intentions of tourists, the research was conducted among the potential users of protected areas about their attitudes towards these areas.

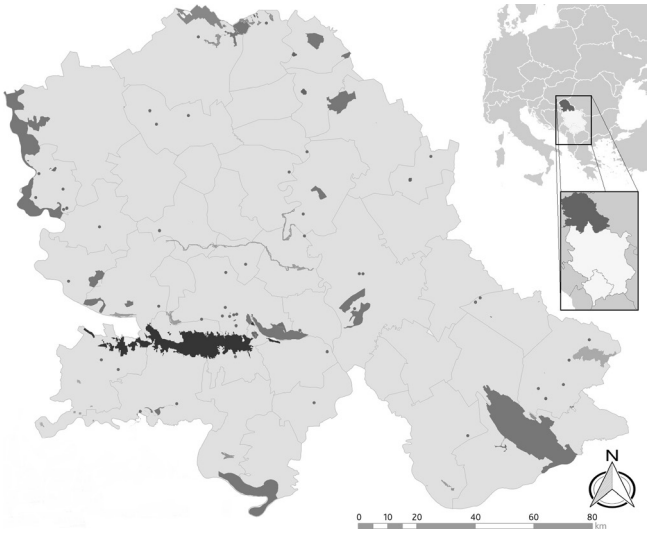

Figure 1. Location of Protected (Study) Areas of Vojvodina with a position in the Republic of Serbia and in respect to the European Union (Source: digitalized by Trišić, I.)

The multi-method research approach

Each case study of a protected area can be used to analyze its management and protection and its role in the coordination of spatial planning for protected areas and their surroundings (Maksin *et al*., 2018). During April and May 2019, research was conducted by the authors among travelers to protected areas in Vojvodina to discover their attitudes on the importance of environmental protection and the sustainable development of tourism. The survey was conducted among 215 travelers. Tourists were surveyed after visiting protected areas, either online or by means of a written questionnaire. The structure of the respondents is shown in Table 1. All of the respondents had traveled at least once to these areas. The hometowns of the respondents (Serbia) are Smederevo, Belgrade, Kovin, Novi Sad, Pirot, Inđija, Niš, and Pančevo. The questionnaire included the following questions: Will your choice of future travel destination include any of the selected destinations…? Do you think that the inclusion of protected areas in the tourism offer can increase the quality of the destination? Which protected area have you visited? The respondents were also asked to sort the types and forms of tourism by relevance (1-irrelevant, 2-less important, 3-preferable, 4-important, 5-most important). The aim was to analyze the answers from the questionnaire to create a unique conclusion relating to the importance of integrating protected areas in Vojvodina's tourism offer. In this analysis, nature-related forms were identified, such as ecotourism and adventure tourism, and they were viewed as forms that could confirm the hypothesis about the significance of protected tourist areas, provided that they were mostly supported by respondents.

After examining the differences in the answers using the Kruskal-Wallis Test, the results of the survey were examined by two comparative analyses of identical, related, and similar answers to other selected case studies. The authors'

questionnaire and analysis of responses, as well as the two comparative studies, provide the unique conclusion of the research in this paper regarding the significance of protected natural areas for the tourism offer in the Autonomous Province of Vojvodina (Serbia).

Table 1. Structure of Respondents

Gender	**Frequency**	**Percent**	
Male	102	47.4	
Female	113	52.6	
Total	215	100.0	
Education	**Frequency**	**Percent**	
Primary Education	27	12.6	
Secondary Education	94	43.7	
Vocational Education	22	10.2	
Higher Education	72	33.5	
Total	215	100	
Age Structure	**N**	**Min**	**Max**
	215	18	73
	Mean	**Std. Dev.**	
	36.85	15.228	

Comparative analysis I refers to a comparison between the answers from the authors' questionnaire (Table 2, questions 1 and 2; Table 5, question 5) and the results from a similar study on the reasons for travel and the planned activities for tourists visiting a Portuguese island of untouched nature – the Azores by Queiroz *et al*. (2014). The survey was conducted using a questionnaire in 2013. The sample of respondents was 531 tourists aged between 15 and 73 years, 55.52% of whom had a university education and 40.49% a secondary education. The responses compared were: 1) Why is the Azores chosen as a travel destination?; 2) What activities do the tourists plan to do in this destination?; 3) Are they satisfied with the destination and why?; and 4) Will they visit this destination again? (That is, what is the level of the experience they gained?).

Comparative analysis II compares the data obtained based on the responses from the authors' questionnaire with the results based on the answers from a case study related to tourists visiting protected areas in the Republic of Romania and other similar destinations, by Hornoiu *et al*. (2014). A question from the authors' questionnaire used in the second comparative method refers to the planned and achieved forms of tourist activities in protected natural areas in Vojvodina (Serbia), (Table 2, question 4). The answers were compared with the answers from case study II (*ibid.*), based on a sample of 187 respondents (students) aged 20-25 years who were potential tourists in the protected natural areas of Romania and other surrounding countries. It should be noted that this country is a significant tourist destination for the Republic of Serbia and the Autonomous Province of Vojvodina, with which it shares a geographical border. The survey was conducted at the University of Bucharest during 2013 and 2014 (*ibid.*). The respondents answered questions regarding tourism activities, and their answers were ranked by a Likert Scale (Joshi *et al*., 2015): very low level of accuracy, low level of accuracy, medium, high level of accuracy, very high level of accuracy. This ranking of answers was identical to the answers rated in the authors' questionnaire (Table 2, question 4), i.e., with the answers ranked by relevance on the following scale: 1-irrelevant, 2-less important, 3-preferable, 4-important, 5-most important. This enabled a direct comparison of the answers given using the comparative method to identify the similarities and differences in the phenomena and processes.

Table 2. Answers of Respondents

1) What will your choice of future tourism destinations include?	**Responses**		**Percent of Cases**
	No.	**Percent**	
Cultural sites only	17	7.3	7.9
It will not include site visits	5	2.2	2.3
It will include a visit to protected natural areas, national parks or a special nature reserves	210	90.5	97.7
Total	232	100.0	107.9
2) Do you think that inclusion of protected areas in the tourism offer can contribute to an increase in the quality of the tourist destination?	**Responses**		**Percent of Cases**
	No.	**Percent**	
Yes	215	100	100.0
No	0	0	0
Total	215	100.0	100.0
3) Which protected areas have you visited?	**Responses**		**Percent of Cases**
	No.	**Percent**	
Fruska Gora National Park	172	50.1	80.0
Zasavica Special Nature Reserve	82	23.9	38.1
Obedska Bara Special Nature Reserve	58	16.9	27.0
Other protected areas	31	9.0	14.4
Total	343	100.0	159.5

4) Sort the types and forms of tourism by relevance, as you would choose them during a visit to Vojvodina's tourist destinations.* Ω	**No.**	**Min**	**Max**	**Mean**	**Std. Dev.**
Ecotourism	215	1	5	4.09	1.138
Adventure tourism	215	1	5	3.58	1.231
Sport tourism	215	1	5	3.27	1.355
Events tourism	215	1	5	2.66	1.250
Scientific tourism	215	1	5	2.29	1.308
*1-irrelevant, 2-less important, 3-preferable, 4-important, 5-most important					

RESULTS AND DISCUSSION

During the research, the views of potential tourists, i.e. the users of protected natural areas, were considered. Since the criteria related to the sustainability of the destination as a protected area were accepted, the next step was to identify the users of the areas in Vojvodina.

Within the written questionnaire there were also 5 questions regarding the development of sustainable tourism and the respondents' views on protected areas (Tables 2, 5).

A total of 215 respondents with an average age of 36.85 provided answers which justified the hypothesis that protected natural areas are an important part of creating a tourism offer in Vojvodina. A total of 210 respondents said that they would visit such a destination as a part of a future trip. All 215 respondents noted that the inclusion of such areas in the tourism offer in Vojvodina would increase the quality of the destination in general. A total of 172 respondents had visited Fruška Gora National Park, which can be justified by the promotion of the destination, its developed tourism program, and its infrastructure. Among the forms of tourism that the respondents would choose to practice, the highest average rates were given to ecotourism (mean 4.09) and adventure tourism (mean 3.58), which are, again, closely related to protected areas (Figure 2).

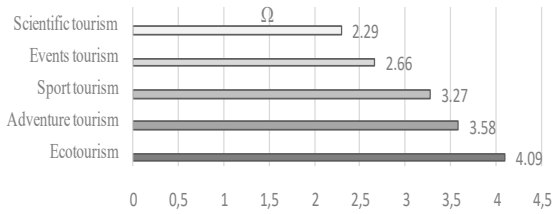

Figure 2. Types and forms of tourism sorted by relevance

Table 3. Ranking forms of tourism

Kruskal-Wallis Test	N	Mean Rank
Sport tourism	215	557.20
Ecotourism	215	737.84
Adventure tourism	215	621.05
Scientific tourism	215	349.91
Events tourism	215	424.00
Total	1075	

Based on the results of the Kruskal-Wallis Test (Li, 2012), it can be concluded that there is a statistically significant difference in the type of destination selected and the form of tourism selected when visiting protected areas:

$$(\chi 2\ (4) = 222.539, p<0.001).$$

Therefore, these forms of tourism have great significance when choosing a travel destination and deciding which activities to take part in. By choosing ecotourism and adventure tourism, as nature-based forms of tourism, there is a very high readiness for protecting the environment and preserving its values (Rinzin *et al.*, 2007; Valdivieso *et al.*, 2015).

Table 4. Test Statistics

Analysis	Evaluation
Chi-Square	222.539
df	4
Asymp. Sig.	.000
a. Kruskal Wallis Test	
b. Grouping various forms of tourism **Ω**	

Within the questionnaire, the respondents also expressed their opinion about the activities they would practice during their visit to a protected area. The responses are ranked for relevance from 1 to 5. The results are shown in Table 5.

Table 5. Respondents' choice of activities when visiting protected areas

5) Score the activities in protected areas by relevance Ω_1	N	Min	Max	Mean	Std. Dev.
Hiking	215	1	5	3.92	1.157
Cycling	215	1	5	3.50	1.245
Wildlife watching	215	1	5	3.29	1.223
Sports	215	1	5	2.41	1.466
Nature photography	215	1	5	2.35	1.236
*1-irrelevant, 2-less important, 3-preferable, 4-important, 5-most important					

The following responses had the highest average values: hiking (3.92) and cycling (3.50). They are followed by wildlife watching, sport, and nature photography. Based on the given answers, it can be concluded that tourists will practice those activities which are closely related to nature and its values. The ranked results can also be presented graphically (Figure 3).

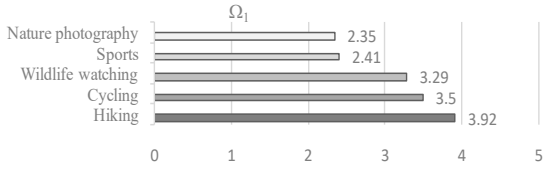

Figure 3. Tourist activities in a protected area, ranked by relevance

We applied the Kruskal-Wallis Test (Li, 2012) to decipher whether there were differences in the responses to ranking the relevance of the activities when visiting a protected area (Tables 6, 7).

According to the results of the Kruskal-Wallis Test, there is a statistically significant difference when assessing the importance of activities when visiting protected areas:

$$(\chi 2\ (4) = 202.499, p<0.001).$$

The results based on the responses to the questions from

Table 2, (questions 1 and 2), after *Comparative analysis I* (Belsoy *et al*., 2012) suggest identical reasons for choosing a tourist destination and opinions regarding protected areas. This can be seen as follows (Queiroz *et al*., 2014):

- Question - Why did you choose this destination? (Table 2, questions 1 and 2). Answers: because of the protected nature, national parks, or areas of natural beauty - 210 respondents (90.5%), and other reasons (9.5%). In the first comparative article *(Comparative analysis I)*, the answers were as follows: because of the natural beauty (41.14%) and bird and whale watching (11.91%), which together makes 53.05%;
- When the respondents were asked to rank the activities in the destination from the highest to the lowest relevance (Table 5, question 5), the answers were as follows: hiking (mean 3.92), cycling (mean 3.50), bird watching (mean 3.29), sports activities (mean 2.41) and nature photography (mean 2.35). This points to the fact that key activities (bird watching, hiking, and sports activities) are predominant, just like in the article in *comparative analysis I*: whale watching (32.4%), hiking (31.6%), diving (7%), sports (5.1%) and other activities (24%); and
- Regarding the experience gained and the potential to repeat the visit, 210 of the respondents will visit these areas again (90.5%), (Table 2, question 1), which is similar to the responses in the first comparative article, where the same answer was given by 82.92% of the respondents (13.37% of them answered with "maybe"). There is no "maybe" option in the authors' questionnaire.

Table 6. Kruskal-Wallis test ranking the relevance of the activities

Kruskal-Wallis Test	N	Mean Rank
Hiking	215	715.73
Cycling	215	624.68
Wildlife watching	215	577.80
Sports	215	349.25
Nature photography	215	377.54
Total	1075	

Table 7. Test Statistics [a,b]

Analysis	Evaluation
Chi-Square	202.499
df	4
Asymp. Sig.	.000
a. Kruskal Wallis Test	
b. Grouping variable: relevance of the activities Ω_1	

Comparative analysis II shows that the authors' questionnaire and the comparative article (Hornoiu *et al*., 2014) have identical reasons for choosing the forms of tourist activities in protected natural areas. This can be seen as follows:

- When the respondents were asked to rank forms of tourism in the protected areas of Vojvodina, the answers were (Table 2, question 4): ecotourism (mean 4.09), adventure (mean 3.58), sports (mean 3.27), events (mean 2.66) and scientific tourism (2.29). The students' answers in the second comparative article *(Comparative analysis II)* were: ecotourism 33% of the respondents (average 4.1377), adventure/nature-based tourism 33% of the respondents (average 3.0722), event/culture 25% of the respondents (average 2.7087), hiking/sports 26% of the respondents (average 2.475) and scientific tourism 26% (average 2.2874).

CONCLUSION AND FUTURE RESEARCH

Some protected areas in Vojvodina have national and international status and regimes of protection. Compared with the total area of the Province it is concluded that the protected area is still extremely small. Increased use of the protected areas of Vojvodina in tourism also contributes to an increase in the number of endangered plant and animal species. On the other hand, this kind of protection can raise the attractiveness of destinations in Vojvodina. This is indicated by the results of this study, in which the respondents voted for those forms of tourism that support the protection and improvement of natural areas. Therefore, the tourist sector of Vojvodina must create tourist products that will satisfy this demand. To provide the best protection and improvement of protected areas in Vojvodina, tourism must be a significant activity. The only model that can be acceptable to all parties including the local community is the development of sustainable tourism in Vojvodina. Its proper implementation will secure socio-cultural, economic, and ecological benefits for the tourist destination.

The northern part of Serbia is rich in nature reserves that need to be preserved from destruction and preserving them will develop tourism. The concept of protection allows the use of natural sites, but only in a sustainable manner, with the basics of renewal. Ecological, economic, and socio-cultural benefits for all members of this system can be distinguished as the final results of protecting natural areas (Vinueza *et al.*, 2014). The conclusion is that the protected areas on the territory of Vojvodina are of great importance for developing tourism. By analyzing data from world practice and the results of the survey in this paper, it can be concluded that the role and importance of protected areas are significantly present in the development of tourism.

The significance of the natural areas of Vojvodina and their natural elements impact the reasons for choosing these destinations and the activities planned within them. The results obtained by the analysis of the data from the authors' questionnaire are confirmed by two comparative analyses of selected case studies. By this, the hypothesis of the paper is confirmed. It is necessary to introduce regular surveys of tourist satisfaction and to use the method applied here to evaluate the results, as a basic input for the development, review, and innovation of the tourism offer in Vojvodina as well as Serbia's destinations with their protected and valuable natural heritage.

REFERENCES

Ali, A., Frew, A.J. (2013). *Information and communication technologies for sustainable tourism*. London and New York: Taylor & Francis Group.

Batman, Z.P., Demirel, O. (2016). Importance of ecology-based tourism and tourism planning approach in Meryemana Creek (Macka-Trabzon) Route, *Journal of Environmental Protection and Ecology*, Vol. 17, No. 3, pp. 1084-1094.

Belsoy, J., Korir, J., Yego, J. (2012). Environmental impacts of tourism in protected areas, *Journal of Environment and Earth Science*, Vol. 2, No. 10, pp. 64-73.

Butzmann, E., Job, H. (2017). Developing a typology of sustainable protected area tourism products, *Journal of Sustainable Tourism*, Vol. 25, No. 12, pp. 1736-1755.

Carr, A., Ruhanen, L., Whitford, M. (2016). Indigenous peoples and tourism: the challenges and opportunities for sustainable tourism, *Journal of Sustainable Tourism*, Vol. 24, No. 8-9, pp. 1067-1079.

Ciglovska, B. (2016). Agroecology and agrotourism as a new cash cow for the farmers the crisis: the case of FYROM, *Journal of Environmental Protection and Ecology*, Vol. 17, No. 1, pp. 276-283.

Delić, D., Cvijanović, D., Prentović, R. (2017). *Uticaj lovnog turizma na zaštićena područja* (in Serbian). Vrnjačka Banja: Univerzitet u Kragujevcu, Fakultet za hotelijerstvo i turizam.

Fennell, D.A. (2015a). *Ecotourism*. London & New York: Routledge.

Fennell, D.A. (2015b). Tourism and the precautionary principle in theory and practice. In C.M. Hall, S. Gössling, D. Scott (Eds.), *The Routledge Handbook of Tourism and Sustainability.* London & New York: Routledge, Taylor & Francis Group, pp. 67-77.

Grujičić, I., Milijić, V., Nonić, D. (2008). Conflict management in protected areas: the Lazar Canyon Natural monument, eastern Serbia, *International Journal of Biodiversity Science and Management*, Vol. 4, No. 4, pp. 219-229.

Hoang, T.T.H., Rompaey, A.V., Meyfroidt, P., Govers, G., Vu, K.C., Nguyen, A.T., Hens, L., Vanacker, V. (2020). Impact of tourism development on the local livelihoods and land cover change in the northern Vietnamese highlands, *Environment, Development and Sustainability*, Vol. 22, pp. 1371-1395.

Holden, A. (2013). Protected areas and tourism. In A. Holden, D. Fennell (Eds.), *The Routledge Handbook of Tourism and the Environment*. London and New York: Taylor & Francis Group, pp. 276-284.

Holden, A. (2016). *Environment and tourism*. London & New York: Routledge.

Hornoiu, R.I., Pădurean, M.A., Nica, A., Maha, L. (2014). Tourism consumpion behavior in natural protected areas, *Amfiteatru Economic*, Vol. 16, No. 8, pp. 1178-1190.

IUCN (2017). I*UCN Annual Report for 2017*. Gland: IUCN.

Janssen, J. (2009). Sustainable development and protected landscapes: the case of The Netherlands, *International Journal of Sustainable Development & World Ecology*, Vol. 16, No. 1, pp. 37-47.

Job, H., Becken, S., Lane, B. (2017). Protected areas in a neoliberal world and the role of tourism in supporting conservation and sustainable development: an assessment of strategic planning, zoning, impact monitoring, and tourism management at natural World Heritage Sites, *Journal of Sustainable Tourism*, Vol. 25, No. 12, pp. 1697-1718.

Joshi, A., Kale, S., Chandel, S., Pal, D.K. (2015). Likert scale: explored and explained, *British Journal of Applied Science & Technology*, Vol. 7, No. 4, pp. 396-403.

Kim, H., Lee, S., Uysal, M., Kim, J., Ahn, K. (2015). Nature-based tourism: Motivation and subjective well-being, *Journal of Travel & Tourism Marketing*, Vol. 32, No. 1, pp. 576-598.

Koens, J.F., Dieperink, C., Miranda, M. (2009). Ecotourism as a development strategy: experiences from Costa Rica, *Environment Development and Sustainability*, Vol. 11, pp. 1225–1237.

Kruger, M., Viljoen, A., Saayman, M. (2017). Who visits the Kruger National Park and Why? Identifying target markets, *Journal of Travel & Tourism Marketing*, Vol. 35, No. 3, pp. 312-340.

Leković, M. (2019). Behavioral portfolio theory and behavioral asset pricing model as an alternative to standard finance concepts, *Economic Horizons*, Vol. 21, No. 3, pp. 255-271.

Li, G. (2012). Statistical testing techniques. In L. Dwyer, A. Gill, N. Seetaram (Eds.), *Handbook of Research Methods in Tourism, Quantitative and Qualitative Approaches*. Cheltenham: Edward Elgar, pp. 13-30.

Maksin, M., Pucar, M., Milijić, S. Korać, M. (2011). *Održivi razvoj turizma u Evropskoj Uniji i Srbiji* (in Serbian). Beograd: Institut za arhitekturu i urbanizam Srbije.

Maksin, M., Ristić, V., Nenković-Riznić, M., Mićić, S. (2018). The role of zoning in the strategic planning of protected areas: Lessons learnt from EU countries and Serbia, *European Planning Studies*, Vol. 26, No. 4, pp. 838-872.

Malenović-Nikolić, J., Vasović, D., Janaćković, G., Ilić-Petković, A., Ilić-Krstić, I. (2016). Improving the management system of mining and energy complexes based on risk assessment, environmental law and principles of sustainable development, *Journal of Environmental Protection and Ecology*, Vol. 17, No. 3, pp. 1066-1075.

Manente, M., Minghetti, V., Mingotto, E. (2014). *Responsible tourism and CSR, assessment systems for sustainable development of SMEs in tourism*. New York: Springer.

Mitchell, B. (2019). *Resource and environmental management*. Oxford: University Press.

Mitsch, W.J., Bernal, B., Hernandez, M.E. (2015). Ecosystem services of wetlands, *International Journal of Biodiversity Science, Ecosystem Services & Management*, Vol. 11, No. 1, pp. 1-4.

Mowforth, M., Munt, I. (2016). *Tourism and sustainability: development, globalization and new tourism in the third world*. London and New York: Taylor & Francis Group.

Muñoz, L., Hausner, V., Brown, G., Runge, C., Fauchald, P. (2019). Identifying spatial overlap in the values of locals, domestic and international tourists to protected areas, *Tourism Management*, Vol. 71, pp. 259-271.

Newsome, D., Moore, S.A., Dowling, R.K. (2013). *Natural area tourism ecology, impacts and management*. Toronto: Channel View Publications.

Oprea, L., Ienciu, I., Tudorascu, M., Filip, L. (2015). Implications of topography and cadastre in tourism planning and sustainable development of "Alba Carolina" Vauban citadel, *Journal of Environmental Protection and Ecology*, Vol. 16, No. 3, pp. 1016-1023.

Pfueller, S.L., Lee, D., Laing, J. (2011). Tourism partnerships in protected areas: Exploring contributions to sustainability, *Environmental Management*, Vol. 48, pp. 734–749.

Polat, Z., Demirel, O. (2016). Evaluation of alternative tourism

in the light of natural, cultural and visual resources in Turkey landscape, *Journal of Environmental Protection and Ecology*, Vol. 17, No. 3, pp. 1220-1228.

Puzović, S., Panjković, B., Tucakov, M., Stojnić, N., Sabadoš, K., Stojanović, T., Vig, L., Marić, B., Tešić, O., Kiš, A., Galamboš, L., Pil, N., Kicošev, V., Stojšić, V., Timotić, D., Perić, R., Bošnjak, T., Delić, J., Dobretić, V., Stanišić, J. (2015). *Upravljanje prirodnom baštinom u Vojvodini* (in Serbian). Novi Sad: Republika Srbija, Autonomna Pokrajina Vojvodina, Pokrajinski sekretarijat za urbanizam, graditeljstvo i zaštitu životne sredine, Pokrajinski zavod za zaštitu prirode.

Queiroz, R.E., Guerreiro, J., Ventura, M.A. (2014). Demand of the tourists visiting protected areas in small oceanic islands: the Azores case-study (Portugal), *Environment, Development and Sustainability*, Vol. 16, pp. 1119–1135.

Rinzin, C., Vermeulen, W.J., Glasbergen, P. (2007). Ecotourism as a mechanism for sustainable development: The case of Bhutan, *Environmental Sciences*, Vol. 4, No. 2, pp. 109-125.

Robinson, P., Lück, M., Smith, S.L.J. (2013). *Tourism*. Oxfordshire: CABI.

Rodary, E., Milian, J. (2011). Expansion and diversification of protected areas: Rupture or continuity?. In C. Aubertin, E. Rodary (Eds.), *Protected Areas, Sustainable Land?.* Farnham: Ashgate, pp. 13-29.

Sl. list AP Vojvodine (br. 10/2016). *Program zaštite životne sredine Autonomne pokrajine Vojvodine za period 2016-2025. godine* (in Serbian). Novi Sad: Pokrajinski sekretarijat za obrazovanje, propise, upravu i nacionalne manjine – nacionalne zajednice.

Stojnić, N., Panjković, B., Sabadoš, K., Kicošev, V., Timotić, D., Kiš, A., Galamboš, L., Delić, J., Dobretić, V., Milenić, B., Perić, R., Stojšić, V., Pil, N., Stanišić, J., Plemić, Z., Predojević, J., Bošnjak, T., Mihajlović, N., Fojkar, O., Došenović, B., Marinković, L., Krnčević, G., Borčić, S., Novaković, S., Rilak, S., Dragaš, K., Pivaš, B. (2015). *Izveštaj o stanju životne sredine za period 2010-2014. godine* (in Serbian). Novi Sad: Pokrajinski zavod za zaštitu prirode.

Štetić, S., Šimičević, D. (2014). *Menadžment turističke destinacije* (in Serbian). Beograd: Visoka turistička škola strukovnih studija.

Štetić, S., Šimičević, D. (2015). *Turistička geografija* (in Serbian). Visoka turistička škola strukovnih studija.

Štetić, S., Trišić, I. (2018). The role and importance of ecosystems in creating tourism activities, *Hotel and Tourism Management*, Vol. 6, No. 2, pp. 35-46.

Tisdell, C., Wilson, C. (2005). Perceived impacts of ecotourism on environmental learning and conservation: turtle watching as a case study, *Environment, Development and Sustainability*, Vol. 7, pp. 291-302.

Trišić, I. (2019). Opportunities for sustainable tourism development and nature conservation in Special Nature Reserve "Deliblatska Peščara", *Hotel and Tourism Management*, Vol. 7, No. 1, pp. 83-93.

Trišić, I., Štetić, S., Privitera, D., Nedelcu, A. (2020). Wine routes in Vojvodina Province, Northern Serbia - a tool for sustainable tourism development, *Sustainability*, Vol. 12, No. 1, pp. 82.

Valdivieso, J.C., Eagles, P.F.J., Gil, J.C. (2015). Efficient management capacity evaluation of tourism in protected areas, *Journal of Environmental Planning and Management*, Vol. 58, No. 9, pp. 1544-1561.

Vinueza, L., Post, A., Guarderas, P., Smith, F., Idrovo, F. (2014). Ecosystem-based management for rocky shores of the Galapagos Islands. In J. Denkinger, V. Luis (Eds.), *The Galapagos Marine Reserve, A Dynamic Social–Ecological System*. New York: Springer, pp. 81-107.

Received April 2020; accepted in revised form June 2020