

## Ecological awareness of tourists in the coastal areas of Poland - preliminary results of the survey

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**Abstract.** The article presents the results of the questionnaire survey studying the level of Polish tourists' ecological awareness, as well as the degree of their familiarity and interest in the European Ecological Network Natura 2000 in the coastal areas. The survey was held in the years 2012–2013 and was conducted among the respondents visiting the Polish Baltic coast. The majority of tourists (80%) arriving at the seaside for recreational purposes declare a high level of interest in environmental protection and daily pro-ecological behaviours. The most popular sources of information on the environment comprise television and the Internet. The majority of tourists express their interest in recreation in protected areas, yet up to 82% of them are not familiar with the notion of Natura 2000. The knowledge about the locations of Natura 2000 sites in the vicinity of tourists' holiday spots is equally poor. The visitors to the coastal areas are highly critical of the availability of information on Natura 2000 and indicate the information boards, websites and leaflets as the most desired sources of information.

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## 1. Introduction

The statement that tourism is nowadays a very influential area of the economy is commonly supported by administrative authorities, politicians, entrepreneurs and, eventually, by tourists themselves. It particularly concerns the coastal areas of Poland which concentrate the most significant part of tourism activity. Tourists are attracted to considerable environmental values and the coast of the Southern Baltic Sea is one of the examples of such areas. A hitherto conducted survey confirms that leisure tourism constitutes the most dominant form of coastal recreation (Głąbiński, 2008; Matczak, Rydz, 2001; Milewski, 2005; Szwichenberg, 2006). Unfortunately, this model of tourism, through its seasonal flow of tourists in summer and the forms of undertaken activities, contributes to environmental degradation. The data of the Central Statistical Office states that in 2012 Poland's coastal areas (Zachodniopomorskie and Pomorskie Voivodships) were visited by approx. 4 million tourists (Tourism in 2012). Therefore, an important question arises of how to reconcile the maintenance of tourism with the needs of nature conservation.

Many authors (Orams, 1995; 1997; Duim, Caalders, 2002; Ballantyne, Packer, 2005; Stonich, 2005; Toczek-Werner, Sołtysik, 2006; Ballantyne et al., 2009; Nyaupane, Poudel, 2011) discern the above-mentioned problem in various places of the world and discuss the relationship between tourism, environment and local communities. They point out the appropriate management of nature-based tourism can play a big role in shaping the environmental awareness of the society. Moreover, they emphasise that although the need for wildlife conservation and tourism development are two separate objectives, which may have a positive influence on the livelihood, there is a strong interdependence between them.

Therefore, one of the major challenges is the implementation of tourism policy, which takes into account such issues as nature conservation, businesses of local communities and the needs of tourists. What constitutes a fundamental mistake in this respect is regarding the needs of residents as a problem hindering the preservation of the natural environment (Stonich, 2005; Beunen, de Vries, 2011; Nyaupane, Poudel, 2011). All previous experiences within the field of implementation of the Integrated Conser-

vation and Development Project are not optimistic. In most cases, the aims and goals of the institutions implementing the above-mentioned activities (international organisations, governments) did not consider the complex social and economic reality, as well as the local determinants of the environment (Stonich, 2005; De Pierola et al., 2009; Beunen, de Vries, 2011). Thus, it is widely assumed that the implementation of projects connecting socio-economic development through community-based tourism with the conservation issues is conditioned by taking into account wide participation of local communities and the appropriate system of educating those who visit the areas of natural value (Orams, 1996; Duim, Caalders, 2002; Ballantyne, Packer, 2005; Nyaupane, Poudel, 2011).

Unfortunately, the majority of visitors, in contrast to administration and enterprises, are far less interested in taking environmental actions. Despite declaring positive attitude towards sustainable tourism, few tourists are aware of the connection between tourist destinations and environmental protection (Budeanu, 2007). The factor that positively contributes to changing tourists' attitudes and behaviours towards the natural environment is the way in which the values of nature are exposed and interpreted (Orams, 1996; 1997; Ballantyne et al. 2009). The natural values exposed in a proper way capture the imagination of visitors and, consequently, help increase the environmental awareness of tourists.

It should be noted that people's attitude towards natural environment is dependent on the level of their ecological awareness (Domka, 1998; Bohdanowicz, 2006; Ballantyne et al., 2009; Kowalczyk, 2010). The research on the issue indicates that it remains at a fairly low level (Domka, 1998; Bohdanowicz, 2006; Głąbiński, 2008; Pietrzyk et al., 2009; Kowalczyk, 2010; Nycz-Wróbel, 2012). This applies to a large part of the population and results in certain behaviours towards the environment that also occur among tourists.

In 2004, following their accession to the European Union, ten countries of Central and Eastern Europe - including Poland - had to implement the objectives of the project named "The European Ecological Network Natura 2000" as the most important element of the system changes connected with nature conservation in these countries (Börzel, Bu-

zogany, 2010). As a result, a large part of Polish territory which had remained beyond any forms of environmental protection was covered by specific protective rigors defined by the EU directives. The process, in fact, took place without conducting any public consultation (De Pierola et al., 2009; Pietrzyk et al. 2009; Ziarnik, Piątkowska, 2010; Głąbiński, 2012). Moreover, no broader campaign promoting a new form of conservation was carried out among the society. Such behaviour of the authorities responsible for the implementation of new regulations relating to the protection of the environment is completely contrary to the views presented earlier.

From 60% to over 80% of Poland's coastal areas were incorporated into Natura 2000 network (European Environment Agency, 2011). These are the highest rates in the whole European Union. For this reason, it is clear that the solution to this problem is now a very serious challenge, not only at the national level. Once the solutions to meet the needs of nature conservation, local communities and tourists have been found, they can be applied in all touristically attractive areas in Europe protected by Natura 2000 network.

Due to the problem outlined above, it is necessary to undertake a variety of activities that can contribute to solving the growing problems. Thus, the Association of "Human, Learning, Environment", in cooperation 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 in the years 2012-2014, mainly aimed at raising people's awareness of the marine and coastal areas of Natura 2000 and their knowledge about the potential use of the local resources in line with the principles of sustainable development. One of the activities the project involved was analysing the ecological awareness of tourists and residents of coastal towns in the vicinity of Natura 2000 sites in Poland.

## 2. Objectives

As mentioned above, the project took the form of information and education campaign in the coastal areas of Natura 2000. In order to identify the so-

cial needs in that field, the project was accompanied by the survey on ecological awareness. In view of rather widespread overuse of the concepts related to ecology, it is necessary to define the term 'ecology'.

What Domka (1998) 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." One should bear in mind that this approach to ecological awareness is only limited to the biosphere and does not cover the natural environment as a whole.

Poskrobko (2007) 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 particular social groups living in a given historical period. In a 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".

Considering the above, the specific objectives of the research were specified:

- defining attitudes and behaviours related to environmental protection in the respondents' daily lives,
- analysing sources of information on environmental protection among tourists,
- evaluating tourists' knowledge about the areas of Natura 2000,
- defining tourists' preferences and attitudes towards natural tourist attractions located in the coastal areas of Natura 2000,
- recognising tourists' needs in terms of promotion and information on tourist attractions located in the coastal areas of Natura 2000.

As it had been assumed, such specific objectives of the research should help respond two basic questions:

- 1/ Does the European Ecological Network Natura 2000, a relatively new form of environmen-

tal protection, have an impact on the preferences in terms of selecting holiday destinations among the tourists visiting the Baltic coast in Poland?

2/ Are the attractions of the natural environment located on the coastal areas of Natura 2000 territories of any interest to tourists?

What was of great significance from the viewpoint of the purpose of the survey was the fact that it was conducted in a place of a short-term stay of tourists. An average resident pays less attention to connections between the quality of recreation and the protection of the environment, for these remain far beyond the daily rhythm of one's life. It was assumed that tourists staying in the towns located nearby the Natura 2000 sites should have more knowledge and be more sensitive to the issues related to environmental protection.

### 3. Methodology

In view of the difficulties in determining the general population of tourists arriving at the coastal areas, the purposive sampling was applied in the questionnaire survey using the method of pen-and-paper interviewing (PAPI).

The survey was carried out in the places characterised by the concentration of tourism. The pollsters conducted the survey in the areas where doing it did not require a hurry, nor did it hinder the tourists from taking advantage of the attractions of the coastal resorts: museums, lighthouses open to the public, ferries, cruise ships harbours, railway stations, bus stations and, during the sunny weather, the beaches in 11 towns located along the Polish coast (Fig. 1).

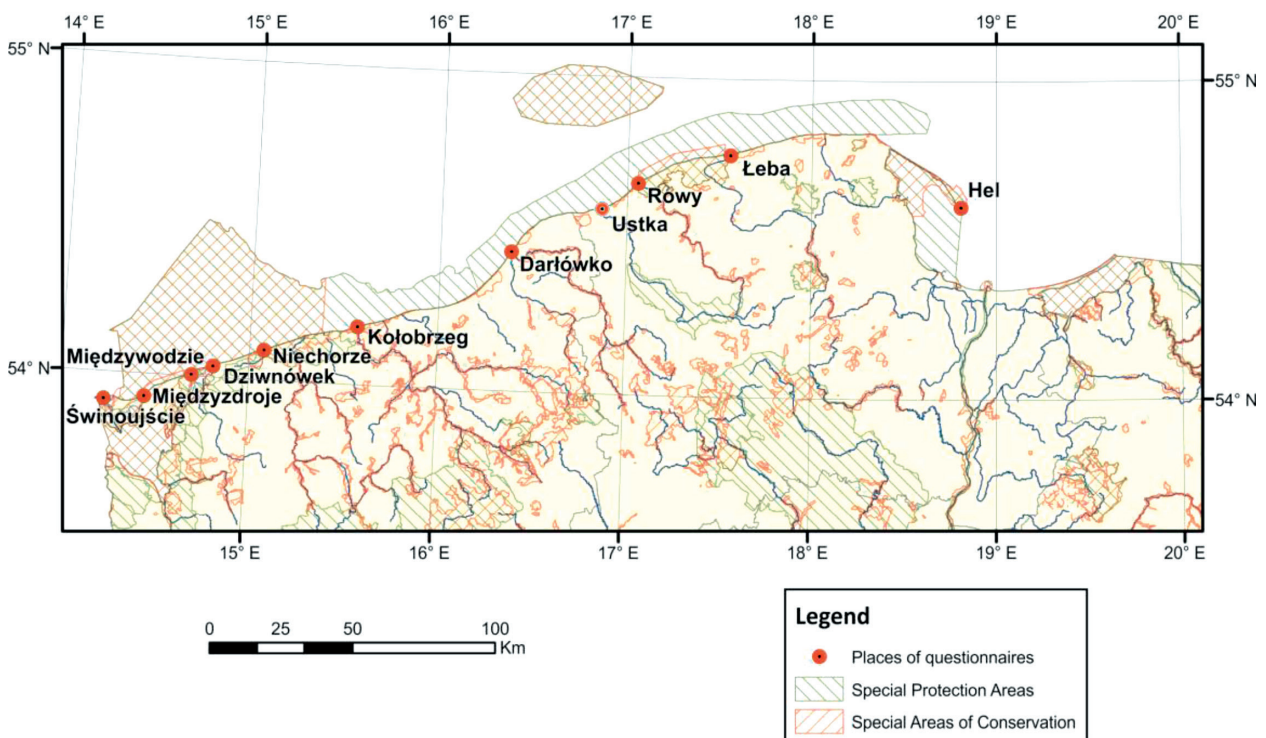


Fig. 1. Map of Natura 2000

Source: Own elaboration

The survey involved pollsters who provided respondents with a standardised questionnaire to be filled in. In case of doubts, the pollsters were obliged to provide necessary information. They also

instantly verified completeness of the responses. The questionnaire was anonymous and contained ten structured questions, as well as the respondent's particulars. The survey was executed by a team of



trained students delegated by the Institute of Tourism of the Faculty of Geoscience of the University of Szczecin. The field stage of the research was preceded by the pilot study performed among the students of the University of Szczecin and Szczecin's travel agents in June 2012.

After learning whether a potential respondent is a tourist or an inhabitant of a particular town, a pollster would present the questionnaire. In order to encourage people to participate in the survey, the pollsters informed that having filled in the questionnaire each respondent would be given a small gift with the Natura 2000 logo (shopping bag, reflective armband or a fridge magnet). If the survey was held in a campsite facility, the questionnaires were handed to the camp counsellors and, having been completed by the youth, they were picked up by the pollsters. The camp counsellors were particularly interested in conducting the survey as in that way they had an opportunity to accomplish the educational objectives of that form of recreation for children and young people. Moreover, the gifts that accompanied the survey were of much more interest to those younger respondents. The research was done between 20 June 2012 and 30 Sept. 2013. The data gathered from the completed questionnaires was entered by the pollsters into the computer system in which they could log via the project website. In total, the pollsters collected 23,877 questionnaires conducted among the tourists staying in the coastal towns of Poland.

Then, the data were developed in the form of summary reports subjected to a preliminary analysis. At this stage an in-depth statistical analysis has not been carried out.

## 4. Results of the survey

### 4.1. Demography of the survey cohort

Of the respondents, women (57%) outnumbered men (43%); according to the pollsters this was because women were more willing to participate in the survey.

The analysis of the age structure of the respondents indicates that young people constituted a large proportion of the survey cohort (Fig. 2). The elderly, in the pollsters' opinion, were reluctant to take part in the survey using different excuses (lack of time or lack of glasses, need of looking after children, etc.). Reaching the campers was, on the other hand, a lot easier task. What facilitated conducting the research on the youngest group (13-24-year-olds) was a large number of specialised facilities capable of accommodating a big number of young tourists concentrated in the coastal towns. This is why that group seems over-represented (49%) in the survey cohort. On the other hand, the young constitute a group of people the vast majority of whom are still studying and therefore have a formal contact with ecological education.

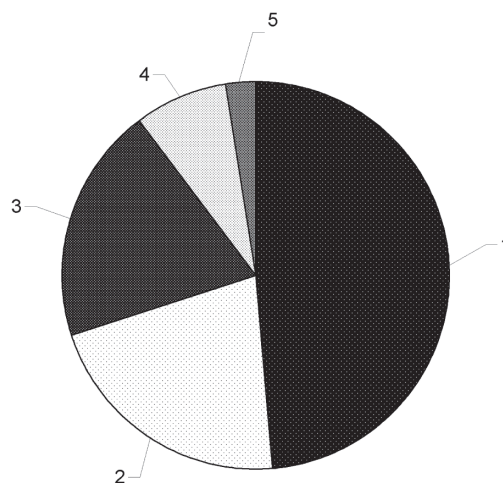


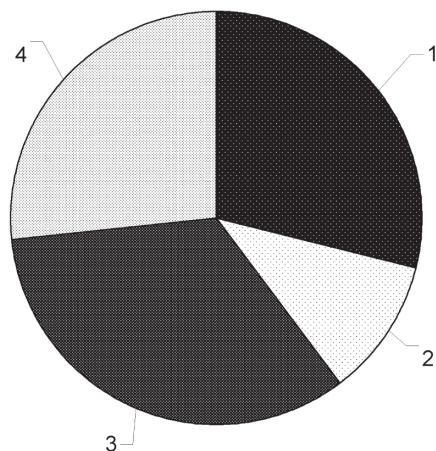
Fig. 2. The age structure of the respondents

Explanation: 1 – 13-24 years old, 48%; 2- 25-34 years old, 21%; 3 – 35-54 years old, 20%; 4 55-65 years old, 8%, above 65 2%

Source: Own elaboration based on the questionnaire survey

The fact that such a large proportion of young people (including junior high school students) participated in the survey resulted in a telling number of the respondents with primary education (Fig. 2).

Sixty per cent of the respondents possessed secondary education or a university degree which should demonstrate their relatively good knowledge of the environmental problems.



**Fig. 3.** The education structure of the respondents

Explanation: 1 – elementary 29%; 2- vocational; 3 – secondary; 4 university education

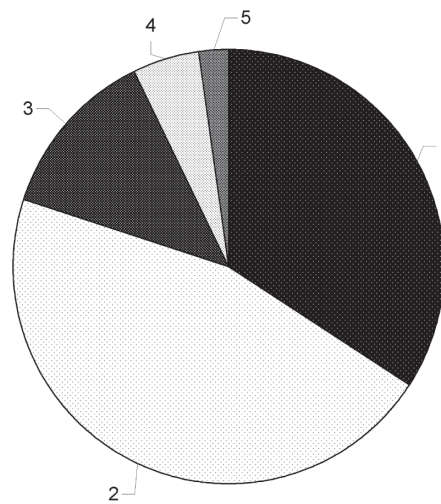
Source: Own elaboration based on the questionnaire survey

#### 4.2. Environmental protection in the respondents' daily life

According to the literature reviews, a crucial methodological problem is the relevance of the selected indicators. This is understood as an observable state of affairs which may be an indicator of a phenomenon that cannot be observed directly (Mayntz et al., 1985). The empirical indicators that literature uses for assessing the level of environmental awareness usually include: consumer behaviours, communication, waste management and problems of protected areas (Bohdanowicz, 2006; Ballantyne et al., 2009). Unfortunately, measuring the respondents' attitudes towards the natural environment is very difficult (Orams, 1997). One of the reasons is the fact that these issues are widely discussed in the public debate and the respondents are familiar with the "politically correct" answers.

Having taken the above into account, it was assumed the approach to the basic issues of environmental protection might be one of the indicators pointing at the level of ecological awareness. Hence, one of the survey questions referred to the significance of environmental protection in the respondents' everyday life (Fig. 4).

The majority of the respondents (80%) stated environmental protection is an important issue. This result may be compared to the ones of the research conducted in 2010 among the inhabitants of Podkarpackie Voivodeship, which indicated a merely average interest in the environmental protection issues (Nycz-Wróbel, 2012). It may, therefore, be stated that tourists visiting coastal areas pay more attention to environmental issues. Such a high proportion of the respondents emphasising the importance of environmental protection should reflect the ensuing pro-ecological activities that can be manifested by e.g. consumer behaviours. It may, furthermore, have an influence on choosing both a holiday destination and forms of tourism activity.



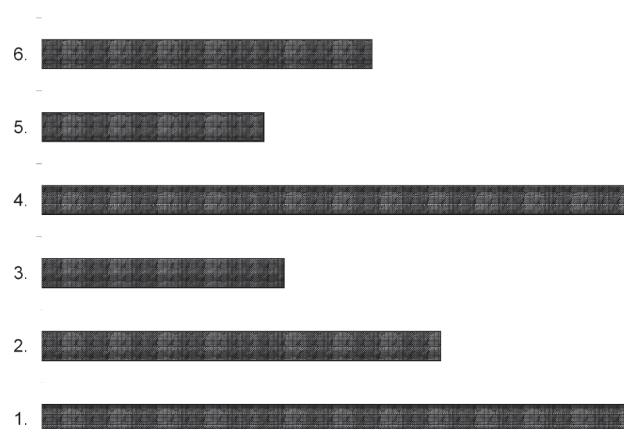
**Fig. 4.** Is environmental protection a significant issue to you?

Explanation: 1 – very important 34%; 2 - important 46%; 3 – I do not mind 13%; 4 – not important 5%; 5- completely irrelevant 2%

Source: Own elaboration based on the questionnaire survey

Another key issue raised in the survey concerned the respondents' sources of knowledge about environmental protection (Fig. 5). The results indicate two of them: television (65.2%) and the Internet (64.9%). By far fewer respondents acquire their knowledge through the press (43.8%), or from school or workplace (36.2%). Relatively few respondents pointed out books (26.6%), which may denote a decreasing role of the printed word in the

process of gaining knowledge and shaping public opinion. Similar results were obtained in the research conducted in 2011 by the Institute for Sustainable Development among junior high school students from all over Poland. They pointed to television (86%) and the Internet (55%) as the main sources of information about environment; school textbooks (28%) or books and the press (18%) being less significant (Stanaszek, Tędziągolska, 2011).



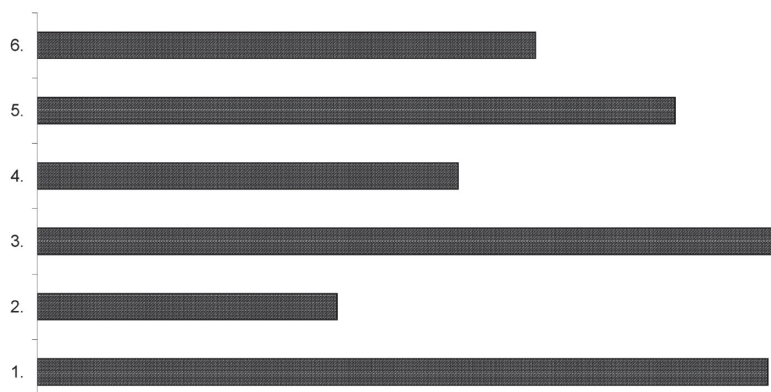
**Fig. 5.** The sources of information about environmental protection

Explanation: 1 – TV 65,2%; 2- press 43,8%; 3 – books 26,6%; 4 – Internet 64,9%; 5- family, friends 24,3%; 6- school, college, university, workplace 36,2%

Source: Own elaboration based on the questionnaire survey

In accordance with the above, it was assumed that daily pro-ecological behaviours may constitute

one of the indicators of the level of the respondents' ecological awareness (Fig. 6).



**Fig. 6.** Daily pro-ecological behaviours

Explanation: 1 – waste segregation, 61,8%; 2 - participation in events like “Earth Day”, “Clean up the World Day”, 25,4%; 3 – saving electricity, 62,9%; 4 – saving water, 35,6%; 5- many times use plastic bags or reusable bags; 6 - throwing away hazardous household wastes in designated places, 42,1%

Source: Own elaboration based on the questionnaire survey

The most popular pro-ecological activities include saving electricity (62.9%), segregation of waste (61.8%), using reusable shopping bags (53.9%) and disposing of problematic waste in designated places (42.1%). What is of the least interest to the respondents is participating in ecological events like “The Earth Day” or “Clean Up The World Day” (25.4%) and saving water (35.6%). The research conducted by the Institute for Sustainable Development during the national sample survey of tourists in summer 2011 (n = 500 people) resulted in the similar data, except for saving water (71%) (Kamieniecka, 2012). The difference might be due to the question in the survey whether water is saved through exchanging seals in the plumbing system is too narrow. Nevertheless, more than half of the respondents declared three of the mentioned pro-ecological behaviours, which may indicate quite a high level of ecological awareness of the survey cohort. The declared behaviours may be, however, only indirectly connected with the issue of environmental protection; in fact, it is the economical factor (daily savings) that has the direct and most important impact. This problem was emphasised by Ballantyne et al., (2009)

who compared the opinions of visitors in the botanical gardens (easily available to the public) and wildlife tourism participants (requiring much effort and cost). As the authors indicate, tourists' attitudes and daily ecological behaviours show a positive relationship. Those who accidentally visit natural attractions (botanical gardens) are less involved in ecological activities than the tourists motivated by nature-based cognitive aspects.

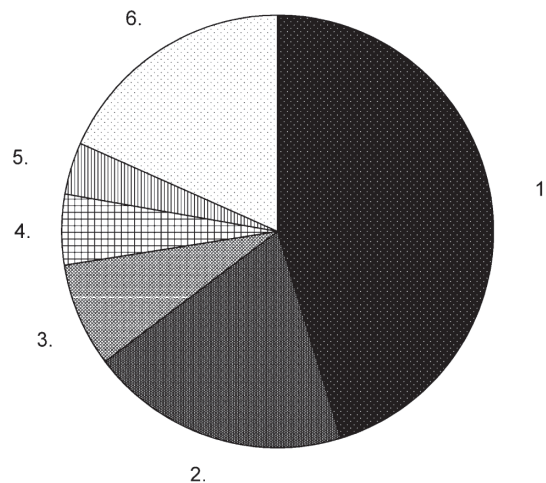
To compare the foregoing results with the ones of the national survey performed on junior high school students, with regard to their personal behaviours, 45% of the respondents do not take any pro-ecological actions and only 4% of them declare saving electricity (Stanaszek, Tędziągolska, 2011). On the other hand, about 50% of the respondents state that in their family homes they use energy-saving light bulbs or reusable shopping bags and they segregate rubbish. The comparison of the results of both surveys might indicate that it is the adults who attach more importance to pro-ecological behaviours. While it is difficult to clearly define the reasons for this phenomenon, it might be presumed the above-mentioned factors constitute one of them.



#### 4.3. Tourists' knowledge and interest in attractions of the Natura 2000 sites

Tourists' perception of the Natura 2000 network has a very short history in Europe as its implementation process is not complete (Börzel, Buzogany, 2010; Beunen, de Vries, 2011). In Poland, the changes in the Nature Conservation Act were pub-

lished in 2004 (Journal of Laws No. 92, item. 880 of 16 April 2004), which initiated the ongoing process of implementing crucial changes within the field of environmental protection. The views presented in the literature state that the level of people's knowledge of the European Ecological Network Natura 2000 is still far insufficient (Pietrzyk et al., 2009; De Pierola et al., 2009; Stanaszek, Tędziągolska, 2011; Stanaszek, Tędziągolska, 2011a; Głabiński, 2012; Kamieniecka, 2012).



**Fig. 7.** The knowledge level of the concept of Natura 2000 site

Explanation: 1 – I do not know this concept, 45%; 2 – strict protection of wildlife on certain areas, 19%; 3 – new name of nature reserve, 8%; 4 – new kind of national parks, 5%; 5 – new kind of landscape parks, 14%; 6 – form of nature protection, 18%

*Source:* Own elaboration based on the questionnaire survey

As mentioned in the introduction, the analysis of the level of tourists' knowledge about Natura 2000 areas is essential for further development of tourism in the coastal areas. For that reason, the questionnaire contained one question concerning the respondents' knowledge of that concept. The presented results (Fig. 7) indicate that up to 82% (sic!) of tourists staying on the Polish coast of the Baltic Sea are not familiar with the term or confuse it with other, previously existing forms of environmental protection.

The questionnaire survey the Institute for Sustainable Development conducted in Jastarnia and

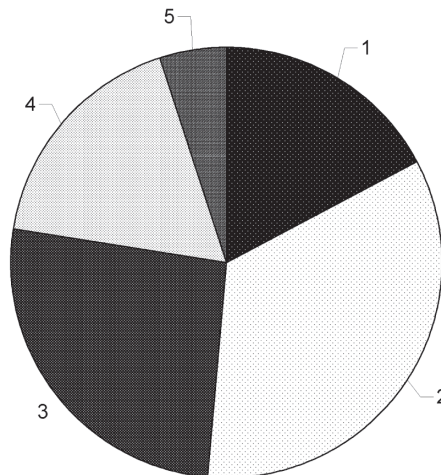
Łeba in 2011 demonstrated the knowledge of that concept by 30% of the respondents, which is slightly higher than the one in the present survey. Nevertheless, as the Institute's research states, it was still the lowest result, compared to other tourist regions of Poland (Stanaszek, Tędziągolska, 2011).

Such a high rate of tourists' ignorance in this field, combined with the spatial range of the Natura 2000 sites in the coastal areas, indicate that this form of environmental protection is poorly reflected in tourists' awareness.

Another question aimed at diagnosing whether tourists consider the presence of natural pro-

tected areas when selecting holiday destinations. More than half of the respondents confirmed (“definitely yes” – 17% and “rather yes” – 34%) they do pay attention to the existence of pro-

tected areas (Fig. 8). In conclusion, good condition of the natural environment at the site of planned holidays is of great interest to the majority of tourists.



**Fig. 8.** Does the existence of protected areas influence your choice of holiday destinations?

Explanation: 1 – definitely yes, 17%; 2 – rather yes, 35%; 3 – it is indifferent for me, 26%; 4 – rather not, 4%; 5 – definitely not, 5%

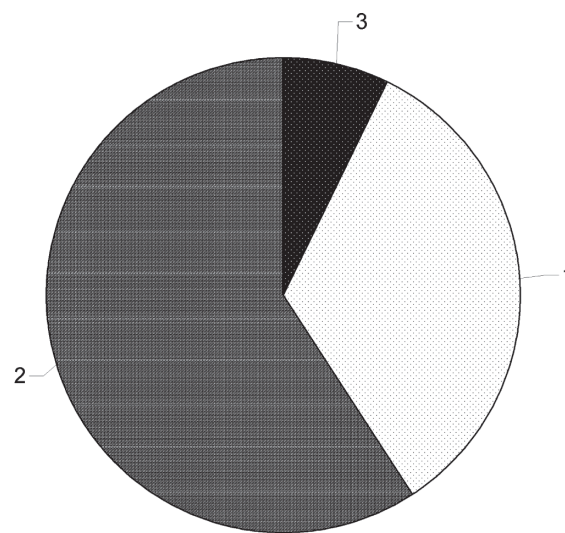
Source: Own elaboration based on the questionnaire survey

Tourists from Germany and the Netherlands represent similar opinions (Budeanu, 2007), which indicates that Poles behave similarly in this regard. On the other hand, up to 22% of the respondents declared their lack of interest in the existence of protected areas at their holiday sites. This may result from their poor knowledge of the concept of Natura 2000 (Fig. 7), as well as their ignorance of the fact that this form of nature conservation exists in a substantial part of the Polish Baltic coast. Furthermore, as stated before, the factor that motivates Polish people to arrive at the sea is a beach holiday (see: Introduction). Mass tourists who are focused on the use of the 3xS (*sun, sea, sand*) do not probably see the beach as a natural asset that can undergo protection.

The results of the research conducted in 2011 by the Institute for Sustainable Development enumerate other reasons for tourists' arrival at the Baltic

Coast: “interesting shows and events” or “sight-seeing” (Stanaszek, Tędziągolska, 2011). One may, therefore, state for a large group of tourists environmental attractions that enable sunbathing and swimming are not the only reason for their arrivals at the sea.

Seaside tourists were asked about the locations of the Natura 2000 areas to be found in the vicinity of their holiday residence. This aimed at analysing their interest in the Natura 2000 network. A vast majority of those arriving at the seaside for tourism (93%) are not familiar with the locations of these forms of environmental protection (Fig. 9). What is more, the remaining 7% of the respondents indicated the locations which in many cases were incorrect or concerned the national parks or nature reserves that, though part of the Natura 2000 network, were not identified with it.



**Fig. 9.** The knowledge of the locations of Natura 2000 areas near the place of holiday residence

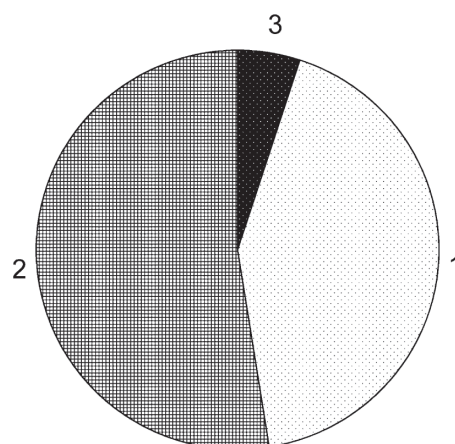
Explanation: 1 – yes but I do not know where it is, 34%; 2 – I have not heard of the existence such area nearby, 59%; 3 – yes, it is on..., 7%

Source: Own elaboration based on the questionnaire survey

The responses indicate the existence of the Natura 2000 sites in the vicinity of a holiday residence is still of no interest to the holidaymakers. There may be several reasons for that phenomenon, such as insufficient labelling of the Natura 2000 sites in the area and the lack of other information and promotion activities in the coastal resorts.

In order to develop that issue, the tourists were asked about their interest in visiting the sites of the

Natura 2000 network. The results of the survey are even more unequivocal. The tourists do not plan to visit these areas (42%) or are not familiar with the tourist attractions located in the Natura 2000 sites (53%) (Fig. 10). The fact that as many as 95% of the tourists are not fond of visiting the sites proves these sites lack tourist promotion almost totally.



**Fig. 10.** The level of interest in visiting the tourist attractions of Natura 2000 sites located in the vicinity of tourists' holiday residence

Explanation: 1 – I am not interested, 42%; 2 – I do not know such attractions and therefore do not plan their visit, 53%; 3 – Yes I am interested, 5%

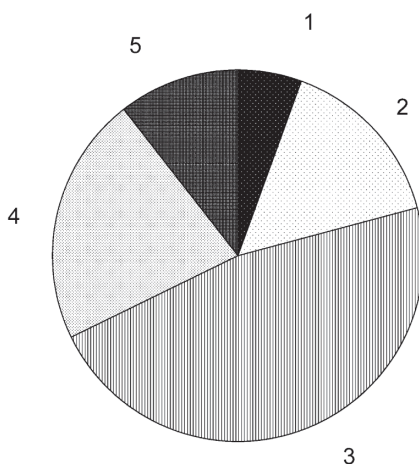
Source: Own elaboration based on the questionnaire survey

The tourists who visit coastal resorts are not familiar or are only partly familiar with the Natura 2000 sites and this probably constitutes one of the reasons for which they do not plan visiting them. It is highly likely that a great number of them stay in the Natura 2000 areas and are totally unaware of the very fact. Obviously, poor interest in visiting these sites may also result from the tourists' lack of cognitive motivation related to their holiday destinations.

Considering the fact that shaping ecological awareness is a long and thorough transfer of information, one must realise a serious gap in the process. Moreover, the fact these protected areas exist may be used not only for educational purposes, but also as a way of promoting sightseeing tourism in the coast and its neighbouring areas.

The foregoing aspect is emphasised by Szwichtenberg (2002) who claims the interest in the development of the areas of outstanding tourist and sightseeing value, which are located in Zachodniopomorskie Voivodeship, is still low. As the author also states, promoting such form of tourism might contribute to deconcentration of tourist activity in the coastal zone which, however, requires appropriate actions.

The tourists were also asked to assess the accessibility of information on the Natura 2000 sites (Fig. 11). The analysis of responses to that question confirms the previous ascertainment. As many as 79% of the respondents indicate the lack of information or are unable to evaluate the case. This proves the sources of information on tourist attractiveness of the Natura 2000 areas are still very scarce or do not exist at all.



**Fig. 11.** Is the information on the tourist attractions of Natura 2000 sites accessible enough?

Explanation: 1- definitely yes, 6%; 2- yes, 15%, 3 - - I cannot identify, 46%; 4 - no, 22%; 5 - definitely not, 10%

Source: Own elaboration based on the questionnaire survey

The problem emphasised in many studies on the implementation of the Natura 2000 network in Europe is, in this term, disclosed in its entirety (De Pierola et al., 2009; Pietrzyk et al., 2009; Ziarnik, Piątkowska, 2010; Głąbiński, 2012; Kamieniecka, 2012;). The lack of knowledge is due to, among others, difficulties in accessing the information on the Natura 2000 sites which, in case of tour-

ists, results in a low level of their awareness which, in turn, leads to tourists' lack of interest in both the Natura 2000 sites and the general issues of environmental protection. This phenomenon is, however, more general in nature, best defined by the following sentence: "Natura 2000 is not our business; it is the administrations' project and it needs to be accomplished without taking local societies



into consideration” (De Pierola et al., 2009). This creates the impression that Natura 2000 areas constitute the product of the actions of the authorities, and are not relevant to tourists and residents. The negative effects of the same erroneous policy of the authorities in the implementation of conservation projects can be observed in various places in the world (Duum, Caalders, 2002; Stonich, 2005). Despite the foregoing circumstances, 60% of tourists

arriving at the Baltic Coast are keen on exploring the Natura 2000 sites.

The desired ways of being informed, most frequently indicated by the respondents, comprise: websites, leaflets, maps as well as marking the Natura 2000 sites; regional souvenirs, visiting educational centres or becoming familiar with natural exhibitions in the field are of the least interest to the respondents (Fig. 12).



**Fig. 12.** The proposals for the promotion strategy and sources of information on Natura 2000 sites

Explanation: 1- marking of Natura sites, 45%; 2 – leaflets, 39%, 3 – maps of Natura sites, 37%; 4 - guide books, 30%; 5 – websites, 40%; 6 – regional souvenirs, 16,4%; nature trails, 28%; natural exhibition, 14,5%; educational centers, 14,5%; package tours, 20%; innovative easily accessible form of natural values, 15,4%

Source: Own elaboration based on the questionnaire survey

The conclusions drawn from the foregoing study indicate the majority of tourists possess very little knowledge of the existence of the Natura 2000 areas, as well as on tourist values of such areas and, therefore, they expect basic information in this respect. This confirms the previous statement that Natura 2000 is a concept that is correctly defined only by a small proportion of Polish tourists having their rest on the Baltic Coast.

## 5. Conclusions

The preliminary results of the questionnaire survey presented in the paper both confirm and develop

the previous views contained in the literature. Based on the foregoing results, one may draw the following conclusions:

1. Taking the difficulties in assessing public attitudes towards the environment, one can state that up to 80% of the respondents state environmental protection is a significant issue for them.
2. More than half of the respondents declare pro-ecological behaviours in their daily life. These involve saving water and electricity, segregating waste or disposing of hazardous waste in designated places. This should not, however, be identified only with a high level of environmental awareness, as it may be economic issues (reduction in the cost of living) that constitute an important factor favouring these behaviours.

3. The vast majority of tourists (82%) are not able to correctly identify the concept of Natura 2000.
4. More than half of the tourists under study (51%) confirm that, when it comes to selecting a holiday destination, they do pay attention to protected natural areas. This may indirectly indicate that slightly more than half of the tourists expect good state of the natural environment in their holiday spot.
5. There is very little knowledge on the subject of the location of the Natura 2000 sites in the vicinity of the tourists' holiday spots.
6. Nowadays, there is almost a complete lack (95%) of tourists' interest in exploring the Natura 2000 areas. As the majority of tourists (79%) indicate, one of its causes is undoubtedly very poor access to information on the subject. The main reason for tourist arrivals at the seaside, i.e. taking rest rather than sightseeing, constitutes yet another significant factor.
7. The majority of students (60%) are interested in the information on the Natura 2000 sites.
8. Area signage, websites and leaflets belong to the most desired sources of information on the Natura 2000 network.

The picture presented above is obviously incomplete as the foregoing data requires further analysis, especially in terms of its spatial aspect. Nevertheless, it can already be claimed that it is essential to undertake a number of promotional and information actions to increase interest in the Natura 2000 sites among the society; this, in turn, will indirectly contribute to the protection of such areas. As the objectives of sustainable tourism assume, raising awareness of the importance of the environment in protected areas will foster keeping species and habitats in their unaltered state. If the tourists remain uninformed about the ecological significance of these areas, further measures to protect the environment are unlikely to gain social acceptance. Therefore, it should be assumed implementing the objectives of the Natura 2000 network without simultaneously increasing ecological awareness of people benefiting from its attractions, will encounter great difficulties.

The issue of adapting the methods of shaping tourists' environmental awareness to current conditions undoubtedly constitutes a serious problem. Unfortunately, the majority of tourists are not

willing to adjust their short-term, holiday behaviours to the requirements of environmental protection. Thus, in addition to conducting information activities, one should bear in mind economic factors, such as admission and parking fees, as well as some local charges, will probably make up the most effective way of influencing the tourists with a lower level of environmental awareness (compare Fig. 5) (Budeanu, 2007). Local charges incurred on the behalf of local governments could fund the operations aiming at limiting the negative influence of tourism on the natural environment, including protected areas.

Summing up, it is worth quoting the opinion of the authors of the study on the Natura 2000 and the society (Natura 2000 i społeczeństwo) that the main mistake made in the past, was that "the first steps in the creation of the Natura 2000 network took place without the participation of European citizens" (De Pierola et al., 2009). This fact, regarding the knowledge gained in different parts of the world during the implementation of at least some of the projects related to environmental protection (Orams, 1997; Duim, Caalders, 2002; Stonich, 2005; Nyaupane, Poudel, 2011), in relation to an area on such a stage of development as the Union Europe, provokes serious thought and requires intensifying multiple activities.

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