

## THE PERCEPTION OF NATURA 2000 SITES BY THE INHABITANTS OF COASTAL AREAS IN POLAND IN THE CONTEXT OF TOURISM DEVELOPMENT OPPORTUNITIES

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### Abstract

**Purpose.** The survey aimed to determine the level of environmental awareness of residents and their knowledge and attitude towards coastal Natura 2000 sites, as well to identify the need for information on this form of conservation.

**Method.** The survey was conducted from 2012 to 2013 among 5,848 respondents. The survey was accomplished by applying the PAPI method and was carried out among residents of coastal towns. The selection of the respondents was purposeful.

**Findings.** The majority of the surveyed population does not display a high level of environmental awareness, and any environmental action they undertake results from economic reasons. The vast majority (83%) of the respondents were not able to correctly interpret the concept of Natura 2000, and as many as 74% report little interest in this issue.

**Research and conclusions limitations.** The research was carried out on a deliberately selected sample unrepresentative of residents, but the results relate to others presented in the literature. Therefore, it should be treated as highly probable.

**Practical implications.** The results can be used by the authorities responsible for Natura 2000 sites to conduct activities related to raising the environmental awareness of residents.

**Originality.** This is the first article which presents survey findings in connection with Natura 2000 areas the survey was conducted in three Polish coastal voivodships.

**Type of paper.** The article presents the results of a survey of 5,848 inhabitants of coastal towns in Poland.

**Keywords:** Natura 2000, ecological awareness, sustainable tourism, environmental conflicts.

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## Introduction

Poland's accession to the European Union in 2004 necessitated the introduction of a number of new regulations into the Polish legal system, including those concerning natural protection. Initiating the process of implementing the European Ecological Network Natura 2000 turned out to be the most important element of the foregoing changes. The sites that are currently incorporated in the network comprise approximately 20% of Poland's territory. Natura 2000 sites include two types: Special Protection Areas [*Dyrektywa Rady 79/409/EWG*] and Special Areas of Conservation [*Dyrektywa Rady 92/43/EWG*]. The Special Protection Areas occupy 15.59% of Poland, whereas the Special Areas of Conservation comprise 11.0% of the country [Ziarnek, Piątkowska 2010, p. 10].

What constitutes a significant difference between Poland's pre-existing forms of natural protection (national parks, landscape parks, nature reserves, etc.) and Natura 2000 sites is the fact that Natura 2000 sites allow for the possibility of conducting economic activities within their territory, provided that they do not adversely affect the things under protection (defined habitats or species). Since Natura 2000 sites comprise the areas that have indicated the presence of economic activities, the issue of determining the rules and size of human activity in these areas has arisen.

The authorities responsible for the implementation of the Natura 2000 network have recently initiated the process of preparing documents in the form of so-called "Plans for Protection" and "Plans protection tasks" that specify the terms of use in these areas. This has resulted in some serious social conflicts stemming from differences of opinion among residents, the administration, and environmental organizations about the opportunities arising from and ways of using the existing resources and environmental assets located within Natura 2000 sites.

## Literature Review

As M. Dutkowski [1995] states, the environmental issues result not only from the incompatibility of economic interests, but also from the differing values and personal beliefs on both sides of the conflict. The problem applies to all protected areas. The aspect is emphasized by Macias and Miedzińska [2013, pp. 31–40], who state that, in most cases, the above-mentioned types of conflicts relate to areas that are intensively used for tourism and areas where the protective function is subordinated to recreation.

Among European countries, the Polish coast of the Baltic Sea constitutes a specific example of such an area. This is due to a very high concentration of tourist infrastructure and significant tourist traffic within a relatively small area. This phenomenon has its own historical conditions and, therefore, maintaining the leading role of tourism is, in social awareness,

the basis of socioeconomic development in the area. The data collected by the Central Statistical Office in 2012 indicate that Poland's coastal voivodships (West Pomerania and Pomerania) were visited by 6 million tourists and have the largest number of local accommodation places in Poland (around 212,000 beds, constituting 31.4% of the accommodation facilities in the country) [*Turystyka w 2012r.* 2013]. In addition, both voivodships are characterized by the highest Baretje index of tourist function (7.0 – West Pomerania, and 4.0 – Pomerania, compared to the average for Poland, which is 1.8) [*Turystyka w 2012r.* 2013], which expresses the ratio between the number of beds to the number of inhabitants in the region. What should be emphasized is the fact that the actual number of beds in the coastal towns of Poland is even greater, as only facilities with more than nine beds are subject to statistical mandatory registration. The data suggest that tourism is the primary source of income for a great number of people inhabiting the coastal areas.

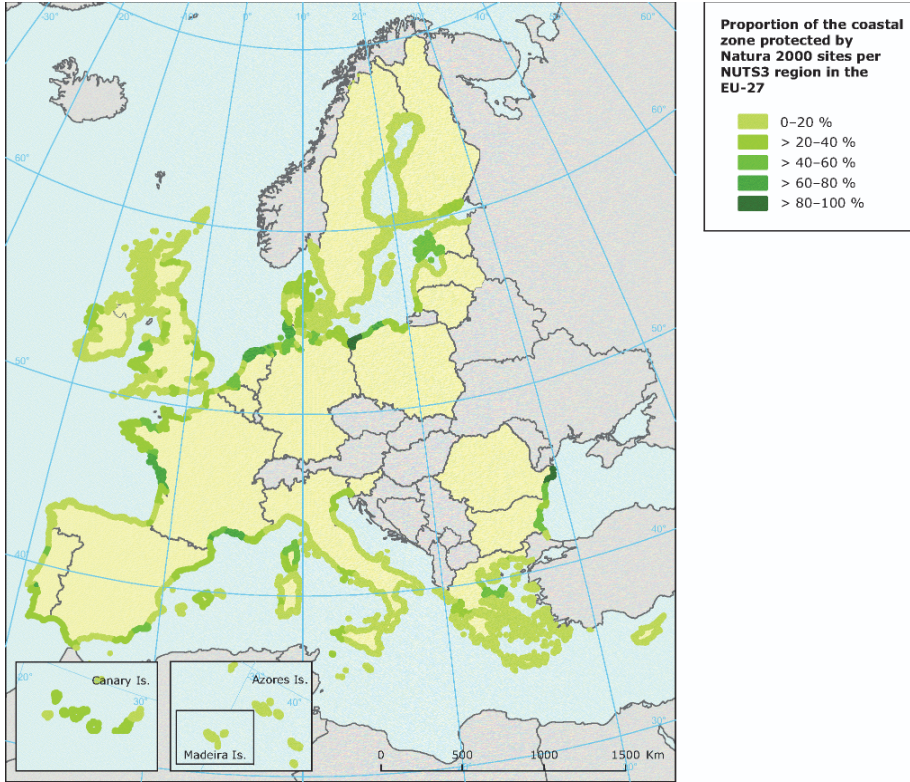
These facts, in addition to information from the European Environment Agency stating that the percentage of European areas in the European Ecological Network Natura 2000 is the highest on the West Pomeranian coast and only slightly lower on the Pomeranian coast (Fig. 1, Fig. 2), raises the question of how to achieve a consensus between socioeconomic and environmental protection functions.

The situation may result in some serious problems in reconciling the various, frequently conflicting, opinions of inhabitants, tourists, entrepreneurs, administrators, and ecological organizations. Moreover, we can conclude that the task of meeting the requirements of both environmental protection and the tourist industry will result in serious social conflicts. As M. Kistowski [2008, pp. 170–180] states, although some conflicts may contribute to the preservation of valuable natural areas, they must be resolved within the existing formal and legal procedures.

Numerous researchers [Arnstein 2007; Beunen, Vries 2011; Börzel, Buzogany 2010; Cent et al. 2014] emphasize the issue of society's contribution to the process of managing the protected areas.

Conflict resolution must first start by gaining the trust of residents. This can be achieved by ensuring that both the administration and experts do not treat society's participation as an obstacle for the implementation of the Natura 2000 network [De Pierola et al. 2009].

Unfortunately, in the opinion of some specialists, the approach and expertise of state authorities that are responsible for the procedures related to environmental impact assessment may cause a problem. Decisions may be issued too hastily or be protracted over time. This phenomenon may concern Natura 2000 sites in Poland in particular [Kowalczyk 2010, p.72]. It is, therefore, necessary to aim for reaching a social consensus between the administration and inhabitants. In Europe, there are examples of both positive and negative measurements taken by administrative authorities responsible for the implementation of the Natura 2000 coastal network

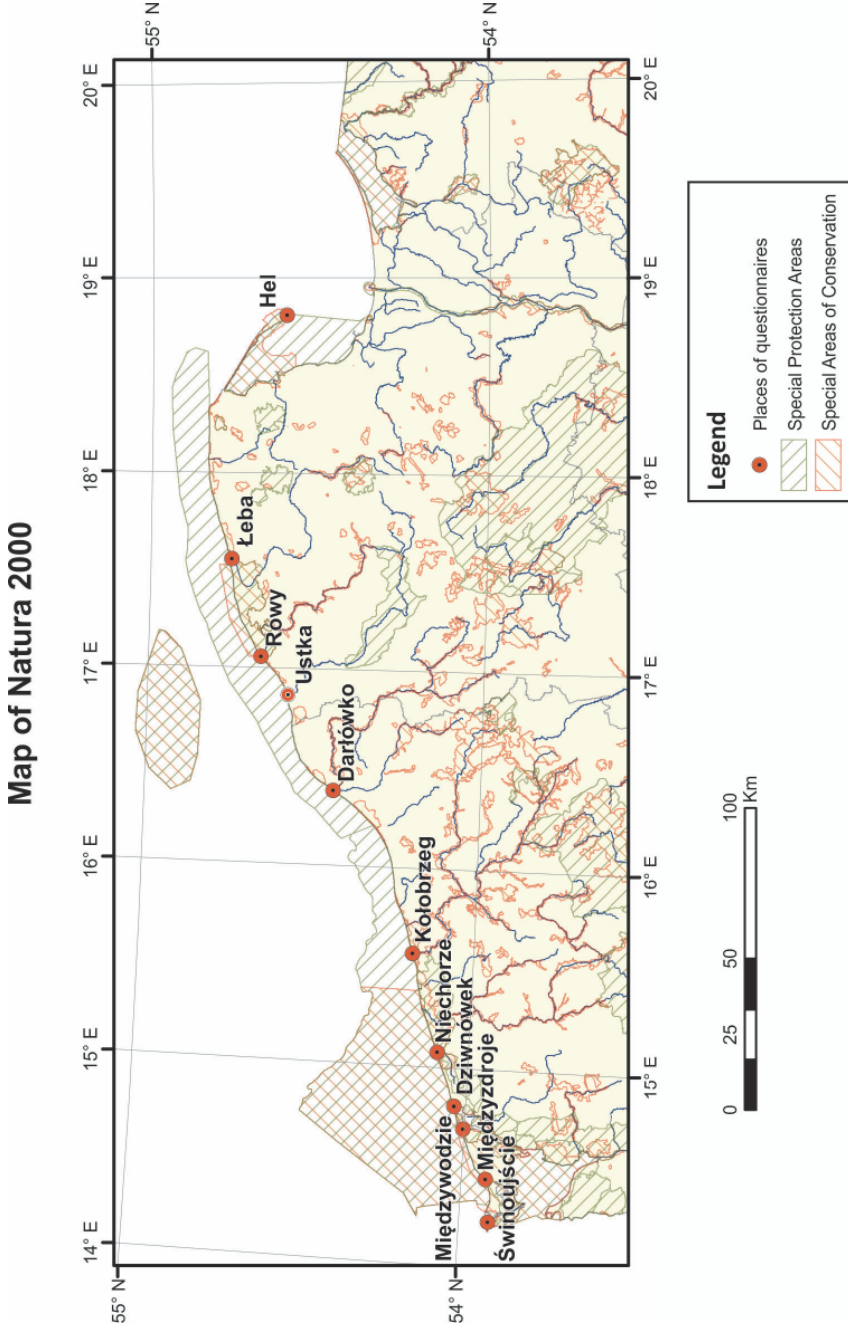


**Figure 1.** The percentage of European coastal areas in the Natura 2000 network

**Source:** <http://www.eea.europa.eu/data-and-maps/figures/coastal-zone-protected-by-natura-2000> (12.06.2014).

[Beunen, de Vries 2011]. Given the foregoing facts on both the coastal areas of the Natura 2000 network as well as the significance of tourism for the region, it is essential to take extensive measures in order to solve existing and potential environmental conflicts.

What influences people's attitude towards the natural environment is their level of social awareness and, above all, ecological awareness [Budeanu 2007, pp. 501-503; Domka 1998, pp. 87-88; Bohdanowicz 2006, p. 67; Kowalczyk 2010, pp. 37-38]. The process of building ecological awareness is not easy, as is noted by M. Orams [1997, p. 304], who states that a "structured educational program, based upon educational psychology, can prompt behaviour changes in people." Hence, one of the measurements aiming to reach an agreement on Natura 2000 sites should be raising ecological awareness among inhabitants and tourists. Sadly, the research indicates that



**Figure 2.** Map of Natura 2000

Source: Author's work.

awareness of this type still remains at quite a low level in Poland [*Badanie świadomości...* 2012; Bohdanowicz 2006, pp. 240-262; Domka 1998, pp. 87-88; Głabiński 2008; Pietrzyk et al. 2009, pp. 407-414; Nycz-Wróbel 2012, pp. 63-75; Stanaszek, Tędziągolska 2011]. An increase in environmental awareness should lead to an acceptance of essential projects that aim to protect the natural environment. Any activities related to the implementation of the Natura 2000 network should be carried out in such a way that they make the inhabitants realize that they contribute to maintaining the tourist value of coastal areas. It is, therefore, obvious that the administrative bodies supervising Natura 2000 sites are responsible for conducting awareness-raising actions among the residents of the areas affected by the foregoing problems. This results from the basic legal regulations still in force in Poland. As article 7 of the Administrative Procedure states, "The public administration bodies shall uphold the rule of law during proceedings and shall take all necessary steps to clarify the facts of a case and to resolve it, having regard to the public interest and the legitimate interests of members of the public" [*Kodeks postępowania administracyjnego 2013*].

Unfortunately, the existing administrative action has been far from sufficient in this regard and, therefore, the Association of Human, Science, Environment, in collaboration with the Faculty of Geoscience of the University of Szczecin, implemented the project entitled "4 Seasons with NATURA 2000: An information and training campaign." The project, which was conducted 2012–2014, was financed by the National Fund for Environmental Protection and Water Management within the frame of a program of "Environmental Education." It mainly aimed to raise people's awareness about the marine and coastal areas of Natura 2000 and their knowledge about the potential use of local resources in line with the principles of sustainable development. The project activities included among other things, analyzing the ecological awareness of tourists and the residents of coastal towns located in the vicinity of Natura 2000 sites in the voivodships of West Pomerania, Pomerania, and Warmia-Mazury.

## Objectives

As was previously mentioned, the project took the form of an information-education campaign in the coastal areas of Natura 2000. In order to identify the social needs in that field, the project was accompanied by a survey on ecological awareness. Considering there is a rather widespread overuse of concepts related to ecology, it is necessary to define the term of ecology.

What L. Domka [1998, pp. 87–88] suggests is that "Ecological awareness is a peculiar, emerging form of social awareness that is manifested in both thoughts and experiences of particular people as well as in socially functioning standards of comprehending, experiencing and evaluating the biosphere."

B. Poskrobko submits a far more elaborate notion of ecological awareness: "The notion of ecological awareness is used in two senses. In the broader sense, it concerns all recognised ideas, values and opinions about the environment as a place of human (social) life and development that is common for the particular social groups living in a given historical period. In the specific and more axiological sense, ecological awareness constitutes the combination of people's knowledge, views and ideas on the role of the environment in human life with its anthropogenic load, degree of overexploitation, threats and protection, as well as people's knowledge on the ways and tools that are of use in managing the environmental exploitation, protection and planning." B. Poskrobko [2007, p. 61].

Taking these views into consideration, the specific objectives of the study have been specified as the following:

- defining the attitudes and behaviors related to environmental protection in the daily lives of the inhabitants of the coastal areas in Poland,
- analyzing the sources of information on environmental protection among the respondents,
- evaluating the local inhabitants' knowledge about the areas of Natura 2000,
- defining the inhabitants' preferences and attitudes towards the natural tourist attractions that are located in the coastal areas of Natura 2000,
- identifying the respondents' opinions on whether Natura 2000 areas contribute to an increase in the number of tourists and the improvement of technical infrastructure in the region,
- recognizing the inhabitants' needs in terms of promotion and information on tourist attractions that are located in the coastal areas of Natura 2000.

These specific research objectives should help in responding to three basic questions:

1. What is the level of ecological awareness among the residents of coastal areas?
2. What are the views on the European Ecological Network Natura 2000 among the residents of coastal areas?
3. Are the attractions of the natural environment of Natura 2000 territories of any interest to the residents?

It was assumed that obtaining the answers to these questions would make it possible to draw conclusions facilitating the selection of both means and methods of social communication between administration bodies and the residents of the coastal areas when implementing the Natura 2000 network.

## Methods

Conducting research on ecological awareness involves certain obstacles because, as Z. Chojnicki [1999, p. 217] states, the subjects of the research comprise both the attributes that are available to direct observation and those that are not subject to observation at all. Social groups' attitudes, personal traits, or characteristics belong to such unobservable attributes. Ecological awareness and social behaviors are yet another example.

The empirical indicators used for assessing levels of ecological awareness comprise, in most cases, consumer behaviors, communication, waste management, and problems of protected areas [*Badanie świadomości...* 2012; Ballantyne et al. 2009; Bohdanowicz 2006, p. 7; Boltromiuk 2009; Kamieniecka 2012].

Taking the above-mentioned indicators into consideration, and bearing in mind the possibility of comparing the obtained results with data presented in previous studies, the researchers decided on the method of conducting a survey in the respondents' places of residence. The survey was not of a representative character and, therefore, the results cannot be generalized to all residents of the coastal areas.

The survey was conducted in two ways. The first of these was applied in reference to incidental collectivity and involved a pollster who provided random people (from the street, shopping mall, ferry crossing in the center of Świnoujście, etc.) with a standardized questionnaire, which respondents were expected to fill in themselves (PAPI method). After verifying whether the respondent was a tourist or a resident of a particular town, the pollster handed in the questionnaire. In order to encourage people to participate in the survey, the pollsters informed them that, having filled in the questionnaire, each respondent would be given a small gift with the Natura 2000 logo on it (a shopping bag, reflective armband, or fridge magnet). If the candidates had any doubts, the pollsters were obliged to provide any necessary information. They also instantly verified the completeness of the responses.

The second survey method involved conducting the Self-Administrated Questionnaire with Captive Audience survey in junior high schools and high schools in the coastal towns located in the voivodships of West Pomerania and Pomerania [Zmijewska, Pokorska 2000]. After discussing terms with the schools' principals, the pollsters provided teachers with questionnaires and posters about the project. Pollsters also provided the classes with gifts displaying the Natura 2000 logo on them, which were designed for all of the students. The questionnaires, filled in by the students, were picked up by the pollsters after the lessons.

The questionnaire was anonymous and contained 11 structured questions as well as respondents' details. The field survey was executed by a team of trained students from the Institute of Tourism of the Faculty of Geoscience at the University of Szczecin. The field stage of the research was preceded by a mock study performed among the students of the University

of Szczecin and Szczecin's travel agents in June 2012. The study allowed for verification of the survey questionnaire.

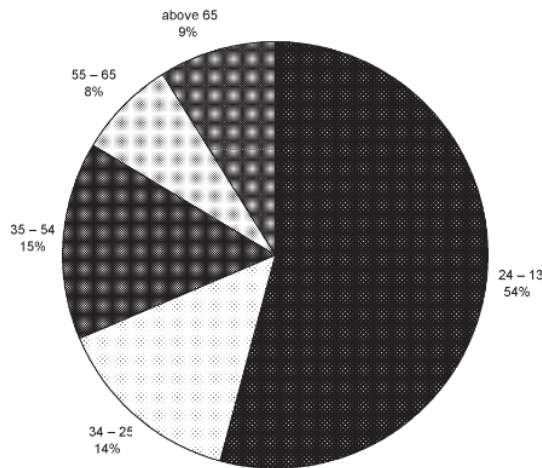
The research was conducted from June 20, 2012 to September 30, 2013. The pollsters gathered data from the questionnaires and entered it into the project website. In total, the pollsters collected 5,848 questionnaires from among the residents of the coastal towns of Poland.

## Results

### *A Demographic Analysis of the Population of the Respondents Under Study*

Of the respondents, males (52%) slightly outnumbered females (48%). The difference, however, was small and should have no effect on the outcome of the study.

An analysis of respondents' ages indicates that young people constituted a large part of the population under study (Fig. 3). This is because, according to pollsters, the elderly were reluctant to take part in the survey, using a variety of reasons (lack of time or glasses, obligation to look after children, etc.) as excuses. The project was, on the other hand, of great interest to the teachers and principals of the schools mainly because of a campaign that was simultaneously conducted among all of the schools of the West Pomeranian, Pomeranian, and Warmian-Masurian voivodeships to promote the project. A photo contest on the attractions of the coastal areas of Natura 2000 was held at the same time as the survey. Information about the survey

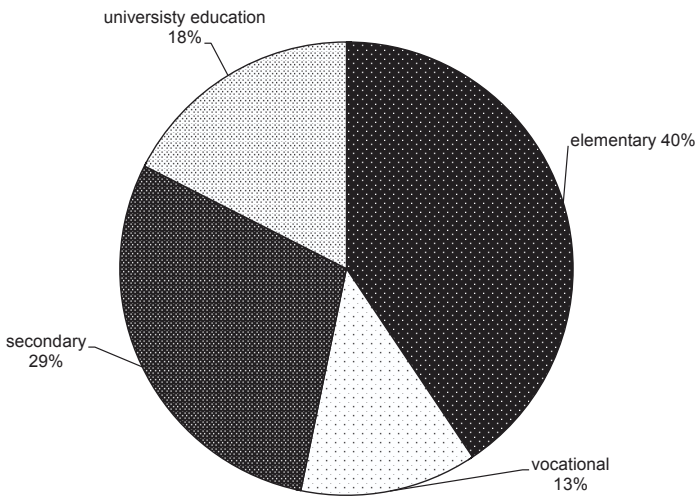


**Figure 3.** The age distribution of respondents

**Source:** Author's work based on the survey.

was posted on both the project website and on posters on advertising pillars and in schools. The survey was also accompanied by field training that was organized for approximately 100 teachers of the three voivodeships. These actions contributed to considerable interest in participating in the survey by a large number of schools in the region and, for that reason, the youngest age group (aged 13–24 years old), mainly consisting of students, is overrepresented in the overall population under study. It can, however, be assumed that this is a group of current learners, and thus these students have contact with formal environmental education.

The fact that such a large proportion of young people (including junior high school and high school students) participated in the survey resulted in a large number of respondents with primary education (Fig. 4). Forty-seven percent of the respondents possessed secondary education or a university degree, which should demonstrate a relatively good knowledge of environmental problems.



**Figure 4.** The education distribution of respondents

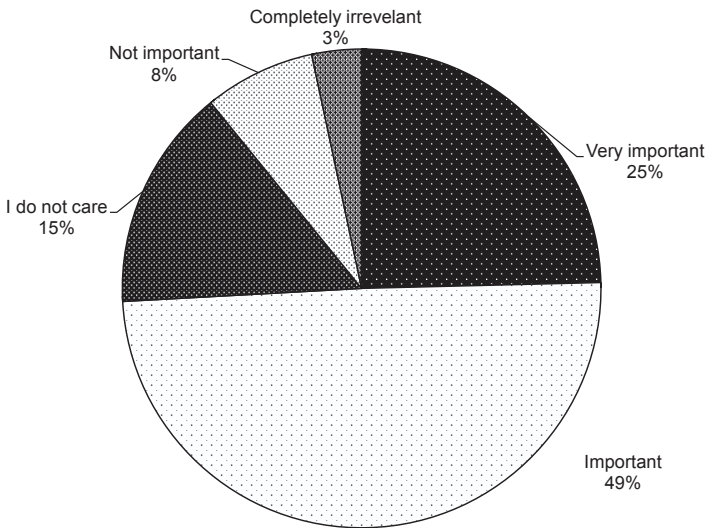
**Source:** Author's work based on the survey.

### *The Issue of Environmental Protection in Respondents' Daily Lives*

The literature reviews state that the issue of the relevance of the selected indicators is a substantial problem. Relevance should be understood as an observable state of affairs which may be an indicator of a phenomenon that cannot be observed directly [Mayntz et al. 1985, p. 29]. It was assumed that the approach to basic issues concerning environmental protection might be one of the indicators pointing to the level of ecological awareness. Hence,

one of the survey questions referred to the significance of environmental protection in everyday life (Fig. 5).

The vast majority of the respondents (75%) stated that environmental protection is an important or very important issue. These results may be compared to those of the research conducted in 2010 among the inhabitants of Podkarpackie Voivodeship, which indicated a merely average interest in environmental protection problems [Nycz-Wróbel 2012, pp. 64–65]. The survey conducted by TNS The Centre for Public Opinion Research Ltd. in 2012 on a nationwide representative sample indicated that as many as 76% of the respondents considered environmental protection to be an important factor for the development of the country [Badanie świadomości... 2012].



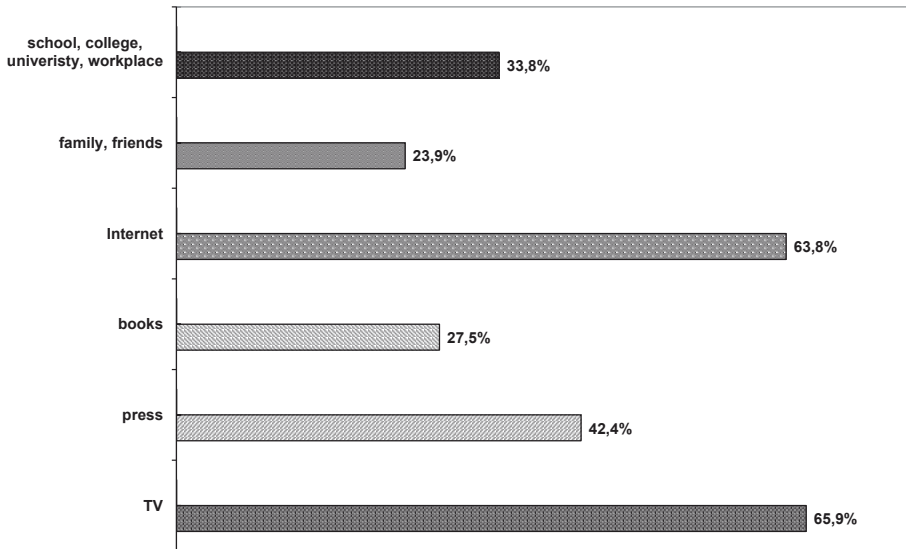
**Figure 5.** Is environmental protection a significant issue for you?

**Source:** Author's work based on the survey.

It may, therefore, be noted that the residents of the coastal areas have a level of interest in environmental protection that is similar to the one of the general population of Poland. It constitutes, on the other hand, a higher proportion compared to the number of residents of southeastern Poland. Though it is difficult to explain this result, perhaps the inhabitants of coastal towns perceive a greater relationship between environmental protection and the value of natural tourism. This may even result from the fact that every year before the tourist season, official statistics of the cleanliness of beaches and seaside baths are published. This information is commented on by the media and may affect tourists' selection of a holiday destination. In

this situation, the residents, for whom tourism constitutes the main source of livelihood, are inclined to associate the environment with the possibility of earning a living and, for this reason, they may exhibit a greater interest in ecological behavior than people in other Polish regions.

Another important issue was to examine the respondents' source of information on environmental protection (Fig. 6). The results indicate the dominance of two sources of information: television (65.9%) and the Internet (63.8%).



**Figure 6.** The sources of information about environmental protection

**Source:** Author's work based on the survey.

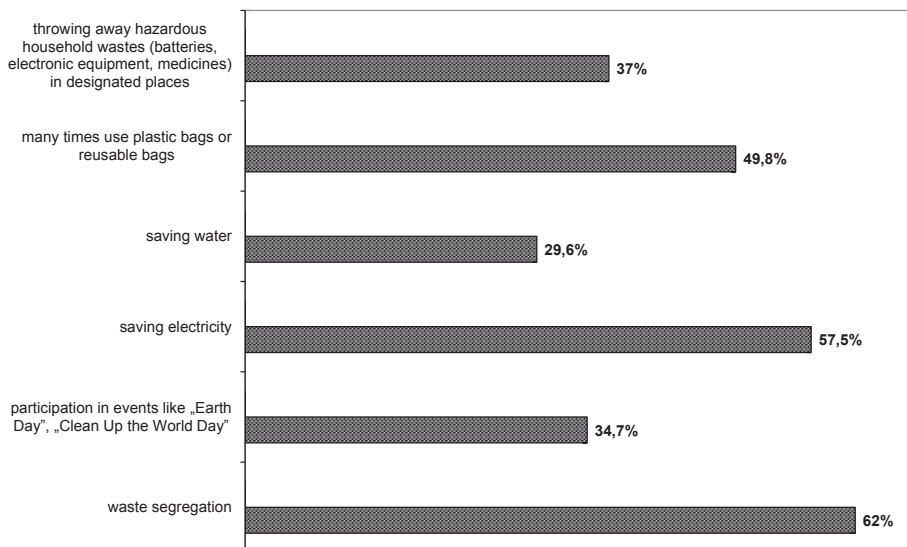
Very few respondents acquire their knowledge through the press (42.3%) or from school or the workplace (33.8%). Relatively few people indicated the use of books (27.5%), which may denote the relatively small role of this source of information. The widespread use of the Internet as an information source should be associated with the high proportion of youth that participated in the study (Fig. 3).

The survey conducted by TNS The Centre for Public Opinion Research Ltd. in 2012 on a nationwide representative sample indicated that TV constituted the most popular source of information (77%); the Internet (27%) and the press (22%) were less significant, and school (7%) was the least popular source [*Badanie świadomości...* 2012, p. 47].

However, the research on Natura 2000 areas that was conducted by the Institute for Sustainable Development pointed to the media (television, radio, and press – 53% altogether) and the Internet (28%) as the most popular sources of information about the environment; information boards were the least significant source (7%) [Stanaszek, Tędziągolska 2011].

With reference to the discussion of how to communicate with the public, one should note that TV and the Internet constitute the best news channels for the environment and Natura 2000 areas.

One of the indicators of the ecological consciousness of respondents includes pro-environmental behaviors in everyday life (Fig. 7). The most popular pro-ecological activities include segregating waste (62%), saving electricity (57.5%), using reusable shopping bags (49.8%), and disposing of problematic waste in designated places (36.9%). What is of the least interest to the respondents is participating in ecological events like “The Earth Day” or “Clean Up The World Day” (34.7%) and saving water (35.6%).



**Figure 7.** Daily pro-ecological behaviors

**Source:** Author’s work based on the survey.

The research conducted by the Institute for Sustainable Development during the national sample survey of tourists in the summer of 2011 (n = 500 people) resulted in similar data, except for saving water (71%) [Stanaszek, Tędziągolska 2011a].

The study by TNS Center for Public Opinion Research Ltd. from 2012, in contrast, indicates that up to 94% of the respondents save electricity, 79% reduce water consumption, and 76% use reusable bags for shopping. Interestingly, only 44% of them declare segregation of waste, and very few, at only 10%, participate in environmental actions [*Badanie świadomości 2012...*].

The comparison of the foregoing results might indicate some similarities in the respondents' behaviors. The majority of the respondents reduce water consumption, save electricity, and segregate waste, while far fewer are involved in direct ecological activities ("The Earth Day" or "Clean Up The World Day").

The declared behaviors may be, however, only indirectly connected with the issue of environmental protection; in fact, it is the economic factor that has the most direct and important impact. A certain premise in this regard may be the results of the TNS Center for Public Opinion Research Ltd. survey, which indicates that 59% of the respondents are not ready to bear additional costs connected with selecting pro-ecological solutions [*Badanie świadomości 2012 ... p. 95*].

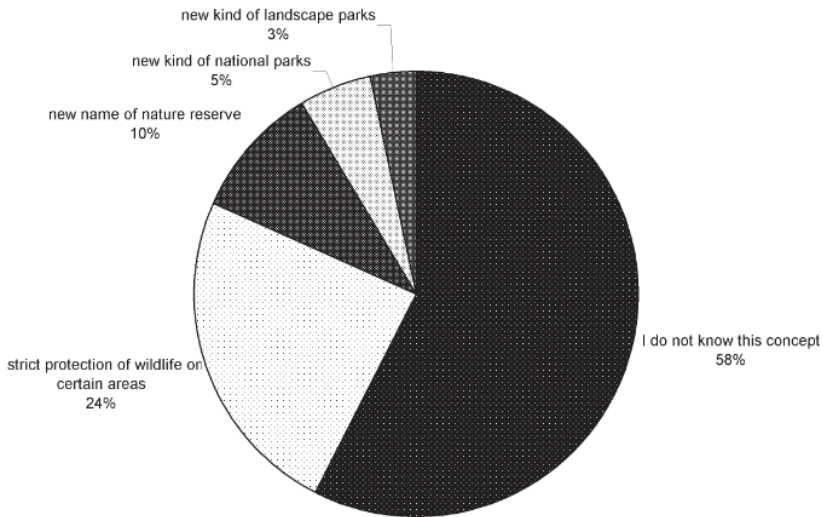
What should also be noted is the fact that the data refer to the entire sample that is under study. The next stage of data analysis will include an attempt to determine spatial variability and demographics.

*The Residents' Knowledge and Interest in the Tourist Attractions  
of Natura 2000 Areas*

Tourists' perceptions of the Natura 2000 network have a very short history in Poland, as this form of protection officially began only after Poland's accession to the European Union. The changes in the Nature Conservation Act were published in 2004 [*Ustawa o ochronie przyrody Dz. U. Nr 92 poz. 880*], which initiated the ongoing process of implementing crucial changes within the field of environmental protection in Poland.

The views presented in the literature state that the level of people's knowledge of the European Ecological Network Natura 2000 is still insufficient [Głabiński 2012; Kamieniecka 2012; Pietrzyk et al. 2009, pp. 407–414; Stanaszek, Tędziągolska 2011; Stanaszek, Tędziągolska 2011a]. It constitutes a very significant problem in the process of social communication between the authorities and the residents of coastal towns. The residents' level of knowledge about Natura 2000 areas is crucial for the further development of tourist functions when taking the principles of sustainable development into consideration. With neither social support nor joint effort, the process of implementing the Natura 2000 network will be inefficient and will abound in numerous conflicts [De Pierola et al. 2009]. This was the reason that a question on the questionnaire concerned knowledge of the notion of Natura 2000 (Fig. 8). The results confirm that only 17% of the residents of Poland's coastal areas correctly interpret the concept. The nationwide

survey conducted by TNS Center for Public Opinion Research Ltd. in 2012 indicated that as many as 27% of the respondents declared their knowledge of the notion [*Badanie świadomości...* 2012]. The 2011 questionnaire survey conducted by the Institute for Sustainable Development in Jastarnia and Łeba signified, in contrast, a bit higher (30%) level of knowledge of the notion [Stanaszek, Tędziągolska 2011].



**Figure 8.** The knowledge level of the concept of Natura 2000 areas

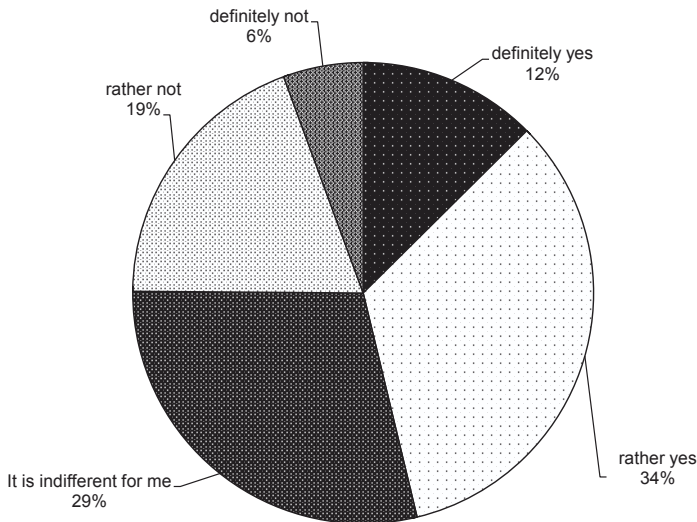
**Source:** Author's work based on the survey.

The low level of knowledge results from, among other things, the fact that such forms of environmental protection as national parks, nature reserves, and landscape parks have existed for many years, and information about them is widely known and readily available, while the Natura 2000 areas constitute an exception in this regard [De Pierola et al. 2009; Ziarnek, Piątkowska 2000]. In Poland, it is also related to the fact that it was not until 2008 that basic information about Natura 2000 was introduced in an elementary range to curriculum for children and youth. [*Rozporządzenie Ministra Edukacji Narodowej z dnia 23 grudnia 2008 r.*].

Such a high rate of ignorance among residents combined with Europe's largest spatial range of Natura 2000 sites located in the coastal areas leads to the conclusion that the existence of this form of environmental protection is still hardly reflected in the social awareness. This fact is quite surprising in light of the range of sites covered by this form of nature conservation in the concerned area. This, therefore, indicates the need for urgent and

wide-ranging awareness-raising activities that should be undertaken on the part of the administration responsible for implementing the Natura 2000 network.

Another issue was the attempt to clarify the perception of Natura 2000 sites as attractive holiday destinations. As assumed, the areas of Natura 2000 can be considered to be the healthiest ones across Europe. Furthermore, integration into the network is a kind of distinction for rural areas that are often marginalized in terms of economic development. This is, in the case of towns located in the hinterland of the Polish coastal zone, a chance for mobilization towards the preservation of traditional methods of cultivation and promotion of healthy food. Unfortunately, only less than half of the respondents (47%) stated that their choice of holiday destination may be affected by the existence of protected areas (Fig. 9). The low level of their awareness of the Natura 2000 network is probably a factor in this (see Fig. 8). In general, the residents still fail to see an opportunity for taking advantage of the brand of Natura 2000 to promote more environmentally friendly forms of tourism or to address tourists with motivations outside of simple recreation.



**Figure 9.** The influence of the existence of protected areas on the choice of holiday destinations

**Source:** Author's work based on the survey.

The results are confirmed in the residents' opinions of tourists' interest in Natura 2000. The majority of them (62%) do not see an increase in tourists' interest in the region because of the existence of Natura 2000

sites. This can be explained by the fact that most of the area's tourists have a strong recreational motivation (Sun, Sea, Sand).

The data collected by the Institute for Sustainable Development indicate that 64% of tourists declare their interest in recreation in the areas of particular natural values [Stanaszek, Tędziągolska 2011]. On the other hand, a sea beach is not often identified with protected natural value.

These views were confirmed by responses to the question concerning the increase in money-making opportunities provided by the Natura 2000 network in the respondents' places of residence. The vast majority of the respondents (74%) do not see any economic benefits of Natura 2000. Undoubtedly, there are several reasons for this; the most significant one, however, is related to the absence of a relationship between tourists in the region and the establishment of the Natura 2000 network. Tourists were in the region even before it was protected. Similarly, they are currently visiting the region without an awareness of or interest in the existence of a new form of environmental protection.

This is yet another argument implying that Natura 2000 is still not regarded as a tourism product. The residents still have not formed positive associations with this form of environmental protection and, therefore, are not conscious of the possibility of promoting their places of residence through their connection with Natura 2000 sites.

Furthermore, the tourists coming to the area do not have any particular expectations in this regard, as the tourism products that they might associate with Natura 2000 have not been created yet [Głabiński 2014].

What constitutes a separate issue is the question of whether the residents perceive any positive effects of the process of implementing the Natura 2000 network in their places of residence. That is why residents were asked if they felt they were benefitting from investment activity related to Natura 2000. The vast majority of the population (69%) did not, unfortunately, see any positive changes in the conditions of public infrastructure. Though this was one of the objectives of the Natura 2000 sites, positive change is still barely perceptible for the residents. It probably results from huge delays in the process of implementing the Natura 2000 network in all of Europe [De Pierola et al. 2009]. For this reason, during awareness-raising activities, the administration needs to put an emphasis on how citizens could potentially benefit from Natura 2000, rather than only discussing management limitations connected with the introduction of protective regimes.

The results of this study should prompt the authorities to increase the participation of residents in the development and management of Natura 2000 sites. They should consider the examples of Thanet Coast, England, where a broad dialogue with the public resulted in full acceptance for the idea of Natura 2000, and the Overijssel province in the Netherlands, where the local community was not sufficiently informed about the concept [Beuen, de Vries 2011]. These methods of introduction resulted in completely differ-

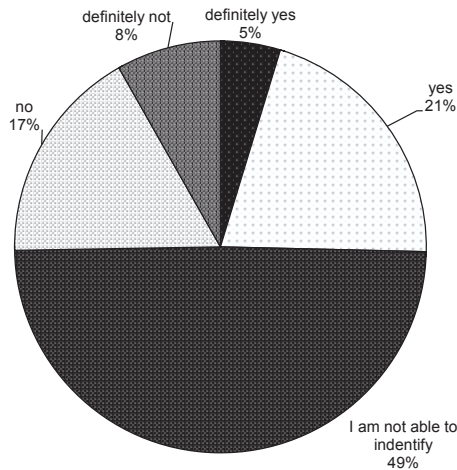
ent attitudes, from complete acceptance in England to a large distrust in the Netherlands.

As was previously mentioned, the participation of conscious residents is essential in the process of implementing the European Ecological Network Natura 2000. That is why residents were asked whether they were aware of their ignorance of the subject and if they expected information on Natura 2000 areas. This is significant, as more conscious residents would be able to advocate for the conservation of natural resources located in Natura 2000 areas, even if they did so for economic reasons. This could be accomplished by promoting environmentally valuable areas that would be visited by more conscious tourists who would be willing to pay more. Thirty-five percent of respondents in Poland in 2012 declared participating in such actions related to pro-ecological projects [Badanie świadomości... 2012, p. 95].

Most residents (56%) are not, unfortunately, interested in any information on the subject. They probably consider Natura 2000 to be a subject that is not of their concern. This issue has a wider meaning in the field of communication and the resolution of potential conflicts concerning Natura 2000 sites that have emerged between the administration and citizens.

The vast majority of residents (74%), many of whom are involved in service activities related to tourism, are not able to determine whether the availability of information on the possibility of exploring Natura 2000 areas is sufficient (Fig. 13). This is yet another indicator showing that the inhabitants of coastal areas in Poland are still quite unfamiliar with the issue.

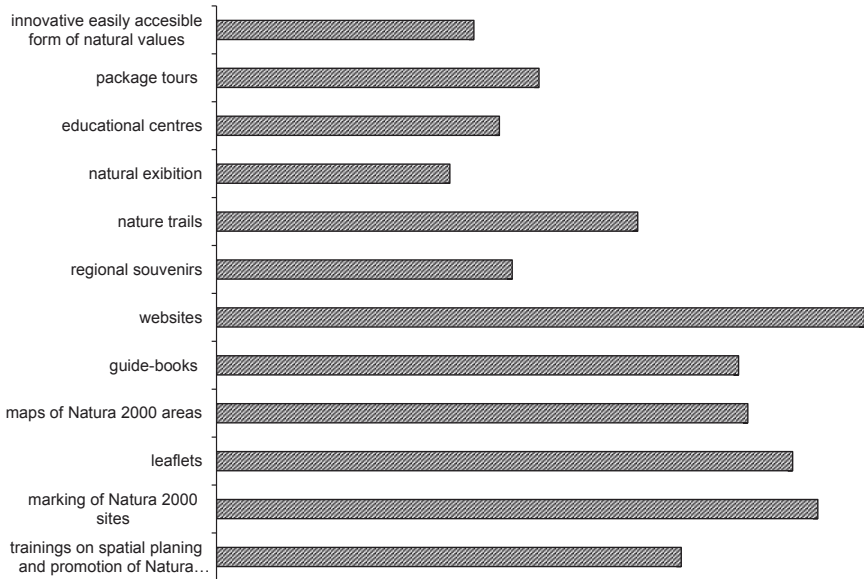
Despite such low interest in information on Natura 2000, the respondents were asked about the sources of information that they believe would be attractive to potential candidates (Fig. 10).



**Figure 10.** Is the information on the tourist attractions of Natura 2000 sites accessible enough?

**Source:** Author's work based on the survey.

The respondents most frequently indicated that they prefer to be informed through the following types of media: websites, leaflets, maps, and the marking of Natura 2000 sites (Fig. 11). Respondents were least interested in becoming familiar with natural exhibitions in the field, visiting educational centers, or innovative forms of providing tourist assets.



**Figure 11.** Proposals for the promotion strategy and sources of information on Natura 2000 sites  
 Source: Author's work based on the survey.

The conclusions drawn from the study indicate that only a certain portion of residents are interested in information concerning tourist attractions in the area. These may be people who are more aware of their lack of knowledge of Natura 2000. This confirms the previous statement that Natura 2000 is a concept that is correctly defined only by a small portion of those residing in coastal towns in Poland. The others are not familiar with the issue, nor are they interested in it. This will likely remain unchanged until government action affects their vital interests.

### Conclusion

In conclusion, what should be emphasized is the fact that the results of the study presented in this paper are not representative and, therefore, any generalizations should be made with caution. The analysis of the survey

results both complements and confirms earlier opinions quoted in the literature and, moreover, it allows the following conclusions to be made.

The vast majority of the residents of Polish coastal towns (75%) state that environmental protection is a significant issue for them.

1. More than half of the respondents claim to participate in pro-ecological behaviors in their daily lives. These involve saving electricity, segregating waste, or using reusable shopping bags. Economic issues (a reduction in the cost of living) may determine such behaviors. This is suggested by the fact that only 10% of the respondents selflessly participate in pro-ecological actions (such as “The Earth Day” or “Clean Up The World Day”).
2. The vast majority (83%) of people residing in Poland’s coastal areas are not able to correctly interpret the concept of Natura 2000. This, combined with Europe’s largest range of this form of nature conservation, should prompt urgent awareness activities.
3. Less than half of the residents under study (47%) are aware that the protected areas are attractive to tourists.
4. More than half of the population does not see an increase in tourists’ interest in their region (62%) resulting from the establishment of Natura 2000 sites, and 74% do not see any benefits at all.
5. The residents do not notice any benefits in the development of public infrastructure (64%), the rise of which was associated with the protection of Natura 2000 sites.
6. The majority of residents (56%) are interested in information on Natura 2000 sites.
7. The vast majority of respondents (74%) have no discernment on the availability of information on Natura 2000, which indicates a lack of interest in this issue.
8. Area signage, websites, and leaflets are the most preferred sources of information on the Natura 2000 network.

The analysis presented above gives a very worrying picture of the level of awareness of the Natura 2000 network among the residents of Poland’s coastal areas. Such knowledge is fragmentary and incomplete, and the level of interest is rather low. This fact, combined with data indicating that the spatial extent of the Natura 2000 network is the largest in West Pomerania and one of the largest in Pomerania, indicates that it is necessary to take comprehensive measures to prevent the emergence of large-scale social conflicts of an environmental nature.

Obviously, these results should be approached with caution. Imperfections in the surveying methods should be taken into account. However, what should be emphasized is the fact that the results correspond with data derived from other studies of a national character. Therefore, it can be concluded that a social dialogue must be opened between the administration that is responsible for the implementation of the Natura 2000 network, resi-

dents, and businesses operating in the tourism industry. The first step in this process should be to raise the environmental awareness of residents. Without any such action, the European Ecological Network Natura 2000 will face serious obstacles in the Polish region of the Baltic Sea coast.

Some authors [Bórzcel, Buzogany 2010; Cent et al. 2014] emphasize the negative effects of the lack of participation of local communities in the creation of Natura 2000 sites in new EU countries. They conclude that when it comes to Poland, Romania, and Hungary, the administration is often reluctant to begin a dialogue with local communities concerning the Natura 2000 network. Such an attitude does not contribute to the effective implementation of protective measures and, consequently, negatively affects the whole society.

In conclusion, it should be noted that the postulates presented above are consistent with the objectives of sustainable development. The objectives of the Natura 2000 network cannot be obtained without the consent of the local communities that host the sites. The authorities should conduct the consultation process with due diligence and without neglecting their social partners. It should, furthermore, be emphasized that, so far, many mistakes have been made in this field, and it is not the fault of local residents.

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## POSTRZEGANIE OBSZARÓW NATURA 2000 PRZEZ MIESZKAŃCÓW NADMORSKICH TERENÓW W POLSCE W KONTEKŚCIE MOŻLIWOŚCI ROZWOJU TURYSTYKI

### Abstrakt

**Cel.** Celem badań było określenie poziomu świadomości ekologicznej mieszkańców, ich wiedzy oraz postaw wobec nadmorskich obszarów Natura 2000. Ponadto w badaniu podjęto próbę określenia potrzeb mieszkańców dotyczących preferowanych źródeł informacji o tej nowej formie ochrony przyrody.

**Metoda.** Badanie ankietowe zostało przeprowadzone na grupie 5848 mieszkańców w okresie od lata 2012 do lata 2013r. Kwestionariusze ankiety były rozdawane i zbierane przez ankietatorów wśród mieszkańców miejscowości nadmorskich (metoda PAPI), a dobór respondentów miał charakter celowy.

**Wyniki.** Zdecydowana większość ankietowanych reprezentowała niezbyt wysoki poziom świadomości ekologicznej, który przejawiał się podejmowaniem działań proekologicznych przede wszystkim z powodów ekonomicznych (65%). Przeważająca większość respondentów (83%) nie potrafiła prawidłowo zdefiniować pojęcia Natura 2000, a 74% z nich nie dostrzegало żadnych korzyści z istnienia tej formy ochrony przyrody.

**Ograniczenia badań i wnioski.** Badanie ankietowe zostało przeprowadzone na celowo dobranej (nie reprezentatywnej) próbie mieszkańców, ale uzyskane wyniki są porównywalne z innymi danymi dotyczącymi tego problemu publikowanymi w literaturze. Z tego powodu można uznać, że uzyskane wyniki są wiarygodne.

**Implikacje praktyczne.** Wyniki badań mogą zostać wykorzystane przez organy administracji odpowiedzialne za prowadzenie działań związanych z podnoszeniem świadomości ekologicznej mieszkańców ze szczególnym uwzględnieniem obszarów Natura 2000.

**Oryginalność.** Jest to pierwszy artykuł, który prezentuje wyniki badań ankietowych dotyczących obszarów Natura 2000 prowadzonych na terenie wszystkich 3 województw nadmorskich w Polsce.

**Rodzaj pracy.** Artykuł prezentuje wyniki badań empirycznych przeprowadzonych metodą ankietową na próbie 5848 mieszkańców miejscowości nadmorskich w Polsce.

**Słowa kluczowe:** Natura 2000, świadomość ekologiczna, turystyka zrównoważona, konflikty ekologiczne.