Abstract: In recent years the Stołowe Mountains National Park has become an increasingly popular destination for the purposes of mountain tourism. Such tourism takes different forms throughout the year, but the most common is hiking. Its continuing popularity results from the close contact with nature it provides, along with the possibility of active leisure pursuits and exploration. The aim of the study is to describe the motivations, preferences and leisure behaviours of hiking tourists who visit the Stołowe Mountains National Park, through survey-based research in 2015 and 2016. The study will highlight the relationship between the respondents' characteristics and their motivations, preferences and behaviour, to identify the main kinds of tourists.

Keywords: hiking, Stołowe Mountains National Park, tourist motivations and preferences.

1. INTRODUCTION

In recent years, tourism in Polish national parks has been increasing systematically. Therefore, it should become a subject of interest for researchers in many fields to help understand its features, intensity and influence, and to forecast its scale and variability in the future. Knowledge of current tourist motivations, preferences and leisure behaviours, as well as observation of their variability over time, has great utility value in the context of adapting the current offer to the needs of tourists. Considering the frequency of the different forms of tourism available within the Stołowe Mountains National Park, it should be noted that hiking is the most popular. Therefore, the aim of the article is to describe the hiking tourists visiting the Park with regard to their motivations, preferences and behaviour during trips. It includes an analysis of purpose, as well as ways of organization, along with a description of the character and range of services that the respondents used at their destination. Another element is a description of relationships between these factors and respondents' characteristics, together with a presentation of the most important differences over several consecutive years.


2. SCALE OF TOURISM IN THE STOŁOWE MOUNTAINS NATIONAL PARK

Tourist footfall in national parks in Poland has reached 12.3 million within a year (Ochrona środowiska 2016, p. 270), but there is an uneven distribution between individual parks. Invariably, the most popular is the Tatra National Park, which is visited by approximately one fourth of the tourists (3.3 million/year), and after that Karkonosze (2.0 million), Wolin (1.5 million) and Wielkopolski (1.2 million). As for the Stołowe Mountains National Park, it is the fifth most
A popular mountain national park in Poland was visited by 480,000 tourists (Fig. 1), according to data from the sale of tickets.

According to data from the sale of tickets to Szczeliniec Wielki and Błędne Skały, tourism has gradually been rising over the past twenty years, at a rate of 2-6% annually. In 2015 it reached a figure of approx. 480,000 entries. In 2007-14, the sale of tickets was at a similar level (320-360,000 a year), but in recent years a great increase in tourism has been observed.

On the basis of the automatic counting of visitors using pyroelectric sensors (Eco-Counter), it can be concluded that tourism in the Stolowe Mountains National Park is much greater and is strongly concentrated in time and space. According to existing data from mid-September 2016 until the end of August 2017, 858,000 entries were recorded, and within the first eight months of 2017 there were 734,000. Most tourist entries to the park were recorded in the summer months (July, August - approx. 190,000 each) and in the spring months (May - 163,000, June - 131,000), which accounted for 80% of the total. That period may be referred to as the high tourist season. Medium-level values were recorded in October and April (approximately 30 to 50,000), which may be considered the middle tourist season. September is a transition period between a high and a middle season, although it has been established only on the basis of incomplete data, as automatic counting of tourists started in the middle of the month in 2016. The lowest figures are recorded in the remaining autumn and winter months - from November to March (approximately 9-10,000 tourists a month), and therefore this period may be referred to as a low tourist season. After analysis of entries in December and January it should be stressed that the period of Christmas and New Year accounts for, approximately, two thirds of tourism recorded in these months. Spatial concentration of tourism is linked to the main attractions of the Park. Each month half of all tourists are recorded (on average) on the tourist trails in Szczeliniec Wielki and in Błędne Skały, and in the summer season this figure is even higher (June 2017 – 67%, July 2017 – 58%, August 2017 – 65%).

The Stolowe Mountains National Park, which protects a unique landscape of mountains, has been included as an area of primary importance for holiday leisure tourism (LIJEWSKI, MIKULOWSKI & WYRZYKOWSKI 2002, p. 56), in the top category of Poland’s sightseeing areas (WYRZYKOWSKI 1986) and attracts the highest footfall in Lower Silesia (KRUCZEK 2014). When analysing ticket sales it is worth noticing that Szczeliniec Wielki and Błędne Skały enjoy similar interest, with a small majority (at a level of 1 to 5%) in favour of the former.

3. RESEARCH METHODS

Research relating to tourists in the Stolowe Mountains National Park has been conducted in order to determine their socio-demographic structure, and understand their motivations, preferences and leisure behaviours, as well as to specify the services they used. These works are a component of the Monitoring System of tourist traffic (MStt) developed within that
area, the assumptions for which have been presented in a separate study (Rogowski & Malek 2016), as have the results of the pilot research (Żyto et al. 2017). The research method used to collect data was a diagnostic survey in the form of a questionnaire composed of 18 questions related to the motivations and preferences of tourists, which included the ways of reaching the region and attractions, purpose, duration, frequency and form of organisation, visited places, type and location of the accommodation and catering facilities that were used, and an assessment of the tourist offer in the region (Rogowski & Malek 2016, p. 91). According to Babbie (2013), survey-based research is the best available method to gather original data in order to observe and describe a large population. Random selection allows a group of respondents, whose characteristics presumably reflect the wider population, and carefully constructed, standardised questionnaires provide data in the same form from all respondents. Surveys are an excellent tool for measuring attitudes and the views of a large population (Babbie 2013, p. 275). Contrary to general opinion, diagnostic surveys enable the views of respondents related to facts to be discovered, rather than facts themselves (Grabowski 2013, p. 63). Research was conducted in the area of Szczeliniec Wielki and Błędne Skaly due to the greatest concentration of tourism there, whereas the percentage of the respondents is 56% for the former attraction and 41% for the latter, which corresponds to the actual proportions. As a result, in 2015 and 2016, 998 correctly filled forms were acquired, and their results were summarised on a spreadsheet.

4. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

The proportions of men and women participating are approximately the same. As for age, most are 35-44 (29%), 20-29 (25%) and 55-69 (17%). The smallest group are those over the age of 70. The respondents were mainly from large cities of the following voivodeships: Lower Silesia (20%), Greater Poland (15%), Silesia (12%), Masovia and Łódź (9% for each) and Lesser Poland (8%) (Fig. 3).

In 2015, the largest group were residents of the Lower Silesian Voivodeship, and in the following year – residents of Greater Poland. However, there is no doubt that the main group of visitors are tourists from the voivodeships of Lower Silesia, Greater Poland, Silesia, Łódź and Masovia. Tourists from abroad made up a small percentage (5%), with the greatest numbers from Germany, Great Britain and The Netherlands.

5. WAYS OF ORGANISING AND SPENDING FREE TIME

Tourists visiting the Stolowe Mountains National Park usually arrive there by car (78%), which is facilitated by a convenient and successively improved road infrastructure. A car is particularly popular among those travelling with their families (91%). The percentage travelling by train was small (6%), and is decreasing (from 8% in 2015 to 4% in 2016), mostly young people (up to 26 – 13%) and residents of Greater Poland (12%). This has an influence on the higher rate of public transport use, a solution selected by one third of the young and one fourth of those over 55. In this respect, buses are more popular. In a trip to the Stolowe Mountains, a car still remains the most frequently used means of transport related to the under-development of public transport in the region. Nevertheless, one third of respondents use the developed network of tourist trails and reach the attractions on foot.

As for the frequency of travelling to the Stolowe Mountains, nearly half of the respondents declared that they had come for the first time. This increases with distance from place of residence, and decreases with age. Therefore, most who went there for the first time live in Masovia, West Pomerania and Łódź Voivodeships and are mostly young. Another 37% go there at least once a year mainly residents of Lower
Silesia and Greater Poland, as well as older respondents. Others travel there less frequently.

Tourists visit the Stołowe Mountains National Park most frequently in the summer (68%), then spring (37%), and autumn (16%), and least frequently in winter (6%). This is understandable, given the most favourable weather conditions and the most important holiday season. In addition, this is confirmed by the data from infrared traffic counters (Fig. 2). According to the rules of the park, in the period from November until the end of April, the tourist trails in Szczeliniec Wielki and in Błędne Skały are not available, and anyone wishing to go there can do so solely on their own responsibility. This is reflected in the responses because as UŚCINKI (2017) indicates, in the summer 80% of tourists visit Błędne Skały and 64% of tourists go to Szczeliniec Wielki. There is also a visible difference between 2015 and 2016 which indicates an increased popularity of spring (from 29% to 45%) and autumn (from 11% to 22%), with a slight decrease in popularity of the summer period (from 70% to 66%). These may relate to an extending tourist season, although they should be verified in subsequent research.

The Stołowe Mountains are a place for short- and medium-term visits. Approximately half of tourists stay for 4 to 7 days, in particular those of more distant regions (voivodeships: Masovia – 67%, Greater Poland – 55% and Łódź 51%) and families with children (53%). In 2016, tourists more frequently chose a period from 4 to 7 days, which resulted from favourable sequences of days free from work. Every fourth tourist stays for only three days while 15% took a one-day trip, a half of whom are residents of Lower Silesia. In 2016, in relation to the previous year, the percentage decreased from 21% to 9%. The remaining 13% opted for at least a 7-day stay in the Stołowe Mountains, and most were over 55.

Overall a great majority were individual tourists (87%) in comparison to those in groups, although, due to the organised nature of a trip, it was much more difficult to convince a package tourist to participate in the survey, so this result should be treated with reserve. Families with children are the largest group visiting the Stołowe Mountains, and they account for 44% of the total. One third stay only with a spouse or a partner, and one fourth with friends.

6. PURPOSE OF TRIP AND MAIN ATTRACTIONS

The primary motivation is leisure tourism (55%), getting to know and admiring inanimate nature (26%), and pursuing active and specialised tourism (7%), treatment and prophylaxis at health resorts, and getting to know and admiring animate nature (3% each). These relationships and proportions make it possible to determine tourist behaviours towards activities which would fall into the category of leisure tourism based on activity and cognitive learning. The valuable area of the national park is seen by more than a half of the respondents as a place to leisure tourism where a tourist goes to get to know inanimate nature by pursuing active and specialised tourism.

The most frequently indicated secondary purpose was getting to know and admiring inanimate nature (43%), which along with leisure tourism was the most common choice within the sample. Further – as a secondary purpose – the respondents pointed to getting to know and admiring animate nature (30%), leisure tourism (21%), getting to know and admiring historical monuments (16%) and pursuing active and specialised tourism (11%). A detailed presentation of primary and secondary purposes depending on place of residence and age is shown in Figs 3, 4 and 5.

An analysis of the opinions of respondents from voivodeships with the greatest number of tourists shows that all pointed to leisure tourism as the primary purpose, followed by cognitive learning. In the case of the former, the differences ranged between 45% for residents of the Lower Silesian Voivodeship and 62% for Greater Poland, which may result from slightly different expectations. Leisure tourism is more characteristic for those living further away and coming for longer periods. Getting to know and admiring inanimate nature (the second most popular) relates...
to the outstanding potential of the area in terms of geography and tourism, determined by topography the most attractive component of the natural environment, in the terms of diversity and landforms. This is rather independent of the respondents’ characteristics. The third most important motivation was active and specialised tourism (7%), understandable given the diversity of topography and differences in height. Treatment and health prophylaxis were also indicated, usually by residents of Greater Poland, and for this group it was the third most important purpose. Another motivation, which involved getting to know and admiring animate nature, was a specific complementary element to the previous one and was more frequently indicated by those who opted for a shorter trip and lived closer to the research area.

Analysis of variations in primary motivations depending on age shows a predominance of leisure tourism in each age range. Only for the oldest group does this motivation play a less important role. For them more important was treatment and prophylaxis. Interestingly, an active motivation was indicated most frequently by those aged 40-54. Therefore, we can assume that families with children are focused on active leisure pursuits, treating cognitive values as secondary (Fig. 5).

The comparison of motivations depending on duration shows again a predominance related to leisure tourism during any season of the year, and in particular in summer. Its importance increases with the number of tourists. In the spring and autumn sightseeing account for a larger percentage. This results from the phenological differences characteristic of those seasons, shorter trips and fewer tourists on the trails, which allows nature to be experienced in more quiet circumstances. In the case of other motivations, these differences are not as noticeable or important (Fig. 6).

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![Fig. 5. The most frequently indicated primary motivations for a visit to the Stołowe Mountains (depending on age)](image)

Source: author, based on field study

![Fig. 6. The most frequently indicated primary motivations for a visit to the Stołowe Mountains (depending on season)](image)

Source: author, based on field study

![Fig. 7. The most frequently indicated secondary motivations for a visit to the Stołowe Mountains (depending on place of residence)](image)

Source: author, based on field study
The respondents were asked to choose two secondary purposes from the same responses, presented in terms of place of residence and age shown on Figs 7 and 8.

Fig. 8. The most frequently indicated secondary motivations for a visit to the Stołowe Mountains (depending on age) 
Source: author, based on field study

The most common secondary motivation indicated by all respondents was getting to know and admiring inanimate nature, which prevailed regardless of place of residence. Likewise, the second most important was getting to know and admiring animate nature. Bringing together these two shows the prevalence of secondary cognitive purposes related to nature, which corresponds to those indicating leisure tourism as the primary purpose. Another secondary purpose was leisure tourism, which was, in turn, predominant among those who indicated cognitive purposes as their main motivation. Therefore, the percentage pointing to both purposes in differing order were two thirds of the entire sample. Next, there was a cultural motivation related to getting to know and admiring historical monuments, indicated mostly by residents of Silesia and Masovia.

Considering age, the most frequently indicated motivation was getting to know and admiring inanimate nature, the relevance of which decreased among the oldest tourists who treat inanimate and animate equally. This decrease can be explained because it was more often indicated as the primary purpose. Therefore, the largest group potentially interested in geo-tourism is made up of the middle-aged and elderly, as approximately two thirds pointed it out either as a primary or secondary motivation. Leisure tourism was most frequently indicated as third by the oldest and youngest respondents, but was primary among those aged 27-40 and 40-54. Cultural motivation as secondary was particularly noticeable among those aged 27-39, who formed the largest group of cultural tourists in the Stołowe Mountains. Another motivation, indicated by one tenth of respondents of all ages, was pursuing active and specialised tourism.

The respondents most frequently visit Szczeliniec Wielki (67%) and Błędne Skały (59%), confirmed by data from infrared traffic counters (Fig. 2). This prevalence is also noticeable during other seasons of the year among residents of voivodeships having the greatest number of tourists, and of different ages. Slightly less popular for both locations was only found among the oldest group of respondents, 63% for Szczeliniec Wielki and 49% for Błędne Skały, respectively. Culturally respondents visited Kudowa-Zdrój (16%), Kłodzko with Kłodzko Fortress (13%), Wambierzyce (9%), Skalne Grzyby and the Książ Castle (8%), Duszniki-Zdrój (6%) and the gold mine in Złoty Stok (5%). The popularity of the towns and attractions shows that with age people are less interested in natural attractions in favour of towns and attractions of a cultural character. There is no such relationship in terms of duration and place of residence.

Fig. 9. Relationship between age of respondents and primary attractions
Source: author, based on field study

Of the total sample, two thirds declared they would like to visit the Czech part of the area, with the highest percentage provided by residents of Masovia (72%), Greater Poland (61%) and Łódź Voivodeships (60%), and those aged 40-54 (66%). On the other hand, the lowest was found among the youngest (52%) and residents of Lower Silesia (53%). The respondents most frequently visit the so-called ‘rock cities’ (Ad-
The respondents had the opportunity to indicate accommodation: private apartments (32%), guest-houses (22%) and hotels (14%). Usually the decisive factor is a convincing offer on the internet together with the rating provided by the users (29%) and a reasonable price (26%). An important factor was the proximity of tourist attractions (22%) and location in a quiet environment (17%). Other accommodation facilities used by respondents were holiday centres and health resorts (10%), and tourist hostels (5%).

There is a noticeable relationship between age and accommodation selected. Cheaper accommodation in hostels and private apartments was selected by the young, whereas with age tourists tend to accept higher costs for a wider offer (board and lodging) at a pension or hotel. As for locations a strong concentration can be found in communes where the national park is located. Tourists most frequently chose Kudowa-Zdrój (41%) with the most developed accommodation base followed by Duszniki-Zdrój with Zieleńiec (13%), Karłów (12%), Radków (8%) and Polanica-Zdrój (9%). There are also smaller places like Pasterka, Łężycy, Wambierzyce or Szczytna, but bigger towns in the region too like Kłodzko or Trutnov. Health resorts enjoy the greatest popularity among the oldest. In turn, Kudowa-Zdrój, due to the size of the accommodation base, prevails for every age group, although least among the youngest who tend to select smaller towns (Karłów, Radków, Duszniki-Zdrój and Pasterka) located as close as possible to the main natural assets of the Park.

The respondents declared that they had frequently used catering facilities, only 15% indicated otherwise. Usually, these were restaurants (62%), catering at the accommodation (28%), fast-food restaurants (24%) and cafés (21%). Restaurants and cafés were most popular among those aged 40-54 (64%), and least popular among the oldest (43%).

7. CONCLUSIONS

Tourists visiting the Stolowe Mountains National Park can be described through a number of variables. A particularly important factor is the strong relationship between purpose, duration and time of arrival. Motivation related to leisure tourism is prevalent among all ages and during every season, but is particularly characteristic for those residing in the more remote regions of Poland who came for at least four days. Only among the elderly is a decrease in indications related to rest found in favour of those connected with cognitive learning and with treatment and prophylaxis, although the latter is included in the rest itself. It is also evident that among families a very important motivation is rest, which may decrease the importance of the cognitive element.

Shorter trips are more focused on cognitive learning, and motivation related to rest is of secondary importance, connected with short-term changes in everyday surroundings. Such trips are more common in the spring and autumn, where an additional factor appreciated by respondents is their changing phenomenological nature. Because of their length, such trips are preceded by planning and selection of tourist attractions (mainly inanimate). Visits of this type are characteristic for residents of Lower Silesia and neighbouring regions which extends the tourist season and is reflected in the sales of tickets to the park.

Another observable phenomenon is the blurring of regional divisions, i.e. the assumption that the prevalent group of visitors were residents of the western regions of Poland. Currently, thanks to the developing network of high-speed roads and some train and bus services, the Stolowe Mountains are becoming increasingly popular among residents of the central and northern part of Poland. As cars are highly popular when travelling, tourists should be encouraged to leave them at their accommodation and move about on foot or by public transport. In recent years, in particular during so-called ‘long weekends’, a major problem has been insufficient parking and traffic jams on the roads. Visitors like to have a convenient means of transport on their way to the attractions and they use the voivodeship road no. 387 running through the Park, commonly called the ‘Road of A Hundred Bends’ (in Polish: Droga Sto Zakrętów). Along that road, within the park itself, parking areas have been prepared, however, they often turn out too small to be able to handle the traffic. In addition, excessive traffic generates noise and air pollution which is why there are attempts to reduce it by imposing restrictions on the access road to Błędne Skaly in combination with high prices for parking, and offering public transport services instead. These solutions bring results,
according to responses, in 2016 the percentage using them doubled in relation to 2015.

Tourists visiting the Stołowe Mountains select attractions based on their motivations, age and place of residence. The young are more focused on getting to know natural assets, which is also related to the frequency of their trips. Being here for the first time, tourists are motivated to see what the area is famous for. During subsequent visits, tourists declare that they return to many popular places, including Szczeliniec Wielki and Błędné Skaly, but they are also more interested in cultural assets and towns, at the expense of natural attractions. In addition, those living further away have a greater tendency to visit the Czech part of the region, not only for cognitive purposes, but also for shopping, which is particularly evident in the place of residence of those visiting the border town of Nachod.

Decisions on accommodation are made mainly on the basis on the offer available on the internet and a reasonable price corresponding to the scope and quality of the offered services. Therefore, the most popular accommodation is private apartments, as well as the board and lodging offered at pensions and hotels. Young people prefer cheaper private apartments and hostels located near natural assets. With age, tourists tend to select more comprehensive services which include board and lodging at pensions and hotels offered at a higher price, resulting from their greater focus on convenience. This also has its justification in the location of the selected accommodation, because with age, more and more people choose to stay in towns with a developed accommodation base functioning also as health resorts. Younger people prefer smaller and less popular towns.

In view of this, tourists visiting the Stołowe Mountains National Park may be divided into three groups:

- younger people, usually without children, coming with their partners and friends, who focus more on nature within the visited area, for whom location of accommodation is more important than its standard (cheaper lodging), motivated by cognitive and rest purposes, who value their freedom in planning the trip;
- families with children mainly wishing to relax select accommodation at facilities adjusted to their needs (rooms with access to a kitchen or apartments of medium or higher category), looking for ‘family attractions’ and entertainment, with secondary sightseeing needs;
- the elderly travelling with their spouses or partners, who value comfort and convenience (a room with access to a kitchen or apartments at facilities at a medium or higher category), wishing to rest, take care of their health (motivations related to treatment and prophylaxis) and getting to know the attractions offered by the investigated area.

8. SUMMARY

The description of the tourism in the Stołowe Mountains National Park is interesting and valuable material which enables a thorough understanding of the tourists visiting the investigated area. In combination with data from infrared traffic counters it provides an enormous quantitative and qualitative information base with wide application possibilities, not only for employees of the Park, but also for local government, representatives of the tourist industry and tourists themselves. The description of the current status of tourism provides interesting material to compare with the work of Prószyńska-Bordas (2008, 2009, 2014), who described such tourists in 1998 and 2008. Thus, it will be possible to capture the similarities and differences in the descriptions of tourists and developments over the last twenty years.

Survey-based research of motivations, preferences and behaviours of tourists in areas which are valuable in terms of nature is important not only for cognitive reasons. This enables an adjustment to the offer for visitors, but also for protection and comparison with other areas. Research in consecutive years allows substantial quantities of information to be gathered, which may be compared. Capturing trends is also very important, to be verified by subsequent research, confirming or dismissing them. For this reason, the research will be continued in subsequent years. It is also important to learn about the opinions of the widest possible range of tourists, which is why in 2017 the decision was made to extend the research in time and space. Survey-based research has already been conducted, and also covered the Czech part of the Stołowe Mountains, to enable comparison. Research in the future, which will in a comprehensive manner describe the motivations, preferences and behaviours in the cross-border area of the Stołowe Mountains, will be used to assess the level of the region’s tourist offer, and to prepare recommendations for representatives of the local tourist industry and local government officials to create a more appropriate tourist offer. These results will also help to improve ways of making the Stołowe Mountains National Park available in terms of sustainable development.

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