Analysis of recreational needs of visitors to the Arey Nature Park

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Abstract. The article presents the results of a sociological survey of visitors to the Arey Nature Park. Based on the questionnaire conducted in July 2020, the paper demonstrates an analysis of recreational needs and a sociological portrait of a visitor to the Arey Nature Park. The article analyses suggestions of vacationers and contains recommendations based on the identified needs and problems mentioned by the visitors in the organization of operation of the protected area. Almost all park visitors note a strong appeal to the natural scenery of the territory. The sanitary condition of the territory and the limited range of services available are highlighted as significant shortcomings in the operation of the park administration.

1. Introduction

Under the Russian legislation, nature parks are state-managed regional protected areas. The work of regional nature parks combines nature conservation objectives with the aim of 'creating conditions for recreation' and 'recreational use of the territory' [1].

It is generally considered that recreational needs are a need to restore physical and mental well-being lost during the life course. Recreational needs are one of the main factors in the development and arrangement of recreational space.

Addressing recreational needs is the basis of any recreational activity, and therefore their comprehensive study is necessary to optimize natural resource management in the protected areas. In this regard, it is of interest to analyze whether visitors to the Arey Nature Park are satisfied with existing conditions in the organization of visits. Without considering suggestions from park visitors, it is difficult to expect a stable demand and build a positive image of the territory.

2. Data and methods

The research process included collection, analysis, and interpretation of data obtained during a questionnaire survey (with open-ended, closed-ended, and semi-closed questions) and interviews with visitors to the Arey Nature Park. The interviewing was carried out in a course of a survey in the form of conversations at tourist camps (turbaza) and parking lots. The field part of the research took place at the end of July 2020, a period when most visits to the Arey Nature Park occur. In total, 76 respondents were interviewed by filling out questionnaires, and 16 people were interviewed without filling out questionnaires, followed by a recording of their responses. The sociological research was conducted in the Arey Nature Park for the first time.
The Arey Nature Park is located in Ulyotovsky District of Trans-Baikal Territory, at a distance of 240 kilometers from the city of Chita, which is the administrative center of Trans-Baikal Territory, and 115 kilometers from a rural locality Ulety, which is the administrative center of Ulyotovsky District. Since the second half of the twentieth century, Lake Areyskoe has been actively used by the population for the restoration of health and recreation. In 1980, the lake was declared a natural monument of regional importance. The Arey Nature Park was established in 2013 (the Decree of the Government of Trans-Baikal Territory No. 207 dated May 24, 2013).

3. Results and discussion

The period covered by the survey in 2020 is characterized by the predominance of women among the surveyed visitors (65% of women and 35% of men). The predominant age category is 30-39 (23.7%) and over 50 plus years old (50-59 and 60-69 y.o.), which make up 25%. Almost the same number of tourists was noted in the age categories of 16–19, 40–49 years old (19.7% of respondents in each category). The children and adolescents (10–19 y.o.) made up 7.9% of park visitors.

The following groups are dominant among park visitors: students (25%), employees (20.1%), retirees (14.5%). Professionals employed in education, trade and services, business, the military, mining as well as casual employees and housewives visit the park in approximately equal proportions. There were no unemployed park visitors.

The majority of vacationers (50%) are city residents from Trans-Baikal Territory (Chita, Krasnokamensk) who came to relax, recuperate and improve their health. About 51% are regular visitors who come every year or several times a year. The visitors from other regions of Russia make up 6.6% of the total number of park visitors. The geography of visitors to the park indicates that it is focused on serving the intraregional tourist: the visitors represent mainly the Baikal region (Trans-Baikal Territory, the Republic of Buryatia, Irkutsk Region). This is largely determined by the fact that the territory is accessible only by road transportation, and the park is in close proximity to the Baikal Highway. 73.7% of park visitors arrived in a personal car, the rest – arrived via rental car or public transport (bus).

The vacationers are mainly families with children or several families coming for a period of 2 to 4 days. Most visitors arrive on weekends. Park visitors tend to stay for 16 days at the most. The choice of accommodation facilities in the Arey Nature Park is limited: 40% of visitors chose tents for an overnight stay, 25% – tourist camps, 23% – campsite of the park administration. The rest preferred the private stay option.

Several groups were identified among the visitors to the Arey Nature Park:
- organized tourist groups at tourist camps ‘Arey’ and ‘Kristall’ who obtained vouchers to visit the park (25%);
- visitors renting privately-owned accommodation in the village of Arey and the village of Stary Arey;
- vacationers staying at guest houses of the camping area of the park administration (23%);
- tourists vacationing on the territory of a tent camp (40%);
- tourists visiting the park on their way to other destinations.

Recreational needs generally fall into the following categories:
1. need to restore physical and mental well-being lost during the life course;
2. need for treatment and disease prevention;
3. need for the restoration of health;
4. need for physical development and physical activity;
5. need for awareness (including self-knowledge) and spiritual development [2].

The questionnaire included multiple-choice questions to determine the motivation of park visitors behind their decision to spend their holiday at the Arey Nature Park. 74.9% of park visitors chose options ‘taking a break from the city’ and ‘spending time alone in nature’, which correspond with the first category of recreational needs. The option ‘active recreation’, corresponding to the fourth category, was noted by 44.7% of respondents. 21% of the survey participants selected options ‘visiting
new places’ and ‘recreation for self-discovery’, which coincide with the fifth category of recreational needs. The ‘need for the restoration of health’ answer was chosen by 43.4% of park visitors.

The beauty of Lake Areyskoe and its surroundings have remained the main factor in attracting visitors to the Arey Nature Park for many years. The answers such as ‘nature’, ‘lake’, ‘forest’, ‘air’, ‘landscape’, ‘sky’, ‘silence’ make up 86.8% of answers to the question ‘what influenced your choice of a place for recreation?’. Among the types of activities in the park, swimming, sunbathing, and hiking are the priorities for vacationers (table 1).

| Table 1. Preferred activities during recreation in the nature park. |
|---------------------------------------------------------------|
| **Answers**                  | **Number of respondents** |
| Recreational fishing            | 25                       |
| Swimming                        | 68                       |
| Sunbathing                      | 26                       |
| Hiking                          | 45                       |
| Tours                           | 14                       |
| Walking along the lakeshore     | 51                       |
| Ball game                       | 17                       |
| Calm outdoor recreation         | 40                       |
| Boating                         | 22                       |
| Spending quality time with friends around the campfire       | 39                       |
| Mud therapy                     | 2                        |

Therefore, the dominant recreational need that tourists come with is the need to restore their physical and mental well-being, which park visitors satisfy via the natural ecosystem of the lake, picturesque landscapes of the park territory, walking along the lake coast as well as by relaxing and swimming in the lake.

At the same time, not the entire range of opportunities of the park territory is used to meet the needs of park visitors. The respondents submitted the following suggestions that, in their opinion, will improve the park experience: organization of active recreation (e.g., tours, hiking, and horseback riding), equipment rental, availability of sports and playgrounds, the development of winter recreation, as well as the organization of a mud therapy clinic. Park visitors coming from the most remote areas of Trans-Baikal Territory and other regions of Russia (Irkutsk, Voronezh, Saint Petersburg) and the city of Chita travel to the Arey Nature Park to restore their health while vacationing.

The following additional services necessary for a comfortable stay at the park were named: equipment rental, water delivery services, firewood available for purchase, organization of cultural and sports events.

When asked ‘What services would you like to receive?’, the most popular answers among the respondents were ‘firewood available for purchase’ and ‘water delivery services’. These services could have been provided, not only by the park administration but also by residents of the village of Arey.

A separate section of the questionnaire was dedicated to the feedback and suggestions of the visitors. When asked to rate the recreation experience at the park, 67% of respondents rated it as ‘good’ and ‘excellent’. 21.1% of respondents rated it as ‘satisfactory’, and approximately 10% of participants rated this experience as ‘unsatisfactory’. The main reason for the negative feedback was the sanitary state of toilets both at the tourist camps and the tent camp.

The respondents stressed the following in their answers to the question of what elements of infrastructure they would recommend for the Arey Nature Park:

- there are not enough clean toilets within walking distance around the entire perimeter of the park (28.9% of the respondents);
• there is a need to renovate rental accommodation (insulate the houses, repair the roofs, reconstruct the buildings, etc.) (14.5% of the respondents);
• it is necessary to organize a regular collection of garbage and garbage pick-up (provide additional garbage bins) (19.7% of the respondents);
• facilities (street lighting, showers, washbasins, paths, descents to the water, rain canopies, information signs, fencing, a parking lot, a visitor information center, luggage storage, changing rooms by the beach, etc.) (34.1% of the respondents);
• there should be better access roads to the tent camp (6.6% of the respondents) and measures to prevent cattle from entering the park grounds (2% of the respondents).

In general, when organizing the recreation and planning activities in the park, it is necessary for the park administration to focus on taking into account suggestions from the two focus groups: 1) the vacationers who came to restore their health (seniors and families with children) and 2) the young visitors (groups of students, young families without children, groups of friends). For youth, it is necessary to organize sports and cultural events and build additional facilities (a summer cafe and nightclubs) at a considerable distance from the accommodation where families are staying. It will reduce the number of conflict situations in the evening.

It should be noted that many regular visitors have noticed positive changes in the Arey Nature Park since its establishment (25%). For example, an opportunity to get reference information, regular garbage collection and garbage pick-up at the southern coast, and the absence of poachers. Some park visitors highlighted the organization of the tent camp with canopies and benches as positive changes.

Tourists made their suggestions on expanding park activities and the range of services provided. 52.6% of the respondents would like to see mud therapy clinic services offered at the park. 35.5% of the respondents would like to have winter recreation opportunities at the park. Horseback riding services are relevant for 32.9% of tourists.

Based on the analysis of the survey answers and territorial capacity of the park, recommendations were developed that are presented in table 2.

Table 2. Recommendations on the requests in meeting recreational needs of visitors to the Arey Nature Park based on the sociological survey results.

| Recreational needs                          | Territorial capacity                                                                 | Recommendations to address the recreational needs         |
|---------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------|
| Need to restore physical and mental well-being lost during the life course | 1. Intact landscapes of the territory.                                                | 1. Improvement of park facilities (comfortable rooms, a campsite, parking lots, designated places for tents, washbasins, garbage pick-up). |
|                                             | 2. Aesthetic appeal of coastal areas, a variety of landscapes.                        | 2. Renovate sanitary and hygienic infrastructure.         |
|                                             | 3. Sandy beaches.                                                                    | 3. Arrangement of a technical zone where water supply, electricity, the Internet, etc. are located. |
|                                             | 4. Medicinal herbs, edible plants (berries, mushrooms), ornamental plants.           | 4. Establish an additional beach area to reach an even distribution of vacationers in the coastal area. |
|                                             | 5. A large number of sunny days.                                                     | 5. Construction of insulated buildings to enable a year-round stay. |
|                                             | 6. Remoteness from the urban agglomeration.                                          | 6. Organize points of sale of food products, including products from local producers. |
Need for treatment and disease prevention
1. Pine and pine-larch forests with rhododendron undergrowth (clean air saturated with phytoncides).
2. The waters and muds of Lake Areyskoe have a pronounced therapeutic effect in curing dermatoses, psoriasis, difficult-to-heal trophic ulcers, etc.
3. Availability of outlets of spring waters ‘Glaznoy’ and ‘Anginny’.
4. Natural factors have an immunomodulatory effect and cause the effect of hematopoiesis. The park territory is equated to the mountain resorts of the Caucasus.

Need for physical development and physical activity
1. A lake warmed up by the sun in summer, with sandy beaches and shallow depths with opportunities for swimming for various categories of the population.
2. A significant area of the park with elevation differences, with the possibility of organizing several walking routes.
3. Possibility of organizing recreational fishing.
4. Heavy snow cover (winter types of recreation).

Need for awareness (including self-knowledge) and spiritual development
1. Diversity of plant communities.
2. Variety of morphological and hydrological objects; faunistic and floristic diversity.
3. Sightseeing places: giant anthills, picturesque rocks of upper reaches of streams, sites of ancient people, etc.

4. Conclusion
There have been no significant changes in the organization of visitor recreation over the last seven years of the Arey Nature Park activity. The lack of amenities, infrastructure, and additional services are indicated by all respondents. Most of the tourists visit the nature park annually. In 2020, the proportion of women was slightly higher than the proportion of men among the visitors to the Arey Nature Park.

The majority of park visitors are residents of Trans-Baikal Territory; visitors from other regions of Russia are rare. No foreign tourists have visited the park. The priority wishes of park visitors pertain to the improvement of the sanitary state of the territory (to increase the number of garbage bins and bio-toilets), renovation of houses at the tourist camps, arrangement of the paths and descents to the lake,
installation of street lighting. More than 90% of the vacationers expressed their willingness to pay for the services and comfort provided.

In light of the COVID-19 pandemic and the associated mobility restrictions on interregional travel, the recreational facilities in Trans-Baikal Territory will experience an increasing influx of visitors. It is necessary to consider this situation as an opportunity to establish a modern recreation and tourism industry on the Arey Nature Park’s territory in a timely manner.

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