

TOURISM AND NATURAL ENVIRONMENT IN THE NP TAGANAY (RUSSIA) - HABITS AND PERCEPTIONS OF THE VISITORS

Tatiana N. TRETIAKOVA

South Ural State University, Institute of Sports, Tourism and Service,
76 Lenin Ave., Chelyabinsk 454080, Russia, e-mail: ttn1@mail.ru

Jovana BRANKOV*

Geographical Institute "Jovan Cvijić", Serbian Academy of Sciences and Arts, 9 Djure Jakšića St.,
Belgrade 11000, Serbia; South Ural State University, Institute of Sports, Tourism and Service,
76 Lenin Ave., Chelyabinsk 454080, Russia, e-mail: j.brankov@gi.sanu.ac.rs

Marko D. PETROVIĆ

Geographical Institute "Jovan Cvijić", Serbian Academy of Sciences and Arts, 9 Djure Jakšića St.,
Belgrade 11000, Serbia; South Ural State University, Institute of Sports, Tourism and Service,
76 Lenin Ave., Chelyabinsk 454080, Russia, e-mail: m.petrovic@gi.sanu.ac.rs

Yulia A. SYROMIATNIKOVA

South Ural State University, Institute of Sports, Tourism and Service,
76 Lenin Ave., Chelyabinsk 454080, Russia, e-mail: syromiatnikovaya@susu.ru

Milan M. RADOVANOVIĆ

Geographical Institute "Jovan Cvijić", Serbian Academy of Sciences and Arts, 9 Djure Jakšića St.,
Belgrade 11000, Serbia; South Ural State University, Institute of Sports, Tourism and Service,
76 Lenin Ave., Chelyabinsk 454080, Russia, e-mail: m.radovanovic@gi.sanu.ac.rs

Aleksey MIKHAILOVICH YAKOVLEV

National Park Taganay, 3-a Shishkina St., Zlatoust 456209, Russia, e-mail: np-taganay@taganay.org

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Abstract: The research analyzes attitudes and habits of the visitors in the National Park (NP) Taganay on South Urals in Russia. The survey method was applied on a sample of 305 respondents in order to investigate visitors' travel habits, as well as their perceptions regarding different experiences they were exposed to. The results identified a strong positive perception regarding overall experiences from visiting the NP. Specific permanent patterns of behavior were observed and compatibility between visitors' habits and the environment was determined. The most significant variables affecting perceptions are the frequency of visits and the age. The study has identified certain concerns regarding environmental issues. Respondents were found sensitive to garbage production in public areas and the presence of noise in protected

* Corresponding author

territory. The results of the study provide inputs for solving the long-standing conflict between nature conservation and mass tourism in Russian protected areas.

Keywords: visitors' perceptions, tourism, natural environment, NP Taganay, Russia

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INTRODUCTION

NPs (NPs) are of great importance for achieving different objectives, such as realization of recreational activities, preservation of the unique natural landscapes of the territory and wildlife habitat, etc. (Brankov et al., 2017). These areas contribute to stopping the loss of biodiversity, maintaining the naturalness and beauty of the landscape and the supply of ecosystem services (Schägner et al., 2016). NPs are the highest category of protected area systems in most countries where scientists, educators, local population and other participants are allowed to meet their various needs (Ezebilo & Mattsson, 2010). Over the last few decades, there is a growing number of studies analyzing the increased request for recreational experiences in NPs (Frick et al., 2007; Tomczyk, 2011; Sessions et al., 2016; Çetin & Sevik, 2016). Academic attention has also been paid to geoecological evaluation of the recreational potentials of NPs (Popović et al., 2018). That is partially a consequence of rapid urban development, with loss of open and green spaces in urban areas that was followed by the mental and physical deterioration of one's daily living environment (Goddard et al., 2010; Çetin & Sevik, 2016). In such cases, inhabitants have begun to look for alternative places for their recreational needs. Efforts are being made to meet people's various needs through leisure facilities and recreation areas, and they are turning to natural protected areas to restore the balance (Çetin & Sevik, 2016). Consequently, for people living in cities, it is important to ensure availability of recreational areas and to meet their environmental needs (Geneletti and Dawa, 2009; Ngoka, 2013; Barros et al., 2013). Increased claims for NPs globally and other protected areas have caused a spectrum of wide influences and raised the danger of their excessive use. Visitors' experiences in NPs can affect their support.

If people feel unwelcome in – or excluded from the parks, they may be unlikely to support such parks (Byrne, 2012). Due to this, various authors suggest that understanding visitor attitudes is of great value to resource managers (Vaske et al., 1995). Also, visitors to natural areas are increasing and research of perceptions could help to seclude visitor types, which could contribute to the success of the future managerial actions (Fennel, 2001). Visitors are at the center of tourism management and represent a valuable resource for gaining information about the presence and extent of impacts, the acceptability of changes in protected area and the consequences of management actions for their experience (Chin et al., 2000). Daily (1997) claims that the whole management of recreational ecosystem services depend on how they are perceived by people.

A number of studies have assessed how park visitors' demographic and socioeconomic characteristics affect their environmental attitudes in various ways (Milanović Pešić et al., 2018; Lynn & Brown, 2003; Stern & Dietz, 1994). Baysan's study suggests that differences in environmental perceptions were more strongly connected to differences in nationality than education levels and occupation (Baysan, 2001). According to Milanović et al., 2018, visitors' perceptions are affected by their age and education. This study also shows that tourists who spend more money on a daily basis express attitudes that are more critical.

On the territory of Russia, NPs are a relatively new form of protection of natural territories (started since 1983) (Trofimova & Kozlova, 2015). Currently, there are more than 40 NPs in Russia. In present conditions, it seems necessary to extend its network, especially in areas with a strong tradition for nature-orientated sorts of tourism. According to the Concept of the development of specially protected natural areas of federal importance, another 20 NPs are planned to be created in Russia by 2020 (Ziryanov et al., 2016). The vector of development and creation of the network of protected areas has changed in modern Russia. New NPs are formed every year for which recreation is one of the main functions. However, traditions, which have been developing over a hundred years of 'self-regulating' tourism, are impossible to overcome (Ziryanov et al., 2016). For this reason, recent attempts have been made to harmonize the development of tourism with the protection of nature.

At the same time, this means defining comprehensive and wide tasks for NPs, such as preservation of unique natural and cultural complexes in ways of sustainable development of the territory and the organization of controlled tourism. The development of tourist infrastructure is only taking place when priority consideration is given to environmental restrictions, which is related to the resistance to landscape loads of the protected area (Trofimova & Kozlova, 2015). Although tourist development of this area has a certain history, there is no objective and systematically processed information on visitors' habits and perceptions in the territory of NPs in Russia. In order to improve the aforementioned scenario, this study observes the attitudes and habits of the visitors in the NP Taganay on South Urals, in the Chelyabinsk Region. In our research, we have applied methodology relying on surveys with the aim to investigate visitors' travel habits during their trip to NPs, as well as their attitudes regarding different experiences they were exposed to. In order to achieve this, two specific research questions are discussed:

1. Are the explored travel habits and attitudes of visitors in line with the natural environment?
2. Are there any differences in observed travel habits and perceptions among visitors with different socio-demographic and socio-economic characteristics?

Bivariate and multivariate statistical analysis is used for identifying and testing the relationship between socio-economic characteristics and the perception of tourism impacts.

STUDY AREA

The NP Taganay is located in the South Urals, covering both the mountain ranges of the Southern Urals and the plateaus and the flat forest-steppe of the mountainous corner. It was declared in 1991 on the territory of the Chelyabinsk region. A total area of the park is about 568,4 km² and its south-western border reaches down to the city of Zlatoust. There are nine ranges of a meridional strike in the park. The largest ridge is the Greater Taganay (26 km long), with the highest point of the entire park – the Kruglitsa Mountain (1177,8 m) (Trofimova & Kozlova, 2015) (Figure 1). The NP Taganay is a part of newly designated UNESCO *Mountainous Urals Biosphere Reserve* that was declared in 2018. Biosphere reserve was established in the territory of a very special mining area in South Urals, where unique and protected natural areas border old industrial cities and settlements. The Reserve is fundamentally composed of three protected areas: Taganay National Park, Arshinsky Sanctuary and Turgoyak Natural Site (Gordeyev et al., 2017). About 12,000 people inhabit the site, whose main goal is to shift from extractive industries to a sustainable development model based on biological natural resource management, tourism and the rehabilitation of landscapes damaged by mining (<https://en.unesco.org/biosphere-reserves/russia/mountainous-urals>).



Figure 1. Location of the study area

Unique natural conditions enabled the development and survival of a variety of plant and animal life, with a significant percentage of endemic and relics. The protected area is characterized by the presence of 749 species of vascular plants, among which 42 species are included in *The Red Book of the Chelyabinsk region*, 20 species are listed in the *Appendix to the Red Data Book of the Chelyabinsk region* and 12 species are included in *The Red Book of the Russian Federation*. The protected area is characterized by a high-altitude zonation, including the mountain-forest, sub-bald mountain and mountain-tundra belts. One of the basic phenomena of NP Taganay is forest ecosystems, which cover more than 93% of the total protected area. Mixed forests of fir and spruce are the

most common for the mountain forest belt and occupy a well-humidified western and central part of the park (the Greater Taganay Range, Yurma Range, Itsyl Range). The sub-bald mountain belt is represented by rare fir forest areas, usually with an admixture of birch, together with the lichen or moss cover and blueberry in a shrub-grass layer. There are also the stone rivers and mountain high-grass meadows. The peaks of the mountains are occupied by mountain tundra, with large areas of rocks outcrops – huge stone placers, devoid of vegetation (<https://www.taganay.org>).

The territory of the NP Taganay is inhabited by 56 species of mammals; 192 species of birds; 6 species of reptiles; 3 species of amphibians and 14 species of fish (<https://www.taganay.org>). Of the total number of species of wildlife living in the NP, *The Red Book of the Chelyabinsk region* includes 73 species and *The Red Data Book of the Russian Federation* includes 17 species. NP Taganay is a well-known tourist destination of the Chelyabinsk region. Generations of visitors and travelers have passed through the mountains and intermountain valleys of the NP well before its establishment.

Today, there are 6 tourist routes and 7 ecological paths with a total length of over 200 km, which takes from several hours to 5 days (Trofimova & Kozlova, 2015). One of the most popular routes goes along the eastern slope of the Greater Taganay Range. At the same time, the territory of the NP Taganay is part of Zlatoust's mining district, a highly industrialized area. With the development of mining and metallurgy in the Urals, that began two centuries ago, nature has undergone a significant transformation. In order to reduce additional negative impacts on the environment and ecosystems, management of the NP pays special attention to create conditions for organized and controlled tourism and raise the ecological awareness of the park's visitors. Some of the NP's most important tasks are forming conditions for regulated recreation and getting to know natural and historical sites with soft methods of nature management. In this sense, the territory of the NP is divided into different zones of protection (Trofimova & Kozlova, 2015).

METHODOLOGY

A survey was applied as a methodological procedure in the data collection. The survey was conducted in August 2018 in the area of the NP Taganay. During the preparation of the survey, the methodological procedure for the analysis of indicators of sustainable tourism was used, proposed by the World Tourism Organization (WTO, 2004) and adapted for the investigated area in agreement with the management of the NP. Authors used the questionnaire model related to the satisfaction of tourists. In order to examine the various dimensions of the views of respondents, and especially to obtain precise information when testing was performed, a mixture of alternative questions and statements was used. The sample consisted of 305 respondents, of which 167 were male and 138 were female. Respondents lived outside the area of NP Taganay and were approached randomly, usually near the tourist's facilities or after the individual was leaving the attraction. The survey was carried out by a written survey and filling was made after oral responses obtained from respondents. The survey was conducted by researchers of the South Ural State University, Institute of Sport, Tourism and Service.

The questionnaire comprised two main sections. The first section captured visitors' habits during travelling and coming to the NP, as well as their activities and visits to the localities. This part of the questionnaire consisted of six questions. The visitors were asked about the reason and the number of visits to the NP, as well as the type of transport they have used and the type of accommodation they have stayed in. Also, they were asked about activities they had during their stay in the NP Taganay and about the sites they visited. The second part of the questionnaire aimed to measure visitors' perceptions of

different issues in the NP Taganay. For answering within this section, Likert-type scale (with a scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*) has been used. This section consists of two variables reflecting the overall experience; six variables related to the state of (tourist) infrastructure and the quality of available services; four items on the environmental issues and two statements on the ecotourism issues.

The questionnaire analysis was processed according to the specific socio-demographic and socio-economic indicators (age, gender, education, marital status, repeated visits, daily consumption). Data analysis involved using descriptive statistics (frequency, central tendency), as well as bivariate (t-tests) analysis.

RESULTS

By examining the socio-demographic profile of the respondents in the NP Taganay, it was found that men dominate to a certain extent (54.8%), as well as the age categories – 20-29 (42.3%) and 30-39 (38.7%) years. The share of the respondents who had university degree was 73.4%. The unmarried respondents accounted for 55.4% of the sample in the NP, while the share of the married visitors (14.4%) or married visitors with children (30.2%) was significant, but somewhat smaller (Figure 2).

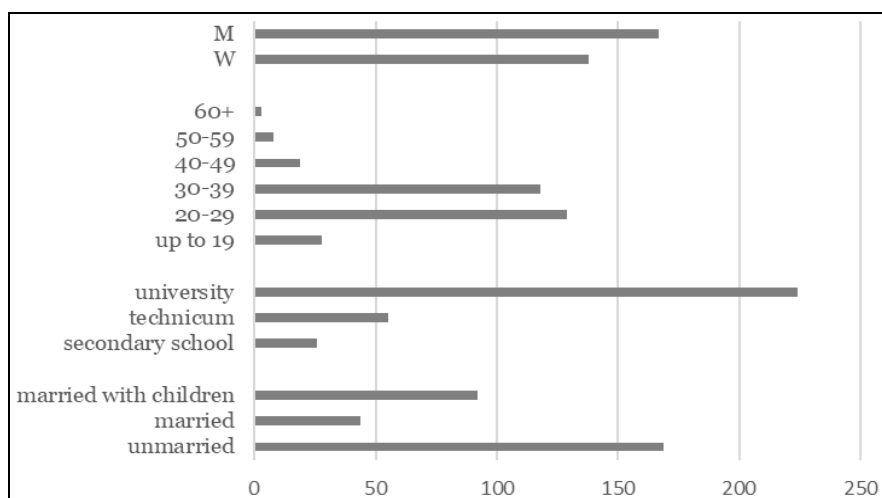


Figure 2. The sample structure of the visitors of the NP Taganay¹

At first, the visitors were asked questions about the reason and the number of visits to this area, and afterward about the means of arrival in the NP and the type of accommodation they stayed in. The highest percentage of the respondents (99.3%) visited NP Taganay as tourists, while the minimum number of visitors came for business reasons (0.7%). When it comes to the number of visits to this protected area, a significant percentage of the respondents recorded only one visit (45.6%), while those who visited NP twice are at 19% and three or more times - 35.4% (Figure 2).

In order to reduce the impact on the natural environment, specific types of accommodation for visitors have been built in the NP Taganay. Travelers are settled in so-

¹ Due to the small number of respondents in certain age groups, categories were merged, so all the analyzes were based on the presence of three age categories: up to 29 years, 30-39 and 40+ years.

called “shelters”, which contain guest houses and tents. There are 6 shelters in the park and their design is inspired by the use of traditional building methods applied by local craftsmen in the area. Another type of accommodation is present in the camping areas in the territory of the NP Taganay. Results of the study show that the visitors who stayed for more than one day, most often stayed in camps (66.9%) or shelters (31.5%) (Figure 3).

The type of transport of visitors indicates the accessibility of a certain space, the habits of travel and the state of transport infrastructure. The highest percentage of the visitors used the car for coming to the NP Taganay, while a smaller percentage decided to arrive by bus. Several other types of transportation were also used by a couple of visitors (Figure 3). It is important to emphasize that environmentally-friendly modes of transport should be encouraged. To reduce impacts, using cycling, public transport, rail transport, etc., as more sustainable options in environmental terms, needs to be increased. Data show that alternative types of transport use less energy per passenger, causing less noise and pollution. In terms of land use, buses require only 5% of the road space (per passenger) required for cars. Some measures giving priority to public transport also have the effect of restricting access for cars (UNWTO, 2004).

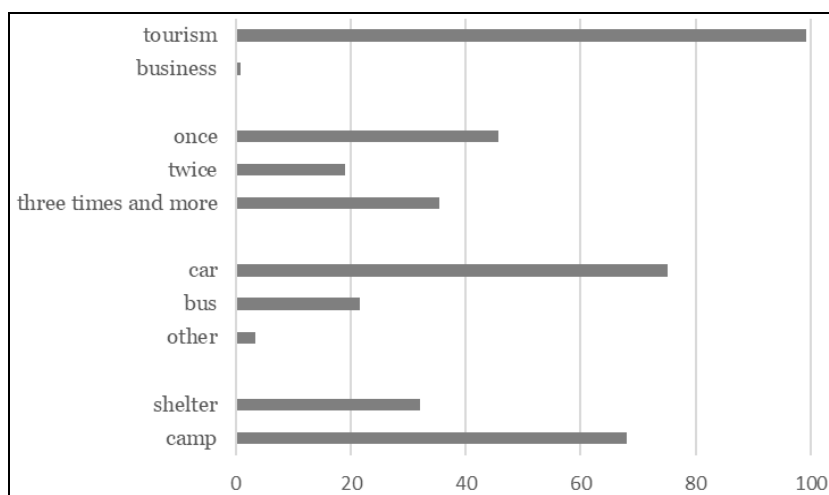


Figure 3. The distribution (%) of the tourists' responses on the reason for visiting, the number of arrivals, the type of transportation and the accommodation they have stayed in

In order to determine whether there are statistically significant differences in observed characteristics, i.e. frequencies of two or more independent samples, a chi-square test was used. The influence between the variables is interpreted by the Cramer (V) coefficient (Table 1). A statistically significant relationship was found between a marital status of the respondents and the number of visits to the NP Taganay. Most of the visitors who are married and have children visited the NP Taganay three times or more (46.7% of the tourists from this category), while visitors who are single or married without children have mostly visited this protected area once (47.3 % of visitors from the first category and 52.3% of the second category). Cramer's coefficient value (0.14) suggests low correlation strength between the variables.

In addition, the correlation is found between the marital status of the respondents and the type of transportation they have used for coming to the NP. Visitors who are married and have children mostly decided to arrive by car, while a significant percentage

of non-married visitors prefer to choose a bus for coming to the NP. Cramer's coefficient of correlation of variables (0.17) indicates the low strength of the correlation between the variables. A statistically significant relationship was also found between daily consumption of the respondents and the type of accommodation they stayed in. Visitors with low daily consumption mostly choose to stay in the camps, while those who spend more often pick shelters, while being in the NP. In this case, Cramer's coefficient value (0.18) suggests low correlation strength between the variables.

Table 1. Differences in visitors' perceptions on the number of visits, means of arrival and the type of accommodation by sociodemographic variables

| Question | | χ^2 (p value) | Cramer's V coeffic. |
|-----------------------|-------------------|-----------------------|------------------------|
| Number of visits | gender | 0.50 | 0.07 |
| | age | 0.34 | 0.08 |
| | education | 0.38 | 0.08 |
| | marital status | 0.03* | 0.14 |
| | daily consumption | 0.06 | 0.12 |
| Type of accommodation | gender | 0.25 | 0.07 |
| | age | 0.84 | 0.03 |
| | education | 0.67 | 0.05 |
| | marital status | 0.59 | 0.06 |
| | daily consumption | 0.008* | 0.18 |
| Type of transport | gender | 0.67 | 0.03 |
| | age | 0.63 | 0.05 |
| | education | 0.69 | 0.05 |
| | marital status | 0.01* | 0.17 |
| | daily consumption | 0.40 | 0.08 |

Activities of tourists and visits to localities

Certain questions within the questionnaire were related to the activities that visitors had during their stay in the NP Taganay, as well as the tourist sites and places they visited.

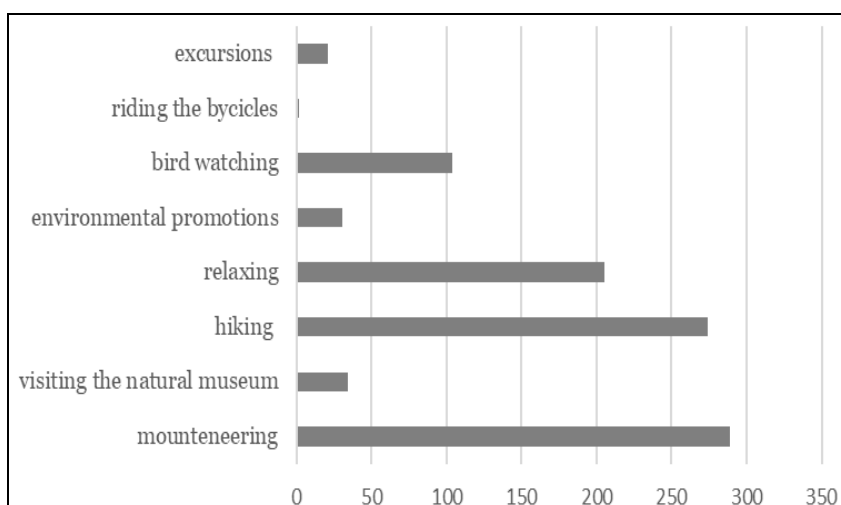


Figure 4. The activities of the visitors during the stay in the NP Taganay

When asked to declare what activities they were doing during their stay within the protected area, the largest number of visitors stated that they climbed on top of the mountain (94.7%) (Figure 4). A significant percentage of respondents went hiking on footpaths (89.8%) and relaxing in nature (67.2%). A specific segment of visitors was bird watching (34%), visiting the natural museum (11%), participating in the promotion of nature protection (10.2%), took part in the excursions (6.9%).

The minority of the visitors were riding the bicycles (0.6%) (Figure 4).

The next question in the survey was about the sites visitors had the opportunity to visit and see during their stay in the NP (Figure 5). The analysis showed that the most visited localities (attractions) were: *Bol'shaiā Kamennaiā reka* (69%), *Otkliknoi greben'* (68.5%) and *Gora Kruglitša* (53%). A significant number of respondents were able to see: *Dolina skazok* (49.8%) and *Dvuglavaiā sopka* (20.7%). Minority of the visitors have visited the following natural attractions of this area: *CHernaiā skala* (13.8%), *Itšyl* (5.9%), *Mit'kina skala* (1.6%) and *Monblan* (0.6%).

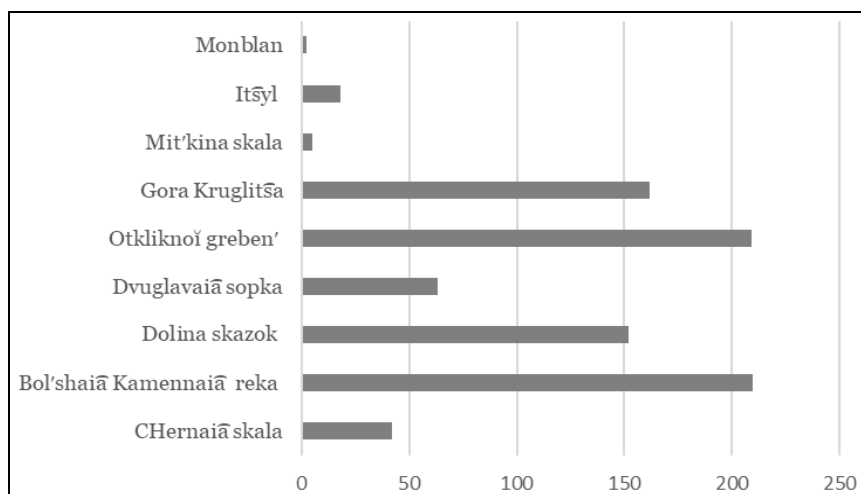


Figure 5. Tourist attractions visited during the stay in the NP Taganay

Visitor's perceptions on the NP Taganay

In order to analyze the attitudes of the visitors regarding different issues related to tourism in the NP Taganay, 14 variables were defined and were taken into consideration in relative terms, with regard to their impact (the mean value of the variable ranging between 1 and 2.4 revealed a negative perception, 2.5–3.4 neutral, and a value of 3.5 and higher showed a positive attitude) (Table 2). Majority of the respondents (97.3%) agreed that they enjoyed their stay in NP Taganay, while the most percentage of the respondents (68.9%) considers that NP provides a plethora of experiences. Regarding the quality of the road infrastructure, 82.2% of the visitors agreed with the statement: *"The state of roads and signage made travel easy"*. Most of the visitors (88.5%) consider this destination as „clean“ destination. Viewing platforms are considered to be clean and well maintained by 86.5% of the visitors. Respondents also commented about the presence and the quality of the souvenirs and crafts. Many comments were positive (69.5%) regarding this question, but there were those that stated the contrary (12.7%). In order to analyze the quality of accommodation in the NP Taganay, visitors were asked to provide a response to the following statement: *"The quality of accommodation was good"*.

Visitors that stayed longer than one day mostly considered that quality of accommodation was good (70.5%), however there were those with the neutral opinion (25.2%). When it comes to services offered in accommodation and catering facilities, 74.1% of respondents agreed that they were high, 21% of respondents gave the neutral answer, and 4.9% of respondents expressed disagreement with this claim. The opinion of the respondents is divided regarding the presence of noise in the NP. A significant percentage of visitors (44.3%) agreed that they were not disturbed by the noise in the NP during their stay, while 42.7% of the respondents had a contrary opinion. A very small percentage responded neutrally to this claim (13%).

Table 2. Visitors perceptions on the NP Taganay

| Visitors' perceptions | Mean | SD |
|----------------------------------------------------------------------------------------------------------------------|------|-----|
| I enjoyed my experience in NP | 4.7 | .5 |
| NP provided a good variety of experiences | 3.9 | 1.0 |
| The state of roads and signage made travel easy | 4.2 | .9 |
| I found the NP to be clean | 4.4 | .7 |
| The viewing platforms were clean and well maintained | 4.3 | .8 |
| Good souvenirs and crafts were available | 3.9 | 1.1 |
| The quality of accommodation was good | 4.0 | .9 |
| The level of service provided was high | 4.0 | .9 |
| Service staff were competent and helpful | 4.2 | .9 |
| I was bothered by noise | 2.9 | 1.5 |
| I was bothered by garbage in public areas | 2.8 | 1.5 |
| The state of the natural environment was good | 4.4 | .7 |
| I consider myself an eco-tourist | 4.1 | 1.0 |
| I would be willing to pay extra for ecotourism activities (birdwatching, visiting ecosystems, mountain hiking, etc.) | 3.4 | 1.3 |

1 – Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree

The opinion difference is also present when it comes to the presence of garbage in public places, where 46.9% of visitors say that the garbage is not present in public places, 41.9% of the respondents consider the opposite, while 11.2% of the respondents have a neutral attitude. The vast majority of respondents, 93.2%, confirmed that they considered the state of the environment in the park to be undamaged.

Table 3. Differences in visitors' perceptions on NP Taganay by sociodemographic and socioeconomic variables

| Visitors' perceptions | Variable | χ^2 (p value) | Cramer's V coeffic. |
|-------------------------------------------------|-----------------|-----------------------|------------------------|
| NP provided a good variety of experiences | repeated visits | 0.013* | 0.144 |
| The state of roads and signage made travel easy | age | 0.046* | 0.126 |
| Good souvenirs and crafts were available | marital status | 0.041* | 0.128 |
| I found the NP to be clean | repeated visits | 0.003* | 0.160 |
| I was bothered by noise | repeated visits | 0.017* | 0.140 |
| I was bothered by garbage in public areas | repeated visits | 0.043* | 0.127 |

Two questions in the survey were about ecotourism. To the claim: "I consider myself an eco-tourist", the largest number of visitors answered affirmatively (73.1%). A certain part of the respondents was neutral (18.7%), and the minority did not agree with this statement (8.2%). Another question related to the market identification for sustainable tourism was given to the visitors in the form of a statement: "I would be

willing to pay extra for ecotourism activities (birdwatching, visiting ecosystems, mountain hiking, etc.)". Half of the respondents (50.8%) answered that they agreed with the previous statement, 23.3% of the respondents were neutral and 25.9% were not ready to allocate additional funds. In order to determine whether there are statistically significant differences in the distribution of the perceptions according to the various sociodemographic and socioeconomic characteristics, the chi-square test was used (Table 3).

The analysis determined the relationship between respondents' viewpoints on a variety of experiences in NP and their repeated visits to this area ($\chi^2= 12.702, p=0.013$). Majority of visitors who visited NP once or twice agreed that various experiences are provided in NP Taganay (over 70% of positive answers), while people who came several times tend to have more restrained attitude. This can be explained by the fact that those who visited NP several times had the opportunity to get to know the area better and to create more critical opinion. The Chi-square test identified the statistically significant relationship between the age of the visitors and the claims about the quality of the traffic infrastructure ($\chi^2= 9.674, p=0.046$). The oldest population (over 40 years) was the most restrained in its attitudes, with 70% affirmative responses, 13.3% neutral and 16.7% negative. By contrast, the other two categories of younger respondents gave over 80% positive answers to this claim. Cramer's coefficient of strength is 0.13, indicating a small correlation between variables. A statistically significant correlation was registered between the marital status of the respondents and the statement on the availability of good souvenirs and old craft products in the NP Taganay ($\chi^2= 9.983, p=0.041$). Compared to the other two categories, married respondents with children responded positively to this statement in higher percentages. In the other two categories, neutral responses are represented in a significant percentage (married - 22.7%; single - 21.9%). This situation can be partly explained by the fact that the population with children is paying more attention to such things and buy the souvenirs more often. In this case, the value of the Cramer coefficient (0.13) testifies to the small correlation between the variables.

The relationship between the visitors' perceptions on the presence of noise in the protected area and their repeated visits was ascertained ($\chi^2= 12.013, p=0.017$).

Also, a statistically significant correlation was registered between the perceptions on the presence of garbage in the public areas and the repeated visits of the respondents ($\chi^2= 9.858, p=0.043$). Similarly to the statement on the overall experiences in NP, in both of these cases, it was determined that people who visited NP several times have more critical perceptions on environmental issues. 63.8% of the visitors who came to NP twice stated that they weren't bothered by the noise, while only 38% of visitors who visited the NP several times stated the same. Through the analysis of perceptions on the overall cleanliness of destination, similar results were obtained, i.e. repeated visits were found to be determining variable ($\chi^2= 15.713, p=0.016$).

DISCUSSION AND CONCLUSION

The purpose of NPs in the developed world is questionable due to the fact that competing objectives around multiple-use and diverse ideas about the reasons for protection versus utilization, can produce disagreements. As urban expansion continues to grow, it creates new challenges for natural resource management and effective strategic planning in protected areas. In that context, various personal perceptions and motivations of people spending time in and 'using' NPs, requires closer examination from researchers of different specialties. Supported by interviews with the visitors, as well as with the insight into the on-site situation, results presented in this study lead to the following conclusions. From a general point of view, a strong positive perception

regarding the overall experiences from visiting the NP Taganay is observed. Specific habits of traveling, which testify about permanent patterns of behavior, are registered – most visitors repeat their visits to the NP and use the car to come to the protected area.

If tourism were to develop on sustainable principles, it is necessary to shift away from the use of the private car to the increased use of other types of transport. This requires adequate spatial planning of the wider zone, as well as detailed planning of development of the road infrastructure in the future.

The study has shown that the most popular visitors' activities are deeply connected to the nature (mountaineering, hiking and relaxing in the nature), which allows people to realize their various physical and mental needs. This is also witnessed by the most visited tourist attractions belonging to the group of natural tourist values. The specific type of accommodation in the NP ensures connection with the natural environment for visitors that mostly expressed positive perceptions on its quality. Although, compared to primary types of accommodation, shelters and camps do not provide sufficient comfort; this type of accommodation allows visitors to connect with nature in deepest sense. Survey research identified a high level of satisfaction with accommodation facilities among visitors, as well as the services provided in these objects. The similar situation is registered regarding the perceptions on the service staff (particularly tourist guides engaged in guiding (hiking) tours). All of these findings confirm the hypothesis on the compatibility between visitors' habits and the environment.

Interviewees stated a high satisfaction with a complete experience in the NP Taganay, as well as the state of the natural environment and the overall cleanliness of the destination. Although this strong positive perception can be a good indicator of the high ecological values of protected territory, the study has also identified certain concerns regarding environmental issues. Respondents were found sensitive to garbage production in public areas and the presence of noise in protected territory. These results confirm the findings of previous studies suggesting that the most valuable natural areas of Urals are under constant pressure of mass tourism (waste, accumulation, trampling vegetation in the parking places, cutting down of trees, etc.) (Ziryayev et al., 2016).

Accordingly, the obtained information could be useful for formulating specific visitor education strategies for activities that are specifically connected to the nature, such as hiking, mountaineering, birdwatching. Based on our results and discussions with tourists, it is clear that socio-economic variables affect visitors' perception, particularly those related to environmental harm. This is in accordance with the other studies indicating that demographic and socio-economic characteristics are related to differing levels of satisfaction (Mossberg, 1995; Yu & Weiler, 2000). The most significant variable affecting environmental perceptions is the frequency of visits. Unlike some previous studies (Geva & Goldman 1991; Tian-Cole et al., 2002), suggesting repeated visits to a tourist destination are related to higher levels of visitor satisfaction, results of this study showed that multiple visits of protected area enabled people to get to know area better and to create opinion that is more critical. Similarly to different earlier research (Priskin, 2003; Milanović et al., 2018), age influenced perceptions of the visitors.

The findings of our research have important implications for park management and policy-making. Our study acknowledges that investigating tourist perceptions can produce information, which should be used together with traditional monitoring in protected areas. Data coming from the attitude analysis can be important for implementing appropriate visitor management strategies, scenario creating and simulation models. Growing numbers of NPs in Russia, which once have been marked by self-regulating tourism, are now being arranged for a mixture of controlled

recreational activities, such as hiking, mountaineering, biking, etc. Besides, the literature suggests that the long-standing conflict between nature conservation and self-regulating mass tourism in Russian protected areas is a major problem that hasn't been solved yet and also a great challenge for management structures (Ziryanov et al., 2016).

This is particularly critical in such protected areas where conservation status has been assigned, but its implementation is controlled poorly. Due to this, more effective management is required to attract tourists to visit the NP Taganay more frequently and to use recreational opportunities with increased awareness of possible negative influence on natural ecosystems. Knowing what types of visitors are to use a protected territory of NP Taganay is crucial for advanced management and for providing public support for conservation goals. By understanding visitors' habits and attitudes, NP managers can expect which activities their users will be willing to engage in and are able to estimate the need to potentially determine some areas for more/less intensive activities. As variability in visitor perception can indicate the need for visitor education (Priskin, 2003), in the case of NP Taganay we emphasize the importance of visitors education policies as a foundation on which a complete management program could be built in the future.

It is yet to be seen how visitors' perceptions toward specific problems will translate into action, and whether such an attitude will have social consequences. Related to that, our research points to the various threats to future tourism development and gives a chance to take actions. In order to ensure a better understanding of visitors' habits and attitudes, as well as to complement the outcomes of this research, implementation of the comparative interstate research studies is recommended. For achieving this objective, specific development projects regarding the visitors-protected area relationship could also be helpful. For future comparative analysis, research would be useful to incorporate various socio-economic indicators and variables (place of residence, occupation, personal income) that may affect visitors' satisfaction.

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