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VALUES OF NATIONAL PARKS IN THE LIGHT OF QUESTIONNAIRE SURVEY OF COMMUNITIES OF PARKS' MUNICIPALITIES

Hibszer A.. **Walory parków narodowych w świetle badań ankietowych społeczności gmin parkowych.** Przedmiotem rozważań jest postrzeganie walorów parków narodowych przez różne grupy społeczności lokalnej, zamieszkałej w sąsiedztwie parków oraz przez władze gmin parkowych. Badania przeprowadzono w gminach przestrzennie powiązanych z parkami narodowymi za pomocą metody sondażu diagnostycznego. Ich celem było określenie zróżnicowania percepcji walorów polskich parków narodowych. W rezultacie podjętych badań stwierdzono, że zdecydowana większość respondentów pozytywnie postrzega walory parków narodowych. Występuje zróżnicowanie postrzegania walorów parków w zależności od postaw respondentów wobec przyrody, ich statusu zawodowego i wykształcenia, zamieszkania w różnych typach gmin oraz odległości od granic parku narodowego, a także od udziału w zajęciach edukacyjnych. Widoczne jest także zróżnicowanie ocen walorów parków w zależności od przynależności do grupy osób pełnoletnich, młodzieży gimnazjalnej oraz przedstawicieli lokalnych władz. Opracowanie stanowi kontynuację badań autora na temat społecznych aspektów funkcjonowania parków narodowych w Polsce.

Гибшер А. **Ценности национальных парков в анкетных исследованиях сообщества парковых гмин.** Предметом обсуждения является восприятие ценностей национальных парков различными группами местных общин, проживающих в непосредственной близости от парков и муниципальных властей парковых общин. Исследования были проведены в гминах, пространственно связанных с национальными парками, методом диагностического обзора. Цель исследований – определить дифференциацию различия в восприятии ценностей польских национальных парков. В результате исследования было установлено, что большинство респондентов положительно воспринимают ценности национальных парков. Существуют разные мнения восприятия ценностей парков в зависимости от отношения респондентов к природе, от их статуса занятости и образования, проживания в разных типах поселений и расстоянии от границ национального парка, а также участия в образовательной деятельности. Наблюдается также дифференцирование оценок ценностей парков в зависимости от принадлежности к группе взрослых, старшеклассников и представителей местных органов власти. Работа является продолжением исследований автора на тему социальных аспектов функционирования национальных парков в Польше.

Key words: values of national parks, local community, questionnaire survey

Abstract

The subject of considerations is the perceiving of values of national parks by different groups of local communities, residing in the parks' neighbourhood and by management of parks' municipalities as well. Investigations were conducted in municipalities which are spatially connected with the national parks by means of method of diagnostic survey. They focused on the determining of variety in perception of values of Polish national parks. In result of conducted investigations it was stated that the straight majority of respondents perceives values of national parks positively. There is the differentiation in perceiving of

parks' values in dependence on the respondents' attitude to the nature, their professional status and education, place of residence in municipalities of different kind, the distance from the boundary of the national park and the participation in educational activities as well. It is also possible to observe the variety in assessments of parks in dependence on membership to group of adult people, lower-secondary school children and representatives of local authorities. This study makes the continuation of investigations on social aspects of national parks' functioning in Poland.

INTRODUCTION

National parks are created in areas which distinguish themselves in special natural values to preserve biological variety, resources, creatures and components of the inanimate nature and landscape values, to restore to the proper state of natural resources and components, and to regenerate deformed natural habitats and habitats of plants, animals and fungi. The most important aim of the park activity is to protect the nature. In its area the whole of nature and specific, characteristic for every region landscape values are protected (*Ustawa ...*, 2004).

In Poland parks create the net that just enough evenly covers the area of the country, including the most valuable fragments of main physico-geographical regions. All of 23 national parks occupy 316 748 ha in total and they are strongly diversified in terms of the area occupied. Polish national parks mainly have a forest character, because more than 62% of their area is occupied by forests. In some of them (Roztocze National Park, Magura National Park and Babia Góra National Park) forests comprise more than 95% in area. The exceptions in this respect are national parks of Ujście Warty and Narew. In the first park forest cover amounts to 1%, and the protection most of all refers to open meadow habitats, dense net of canals and oxbow lakes that are the most important in Poland habitat for water and mud birds, whereas the contribution of forest in the Narew National Park does not exceed 3% of its area, and the most important natural value is here the unique character of anastomosing river – the Narew. The majority of Polish national parks meets criteria of the national park definition (II category in the 6-degree division of protected areas) of the World Commission on National Parks and Protected Areas of the International Union for Conservation of Nature – IUCN. Two parks: the Ojców NP and Wigry NP – have the V category (areas mainly protected for the reason of landscape values).

All of national parks in Poland are areas Natura 2000. The membership to Natura 2000 imposes additional obligations to the management of national parks. In return it brings advantages to the parks and local communities as well, allowing wider using UE funds to conduct investigations, preserve natural resources, modernize and develop infrastructure that enables using the nature values (TWOREK, CIERLIK, 2003; *Sieć...*, 2004; *Finansowanie...*, 2007).

Considering high values of the protected nature, Polish national parks were included into some international nets of protected areas. The Białowieża National Park as the only one since 1978 year has occurred in the prestigious list of The UNESCO World Heritage. The straight majority of parks makes bird refuges of European importance (IBA – Important Bird Area) that are determined on the base of criteria worked out by the organization BirdLife International. Nine Polish national parks (of Babia Góra, Białowieża, Bieszczady, Bory Tucholskie, Kampinos, Karkonosze, Polesie, Słowiński and Tatra) comprise biosphere reserves which are determined as part of program The Man and the Biosphere – MaB UNESCO. Seven national parks (of Biebrza, Karkonosze, Narew, Polesie, Słowiński, Ujście Warty and Wigry) are Ramsar areas, i.e. aquatic-muddy areas of international importance, protected on the base of Ramsar Conference. Two maritime national parks belong to the Baltic Sea Protected Areas, created under supervision of Helsinki Commission (HELCOM). Two national parks (of Białowieża and Bieszczady) were awarded by prestigious Diploma of Council of Europe (The European Diploma of Protected Areas) as especially valuable and important for the nature preservation protected areas. Bieszczady National Park, as the only in Poland, belongs to the net of protected areas PAN-Parks, including the most valuable areas of protected nature in Europe.

In hitherto existing investigations concerning values of national parks the attention was paid to their attractiveness for tourist traffic (among others MATUSZEWSKA, 2008; KIRYLUK, BORKOWSKA-NISZCZOTA, 2009). The aim of the given investigations is to determine the variety in perception of values of national parks located in so-called parks' municipalities by inhabitants of these municipalities and the government authorities with regard to criteria differing respondents.

RESEARCH METHOD

Investigations included the community of parks' municipalities, i.e. municipalities which are spatially connected with national parks. There are 134 such municipalities. At grounds of 115 municipalities parks lie at least partially, and terrains of the majority of these municipalities occupy also protective zones of parks. Additionally, in 19 municipalities there is the buffer zone of national park. The number of parks' municipalities in the particular national parks is varied and amounts to from two (in parks of Białowieża, Bory Tucholskie) up to eighteen

(in park of Biebrza). It amounts to 6 municipalities on average. The area of all of parks' municipalities makes less than 7% area of Poland (to compare: the area of parks includes about 1% of Poland territory). Among parks' municipalities there are 84 rural, 35 urban-rural and 15 urban ones. These municipalities differ in the occupied area and the population number as well.

Investigations were realised by means of method of diagnostics survey with applying of questionnaire since March till November 2009. Data were obtained from 112 municipalities, i.e. from representatives of these municipalities authorities and local population. Among inhabitants there were 2917 adult people and 3027 pupils from 137 lower-secondary schools at the age of 15–16 years. The aim of separating among respondents groups of adult inhabitants and lower-secondary school children was to present the variety of attitudes towards park, resulting from the length of practical experience and theoretically varied attitudes and behaviours towards the national park (to the rule young people have more idealistic look at the nature).

The assessment of values of national parks was made considering the following criteria, varying people under investigations: the attitude of respondent to the nature, professional status of respondent, his education, a place of residence in municipalities of different type and in different places in relation to the boundary of the national park, and the participation of those polled people in educational activities conducted by the national park.

Materials presented in the paper are the part of results of wider investigations on relations occurring between national parks and local community of parks' municipalities. Partial results of these investigations were already presented by the author in *Acta Geographica Silesiana* (HIBSZER, 2012a, b).

AN ASSESSMENT OF VALUES OF NATIONAL PARKS BY LOCAL POPULATION AND AUTHORITIES OF MUNICIPALITIES-RESULTS OF QUESTIONNAIRE SURVEY

Values of national parks, which are spatially connected with the municipality, and where the respondents live, were assessed by them decidedly positively. Among investigated people, more than the half stated that these values are high, and every fifth person that they are very high (fig. 1). For a quarter of those polled people they are average. Low and very low assessment of natural and landscape values

was observed in a small group of respondents (2% of those polled).

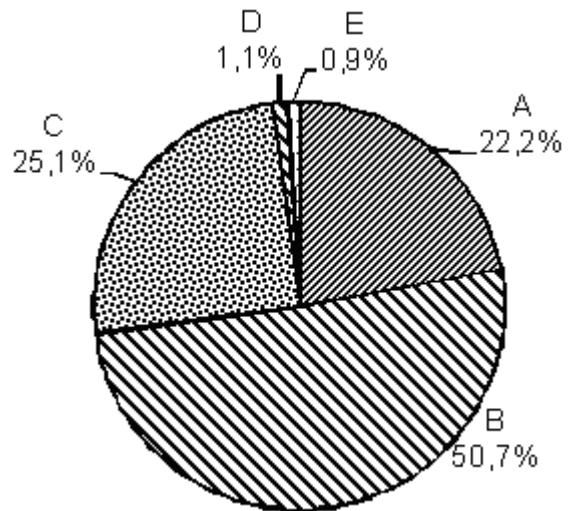


Fig. 1. Respondents' assessment of natural and landscape values of national parks:

Values: A – very high, B – high, C – average, D – low, E – very low (source: on author's own study)

Rys. 1. Ocena walorów przyrodniczych i krajobrazowych parków narodowych przez respondentów:

Walory: A – bardzo wysokie, B – wysokie, C – przeciętne, D – niskie, E – bardzo niskie (źródło: opracowanie własne)

The author noticed the difference in assessment of values between adult people and pupils from lower-secondary school. The indication of "high" values of national parks among the basic groups of respondents (adult and young people) is almost identical (every 50%). But among lower-secondary school children the percentage of people who indicate the values mediocrity of parks, located in the neighbourhood of place of residence is higher (about 30% – young people, about 22% adults). Whereas among young people, in comparison to adults, the percentage of people, who perceive very high values of national parks was less (about 18% – young people, about 27% – adult people).

It is possible to observe the correlation of assessment of values of the nearest national part with respondents' attitudes to the nature. Among people for whom the nature is very important, the straight majority – more than 80% – considers that these values are high and very high (tab. 1). Whereas people indifferent towards the nature claim, that values of the national park, occurring in the neighbourhood of the place of their residence, are average (almost 40%). In this group of respondents occurs the largest percentage of people who lowly assess the values of the nearest national park – about 15%.

Table 1. Distribution of responses on the subject of assessment of natural and landscape values of parks (criterion: attitude to the nature)

Tabela 1. Rozkład odpowiedzi na temat oceny walorów przyrodniczych i krajobrazowych parków (kryterium: stosunek do przyrody)

The nature for respondent is:		Natural and landscape values of the nearest national park					In total
		very low	low	average	high	very high	
very important	number	4	8	324	943	564	1843
	contribution %	0,2	0,4	17,6	51,2	30,6	100
important	number	19	33	693	1190	374	2309
	contribution %	0,8	1,4	30,0	51,5	16,2	100
indifferent	number	15	6	53	39	20	133
	contribution %	11,3	4,5	39,8	29,3	15,0	100
In total	number	38	47	1070	2172	958	4285
	contribution %	0,9	1,1	25,0	50,7	22,4	100

(source: on author's own study)

Considering professional status of respondents it is possible to notice that people working professionally (more than 80% of high and very high statements) assess the values of the nearest national

park in the highest way, whereas non-working people – in the lowest way (about 66% of added up very high and high statements) (tab. 2).

Table 2. Distribution of responses on the subject of assessment of natural and landscape values of parks (criterion: professional status of respondent)

Tabela 2. Rozkład odpowiedzi na temat oceny walorów przyrodniczych i krajobrazowych parków (kryterium: status zawodowy respondenta)

Professional status:		Natural and landscape values of the nearest national park					In total
		very low	low	average	high	very high	
pupil	number	32	36	605	1071	365	2109
	contribution %	1,5	1,7	28,7	50,8	17,3	100
student	number	0	1	14	29	16	60
	contribution %	0,0	1,7	23,3	48,3	26,7	100
working professionally	number	5	4	307	833	480	1629
	contribution %	0,3	0,2	18,8	51,1	29,5	100
non-working people	number	0	3	107	169	51	330
	contribution %	0,0	0,9	32,4	51,2	15,5	100
pensioner	number	1	1	24	40	24	90
	contribution %	1,1	1,1	26,7	44,4	26,7	100
In total	number	38	45	1057	2142	936	4218
	contribution %	0,9	1,1	25,1	50,8	22,2	100

(source: on author's own study)

Considering the following criterion of respondents separating – their education, it is possible to notice that the assessment of values of the nearest national park is the highest among people with higher education (almost 90% of

added up statements that these values are “high” and “very high”), then with secondary education (almost 80%), vocational education (68%), and the lowest – with primary education (61%) (tab. 3).

Table 3. Distribution of responses on the subject of assessment of natural and landscape values of parks (criterion: education of respondent)

Tabela 3. Rozkład odpowiedzi na temat oceny walorów przyrodniczych i krajobrazowych parków (kryterium: wykształcenie respondenta)

Education		Natural and landscape values of the nearest national park					In total
		very low	low	average	high	very high	
primary	number	1	2	51	65	26	145
	contribution %	0,7	1,4	35,2	44,8	17,9	100
vocational	number	0	2	164	236	124	526
	contribution %	0,0	0,4	31,2	44,9	23,6	100
secondary	number	2	6	154	395	160	717
	contribution %	0,3	0,8	21,5	55,1	22,3	100
higher	number	3	1	98	397	275	774
	contribution %	0,4	0,1	12,7	51,3	35,5	100
In total	number	6	11	467	1093	585	2162
	contribution %	0,28	0,51	21,60	50,56	27,06	100

(source: on author's own study)

Among people living in park municipalities of different type it is possible to observe, that people from urban municipalities assess the values of national parks in the highest way (26% statements

that they are very high and 49% that they are high), whereas the lowest assessment is typical for people living in urban – rural municipalities (17,3% – very high and 52,5% – high) (tab. 4).

Table 4. Distribution of responses on the subject of assessment of natural and landscape values of parks (criterion: living in municipalities of different type)

Tabela 4. Rozkład odpowiedzi na temat oceny walorów przyrodniczych i krajobrazowych parków (kryterium: zamieszkanie w różnych typach gmin)

Type of municipality:		Natural and landscape values of the nearest national park					In total
		very low	low	average	high	very high	
rural	number	24	23	580	1203	548	2378
	contribution %	1,0	1,0	24,4	50,6	23,0	100
urban-rural	number	8	11	274	509	168	970
	contribution %	0,8	1,1	28,2	52,5	17,3	100
urban	number	6	10	179	388	208	791
	contribution %	0,8	1,3	22,6	49,1	26,3	100
In total	number	38	44	1033	2100	924	4139
	contribution %	0,9	1,1	25,0	50,7	22,3	100

(source: on author's own study)

Comparing opinions of those polled people on values in dependence on the distance of place of respondents' residence from the park boundary, it is possible to notice that the highest assessments of park values were expressed by respondents living in the park (almost 86% of added up statements:

very high and high) (tab. 5). Among people living in the park' municipalities, but at a longer distance from the national park's boundary the assessments were the lowest (less than 70% statements that they are high and very high).

Table 5. Distribution of responses on the subject of assessment of natural and landscape values of parks (criterion: place of residence in regard to the national park)

Tabela 5. Rozkład odpowiedzi na temat oceny walorów przyrodniczych i krajobrazowych parków (kryterium: zamieszkanie względem parku narodowego)

Place of residence in regard to the national park:		Natural and landscape values of the nearest national park					In total
		very low	low	average	high	very high	
In NP	number	0	0	10	42	18	70
	contribution %	0,0	0,0	14,3	60,0	25,7	100
In the neighbourhood of boundary/ buffer zone	number	16	24	548	1234	602	2424
	contribution %	0,7	1,0	22,6	50,9	24,8	100
At a longer distance from the NP boundary	number	22	21	496	878	323	1740
	contribution %	1,3	1,2	28,5	50,5	18,6	100
In total	number	38	45	1054	2154	943	4234
	contribution %	0,9	1,1	24,9	50,9	22,3	100

(source: on author's own study)

Higher assessments of park's values were stated among these people, who took part in activities conducted by the national park. Almost 80% participants of such activities assess park's values as very high and high, and only about 1% as low and very low. Whereas people who did not participate in activities conducted by the national park (or they did not know if they took part in such activities)

are characterized by a large percentage of people, for whom the values of the nearest national park are average (about 30% and 40% respectively). In these groups of investigated people the percentage of respondents, for whom these values are low and very low was higher (about 2% and 6%) (tab. 6).

Table 6. Distribution of responses on the subject of assessment of natural and landscape values of parks (criterion: participation in educational activities)

Tabela 6. Rozkład odpowiedzi na temat oceny walorów przyrodniczych i krajobrazowych parków (kryterium: udział w zajęciach edukacyjnych)

Did you take part in activities conducted in NP?		Natural and landscape values of the nearest national park					In total
		very low	low	average	high	very high	
yes	number	3	19	371	1030	567	1990
	contribution %	0,2	1,0	18,6	51,8	28,5	100
no	number	20	17	513	929	309	1788
	contribution %	1,1	1,0	28,7	52,0	17,3	100
I do not know	number	12	9	166	170	57	414
	contribution %	2,9	2,2	40,1	41,1	13,8	100
In total	number	35	45	1050	2129	933	4192
	contribution %	0,8	1,1	25,0	50,8	22,3	100

(source: on author's own study)

The complement of analysis on the assessment of park's values among the local community was the investigation on opinion on this issue among representatives of authorities of park municipalities. It appears that very high assessment of values of national parks occurs in this group of respondents. Almost 90% of those polled representatives of government authorities assessed the values of the nearest national park, spatially connected with "theirs own" municipality as high or very high (fig. 2). Some respondents stated, that these values are "average", and only one (!) answered that values are "very low".

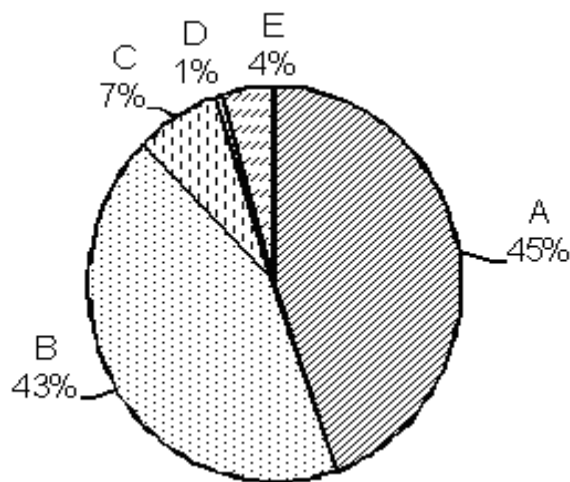


Fig. 2. Assessment of values of national parks by representatives of authorities of park municipalities:

Values: A – very high – very high, B – high, C – average, D – very low, E – lack of responses (source: on author's own study)

Rys 2. Ocena walorów parków narodowych przez przedstawicieli władz gmin parkowych:

Walory: A – bardzo wysokie, B – wysokie, C – przeciętne, D – bardzo niskie, E – brak odpowiedzi (źródło: opracowanie własne)

High, very positive assessment of parks' values among representatives of government authorities of park municipalities, probably results from the perceiving of function of national parks as the area of valuable nature and landscape protection (it was indicated by as much as 95,5% of such group of respondents). Besides, according to 65% of those polled people, the national park is also the chance to promote the region, and according to 40% – the field of investigations for scientific workers. According to 23,2% of those polled people the national park makes the chance to get EU funds (fig. 3). Representatives of local authorities have the consciousness of negative sides of the park's neighbourhood – according to more than 25% of such group of respondents the national park is the source of living ob-

structions for local population owing to numerous bans, and 12,5% of them consider that the existence of national park makes the barrier for the development of the region, and for 7,1% it is also the source of social conflicts. Small group of representatives of government authorities sees in the national park the institution top-down imposed by the state against the local population (3,6%).

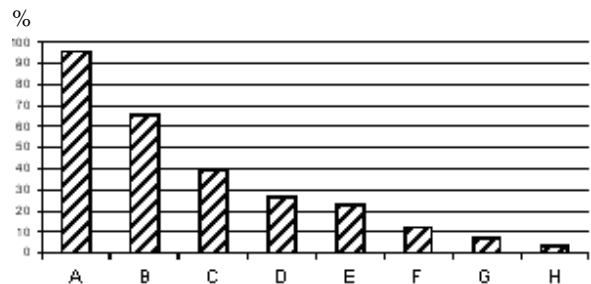


Fig. 3. Distribution of responses of authorities of park's municipalities to the question what above all the national park is (in %):

A – protection area of the valuable nature and landscape, B – chance to promote the region/municipality, C – field of research for scientific workers, D – obstruction for the local community, because of numerous bans, E – chance to get EU funds, F – barrier for the region development, G – source of social conflicts, H – institution top-down imposed by the state against the local population (source: on author's own study)

Rys. 3. Rozkład odpowiedzi władz gmin parkowych na pytanie czym przede wszystkim jest park narodowy (w %):

A – obszar ochrony cennej przyrody i krajobrazu, B – szansa na promocję regionu/gminy, C – pole badań dla naukowców, D – utrudnienie w życiu dla miejscowej ludności, bo są tam liczne zakazy, E – szansa na zdobycie funduszy unijnych, F – bariera dla rozwoju regionu, G – źródło konfliktów społecznych, H – instytucja odgórnie narzucona przez państwo wbrew ludności miejscowej (źródło: opracowanie własne)

DISCUSSION OF RESULTS

The comparison of perceiving of natural and landscape values of national parks between the particular categories of respondents shows the variety. The assessment of parks values, compared between authorities of park municipalities and local population indicates noticeable divergence of their perception (fig. 4). The group of representatives of the government authorities notably higher assess park values than the inhabitants of these municipalities. There are also differences in the assessment of national parks' values between the young and adult people. Among pupils from lower-secondary school the percentage of "average" values is higher, whereas among adult people more respondents state that values are "very high".

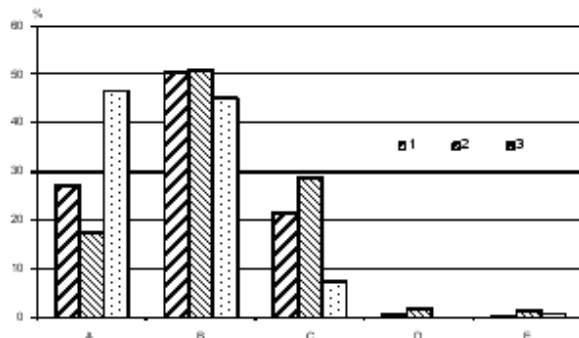


Fig. 4. Natural and landscape values of landscape parks in opinion of adult people, lower-secondary school children and authorities of parks' municipalities:

1 – adults, 2 – lower secondary school children, 3 – authorities of parks' municipalities; A – very high, B – high, C – average, D – low, E – very low, (source: on author's own study)

Rys. 4. Walory przyrodnicze i krajobrazowe parków narodowych w opinii osób pełnoletnich, gimnazjalistów oraz władz gmin parkowych:

1 – osoby pełnoletnie, 2 – młodzież gimnazjalna, 3 – władze gmin parkowych, A – bardzo wysokie, B – wysokie, C – przeciętne, D – niskie, E – bardzo niskie, (źródło: opracowanie własne)

The assessment of natural and landscape values of parks considering different criteria, also showed distinct diversity. Investigations allowed noticing, that the assessment of values of the nearest national park is especially influenced by its distance from its boundaries. The perceiving of national parks' values is undoubtedly influenced by the attitude of those polled to the nature, education, professional status or the participation in educational activities conducted by the park as well. The highest assessments of the nearest park were typical for respondents, for whom the nature is very important, well educated, working and residing in the national park, in urban municipalities and taking part in educational activities conducted by the national park.

Because investigations of such a type have an innovative character, it is impossible to discuss the obtained results with studies of other authors.

CONCLUSIONS

Presented in the article results of investigations on the assessment of values of national parks that neighbour with respondents' places of residence, allow formulating the following regularities and conclusions:

1. Appreciation of national parks' values is connected with better education of respondents, their pro-environmental attitude, professional work,

living inside the park and the participation in educational activities conducted by the national park.

2. The authorities of national parks assess the national parks' values considerably higher than their inhabitants what certainly is the reflection of perceiving numerous advantages of the park's neighbourhood for the municipality. On the one hand it is very advantageous situation, because people who have authority, i.e. make among others decisions that influence the quality and state of local natural environment, can undertake the cooperation with people managing the national park for the good of the protected nature, so also to preserve values of existing national parks. On the other hand, lower assessment of values by the very inhabitants of parks' municipalities should make the challenge for the management of national parks to improve the perceiving parks' values by the local population. The challenge for parks' managements can be the ecological education conducted by the park, because results of investigations indicate, that it can shape the attitudes towards the national park. Educational activities should include different groups of local community, so school children and adult people as well.

REFERENCES

- Finansowanie sieci Natura 2000. Podręcznik, 2007, (ec.europa.eu/environment/nature/natura2000/financing/index_en.htm).
- Hibszer A., 2012a: Parki narodowe w opinii mieszkańców gmin parkowych. *Acta Geographica Silesiana*, nr specjalny 2. WNoZ UŚ, Sosnowiec: 27–34.
- Hibszer A., 2012b: Korzyści z sąsiedztwa parku narodowego w opinii lokalnych społeczności. *Acta Geographica Silesiana*, 12. WNoZ UŚ, Sosnowiec: 13–25.
- Kiryłuk H., Borkowska-Niszczota M., 2009: Ocena atrakcyjności walorów turystycznych Biebrzańskiego Parku Narodowego. *Economy and Management*, 1: 63–87.
- Matuszewska D., 2008: Atrakcyjność krajobrazu Słowińskiego Parku Narodowego dla potrzeb turystyki pieszej. W: Chylińska D., Zaręba A. (red.): *Studia krajobrazowe jako podstawa właściwego gospodarowania przestrzenią*. UWr, Wrocław: 77–90.
- Sieć Natura 2000. 10 pytań – 10 odpowiedzi. Wyd. Ministerstwo Środowiska, Warszawa, 2004.
- Tworek S., Cierlik G., 2003: Turystyka na obszarach Natura 2000. W: Makomska-Juchiewicz M., Tworek S. (red.): *Ekologiczna Sieć Natura 2000. Problem czy szansa?* Wyd. Instytut Ochrony Przyrody PAN, Kraków: 163–168.
- Ustawa z dnia 16 kwietnia 2004 r. o ochronie przyrody. Dz. U. 2004 nr 92, poz. 880 z późniejszymi zmianami.