NATURAL AND CULTURAL VALUES OF THE CROSS-BORDER AREA OF SZCZECIN LAGOON THROUGH THE SAILORS EYES

Barbara **OSÓCH**

Wydział Nauk o Ziemi, Uniwersytet Szczeciński, Szczecin, Poland

Keywords:

- Szczecin Lagoon
- nature
- tourism
- perception
- opinion

Abstract:

Neighbouring oneself the zachodniopomorskie province and Mecklenburg Western Pomerania appear to be similar in terms of size, landform features, degree of the afforestation rate, covering the area with water areas, the occurrence of protected nature areas, tourist use. The aim of the study was to assess the perception of the attractiveness of natural and cultural area around the Szczecin Lagoon and Dąbie Lake. Its implementation requires the use of surveys method. The study involved a group of recreational boaters exploring both reservoirs. In addition, inventory method was used to research the discussed area. The responses showed a variety of environmental and anthropogenic on both sides of the border, and also gave the picture the diversity of assessment by the respondents. It confirmed to put in the work to assume that these same places are a source of very different opinion of the respondents.

INTRODUCTION

Water areas are one of the dominant landscape of the zachodniopomorskie province and Mecklenburg Western Pomerania. They are reservoirs of varying specificity and scenic values. The biggest water reservoir is Szczecin Lagoon and Dabie Lake, which historically accounted for its bay [Majewski 1980]. Szczecin Lagoon is also the largest inland basin in Poland and one of the two cross-border water areas in the country. The basin is separated from the Baltic Sea with two islands Usedom and Wolin. The navigation between the Lagoon and the Baltic Sea through three straits Piana, Świna and Dziwna. It is divided into two parts: Little Lagoon to the west and the Grand Lagoon to the east. The total surface area of the basin along the straits is 911.8 km² [Hermach 1994, Kilarski 2009]. Due to its location within the European Union it is the only one, where the free international traffic is held. This allows to establish contacts with sailors from all over the Pomerania Euroregion. Nautical tourism can be done at the same time - which is unique in the scale of the country - on the open sea waters, the lakes and inland waterways [Kuliński 2012]. Administratively Polish Szczecin Lagoon water are included in the internal sea waters [Act of 18 July 2001. Water Law (Dz. U. of 2012. Pos. 145), the Act of 21 March 1991. Maritime areas of the Polish Republic]. A German part of the Szczecin Lagoon belongs to inland waters such as Dabie Lake, lying in the Lower Oder Valley. Just like the Lagoon, it is part of the estuary of the River Oder. It is the fourth largest lake in Poland and the first in the province. Its area covers 54.08 km². The whole is located within the limits of the city of Szczecin. It is the only lake in Poland, which is prior to the movement of seagoing vessels, despite the fact that according to the National Water Management is a wholly owned inland [http://www.kzgw.gov.pl/pl/srodladowe-drogi-wodne-w-polsce.html]. It is connected with the current of the Odra river with many navigable canals, between which formed a picturesque island [www.zalew.org]. Today is one of the shipping routes from Szczecin to the north

through the Szczecin Lagoon to the Baltic Sea. The varied terrain and unique landscape and scenic area allow observation from both land and water.

METHODOLOGY, TERRITORIAL AND TEMPORAL RESEARCH

The work is based largely on the conducted surveys and interviews with the participants of nautical tourism. The questionnaire [Trochim 2002 Punch, 2005] consists of 39 questions, of which 10 are demographics questions. Questions have closed character (26 questions) single and multiple choice, questions including the matrix with a specific number of columns and answers, semantic matrix for which the answers may lie in two opposite poles (depict emotions, feelings and evaluation) and finally the open questions. The study was conducted in selected Polish and German marinas around the Szczecin Lagoon and Dabie Lake. An assumption was made, that one and the same places can be the source of different experience for different persons. The perception and the indexation of the space by her users are a resultant of the sequence of factors, e.g. of shared experience incurred as a result of penetrating the same area. Seemingly homogeneous basin about parameters moved close, about elements counteracting each other of the natural environment [Wojciechowski 1986] and cultural [Łęcki 2005], differently was assessed by Polish and German yachtsmen [Osóch 2015]. In spite of the diversity of natural attractions and cultural which are in Mecklenburg and the zachodniopomorskie province, elements, being in the most immediate neighbourhood of the basin of the Szczecin Lagoon were subjected to the evaluation. It was assumed that one and the same place may be a source of different experience for different people. Perception and valorization space by the users is the result of several factors, for example: a common experience caused by the penetration of the same area. Seemingly homogeneous water basin due to similar parameters, by balancing the elements of the natural environment [Wojciechowski 1986] and cultural [Łecki, 2005], was assessed differently by the Polish and German sailors [Osóch 2015]. Despite the diversity of natural and cultural attractions that are located in Mecklenburg Western Pomerania and Zachodniopomorskie, elements, being in the most immediate neighbourhood of the Szczecin Lagoon were subjected to the evaluation. That zone is not specified permanent border. It only sets distance one-day trip, undertaken on foot or by bicycle, routes leading from nearby marinas. This distance also outlined border of conducted inventory covering natural and cultural values. Enriched the information base and completed the image of the area. The reason for establishing the reach are observed sailors customs, most of whom sleep on their boats, and during the day take a small trip distance trips. There were evaluated some elements of the natural environment and cultural heritage (which includes material objects closely related to human activity and those he produced), which in the eyes of the sailors are the most interesting observation value. A group of 800 respondents represent Polish and German sailors. Their statements and opinions are the basis of analyzes. The text of the article corresponds to the published monograph [Osóch 2015] and its complement. A survey and inventory of natural and cultural resources carried out in the 2010-2012 seasons sailing.

ATTRACTIVENESS OF RESERVOIR IN SAILORS OPINION - RESULTS

Sailing attraction of the Szczecin Lake was subjected to the evaluation. Selected elements of the demographic structure of the sailors involved in the study are presented below [Tab. 1]. As expected, it has been assessed differently by the Polish and German sailors. Polish side has been positively assessed by the Poles (74.5%) and Germans (71.4%). It issued a negative assessment of 16% of Poles and 14.3% of Germans. The vacillation showed the 9.5% of Poles and the 14.3% of Germans in the evaluation. They were persons who have not sailed on the Polish side of the basin or had just begun his adventure with sailing. Poles (48%) and Germany (54%) the most appreciated area surrounding nature, the serenity and

tranquility, as well as the picturesque location of marinas [Fig. 1.]. Another factor demonstrating the attractiveness of this side of the basin is a good preparation and marking of navigation on the water. For the Germans, it is important to the size of the reservoir, enabling multi cruises. Above assessed by the Poles is high tourist attractiveness in the area of land, including regular maritime events, which the largest diversity is taken in the Szczecin area [Osóch 2015].

Tab. 1. The socio-demographic structure of the sailors

Nationality	Poles 64%	
	Germans34%	
Sex	man 79%	
	woman 21%	
Age:	Poles	Germans
under 19 years	19%	0
19-25 years	22%	2%
26-35	23%	3%
36-45	14%	15%
46-55	10%	26%
56-65	11%	30%
over 65 years	1%	24%
Place of residence:	zachodnio-	Brandenburg,
	pomorskie,	Meklenburg,
	śląskie,	Nordhein-
	dolnośląskie	Westfallen

Source: based on survey

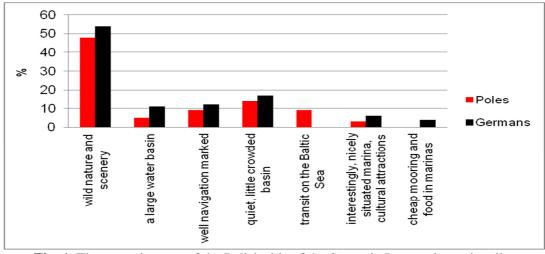


Fig. 1. The attractiveness of the Polish side of the Szczecin Lagoon by nationality Source: based on survey

Negative assessment of the Polish side of the basin, in the opinion of Poles, associated with too low amount of marinas, and consequently too much distance between them. Existing marinas do not meet the expectations of the sailors, with a comparison of the utilized high quality marinas abroad (up 46% response Poles). Problematic is water pollution, not conducive to rest over the water. Germans drew attention to the large number of fishing nets and insufficient depth of the reservoir which makes it difficult to maneuver and sailing yachts pound (up to 48% of responses).

A large share of unspecified Polish opinion (28%) on the attractiveness of the basin stems from his ignorance. Comparing the percentages of sailing abroad found that considerably more Poles sails on the German side of the Lagoon, than the Germans on the Polish side. German side of the Lagoon was considered interesting for sailing for 90% of the surveyed Germans and more than 65% of surveyed Poles. Lack of attractiveness in the assessment pointed to a little over 9% of Germans and less than 7% of Poles [Osóch 2015].

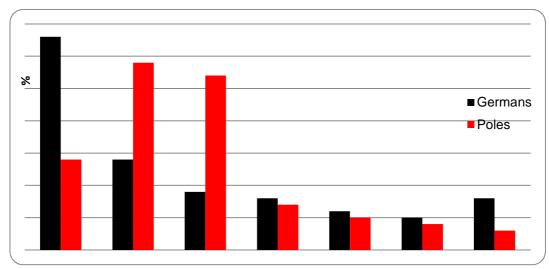


Fig. 2. The attractiveness of the German side of the Szczecin Lagoon by nationality Source: based on survey

In the opinion of the Germans on its attractiveness is influenced primarily surrounding nature area, wharves and marinas infrastructure, their plurality and diversity [Fig. 2.] Most Poles appreciate the German side of the Lagoon (up to 30% are Poles and only 14% of Germans response) for the high-end development of waterfronts, marinas multiplicity within the basin and the quality of services, as well as a wealth of cultural attractions.

German respondents reluctantly gave answers about defects and gaps development of sailing and natural attractiveness of the German side of the Szczecin Lagoon. This is further evidence of the different nature of both nations.

Poles have focused on the high boat-parking fees in yacht marinas and the lack of communication by the service of the German harbor in a language other than German.

The attractiveness of the choice of sailing basin is also influenced by the popularity of the region and the density of the amount of traveling in the units [Fig. 3.]. Poles are more likely to choose the busy place, often referred to as "popular" by the accumulation of attractions and entertainment on land. Germans are inclined to steer such type of water areas. More often than Poles also emphasize the need to stay in an environment with a developed system of safety on the water and land, which is dictated probably their extensive experience and concern for their own safety and the expectation of a rapid emergency response in the event of an accident. Exhibit care to provide adequate security in the labeling on the basin and the entrance to the port. They also point to the presence of clean, clear water, and thus have the most determined expectations and opinions. Probably, these differences are dictated by the average age of sailors, which for Poles is an average of 26-35 years, and for the Germans over 56 years [Osóch 2015].

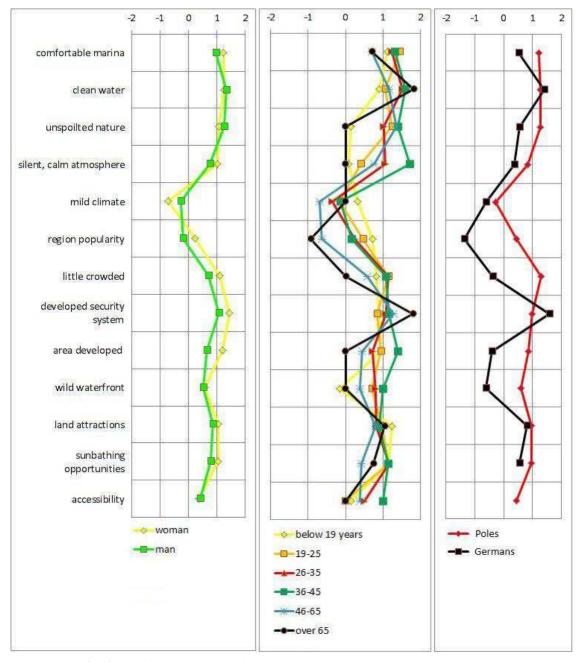


Fig. 3. Preferences of the sailing basin due to gender, age and nationality Source: based on survey

RESULTS OF INVENTORY WORK - NATURAL VALUES

For the purposes of work, the inventory by "Kanon Krajoznawczy Polski" (Kucharski, Łęcki 2000) and guides of Mecklenburg Western Pomerania were used.

250 km long coastline (of which nearly 50 km are part of the coastline) is a variable width of the belt surrounded by cane reeds piled sand embankments. Plains are occupied by fields, meadows, heaths, bogs and wetlands, as an example of the best-educated communities in Poland [Herbichowa 2005 Torbe, Rabski 2008]. The coast of the Lagoon take the form of flat, cliffs and delta. The most characteristic here are the moraine hills, often covered with beech forests and the old dunes, coastal and inland waterways. Diversification of the landscape are the hills, where there are viewpoints: Zielonka hill in Lubin, Grzywacz (115.4 m), Kawcza Góra (61.4 m), Gosań (95.1 m) - the highest point of the cliff over the Polish coast, and the Biała Góra (about 100 m).

Unique in the scale of European coasts are the islands of the Delta Reverse of Świna in the northern part of the Lagoon. It is a gathering of dozens of islands separated by channels, forming a land of floating gardens. In the southern part of the Lagoon in the Szczecin area, Miedzyodrze the network of canals, backwaters and oxbows create the largest fen in Central Europe [Leszczyńska 2009]. Tourists-sailors have the chance to observe almost in the center of the city, habitat of cormorants, herons and many species of birds of prey.

The landscape of the basin is also integrated into artificial dug of the island, such as: Chełminek – was successfully extracted from the material during the dredging of the fairway Szczecin – Świnoujście, phosphogypsum hills in the area of Police, or kilometers of flood embankments and irrigation channels.

As similar as on the German side, the total surface area forming a national system of protected areas is approximately 20% of the total area of the Zachodniopomorskie province¹. In the immediate vicinity of the Szczecin Lagoon it is [Fig. 4]:

- 17 of 114 nature reserves²:
 - in the Wolin National Park: 5 strict conservation areas: by Prof. Dr Zygmunt Czubiński, Dr Bogdan Dyakowski, Dr Stefan Jarosz, Prof. Marian Raciborski, Prof. Władysław Szafer, Prof. Adam Wodziczka)
 - in the Szczecin Landscape Park 6 reserves: "Zdroje", "Bukowe Zdroje" by Tadeusz Parowy" by Joseph Lewandowski, "Kołowskie Wąwozy","Źródliskowa Buczyna" by George Jackowski, "Trawiasta Buczyna" by Prof. Stefan Kownas,
 - in the area of the Szczecin Lagoon 6 reserves: "Czarnocin", "Szczecin Lagoon Nature Park" (the first in Poland, a model area of practical implementation of the principles of the European Ecological Network - Natura 2000), "Hill lookout over Miedzyodrze", "Uroczysko Święta", "Białodrzew Kopicki", "Olszanka";
- 3 forests Wkrzańska, Bukowa, Goleniowska;
- 10 of 18 areas and Bird habitats of the Natura 2000: "Wzgórza Bukowe", "Ujście Odry i Zalew Szczeciński", "Wolin i Uznam", "Zalew Szczeciński", "Puszcza Goleniowska", "Zalew Kamieński i Dziwna", "Łąki Skoszewskie", "Delta Świny", "Uroczyska w Lasach Stepnickich", "Ostoja Goleniowska"³;
- 1 of 2 national parks: "Wolin National Park".

Also noteworthy are monuments of inanimate nature - boulders, for example. "Głaz Królewski" emerging from the waters of the Kamień Lagoon, from which the name to the town Kamień Pomorski. The attraction of Wolin National Park is bison reserve.

Leisure time can be spend in natural history museums - the Museum of Geology of the University of Szczecin in Szczecin, the Museum of Stones in Kamień Pomorski - Branch of the Mineralogical Museum in Szklarska Poreba, Natural History Museum Wolin National Park by prof. Adam Wodziczka.

The charm of the region complement the natural medicinal values - climate, rich deposits of mud and brine – which form the basis for the functioning of spas in Świnoujście, Kamień Pomorski and Kołobrzeg.

¹ według Biura Konserwacji Przyrody Regionalnej Dyrekcji Ochrony Środowiska w Szczecinie, Ustawa z dnia 16 kwietnia 2004 r. o ochronie przyrody,

http://www.wzp.pl/srodowisko/formy_ochrony_przyrody/formy_ochrony_przyrody.htm

² wytyczne zintegrowanego zarządzania strefą przybrzeżną Zalewu Szczecińskiego (ZZOP)

http://databases.eucc-d.de/files/documents/00000175_guidelines_iczm_pol.pdf

³ Rozporządzenie Ministra Środowiska z dnia 27 października 2008 r. zmieniające rozporządzenie w sprawie obszarów specjalnej ochrony ptaków Natura 2000 (Dz.U.08.198.1226)

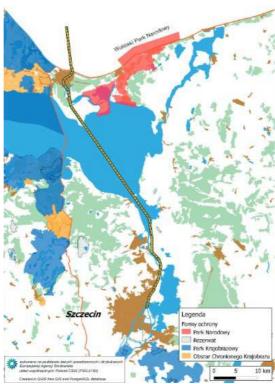


Fig. 4. Forms of nature protection around the Polish side of the Szczecin Lagoon source: www.natura2000ums.eu

Over 20% of the area of the Land Mecklenburg Western Pomerania is protected nature areas, of which in the immediate vicinity of the Szczecin Lagoon are: - 2 of 7 natural parks: "Over the Szczecin Lagoon" and "Usedom" [Fig. 5.] - 3 nature reserves on the island of Usedom "Streckelsberg" circle Ueckermünde "Inland dunes Altwarp lake Neuwarp and Riether Werder" and "bottom of the lake Ahlbeck" [Fig. 5.].



- A Nature reserve "Streckelsberg"
- B Nature reserve "Bottom of the lake Ahlbeck"
- C Nature reserves: "Altwarp inland dunes, lake and Riether Neuwarp Werder"
- D Natural Park "Usedom"
- E Natural Park "Over the Szczecin Lagoon"

Fig. 5. The German protected areas in the immediate vicinity of the Szczecin Lagoon source: http://www.geodus.com/globe-map/tresgrand/planet-observer_PORME.jpg source: http://www.natur-mv.de/schutzgebiete-ash.asp

Just as the Polish side of the Lagoon, the area is full of fens, sandy areas, dunes, between which, mainly from the coast, there are small ponds and marshes. Dune belts are covered with mainly pine forests.

An interesting experience can be a trip to the zoo. In the immediate vicinity of the Szczecin Lagoon are 2 of the 16 existing in the German province: Ueckermünde and Wolgast. In addition to large zoos, there are many other institutions, such as bison reserve bred in natural conditions - Damerower Werder.

The 3 natural history museums on the island of Usedom from the existing 21 in Mecklenburg, presented various specialist collections, showing above all the diversity of native wildlife from the forest that is habitat by stone heritage of the Ice Age until the water world:

- "Shell Museum" in Heringsdorf (the largest shell close to a meter in diameter, weighing 95 kg),
- "Rock garden" and "Cabinet Forest" in Ueckeritz (one of the richest collections of stone in northern Germany)⁴.

RESULTS OF INVENTORY WORK - CULTURAL VALUES

Monuments of architecture and building at the province of Zachodniopomorskie form a large, heterogeneous group of objects. Among them, in the immediate neighborhood of the Szczecin Lagoon, those which deserve for the attention according to "Kanon Krajoznawczy Polski":

- urban assumptions Kamień Pomorski Town Hall, the city walls (Wolińska Gate),
 the
- palace of the Bishops [10]
- places of worship and historic churches Cathedral in Szczecin [11] and Kamień Pomorski [10] (held periodically with the International Festival of Organ and Chamber Music)
- castles and palaces Castle of Pomeranian Dukes in Szczecin [11]
- military and defense structures:
 - Gerhard and Angel forts in Świnoujście [12]
 - team-raid shelters of II World War in the vicinity of Szczecin in Szczecin Central railway station the largest civilian shelter in Poland [11]
- museums:
 - Museum of the History of Medicine and Pharmacy, Department of History of Medicine and Medical Ethics, Pomeranian Medical University in Szczecin[11],
 - National Museum in Szczecin [11],
 - Marine Fisheries Museum in Świnoujście [12],
 - Regional Museum of Andrew Kaube in Wolin [13]⁵
 - Wax Cabinet in Międzyzdroje [14],
 - Bunker-Museum in Zalesie [15] position of V3 rocket launchers battle of World War II,
- lighthouses:
 - Świnoujście Lighthouse from 1858 the highest in the Baltic [12],
 - Kikut lighthouse [16].

For treasure hunters, pearls of architecture and technology, unsolved riddles of the II World War, the undoubted highlight will be discover:

- hull ship-built by concrete "Ulrich Finsterwalde" on the Dabie Lake [17]⁶,

_

⁴ http://museen.kulturportal-mv.de/de/museen_nach_kategorie/naturkundemuseen/

⁵ www.kobidz.pl

- Bismarck Tower in 1899 in Szczecin (Gocławska Tower) the most expensive of the Bismarck towers built [11]
- Quistorp Tower from 1900 [11] lookout tower on the hill located in Arkona Forest in Szczecin. Since the end of World War II in ruins, monuments registered as a permanent ruin;
- railroad drawbridge over Regalica river (Eastern Odra) from 1877, is the only currently active object of this type in Poland and Europe;
- bridge to the Swallow island from 1921 [11] Szczecin bridge over the Western Oder, connecting Columbus street and the Swallow Island. The only bridge in Szczecin, which survived World War II⁷;
- buildings from the days of the XIX century industrial heyday of Szczecin at Columbus street called "Szczecin Venice" – establishments whose food products were known throughout Germany [11].



Fig. 6. Cultural attractions in the Polish and the German side of the Szczecin Lagoon Source: own work based on "Kanon Krajoznawczy Polski"

Noteworthy are numerous events taking place on historical and regional levels⁸, mainly in the summer, for example:

- International Festival of Organ and Chamber Music in Kamień Pomorski [10]
- Viking Festival in Wolin [13]
- Western Picnic / Folk, Blues & Country Festival in Sułomino [18]
- Festival of Stars in Międzyzdroje [14]
- Feast Fish and Bread in Stepnica [19]

⁶ http://okretywojenne.pl/pefu/html/pl_wyborcza1.htm

⁷ Encyklopedia Szczecina. T. I A-O. Szczecin: Uniwersytet Szczeciński, 1999, s. 462

⁸ http://zamek.szczecin.pl/download/instytucje_kulturalne.pdf

- Water-Land Expedition "Flis Odrzański" in Szczecin [11]
- Central Maritime Days in Szczecin [11]
- International Festival of Street Artists [11]
- FAMA International Art Campus in Świnoujście [12]
- Floating Maritime Song Festival "Windmill" SAIL Świnoujście [12]

Beauty of the landscapes of Mecklenburg Western Pomerania is enriched by an unprecedented number of places of cultural and historical values. In the Middle Ages, in the heyday of the Hanseatic League and the Association in subsequent periods, there were a lot of buildings (among them prominent objects brick Gothic architecture) of historical and cultural [Nussbaum 1994].

A new chapter in the history of architecture began here at the time of the discovery of the curative effects of salt water and the climate of the Baltic Sea. In 1793 Duke Friedrich Franz I of Mecklenburg in Schwerin Dynasty founded the first German seaside resort of Heiligendamm. Soon began to appear more elegant, elite sea bathing, including in Putbus, the "white city", near the Bay of Greifswald. The coastal resorts architecture, extremely different from the assumptions of monumental brick old towns of the Hanseatic cities, attracts thousands of visitors each year and invites you to stroll along seaside promenades.

What is advisable to visit the island of Usedom and its vicinity are [Fig. 24.]:

- Otto Lilienthal Museum in Anklam [1], which presents the aviation pioneer
- Historical and Technical Museum in Peenemünde [2] the former missile research station, which in the years 1936-1945, the foundations were laid for the construction of modern civil and military rockets (the German retaliation weapon type V1 and V2).
- imperial seaside resorts: Bansin, Heringsdorf and Ahlbeck [3] of that stretch along the promenade and the seafront with white villas of the era of French and Italian Renaissance and Classical era. In Ahlbeck there is an oldest pier on the German Baltic Sea coast, preserved until today in its original condition.
- lifting railway bridge in Karnin [4] a monument of technology the latest symbol of the old fast train connection from Berlin – Świnoujście.
- historical museums from 67 in the whole province 3 of them in the neighborhood:
 City Museum Wolgast "Kaffeemühle" [5], Lagoon Museum in Ueckermünde [6],
 Museum of Beds in Peenemunde [2],
- museums of art: Atelier Otto Niemeyer-Holstein in Koserow [7],
- places of national remembrance National Memorial at the former concentration camp Karlshagen [8], and cemetery in Peenemunde [2], Clinic of Saint Christopher in Ueckermünde [6] place of remembrance of victims of Nazi euthanasia, prison Wehrmacht (the Museum at the stone gate) in Anklam [1],
- Golm in Kamminke cemetery [9] the largest cemetery in Mecklenburg Western Pomerania, on the highest hill of the island of Usedom, commemorating the German soldiers who died during World War II.

CONCLUSIONS

On the basis of this comparative characteristics expressed opinion, found differences in the behavior of sailing resulting from diversified socio-demographic structure. Depending on nationality and age, the perception of the environment, the expectations and requirements of the sites on which the voluntarily and knowingly spend leisure time is changing. Both the Polish and the German side of the Szczecin Lagoon in the opinion of sailors it proved to be an interesting scenic, but for every nation for other reasons. Sailors statements largely correspond with inventory resources landscape. Unanimously appreciated and distinguished

qualities of the natural environment Polish side of the Lagoon. Their diversity and variability lookout fully meet the needs of visual and aesthetic respondents. German coast in terms of natural appearance differs from Polish. Its monotony associated with the ubiquitous flat, peat-swamp terrain. Therefore, sailors gave higher score the development of the tourist wharves, as well as high-class sailing infrastructure to adapt to the needs of guests-boaters. Despite the abundance of cultural attractions that gathered on both sides of the Szczecin Lagoon, increased their multitude is characterized by the German side. There are both outdoor remnants of pre-war construction and architecture, as well as museums with collections of prehistoric geology, history and contemporary craft. Polish side is reach in amount of cultural-historical events taking place (in the vicinity of Lagoon), but the greatest accumulation of cultural attractions located in the vicinity of Dabie Lake - in Szczecin.

SUMMARY

Szczecin Lagoon area is interesting as a place of crossing waterways leading from the south and west of Europe to the north and east, getting together sailors from all over the Pomerania region, establishing international contacts and exchange experiences. It is also extensively used by social groups engaged in transportation, commercial, agricultural, industrial, construction, science and tourism. With a distance greater part of the coast of the Szczecin Lagoon from economic centers, it has managed to keep close to the nature of the cultural landscape. There are many seaside resorts, picturesque villages prosperous integrated into the rich landscape of the region, which contributes to the massive seasonal touristic movement, of which both the zachodniopomorskie province and the Land of Mecklenburg Western Pomerania is known. Mass tourism poses a threat to the natural environment. It manifests itself mainly pressure on the coast and beaches, cliffs, dunes and some parts of forests, and buildings littering the coast. The increasing number of tourists also leads to growing pressure recreational building, often at the boundaries of the park, for example in the area of Wisełka and Lubin. Like other tourist exploited regions, the impact of mass tourism is not conducive to the proper condition of the ecosystem of the coastal zone. So far steadily increasing tourist traffic on the water is not felt by the participants themselves. Losses in the natural environment caused by the water tourism are not as significant as in the case of tourism on the coast. An example of one hand, closer relations of neighboring countries, enabling residents to move freely and explore the local tourism resources, on the other hand, channel the pedestrian and bicycle traffic in order to protect natural resources (coastal dunes with bushes) is the construction of cross-border promenade between Świnoujście and the municipality of Heringsdorf, enriched with nature information boards, viewing observation platforms and sanitary facilities, as well as fortified descent to the beach [http://www.swinoujscie.pl/pl/contents/content/563/7847]. Concerned about the natural resources and cultural heritage should not be underestimated guidelines for their protection.

LITERATURE

- 1. Encyklopedia Szczecina. T. I A-O. Szczecin: Uniwersytet Szczeciński (1999), s. 462
- 2. Herbichowa M., Pawlaczyk P., Stańko R. (2005), Ochrona torfowisk Bałtyckich. Przewodnik dla praktyków, teoretyków i urzędników. Wyd. Klub Przyrodników. Świebodzin. http://www.kp.org.pl/plbaltbogs/guide.pdf
- 3. Hermach M., Lipok A., Kalita K. (1994), Jachtem po Zalewie Szczecińskim. Computer Originals. Szczecin.
- 4. Kilarski Z. (2009), Szlak wodny Berlin-Szczecin-Bałtyk. Przewodnik dla żeglarzy i turystów wodnych. Wyd. Artdeco. Szczecin.
- 5. Kucharski B., Łęcki W. (2000), Kanon Krajoznawczy Polski. Wyd. PTTK Kraj.

- 6. Kuliński J. (2012), Praktyka bałtycka na małym jachcie. Wyd. Nowator-Kartuzy.
- 7. Leszczyńska M. (2009), Międzyodrze. Przewodnik. Oficyna IN PLUS. Szczecin.
- 8. Łęcki W. (2005), Kanon krajoznawczy Polski. Wyd. PTTK Kraj. Warszawa.
- 9. Majewski A. (1980), Ogólna charakterystyka Zalewu Szczecińskiego. W: A. Majewski (red.): Zalew Szczeciński. Warszawa: Wyd. Komunikacji i Łączności, s. 17-25.
- 10. Nussbaum N. (1994), Deutsche Kirchenbaukunst der Gotik, Darmstadt.
- 11. Osóch B. (2015), Sailing infrastructure and components of natural environment in the transboundary area of the Szczecin Lagoon in sailors opinion. Wyd.Volumina.pl. Szczecin.
- 12. Punch K. (2005), Introduction to social research, quantitative and qualitative approaches, second edition.
- 13. Torbe M. (2005), Przyroda wokół Zalewu Szczecińskiego. Buchalter. Szczecin.
- 14. Torbe M., Rabski K. (2008), Wokół Zalewu Szczecińskiego. Oficyna IN PLUS. Szczecin.
- 15. Trochim W. (2002), Types of Surveys, Research Methods Knowledge Base.
- 16. Ustawa z dnia 18 lipca 2001 r. Prawo wodne (Dz. U. z 2012 r. poz. 145), Ustawa z dnia 21 marca 1991 r. o obszarach morskich Rzeczypospolitej Polskiej
- 17. Rozporządzenie Ministra Środowiska z dnia 27 października 2008 r. zmieniające rozporządzenie w sprawie obszarów specjalnej ochrony ptaków Natura 2000 (Dz.U.08.198.1226)
- 18. Wojciechowski K. (1986), Problemy percepcji i oceny estetycznej krajobrazu. Uniwersytet Marii Curie-Skłodowskiej, Lublin.

Internet sources:

- 1. http://www.kzgw.gov.pl/pl/srodladowe-drogi-wodne-w-polsce.html [dostęp: 30 września 2016]
- 2. http://www.swinoujscie.pl/pl/contents/content/563/7847 [dostep: 15 września 2016]
- 3. http://okretywojenne.pl/pefu/html/pl_wyborcza1.htm [dostęp: 14 września 2016]
- 4. www.kobidz.pl [dostęp: 10 września 2016]
- 5. www.natura2000ums.eu [dostęp: 10 września 2016]
- 6. http://www.natur-mv.de/schutzgebiete-ash.asp [dostep: 10 września 2016]
- 7. http://www.geodus.com/globe-map/tresgrand/planet-observer_PORME.jpg [dostęp: 11 września 2016]
- 8. http://www.wzp.pl/srodowisko/formy_ochrony_przyrody/formy_ochrony_przyrody.htm [dostęp: 5 września 2016]
- 9. http://databases.eucc-d.de/files/documents/00000175_guidelines_iczm_pol.pdf [dostęp: 5 września 2016]
- 10. http://zamek.szczecin.pl/download/instytucje_kulturalne.pdf [dostęp: 14 września 2016]
- 11. http://museen.kulturportal-mv.de/de/museen_nach_kategorie/naturkundemuseen [dostęp: 10 września 2016]
- 12. www.zalew.org