

# Zoning in a future coastal biosphere reserve - Planning for tourism and outdoor recreation in the Blekinge archipelago, Sweden

Rosemarie Ankre



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*Planning for tourism and outdoor recreation  
in the Blekinge archipelago, Sweden*

Rosemarie Ankre



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## PREFACE

I would like to thank the various establishments and Skärgårdstrafiken who participated in the Blekinge archipelago study. The field workers made a tremendous work and Maria Rundquist took skilful pictures, which I have had the pleasure to use in this study. Furthermore, it has been rewarding and interesting to take part of the information which has been given to me by the various interviews with the municipalities' representatives – thank you for your time. I also want to express my appreciation to my colleague Lena Pettersson Forsberg who has opened her home to me during my visits in Blekinge.

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Rosemarie Ankre

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# 1. BACKGROUND

## 1.1 Introduction

At present, the Blekinge County Administration Board and three coastal municipalities (Karlskrona, Karlshamn and Ronneby) are in the process of getting the Blekinge archipelago designated as a biosphere reserve (*the Man and Biosphere Programme*). The Blekinge archipelago consists of areas of national interest for nature and outdoor life, has several nature reserves and areas part of the Natura 2000, together with bird and seal sanctuaries. The area has been closed for military reasons and since these restrictions have been lifted, pressure from tourism and outdoor recreation, recreational housing etc. create an interesting planning situation. In this study, the zoning of a future coastal biosphere reserve will be discussed. This type of zoning has been viewed as not functional and difficult to apply to Swedish biosphere reserves (Thorell, 1999; Thorell et al., 2005b). The area's authorities' opinions and attitudes to a possible future biosphere reserve and its zoning will be analysed, based on interviews with the Blekinge county administration board and representatives of the municipalities Karlskrona, Karlshamn and Ronneby. Also, the authorities' estimations of a future tourism development due to a potential nomination as a biosphere reserve will be presented.

Due to the problems with biosphere reserve zoning in Sweden, planning of tourism and outdoor recreation will be discussed with comparisons with the planning framework ROS (the *Recreation Opportunity Spectrum*). Are these two zoning systems equivalent and can they be combined? The ROS has mainly been used in North American wilderness areas, but also, for example, in Fulufjället, Sweden (Fredman et al, 2005) to direct visitors to different areas, in order to balance the land and water use with conservation and the visitors' various wishes for activities and experiences. The ROS is also a tool to decrease and control goal interference, for example, noise (Clark & Stankey, 1979; Driver et al., 1987; Emmelin, 1997; Manning 1999; Stankey et al., 1999).

Since tourism is quite new in the Blekinge archipelago and because of the area's relevance as a place for the inhabitants' outdoor recreation, it is interesting to study the present situation of goal interference. It is thereby relevant to gather information of the visitors and second home owners since the planning authorities in Blekinge do not have any knowledge support of tourism and outdoor recreation. The study's analyses are based on the result from a questionnaire survey directed to visitors and second home owners in the Blekinge archipelago 2007. The results of the questionnaire survey will reveal the existing conflict situation and also the respondents' attitudes to spatial separation. For example, what are the respondents' attitudes, activities and geographical dispersion? What are their experiences and opinions of conflicts? What are the attitudes to different ways of handling conflicts?

Finally, a method evaluation is part of this study since registration cards were used as a method to collect addresses of temporary visitors. How to get different visitor data by using registration cards and the difficulties with such a method in coastal areas will be examined.

## 1.2 Geographical and historical description of the Blekinge archipelago

Blekinge is a province in Götaland, in the south-eastern Sweden. Despite being a quite small area (40 km south-north, and 110 km west-east) there are around 150,000 inhabitants, which makes it one of the country's most densely populated provinces. During centuries, Blekinge was a borderland between Sweden and Denmark and a place for battles of the two countries.



By the peace of Roskilde in 1658, Blekinge became permanently Swedish. Today, the area is often called ‘the garden of Sweden’ in popular speech (Region Blekinge, 2007).



**Figure 1.** Map of the Blekinge archipelago. © Lantmäteriverket Gävle 2008. Permission I 2008/1064.

Blekinge has the southernmost archipelago of Sweden with approximately a thousand islands, islets and skerries. The Blekinge archipelago involves four different municipalities – Karlskrona, Ronneby, Karlshamn and Sölvesborg – in the Blekinge county. The archipelago includes the islands Utlängan and Utklippan in the east and is stretched to the area Listerlandet and Hanö in the west, see Figure 1 (Glesbygdsverket, 2003).

At the end of the 17<sup>th</sup> century, Sweden was a major European power where the Baltic Sea provided a link to unite the kingdom. Therefore it was decided to establish the city Karlskrona in 1680, which became an important base for the Swedish Navy (SNA, 1994). The Blekinge archipelago with its many islands and the access to oak on the mainland (as material when the ships were built), offered a protected and an ice-free base for naval activities. Since the establishment of Karlskrona, the provincial capitol, the Navy has played an important part of the city's and the Blekinge archipelago's identity (Karlskrona kommun & Länsstyrelsen Blekinge Län, 2007).

Since 1998, Karlskrona is on the UNESCO's<sup>1</sup> world heritage list. It was considered of particular interest as the original layout of the town is exceptionally well-preserved. The naval docks, citadels and fortresses still exist. Karlskrona was built on various islands and the city planning with streets and great squares got much attention abroad, and provided a model for similar installations in Europe (Karlskrona kommun & Länsstyrelsen Blekinge Län, 2007).

Many of the Blekinge archipelago's islands were populated during prehistoric time. Since the Middle Ages, farms and smaller villages were established on a number of the larger islands. Many of the islands in the outer archipelago were populated solely during some parts of the

<sup>1</sup> In 1972, the General Conference of UNESCO adopted the Convention Concerning the Protection of World Cultural and Natural Heritage. The aim was to encourage the identification and protection of irreplaceable cultural and natural heritage sites. The list of sites has received worldwide recognition (Karlskrona kommun & Länsstyrelsen Blekinge Län, 2007).

year or during periods when the herring fishing was considerable (Glesbygdverket, 2003). The seasonal fishing also included hunting of sea birds and seal. In the summer, cattle were sent from the mainland out to pasture on the islands. At the end of the 17<sup>th</sup> century, the fishing hamlets were established and settlements were developed around them. For a long time, however, the islands in the eastern part of the archipelago were owned by the Crown, or the administrative county district (Johansson, 2002; see also Haasum, 2001 for an overview of the historical change of the Swedish coast).

During the 19<sup>th</sup> century, the fishing industry was important for the area and the fishing hamlets continued to spread (Johansson, 2002). At the turn of the 20<sup>th</sup> century, there were also stonemasonries and boat buildings on some islands, but these industries slowly phased out after the Second World War. In 1948-2003, the number of professional fishermen in Sweden decreased from 12,000 to 2,000. Nowadays, the settlements in the archipelago consist of solitary farms, villages, fishing hamlets and areas of second homes. Some parts of the settlements reflect the past life of the archipelago and are valuable culture environments. These also consist of harbours, military establishments, ship wrecks and ancient monuments (Glesbygdverket, 2003).



**Photograph 1.** *The tourboat MS Tjärö which takes passengers to Tjärö in May-September. Photo by Maria Rundquist, 2007.*

The access to the archipelago has increased by either bridges or ferries. In 1937, bridges to the islands Senoren, Sturkö, Tjurkö and Hasslö were built, and a car ferry to Aspö was established. The population could thereby commute to the work on the mainland by bus or car (Johansson, 2002). Some more islands are today reachable by either bridges or by car ferry from the mainland. For example, Senoren, Sturkö and Tjurkö are linked by bridges (Ottosson, 2006).

The ferry company *Skärgårdstrafiken*<sup>2</sup> offers transport in the Karlskrona municipality's archipelago (<http://www.archipelago.nu/> 5/9/07). There are also ferries from Ronneby, Karlshamn or Sölvesborg to respective parts of the archipelago, as in Karlshamn where Tjärö Tourism station is the traffic manager in the summer time, see Photograph 1 (<http://www.karlshamn.se/Turism/>, 2007).

In 2002, roughly 3,700 people lived permanently on larger islands with bridges in the Karlskrona municipality, for example, Hasslö, Sturkö and Tjurkö. Approximately 650 people<sup>3</sup> lived on islands without an established communication (Glesbygdsverket, 2007). Among the people living permanently in the area, many still have their occupations in the archipelago. The defensive forces have been an important employer for a long time and have also had a governing influence upon the development of society. Except for the traditional industries, such as fishing, hunting and agriculture, tourism and information technology are viewed with expectations for providing future work opportunities (Länsstyrelsen Blekinge Län, 1999).

However, after the previous streamlining of fishing and agriculture, it is difficult to make a living on these industries. Also, the farms on the islands are often minor with small areas under cultivation, which makes it less profitable. For example, there has been a strong reduction of the number of people living on the islands Stenshamn and Utlängan, where there are only four people living all year around. The usage of motorboats and more advanced fishing tools have made it unnecessary to live on the outskirts of the archipelago (Johansson, 2002).

According to the Blekinge Archipelago Program (Länsstyrelsen Blekinge Län, 1999), there is a possibility of a limited increase of the population in the archipelago. Water and sewerage are the foremost restrictive factors and the access to a functional public transportation. Other limitations are the service, which is not viewed as sufficient to create an attractive living, and the few work opportunities. On the other side, the county administration board thinks that the nature and culture environments of the archipelago are attractive to people and thereby central for a life of high-quality (Länsstyrelsen Blekinge Län, 1999). The sea and coast are highly valued as a housing and culture environment, and as an outdoor recreation area. But today, many fisherman's cottages, crofter's holdings and farms are having summer guests as residents. It is common that the people, who live on the islands only during summer time, have or have had relatives in the area (Johansson, 2002).

In the 21<sup>st</sup> century, around five places of residence have been built every year. Nevertheless, the fact is that the population has decreased during the 20<sup>th</sup> century, where the permanent living has instead become secondary living (Glesbygdsverket, 2003). In the eastern Blekinge archipelago, the second homes have increased while the permanent living has decreased (Johansson, 2002). The second homes are on islands and along the coast. As stated by the county administration board (1999), the permanent housing is concentrated to the western part of the archipelago, mainly on the large islands, while the second homes are mostly in the east and in the central part of the area. In 1999, there were 2050 permanent housing and 1061 second homes in the Karlskrona municipality (Karlskrona kommun, 2003).

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<sup>2</sup> The Archipelago Traffic. Author's translation.

<sup>3</sup> The islands with most of the people were Aspö (n=477), Ytterön-Hästholmen (n=62), Hanö (n=33) and Inlängan (n=19). The other islands had a population of approximately 1-5 people each (Glesbygdsverket, 2007).





**Photograph 2.** *The stone bank Bönsäcken ('the Bean bag' on Hanö) which constantly moves as the waves shift it around. Photo by Maria Rundquist, 2007.*

In the Blekinge archipelago there are great possibilities to experience interesting nature, see Photograph 2. The archipelago consists of areas of national interest for nature, culture and outdoor recreation, together with Natura 2000 areas, and bird and seal sanctuaries. The area has been strongly influenced by human's use of the landscape where, for example, the eastern coastal area of Karlskrona seems to have been pasture land since the Iron Age. The seashore meadows are especially rich in species because of the grazing and the biodiversity is often large in these areas (Glesbygdverket, 2003).

Due to urbanisation, recreation areas close to urbanised centres are becoming increasingly important to the society (Kajala et al., 2006). For the citizens of Karlskrona, the archipelago offers a nuanced recreation area. However, regarding tourism development and outdoor recreation, the eastern archipelago does not have a long tradition of a tourism industry, in comparison to the Ronneby archipelago. Not until the 1950s-60s, it became customary with outdoor recreation since the area consisted of extensive military prohibited areas (Johansson, 2002). Until 1997, it was prohibited for foreigners to visit the Blekinge archipelago in peace time. This has contributed to a unique environment of the archipelago, but also been a factor to a closed society (Karlskrona kommun, 2003). If a raised military preparedness or if the government (with consideration to Sweden's military preparedness) makes a decision of no admittance for foreigners, the prohibition is made valid (Johansson, 2002).

In the archipelago, examples of activities are pleasure boats, angling, sunbathing, bird-watching, hiking, visiting nature parks etc. Karlskrona is also becoming popular among cruise tourists who choose to experience the countries in the Baltic Sea. The city is one of the destinations in the Cruise Baltic cross-border venture (Karlskronaguiden, 2007). Different accommodations are offered by camping grounds, youth hostels, holiday villages and hotels. In

the archipelago, it is possible to use a pass entitling one to cheap-rate travel by the Skärgårdstrafiken's tour boats. One can also buy a bike package where accommodation with breakfast, rent of bikes and travelling in the archipelago are included. If the archipelago freezes in winter, it can be explored on skates or by iceboat.

## 2. THE DATA COLLECTION IN THE BLEKINGE ARCHIPELAGO 2007

### 2.1 The collection of visitor data and the variety of methods

*“The absence of visitor use data of many of the world’s protected areas is a major policy problem. The lack of such data results in tourism being undervalued in public policy. It is difficult to understand the scale of the world’s tourism use of protected areas without standard measurement units, collection procedures or integrated data management systems.”* (Foreword by Paul F. J. Eagles in Kajala et al., (2006) p. 6).

As the quotation above expresses, it is necessary to collect visitor data which can be implemented in the work of planning and management. Without knowledge of the visitors, it becomes difficult to plan for them. A good visitor monitoring programme consists of visitor surveys and visitor counting, and in planning and management processes it is relevant with an awareness of both the numbers of the visitors and their characteristics (Kajala et al., 2006). By this means, to be able to plan and manage the Swedish coastal areas, it is important to get knowledge of the visitors in order to get a valid picture of their reality. What do the visitors do during their stay? Where are they in the area? Are there any conflicts? To handle conflicts, it is necessary to evaluate and have insight in which knowledge is needed; what conflicts exist according to whom, where, how, when and why? Knowledge of the visitors’ experiences, activities and effects on nature could contribute to a decreasing of conflicts. Therefore, to achieve an appropriate and effective management of nature areas for tourism and outdoor recreation, a good knowledge of the visitors is required (Emmelin et al., 2005).

There is a wide variety of methods of collecting visitor data, due to the broad range and dynamics of outdoor recreation activities which, according to Kajala et al., (2006), involves a psychological experience and participation in a specific activity in a specific area. Studying outdoor recreation usually requires more than simply counting the number of visits. One should, for example, investigate what the outcome of the visits was, the visitor expectations and activities, their memories etc. Several methods have been developed (Kajala et al., p. 28):

- mechanical and electronic counting devices,
- visual observations,
- personal interviews,
- camera or video monitoring,
- indirect measures (e.g. environmental impact, number of cars, water/firewood consumption, etc.),
- focus groups and expert panels,
- self registration of visitors and,
- questionnaire surveys.

The choice of methods depends on the aim of the study, the questions to be asked, the type of area, the extent of various activities, the number and types of visitors etc. On site data collection is to be preferred, if studying attitudes toward management measures (Kajala et al., 2006). With a case study approach, a typical place is selected for a study because it is believed to possess particular characteristics (Robinson, 1998). Case studies are also apt when doing a profound analysis of, for example, planning and processes, as in the case of the Blekinge archipelago. Within tourism research, case studies as analytic tools are frequent especially concerning spatial change, tourist flows, or physical change due to tourist developments. In

relation to tourist attitudes it is less common, but there are some works on behavioural patterns (Ryan, 1995).

In the Blekinge archipelago study, interviews with the county administration board and with representatives of the municipalities were chosen as one method. All interviews were semi-structured and the questions were sent in advance to the people being interviewed. The author conducted the interviews, where a tape recorder was used and notes were taken. The interviews took place during approximately 1,5 hour.

Elisabet Wallsten, biosphere reserve (candidate) coordinator, Blekinge archipelago, was interviewed 23 April, 2008. Wallsten is employed by the Blekinge county administration board, but at the time of the interview, she also worked as the biosphere reserve coordinator. The interview took place at Wallsten's office, and the purpose was to get information of the process of the establishment of a new biosphere reserve in Sweden and to discuss zoning, conflicts and tourism (Appendix 8). In the beginning of the interview, Åke Widgren from *the Nature department* of the county administration board also participated. He is involved in the current work of establishing possible 'consideration areas' in the Blekinge archipelago, and could thereby answer the questions regarding noise and silence in the area.

Another interview was carried out 24 April, 2008, with Sven-Olof Petersson (Appendix 8), who is answerable for the Karlskrona municipality's work with the future biosphere reserve. He is also the Agenda 21 coordinator at the Social structure administration at *the Environment office*. The interview took place at the municipality's building in Karlskrona.

On the 27 May, 2008, Per-Ola Mattson, member of the Karlshamn municipal council moreover chair for the Social Democrats in Karlshamn, was interviewed together with Lena Axelsson, head of tourism in Karlshamn municipality (Appendix 8). They are the representatives for the Karlshamn municipality in the work with the future biosphere reserve in Blekinge. The interview took place at the *National Biosphere Reserve Meeting* in Gysinge, which took place 27-28 May.

Finally, 9 July 2008, Anna-Karin Sonesson, investigator at the Ronneby municipal managerial department and Emma Berntsson, environment and health manager at Ronneby municipality, answered the interview questions in writing (e-mail).

## **2.2 The method of registration card data**

The method with registration cards has been used in several studies in the Swedish mountains (see Fredman & Emmelin, 1999; Hörnsten, 2002; Hörnsten & Fredman, 2002; Vuorio, 2003 and Wall Reinius, 2006) either by self-registration stations placed at entrance points or marked hiking trails, or by the distribution of cards to mountain stations or cabins to be handed out by staff. As Manning (1999) states, the method with registration cards is one of the few ways to get hikers' addresses and it also gives a relatively large sample of visitors. Another advantage is that the questions of the cards may be compared to the results of the questionnaire survey and that the respondents are aware that they might receive a questionnaire. This may lead to a higher percentage of the response rate (Kajala et al., 2007). The final response rate of the Blekinge study, differed between the registration card respondents (n=238 total response rate 55%) and the second home owners (n=340 total response rate 41%). This may indicate that the method of registration cards means a higher response rate in the end.

In order to get the temporary visitors' addresses, self registration by registration cards was used as method in the Blekinge study. From 25 June to 24 August 2007, people visiting the Blekinge archipelago were asked to complete registration cards (Appendices 3-7) at several establishments. Field workers were also handing out cards at certain occasions at different places in the archipelago.

In the Blekinge archipelago, as many different establishments as possible were selected in the three municipalities. Establishments (guest harbours, youth hostels, and camping grounds) located on the coast near the sea or on different islands in the archipelago were determined as interesting to contact for the distribution of the cards. The most of the archipelago's establishments were located in the Karlskrona municipality. Also included in the study was the Eriksberg Game and Nature Park, which with its 10 km<sup>2</sup> is one of the largest wildlife sanctuaries in northern Europe. Registration cards were also handed out by the Skärgårdstrafiken's staff on the tour boats M/F Axel, M/F Ungskär and M/F Wittus, in the Karlskrona municipality.

The establishments (n=19) were contacted by phone. The author explained the purpose of the research and a verbal agreement was set up regarding being part of the study or not. At this point, none of the contacted establishments refused to participate. The registration cards were personally delivered by field workers 25-29 June. The present staff was informed what the study was about (verbally together with written information), and how to distribute and collect the cards. The field workers also distributed signs and information about the research directed to visitors. This was to be set up in the receptions, on notice boards etc. and the information was in Swedish, German and English. Regarding the guest harbours, certain boxes were delivered to be set up, so the respondents could leave the cards themselves.

The establishments were contacted by phone 10 July by a field worker. The contact was made to control how the work was proceeding and to encourage the establishments to hand out the cards. The picking up of registration cards took place by field workers at two times; firstly 17-26 July and secondly 15-20 August.

A total of 596 registration cards were collected in the Blekinge archipelago. Of these, 165 addresses were to foreigners and 431 cards with addresses to Swedes (217 females and 214 males).



**Table 1.** *Number of registration cards to Swedish respondents in the Blekinge archipelago 2007.*

| Source and place                                  | Municipality | Females (n) | Males (n)  | Total (n)  |
|---|--------------|-------------|------------|------------|
| Aspö Lotstorn                                     | Karlskrona   | 12          | 11         | 23         |
| Dragsö Camping ground                             | Karlskrona   | 16          | 12         | 28         |
| Dragsö utkik KKS                                  | Karlskrona   | 0           | 2          | 2          |
| Guest harbour Karlskrona                          | Karlskrona   | 0           | 4          | 4          |
| Hasslö youth hostel                               | Karlskrona   | 4           | 3          | 7          |
| Kristianopel Camping ground and youth hostel      | Karlskrona   | 4           | 5          | 9          |
| Senoren Camping ground                            | Karlskrona   | 1           | 3          | 4          |
| Sturkö Camping ground                             | Karlskrona   | 1           | 1          | 2          |
| Tjurkö youth hostel                               | Karlskrona   | -           | -          | -          |
| Tourboats <i>Skärgårdstrafiken</i>                | Karlskrona   | 81          | 69         | 150        |
| Trummenäs Camping ground                          | Karlskrona   | 0           | 3          | 3          |
| Utklippan youth hostel                            | Karlskrona   | 7           | 11         | 18         |
| Utklippan guest harbour                           | Karlskrona   | 4           | 34         | 38         |
|   |              |             |            |            |
| Bökenäs Camping ground                            | Ronneby      | 1           | 0          | 1          |
| Garnanäs Farm                                     | Ronneby      | -           | -          | -          |
| Järnavik Youth hostel                             | Ronneby      | 4           | 1          | 5          |
|   |              |             |            |            |
| Eriksberg Game and Nature Park                    | Karlshamn    | 6           | 4          | 10         |
| Kollevik Camping ground                           | Karlshamn    | 2           | 0          | 2          |
| Tjärö Youth hostel and guest harbour              | Karlshamn    | -           | -          | -          |
|   |              |             |            |            |
| Tjärö tourist station – field workers             | Karlshamn    | 23          | 18         | 41         |
| Karön – field workers                             | Ronneby      | 1           | 9          | 10         |
| Tourboat <i>Skärgårdstrafiken</i> – field workers | Karlskrona   | 50          | 24         | 74         |
| <b>TOTAL:</b>                                     |              | <b>217</b>  | <b>214</b> | <b>431</b> |

The most registration cards were gathered at the tour boats and Utklippan guest harbour, see Table 1. The establishments Garnanäs Farm, Tjurkö youth hostel and Tjärö youth hostel and guest harbour, had not handed out any cards during the time period.

During certain occasions in June-August, three field workers handed out cards themselves to visitors on camping grounds and among passengers on the tour boats. As depicted at the bottom of Table 1, a total of 125 cards with addresses to Swedes (74 females and 51 males) were collected by the field workers at Tjärö tourist station, Karön and the tourboat.

**Table 2.** *Distribution of foreigners who filled in registration cards in the Blekinge archipelago 2007.*

| Source and place                                  | Municipality | Foreigners (n)    |
|---|--------------|-------------------|
| Aspö Lotstorn                                     | Karlskrona   | 2                 |
| Dragsö utkik KKS                                  | Karlskrona   | 1                 |
| Guest harbour Karlskrona                          | Karlskrona   | 2                 |
| Kristianopel camping ground and youth hostel      | Karlskrona   | 2                 |
| Senoren camping ground                            | Karlskrona   | 2                 |
| Tour boats <i>Skärgårdstrafiken</i>               | Karlskrona   | 26                |
| Utklippan guest harbour                           | Karlskrona   | 78                |
| Bökenäs camping ground                            | Ronneby      | 6                 |
| Järnavik youth hostel                             | Ronneby      | 3                 |
| Eriksberg Game and Nature Park                    | Karlshamn    | 17                |
| Tjärö tourist station – field workers             | Karlshamn    | 8                 |
| Karön – field workers                             | Ronneby      | 4                 |
| Tourboat <i>Skärgårdstrafiken</i> – field workers | Karlskrona   | 14                |
|   |              | <b>Total: 165</b> |

The foreigners (n=165) who filled in registration cards were from many different countries, for example, Germany, Denmark, Switzerland, Holland, Austria, Spain and England. The most addresses to foreigners were collected on Utklippan and on the tour boats (see Table 2). Several foreigners also filled in cards while being in the Eriksberg Game and Nature Park. Finally, a number of 26 cards were collected by field workers.

The total of cards with addresses to foreigners proved to be much fewer in comparison to the total of addresses to Swedes. Since it would be difficult to statistically compare the results of the foreigners with the Swedes, it was decided to exclude the foreign respondents from this study.

**Table 3.** *Questions in the registration cards - in relation to different distribution places.*

| Where the registration cards were handed out | Questions in the registration cards  |
|--|--|
| 1. Youth hostels and camping grounds         | a) When did you arrive to the Blekinge archipelago and when are you planning to leave?<br>b) What is your main activity during the stay?       |
| 2. Tour boats ( <i>Skärgårdstrafiken</i> )   | a) Is your visit over the day or do you stay overnight (number of nights)?<br>b) What is your main activity during the stay?                   |
| 3. The Eriksberg Game and Nature Park        | a) Do you own or have access to a second home in Blekinge?<br>b) Where did you stay last night?  |
| 4. Guest harbours                            | a) When did you arrive to the Blekinge archipelago to sail and when are you planning to leave?<br>b) Which harbour did you stay at last night? |
| 5. Cards handed out by field workers         | a) When did you arrive to the Blekinge archipelago and when are you planning to leave?<br>b) What is your main activity during the stay?       |

The registration cards are not only a method to collect addresses to future respondents of a questionnaire survey. The cards themselves are a method to collect visitor data concerning name, address, age and sex, and information of when he or she arrived to the area and departure. Thereby, it is possible to collect even more data about the visitors. Depending on where the registration card was handed out in the Blekinge study, five different forms were constructed with different questions, see Table 3. Different questions about the respondent's visit and activities were asked. Other questions could also include, for example, the respondent's duration of stay, and if he or she had access to a second home. In this report, the results of the registration cards have not been analysed.

### **2.3 The applicability of registration cards in coastal areas**

Regarding the registration cards, one should be aware that when visitors fill in cards on a large voluntary basis, one will probably find some un-representatively in the sampled population (Wall Reinius, 2006). Despite the fact that the visitors are asked to fill in cards, there is a certain amount of voluntariness and it is possible for the respondents to decline. Thereby, fewer respondents fill in the cards in relation to the actual amount of respondents. This bias caused by self registration can be significant. Moreover, non-locals tend to register more often than the locals (Kajala et al., 2007).

It is difficult to make a non-response analysis of the registration cards in areas like the Blekinge archipelago – it has to be done roughly. Of course there were visitors who never had the opportunity to register and to be included in the study (see also discussion in Kajala et al., 2007). Perhaps they did not see the cards or the information, or did not understand the purpose, or thought that they would register later. As Kajala et al., (2007) state, some visitors may be in such a hurry that they do not have the time to answer the survey. In such cases, one could consider to either reject that sort of site for collection of data or move to another location. In the Blekinge study it was not easy to move to another location, since it was the establishments and tour boats that were the locations.

In comparison to special non-response analyses in the Swedish mountains (where respondents on a hiking trail were asked why they had passed a box with registrations cards without filling in a card) it is more complicated to estimate *when* to ask a visitor in the Blekinge archipelago why they did not fill in a card. For example, on the tour boats it was not until the visitors had *left* to go ashore, that it was certain that they did not intend to fill in a card. To be able to ask different passengers whether they had filled in a card and not, demanded extra staff on both the boats and on dry land. In such a non-response analysis, it is necessary to identify the non-respondents before they head off for other activities or their second home. The same is for the pleasure boats in the guest harbours. It is not until the pleasure boat leaves the harbour, that it is determined that the respondents will not fill in a card. In youth hostels and camping ground, the visitors have to be caught after they check out. Before this moment they have had the opportunity to fill in a card.

When collecting addresses, is also important to register external factors that may affect the respondents and their activities, such as the weather, special campaigns or events (Vuorio, 2003). For example, in the Blekinge study, the weather in summer 2007 was miserable from Midsummer and three weeks forward. Regarding which places in Sweden that had had the worst summer, Karlshamn in Blekinge, came on first place with a rain record in both June and July. The summer of Sweden could despite this be viewed as normal in 2007, but with changeable weather (<http://svt.se/svt/jsp/>, 10/10/07). Nevertheless, the poor weather in the area

may have affected the number of visitors and their activities. The field workers noticed that during windy days with rain, there were very few passengers onboard the tour boats.

As mentioned above, the registration cards have been an efficient and useful method in the Swedish mountains. What about using this method in the Swedish coastal areas? In the Swedish coastal areas, the method has earlier been used in the Luleå archipelago (see Ankre, 2007), to get temporary visitors' addresses. In both the Luleå and the Blekinge studies, the distribution of the registration cards proved to be problematic and the final number of useable cards with addresses were much fewer than expected. In the Blekinge archipelago, there were several possible reasons for the poor result of the cards, which can be concluded as follows:

- i) Many different organisations/establishments.
- ii) Competing investigations/questionnaire surveys by the establishments.
- iii) Unsatisfied supervisors concerning their participation in the project.
- iv) The staff's degree of knowledge and information about the study.
- v) The degree of the staff's involvement.
- vi) A negative attitude among the visitors (according to the establishments).

In the survey, there were many different organisations and establishments to organise in the work of the registration cards. The 19 establishments were all managed and administrated separately with no unifying organisation to contact for the investigation. The Swedish Tourist Association (STF) is responsible for a couple of the youth hostels in the Blekinge archipelago, but otherwise the establishments are run by private entrepreneurs. Perhaps if there had been one organisation<sup>4</sup> to be in contact with, it would have been easier to implement the relevance of the establishments' participation. An all-embracing organisation would thereby decide that the establishments should participate actively in a survey.

Competing investigations/questionnaire surveys by the establishments might be another cause for the complications with the registration cards. Several of the camping grounds had their own investigations and questionnaire surveys. The establishments were, of course, interested in satisfying results of their own investigations, which could have affected the procedure of handing out the registration cards. Also, visitors might have felt that they had contributed enough since they first had answered the establishment's survey, and then were asked to be part of another survey as well.

An additional observation in the Blekinge study was that some owners and supervisors declared at the final collection of the cards, that they were unsatisfied with their participation in the project. During the first contact with the establishments' owners and supervisors, many were positive towards being part of the study. However, when the project was finished, some of them expressed dissatisfaction since they would have liked to formulate the project and its' execution. Perhaps these owners and supervisors had deliberated over the project, with the conclusion that a phone call in advance from the project organizers (to explain the study and its purpose) was not enough. Or, the dissatisfaction could to some extent be explained by cognitive dissonance, where one tries with different excuses for certain behaviour: "*We did not hand out the registration cards because of...*". Thereby, the late expressed wish for being part of the study from the beginning, became an argument for not have handed out the cards.

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<sup>4</sup> For example, in Wall Reinius' study (2006), the STF was involved in the work with handing out cards at 12 of its mountain huts.

Another observation in the method of registration cards was the establishment staffs' lacking knowledge and information about the study and its purpose. It is central to bring the staff up to date and to make sure that they have knowledge of the cards and general basic information of the project. It is difficult to convince visitors to participate in a study if one self does not know why the visitors should bother to fill in a card, or what the research is about. However, in the Blekinge study, the field workers informed the staff both verbally and in written, as well as the author informed the owners and the supervisors of the establishments. There were also material, such as signs, which should be put on boards. Problematically, at these sorts of establishments there can be a variety of staff working at different times who did not take part of the information.

The degree of the staff's involvement is another aspect of the method of the registration cards. The success with the method is highly dependent on the staffs' enthusiasm and interest. A reason for visitors not filling in the cards may be related to the co-operation of the involved staff (Wall Reinius, 2006). One problem is the missing link between the owner/supervisor and the staff. The former agrees to be part of the study, but forgets to apply and inform the staff about this. The staff are thereby feeling mislead and the cards are perceived as 'extra work'. To hand out the registration cards is to some extent time consuming, which may also explain the inadequate result of the cards from the establishments. The staff needs to explain the purpose of the study for a couple of minutes for every guest.

According to the establishments, a negative attitude among the visitors was one reason for the difficulties with the cards. When the field workers collected the cards among the establishments, they were told that the cause for the poor result of collected cards depended on the visitors, who:

- a) did not want to fill in the cards,
- b) did not have the time,
- c) were on a vacation and did not want to be disturbed,
- d) did not want to reveal their addresses or,
- e) were simply not interested.

As maintained by the establishments' staff, the reasons stated above were the most common ones for not wanting to participate and fill in a card.

However, almost everybody who was asked by a field worker in the Blekinge archipelago to fill in a card agreed to participate. When the study had been explained by the field worker and there had been the possibility to ask questions from the respondents' part, many were interested to participate. The people who did not want to participate when contacted by a field worker had the following reasons:

- a) I do not under any circumstances reveal my home address,
- b) I never respond on questionnaires no matter what,
- c) I'm being so stressed for the autumn that it would be unreasonable to have the time for a questionnaire survey.



**Photograph 3.** *A visitor on Tjärö fills in a registration card handed out by a field worker. Photo by Maria Rundquist, 2007.*

How applicable are registration cards in coastal areas? As the study in the Blekinge archipelago shows, the method with registration cards could develop further. For example, there was no information of the research on the reverse of the registration card. It may have made the card more understandable and appealing to fill in. The card may also be perceived as difficult to grasp and read. A solution is that the person who hand out the cards, also fill in the cards (instead of the respondent) which would make the final result more usable. There were 72 cards<sup>5</sup> collected which could not be used because of, for example, respondents being part of the same household, bad handwriting, fake addresses, the same person filling in more than one card, and minor children filling in cards.

Furthermore, detailed information and continuous contact with the establishments is necessary. To contact the establishments again by phone in an early stage of the study proved to be a good idea. It revealed how the establishments had handled their obligations with the cards so far. The phone call gave an opportunity to talk to the establishments and ask how many cards they had gathered at this point. It also meant a reminder of the agreement of handing out the registration cards. Some demonstrated a bad consciousness for not being more active in the work of handing out and collecting the cards. Some staff in the Blekinge archipelago declared at this point that they had not had the time to hand out the cards, which of course was important information.

Finally, are visitors in Swedish coastal areas negative to registration cards? No, instead the attitudes and involvement of the people *handing out* the cards are central to the achievement of

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<sup>5</sup> These 72 cards have therefore not been included in the total amount of collected cards. Author's comment.

the method in these areas. This study demonstrates that to succeed with the registration cards in an environment like the Blekinge archipelago, field workers who hand out the cards in person is the most successful way to get addresses to future questionnaire respondents. Approximately ten days was spent to hand out registration cards by field workers. The sporadic times the field workers were collecting registrations cards, they managed to collect 29% (n=125)<sup>6</sup> of the total of the cards (n=431), in comparison to the 19 establishments who had several months to hand out the cards.

The involvement of field workers emphasizes the advantages even more. The field workers can explain the purpose with the cards and answer questions concerning the research. The respondents are therefore well-informed that they most likely will receive a questionnaire form later on. To employ people to hand out the cards is, of course, more expensive than asking establishments to hand out cards voluntarily. However, the final result of the number of collected cards would instead improve. Also, it is easier for the project leader to overview the results of the cards continually by a dialogue with the field workers. The conclusion is that registration cards are functional as a method to collect addresses of different groups of temporary visitors in coastal areas – if the dependence of various establishments is avoided.

## 2.4 The questionnaire survey

To get knowledge of the tourism and outdoor recreation in the Blekinge archipelago, a questionnaire survey directed to visitors and second home owners was conducted. Many visitor studies face problems regarding whether the surveys are representative or not. The whole population's size and type is hardly ever identified, which makes it difficult to estimate the sample size and to see if it is representative. To have a representative sample, three municipalities of the Blekinge archipelago were included (Karlskrona, Ronneby and Karlshamn) in this study.

Questionnaire forms were also sent to second home owners in Sölvesborg municipality, but it was decided not to include these respondents in the study since this municipality no longer was part of becoming a biosphere reserve. Another reason is that the response rate was low and that several of the second home owners of Sölvesborg did not define the area as part of the Blekinge archipelago in their questionnaire answers, even though, for example, the National Rural Development Agency defines it so. However, Hanö (located in Sölvesborg) as a place is still included to estimate how many of the respondents who went to this particular island.

Furthermore, the visitors' addresses were unevenly distributed in the Blekinge archipelago. Thereby, mainly a *thematic*, and not a geographical, representative sample was achieved in this study when collecting the respondents' addresses to:

- a) Temporary visitors.
- b) Second home owners.

The temporary visitors' addresses were collected by the gathering of registration cards, as described above.

3,900 addresses of second home owners (who had a second home 50 metres from the shore line in the Blekinge county) were bought from the National Land Survey. This included both the

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<sup>6</sup> There was also another 26 cards collected by the field workers, but with foreign respondents. Author's comment.

permanent addresses and the second home addresses of the respondents. This in order to firstly, make a selection of respondents due to the second home's geographical location in the archipelago (to make an even dispersion between the municipalities) and secondly, to send the questionnaires to the permanent addresses.

The respondents should have visited the area in May-August 2007. The time period was selected due to several factors. It is the peak of the tourist season in summer time, many people spend a lot of time in their second homes, the boats are used frequently and both people from the areas nearby (from the county and, for example, Karlskrona) and visitors from far away visit the archipelago. However, since the addresses of second home owners were bought from the National Land Survey, it was impossible to know whether the respondent had been in the area during the specified time. If the second home owners had not been in the area the summer 2007, they were instead asked to declare when he or she had had their last visit in the area. Thereafter to answer the more general questions not referring to May-August 2007.

The goal of the survey was to gather knowledge of the visitors, their activities, which conflicts they had experienced and their attitudes to changes and development in the area and in Swedish coastal areas in general. The questionnaire survey<sup>7</sup> in the Blekinge archipelago thereby consisted of seven sections with questions about:

- A) When one had been in the area, and the means of transport and accessibility. Also, the experiences of conflicts, and the attitudes to taking measures to conflicts.
- B) The respondents' activities and experiences. In addition, the attitudes to possible future development in the area.
- C) Where in the area the respondents had been and the housing, such as second homes.
- D) Experiences and attitudes to noise, in the area and in Sweden in general.
- E) The shoreline protection, restrictions against freedom of movement.
- F) Opinions of coastal areas in Sweden in general.
- G) Information of the respondents' address, sex, age, civil status, education and the income of the household.

In conclusion, the key words of the questionnaire were *conflicts*, *zoning*, *accessibility*, *noise*, and *the purism scale*<sup>8</sup> (see Appendix 1, question F1) which reflected the research questions of the thesis. Two other important variables were the respondents' activities and geographical dispersion. The questions of the questionnaire survey may also be related to the discussion of a possible future biosphere reserve in the Blekinge archipelago. Questions concerning economics and demographical variables were also included to get knowledge of the respondents' similar or different backgrounds. The questionnaire was tested on twelve students and some co-workers, in order to evaluate the form's functionality.

The 26-27 October 2007, the questionnaire was sent to a total of 1259 respondents: 828 second home owners and 431 temporary visitors (respondents from the registration cards). Visitors from other countries were not included in the study. A first reminder was sent 20-21 November

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<sup>7</sup> In this paper the Appendix 1 consists of an English translation of Appendix 2, the original Swedish version of the questionnaire.

<sup>8</sup> It is a classification model where people are separated into different groups in relation to their motives and behaviours. One can estimate the visitors' ideals in relation to 'purism' by asking questions about different indicators of untouched nature. The visitors are divided in to three main groups: 'purists', 'neutralists' and 'urbanists' (also called 'non-purists') depending on their attitudes (Stankey, 1973; Cole, 2001). The method should be used to get a compounded ideal view among the respondents, not how this opinion has been formed by the individual (Emmelin, 1997).



to the respondents who had not send in the questionnaire form. A second reminder (with a new questionnaire form included) was sent 7 December to 256 of the registration card respondents. After Christmas, 588 second home owners got a second reminder. The coding of the questionnaires began in December 2007 and was concluded in April, 2008.

**Table 4.** *Data of the questionnaire survey in the Blekinge archipelago 2007.*

| <b>Statistics</b>                          | <b>Number</b> |
|--|---------------|
| Mailed questionnaires                      | 1259          |
| Completed questionnaires                   | 578           |
| Respondents permanently living in the area | 68            |
| Wrong addresses                            | 13            |
| Not completed questionnaires               | 63            |
| Non-respondents                            | 537           |

The questionnaire was mailed to 1259 individuals and the total number of completed surveys was 578. The number of non-respondents was 537. The questionnaire was send to respondents (n=68) who proved to live permanently in their second homes. These were thereby not included in this study. Because of wrong addresses, a total of 13 surveys were returned to the sender (see Table 4). Also, a number of 63 questionnaires were sent back either empty or not completed. The final response rate was 52% of the survey, calculated as  $1259 - 68 - 13 - 63 = 1115$  and  $578/1115 = 0,5183 = 52\%$ .

**Table 5.** *Response rate of the second home owners in the three municipalities of the Blekinge archipelago, 2007.*

| <b>Municipality of the second home owners</b> | <b>Questionnaires send out (n)</b> | <b>Completed questionnaires (n)</b> | <b>Response rate (percentage)</b> |
|---|------------------------------------|-------------------------------------|-----------------------------------|
| Karlskrona                                    | 374                                | 151                                 | 40%                               |
| Ronneby                                       | 282                                | 112                                 | 40%                               |
| Karlshamn                                     | 172                                | 77                                  | 45%                               |
| <b>Total</b>                                  | <b>828</b>                         | <b>340</b>                          | <b>41%</b>                        |

Since the addresses to respondents of the Blekinge study were collected in two ways it was interesting to see if the response rate differed between the second home owners and the registration card respondents. Of 828 second home owners, 340 participated in the study. The response rate among the second home owners was totally 41%, see Table 5. When comparing the response rate among the second home owners in the three different municipalities, the result was quite uniform even though Karlshamn municipality had a slightly higher percentage.

Among the 431 respondents who had filled in a registration card, a number of 238 answered the questionnaire survey. The response rate among the registration card respondents was thereby 55%.

## 2.5 Non-response analysis

A non-response analysis of the questionnaire survey was executed by a field assistant. It was determined that 10% of the final non-response rate should be examined to be statistically acceptable. The selection of non-respondents was made from the lists of addresses. If the phone number was not found, the next non-respondent in turn was chosen. Except for describing why

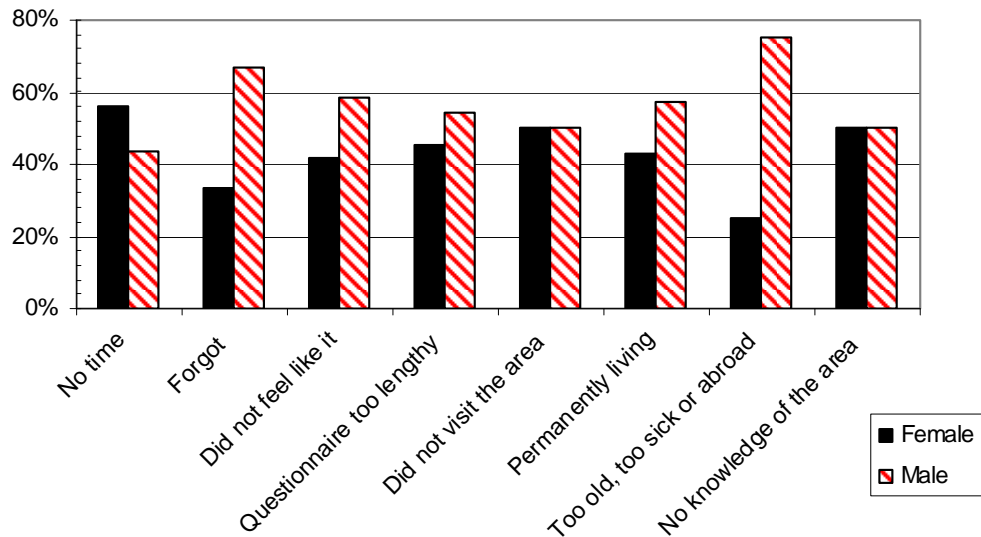
he or she had not participated in the questionnaire survey, the non-respondents were also asked to tell their birth year. The field assistant made the phone calls in the evening, to secure a higher response rate.

In advance, some reasons for choosing not to participate in the study was determined from the non-respondents who had informed the author in writing, by email or by phone that they were not going to participate. Several causes were thereby assigned, for example, lacking out of time or claiming that they had not been to the Blekinge archipelago in 2007. Others were travelling abroad, were too old or too sick to be able to answer the questionnaire. Also, there were non-respondents who maintained that the questionnaire form was too extensive, poorly constructed or of no relevance for them.

**Table 6.** *The number of respondents in the non-response analysis and the reasons for not participating in the questionnaire survey.*

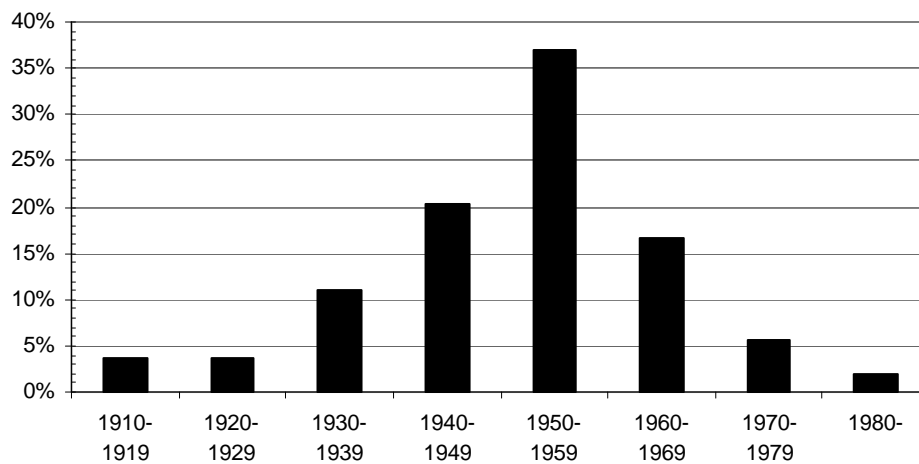
| Reasons for not participating   | Total of respondents<br>(n=57) |
|---------------------------------|--------------------------------|
| No time                         | 16                             |
| Did not feel like it            | 12                             |
| Questionnaire too lengthy       | 11                             |
| Permanently living              | 7                              |
| Too old, too sick or was abroad | 4                              |
| Forgot                          | 3                              |
| Did not visit the area          | 2                              |
| No knowledge of the area        | 2                              |

A total of 57 non-respondents were called by phone. The non-response analysis showed that lack of time was the most common reason for not participating in the Blekinge study, see Table 6. Other recurrent reasons were that the questionnaire form was perceived as too lengthy, or that one just did not feel like participating. Being permanently living in a second home, was another reason for not answering the questionnaire.



**Figure 2.** *The reasons for not answering the questionnaire survey among male and female non-respondents.*

The reasons for not participating differed to some extent among males (n=31) and females (n=26). Especially the categories regarding being too old etc. or forgetting to fill in the questionnaire, stand out (Figure 2). Also, there were more males who did not feel like participating or were permanently living in the archipelago. A higher number of females declared that they had had no time for participating.



**Figure 3.** *Age groups in the non-response analysis.*

In the non-response analysis, the birth year was examined (n=54). As shown in Figure 3, the two largest groups of non-respondents (a total of 57%) were born 1940-1959. The third largest age group (17%) was born 1960-1969. There were also fewer non-respondents in the age groups consisting of people either born in the early, respectively late, 20<sup>th</sup> century.

### 3. RESULTS OF THE QUESTIONNAIRE SURVEY IN THE BLEKINGE ARCHIPELAGO 2007

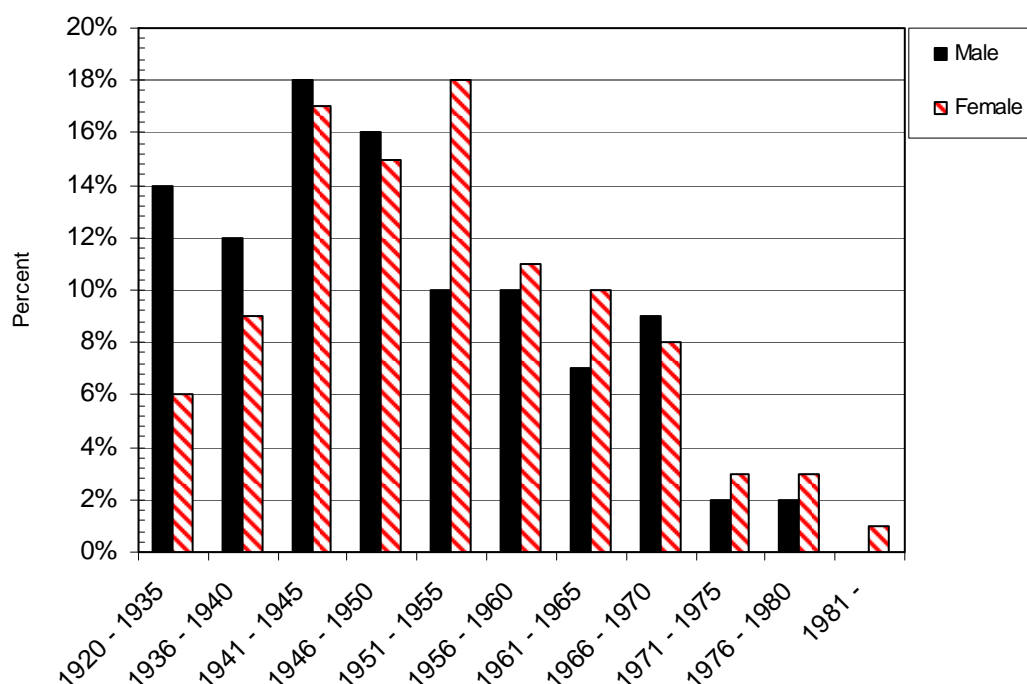
#### 3.1 Introduction

In this section, the results of the questionnaire survey in the Blekinge archipelago 2007 are presented with tables. The results are based upon the frequencies calculated by using the software *Statistical Package for Social Sciences* (SPSS) and thereby summarised in frequency tables in *Excel*. The results are presented either as percentage or by the number of respondents in Appendix 1.

Note that the calculated percentage is based upon the declared number of respondents for every question in Appendix 1 (the questionnaire form with the frequency distribution included), where the number of missing respondents are clearly presented. In this section, the results have references to the explicit questions in Appendix 1.

#### 3.2 Basic information of the respondents

All respondents (n=578) were from Sweden. The main part of the respondents had their residence in the area nearby the Blekinge archipelago and the southern part of Sweden. Several of the respondents (18%) came from the four municipalities of Blekinge county (Karlskrona n=41, Karlshamn n=29, Ronneby n=23 and Sölvesborg n=6). The cities with the highest number of respondents' residence were Lund (n=31), Växjö (n=29), Malmö (n=28), Stockholm (n=24), Lyckeby (n=12), Trelleborg (n=9) and Limhamn (n=8). For the other home districts, see question G1.



**Figure 4.** The percentage of males and females within the respondents' age groups in the Blekinge archipelago 2007.

In the survey, there was quite an even distribution between males (48%, n=271) and females (52%, n=293). 17% was in age group 1941-45, followed by 15% in group 1946-1950 and 14% in group 1951-1955 (see question G2). Only 4% of the respondents were born in 1976 or later.

Figure 4 shows the gender dispersion in relation to age. More women are represented in the age group 1951-1955, while there are more men in the age groups between 1920-1940. Otherwise, the gender dispersion is rather even.

A major part (82%) of the respondents was married or cohabiting with a partner, while 13% was single. The remaining respondents were either in a relationship but not living together, or living with their parents. Of the respondents, 57% had a completed education of university or college, and 13% had completed compulsory school or junior secondary school. Finally, 18% had completed upper secondary school.

The approximate total disposable income of the respondents' household in 2007 (after deducted taxes) was more than 500 000 SEK among 28% in the survey. Furthermore, 1/5 of the respondents proved to have an income between 200 000 – 299 999 SEK, respectively 1/5 had 300 000 – 399 999 SEK and another 1/5 had 400 000 – 499 999 SEK.

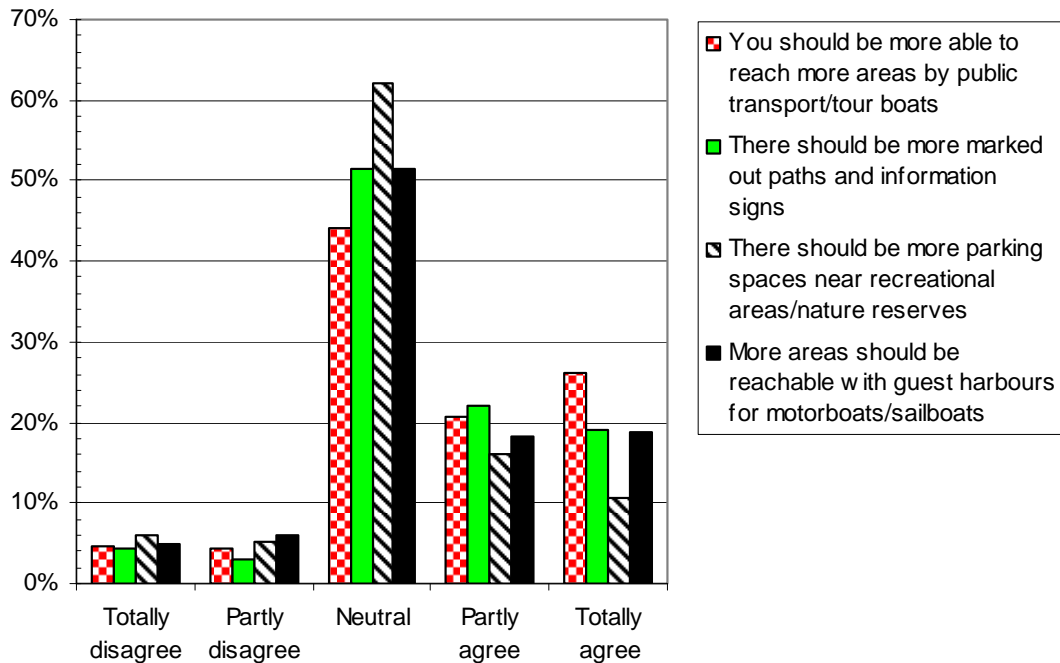
Of the respondents, 88% had visited the area before the summer 2007 and 89% would definitely come back for a visit. Over half of the respondents had an overall very good opinion of their visit in the area, while 35% thought that it had been good, and that only one or two things could have been better. Finally, 10% stated that their overall opinion was rather good, but that some things could have been better.

### **3.3 Accessibility and means of transport**

To get to the Blekinge archipelago, the respondents used one or more means of transport. The most common mean of transport was by one's own car (82%), followed by one's own boat (16%). Car with a caravan, bus or train were used by approximately 3-5%. Finally, aeroplane and rental car were used by 1-2%.

Within the Blekinge archipelago, the most common transport means were car (66%), motorboat (42%), tour boat (35%) and bicycle (25%). Among the respondents, 17% had used a sailing boat to travel within the area and 11% had used the hiking paths. Canoe/kayak (5%) and motor cycle (1%) or four wheeler (0,2%) were less common.

Of the respondents, 34% were positive or very positive regarding their feelings to the existing public transportation while 9% were negative or very negative. 13% was neutral and 44% claimed that they had not used any public transportation means.



**Figure 5.** *Opinions regarding a possible future accessibility in the Blekinge archipelago.*

The respondents also gave their opinion regarding a possible future accessibility in the Blekinge archipelago, see Figure 5. The statements concerned if one should be able to reach more areas by public transport/tour boats, and if there should be more marked out paths and information signs. Another statement was if there should be more parking spaces near recreational areas/nature reserves. For example, 37% partly agreed or totally agreed that guest harbours would make more areas easy to reach. As depicted above, a low percentage of the respondents totally disagreed or partly disagreed with the statements.

27% partly agreed or totally agreed with a future development of more parking spaces. Nearly half of the respondents partly agreed or totally agreed that public transport/tour boats should develop to increase the ease of access. Furthermore, regarding if there should be more marked paths, 41% partly agreed or totally agreed.

### 3.4 Conflicts

In the survey, several questions concerned different experiences and sources of conflicts. Among the respondents, 69% believed that the number of visitors was just right. Only about 5% thought that there were a bit too many or much too many visitors. Instead, 1/4 of the respondents indicated in their response that the tourism development could increase, since they believed that there were much too few or a bit too few visitors.

**Table 7.** *The respondents' experiences of conflicts in any of the following situations in the Blekinge archipelago in May-August, 2007.*

|  | Not<br>at all | Not<br>much  | A bit        | Rather<br>much | Very<br>much |
|--|---------------|--------------|--------------|----------------|--------------|
| Other visitors carrying out other activities than I did (M <sup>9</sup> =27) | 79,9%         | 10,5%        | 6,7%         | 2%             | 0,9%         |
| Other visitors carrying out the same activities as I did (M=27)              | 81,5%         | 9,8%         | 6,7%         | 1,8%           | 0,2%         |
| Direct contact with other visitors (M=28)                                    | 77,3%         | 12,7%        | 6,7%         | 2,4%           | 0,9%         |
| The mere knowledge of other visitors (M=28)                                  | 69,5%         | 14,9%        | 9,3%         | 4%             | 2,4%         |
| The establishment of second homes (M=30)                                     | 69,2%         | 13,3%        | 10,9%        | 3,6%           | 2,9%         |
| The development of infrastructure, sewerage, electric lightning, etc (M=29)  | 67,4%         | 12,2%        | <b>13,3%</b> | 3,3%           | <b>3,8%</b>  |
| Noise (M=27)   | 70,4%         | 14%          | 9,6%         | <b>4,4%</b>    | 1,6%         |
| Shoreline protection (M=28)  | 70%           | <b>15,3%</b> | 9,8%         | 2,7%           | 2,2%         |
| Restrictions of the freedom of movement (M=28)                               | 72,7%         | 14,7%        | 7,8%         | 3,3%           | 1,5%         |
| The fishing industry (M=29)  | 85,2%         | 8,7%         | 3,5%         | 1,1%           | 1,5%         |
| The farming (M=30)   | <b>90,1%</b>  | 6,8%         | 2,4%         | 0,5%           | 0,2%         |
| The local population (M=27)  | 85,1%         | 7,8%         | 4,7%         | 0,7%           | 1,6%         |

In Table 7, different sources of a possible experienced conflict are listed to the left, for example if the respondent has experienced a conflict related to the local population or a conflict due to noise. As depicted above, the majority of the respondents had *not* experienced the stated conflicts *at all*. Especially conflicts due to farming, the fishing industry or the local population had not been experienced at all.

The development of infrastructure, sewerage, electric lightning, etc. got the highest percentage (4%) among the conflicts experienced very much by the respondents.

When the percentage of the respondents' answers were put together regarding which conflicts they had experienced *a bit*, *rather much* and *very much* (see question A12), one fifth of the respondents mentioned the development of infrastructure, sewerage, electric lightning. Furthermore, 17% stated the establishment of second homes and 16% noise.

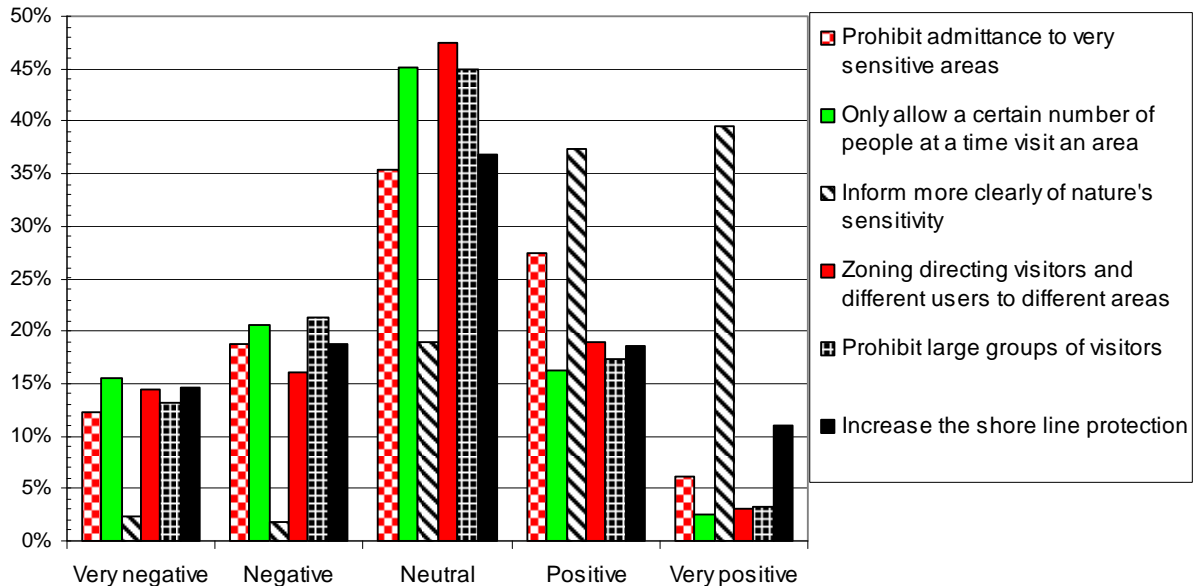
Continually, when instead the percentage of the respondents' answers were put together regarding which conflicts they had experienced *rather much* and *very much*, 7% stated the development of infrastructure, sewerage, electric lightning, respectively 7% the establishment of second homes and 6% noise.

A complementary question to the one concerning experienced conflicts was if there had been other conflicts experienced rather much or very much. The results are here expressed in the number of respondents. The most common answers were jet-skies (n=6) or reckless driving with boats (n=6). For additional causes of conflicts, see question A12.

The respondents were also asked to describe how they felt about the conflicts that they had experienced *rather much* or *very much*, and why they thought that the conflicts had arose (for additional information, see question A13). Two reasons were the sewerage problem (n=8) and

<sup>9</sup> M = missing respondents.

reckless driving of motorboats (n=6). Noise from jet-skies (n=5), beach limitations (n=4) and the local population not being friendly or respectful towards others, were other explanations why conflicts arose. Other reasons worth mentioning; neighbours (n=3), jealousy (n=3), noise from motorboats and airplanes (n=6), and constructions in general or buildings near the water (n=3).



**Figure 7.** The opinions on possible future measures to prevent conflicts in the Blekinge archipelago.

Finally, the respondents gave their opinions regarding possible future measures aiming to prevent conflicts in the Blekinge archipelago. As Figure 7 depicts, the statement regarding information regarding nature's sensitivity was viewed as *positive* or *very positive* by 77%. Among the respondents, about 1/3 believed it as *positive* or *very positive* to prohibit people to have admittance to very sensitive areas. Also, 30% was *positive* or *very positive* towards increasing the shore line protection.

The statements regarding different measurements to prevent conflicts in the area, all received just above 30% if *negative* or *very negative* opinions were put together, except for the statement of more clear information of nature and its sensitivity (4%). The statements with the highest negative percentage was firstly only allowing a certain number of people at a time visit an area (36%), and secondly prohibiting larger groups of people (35%).

### 3.5 Activities

The respondents stated which activities they had performed during their stay in the Blekinge archipelago 2007. Rest and relaxation (77%) got the highest percentage, followed by sunbathing and swimming (69%), seeing friends and family (67%) and experiencing the landscape (66%).

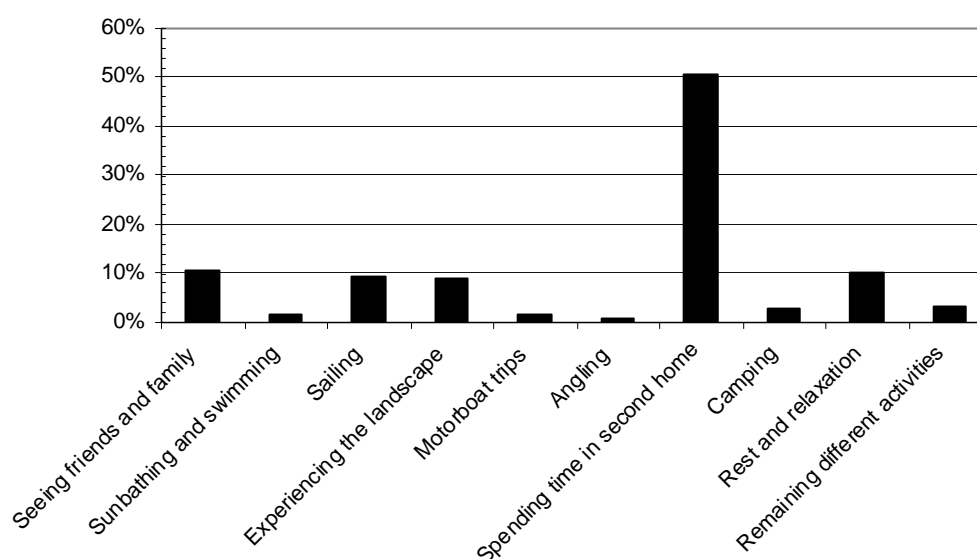
Since many of the respondents were second home owners, one activity with high percentage was spending time in a second home (66%). It also indicates why 14% spent their time gardening and working with the house. Nevertheless, hiking (45%) was also performed by many respondents as well as motorboat trips (36%). In comparison, sailing was an activity of



1/5 of the respondents. Regarding access to a pleasure boat, 24% of the respondents answered that they had had access to a sailing boat, and 53% to a motorboat.

Outdoor recreation was also common; having picnic or barbecuing outdoors (34%), picking berries and mushrooms (30%), and angling (29%). Among the respondents, 11% was bicycling and 11% golfing. Only a couple percent (see question B1), spent their time camping, wind surfing, canoeing or using a jet-ski.

In the Blekinge archipelago, visits to the military history remains or establishments, historical environments, as well as museums, were mentioned as activities (all together 10 respondents). One respondent mentioned visiting the World heritage as an activity.



**Figure 8.** *The respondents' main activity during their stay in the Blekinge archipelago 2007.*

Among the stated activities, the respondents were asked to mention which one of the activities that had been their *main* activity, see Figure 8. Spending time in a second home (51%) had the highest percentage, followed by seeing friends and family (11%), and rest and relaxation (10%). Some respondents (10%) said that they had had some experience of their main activity, while 1% stated that they had had none experience. The experience of the main activity was between 29% great and 60% very great.

**Table 8.** *Factors that influenced a visit to the Blekinge archipelago 2007.*

| Of no importance<br>4% | Of some importance<br>12% | Of great importance<br>56% | Factors                                   |
|------------------------|---------------------------|----------------------------|---|
|                        |                           |                            | The possibility of an outdoor experience  |
| 16%                    | 35%                       | 13%                        | The possibility of a cultural experience  |
| 9%                     | 25%                       | 33%                        | Nice water, beaches and sea bed           |
| 29%                    | 4%                        | <b>62%</b>                 | Access to a second home                   |
| <b>63%</b>             | 9%                        | 15%                        | Sailing possibilities                     |
| 43%                    | 15%                       | 22%                        | The possibility of using a motorboat      |
| <b>46%</b>             | 19%                       | 12%                        | The possibility of angling                |
| 23%                    | 32%                       | 15%                        | The possibility of physical activity      |
| 2/%                    | 28%                       | 2/%                        | The possibility of hiking                 |
| 4%                     | 12%                       | <b>56%</b>                 | The means of communication to the islands |
| 25%                    | 19%                       | 34%                        | To get away from work                     |
| 21%                    | 29%                       | 24%                        | To get away from home                     |
| 31%                    | 21%                       | 21%                        | Access to housing and service             |
| 14%                    | 18%                       | 36%                        | Spending time with friends and family     |
| 33%                    | 24%                       | 15%                        | Absence of restrictions and impediments   |
| 6%                     | 14%                       | <b>49%</b>                 | The possibility of peace and quiet        |
| 35%                    | 22%                       | 15%                        | To spend time alone                       |

The respondents could on a 5-scale grade estimate the importance of different factors, which had influenced them to go to the Blekinge archipelago 2007. There were three factors with the highest percentage of being *of great importance*: access to a second home (62%), the possibility of an outdoor recreation (56%) and the means of communication to the islands (56%), see Table 8. Another factor with a high percentage of *great importance* was the possibility of experiencing peace and quiet (49%).

Among the respondents in the survey, the sailing possibilities were viewed of no importance by 63%, in comparison to the possibility of using a motorboat (43%). Also, another factor with high percentage of *no importance* was angling (46%).

Access of housing and service had a divided distribution of respondents who on one hand considered it as a factor of *no importance* (31%), and on the other hand *of importance* or *of great importance* (39%). The factor about the absence of restrictions and impediments was viewed of *no importance* by 33%.

### 3.6 Experiences of existing and future developments of the area

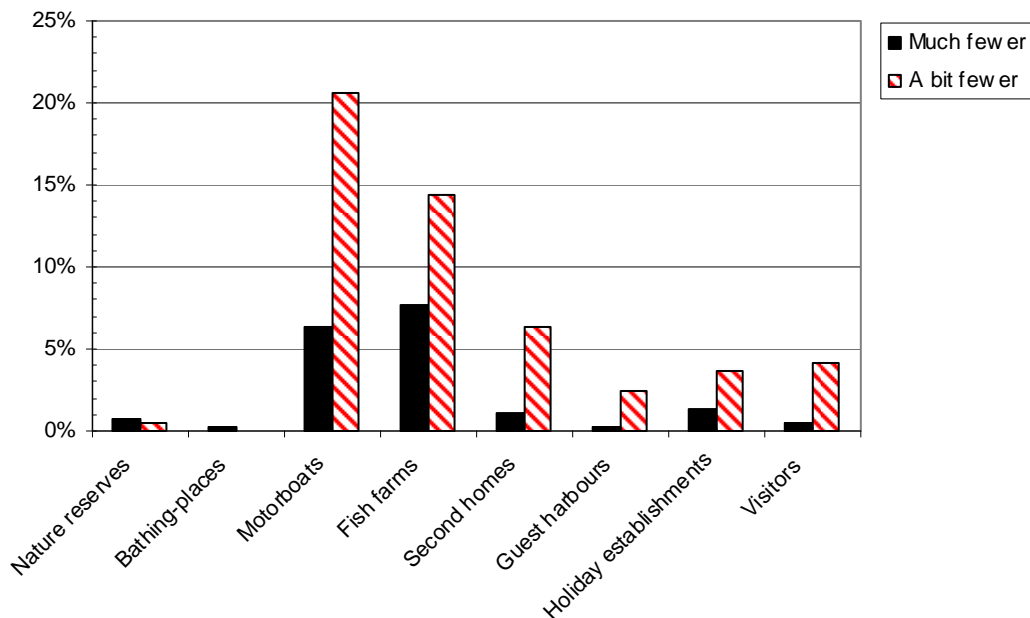
The respondents were asked to estimate if they had experienced different factors concerning crowding, littering, wear etc. (see question B7). The experiences were graded on a 5-scale grade by the respondents between *a lot* to *not at all*.

Statistically, when adding of the percentage of not experienced at all with almost not at all, the percentage was:

- a) Toilet waste in the water (94%)
- b) Crowding (84%)
- c) Erosion (90%)
- d) Heavy development (84%)
- e) Backwash (78%)

The percentage was low (2-4%) when examining the factors if they were experienced *pretty much* or *a lot*.

However, four factors stand out statistically. First, there were 38% of the respondents who had experienced ticks and 26% had experienced algal bloom, *pretty much* or *a lot*. Littering (9%) and backwash (8%) had also a somewhat higher percentage regarding the amount of respondents experiencing these factors *pretty much* or *a lot*.



**Figure 9.** *Opinions of possible future developments in the Blekinge archipelago.*

Continually, another question of the questionnaire was an estimation of the respondents' opinions of possible future developments of, for example, what the number of nature reserves, second homes or motorboats of the area *should be*. The statements were graded between becoming much fewer to becoming much more on a 5-scale grade (see question B8).

Concerning all statements, a percentage of around 60% or higher, stated that the area should stay as it was. As depicted in Figure 9, a minority of the respondents were of the opinion that a possible future development should involve much fewer or a bit fewer bathing-places, nature reserves or guest harbours. The opinions of the future development regarding the number of motorboats, 27% thought the motorboats should become much fewer or a bit fewer, and regarding the fish farms, 22% thought these should become much fewer or a bit fewer.

The number of visitors should become a bit more or much more according to 37%. Also, 38% of the respondents declared that the number of guest harbours should increase. Moreover, the

number of bathing-places (39%) and nature reserves (33%) should increase a bit more or much more.

One questionnaire question concerned if tourism helps conserving the nature and culture environment in the Blekinge archipelago; 48% believed tourism helps conserving nature/culture to some extent and 17% a lot. The respondents were thereby asked to describe with their own words *why* tourism contributes to conservation (see question B9). Better economy and economical possibilities were mentioned by a number of 71 respondents. Another reasons were that it generates incomes (n=22), it awakes an interest in conserving nature (n=21) and leads to a living archipelago (n=15). The respondents also pointed out that tourism shows how beautiful the archipelago is, which leads to conservation (n=14), and to maintenance and care of the area (n=9). Other reasons were that the municipality invests in what is appreciated (n=7) and to development together with improvement of the area (n=7).

If the respondents thought tourism threatens nature and culture environment in the area, was another question. 33% believed that tourism was a threat *to some extent* and 2% believed that it was a threat of *a lot*. Some of the declared reasons why tourism is a threat, was littering (n=48), wear (n=38) and wear because of too many people (n=9). Other causes of tourism being a threat to nature and culture were lack of consideration and respect (n=8) and lack of limitations and restrictions (n=7). Also crowding (n=7) and motorboats (n=6) together with motorized traffic (n=5) were mentioned causes.

### 3.7 Geographical dispersion

In the questionnaire, the respondents were asked to inform which places they had visited<sup>10</sup> in the Blekinge archipelago in May-August 2007. A number of 21 places<sup>11</sup> had a visit percentage of 1%.

Out of 83 places, seven had visits of 20% or more of the respondents (see question C1):

- i) Sturkö 30%
- ii) Aspö 24%
- iii) Hasslö 23%
- iv) Kristianopel 21%
- v) Torhamn 21%
- vi) Senoren 20%
- vii) Järnavik 20%

The ten places with a visitor percentage between 18-10% were:

- i) Matvik 18%
- ii) Hanö 18%
- iii) Dragsö 15%
- iv) Drottningsskär 15%

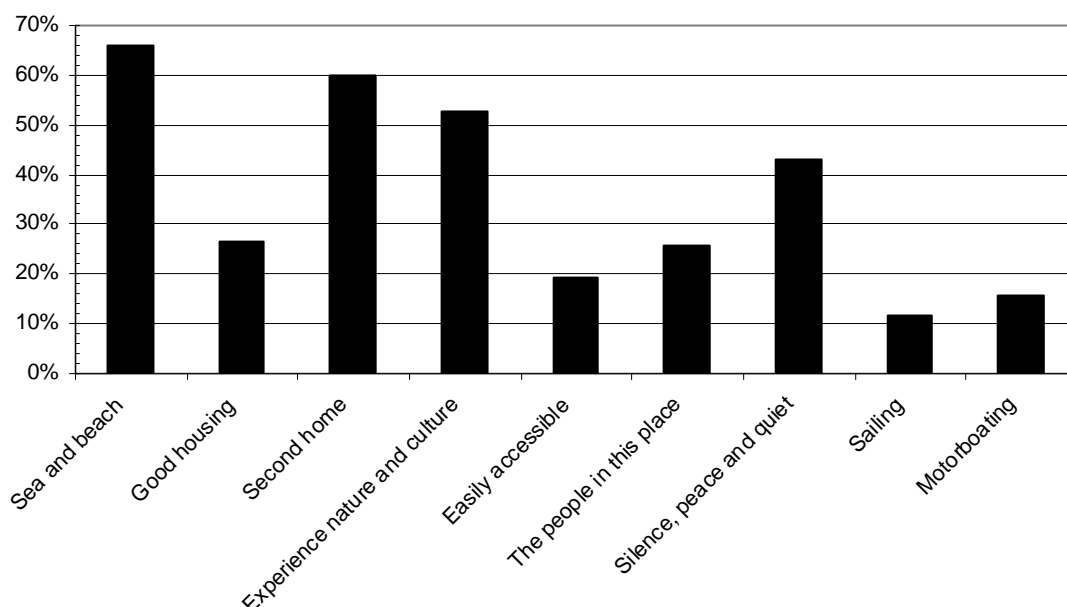
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<sup>10</sup> Except for the stated examples of places in the questionnaire, the respondents could also add places themselves. Author's comment.

<sup>11</sup> Björnön, Eneholmen, Flakskär, Gullö, Haglö, Ivö, Järkö, Kidö, Kvalmsö, Kølvsö, Lindö, Ornö, Ramsö, Rollös, Sickelön, Spjutsö, Styrös, Utö, Vanö, Vångsö and Äspeskär.

- v) Ekenäs 14%
- vi) Trummenäs 12%
- vii) Hällevik 11%
- viii) Hästö 11%
- ix) Torhamns udde 10%
- x) Karön 10%

Among of the places the respondents had visited, they should encircle which place that was the most important to them (here depicted in the numbers of respondents) – Aspö (n=37), Hasslö (n=28) and Hanö (n=21) were the most encircled places. Thereafter, there were another six places – Jordö (n=19), Senoren (n=16), Sturkö (n=16), Matvik (n=13), Ekö (n=12) and Utklippan (n=12).



**Figure 10.** *Why a place was the most important to the respondents among visited places in the Blekinge archipelago.*

The reasons why these places were the most important to the respondents (see question C4) were above all the sea and the beach (66%), and the second home (60%). To experience nature and culture (53%) and silence, peace and quiet (43%) were also important with the place, see Figure 10. That the place was easy to get to was viewed as important by 20%. Activities with pleasure boats were less important (motorboating 16% respectively sailing 12%).

Other reasons why a certain place in the Blekinge archipelago was the most important to the respondents were, for example, family and relatives (n=7), angling (n=6), memories/childhood memories (n=6), kayaking (n=3) and that the respondent was born in the area (n=3).

### 3.8 Access to a second home

Among the respondents, 66% had regular access to a second home in the Blekinge archipelago. Regarding if one would like to extend the period of staying in a second home, 35% would like to be there a couple of weeks more every year. Another 28% would like to extend their time with a couple of months every year.

A majority (93%) of the second homes (which the respondents had access to) were owned either by the respondents or by a husband/wife or cohabitate. The other six percentages included an ownership by relatives, and the remaining was either by rental or owned by friends. Since many of the respondents already owned a second home, 87% answered that they were not interested in buying a house. However, 3% said that they could consider buying a second home to visit during the summer and 6% to visit during both the summer and the winter. Finally, 4% stated they were interested in a purchase to live in the second home permanently.

1/5 of the respondents would like to live permanently in the Blekinge archipelago. They were thereafter asked to specify where in the area they would like to live in (for more specified places see question C9): Hasslö (n=8), Tärnö (n=6), Aspö (n=6), Sturkö (n=5), Jordö (n=4), Karlskrona (n=4), and Tjurkö (n=4).

### 3.9 Noise and silence

If there are any so called ‘quiet areas’<sup>12</sup> in the Blekinge archipelago, was a question which divided the respondents into half, since 51% said yes and 49% said no. Where the quiet areas are to be found gave a wide geographical dispersion in the archipelago (see question D5). However, some areas got a higher number of respondents mentioning them as quiet:

- i) Utklippan (n=18)
- ii) Aspö (n=11)
- iii) Järnevik (n=11)
- iv) Hanö (n=10)
- v) Tjurkö (n=10)
- vi) Islands in general (n=21)
- vii) The outer archipelago (n=20)

Continually, the respondents were asked if they had experienced any kind of noise from different sources during their visit in the Blekinge archipelago 2007. The statements were graded between *nothing* to *much* on a 5-scale grade. The results showed that 50% and more had not experienced noise of various sources described in the questionnaire survey (see question D3).

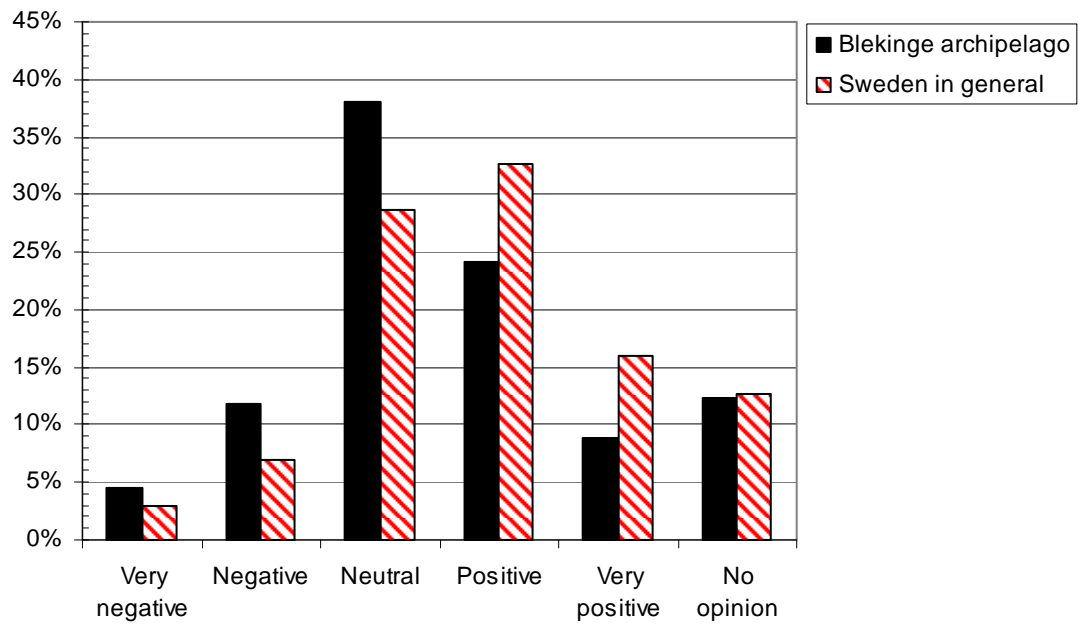
With the percentage of noise experienced *rather much* and *much* added, the results were:

- a) Military planes 12%
- b) Helicopters 8%
- c) Large private boats 7%
- d) Small private boats 6%
- e) Jet-ski/water scooter 4%
- f) Passenger planes at a high altitude 4%, road traffic 4%, military ships 4%, music 3%, tour boats 2%, loud people 2%, industry 0%.

Where the respondents had experienced *rather much* or *much* noise during their visit in the area in 2007 differed (see question D3). In the survey, the places Karlskrona archipelago (n=12), Hasslö (n=8), Tärnö (n=7), Aspö (n=5), Bökenäs (n=5), Matvik (n=5) and Tjurkö (n=59), had the main number of respondents.

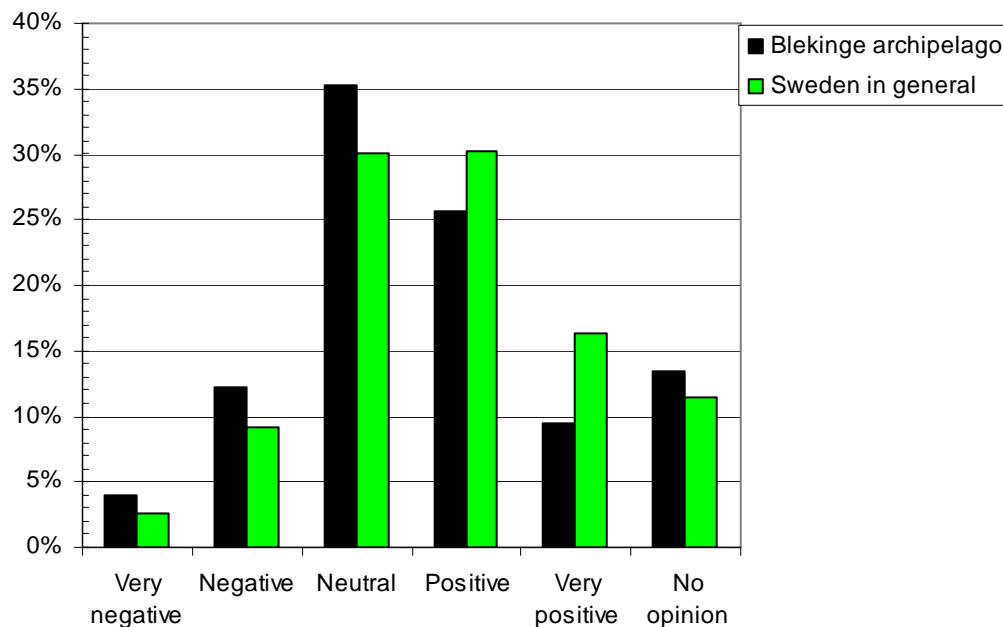
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<sup>12</sup> In the questionnaire survey, the question was “Are there, in your opinion, any ‘quiet areas’, i.e. areas almost free of noise, in the Blekinge archipelago?”. However, it was up to the respondent to define what an area almost free from noise was. Author’s comment.



**Figure 11.** *Attitudes to noise free zones (with restrictions against all motor traffic) in Sweden in general and in the Blekinge archipelago.*

In Figure 11, a comparison was made between the respondents' general attitude towards noise-free zones through restrictions for all motor traffic (on land and water) and their attitude to noise-free zones in the Blekinge archipelago. 10% were very negative or negative towards this zoning in Sweden in general while 16% had the same attitude towards noise-free zoning in the archipelago. It was also a difference between the respondents' attitudes when being positive or very positive; in Sweden in general a total of 49% and in the Blekinge archipelago 33%.



**Figure 12.** *Attitudes to noise free zones with restrictions for motorboat traffic in Sweden in general and in the Blekinge archipelago.*

Among the respondents, 47% were positive or very positive towards noise-free zoning through restrictions for motorboats in Sweden, while 35% had the same positive attitude if applied in the Blekinge archipelago (see Figure 12). 12% were negative or very negative to this type of zoning in Sweden, while 16% had this attitude if applied in the archipelago.

Safety cameras (for boat traffic) in the fairways in the Blekinge archipelago were viewed as positive by 21% and very positive by 8%. Among the respondents, 10% were very negative and 15% negative towards safety cameras.

The attitude to speed limits for motorboats in the Blekinge archipelago was very negative by 3% and negative by 7%, while 34% were positive and 21% very positive.

**Table 9.** *Factors of importance as measures for reducing noise from motorboats in the Blekinge archipelago.*

|   | <b>Of no importance</b> | <b>Of some importance</b> | <b>Of great importance</b> |
|---|-------------------------|---------------------------|----------------------------|
| Speed limit in the fairways (M=56)                        | 17%                     | 36%                       | 21%                        |
| Safety cameras (for boat traffic) in the fairways (M=70)  | <b>31%</b>              | 32%                       | 11%                        |
| Limited use of the area for certain types of craft (M=63) | 20%                     | 39%                       | 13%                        |
| Limited use of the area for certain activities (M=65)     | 20%                     | <b>41%</b>                | 12%                        |
| Information leading to greater consideration (M=60)       | 13%                     | 33%                       | <b>23%</b>                 |
| Prohibition of boats that make too much noise (M=61)      | 16%                     | 33%                       | <b>23%</b>                 |

As depicted in Table 9, the factor “Information” (45%) had the highest percentage (23%) of great importance. The factors “Prohibition of boats that make too much noise” (23%) and “Speed limits in the fairways” (21%) were the following factors with high percentage.

In comparison to the other factors, many of the respondents considered “Safety cameras” of no importance (31%). “Information” was deemed of no importance of the fewest number of respondents.

### **3.10 Attitudes to the shoreline protection, restrictions against moving freely and nature reserves**

As a visitor in the Blekinge archipelago 2007, the respondents were asked to give their opinions whether the beaches were accessible to the public or not (see question E1). 30% totally agreed and 38% partly agreed that access to the beaches/areas close to the shore, was good in the area. Only 3% totally disagreed with the statement.

That the public access to the beaches had improved the last couple of years, had a high percentage of respondents being neutral (62%), however, 12% partly agreed and 7% totally agreed. Moreover, 8% totally disagreed and 11% partly disagreed with the statement.

In addition, the respondents stated their opinion if the municipalities, and not the State (through the county administration boards), should have more influence over the shoreline protection.



14% totally disagreed, while 12% partly disagreed. Of the respondents, 23% partly agreed and 17% totally agreed that the municipalities should have more authority of the shoreline protection.

If buildings or activities had prevented the respondents from moving freely in areas close to the shore, was experienced to some extent by 21% and a lot by 3%. The question was also why one had experienced hindrance from moving freely (see question E2). 106 respondents explained why they had felt hindered; 33 said that it was because of fences, areas being sealed and areas being closed. Other expressed reasons for not being able to move freely were: sites bordering on the sea (n=18), housing along the shoreline (n=15), and housing being in the way 8% (n=8). Also, bridges with signs with 'Private' on (n=4) and too many private areas (n=4) were expressed by the respondents as hindrance.

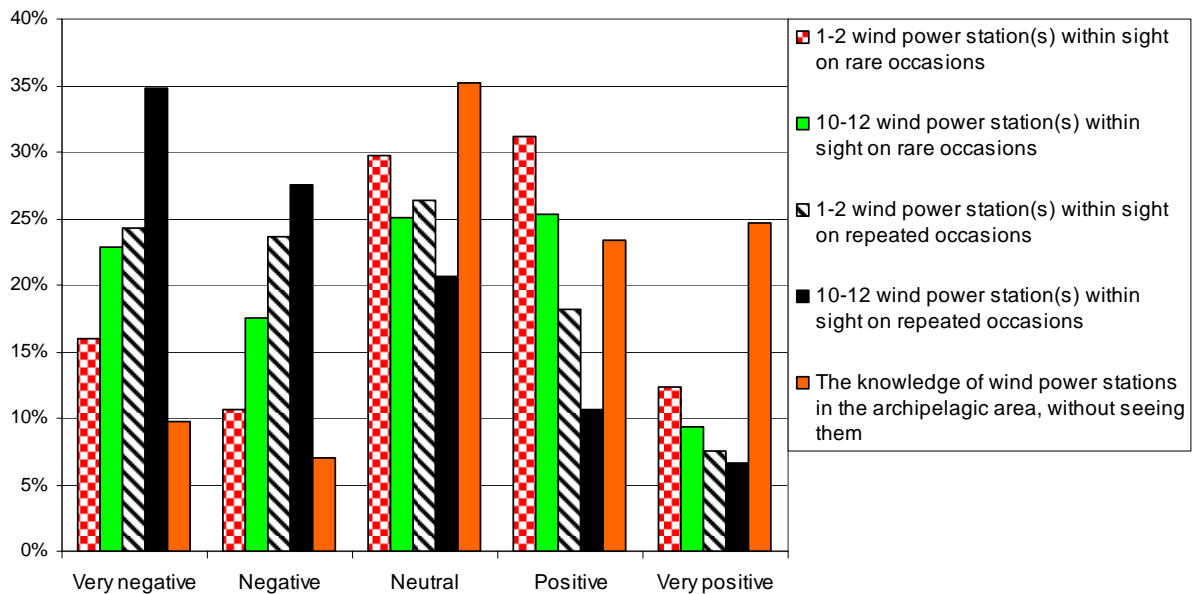
Bird and/or seal sanctuaries (with visit restrictions) prevented 4% to some extent from moving freely and 1% a lot from moving freely. The reasons were prohibition against going ashore (n=8) and that some islands had restrictions (n=2), see question E5. However, a major percentage (96%) had not been prevented at all by the bird and/or seal sanctuaries. To 97% of the respondents, these sorts of restricted areas had not affected their planning of their visit in the archipelago, while 3% had been affected in their planning to some extent and 1% a lot. Prohibition against going ashore (n=5) and consideration to nature (n=4) were expressed as causes.

How one had been affected by the area's nature reserves, 27% answered positively and 22% very positively, while 0% had been affected negatively or very negatively. If one had been to a nature reserve or not, 51% answered yes whereas 20% did not know.

Another question in the survey involved if one had visited former military areas in 2007, after the restrictions had been removed. 65% had not visited them at all, while 24% had visited them to some extent. Finally, 11% had visited the former military areas a lot. Why one had visited these areas (see question E3), was answered by 133 respondents. The reason for the majority was because one has a second home there (n=21) or because the areas are interesting (n=19). Other reasons for visiting the former military areas are good hiking (n=12) and beautiful nature (n=12) together with accommodation/housing (n=11). Another motive is curiosity (n=6). Three respondents also stated that the military areas had hindered them from moving freely.

### **3.11 Attitudes to scenarios of establishments of wind power stations**

Another section of the questionnaire survey included questions regarding the respondents' attitudes to the establishment of wind power stations. The respondents viewed the building of wind power stations in the Blekinge archipelago as very negative by 16% and negative by 16%. Among the respondents, 27% were positive and 13% very positive.



**Figure 13.** Evaluation of scenarios of wind power stations in the Blekinge archipelago.

An expansion of wind power involves a visual change of the landscape. Being a visitor in the Blekinge archipelago 2007, the respondents were asked to evaluate different scenarios of wind power stations in the area (see question E9). The scenarios were about a different number of wind power stations on either rare or repeated occasions. Also, the respondents were asked to evaluate their attitude to the mere knowledge of the existence of wind power stations (without being in visual sight).

As depicted in Figure 13, having wind power stations within sight on repeated occasions got a higher percentage as being very negative or negative by the respondents, in comparison having the establishments within sight on rare occasions. To see 10-12 wind power stations frequently was viewed as very negative by 35% and negative by 28%. Even if the number of the establishments were fewer, 1-2 wind power stations on repeated occasion was regarded as very negative by 24% and negative by 24%.

In Figure 13, the statement with the highest percentage of being *very positive* (25%), was the knowledge that wind power stations were in the area – but without seeing them. The same statement had a percentage of 23% of the respondents being positive.

12% believed it as very positive and 31% as positive to have 1-2 wind power stations within sight on rare occasions. In comparison, 8% was very positive and 18% was positive to have the same number of establishments in sight, but on repeated occasions.

Another divergence is found between observing 10-12 wind power stations on rare occasion – where 9% was very positive and 25% was positive – towards observing 10-12 wind power stations on repeated occasions where 7% was very positive and 11% was positive.

#### 4. THE CONCEPTUAL FRAMEWORK OF ECO-STRATEGIES

“‘Landscape’ means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.” (The European Landscape Convention<sup>13</sup> Article 1, 2007).

Different stakeholders have different perspectives on the landscape; there are various interests (for example, tourism, outdoor recreation, and/or conservation) that may cause conflicts (Vuorio, 2003; Sandell, 2005a). The landscape is a concrete physical reality, but at the same time everyone has their own *interpretation* of what the landscape is. Sörlin (1999) discusses what kind of processes that lay behind the establishment of the landscapes that also have become part of the national consciousness. Sense of belonging is deeply rooted in humans’ emotions, memory, and imagery. National paintings, photography, travelogues, and growing tourism have supported the image of the landscape. The cultural processes have created our common mental landscapes. These mental landscapes are as real as the physical landscape ‘out there’, according to Sörlin (1999).

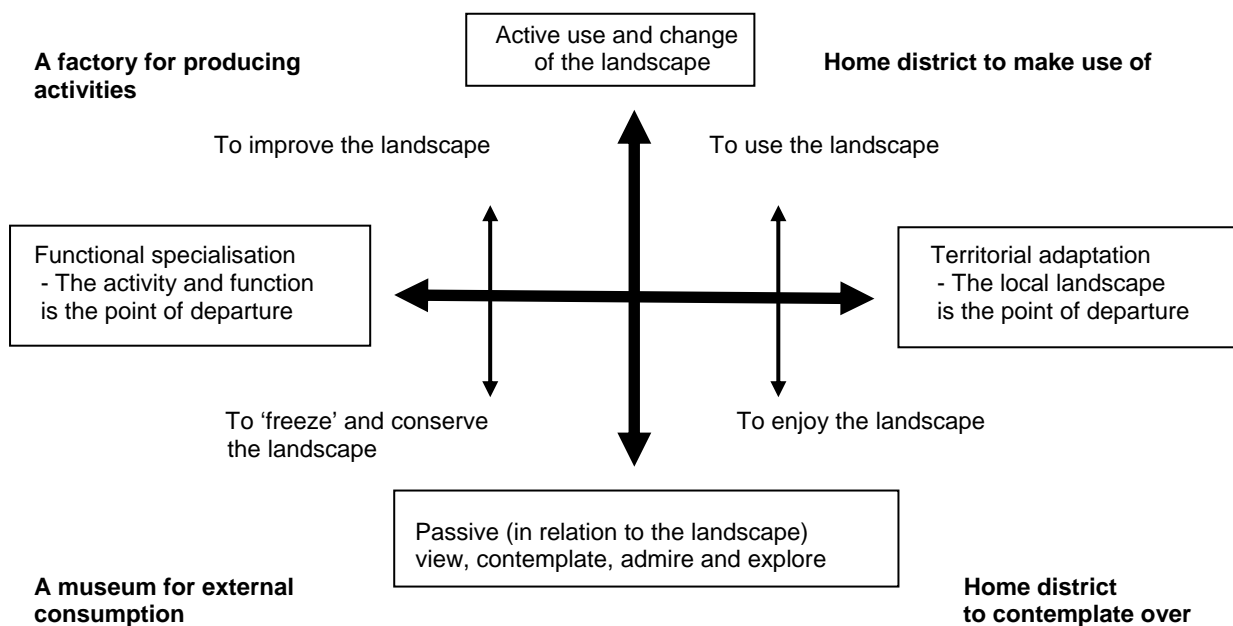


**Photograph 4.** View on Karlshamn from the Tjärö boat. Photo by Maria Rundquist, 2007.

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<sup>13</sup> While every citizen must certainly play a part in conserving the quality of the landscape, public authorities have a duty to define the general framework for ensuring this quality. The convention establishes the general legal principles which should serve as a basis for adopting national landscape policies and establishing international co-operation in such matters ([http://www.coe.int/t/e/cultural\\_co-operation/](http://www.coe.int/t/e/cultural_co-operation/), 2007).

With regard to a specific physical landscape, both mental perspectives and actual use and behaviour are to be found (Sandell, 2003). In the landscape, various landscape perspectives, interests and ambitions are intertwined. For example, there could be differences of the perspectives of a coastal landscape (see Photograph 4) between its various stakeholders – between the tourists and the permanent population, between the people who wants to conserve the landscape and the fishing industry, between the people who have sailing boats and the ones who have motorboats, etc. These landscape perspectives change over time due to technical development and external influences and they can, at least to some extent, differ for the same person or group in different contexts (Sandell, 2003). In this section, *the conceptual framework of eco-strategies* is therefore discussed in order to analyse and discuss conflicts in coastal areas, since the model is useful as a support within planning and development.



**Figure 14.** *The conceptual framework of eco-strategies.* (Sandell, 2000).

The perspectives and attitudes to nature and landscape have been depicted by Sandell (2000 & 2001), as a conceptual framework of eco-strategies. It is based upon the tensions along two axes, see Figure 14:

- i) an active use and change of the landscape opposite to passively viewing, admiring and exploring the landscape and
- ii) a functional specialisation opposite to a territorial adaptation.

The functional specialisation is the specialisation of different landscapes for various purposes and transporting oneself or one's merchandise between places, partly by re-building the landscapes so that they fit the desired functions. In doing this, there is a tension between adjusting human activities to the landscape, and adjusting the landscape to human activities on a large scale. Simultaneously, there are a number of relationships between *where* the activities take place and *which* the activities are. The landscape itself is vital in this aspect, since it has an effect on which activities, equipment etc. should be implemented (Sandell, 2001).

Sandell (2001) expresses that the model is a conceptual framework put together by the condition of state of opposition of partly an attitude. The required purpose (use) is the base for

development, where the local landscape (the environment) is part of the foundation. A repeated contradiction is found between the *development* perspective (function specialisation) and the *planning* perspective (multiple uses). The framework is also created by the contradiction of a 'passive' and an 'active' version. Looking at the conceptual framework of eco-strategies, one should imagine how the extension of 'tourism' is focused outside one's home district, and that it includes a completely built up environment. In comparison, 'outdoor recreation' includes both the home district and the distant district, but excludes the completely built up environment (Sandell, 2001).

Furthermore, Sandell (2001) discusses the correspondence of his eco-strategies and spatial planning, where in the vertical axis (Figure 14), land and water use with 'development' and 'conservation' correspond with 'active use' and 'passive view'. In the horizontal axis, he believes there is a parallel to rational planning in the left field, and communicative planning in the right field where the local population plays a part in planning. The framework has been added with examples and concepts with relation to nature conservation, outdoor recreation and tourism (Sandell, 2001 p. 36).

Tourists who visit the area are also participants in recreational activities. Outdoor recreation and tourism thus mutually use the same resource (nature) and are often dependent upon each other. When combining the different standpoints of tourism, outdoor recreation and conservation, the combination will spread the perspectives within the fields of Figure 14. Fulfilling various requirements is difficult. This method generates different aspects of social integration like politics, economics, and culture that are brought into focus together with the human-ecological questions (Vuorio, 2003).

Bodén and Ankre (2005) have related various tourism and culture activities in the Stockholm archipelago into the four different fields of Sandell's framework. In the upper left field, there are activities that demand an adjustment of the landscape in its function and commercial, planned, and demanded specialisation. Usually the activities are experience oriented with/or culinary elements. The visitors have a clear view of what the offered experiences are (Bodén & Ankre, 2005).

In the lower left field (Figure 14), a *museum* for external consumption is shaped. In the relation to tourism, these activities also require an adjustment of the landscape in its function and specialisation. This field contains nature and culture reserves, where certain areas are of such value that it is prohibited to visit them during particular time periods (Bodén & Ankre, 2005). In the upper right field is one's home district to be *utilized* (for example, picking berries and fishing), and in the lower right field is one's home district to be *contemplated* (for example a walk by the sea). These two fields concern activities that have a natural connection with the local community. It is a landscape for multiple uses and different experiences. The use has a local producer perspective with linkage to traditional industry of the archipelago, such as, market days, hay-making, and selling handicrafts (Bodén & Ankre, 2005).

The landscape should be used and changed to get economic growth, but at the same time be conserved. A question is when a landscape should be 'freezed'. Bodén and Ankre (2005) therefore discuss how culture and nature conservation are two of many interests that have to cooperate within tourism. The foundation of protected areas is the conservation of natural, cultural, and visual values. These consist of the characteristics that correspond with the purposes of tourism and recreation. In multiple used protected areas, many activities need to be accommodated so the environment is conserved and conflicts are diminished, making

stakeholders continue to act together in an ecologically sustainable way (Lynch et al., 2004). The balance of the eco-strategies is decisive; it determines questions regarding environment and nature resources, and, for example, the shaping of tourism and recreation (Sandell, 2000).

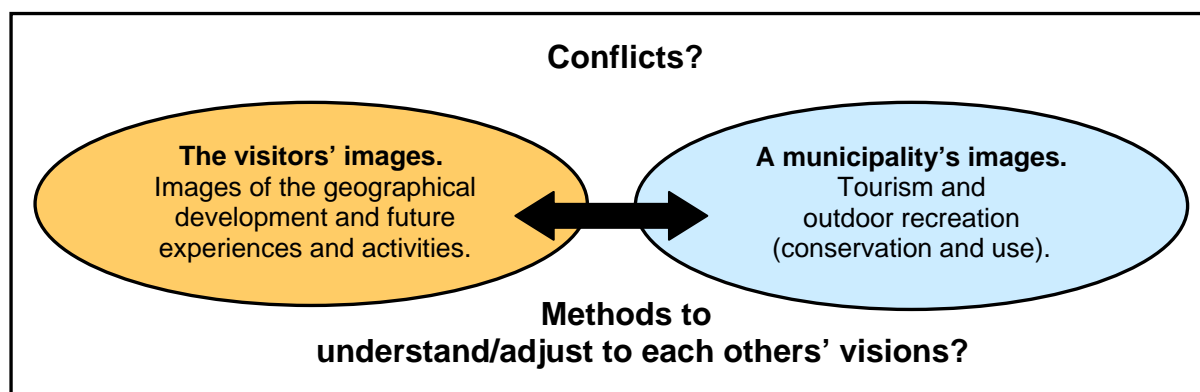
## 5. GOAL INTERFERENCE IN SWEDISH COASTAL AREAS

### 5.1 The relationship between nature conservation and tourism development

In this study, the visitors' and the second home owners' sensitivity to and perceptions of goal interference is of interest. One sort of conflict is between practisers of outdoor recreation and other resource users. However, conflict may also arise between different types of recreationists; it depends on to which degree two or more activities can co-exist in the use of a recreational resource. There may also be conflicts between people who are performing the same activities. Where the activities need similar conditions, shared use is a possibility, or then again conflict. It is a competition for the same physical, social and psychological space at the same time. Conflict is not space or time bound since the effects may reach surrounding areas (Pigram & Jenkins, 1999). In addition, conflict can arise from indirect contact between recreation participants, who can refer to seen or unseen undesirable out-groups or objects of such groups, including associated environmental impacts (Manning, 1999). Finally, the perceptions of the visitors may differ from that of the managers (Lindberg et al, 2001).

The goal interference that the planners are trying to solve and handle should be established in the users' reality, and not only as the planners' conceptions. In that way, knowledge of the visitors may show if the authorities' perceptions of goal interference are the same as the users'. To achieve an appropriate and effective management of nature areas for tourism and outdoor life, a good knowledge of the visitors is necessary (Arnberger et al., 2002; Emmelin et al., 2005). Knowledge of the visitors' and the second homeowners' experiences, activities and effects on the environment may contribute to a developed planning and methods for handling conflicts. By knowledge of the visitors and the second home owners, their attitudes and experiences could be understood in order to put this information in the context of planning.

*“For an individual, conflict is defined as goal interference attributed to another’s behaviour.”* (Jacob & Schreyer, 1980, p. 369). This view on conflicts is built upon the theories of expectations (expectancy theory) and motives for outdoor recreation and theories on discrepancies (discrepancy theory). People participate in outdoor recreation to obtain certain goals – silence, solitude, physical training etc. Jacob and Schreyer (1980) state that the source of the goal interference has to be identified. For the conflict to exist there has to be a link between goal interference and another’s behaviour. If one’s goals with the outdoor recreation experience are disturbed or not fulfilled due to other outdoor recreationists’ behaviour and activities, there will be discontent and less satisfaction.



**Figure 15.** *Different images of tourism development and planning.* (After Ankre, 2007).

In Figure 15, some of the possible different visions of tourism development and planning are illustrated from the perspectives of the visitors and a municipality. The visitors' images may involve the changes and development of the geographical landscape and the present situation (such as service, permanent population, and accessibility) together with their wishes for different experiences and activities. This may form the visitors' images of a future tourism development and planning (Ankre, 2007). However, information and understanding of goal interference in the coastal areas are incomplete in the Swedish municipal planning (Boverket, 1995). In a destination with tourism and outdoor recreation, management and understanding of the different kinds of conflicts is important. Otherwise, it becomes difficult to implement and develop planning methods to handle conflicts.

Goal interference makes planning for tourism and outdoor recreation difficult. Tourism in coastal areas is growing faster than any other tourism branch in the world because of the complex relationships between opportunity, image, perceived benefit, cost, and history. The coastal areas are thereby attractive tourist destinations where new technology has created new activities and locations, which offer a varied tourism by the sea (Orams, 1999). In the coastal areas, the same interests are shared by nature-based tourism and nature conservation, where the physical environment and possible activities greatly attract visitors. At the same time, these areas consist of vulnerable nature and culture. Different conflicts of interest may thus arise either between tourism and outdoor recreation against other interests of use. Tolvanen et al., (2005) mean that conflict can arise if nature of an otherwise attractive destination for tourism has been damaged by, for example, industry or forestry. Other interests that may cause conflict with tourism is the fishing industry, the establishment of second homes or wind power stations, noise etc. (see Ankre, 2007), or between different stakeholders.

Hall (2000) claims that it is necessary to identify different conflicts of interest in coastal areas to be able to understand if planning towards a sustainable tourism development is successful or not. The topic of conflicts in coastal areas has been scientifically discussed in Swedish and international publications. There are several stakeholders in the Swedish coastal areas, such as the local population, the visitors and the second home owners. These stakeholders have different perceptions of the landscape and of the land and water use, which may cause conflicts. Müller (1999) has investigated the German cottage purchases in Sweden in his thesis *German Second Home Owners in the Swedish Countryside* where he also analysed conflicts in the countryside. Interestingly, Müller considers the second home owners' attitudes towards the countryside as similar to the local population's, because of the time spent in the area. Conflicts between stakeholders were more likely to arise between second home owners and other visitors than between second home owners and the local population.

Conflicts may arise from different interests and perspectives of land and water use, which planners try to solve and handle. This especially concerns the balance between conservation and development. In her thesis *Participation and Planning in the Management of Coastal Resource Conflicts*, Morf (2006) has explored how Swedish municipal spatial planning and the associated participation procedures manage and decrease conflicts stemming from the use of coastal natural resources. The results from the case studies on the West Coast of Sweden showed that planning and participation were important tools for managing conflicts, but that the routine procedures for participation were not designed for the purpose of resolving coastal resource conflicts. Furthermore, Almstedt (1998) has analysed how the demands of outdoor recreation with regard to the use of land and water are taken into consideration in spatial planning and how outdoor recreation was considered in local planning. Her starting point in the



thesis *En plats i planeringen*<sup>14</sup> was that there were activities in society which compete in the perspective of how land and water should be used. Almstedt mentions, for example, that, in the comprehensive plans, second homes were stated as a possible source of conflict in relation to outdoor recreation in coastal areas.

From an identification of different relationships between tourism and nature conservation, Budowski (1976) discusses how a sustainable development is only reached by symbiosis and a coalition between the tourism developers and the so called 'conservationists'. He has categorised three sorts of relationships between tourism development and nature conservation. The first category is *conflict*. This relationship is especially occurring when tourism is regarded to be damaging for nature. The second category is *coexistence*, where the two interests are side by side, but with little contact. However, Budowski (1976) declares that this sort of relationship seldom is fixed, instead it develops to become a conflict or to be a third category; *symbiosis*. In the symbiotic relationship, both parts may get benefits from each other where conservation is joint with economic advantages and people's benefits of nature (in a physical, aesthetic, cultural, scientific, or educational sense).

The question is what kind of relationship the Swedish coastal areas and archipelagos have today with nature conservation? A global problem is that the coastal terrestrial areas, is the high economic value of coastal areas. This especially if there is dense human populations and long histories where very profitable human activities tend to concentrate, including urbanization, industry, energy, tourism and transports (Batisse, 1990). From Budowski's reasoning above, all three relationships can be identified in the coastal areas. One could, however, argue that the vision of the coastal areas' planning is that the conflicts at least are handled. The measurements differ and a problem is naturally that the knowledge of the conflicts in many places is diffuse. What are the conflicts, between whom and where? Emmelin (1997) argues that planning traditionally deals with conflicts through compromises and agreement. Conflicts could be underestimated and there could be attempts to reach compromises between interests that actually are irreconcilable. Instead of trying to subdue the differences within planning to avoid deadlocks, discussing conflicts of interest in an early stage could create an understanding amid the stakeholders. In the Blekinge archipelago, the goal is to reach a balance of tourism development and conservation. The work with the biosphere reserve and its zoning is one method to create symbiosis between tourism and conservation.

## 5.2 Examples of conflicts in the Blekinge archipelago reported in local media

In the local media (the newspaper Blekinge Läns Tidning, shorten BLT) various examples of conflicts in the Blekinge archipelago can be found. In this type of area with several interests competing with each other, this may clarify the issues which planning has to handle in the area.

The shore line protection and people's wish for access is one cause of conflict in the Blekinge archipelago. In a letter to the local press in the Blekinge county, the public right of access is discussed as an obligation of the private owner: "*When we arrive to our place for nice relaxation, there are at many times several pleasure boats which are mooring at the best sunbathing cliffs. If we would like to sunbath, we have to climb over lines, sun mattresses and or suchlike things, for we can not tell them that they can not be there, even though it is private land, because of the public right of access.*" (BLT, 28/06/08. Author's translation).

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<sup>14</sup> *A place in planning*. Author's translation.

In the local newspaper BLT (03/08/07) an appeal against a planned second home on Aspö is described. The planned building will be on the only un-built area of the island and is within the shore line protections, and also within an area of national interest. According to the appeal against the second home, the area is used by everybody who wants to go to the shore since it is the only way. Another newspaper article (BLT, 18/09/07) describes how a house-owner wants to divide two pieces of land into lots, and build on them on Yttre Ekö. This means that the area becomes a private ground where the house-owner has the right to put up fences and physically keep the public out. However, the *Environmental Association Blekinge Väst* states that the area is within the shore line protection and also within areas of national interest for outdoor recreation, nature and coast (BLT, 18/09/07). The Local Building Committee of Karlshamn municipality did not approve of the application to build on Yttre Ekö. The application was deemed to be in conflict with the shoreline protection and the national interests for outdoor recreation and nature conservation. Also, the county administration board has made a pronouncement that they do not approve of the application (Karlshamn kommun, Dnr 2007.687.230).

*“No constraints for jet-skies in the archipelago. The coast guard is powerless because of law trouble.”* This was the head-line of an article concerning jet-skies in the Blekinge archipelago and reckless driving (BLT, 6/08/08). Not all jet-ski drivers stay within the fairways and the two areas in the archipelago that the county administration board has approved of. The Swedish government has executed a jet-ski decree which means that these vehicles are only permitted to be driven in public fairways. However, this has been appealed against to the EU-court and the judicial decision is still lingering. In the meantime, the jet-ski drivers who are driving in forbidden areas cannot be fined, but the maritime law (reckless driving or drunk driving) is of course still applicable (BLT, 6/08/08).

There are several companies that are interested in establishing wind power stations in the Blekinge county. One reason is that the defensive forces have opened up for new possibilities of establishments. Earlier, the defensive forces' communication systems could be disturbed by the wind power stations. In 2008, more than 70 applications of building wind power stations have been made. However, not everybody is positive and on Listerlandet protest lists have been written and there was also a certain opposition on Sturkö. The project leader Salomonsson maintains that: *“In the end, when the wind power stations are on place, some of the sceptics switched side. The visual experience one was afraid of wasn't as bad as one had imagined.”* (<http://www.sr.se/cgi-bin/blekinge/nyheter/artikel.asp?Artikel=2065605> 11/07/08, 11/07/08). There have been complaints from some of the local population about the work around the construction on Sturkö regarding the tipping of stones and the creation of a new road. The wind power station company maintains that it has followed the regulations. The municipal head of environment declares to the local news paper that he will look upon the complaint. The municipality gives permission at an early stage and before starting the project the company has to make an Environmental Impact Assessment (BLT, 16/04/08).

A final example of a conflict described in the local media concern dredging. Different interest organisations from Tjurkö, Aspö and Senoren together with Möcklö, have protested against the Karlskrona municipality's application of permission for tipping waste from dredging. The waste would be tipped in the water outside north of Tjurkö, despite it containing Tributyltin<sup>15</sup> (TBT). It is a toxic substance which was formerly used in boat paint, before it was forbidden

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<sup>15</sup> Tributyltin compounds are moderately to highly persistent organic pollutants. One common example is leaching of TBT from marine paints into the aquatic environment, causing irreversible damage to the aquatic life (<http://en.wikipedia.org/wiki/Tributyltin><http://en.wikipedia.org/wiki/Tributyltin>, 11/07/08).

because of the recognized consequences to the environment. However, the municipality believes that it is better for the environment to tip the dredging waste into the water instead of transporting the heavy masses with trucks. In the fall 2008, there will be a meeting with the interest organisations, the municipality, the county administration board and the company responsible for the tests of the sea bed (BLT, 8/07/08). Winkler, the former head of the harbor, states that there is so little TBT that the waste can be covered up with mud and thereby not leak any toxics (BLT, 31/05/08).

### **5.3 Goal interference because of noise**

The sound environment is relevant for many visitors' experience of nature and culture in tourism and outdoor recreation. Peace and quiet are not only sought-after, but difficult to experience in society of today (Kariel, 1990; Mace et al., 1999; Cessford, 2000; Hamilton, 2003). The problem with noise has to be viewed comprehensively since the concept is subjective; who is disturbed and where, by what noise and in what situations? Noise is an individual experience depending on, for example, one's expectations, the location, and the activities performed (Naturvårdsverket, 2005a).

The lack of noise-free areas in the Swedish coastal areas has become an environmental problem. The level of unwanted sounds is increasing while areas with sound environments of quality are diminishing (Boverket, 2003). Research and management attention is now being extended to include the impacts of noise in outdoor recreation. Silence and natural quiet (sounds of nature undisturbed by human-caused noise) are being recognized as an important and endangered resource (Newman et al, 2006). Some sounds may be unwanted (for example, traffic, loud music, shouting), which is referred to as *noise*. In an area where individuals do not expect noise, even low sound-levels may be perceived as annoying in comparison to an area where noise is expected (Banverket, 2002).

In comparison to other areas, spending time in nature is often associated with peace and quiet, where one should not be disturbed. If this is sought especially in an area, negative attitudes to motorized activities could be presumed, especially if they are regarded as unnecessary (SOU 1993:51). If silence is viewed as important in a visitor's experience, it might cause recreational conflicts if the wishes for a certain experience are not fulfilled. Noise in recreation areas is a concern to both managers and users (Harrison et al., 1980; Ewert et al., 1999; Gramann, 1999; Cessford, 2000). An extensive usage of different motor-driven vehicles in areas where silence is considered as vital can cause conflicts between different stakeholders. For example, noise disturbs birds, animals and fauna, which cause conflicts with the interests of nature conservation (SOU 1993:51).

Do the authorities in the Blekinge archipelago consider noise as a conflict? Widgren (23/4/08) who works at the Blekinge county administration board, states that certainly there are some problems concerning noise, but that the archipelago not in particular is exposed. If there is any noise, it is in specific areas and not geographically spread. The noise is contemporary since it is calm during long periods. The noise sources are, according to him, aeroplanes, larger ships and fast motorboats. Petersson (24/4/08) believes that mechanical noise is a conflict in Karlskrona city, where the car ferry rumbles in the basin. Since 15 years, there has also been ferry traffic between Karlskrona and Poland, Lithuania and Estonia, where the ferries create noise. Furthermore, Mattson and Axelsson (27/5/08) claim that mechanical noise is a conflict in the area especially fast motorboats and for example, jet skies. In Ronneby municipality, noise has

significance in more or less all planning, even for tourism and outdoor recreation Sonesson & Berntsson, 9/7/08).

In the work of creating ‘quiet areas’ or ‘areas of consideration’, the right of public access<sup>16</sup> is an interesting aspect. In Sweden, the outdoor recreation has been strongly influenced by the right of public access (Sandell, 2005), which allows everyone to move freely across private land in the countryside within certain limits. The right of public access can be seen as the ‘free space’ between following restrictions (Sandell, 2005):

- i) economic interests,
- ii) local people’s privacy,
- iii) conservation, and
- iv) and the actual use and change of the landscape.

The Swedish authorities are responsible for the right of public access and the nature conservation, where the SEPA provides Swedes and foreign visitors with information about the regulations. The right of public access is a natural part of the Swedes’ connection with and use of nature (for further discussion, see Sandell 1997 and 2001). The land owners have to accept other people’s occasional presence on their land, but there should be no damages or disturbances. Certain products of the nature (for example, mushrooms, berries and plants that are not under protection) are free to pick (Blücher et al., 2001). This right to move freely can be delimited in protected areas (for example, prohibition against fires on cliffs, no access during breeding season etc.) to increase the conservation (von Sydow, 17/04/08). Concerning the water areas, one has the right to go by boat on all public and private water according to common law. However, the surroundings and nature life should not be disturbed. By means of the Environmental Code, and Swedish legislation regarding traffic at sea, the county administration boards can limit or prohibit boat traffic in nature reserves and national parks (Naturvårdsverket, 2005).

According to Ahlström (1999), the conflict situation concerning mechanical noise is similar in their development in the Swedish mountains and in the coastal areas. The number of fast and large motorboats continues to increase which leads to a conflict with other users who want peace and quiet. It is important to see that noise is an aspect of power; who has the right to decide how, where and when there should be silence? Studies of coastal management practice tend to regard voluntary agreements for zoning and exclusion to be more likely to succeed than legal mechanisms (Roe & Benson, 2001). Because of the right of public access, people can not be hindered from having access to areas of an archipelago.

In summer 2008, two areas of consideration have been established in the Stockholm’s archipelago by the Stockholm county administration board due to the increasing noise from pleasure boats and the increasing number of boats in nature reserves. The municipalities pointed out ten thinkable areas, among the Stockholm county administration board has picked out two nature reserves. In these places, one should be able to experience peace and quiet. As the name suggests, consideration and thoughtfulness are important – it is not a new jurisdiction, instead people are *encouraged* to follow these proposals ([http://www.ab.lst.se/templates/InformationPage\\_\\_\\_11790.asp](http://www.ab.lst.se/templates/InformationPage___11790.asp) 15/08/08):

- to keep a slow speed, at most 5 knot,
- avoid surges to moored boats and swimming people,

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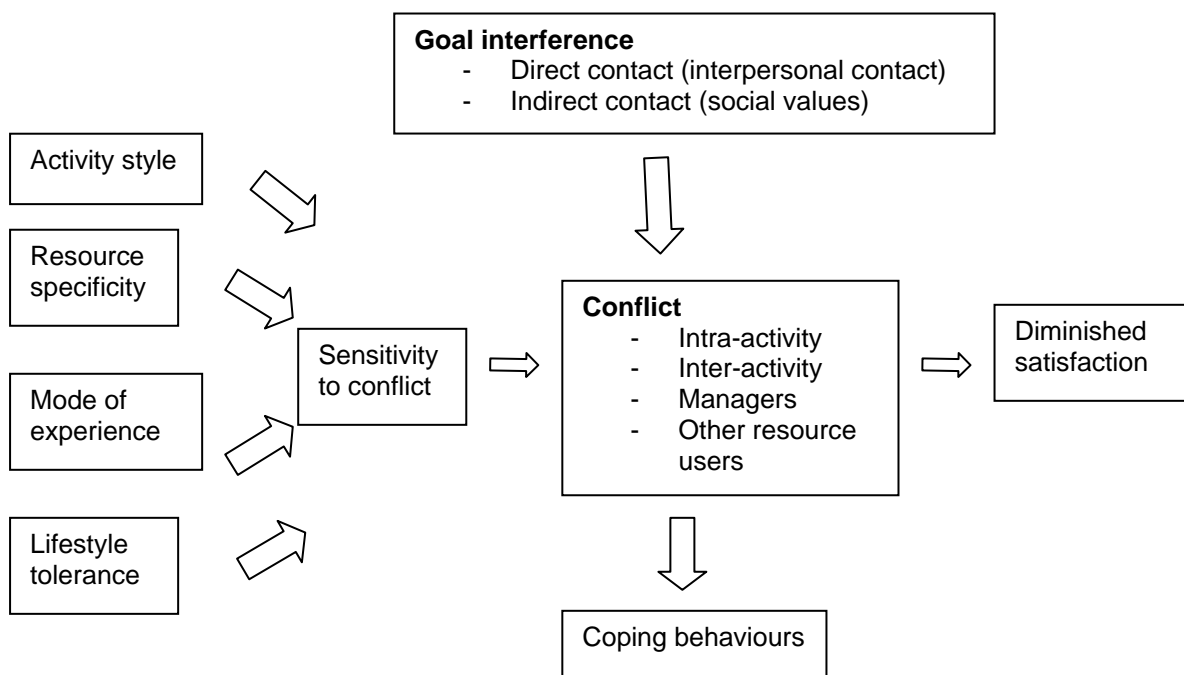
<sup>16</sup> In Swedish: Allemansrätt. Author’s comment.

- use the boat engine as little as possible and avoid to leave the engine running,
- to not drive a dinghy with an outboard engine without cause,
- avoid jet-ski driving or other loud water games,
- restrain music and talk,
- take care of garbage,
- no toilet waste in the water.

In the beginning, the areas of consideration will be founded upon voluntariness, since the idea is that the visitors will show respect and common sense. However, in Mars 2008, Nyberg, director of environment of the county administration board, concluded that: *“The regulations for these areas must be accurate with the other existing regulations. However, the difficult part is the decision of how we are going to look after so the regulations are followed. If there are different regulations and we do not have resources to guard them, it will not be trustworthy.”* (Sundström, Dagens Nyheter 23/03/08 p. 17). Anyhow, the hope is that the voluntariness will be enough. An evaluation of the project will estimate if additional measurements will be needed in the future ([http://www.ab.lst.se/templates/InformationPage\\_\\_\\_\\_11790.asp](http://www.ab.lst.se/templates/InformationPage____11790.asp) 15/08/08).

#### 5.4 Visitors’ sensitivity to conflict

Manning (1999) states that there are several variables related to conflicts; motivations for recreation, broad social values, perceived similarity of groups or activities, type and level of technology employed, level of experience or commitment, tolerance for sharing resources, expectation for encountering other types of activity groups, and place attachment.



**Figure 16.** A model of sensitivity to conflict. (After Manning, 1999).

Manning (1999) has outlined several basic components in his extended model (Figure 16) of recreational conflict, where the four variables of conflict from Jacob and Schreyer (1980) still are included. As described above, Jacob and Schreyer (1980) define conflict as goal interference attributed to another person’s behaviour. When the goals are hindered or disturbed, the visitor is not satisfied, which can be attributed to the behaviour of another individual or

group. Conflict can be linked to or caused by four major factors: *activity style*, *resource specificity*, *mode of experience* and finally, *lifestyle tolerance*. The components explain how a visitor have desired and achieved goals concerning his or her recreation.

Manning (1999) explains that these four factors cover all the variables found to be statistically related to conflicts. In empirical studies, one has tried to explore the *underlying reasons* for conflict. The motives or goals of the visitors are important in explaining and understanding recreation conflict. For example, motivations for recreation can be interpreted as part of one's recreation activity style, and social values (beliefs and attitudes) as contributing to lifestyle tolerance.

The variables in Figure 16, determine the *sensitivity to conflict* rather than *conflict*, as it is experienced and attributed directly to others. Personal norms and values are important. As implied by 'sensitivity to conflict', two individuals may have the same experience, but they sense different levels of conflict. Sensitivity to conflict and conflict are related, but are separate concepts. By asking the respondents to what extent they dislike or like, for example, the contact with other participants in their activities, sensitivity to conflict are determined indirectly and more generally. In that way, potential conflict is measured (Manning, 1999).

Conflict, in turn, is measured by asking the respondents specifically and directly if and how other people have hindered their goals. The goal interference can occur either by *direct* contact (interpersonal contact) or *indirect* contact (social values). Depending on certain behaviours or other motivations, the four variables create preconditions that are more likely to lead to conflict; a 'catalyzing situation' for conflict. The final reaction among the recreationists is that some may implement *coping behaviours* to reduce or get rid of the conflict and others may instead experience disappointment and *diminished satisfaction* (Manning, 1999).

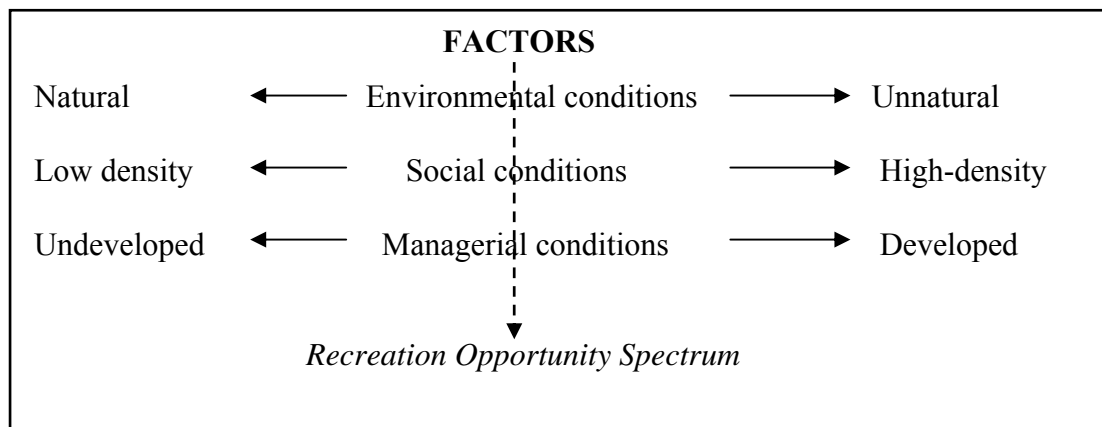
## 6. THE RECREATION OPPORTUNITY SPECTRUM

The *Recreation Opportunity Spectrum* (ROS) is a planning framework, with an approach of providing a range of recreational opportunities where zoning is applied on the landscape. The questions regarding what types of outdoor recreation opportunities to provide, how much, where, to what degree, and by whom, has influenced the ROS which was developed at the end of the 1970s. Biological, physical, social and managerial conditions combined the concept of a recreational opportunity setting based on the premise that: “... *recreationists seek a variety of recreational opportunity settings, and through their participation in different activities in these settings, derive a variety of experiences and benefits.*” (Stankey et al., 1999 pp. 437).

The ROS has typically been applied at a regional level and supports a development of recreation experiences where areas are classified and divided after the environmental conditions and the recreational activities. The ROS is an organising or *conceptual framework* where management judgment is needed in the application, as pointed out by Manning (1999). The planning framework has been outlined in several publications (Clark & Stankey, 1979; Driver et al., 1987; Emmelin, 1997; Manning 1999; Stankey et al., 1999).

As maintained by Stankey et al. (1999) the idea of the ROS is:

- to respond to the need for diversity in recreation settings (reaching between wilderness and affected nature),
- to get easier valuations of effects and consequences between recreation and other interests,
- to put management on a behavioural foundation to make the consumers' values more valid.



**Figure 17.** *The relationship between the ROS-factors (After Manning, 1999).*

By applying the ROS, the landscape is divided into various factors that are considered to provide possibilities for different experiences, see Figure 17. Noteworthy, the total of the factors creates a *spectrum*. This spectrum contains different setting classes. Recreational opportunities are seen as combinations of physical, social and managerial characteristics of settings. A basic assumption is that most people look for diversity in recreational opportunities (Kaltenborn & Emmelin, 1993). The environmental conditions are the qualities of the physical landscape, the social conditions how the landscape is used and managing conditions are which measurements are done in the area. The environmental, social and managing factors can thereby be combined in different ways to generate recreation opportunities (Manning, 1999).

When applying the ROS, the landscapes can be zoned in primitive, semi-primitive, non-motorized, semi-primitive motorized, rustic, concentrated, and modern urbanized classes (for

example, Manning, 1999). The planning framework provides opportunities for activities in certain areas that realise people's desired experiences. The ambition is to find a balance between the use and the conservation; a variety of recreation satisfies the need for experiences and directs people to certain areas that protect nature (Driver et al., 1987). Consequently, the ROS encourages diversity where everyone has access to the various zones. One should be able experience what the different zones offer that responds to various interests and needs (Emmelin et al., 2005).

An extension of the ROS is the *Water Recreation Opportunity Spectrum* (WROS), which provides guidance for water resources (for example, coastal zones, lakes, rivers, marine protected areas etc.). Its goal is to provide planners and managers with a framework for conserving a spectrum of quality and diverse water recreation opportunities. According to Aukerman and Haas (2004), the WROS can be applied to any water resource, although it is less practical on very small areas.

The WROS is a tool for understanding the type and location of six types of water related recreation opportunities. The factors from the ROS are put into six WROS classes described as zones with different distance from developed and populated cities ranged across a spectrum of urban suburban, rural developed, rural natural, semi primitive, and primitive classes. Each WROS class is defined by a particular 'package' of activities, setting attributes, experiences, and benefits. For example, the activity of low-speed motor boating is represented in all classes except the primitive. Jet-ski is, in comparison, not represented as an accepted activity in the semi primitive and the primitive class (Aukerman & Haas, 2004).

The most critical concern of having successful implementations of the ROS (and the WROS) is that it is executed as expert-based, rational-comprehensive planning. This may cause difficulties when there are disagreements about cause-effect relationships or conflicts over goals, as maintained by Stankey et al. (1999). The ROS should in this manner develop to become a more modern planning framework (Stankey et al., 1999):

- to admit the legitimacy of different groups' values and interest in an area,
- to admit that other knowledge than the scientific is necessary,
- to give scientific knowledge as information to stakeholders rather than only being the base for decision-making,
- to have active involvement and learning among the stakeholders.

Critique has also been expressed by Hall and Page (2002), who claim that the key limitation of the use of the ROS is the emphasis on the setting, at the expense of who the visitor is. The reason is partly that earlier cultures from the landscape planning and architecture professions have suggested that visitor management could be largely addressed through site and facility design. This approach stemmed from a view of site factors as the locus of values (Emmelin, 1997).

The purpose of the ROS is consequently to divide a region into geographical perceivable areas with various contents. The separation is both spatial and qualitative. However, how to implicate and use the ROS is not an obvious task. The Swedish coastal areas consist of inhomogeneous landscapes because of a variation of geography and nature, differences of accessibility, possibilities of different activities, blurred boundaries of rural and urban living, and mental perceptions of what an archipelago is. This together creates complicated arenas to plan and manage (Ankre, 2007). Furthermore, to use the ROS correctly, Wallsten (1988) deems that



there have to be clear and described goals on what should be offered in the area and where, how and for whom. Users with different interests and activities should choose areas that correspond to their preferences. The users have to be well-informed and make a choice to achieve their experience goals. Also, management has to be part of a rational process to create concrete goals for various areas and have the means to fulfil these goals (Emmelin et al., 2005).

## 7. THE BIOSPHERE RESERVE CONCEPT AND ZONING

### 7.1 The Man and the Biosphere (MAB) Programme

In accordance with the Convention on Biological Diversity, the main purpose of the UNESCO *Man and the Biosphere* (MAB) programme was to enhance the relationship between human beings and the environment on a global basis. By interdisciplinary research and cooperation between stakeholders on different levels, the MAB should contribute to knowledge and sustainability (Olsson, 2003). At the end of the 1960s, the initial idea of the MAB programme was to get a balance between usage and conservation by practical solutions. People together with nature was central; how could Earth's resources be used but at the same time be conserved? Thorell and Olsson (2004a) enlighten, however, that the idea of the MAB was ahead of its time. It did not get a worldwide attention until some decades later. In 1992, at the United Nations' conference about environment and development in Rio de Janeiro, the Agenda 21 was accepted by government representatives from around the world. The concept *sustainable development* was thereby established. The aim was to work against pollution and other environmental problems, in order to sustain the environment for the coming generations (Thorell, 1999).

The biosphere reserve<sup>17</sup> is a central tool in the MAB programme. In 1968, at the international Biosphere Conference, it was firmly declared that there should be a combination of conservation and usage where interdisciplinary means could be a help (see UNESCO 2002, for a historical overview of the biosphere reserve's progress):

*“Biosphere reserves are both concept and tool, taking shape as part of UNESCO's intergovernmental research programme on Man and the Biosphere and representing a key component in its objective, which is to achieve a sustainable balance between the conflicting goals of conserving biological diversity, promoting human development while maintaining associated cultural values. Biosphere reserves are sites where this objective is tested, refined, demonstrated and implemented.”*  
(UNESCO, 2002 p. 16).

After the first international establishment of a biosphere reserve in 1976, the concept has contributed to a change of the general view on socioeconomic development and the management of protected areas. The biosphere reserves are representative landscapes of ecosystems and can consist of both land and water environments. They are multifunctional where several different purposes interact and support each other (Svenska MAB-kommittén, 2005). However, the biosphere reserve concept is constantly developing. In the development of the biosphere reserve in Kristianstad Vattenrike, the Swedish MAB committee emphasizes how the concept was adjusted to the local conditions. Such adjustments are required if urban and marine areas are to become biosphere reserves (Svenska MAB-kommittén, 2007).

From the World Network of Biosphere Reserves, which is the worldwide network of the biosphere reserves, there has been an offspring of national and regional networks. These consist of various organizational structures and functions, however, within the requirements of the MAB programme. One example of a sub-network is the NordMAB Network (as part of the

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<sup>17</sup> The international term is biosphere reserve; however, the term has been modified to 'biosphere *area*' in Swedish. The term 'reserve' is a misnomer, because it is not meant to imply restrictions or regulations of human activities but the opposite, according to Thorell et al., (2005a).

EuroMAB network) created after a conference in 2004 with participants from Greenland, Norway, Sweden, Finland, Estonia, Latvia and western Russia (for a description, see Thorell et al., 2005a). In these countries, it is an increasing interest for biosphere reserves<sup>18</sup>, but at the same time the participation could become even more and develop, for example, transboundary biosphere reserves (UNESCO, 2007).

The Swedish MAB programme<sup>19</sup> is thereby a national part of EuroMAB network and the NordMAB network. Interdisciplinary research and cooperation between the stakeholders on the different levels of the Swedish society is encouraged, where science, local knowledge together with regional and local management should work together. The Swedish MAB-committee is the connection between the Swedish MAB programme and the international networks. The Swedish MAB programme's priority in 2007-2008 is to strengthen and to increase research, to develop the concept of biosphere reserve, and to enhance communication and networks (Svenska MAB kommittén, 2007).

The biosphere reserves are nominated nationally, but the final approval is made by the UNESCO. In 1995, at an international conference in Seville, the role and the purpose of biosphere reserves were updated and more clearly defined at site, regional and international levels. *The Statutory Framework of the World Network of Biosphere Reserves* was one outcome, which is a negotiated legal text. The World Network of Biosphere Reserves now had a document to guide and govern the network's functions and development: "*It is a soft law instrument which does not carry the heavy weight of a convention, and maintains the flexibility of approach which constitutes one of the values of the biosphere reserve concept.*" (UNESCO, 2002 p. 184). The biosphere reserves were thereby controlled by international goals, principles and rules. The recommendations for how the development of the biosphere reserves should proceed were at the same time established by *The Seville Strategy for Biosphere Reserves*. It was a basic reference framework which officially confirmed how biosphere reserves should be defined and specified. It consisted of different strategic principles for the biosphere reserves and a vision into the 21<sup>st</sup> century (UNESCO, 2002).

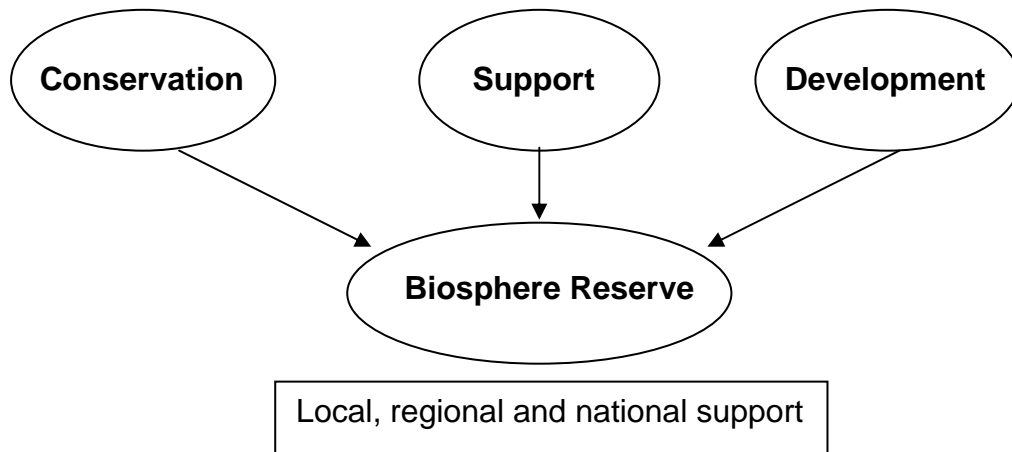
## 7.2 A model area for sustainable development

When *The Seville Strategy for Biosphere Reserves* was determined, general criteria were specified. These outlines specify what is demanded to make an area qualified as a biosphere reserve. Some of the criteria were that an area has to be large enough to contribute to a cultural and biological diversity, it should be divided into three zones and there should be a co-operation between authorities, local population and private interests (Thorell, 1999). The MAB programme defines the biosphere reserves as: "... *areas of terrestrial and coastal-marine ecosystems which are internationally recognised for promoting and demonstrating a balanced relationship between people and nature.*" (Thorell et al., 2005a p. 16 after UNESCO, 1996). In May 2007, there were 507 biosphere reserves in 102 countries (UNESCO, 2007).

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<sup>18</sup> At present, there are six designated reserves in the NordMAB network. Though, Norway does not have any biosphere reserve since the designation of Svalbard was withdrawn because it did not meet the Seville biosphere criteria – there was no zoning and no population in the area (UNESCO, 2007).

<sup>19</sup> The Swedish MAB committee was established in 1999/2000 with representatives from the SEPA, the National Heritage Board, researchers etc. (Svenska MAB kommittén, 2005). See also Thorell et al., (2004b and 2005a) for more information of the Swedish MAB programme and committee.



**Figure 18.** *The three main functions of a biosphere reserve* (After Svenska MAB-kommittén, 2005).

The biosphere reserves' main functions (see Figure 18) are to promote social and economic development, to protect biodiversity and to be the scene for research and education (Svenska MAB-kommittén, 2005):

*Conservation:* To contribute to the conservation of landscapes, eco systems, species and biodiversity.

*Development:* To promote economical development and a development of society which is sustainable both ecological and social.

*Support:* To aid demonstration projects, education, research and supervision of environment.

The purpose with the biosphere reserves is to get new knowledge and to develop management together with local stakeholders, in particular the people who live and interact in the area (see Figure 18). Professionals, politicians and volunteers should use the biosphere reserve as a tool for sustainable development. The concept is a linkage between research and the public, in order to understand how biodiversity may be conserved and how to create a sustainable development (Thorell, 1999). Bridgewater (2002) discusses conservation and that it has to be practical, acceptable to society and easy to understand. The broader values of society are not sovereign from the values that define conservation: *"The concept of sustainability represents an intellectual attempt to balance human use of resources with the protection of resources for future generations, a concept with rather poorly defined processes for a vaguely (and variously) defined goal."* (Bridgewater, 2002 p. 11).

UNESCO has described various benefits of an area becoming a biosphere reserve. The permanent population, citizens and government authorities can become better aware of different environmental and development issues. Various projects of a biosphere reserve mean increased knowledge. Another benefit is that being a biosphere reserve, can lead to financial aid. Moreover, a biosphere reserve can be a place for learning and the implementation of Agenda 21, to be applied elsewhere ([http://www.unesco.org/mab/faq\\_br.shtml#benef](http://www.unesco.org/mab/faq_br.shtml#benef) 14/3/08).



**Figure 19.** *Swedish nature conservation in relation to a biosphere reserve.* (After [www.vattenriket.kristianstad.se/presentation/ppt/b040204\\_KLIMP.ppt](http://www.vattenriket.kristianstad.se/presentation/ppt/b040204_KLIMP.ppt) 28/3/08).

Stenseke (2003) declares, the physical landscape is no longer regarded as a separate unite; it is intertwined with knowledge, values, and socio-economic structures which is part of the biosphere reserve concept. The nature conservation should also be implemented by everyone in society, not only by the experts and the authorities. To be involved in the process makes people to become more responsible (Stenseke, 2003). Thereby, the biosphere reserve concept is viewed to be right in time, because of the Swedish nature conservation politics stated above. This is also illustrated in Figure 19. For the municipalities' work with Agenda 21, the biosphere reserve concept could be a tool to integrate land use, biodiversity and the usage of the resources in the local environmental work (Thorell, 1999).

Daléus (2004) discusses how conservation may lead to direct development (for example, work opportunities and clean water) and indirect development (for example, attractive environment is important in the competition of inhabitants). Also, the development of new technique and products is necessary for conservation. However, Daléus (2004) emphasizes how important it is to join development and conservation together, instead of being separated from each other where the people working with these issues only see it from one perspective. Cooperation between the people who develop and conserve, is probably an important aspect. Nevertheless, these should also be people who have knowledge of both development and conservation (Daléus, 2004).

In Sweden, there are two existing biosphere reserves, Torneträsk and Kristianstad Vattenrike. There are also three areas with candidate status of possibly becoming a biosphere reserve; Älvsjökvarnen Nedre Dalälven, the archipelago of lake Vänern and mount Kinnekulle, and the Blekinge archipelago. However, as the SEPA states, the most important is not to have many biosphere reserves, but to have areas of high quality. At present, it is not possible to supervise many biosphere reserves in Sweden. Instead, there should be main areas, where one can view the entirety of human beings and nature (Åhrén, 2004).

According to the Swedish government (2002), sustainable development is defined as development which meets the present needs, but without preventing the next generations'

possibilities. For the Swedish government's politics<sup>20</sup>, sustainability is a guiding principle within all areas:

*“Nature conservation politics should be viewed as politics which contribute to the creation of possibilities and development, instead of preventions and restrictions. Possibilities of nature experiences, outdoor recreation and increased nature tourism. Possibilities of regional development, maintenance of gene resources, and to a long-term sustainable usage in important economic sectors. Possibilities of sustaining our cultural landscape as part of our cultural heritage. Possibilities of creating a long-term sustainable development.”*  
(Regeringens skrivelse 2001/02:173, 2002 p. 21. Author's translation.).

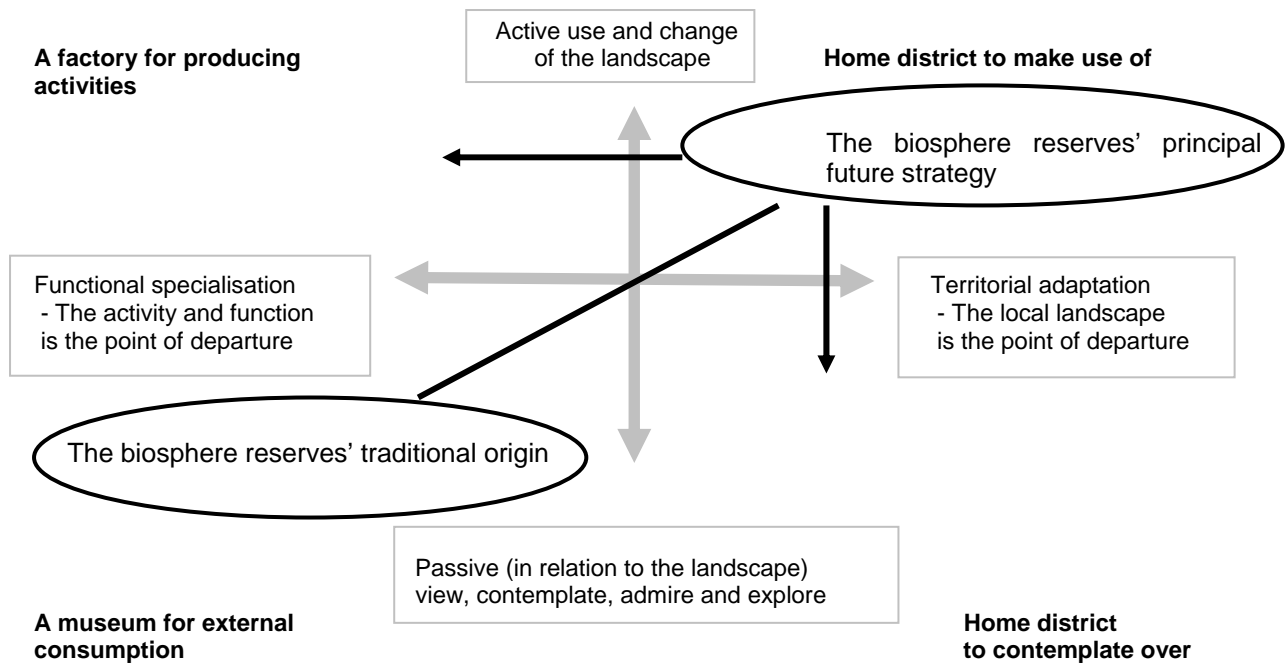
The SEPA has discussed why the biosphere reserve concept is important (Risinger, 2004). One reason for the SEPA's belief of the concept's relevance is that it consists of ideas and processes which are considered in the Swedish government's official letter of nature conservation (2001/02:173) and in the change of the Swedish nature conservation. The concept is based, according to the SEPA, on the three parts of the strategy of ‘*hushållning*’<sup>21</sup>: cautious usage, protection of valuable environments and environmental adjusted spatial planning. Risinger (2004) believes that by a biosphere reserve, it is obvious how the connection between these three parts could be strengthened, and how the interaction between natural and social sciences could increase.

The interest for the programme has continually grown and the development of biosphere reserves is now also partly financially supported by the SEPA (Thorell et al., 2004b). But for example, in 2005 von Sydow, the head of nature conservation at the Norrbotten county administration board, declared that her staff was not knowledgeable enough regarding biosphere reserves or the specific issues concerning the Torneträsk. Neither did the county administration board have any money to investigate the biosphere reserve issue (Jämting & Nilsson, 2005).

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<sup>20</sup> From the Swedish government, the Swedish Parliament received an official letter (2001/02:173) concerning a gathered and partly renewed nature conservation politics. In the official letter, the relationship between nature conservation and sustainable development is discussed, as well as the motives for the government's nature conservation politics. Different areas are highlighted as important for the continued work with nature conservation, for example, spatial planning as a valuable tool, outdoor recreation and dialogue with the citizens.

<sup>21</sup> The term could be directed translated to ‘good housekeeping’. In natural resource use and spatial planning, it may intuitively imply and literally be interpreted as meaning either economising/rationing or efficient use. The term may be used by the both sides of conservation and land use changes (Vuorio, 2003 p. 13).



**Figure 20.** *The biosphere reserve concept in the conceptual framework of eco-strategies.* (Sandell, 2003).

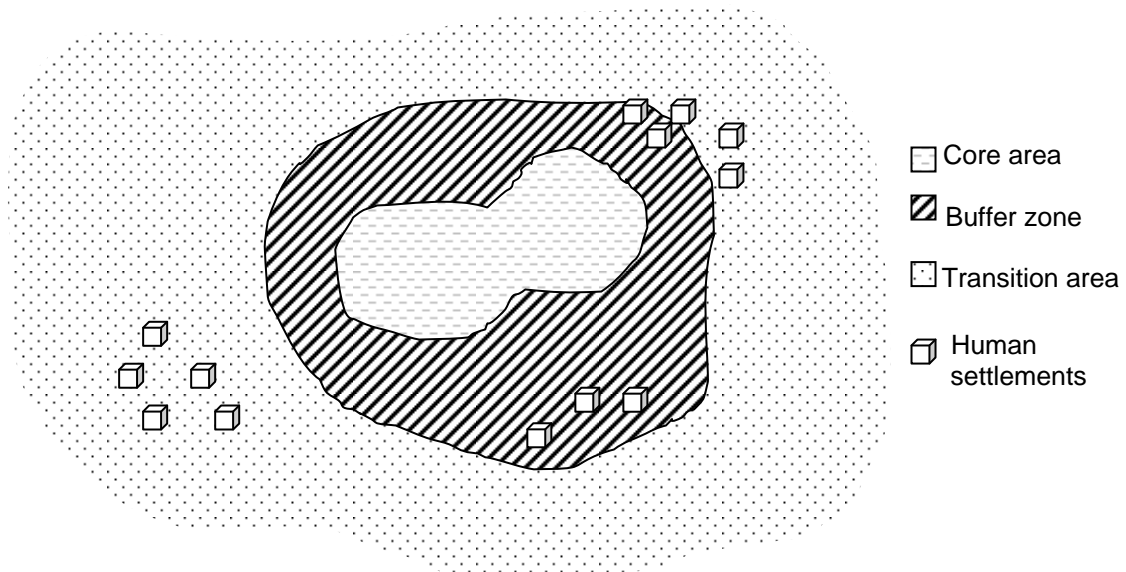
Sandell (2003) has considered how the biosphere reserve concept may be incorporated in his framework of eco-strategies. The concept takes its beginning in the left lower corner due to the focus and stress upon natural science and the interest in protected nature landscapes, see Figure 20.

As discussed above, the work of the UNESCO (as stated in the Seville Strategy) has now become to include also the local population's involvement and development together with conservation. Thereby, the biosphere reserve principal future strategy is moved to the upper right corner. The biosphere reserve has an obvious mission of changing society (Sandell, 2003). The concept's goal to be locally supported and to be a regional and global model is illustrated by the arrows. Since the core areas of a biosphere reserve is an already protected area (for example, a national park), the biosphere reserve is *still* to be found also in the left corner. As Sandell (2003) puts it, the tradition with a 'museum' perspective is yet alive. The question Sandell (2003) arises in his model is how the landscape perspective of the biosphere reserve strategy could become better incorporated in the spatial planning. Also, if the biosphere reserve concept could become a more important element in the planning for tourism, outdoor recreation and conservation.

### 7.3 The zoning elements

In a biosphere reserve, zoning is an important part. It does not involve any new legislation with restrictions. It is a form of spatial planning and an approach to turn nature conservation into practise. The zoning should consist of three elements, so called core areas, buffer zones and transition area. Usually, a biosphere reserve consists of several core areas and buffer zones. The core area is protected by law (for example, by being designated as a national park, nature reserve or Natura 2000 area), while the buffer zone includes activities and usage that are compatible with the core area's purpose. The transition area is the outer zone, which encloses the core areas and the buffer zones, where development is of priority and where the most of the

human activities are. Research is executed in all the zones. The biosphere reserve zoning is a zoning applied worldwide, but it should be adjusted after the area's limitations and geographical conditions (Thorell, 1999).



**Figure 21.** *Schematic zoning pattern of a generalized biosphere reserve.* (After UNESCO, 2002).

Figure 21 illustrates the zoning of a biosphere reserve, which could also be specifically described as (UNESCO, 2007 p. 3):

- a) a legally constituted **core area** or areas devoted to long-term protection, according to the conservation objectives of the biosphere reserve, and of sufficient size to meet these objectives;
- b) a **buffer zone** or zones clearly identified and surrounding or contiguous to the core areas, where only activities compatible with the conservation objectives can take place;
- c) an outer **transition area** where sustainable resource management practices are promoted and developed.

In summary, according to the Seville Strategy, the functions of the various zones are (UNESCO, 2007 p. 4):

- *Core area*: conservation, monitoring, research, low-impact use.
- *Buffer zone*: cooperative activities (education, recreation, ecotourism, research).
- *Transition area*: multiple-use area (agriculture, settlements, sustainable use of natural resources).

The earlier biosphere reserves had only one core area, but since the 1990s most biosphere reserves are made of several core areas. Thereby, several areas of high value which are spread geographically can be included in one biosphere reserve (UNESCO, 2007). The function of the core areas is to ensure a long-term protection of biodiversity. They are rendering services to society in large, for example, research, clean air and water, recreation environment, ecotourism, which means work opportunities, finances, new knowledge and sustainable development (UNESCO, 2007).



The buffer zones should connect the core areas and the transition areas, but it does not have to be completely surrounding a core area. Yet, in the recent designated biosphere reserves, it has sometimes been recommended that the buffer zones fully enclose the core areas in order to be more strongly protective of environment conservation (UNESCO, 2007). The transition areas<sup>22</sup> are characterized by human impact with its different stakeholders who manage and sustainably develop the area's resources. The economic development is based on a sustainable use of the resources and there can of course be conservation values in the transition area as well (UNESCO, 2007).

#### **7.4 The challenge of planning and implementing zoning in reality**

Obviously, the understandings of the biosphere reserve's zoning and functions have altered since the concept itself has evolved in the progress of meeting environmental and social requirements. The zoning of the biosphere reserve is an ideal, according to Dempster (2004), where the centre is the core, the buffer zone and the transition area. She concludes after an overview of the Canadian biosphere reserves, that there are various sorts of zonation to meet local conditions. This is not inaccurate but it does show the difference between the ideal conception and the reality (Dempster, 2004).

As a result of a meeting of the Advisory Committee for Biosphere Reserves (UNESCO, 2007), a document was outlined where the development of the zonation pattern was described, and with modified definitions of the three zones' functions with a corresponding zonation pattern. Initially, the zoning consisted of concentric rings. To meet the different local needs and conditions, the zoning has been put into practice in various ways, which also has lead to positive outcomes such as flexibility and creativity (UNESCO, 2007).

To plan and implement the biosphere reserve zoning is a challenge, which have lead criticism and difficulties in several areas (see below). According to the Swedish MAB-committee, there is a strong need to develop the zoning model. Together with the EuroMAB, the Committee will work with improved suggestions for zoning models (Svenska MAB kommittén, 2007). The objective of the Advisory Committee for Biosphere Reserves (UNESCO, 2007), is that the biosphere reserves should become more effective by an integrated zoning and management. Therefore, some actions were proposed in 2007 to obtain conservation, sustainable use of resources and knowledge generation<sup>23</sup> (see UNESCO, 2007 for details):

*Action 1:* Modified descriptions of the zones and their functions. For example, core areas may be made known as 'conservation for development' areas which contribute to preservation and linkage with cultural diversity. In the buffer zones, economic activities (in line with the conservation objectives) may be carried out and negative human activities effects on the core area should be minimized. In the transition areas, it could be experimented with 'new' approaches to development, for example, sustainable energy use, and there should be on-going consultation with different stakeholders.

*Action 2:* Through innovative and locally-determined zonation pattern biosphere reserve managers can integrate conservation, sustainable use of resources and knowledge generation into the biosphere reserve.

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<sup>22</sup> UNESCO (2007) discusses the meaning of the term *transition* area since it is vague. Instead, the zone could be called 'area of cooperation' or 'sustainable development area' to clarify its proposed function.

<sup>23</sup> This is defined by UNESCO (2007) as including environmental research, monitoring, public awareness and education.

*Action 3:* Biosphere reserve planning and management develop cooperation plans that establish how objectives and functions re to be achieved in biosphere reserves.

*Action 4:* Governments promote biosphere reserves as learning laboratories and sites of excellence for sustainable development.

In 2008, at the 3<sup>rd</sup> World Congress of Biosphere Reserves, one agreed upon the Madrid Action Plan (2008) due to different challenges – climate change, provision of ecosystem services and urbanization as a principal driver for eco-system-wide pressures. The aim was to make biosphere reserves the principal internationally designated areas to reach sustainable development:

*“The biosphere reserve (BR) concept has proved its value beyond protected areas and is increasingly embraced by scientists, planners, policy makers and local communities to bring a variety of knowledge, scientific investigations and experiences to link biodiversity conservation and socio-economic development for human well-being.”* (Madrid Action Plan, 2008 p. 2).

For the period 2008-2013, the Madrid Action Plan puts actions, targets and success indicators, partnerships and an evaluation framework into words. Before the end of August 2008, the MAB secretariat should be informed by the countries (with biosphere reserves) of which methods and schedules of action to be implemented within the Madrid Action Plan framework. An evaluation will be made in 2010 and 2013.

One part of the Action Plan consists of zonation and how it is linking functions to space. There is a need for a more integrated understanding of zoning, according to the Action Plan. The core area also means ecosystem services along its conservation function, which can be calculated in economic terms, for example clean air and water. Regarding the buffer zones, they can have central functions to keep biological and cultural diversity, and they are also linking the core areas with the transition areas (Madrid Action Plan, 2008).

In coastal areas, it is common that the land and water areas are under separate jurisdictions and management authorities. This makes a consistent approach complicated. In a number of biosphere reserves consisting of coastal areas and islands, one is trying to see adjacent land and marine ecosystems as a whole. Different areas are zoned for different functions and aims, with core areas in both terrestrial and marine ecosystems (UNESCO, 2002). If culture diversity is to be ascertained one cannot delimit core areas without any human activity: *“It lies near at hand to talk about zones where the human activity shows consideration at different degrees.”* (Stenseke, 2003 p. 22. Author’s translation.).

In the transition area, conservation/environmental goals and elements should be considered together with the development function. The transitions areas are important for the socio-economic development. However, these areas have not been required to be defined with limits or boundaries. As a result of cooperation plans, projects and concepts, clear boundaries are necessary which one can grasp and accept. A biosphere reserve’s total enclosure also needs to be specified (UNESCO, 2002). Because the transition area is not required to be spatially defined it may cause problems. When establishing management plans and regional development strategies, these should be valid for the biosphere reserve as a whole: *“Management authorities typically plan in a defined spatial context. In practice, too, most*

*proposals for biosphere reserve designation actually do delineate the geographic extent of the transition zone.” (UNESCO, 2007 p. 8-7).*

In new proposals of becoming a biosphere reserve, it is recommended that the transition area to be outlined and defined. According to Thorell (1999), the transition areas in Sweden could be juridical regulated by the Planning and Building Act, even though the juridical plans are related to buildings. The comprehensive plan could also be a tool, despite it not being a legislative document (Thorell, 1999).

**Table 10.** *Actions for biosphere reserve zonation.* (After the Madrid Action Plan, p. 12.).

| Target  | Actions   | Time | Success indicator  | Responsibility for action                      |
|---|---|------|--|--|
| Analysis of zonation of all biosphere reserves  | Carry out a survey on the present zoning system of the WNBR <sup>24</sup> (including the proportions of the different zones) and investigate how well they fulfill the three functions in each zone.  | 2010 | Outcome of analysis submitted to ICC <sup>25</sup> , and results and ICC recommendations published.                            | MAB Secretariat and Regional Networks.         |
| Functional zonation in all biosphere reserves established, particularly with regard to the transition area and the development function | Develop and apply practical tools and guidelines for zoning at the national level.<br><br>Determine the most suitable zonation patterns and define performance standards for each zone. Ensure sufficient size of each zone for the biosphere reserve functions and identify the contribution of each zone to the whole biosphere reserve.<br><br>Clearly define the outer boundary of the biosphere reserve in determining the transition area through stakeholder consultation. Natural, political and administrative boundaries should be considered and defined, and clearly explained. | 2013 | 100% sites have functional biosphere reserve zonation.   | National MAB committees and Regional Networks. |
| Cooperative conservation and development strategies for biosphere reserves  | Use appropriate tools for a better connectivity of ecologically-important sites and elements in the landscape, a better inter-linkage of areas/zones and enhanced buffering, and a better consistency in planning.  | 2013 | 25 biosphere reserves have well-designated plans with sufficient conditions assuring financial and operational sustainability. | Individual biosphere reserves.                 |
|   |   |      |  |  |

<sup>24</sup> World Network of Biosphere Reserves.

<sup>25</sup> International Coordinating Council for the MAB programme.

In the Madrid Action Plan (2008) some actions have been defined which should be taken into practice in order to make the biosphere reserves more effective, see Table 10. However, a flexibility of the definition of the zones can be maintained on a national level.

One problem expressed by Price (2002), who has looked upon the UK experience of the biosphere reserves, is that there has been a lack of indicators and mechanisms to review effectiveness. This has led to a number of sites which are not biosphere reserves in reality, only in name. After a periodic review of UNESCO, Torneträsk is in the process of revision since it did not fulfill the new criteria established by the Seville Strategy (see also Price, 2002, for an overview of the development of review process). A proper zoning is needed and the local people should be more involved.

The Swedish MAB-committee has made suggestions for changes of the Torneträsk biosphere reserve. More people should be included by an expansion of the area (Thorell et al., 2005b). In Torneträsk, Sweden, the core areas consist of the national parks and nature reserves, and the lake Torneträsk is the buffer zone. However, the transition area does not carry out the requirements of local population (see Wall, 2001). In the end of 2003, there was no coordinator employed, but the Kiruna municipality had decided to look upon an upgrading of the area. Financial support was given from the Swedish MAB committee, the SEPA, the Abisko Scientific Research Station and the Norrbotten county administration board. According to Thorell et al., (2005b p. 102): *"The Swedish MAB-committee has tried to find local support to upgrade the reserve and it is now likely that Torneträsk BR will become upgraded by local initiatives."*

Apparently, the ball is now with the Kiruna municipality's regarding the proposal of the expansion of the transition area to include more populated areas. A preliminary study *Sustainable development in the mountains* with the biosphere reserve in focus has been viewed as a sign that the Kiruna municipality has the will to continue with the biosphere reserve (Sandell, 2005b; Jämting & Nilsson, 2005). However, at the Environment Office of the Kiruna municipality, the report is not known. In an e-mail correspondence with Lahti (2008), head of the Kiruna municipality's Environment Office, it is explained that the question of an extension of the biosphere reserve is not at the municipal political agenda at all. The reasons could be several: *"... but the most probable is that there is a reluctance and suspiciousness against everything that breathe reserve/more protection."* (Lahti, Kiruna municipality 18/3/08). Another reason could be that there are good business within mining and ore-prospecting, and there is a fear for a restriction of these interests (Lahti, 2008). Also, the former coordinator, who was regarded as the driving force of the Torneträsk biosphere reserve and the author of the preliminary study of the area is now a teacher and no longer involved in the project.

As Sandell (2005b) discusses, a proper zoning was never executed in Torneträsk, and this is one of the reasons why UNESCO is threatening to withdraw the area from the list of biosphere reserves. Furthermore, Jämting and Nilsson (2005) stress that because of the establishment of the Abisko Scientific Research Station in Torneträsk the cultural and social values of the area have been put aside, due to the emphasis upon the nature and physical values. In November 2008, the Swedish MAB Committee decided that Torneträsk has until 2009 to develop a plan for the area with the purpose to fulfill the Seville Strategy. If not, the Committee will recommend that Torneträsk no longer should be a biosphere reserve (MacTaggart, Swedish national coordinator MAB Committee, 14/11/08).

Kristianstad Vattenrike ([www.vattenriket.kristianstad.se/presentation/ppt/b040204\\_KLIMP.ppt](http://www.vattenriket.kristianstad.se/presentation/ppt/b040204_KLIMP.ppt) 28/3/08) has developed a Swedish model of zoning together with regional and national authorities, since there was no national example to originate from. The aim was to identify and show valuable areas from a landscape perspective, create zones as support for decisions of resource priorities and no new legislation. Also, there should be no new process to handle the zoning, instead the work proceed together with the comprehensive plan. In the zonation, the nature reserves, Natura 2000, RAMSAR, areas of national interest, the shore line protection was considered when creating the different zones ([www.vattenriket.kristianstad.se/presentation/ppt/b040204\\_KLIMP.ppt](http://www.vattenriket.kristianstad.se/presentation/ppt/b040204_KLIMP.ppt) 28/3/08).

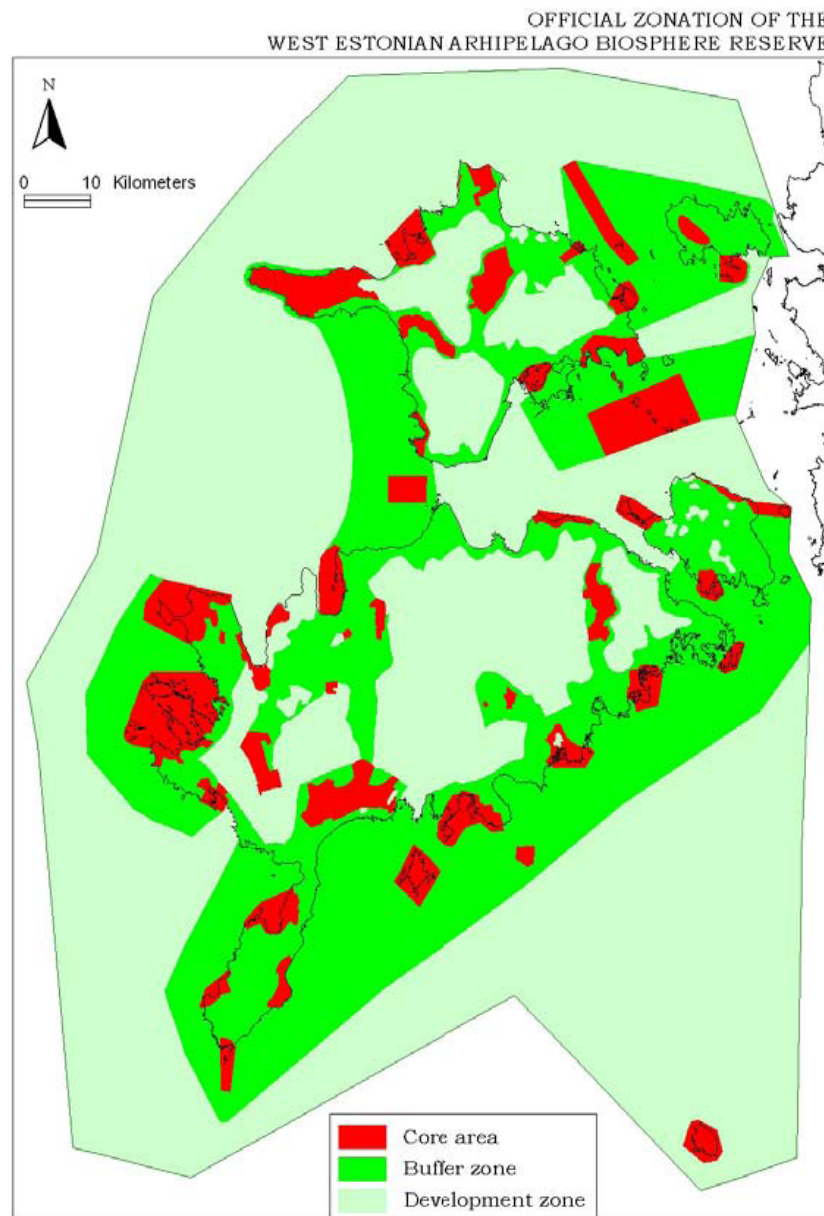
In the Blekinge archipelago, only the core areas were defined in the preliminary study. The transition areas are, however, the most important, according to Wallsten (25/4/07). How to work with the zoning will continue to be an issue during the candidate status. Different types of nature and culture environments have been mapped out in the preliminary study, which can be used in the biosphere reserve zoning. The goal is that the biosphere reserve should have well-motivated zoning which is supported by different stakeholders (Länsstyrelsen i Blekinge et al., 2007). The zoning problem in Torneträsk is an example for the need of improvement of the zonation.

The flaws of the Swedish zoning have been discussed by Stenseke (2003), since these make it problematic to use the biosphere reserve as a tool. Especially the core areas (which are already protected areas) with the biological diversity have been the crucial factor in the zoning. Stenseke (2003) thinks that one could consider the biosphere reserve as a glass cover. In the work with a biosphere reserve one should, however, see beyond the issues within this glass cover. The humans and the environment are affected by global and national actions, for example, politics and pollution. To make the concept work, a world wide interaction is required (Stenseke, 2003). Bridgewater (2002) suggests that there is a similarity between ecosystems, culture and languages – all can be changed or developed. A conservation of an ecosystem should not mean that it cannot be changed, or be developed or used by human beings.

## **7.5 Two examples of archipelagos as biosphere reserves in Northern Europe**

Biosphere reserves in archipelagos have been established in different parts of the world (see UNESCO, 2002). Two examples of biosphere reserves in the northern hemisphere are Finnish and Estonian, which differ concerning their geographical location in the world, size and number of people (for details, see for example Thorell et al., 2005a). Nevertheless, what is interesting is how these two examples have practised the zoning of a biosphere reserve. How has the zoning (with the dispersion of core areas, the buffer zones and the transition areas) of the islands and islets been dealt with?

The *West Estonian Archipelago Biosphere Reserve* is located in the eastern Baltic Sea. Approximately 50,000 people live within the area of the biosphere reserve where agriculture, fishing, forestry, hunting and tourism are the most important ways of livelihood. Especially the tourism industry is growing rapidly, especially domestic tourism, but also foreign visitors find the archipelago attractive ([http://www.coastsust.eu/index.php?option=com\\_content&task=view&id=31&Itemid=52](http://www.coastsust.eu/index.php?option=com_content&task=view&id=31&Itemid=52) 14/3/08).



**Figure 22.** *The zoning of the West Estonian Archipelago Biosphere Reserve, Estonia.* (Permission by T. Kokovkin.)

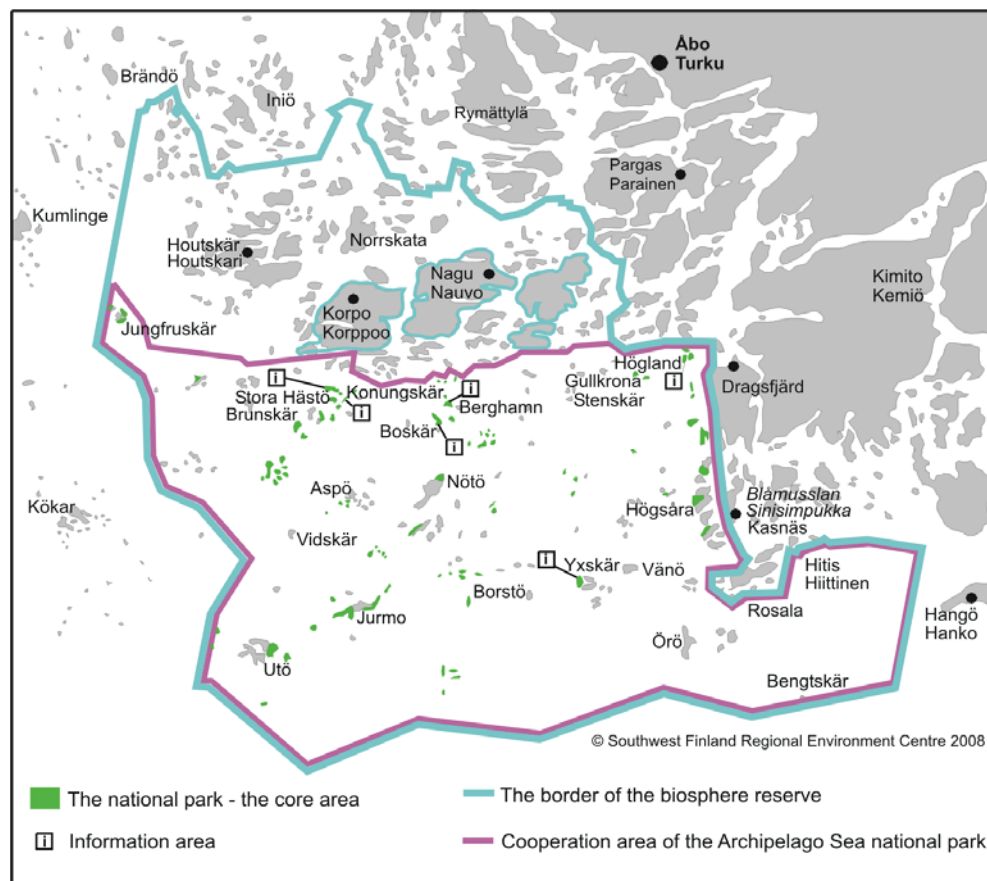
The West Estonian Archipelago Biosphere Reserve consists of four islands and numerous islets, see Figure 21. Within the biosphere reserve, there is a national park and other protected areas. In 1990, it was established as a biosphere reserve and was first managed governmentally. In the 1990s, the organisation of the protected areas changed due to political independence, the accession with the EU, private land ownership and democratic governing. The biosphere reserve management was shifted to the non-governmental ‘Biosphere Programme Foundation’ in 2002, and later to the State Nature conservation Centre. The zoning was modified from a focus on nature conservation, to be adjusted to the UNESCO’s MAB zoning. This has meant that the social and economic aspects of sustainable development have been integrated to a greater extent, where also the people are involved in the process (Kokovkin, 2005). More emphasis was placed on the transition area, whereas the core areas remained under strict

control

(<http://www.unesco.org/mabdb/br/brdir/directory/biores.asp?mode=all&code=ENA+01> 14/3/08).

At present, there are more than 50 specified and conserved areas in the West Estonian Archipelago Biosphere Reserve, which also are the core areas. Surrounding the core areas, there are buffer zones with limited nature management, such as Natura 2000 areas. The remaining parts of the biosphere reserve are the development zones (transition areas), where people live and are active without restrictions ([http://www.coastsust.eu/index.php?option=com\\_content&task=view&id=31&Itemid=52](http://www.coastsust.eu/index.php?option=com_content&task=view&id=31&Itemid=52) 18/3/08).

Today the biosphere reserve in Estonia is in a very uneasy situation, according to Kovkovin. The zonation is not operational in reality, and a major reform will follow, so that the zonation will probably change in the years to come (Kovkovin, 23/04/08).



**Figure 23.** *The zoning of the Archipelago Sea Biosphere Reserve, Finland.* (Permission by Finland's environmental administration).

In 1994, the *Archipelago Sea Biosphere Reserve* was established in Finland. About 1200 people live within the biosphere reserve. To combine the sources of income have always been part of reality for the archipelago's inhabitants, for example, small-scale agriculture and animal husbandry together with fishing and trade in the northern Baltic Sea region. The traditional way of living is, however, diminishing being replaced by the service industry together with the tourism industry (<http://www.coastalguide.to/archipelago/index.html> 14/3/08).

The core area consists of the Archipelago National Park, owned and managed by the Finnish Forest and Park Service in Southern Finland. Still, most of the other land and water areas are private owned. A buffer zone and a transition area surrounds the national park, see Figure 23 ([http://www.turunmaanseutu.fi/biosphere/index\\_eng.php?id=yleistaeng](http://www.turunmaanseutu.fi/biosphere/index_eng.php?id=yleistaeng) 14/3/08).

In the Finnish biosphere reserve, three different zones of a biosphere reserve exist but in reality they are not operationalized systematically, according to Hokkanen et al., (2005). There are no external buffer zones, instead the core areas consist of strictly protected areas and the recreation areas are buffer zones. A transition area has been defined, but with no administrative status so the zoning has not been properly developed. To make the concept more known and accepted in Finland, the zoning has to become more effectively adopted as a local tool (Hokkanen et al., 2005).



## 8. THE ESTABLISHMENT OF A BIOSPHERE RESERVE IN A SWEDISH ARCHIPELAGO

### 8.1 Strengths and weaknesses

In December 2007, the Swedish MAB-committee decided to give the Blekinge archipelago a candidate status of possibly becoming a biosphere reserve. The area includes the archipelago and the coastal area of the municipalities Karlskrona, Ronneby and Karlshamn<sup>26</sup>. The decision was based on a preliminary study where the reasons and possibilities of why Blekinge archipelago should become a biosphere reserve were explained. The area consists of valuable nature and culture, and the local population's prospects of living in the area are central for the conservation of the area's values (Miljöekstra, 2006). In the Blekinge archipelago, there is ([http://www.k.lst.se/NR/rdonlyres/B1EF4C8D-FEAE-4B69-96EE2101AC461709/0/BIOSFAROMRADE\\_info.pdf](http://www.k.lst.se/NR/rdonlyres/B1EF4C8D-FEAE-4B69-96EE2101AC461709/0/BIOSFAROMRADE_info.pdf) 12/3/08):

- a coastal fishing and small-scale agriculture,
- genuine and traditional craftsmanship, for example, boat building,
- nature of high values consisting of seashore meadows, skerries and islets, bays, shallow sea bottoms, forests etc.,
- a unique culture landscape both above and under the water line, for example, the World Heritage Karlskrona and the culture reserve Ronneby Brunnspark.

In the preliminary study, the local commitment was described and it was also depicted how the area fulfils the criteria of becoming a biosphere reserve. The Blekinge archipelago will continue to be a candidate until Summer 2010, and after that it will be decided by the UNESCO whether it should become a biosphere reserve or not (<http://www.ronneby.se/publicweb/templates/Page.aspx?id=8574> 18/3/08).

It was the Blekinge county administration board who took the initiative for the work of becoming a biosphere reserve. Professor Elmqvist, at the time chairman of the Swedish MAB-committee, as well as of the International MAB Programme, stated that: *"The biosphere reserves are exciting model areas for sustainable development. The Blekinge archipelago and its coast contribute with something new in the Swedish, as in the international biosphere network, since the area includes marine environments of the southern Baltic Sea."* (<http://www.k.lst.se/k/Pressrum/Nyheter/2008/biosfar080121.htm> 12/3/08. Author's translation). According to the Blekinge administration board (2007), there were several reasons for the idea of creating a biosphere reserve of the Blekinge archipelago. Since biosphere reserves should be model areas for sustainability, it would be a way to keep the landscape alive and to keep a local population.

According to Wallsten (23/4/08), the traditional tools are of no help – there is a need to see the totality and all questions. The reasons were that there is a national focus upon marine conservation. In Blekinge, the goal is to conserve the nature values, but it is difficult without incorporating human beings since the area also is a culture landscape. Petersson (24/4/08) explains that there is a need to strengthen life in the archipelago. A change is necessary since people are moving away from the islands, which also have become overgrown since there are no cattle anymore to graze them. A biosphere reserve means a new way of thinking; possibilities not limitations. It is necessary with a landscape perspective and to consider sustainable development as a whole. Also, there were several points of contact with the content

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<sup>26</sup> The municipality Sölvesborg was part of the preliminary study but decided to not continue with the application.

of the Regional environment and economizing program '*More life in the [Blekinge] archipelago*' (Mer liv i skärgården, Länsstyrelsen i Blekinge, 1999).

Furthermore, the local organizations and entrepreneurs could get tools for development, research and projects in the Blekinge archipelago. Being a biosphere reserve would also mean a large network where experiences and problem solving could be discussed ([http://www.k.lst.se/NR/rdonlyres/B1EF4C8D-FEAE-4B69-96EE-2101AC461709/0/BIOSFAROMRADE\\_info.pdf](http://www.k.lst.se/NR/rdonlyres/B1EF4C8D-FEAE-4B69-96EE-2101AC461709/0/BIOSFAROMRADE_info.pdf) 12/3/08). People living in the Blekinge archipelago, should continue to develop and shape the area, but at the same time protect its values. There is hope that the biosphere reserve will impel new ideas regarding local investments, which will create work opportunities (Länstidningen, 2007). By a biosphere reserve status, the prerequisites would increase for the archipelago to stay alive and to sustain the agriculture and small-scale fishery of the area, according to the Blekinge county administration board (Knutsson, BLT, 08/02/07).

Distrust and prejudices on a local level are weaknesses in the establishment of a biosphere reserve in the Blekinge archipelago. In the area, there is also a sense of fatigue for projects, according to Petersson in Karlskrona municipality (24/4/08). It is important that the biosphere reserve is a regional cooperation, not only a project by the Blekinge county administration board. Otherwise it will become an impediment to the work, according to Mattson and Axelsson. Petersson's opinion is that there should be more mutual geographical planning with a common view, for example, a development of the water and sewerage over the municipal boundaries to give opportunities to development in the coastal area. Sonesson and Berntsson (9/7/08) mean that the concept biosphere reserve could be difficult to understand. If there are no resources connected to it and if nothing happens (an actual outcome) it could mean lost confidence, according to them.

Mattson and Axelsson also describe a fear among the local population and second home owners that there will be more restrictions. Does the biosphere reserve concept mean new nature reserves? This is a worry that has been expressed towards the planning of a biosphere reserve in the Blekinge archipelago. The Karlskrona municipality was at first afraid that the concept meant a new way of establishing a marine reserve (Petersson, 24/4/08). Perhaps it is because the Blekinge county administration board is the driving force. Wallsten declares that there were a lot of questions regarding the biosphere reserve, but little critique. Nevertheless, there was an anxiety that the concept implied another way of establishing a marine reserve; there is a fear for restrictions in the area and also of more visitors (Wallsten, 23/4/08). However, there is a contradiction in the attitude; there is criticism against the rules that prohibit one self from extending one's house, but at the same time one does not want others to come to the area and built houses. There is a concern for too much development. The archipelago has been closed for a long time and the second home owners are afraid that the tourism will expand too much since they have invested a lot in their residence: "*They have found their 'untouched' nature. But if there is a fear for tourism establishments – who is going to be the enterpriser?*" (Mattson & Axelsson, 27/05/08).

Wallsten means that one weakness with a biosphere reserve is that it is economical insecure with financing. However, the SEPA finances the MAB coordinators. Also, in Sweden the attitudes towards the establishments of biosphere reserves are obscure; there are positive signals but the signals are at the same time unclear. For example, the SEPA gives different signals where it is indistinct which department or organisation that should be responsible of the Swedish MAB Committee. There is turbulence. Finally, Wallsten points out that the work with

the biosphere reserve is voluntarily, which thereby can be given no priority. It is necessary with several employees, so it all does not depend upon the work of one or two persons. Therefore, a work group consisting of several representatives of each municipality has been created in the effort with the Blekinge biosphere reserve (Wallsten, 23/4/08),

## **8.2 Existing and non-existing cooperation over the municipal borders**

In the effort of creating a future biosphere reserve, the work group in Blekinge has tried different sorts of contacts and channels to learn more about the concept. For example, they have visited Kristianstads Vattenrike to get information. There are also yearly national MAB meetings where the different biosphere reserves or biosphere reserve candidates are hosts<sup>27</sup>, where one can exchange thoughts and experiences. In addition, Wallsten has as the coordinator been to the international MAB meeting in Madrid in 2008. A continuous international contact has been established with the Archipelago Sea Biosphere Reserve, Finland since the area reminds of the Blekinge archipelago. It means inspiration, but also knowledge of earlier made mistakes (Wallsten, 23/4/08).

In the Blekinge archipelago, an increased cooperation between the municipalities is expressed by Mattson and Axelsson as one of the strengths with the concept. Now they have something in common to work with. Before this, there was no direct cooperation in the coastal areas, because the islands differ regarding accessibility, settlements etc. (Mattson & Axelsson 27/05/08). Also Sonesson and Berntsson believe that strength is that the municipalities work together with focus upon sustainable development; it is comprehensive. The qualities of the area are made visible. Petersson emphasizes that the biosphere reserve concept means a gathering of resources. The municipal borders should be erased. To get local collaboration between people built upon voluntariness is another strength (Petersson, 24/4/08).

As mentioned earlier, Sölvesborg decided to not participate in the biosphere reserve project. The municipality joined as the last part in the procedure which meant that the other three municipalities already had begun their work. In the beginning, the biosphere reserve boundaries were diffuse and therefore Sölvesborg was not included initially (Petersson, 24/4/08). Wallsten can only speculate about the causes why Sölvesborg withdraw from the project, since the municipality has not explained why it did not want to continue. She thinks that Sölvesborg perhaps got too little information since it joined last. It could also have been an economical issue since the biosphere reserve requires investments. Petersson's guess is that Sölvesborg did not interpret the signals of what a biosphere reserve is as the other municipalities did. Also, a distinguished agriculture environment could have contributed to the decision of not participating. Sonesson and Berntsson think it was no catastrophe that Sölvesborg decided to not participate, but that the work might have had another direction and focus, for example, concerning the fishing and eutrophication.

However, in a newspaper article (BLT, 6/11/07), the politicians of Sölvesborg explain their withdrawal from the biosphere reserve project by it being too expensive. In the process, the municipal architect Adielsson and the municipal jurist Braw were asked to deliver their opinions. Adielsson said that a future biosphere reserve would mean great possibilities to the municipality by, for example, an increased tourism and becoming a more attractive area to live in permanently. However, Braw warned for the future expenses where, for example, the MAB office with some employees would be at great cost. This made the politicians to reconsider

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<sup>27</sup> In 2008, the national MAB meeting was in Gysinge, the Nedre Dalälven (northwest of Uppsala) which at the time of writing is a biosphere reserve candidate. Author's comment.

their earlier positive attitude towards Sölvesborg's participation or as the vice local government Larsen said: *"When we heard this, we got cold feet. It would cost the municipality 400 000 to 500 000 SEK yearly. We can make achievements ourselves for this kind of money, and therefore we say no."* (BLT, 6/11/07. Author's translation).

The vice local government Larsen (BLT; 6/11/07) does not exclude that Adielsson is right in his positive valuation of the outcomes of a possible biosphere reserve, but points out that it is difficult to make specific predictions of the future advantages. Mattson and Axelsson think that Sölvesborg made a miscalculation and that it will mean a loss to the municipality itself, much due to the fishing industry in the area. In the regional perspective, it is a pity. The places Listerlandet and Hanö are important, which may have importance in the future (Mattson & Axelsson 27/05/08).

Petersson states that the largest fishing communities are located in Sölvesborg and therefore they should have joined the biosphere reserve. It would have been a strong point if they had participated. Wallsten too emphasizes the fishing in Sölvesborg, since she thinks that the issues regarding the fishing industry are very important. Now the fishermen in Listerlandet and Hanö are not included. Sölvesborg's withdrawal leads to a lost context of the coast, even though the Sölvesborg does not have any archipelago. Nonetheless, if one does not want to participate one should not. Wallsten does not close the door if Sölvesborg would like to participate in the future.

### **8.3 The ingredient of local support in the making of a biosphere reserve**

Ruttan (2004) believes there are some certain factors that make communities worldwide turn to the biosphere reserve concept as a local integrating mechanism. He discusses why the interest has increased in Canada and abroad, and what it is that makes the concept a popular solution for sustainability issues today. One reason is that the local people believe that they are more apt to achieve goals due to an understanding of the local situation. There is a loss of faith to the central government. Also, to organize environmental and sustainability attempts becomes easier and a biosphere reserve promotes cooperation and collaboration of projects, according to Ruttan (2004). Smaller organizations can thereby become more efficient. Another reason could be that there is action, not only talk, with a belief in economic development. Communities are involved in the work of attaining sustainability, thus not only dependent on voluntary workers who could be burn out. Finally, Ruttan (2004) states that because of the Canadian fragmented landscape where the protected areas are disconnected from each other, the biosphere reserves offer a reconnection. The zoning connects the protected areas with each other.

In the existing Swedish biosphere reserves, Jämting and Nilsson (2005) find in their comparison of the Swedish biosphere reserves, that the local commitment and cooperation between different stakeholders was strong in Kristianstads Vattenrike, but was absent in Torneträsk. To have a local support and involvement is important to keep a concept as a biosphere reserve alive, and the differences in this aspect between Torneträsk and Kristianstads Vattenrike are clear (see also Thorell et al., 2004b). As mentioned above, Torneträsk has a weak local involvement because of the problem of not having a local population within the zonation of the biosphere reserve. Sandell (2005b) has therefore looked upon which means that could be used in order to establish a foundation for an extension of Torneträsk biosphere reserve in the Kiruna municipality. Sandell (2005b) believes that information (press conferences, basic data to the news papers, dispersion of earlier published material, exhibitions at the library) and discussion meetings could be a method to create a local support. Thereby the public could be another part which puts pressure on the local and regional authorities.

However, as Sandell (2005b) concludes, this would show in what extent individuals, entrepreneurs, organisations and local authorities comprehend the usefulness of the concept.

In establishing the biosphere reserve concept locally in Blekinge archipelago, Mattson and Axelsson (27/05/08) believe in creating a neutral commitment. There is a need for a lot of information and to show the intentions with the biosphere reserve. Sonesson and Berntsson (9/7/08) declare that there has been some local scepticism since the concept is vague. Petersson (24/4/08) mentions summer activities and also the home page as channels for information. However, the conversation is the most important. The different ways of getting out to the local population is also described in the report of the preliminary study of the establishment of a biosphere reserve in Blekinge (Länsstyrelsen i Blekinge et al., 2007). There have been different sorts of communication and contact with different groups in the Blekinge community, for example, meetings with organisations and businesses, meetings with separate people, arrangements like open-air meetings and fairs. Finally, Wallsten (23/4/08) declares that the local reply to the biosphere reserve of the Blekinge archipelago has been positive, where people say that "*Now you are listening to us!*". The local population has come with their own ideas of what the biosphere reserve should contain and there are great expectations.

#### **8.4 Tourism as a development factor**

Tourism as a development factor in biosphere reserves is an interesting issue. In 1978, before the first establishment of a Swedish biosphere reserve, the aims and criteria for future biosphere reserves were discussed in a report to the SEPA. The report included suggestions for future biosphere reserves in Sweden, for example, of the nature reserve in the mountain area Vindelfjällen. However, regarding Vindelfjällen, Professor (in organic ecology) Nihlgård stated that: "*The size may seem satisfactory, but at the same time, the intention with this nature reserve seems to be directed on tourism, which is directly contrary to the biosphere reserve foundations.*" (Nihlgård, 1978 p. 9. Author's translation.). Conversely, today it is stated that the biosphere reserves may in principal work as a gathering concept for tourism development together with conservation. Logically, tourism in the core areas should be of no disturbance for nature, while it could develop more in the other zones (Fredman, 2004). Nature tourism and nature conservation in mutual use of each other is the goal of the Swedish government (2001/02:173).

Tourism may generate problems (growth out of control, environmental impact and conflicts) and intolerable impacts. Tourism may also add to protection and advantages, for example, work opportunities, international support, strengthened cultural values by the tourists' support (UNESCO, 2002). Tourism can lead to a greater respect for the protected nature and culture because the local population experiences the area's values due to the visitors' appreciation (Nolte, 2004). For example, in the Biosphere Reserve Schorfheide-Chorin, Germany, the locals are irritated by the old cobblestone roads, which actually have been paved over in many parts of the country. The environment has been taken for granted by the locals, and many have a poor knowledge of the region's special status as a biosphere reserve which has created a negative attitude. The visitors are instead often more considerate of the biosphere's purposes for sustainability and appreciate that the environment has been conserved. The visitors' attitude can thereby affect the locals' position towards conservation and the biosphere reserve (<http://www.deutsche-welle.de/dw/article/0,1564,1079126,00.html> 26/03/08).

Anyhow, in many protected areas including biosphere reserves, tourism is important in the management (see UNESCO, 2002). The biosphere reserve could be a regulating tool of tourism

and conservation, where the concept could lead to a higher awareness of sustainable development in tourism and general. In Kristianstad's Vattenrike, the tourism and outdoor recreation has increased after the biosphere reserve nomination because of an interest of product development among the tourist entrepreneurs (Nilsson, 2006). Noticeably, tourism should be based on common sense and responsible use of the resources, according to UNESCO (2002), which has initiated different initiatives for sustainable tourism and eco-tourism. According to Roberge and Öhman (1999), there has not been a direct co-operation in the MAB network concerning the development of tourism. There are simply many biosphere reserves which differ in their interests and possibilities. The benefits of a more active network considering tourism, could be the sharing of ideas and strategies, marketing networks, partnerships in funding and development of projects, and developing local interests. To create a destination image by the co-operation of the local stakeholders is also an advantage of the biosphere reserve concept (Roberge & Öhman, 1999).

In relation to a meeting of the EuroMAB biosphere reserve coordinators (1998), a discussion of different topics concerning sustainable tourism and the use of biosphere reserves for developing tourism was encouraged. For example, the coordinator for the Charlevoix biosphere reserve (Canada) explained that the nomination of the UNESCO had lead to several initiatives which had affected the area's tourism positively, such as the establishment of organisations who work for conservation and development, reintroduction of certain species, and development of natural sites (Roberge & Öhman, 1999).

However, if one returns to the statement of the Blekinge county administration board regarding tourism, two aspects of the supposed advantages of tourism should be discussed:

- a) an encouraged tourism industry because of the cooperation and criteria of a biosphere reserve,
- b) the strength of being labelled as a biosphere reserve.

Öhman (1999) describes the biosphere reserve as a 'catalyzer' which build up a network of administration, entrepreneurs and local population for a tourism development. The local tourism entrepreneurs should get support by the establishment of a biosphere reserve in order to start new enterprises, marketing, create service networks and build up products. Roberge and Öhman (1999), emphasize that it should be unmistakable that it is the local population who will get the economic profits from a tourism development which has to be well-planned.

Tourism is still a quite new industry in the Blekinge archipelago (see above), but is viewed with optimism for the future because of its possibility of generating work and development. However, in the preliminary study the future tourism development of a possible biosphere reserve is not described or discussed. Wallsten (24/4/08) stresses that tourism development should not be upon the inventiveness of the Blekinge county administration board or the biosphere reserve coordinator. It is not the role of the biosphere reserve office; it is the entrepreneurs who should come with the ideas. Petersson (24/4/08) believes that the tourism development must be initiatives from the local population, but with the support/help from the municipalities, for example, PR, collaboration, planning, and finding funding for projects. Yet there have been meetings with different municipal tourism representatives and with Region Blekinge (with the theme *Do we want more visitors in the Blekinge archipelago?*), but it is unclear what the plans of action are to develop the area's tourism industry and outdoor recreation. In the Blekinge workgroup the matter of too many visitors in the future has been discussed – due to the biosphere reserve actually being a possible cause for such a development (Mattson & Axelsson, 27/5/08).

How do the Blekinge county administration board, the municipalities, various organisations and the local population want the tourism development to proceed, in accordance with UNESCO's imperatives for a biosphere reserve? If tourism is going to be an important part of the biosphere reserve, it is necessary to understand and decide which efforts and measures to take in the further work. Or as Budowski states (1976) "*Those who handle tourism must be adequately educated to recognize the dangers and, equally, conservationists throughout the world should be made to understand that tourism, rather than being stopped, must be better planned and controlled.*" (Budowski, 1976 p. 28). If a local society is to gain from tourism, the money must stay in the region to be of any good. For example, people hiking in the Swedish mountains or visiting the archipelagos, contribute little to the regional development. It is by companies and enterprises the money is kept in an area (Bederoff, head of tourism issues at Nutek<sup>28</sup>, in Nilsson, 2006).

The work with a biosphere reserve in Blekinge may as a process make more visitors and extended housing possible, so that the tourism development is strengthened. Cooperation is necessary (Mattson & Axelsson, 27/5/08). Petersson wants to show the unique landscape, so that people can be part of what the archipelago can offer. However, there has to be guides and possibilities to stay overnight and eat. The local population has to be able to take care of the assets and the economical advantages.

Is the label of being a biosphere reserve also a certificate of excellence which attracts tourists? Wallsten (23/4/08) says that the biosphere reserve means a quality brand and that it attracts more people. The concept shows that there are high values. The biosphere reserve puts the archipelago on the map, especially in other parts of Europe. It shows that there are areas with high nature and culture values. Hopefully, the number of nature and culture arrangements of high quality increase (Wallsten, 23/4/08). In the Blekinge archipelago, the Ronneby municipality has claimed in the local newspaper that there are biosphere reserve tourists (as well as there are World Heritage tourists), who travel around the world to visit biosphere reserves. Thereby, the archipelago's tourism industry could benefit from a biosphere reserve status (Hinderson, Sydöstran, 03/10/06). Sonesson and Berntsson (9/7/08), representatives of Ronneby municipality, believe that a biosphere reserve would be positive for the tourism development in the marketing of the area. But they also state that it is necessary to develop a plan for tourism development in general, before working with these issues specifically in a biosphere reserve. Petersson is convinced that a biosphere reserve is a force in tourism since more people catch sight of the area and come to visit. It is important to market it wisely, for example, the Karlskrona world heritage attracts visitors – why can it not be the same with the biosphere reserve? Petersson thinks that if one can come to a world heritage, one can come to a biosphere reserve.

Yet it is questionable how many, nationally or globally, who are aware of the label 'biosphere reserve'. Have there been measurements of the so called biosphere reserve tourists; do they exist or is it just assumed that they exist? Do people bother if a place is a biosphere reserve or not when choosing their destination for holiday? Perhaps the belief that the status of being a biosphere reserve automatically attracts visitors is hazardous. People living in three biosphere reserves (where tourism is not fully exploited yet) in the Czech Republic "... *highly appreciate the fact that the 'label' of a protected area increases tourist attractiveness of the whole territory.*" according to Kušová et al., (2007 p. 48). However, what actual facts the local population is supported by when answering *Does protected landscape areas increase the*

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<sup>28</sup> Nutek - the Swedish Agency for Economic and Regional Growth ([http://www.nutek.se/sb/d/113 16/4/08](http://www.nutek.se/sb/d/113%2016/4/08)).

*tourist attractiveness of the region?* is still vague. How and why, and are the visitors of the same opinion? Studies by Eagles (2001) and Nolte (2004) show that the biosphere reserve concept is less known in comparison to the national park concept, which is a well-established trade mark. In a study of foreign and domestic visitors in the Swedish mountains by Wall Reinius and Fredman (2005), it was evident that the Torneträsk as a biosphere reserve was barely known for anyone, while the Fulufjället as a national park was known to most visitors.

The biosphere reserve is a rather new brand in Sweden and it will take time before it becomes as strong as the national park concept, as stated by Wall Reinius and Fredman (2005) who believe that visibility by marketing, information and media is important. If international and national visitors are to recognise that they either should come to the Blekinge archipelago because it is a biosphere reserve, or realize that they actually are situated in such area during a visit, it is necessary with thorough information. For example, the archipelago of lake Vänern and mount Kinnekulle has marketed its status of being a biosphere reserve candidate on its tourism web page, where eco-tourism is promoted ([http://uddevalla.vastsverige.com/templates/article\\_\\_\\_17367.aspx](http://uddevalla.vastsverige.com/templates/article___17367.aspx) 4/4/08).



## 9. DISCUSSION

The Swedish coastal areas and archipelagos are attractive to visitors which creates an interest for tourism development and outdoor recreation (Turistdelegationen, 1999). These areas also consist of valuable nature and culture. To plan for tourism and outdoor recreation along with sustainability and other land and water use is, however, complicated. There are many different stakeholders which needs, interests and experiences may differ. This causes conflicts due to, for example, conservation, accessibility, usage, development and management of the coastal areas (Morf, 2006).

In Sweden, there is no specific legislation for the biosphere reserves. Neither is there a national standard developed for zoning, but the Swedish MAB-committee believes that the Kristianstads Vattenrike should serve as a model to the development of zoning in the Swedish biosphere reserves (Thorell et al., 2005b). By the Environmental Code, the municipalities and county administration boards can establish nature reserves, which can be either a core area or a buffer zone. In Kristianstads Vattenrike, the Swedish legislation connected to the Environmental Code, has been the foundation where already existing protected areas and earlier classifications of natural values have been used. The zoning is viewed as a tool to make financial and human resources of priority. It is important that it does not imply or mean restrictions or restricting legislation (Thorell et al., 2005b).

Still, the biosphere reserve zoning is not entirely functional today and in most biosphere reserves of NordMAB, an enlightenment of the zoning is necessary (Thorell et al., 2005b). As Ronneby municipality explains the biosphere reserve work with the zoning of the Blekinge archipelago: *“The zoning is primarily made for the cause of the application and will not be used in practice to a great extent. The questions have been discussed in the work group and the board group.”* (Interview Sonesson & Berntsson, 9/7/08. Author’s translation). Furthermore, zoning is not viewed as necessary by the Swedish MAB-committee (Thorell et al., 2005b). This attitude towards the zoning, which has been explained as essential in the UNESCO’s work with the biosphere reserve concept above, is interesting. How will this approach towards the zoning affect the future work with the biosphere reserve in the Blekinge archipelago? Clearly, it emphasizes the need for a further development of the zoning. It is obviously a problem if already established biosphere reserves (for example, the West Estonian Archipelago Biosphere Reserve and the Archipelago Sea Biosphere Reserve) are not satisfied with the zoning instrument and areas being candidates for becoming a biosphere reserve are viewing the zoning as of no relevance in practice.

However, at the Swedish national MAB meeting in Gysinge, 2008, the question *“Does zoning matter in practice?”* was raised. It was concluded that it is necessary to discuss this matter on a national level how the zoning might be used to make it functional. The zoning should be problemized, not phased out. Zoning is a way of identifying areas of value, and the pedagogical effect and the possibility of using the transfer areas should be discussed. Thorell (1999) explains that models are needed to make it easier for everyone to understand the task of keeping biodiversity. A biosphere reserve is a model so everybody can learn and understand sustainable development. In that way, zoning is a practical means to apply ecological principles to.

The question is whether the biosphere reserve concept with zoning could develop further by using the ROS? So far, in the application of the ROS in Sweden, the dilemma is rather the opposition between nature conservation and use, and other forms of recreation development.

Also, because of the public right of access there are other prerequisites for regulations of activities and admittance, which requires an adjustment of the ROS to Swedish conditions (Emmelin et al., 2005). Nevertheless, the ROS and the WROS could develop more to be more useful in planning and in handling conflicts in Swedish coastal areas, by including the opinions, attitudes and experiences of visitors (and non-visitors). However, does zoning function best in countries without tools of nature protection? Should not all zones aim for a certain degree of conservation-development interactions and balance? This question was addressed by a special panel during the 19<sup>th</sup> session of the MAB International Co-ordinating Council (ICC), which main recommendations became to: *“Acknowledge and support new and innovative interpretations of the biosphere reserve zonation principles through which the balance between use and conservation is reflected in all components of the biosphere reserve.”* ([http://www.unesco.org/mab/icc/icc19th\\_results.shtml](http://www.unesco.org/mab/icc/icc19th_results.shtml) 18/3/08). In other words, the zones do not necessary be primarily be for either conservation or development.

Arnberger et al., (2002) believe that the challenge for nature management is to conserve areas where humans have not made marks, but also fulfil people's needs for outdoor recreation by establishing zones. Knowledge of the visitors' activities, number, needs and motivations are thereby essential (Arnberger et al., 2002). Thereby, the ROS could be interesting to implement in a biosphere reserve. The expressed fear of more restrictions in the archipelago because of a biosphere reserve might also be decreased by using the ROS where social aspects, as well as ecological, are included in the area's process and development. As Budowski (1976) asks, must tourism be harmful to conservation? His answer is no, provided that apt measure are taken, for example zoning, with limited access to different areas depending on their conservation values.

Information and communication with different groups of users in the biosphere reserve seems to be a natural way to achieve enlightenment. The different views on the application of a biosphere reserve and its zoning has been explained above by Sandell (2003) and his framework of eco-strategies. His model should be used to illustrate that there are different landscape perspectives of different groups – the UN, the Swedish MAB-committee, the county administration board, the municipalities, the local population, the visitors, the second home owners etc. In the way of working with protected areas, development and conservation of the landscape could be more adjusted to different stakeholders and today's society.

## 10. CONCLUSION

The strengths of a possible biosphere reserve in the Blekinge archipelago are, according to the various authorities, the cooperation of the municipalities and that the concept is a tool for sustainable development with more work opportunities and protection of the values of the area. The biosphere reserve concept is viewed by the authorities in Blekinge archipelago as a strong trademark for a future positive tourism development. However, this is uncertain since the concept is still not widely known to the public. Instead, it is important to use marketing, information and media. Weaknesses when implementing the concept is a fear of more restrictions and there have also been concerns for the establishment of a marine reserve. Finally, the financial situation for a future biosphere reserve is unclear.

By applying the conflict model by Manning (1999), one can understand which factors that lie behind the goal interference. These factors create preconditions which are more likely to lead to conflicts due to certain behaviour – these are catalysator for conflicts. If one expects a wilderness experience with peace and quiet, noise from motorboats is not part of the presumed experience. By excluding certain outdoor recreation activities from some areas that are valuable or sensitive, and by restricting uses in contradiction, zoning may solve, or at least reduce, the problem of conflicts. By the management of conflicts, the visitors may reach a higher satisfaction, as discussed by Manning (1999). The questions of how and where zoning should be applied in coastal areas are complex even if there already are some areas with restrictions, like bird and seal sanctuaries. There is a need to further develop the biosphere zoning concept to correspond to the coastal areas' character where the planning framework ROS could be interesting to use. However, the practice of zoning would benefit from better knowledge of the visitors and second home owners.

This study has comprised information about the temporary visitors and the second home owners in the area regarding their demography, geographical dispersion, activities, attitudes and opinions of future developments of the area. Examples of results concerning conflicts from the study are:

- Experienced conflicts were due to the development of sewerage, second homes and noise. However, a majority of the respondents did not experience any conflicts of a high degree.
- Concerning measurements against conflicts in the area, information was regarded above all as positive. Several respondents were also positive to prohibition to especially sensitive areas and to an increased shore line protection.
- Several conflicts have been described in the local media, for example, the shore line protection, the establishment of second homes, jet-skies, wind power stations and dredging.
- The respondents' attitudes towards noise free areas with restrictions against motorboats, differed depending on if it was going to be applied in Sweden in general or in the actual area. One was more positive towards a general application, but not if there were going to be restrictions in the Blekinge archipelago. This may be explained by the phenomenon '*Not In My Backyard*' (NIMBY) where individuals view a development as improper for their own area, but accept the development in other areas – since it does not concern oneself.

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## **APPENDIX 1. The questionnaire survey in the Blekinge archipelago. English version.**

Questionnaire

*The Blekinge archipelago 2007*

### **Visiting the Blekinge archipelago in 2007**

This questionnaire is addressed to those visiting the Blekinge archipelago in May-August, 2007. The area embraced by this study is marked on the attached map. The study is part of a research project aiming to improve the knowledge of visitors and second home owners in the Blekinge archipelago. Having knowledge of the activities and experiences of the visitors, and of what areas they have visited, helps improving the planning and management of the area.

You have randomly been chosen to take part in this study. In order to receive reliable results, it is urgent that as many people as possible answer the questionnaire! Naturally, your participation is confidential, and the number on the questionnaire is only there to make sure that I will not send a reminder to those who have already answered. As we present the results of the study, there will be no indications of individual answers.

**Please, return the filled in questionnaire in the post-free reply envelope as soon as possible!**

If you have any questions about the study, please contact the project leader Rosemarie Ankre.

**Thank you very much in advance for your contribution!**

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# QUESTIONNAIRE

A. First are a number of questions regarding your housing, means of transport and accessibility in the Blekinge archipelago in May-August, 2007. The Karlskrona, Ronneby, Karlshamn, and Sölvesborg municipalities are included in this area, see the map. After that, there will be questions concerning your experience of conflicts in the area in May-August, 2007, and of your opinions regarding possible future measures of conflicts.

**A1. Circle what dates you visited the Blekinge archipelago in the summer of 2007 in the calendars below. Mark all days spent in the area!**

I own a second home in Blekinge, but did **not** visit the Blekinge archipelago in May-August, 2007. As I answer the questionnaire, I therefore consider my most recent visit. I visited the Blekinge archipelago **last on the** : Number of respondents: 1. (0,2%) June 2005.

**A2. Look at the calendars below. Mark what kind of company you had and the number of people of each category. Do not include yourself! Use the symbols below.**

## MAY 2007

**M T W T F S S**

|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
|    | 1  | 2  | 3  | 4  | 5  | 6  |
| 7  | 8  | 9  | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 |    |    |    |

## JUNE 2007

**M T W T F S S**

|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
|    |    |    |    | 1  | 2  | 3  |
| 4  | 5  | 6  | 7  | 8  | 9  | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |    |

## JULY 2007

**M    T    W    T    F    S    S**

|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
|    |    |    |    |    |    | 1  |
| 2  | 3  | 4  | 5  | 6  | 7  | 8  |
| 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 |    |    |    |    |    |

## AUGUST 2007

**M    T    W    T    F    S    S**

|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
|    |    | 1  | 2  | 3  | 4  | 5  |
| 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 |    |    |

*Example: F 3 O 2 in the 6 July square means company of Family and relatives – 3 people, company of Others – 2 people.*

**F** (Family and relatives)    **A** (Friends and acquaintances)  
**C** (Colleagues)            **O** (Others)

## JULY

|              |
|--------------|
| <b>6</b> F 3 |
| O 2          |

0% **No company** – I travelled alone.

**A3. At your latest visit to the Blekinge archipelago (May-August, 2007), for how many days were you travelling altogether, from leaving your home until returning? (Missing: 107).**

|               |               |                |               |               |
|---------------|---------------|----------------|---------------|---------------|
| 0 days: 6,6%  | 1 day: 20%    | 2 days: 21,4%  | 3 days: 12,5% | 4 days: 5,9%  |
| 5 days: 4,5%  | 6 days: 3,4%  | 7 days: 3,6%   | 8 days: 2,5%  | 9 days: 0,8%  |
| 10 days: 0,8% | 11 days: 0,8% | 12 days: 1,1%  | 13 days: 0,4% | 14 days: 1,3% |
| 15 days: 0,6% | 16 days: 0,4% | 17 days: 0,4%  | 18 days: 0,4% | 20 days: 1,7% |
| 21 days: 1,1% | 22 days: 0,4% | 23 days: 0,2 % | 24 days: 0,2% | 25 days: 0,6% |
| 26 days: 0,4% | 28 days: 0,8% | 30 days: 0,4%  | 33 days: 0,2% | 35 days: 0,4% |
| 36 days: 0,6% | 37 days: 0,2% | 40 days: 0,2%  | 41 days: 0,2% | 42 days: 0,4% |
| 45 days: 0,2% | 46 days: 0,2% | 50 days: 0,2%  | 60 days: 0,2% | 62 days: 0,2% |

|                |                |                |                |
|----------------|----------------|----------------|----------------|
| 64 days: 0,2%  | 65 days: 0,2%  | 78 days: 0,2%  | 79 days: 0,2%  |
| 100 days: 0,2% | 106 days: 0,2% | 118 days: 0,2% | 120 days: 0,6% |
| 137 days: 0,2% | 180 days: 0,4% | 190 days: 0,2% |                |

**A4. What means of transport did you use to travel to the Blekinge archipelago from your home in May-August, 2007? *Tic one or more alternatives.* (Missing = M, see below).**

|                       |  |                      |
|-----------------------|--|----------------------|
| 81,9% Own car (M=4)   | 4,2% Train (M=4)                         | 1,7% Aeroplane (M=5) |
| 1,2% Rental car (M=4) | 3,1% Bus (M=4)                           |                      |
| 16% Own boat (M=4)    | 4,9% Car with a caravan/motor home (M=4) |                      |

*Other, what?* (Number of respondents: 32): Some one else's car (n=3), boat/ferry (n=15), walk (n=1), MC (n=5), taxi-boat (n=2), bicycle (n=6).

**A5. With what did you travel within the coastal area of Blekinge during your visit in May-August, 2007? *Tic one or more alternatives.* (Missing = M, see below).**

|                               |                           |                          |
|-------------------------------|---------------------------|--------------------------|
| 17,1% Sailboat (M=11)         | 5,3% Canoe/kayak (M=11)   | 35,2% Tour boat (M=10)   |
| 66,2% Car (M=10)              | 4,1% Bus (M=11)           | 0,2% Four wheeler (M=11) |
| 41,9% Motorboat (M=10)        | 11,1% Hiking paths (M=10) | 25% Bicycle (M=10)       |
| 1,2% Motor cycle/moped (M=11) |                           |                          |

*Other, what?* (Number of respondents: 20): Boat/ferry (n=10), walk (n=1), train (n=3), car with caravan (n=1), taxi-boat (n=1), rowing boat (n=4).

**A6. How do you feel about the possibility of travelling by public transports within the Blekinge archipelago in May-August, 2007? (Missing: 9).**

|                     |                                    |               |                |
|---------------------|------------------------------------|---------------|----------------|
| 2,8% Very negative  | 6,2% Negative                      | 13,4% Neutral | 20,6% Positive |
| 13,5% Very positive | 43,6% Did not use public transport |               |                |

**A7. What is your opinion on the following statements regarding a possible future accessibility in the Blekinge archipelago? *Circle one number for each statement.* (Missing = M, see below).**

|  | Totally disagree | Partly disagree | Neutral | Partly agree | Totally agree |
|--|------------------|-----------------|---------|--------------|---------------|
| You should be able to reach more areas by public transport/tour boats (M=24)       | 4,5%             | 4,3%            | 44,2%   | 20,8%        | 26,2%         |
| There should be more marked out paths and information signs (M=22)                 | 4,3%             | 2,9%            | 51,4%   | 22,1%        | 19,2%         |
| There should be more parking spaces near recreational areas/nature reserves (M=24) | 6%               | 5,1%            | 62,1%   | 16,2%        | 10,5%         |
| More areas should be reachable with guest harbours for motorboats/sailboats (M=22) | 5%               | 6,1%            | 51,6%   | 18,2%        | 18,7%         |

**A8. Did you visit the Blekinge archipelago before May-August, 2007? (Missing: 6).**

|           |                                    |
|-----------|------------------------------------|
| 87,8% Yes | 12,2% No → proceed to question A11 |
|-----------|------------------------------------|

**A9. State the approximate number of times you have visited the Blekinge archipelago during the following periods of time:** (Missing = M, see below).

2007 (M=21) \_\_\_\_\_ 2005 – 2006 (M=22) \_\_\_\_\_ 2000 – 2004 (M=25) \_\_\_\_\_ 1995  
 – 1999 (M=25) \_\_\_\_\_ 1990 – 1994 (M=27) \_\_\_\_\_ 1985 – 1989 (M=29) \_\_\_\_\_ Before  
 1985 (M=31) \_\_\_\_\_

**A10. What year did you visit the Blekinge archipelago for the first time?** (Missing: 44).

**A11. What is your opinion on the number of visitors in the Blekinge archipelago in May-August, 2007?** *Tic one alternative.* (Missing: 22).

14% Much too few    11,9% A bit too few    69,2% Just right    4,3% A bit too many    0,5% Much too many

**A12. Sometimes, conflicts arise because of different interests, activities, or land and water use. Did you experience conflicts in any of the following situations in the Blekinge archipelago in May-August, 2007?** *Circle one number for each statement.* (Missing = M, see below).

|   | Not<br>at all | Not<br>much | A bit | Rather<br>much | Very<br>much |
|---|---------------|-------------|-------|----------------|--------------|
| Other visitors carrying out <u>other</u> activities than I did (M=27)       | 79,9%         | 10,5%       | 6,7%  | 2%             | 0,9%         |
| Other visitors carrying out <u>the same</u> activities as I did (M=27)      | 81,5%         | 9,8%        | 6,7%  | 1,8%           | 0,2%         |
| Direct contact with other visitors (M=28)                                   | 77,3%         | 12,7%       | 6,7%  | 2,4%           | 0,9%         |
| The mere knowledge of other visitors (M=28)                                 | 69,5%         | 14,9%       | 9,3%  | 4%             | 2,4%         |
| The establishment of second homes (M=30)                                    | 69,2%         | 13,3%       | 10,9% | 3,6%           | 2,9%         |
| The development of infrastructure, sewerage, electric lightning, etc (M=29) | 67,4%         | 12,2%       | 13,3% | 3,3%           | 3,8%         |
| Noise (M=27) .....  | 70,4%         | 14%         | 9,6%  | 4,4%           | 1,6%         |
| Shoreline protection (M=28) .....   | 70%           | 15,3%       | 9,8%  | 2,7%           | 2,2%         |
| Restrictions of the freedom of movement (M=28)                              | 72,7%         | 14,7%       | 7,8%  | 3,3%           | 1,5%         |
| The fishing industry (M=29) .....   | 85,2%         | 8,7%        | 3,5%  | 1,1%           | 1,5%         |
| The farming (M=30) .....  | 90,1%         | 6,8%        | 2,4%  | 0,5%           | 0,2%         |
| The local population (M=27).....  | 85,1%         | 7,8%        | 4,7%  | 0,7%           | 1,6%         |

**Are there other conflicts than those above that you experienced rather much or very much in the Blekinge archipelago in May-August, 2007?** (Number of respondents: 68).

| Other conflicts                                | Number of<br>respondents | %    |
|--|--------------------------|------|
| Jet-ski  | 6                        | 8,8% |
| Reckless driving with boats                    | 6                        | 8,8% |
| Sewerage/emptying of latrine                   | 5                        | 7,4% |
| The ferry traffic (crowded, lines, timetables) | 5                        | 7,4% |
| The local population                           | 4                        | 5,9% |
| Bad neighbour ship                             | 3                        | 4,4% |
| Noise from military airplanes                  | 3                        | 4,4% |

|   |   |      |
|---|---|------|
| To many building permits  | 2 | 2,9% |
| Lighting of fires   | 2 | 2,9% |
| Noise from boats  | 2 | 2,9% |
| Too few guest harbour places  | 2 | 2,9% |
| Algal bloom   | 1 | 1,5% |
| Public authorities on vacation (no service)                           | 1 | 1,5% |
| Prohibition against going ashore                                      | 1 | 1,5% |
| Risk for getting the boat stolen                                      | 1 | 1,5% |
| Too much noise from various sources                                   | 1 | 1,5% |
| Narrow roads  | 1 | 1,5% |
| Establishment of new buildings  | 1 | 1,5% |
| Politicians are selling out the Sandhamn harbour                      | 1 | 1,5% |
| Garbage collection  | 1 | 1,5% |
| Fishing restrictions  | 1 | 1,5% |
| The establishment of ship hangar                                      | 1 | 1,5% |
| Ruined mailbox  | 1 | 1,5% |
| Moped   | 1 | 1,5% |
| Bad bicycle roads   | 1 | 1,5% |
| Graffiti  | 1 | 1,5% |
| Dog owners  | 1 | 1,5% |
| Too few foreign local population                                      | 1 | 1,5% |
| Lapping of the waves  | 1 | 1,5% |
| Fishermen's bad behaviour and disturbing fish breeding                | 1 | 1,5% |
| Cattle  | 1 | 1,5% |
| Outdoor recreation  | 1 | 1,5% |
| People does not have knowledge of the right of public access          | 1 | 1,5% |
| Litter due to too many visitors                                       | 1 | 1,5% |
| Difficult with construction places                                    | 1 | 1,5% |
| 3G-pylons/wind power stations   | 1 | 1,5% |
| Too much fertilization within agriculture                             | 1 | 1,5% |
| Opponents against hunting   | 1 | 1,5% |
| Conflict with the county administration board due to purchase of land | 1 | 1,5% |

**A13. Based on question A12 above, describe how you felt about the conflicts you experienced rather much or very much, and why you think that the conflicts arose:**  
(Number of respondents: 95)

| Other conflicts                                      | Number of respondents | %    |
|--|-----------------------|------|
| Sewerage problems                                    | 8                     | 8,4% |
| Reckless driving of motorboats                       | 6                     | 6,3% |
| Noise from jet-skies                                 | 5                     | 5,3% |
| Beach limitations                                    | 4                     | 4,2% |
| Local populations not friendly/ respectful to others | 4                     | 4,2% |
| Bad lighting   | 3                     | 3,2% |
| Noise from motorboats                                | 3                     | 3,2% |
| Noise from airplanes                                 | 3                     | 3,2% |
| Neighbours   | 3                     | 3,2% |
| Constructions in general or buildings near the water | 3                     | 3,2% |
| Jealousy   | 3                     | 3,2% |



|  |   |      |
|--|---|------|
| Insufficient consideration and rules   | 2 | 2,1% |
| Summer house without municipal Sewerage  | 2 | 2,1% |
| Prohibition against eel-fishing  | 2 | 2,1% |
| Location and standard of car-roads   | 2 | 2,1% |
| Exploitation of the archipelago  | 2 | 2,1% |
| Keeping a berth without owning a boat  | 2 | 2,1% |
| Fishermens' bad behaviour and disturbing fish breeding                                   | 2 | 2,1% |
| Badly functioning shore line protection  | 2 | 2,1% |
| Cattle (cows, sheep etc.)  | 2 | 2,1% |
| Municipal unwillingness to develop Sewerage  | 1 | 1,1% |
| High speed of motorboats because of large boats  | 1 | 1,1% |
| Second home owners think that they own the beach   | 1 | 1,1% |
| Visitors show no respect for private beaches   | 1 | 1,1% |
| Motorists drive too fast   | 1 | 1,1% |
| Mixture of summer houses and second homes  | 1 | 1,1% |
| Different views regarding consideration to the local population                          | 1 | 1,1% |
| The local population does not want changes   | 1 | 1,1% |
| Noise from cars  | 1 | 1,1% |
| Old spatial planning of areas  | 1 | 1,1% |
| Building permissions take too long   | 1 | 1,1% |
| Groceries of bad quality in the store  | 1 | 1,1% |
| Danger for fire  | 1 | 1,1% |
| Partying people  | 1 | 1,1% |
| The local population does not have knowledge of rights due to the right of public access | 1 | 1,1% |
| Fertilizing  | 1 | 1,1% |
| Too few police officers  | 1 | 1,1% |
| Conflict between farmers and second home owners  | 1 | 1,1% |
| To few nature harbours   | 1 | 1,1% |
| The ferry to Verkö is disturbing   | 1 | 1,1% |
| Driven cars on private roads   | 1 | 1,1% |
| None or unclear municipal information to the public                                      | 1 | 1,1% |
| Conflicts in the harbour between boat owners   | 1 | 1,1% |
| New establishment of second homes  | 1 | 1,1% |
| Private bridges  | 1 | 1,1% |
| Military protection areas  | 1 | 1,1% |
| More generous building permissions   | 1 | 1,1% |
| No knowledge of damage on the environment  | 1 | 1,1% |
| Different opinions between land owners   | 1 | 1,1% |
| Handling of garbage in harbour   | 1 | 1,1% |
| Crowded on the tour boats  | 1 | 1,1% |
| Establishment of new buildings   | 1 | 1,1% |

**A14. What is your opinion on the possible future measures below, aiming to prevent conflicts in the Blekinge archipelago? Circle one number for each statement. (Missing = M, see below).**

|  | <b>Very negative</b> | <b>Negative</b> | <b>Neutral</b> | <b>Positive</b> | <b>Very positive</b> |
|--|----------------------|-----------------|----------------|-----------------|----------------------|
| Prohibit admittance to very sensitive areas. (M=31)                      | 12,2%                | 18,8%           | 35,3%          | 27,4%           | 6,2%                 |
| Only allow a certain number of people at a time visit an area. (M=35)    | 15,5%                | 20,6 %          | 45,1%          | 16,2%           | 2,6%                 |
| Inform more clearly of nature's sensitivity. (M=29)                      | 2,4%                 | 1,8%            | 18,9%          | 37,3%           | 39,5%                |
| Zoning directing visitors and different users to different areas. (M=38) | 14,4%                | 16,1%           | 47,4%          | 18,9%           | 3,1%                 |
| Prohibit large groups of visitors. (M=34)                                | 13,2%                | 21,3%           | 44,9%          | 17,3%           | 3,3%                 |
| Increase the shore line protection. (M=31)                               | 14,6%                | 18,8%           | 36,9%          | 18,6%           | 11%                  |

**B. This part contains questions on your activities and experiences in the Blekinge archipelago in May-August, 2007. Then there will be questions regarding a possible future development of the area.**

**B1. What where your activities during your stay in the Blekinge archipelago in 2007?**

*Tic one or more alternatives. (Missing: 4).*

|                                 |   |                                  |
|---------------------------------|---|----------------------------------|
| 66,9% Seeing friends and family | 66% Spending time in second home        |                                  |
| 69,2% Sunbathing and swimming   | 1,6% Diving                             | 66,2% Experiencing the landscape |
| 21,4% Sailing                   | 8% Canoe/kayak trips                    | 2,8% Camping out in tent         |
| 1,4% Jet-ski/water scooter      | 77% Rest and relaxation                 | 2,1% Wind/wave surfing           |
| 36,4% Motorboat trips           | 44,8% Hiking                            | 5,7% Camping/staying in caravan  |
| 29,3% Angling                   | 33,7% Having picnic/barbecuing outdoors |                                  |
| 29,6% Picking berries/mushrooms |   |                                  |

**Other activities** (Number of respondent: 102).

| <b>Other activities</b>                 | <b>Number of respondents</b> | <b>%</b> |
|---|------------------------------|----------|
| Gardening and working with the house    | 14                           | 13,7%    |
| Bicycling                               | 11                           | 10,8%    |
| Golf                                    | 11                           | 10,8%    |
| Building                                | 5                            | 4,9%     |
| Culture and sightseeing                 | 5                            | 4,9%     |
| "Kreativum"                             | 4                            | 3,9%     |
| Museum                                  | 4                            | 3,9%     |
| Bird watching                           | 4                            | 3,9%     |
| Going with the tour boat                | 4                            | 3,9%     |
| The children's farm ("Barnens gård")    | 3                            | 2,9%     |
| Military history remains/establishments | 3                            | 2,9%     |
| Shopping                                | 3                            | 2,9%     |
| Excursion and being                     | 3                            | 2,9%     |

|                         |   |      |
|-------------------------|---|------|
| together                |   |      |
| Historical environments | 3 | 2,9% |
| Rowing                  | 2 | 2%   |
| Hunting                 | 2 | 2%   |
| Hiking                  | 2 | 2%   |
| Celebrations            | 2 | 2%   |
| Orienteering race       | 1 | 1%   |
| Reading a book          | 1 | 1%   |
| Coffee                  | 1 | 1%   |
| Concerts                | 1 | 1%   |
| World heritage          | 1 | 1%   |
| Water skiing            | 1 | 1%   |
| Boules                  | 1 | 1%   |
| Nature reserve          | 1 | 1%   |
| Jogging                 | 1 | 1%   |
| Barbequing              | 1 | 1%   |
| Partying                | 1 | 1%   |
| Flea market             | 1 | 1%   |
| Painting art            | 1 | 1%   |
| Choir camp              | 1 | 1%   |
| Exercising              | 1 | 1%   |
| Genealogical research   | 1 | 1%   |
| Tennis                  | 1 | 1%   |

**B2. Circle the main activity in question B1 above. Even if you have only chosen one activity above, please circle it!** (Missing: 130).

|                                 |                                      |
|---------------------------------|--------------------------------------|
| 10,7% Seeing friends and family | 50,7% Spending time in second home   |
| 0% Picking berries/mushrooms    | 2,7% Camping/staying in caravan      |
| 1,6% Sunbathing and swimming    | 0% Diving                            |
| 9,4% Sailing                    | 0,4% Canoe/kayak trips               |
| 0,4% Jet-ski/water scooter      | 10,3% Rest and relaxation            |
| 8,9% Experiencing the landscape | 0,4% Hiking                          |
| 1,6% Motorboat trips            | 0% Wind/wave surfing                 |
| 0,7% Angling                    | 0% Having picnic/barbecuing outdoors |
| 0,2% Camping out in tent        | 2% Other activities                  |

**B3. What is your experience of the circled activity?** (Missing: 18).

1,2% No experience   10,2% Some experience   28,6% Great experience   60% Very great experience

**B4. Did you have access to a sailboat in the Blekinge archipelago in May-August, 2007?**

(Missing: 12).

24,4% Yes                      75,6% No

**B5. Did you have access to a motorboat in the Blekinge archipelago in May-August, 2007?**

(Missing: 7).

52,7% Yes                      47,3% No

**B6. What factors influenced you to go to the Blekinge archipelago in May-August, 2007?**

*Circle one number for each statement. (Missing = M, see below).*

|  | <b>Of no importance</b> |       | <b>Of some importance</b> |       | <b>Of great importance</b> |
|--|-------------------------|-------|---------------------------|-------|----------------------------|
| The possibility of an outdoor experience (M=20)    | 4,3%                    | 1,4%  | 12%                       | 26,7% | 55,6%                      |
| The possibility of a cultural experience (M=36)    | 15,5%                   | 14,4% | 35,4%                     | 21,8% | 12,9%                      |
| Nice water, beaches, and sea bed (M=33)            | 8,6%                    | 7,9%  | 24,6%                     | 25,5% | 33,4%                      |
| Access to a second home (M=22)                     | 28,6%                   | 2,3%  | 4%                        | 3,2%  | 61,9%                      |
| Sailing possibilities (M=49)                       | 62,6%                   | 7,8%  | 8,7%                      | 6%    | 14,9%                      |
| The possibility of using a motorboat (M=30)        | 43,2%                   | 7,8%  | 15%                       | 12%   | 21,9%                      |
| The possibility of angling (M=35)                  | 45,5%                   | 11,2% | 19,2%                     | 12,3% | 11,8%                      |
| The possibility of physical activity (M=35)        | 23%                     | 11,8% | 31,7%                     | 18,8% | 14,7%                      |
| The possibility of hiking (M=31)                   | 19,6%                   | 8,6%  | 28,2%                     | 23,8% | 19,7%                      |
| The means of communication to the islands (M=36)   | 4,3%                    | 1,4%  | 12%                       | 26,7% | 55,6%                      |
| Get away from work (M=43)                          | 25,4%                   | 3%    | 19,1%                     | 19,1% | 33,5%                      |
| Get away from home (M=36)                          | 21%                     | 7,2%  | 28,6%                     | 19,4% | 23,8%                      |
| Access to housing and service (M=42)               | 30,8%                   | 9,7%  | 20,7%                     | 17,9% | 20,9%                      |
| Spending time with friends and family (M=22)       | 14,2%                   | 5,6%  | 18%                       | 26,1% | 36,2%                      |
| The absence of restrictions and impediments (M=46) | 33,1%                   | 11,1% | 23,5%                     | 17,1% | 15,2%                      |
| The possibility of peace and quiet (M=21)          | 5,9%                    | 2,9%  | 14%                       | 28%   | 49,2%                      |
| Spending time alone (M=35)                         | 35,2%                   | 13,6% | 21,5%                     | 14,7% | 14,9%                      |

**Are there other factors that were very important (4-5)? If so, please, name which:**

(Number of respondents: 54).

| <b>Other important factors</b>           | <b>Number of respondents</b> | <b>%</b> |
|--|------------------------------|----------|
| Second home                              | 6                            | 11,1%    |
| The geographical location                | 4                            | 7,4%     |
| Beautiful nature                         | 4                            | 7,4%     |
| On the way; a stop                       | 4                            | 7,4%     |
| Close to the sea                         | 3                            | 5,6%     |
| Sun bathing                              | 2                            | 3,7%     |
| Kayaking                                 | 2                            | 3,7%     |
| Invited as a guest/visitor               | 2                            | 3,7%     |
| Exploring new things                     | 2                            | 3,7%     |
| Get energy                               | 2                            | 3,7%     |
| Originally from Karlskrona               | 2                            | 3,7%     |
| Jazz festival Hällevik                   | 2                            | 3,7%     |
| Good place for bird watching             | 2                            | 3,7%     |
| Childhood memories                       | 1                            | 1,9%     |
| Quality service in the guest harbours    | 1                            | 1,9%     |
| Was building a house                     | 1                            | 1,9%     |
| Second home bordering on the sea         | 1                            | 1,9%     |
| Bicycling                                | 1                            | 1,9%     |
| Freedom                                  | 1                            | 1,9%     |
| Military history                         | 1                            | 1,9%     |
| Work                                     | 1                            | 1,9%     |
| Genealogical research centre in Kallinge | 1                            | 1,9%     |

|  |   |      |
|--|---|------|
| Be together                            | 1 | 1,9% |
| Jet-ski                                | 1 | 1,9% |
| A different environment                | 1 | 1,9% |
| Easy to live in the area in the summer | 1 | 1,9% |
| Hunting sea birds                      | 1 | 1,9% |
| Relatives                              | 1 | 1,9% |
| The possibility to water and Sewerage  | 1 | 1,9% |
| The world heritage                     | 1 | 1,9% |

**B7. During your visit to the Blekinge archipelago in May-August, 2007, did you experience any of the following? Circle one number for each statement.** (Missing = M, see below).

|                                      | Not<br>at all |       | To some<br>extent |       | A lot |
|--------------------------------------|---------------|-------|-------------------|-------|-------|
| Crowding (too many visitors) (M=10)  | 69%           | 15,1% | 11,8%             | 3%    | 1,1%  |
| Heavy development (M=12)             | 61,7%         | 22,3% | 13,1%             | 2,1%  | 0,9%  |
| Wear of ground and vegetation (M=12) | 54,1%         | 28,3% | 15%               | 1,9%  | 0,7%  |
| Erosion (M=27)                       | 67,3%         | 23,2% | 7,6%              | 1,3%  | 0,5%  |
| Littering (M=9)                      | 35,7%         | 30,6% | 25%               | 6,5%  | 2,3%  |
| Backwash (M=22)                      | 58,3%         | 19,8% | 14,4%             | 4,5%  | 3,1%  |
| Toilet waste in the water (M=16)     | 81,3%         | 12,6% | 4,1%              | 1,2%  | 0,7%  |
| Algal bloom (M=9)                    | 33%           | 13,7% | 27,8%             | 17,2% | 8,3%  |
| Ticks (M=6)                          | 28,7%         | 12,6% | 20,8%             | 18%   | 19,9% |

**B8. Below are a few statements regarding a possible future development of the Blekinge archipelago. Mark what best corresponds with your opinion. Circle one number for each statement.** (Missing = M, see below).

|  | Much fewer | A bit fewer | As it is | A bit more | Much more |
|--|------------|-------------|----------|------------|-----------|
| The number of nature reserves should be (M=29)             | 0,7%       | 0,5%        | 66,3%    | 28,1%      | 4,4%      |
| The number of bathing-places should be... (M=29)           | 0,2%       | 0%          | 60,5%    | 35,2%      | 4,2%      |
| The number of motorboats should be..... (M=33)             | 6,4%       | 20,6%       | 67,7%    | 4,8%       | 0,6%      |
| The number of fish farms should be..... (M=33)             | 7,7%       | 14,4%       | 71,3%    | 5,6%       | 0,9%      |
| The number of second homes should be... (M=34)             | 1,1%       | 6,4%        | 75,7%    | 15,1%      | 1,7%      |
| The number of guest harbours should be... (M=35)           | 0,2%       | 2,4%        | 59,5%    | 31,1%      | 6,8%      |
| The number of holiday establishments should be..... (M=38) | 1,3%       | 3,7%        | 68,7%    | 22,6%      | 3,7%      |
| The number of visitors should be..... (M=31)               | 0,5%       | 4,2%        | 58,1%    | 28,7%      | 8,4%      |

**B9. Do you think that tourism helps conserving the nature and culture environment in the Blekinge archipelago?** (Missing: 43).

35% No, not at all.

47,9% Yes, to some extent.

17,2% Yes, a lot.

**Why does tourism contribute to the conserving of the nature and culture environment in the Blekinge archipelago?** (Number of respondents:258)

| Contribution   | Number of respondents | %    |
|--|-----------------------|------|
| Better economy/ economical possibilities                                   | 71                    | 28%  |
| The interest of conserving the nature                                      | 21                    | 8%   |
| Generate incomes   | 22                    | 8,5% |
| A living archipelago   | 15                    | 5,8% |
| To show the beautifulness with the archipelago                             | 14                    | 5,4% |
| Work opportunities   | 13                    | 5%   |
| Maintenance and care   | 9                     | 3,5% |
| To keep order and make demands   | 9                     | 3,5% |
| The municipality invests in what is appreciated/recognises the archipelago | 7                     | 2,7% |
| Development and improvement of the area                                    | 7                     | 2,7% |
| To conserve and maintain is an effort worth it                             | 6                     | 2,3% |
| An understanding for nature  | 6                     | 2,3% |
| Resources  | 5                     | 1,9% |
| Better service and quality   | 5                     | 1,9% |
| An increased interest in conservation                                      | 4                     | 1,6% |
| Culture develops   | 4                     | 1,6% |
| To keep the landscape open   | 4                     | 1,6% |
| The politicians do not forget the landscape; they are under more pressure  | 3                     | 1,2% |
| More visitors, more possibilities to conservation                          | 3                     | 1,2% |
| Inspiration and influences   | 3                     | 1,2% |
| Demand creates resources for conservation                                  | 3                     | 1,2% |
| Attractive force for human beings/visitors                                 | 3                     | 1,2% |
| Charges  | 2                     | 0,8% |
| The local population see themselves from another perspective               | 2                     | 0,8% |
| Regulations  | 2                     | 0,8% |
| More people can conserve nature together                                   | 2                     | 0,8% |
| Transports   | 2                     | 0,8% |
| More activities  | 2                     | 0,8% |
| A local population   | 2                     | 0,8% |
| Angling  | 1                     | 0,4% |
| Increased purchasing power   | 1                     | 0,4% |
| Investments in specific places   | 1                     | 0,4% |
| Houses and industrial environments are renovated                           | 1                     | 0,4% |
| Nature and culture do not become private property                          | 1                     | 0,4% |
| New contacts   | 1                     | 0,4% |
| The local population keep their land in order                              | 1                     | 0,4% |

**B10. Do you think that tourism threatens the nature and culture environment in the Blekinge archipelago?** (Missing: 39).

65,7% No, not at all.

32,5% Yes, to some extent.

1,9% Yes, a lot.

**Why does tourism threaten the nature and culture environment in the Blekinge archipelago?**  
(Number of respondents:175)

| Threats   | Number of respondents | %     |
|---|-----------------------|-------|
| Littering   | 48                    | 27,4% |
| Wear  | 38                    | 21,7% |
| Wear because of too many people   | 9                     | 5,1%  |
| Lack of consideration and respect   | 8                     | 4,6%  |
| If there are no limitations and restrictions  | 7                     | 4%    |
| Nature is overloaded or ruined  | 7                     | 4%    |
| Crowding  | 7                     | 4%    |
| Motorboats  | 6                     | 3,4%  |
| Exploitation  | 5                     | 2,9%  |
| Too much motorized traffic  | 5                     | 2,9%  |
| Disturbance of animals and birds  | 3                     | 1,7%  |
| Destruction   | 3                     | 1,7%  |
| The right of public access does not give a right to everything/ lacking knowledge of the right of public access | 2                     | 1,1%  |
| Lacking knowledge   | 2                     | 1,1%  |
| Commercialism   | 2                     | 1,1%  |
| Pollution   | 2                     | 1,1%  |
| Disposals and garbage   | 2                     | 1,1%  |
| Bad service   | 2                     | 1,1%  |
| No respect towards the local population   | 1                     | 0,6%  |
| Wrong type of tourists  | 1                     | 0,6%  |
| No consideration to signs   | 1                     | 0,6%  |
| Trawling and too much fishing   | 1                     | 0,6%  |
| Noise   | 1                     | 0,6%  |
| If tourism becomes too concentrated   | 1                     | 0,6%  |
| If tourism increases  | 1                     | 0,6%  |
| New built houses which differ   | 1                     | 0,6%  |
| Owners of pleasure boats  | 1                     | 0,6%  |
| Ferries   | 1                     | 0,6%  |
| Luxury houses   | 1                     | 0,6%  |
| New second homes in earlier military areas  | 1                     | 0,6%  |
| Addiction   | 1                     | 0,6%  |
| Threat against the freedom experience   | 1                     | 0,6%  |
| Oil from boats  | 1                     | 0,6%  |
| Barbeque hysteria   | 1                     | 0,6%  |
| Bad supervision   | 1                     | 0,6%  |

**C. Here are some questions concerning what part of the Blekinge archipelago you visited in May-August, 2007, and what kind of housing you had. Furthermore, we would like to know more about the second homes in the Blekinge archipelago generally.**

**C1. What places did you visit in the Blekinge archipelago in May-August, 2007? Tic one or more alternatives. Use the map as a help! (Missing = M, see below).**

|                            |                          |                           |
|----------------------------|--------------------------|---------------------------|
| 24,4% Aspö (M=5)           | 6,5% Hörvik (M=5)        | 0,9% Sickelön (M=5)       |
| 3,7% Aspöskär (M=5)        | 7% Inlängan (M=5)        | 8% Skärva (M=5)           |
| 3,5% Arpö (M=5)            | 1,2% Ivö (M=5)           | 2,3% Slädö (M=5)          |
| 0,3% Björnön (M=5)         | 7,9% Joggesö (M=5)       | 1,4% Spjutsö (M=5)        |
| 5,1% Bollöarna (M=5)       | 7% Jordö (M=5)           | 5,8% St. Ekön (M=5)       |
| 4% Boön (M=5)              | 1% Järkö (M=5)           | 1,9% Stekön (M=5)         |
| 5,1% Bökenäs (M=5)         | 20,1% Järnavik (M=5)     | 29,5% Sturkö (M=5)        |
| 15,2% Dragsö (M=5)         | 10,1% Karön (M=5)        | 1,4% Styrsö (M=5)         |
| 14,7% Drottningsskär (M=5) | 0% Kidö (M=5)            | 2,3% Säljö (M=5)          |
| 2,1% Dunsön (M=5)          | 5,1% Knösö (M=5)         | 9,4% Tjörö (M=5)          |
| 14% Ekenäs (M=5)           | 7,9% Kollevik (M=5)      | 20,6% Torhamn (M=5)       |
| 6,5% Ekö (M=5)             | 20,5% Kristianopel (M=6) | 10,3% Torhamns udde (M=5) |
| 3% Elleholm (M=5)          | 2,4% Krokås (M=5)        | 11,9% Trummenäs (M=5)     |
| 1% Eneholmen (M=5)         | 8,2% Kungsholmen (M=5)   | 6,5% Ungskär (M=5)        |
| 9,6% Eriksberg (M=5)       | 1,4% Kvalmsö (M=5)       | 9,2% Utklippan (M=5)      |
| 3% Flaggsö (M=5)           | 0,5% Kölvingsö (M=5)     | 7,9% Utlängan (M=5)       |
| 1,4% Flakskär (M=5)        | 1,2% Lindö (M=5)         | 0,7% Utö (M=6)            |
| 2,4% Fäjö (M=5)            | 18,2% Matvik (M=6)       | 0,3% Vanö (M=5)           |
| 5,6% Garnanäs (M=5)        | 1,6% Maltkvarn (M=5)     | 1,6% Vagnö (M=5)          |
| 0,5% Gullö (M=5)           | 2,3% Mulö (M=5)          | 7,9% Verkö (M=5)          |
| 3,1% Gåsfeten (M=5)        | 2,4% Nastensö (M=6)      | 2,4% Videskär (M=5)       |
| 0,9% Haglö (M=5)           | 9,6% Nordersund (M=6)    | 1,2% Vångsö (M=5)         |
| 17,5% Hanö (M=5)           | 0,9% Ornö (M=5)          | 4,45 V. Bokön (M=5)       |
| 4,2% Harö (M=5)            | 8,7% Pukavik (M=5)       | 4,4% Ytterön (M=5)        |
| 2,3% Harön (M=5)           | 0,9% Ramsö (M=5)         | 1,4% Äspeskär (M=5)       |
| 23% Hasslö (M=5)           | 0,3% Rollösö (M=5)       | 2,4% Öppensö (M=5)        |
| 11,2% Hällevik (M=5)       | 5,9% Saltärna (M=6)      | 5,1% Ö. Bokön (M=5)       |
| 11,3% Hästö (M=5)          | 20,2% Senören (M=5)      |                           |

**C2. In question C1 above, specify your main housing (see codes below) and the number of nights you stayed. Example: ☐ Hanö T 2 nights**

**Housing:**

**S** = Second home

**Y** = Youth hostel, hotel or conference house

**RP** = Rented private house or second home

**C** = Caravan or motor home

**R** = Relatives and/or friends

**B** = Boat

**T** = Tent

0% I did not spend the night



**C3. In question C1 above, what place is the most important to you? Circle one alternative.**  
(Missing: 311. Number of respondents 267).

| Place         | Number of<br>respondents | %     |
|---------------|--------------------------|-------|
| Aspö          | 37                       | 13,9% |
| Bökenäs       | 1                        | 0,4%  |
| Dragsö        | 9                        | 3,4%  |
| Ekenäs        | 4                        | 1,5%  |
| Ekö           | 12                       | 4,5%  |
| Eriksberg     | 1                        | 0,4%  |
| Garnanäs      | 8                        | 3%    |
| Gåsfeten      | 1                        | 0,4%  |
| Hanö          | 21                       | 7,9%  |
| Hasslö        | 28                       | 10,5% |
| Hällevik      | 4                        | 1,5%  |
| Hästö         | 1                        | 0,4%  |
| Inlängen      | 1                        | 0,4%  |
| Jordö         | 19                       | 7,1%  |
| Järnavik      | 11                       | 4,1%  |
| Karön         | 3                        | 1,1%  |
| Knösö         | 1                        | 0,4%  |
| Kollevik      | 2                        | 0,7%  |
| Kristianopel  | 7                        | 2,6%  |
| Kungsholmen   | 3                        | 1,1%  |
| Matvik        | 13                       | 4,9%  |
| Maltkvarn     | 1                        | 0,4%  |
| Saltärna      | 4                        | 1,5%  |
| Senoren       | 16                       | 6%    |
| Skärva        | 1                        | 0,4%  |
| St.Ekön       | 2                        | 0,7%  |
| Sturkö        | 16                       | 6,0%  |
| Tjörö         | 7                        | 2,6%  |
| Torhamn       | 1                        | 0,4%  |
| Torhamns udde | 2                        | 0,7%  |
| Trummenäs     | 2                        | 0,7%  |
| Ungskär       | 7                        | 2,6%  |
| Utklippan     | 12                       | 4,5%  |
| Utlängen      | 6                        | 2,2%  |
| Vagnö         | 1                        | 0,4%  |
| Videskär      | 1                        | 0,4%  |
| Ö.Bokön       | 1                        | 0,4%  |

**C4. Why is this place the most important to you?** *Tic one or more alternatives.* (Missing: 23).

|                     |                                     |                                |
|---------------------|-------------------------------------|--------------------------------|
| 65,9% Sea and beach | 52,6% Experience nature and culture | 43,1% Silence, peace and quiet |
| 26,7% Good housing  | 19,5% Easily accessible             | 11,7% Sailing                  |
| 60% Second home     | 25,9% The people in this place      | 15,7% Motorboating             |

**Other, what?** (Number of respondents: 47)

| Other reasons why the place is important | Number of respondents | %     |
|--|-----------------------|-------|
| Family and relatives                     | 7                     | 14,9% |
| Angling                                  | 6                     | 12,8% |
| Memories and childhood memories          | 6                     | 12,8% |
| Kayak                                    | 3                     | 6,4%  |
| Nature                                   | 3                     | 6,4%  |
| Is born in the area                      | 3                     | 6,4%  |
| Birds                                    | 2                     | 4,3%  |
| Berth                                    | 2                     | 4,3%  |
| Good camping places                      | 2                     | 4,3%  |
| Romance/we got married there             | 2                     | 4,3%  |
| Golf                                     | 1                     | 2,1%  |
| Rowing                                   | 1                     | 2,1%  |
| Launching of boat there                  | 1                     | 2,1%  |
| Picking berries                          | 1                     | 2,1%  |
| Herbs                                    | 1                     | 2,1%  |
| The personal closeness                   | 1                     | 2,1%  |
| Gardening                                | 1                     | 2,1%  |
| Bicycle roads                            | 1                     | 2,1%  |
| Is in love with the island               | 1                     | 2,1%  |
| Used to work in the area                 | 1                     | 2,1%  |
| Karlskrona is important to visit         | 1                     | 2,1%  |

**C5. Do you have regular access to a second home in the Blekinge archipelago?** (Missing: 8).

65,6% Yes                      34,4% No      →    Proceed to question **C8**

**C6. Who owns the second home you have access to?** (Missing: 18 + 204).

|                               |   |
|-------------------------------|---|
| 92,7% I/husband/wife/cohabite | 0,8% Friends and acquaintances                    |
| 5,6% Relatives                | 0,8% I rent/borrow it regularly from someone else |

**C7. Would you like to extend the period of staying in a second home in the Blekinge archipelago?** (Missing: 17 + 204).

34,7% Yes, a couple of weeks every year  
27,7% Yes, a couple of months every year 37,5% No

**C8. Would you like to live permanently in the Blekinge archipelago?** (Missing: 16).

20,1% Yes                      79,9% No      →   Proceed to question **C10**

**C9. Where in the Blekinge archipelago would you like to live permanently?**

(Number of respondents: 92)

| Places                 | Number of respondents | %    |
|------------------------|-----------------------|------|
| Hasslö                 | 8                     | 8,7% |
| Tärnö                  | 6                     | 6,5% |
| Aspö                   | 6                     | 6,5% |
| Sturkö                 | 5                     | 5,4% |
| Jordö                  | 4                     | 4,3% |
| Karlskrona             | 4                     | 4,3% |
| Tjurkö                 | 4                     | 4,3% |
| Inlängen               | 3                     | 3,3% |
| Ekö                    | 3                     | 3,3% |
| Ungskär                | 3                     | 3,3% |
| Senoren                | 3                     | 3,3% |
| Matvik                 | 3                     | 3,3% |
| Eastern archipelago    | 3                     | 3,3% |
| Around Ronneby         | 3                     | 3,3% |
| Hanö                   | 2                     | 2,2% |
| Trolleboda             | 2                     | 2,2% |
| Vettekulla             | 2                     | 2,2% |
| Karlskrona archipelago | 2                     | 2,2% |
| Torhamn                | 2                     | 2,2% |
| Karlshamn              | 2                     | 2,2% |
| Hällevik               | 1                     | 1,1% |
| Hästö                  | 1                     | 1,1% |
| Kuggeboda              | 1                     | 1,1% |
| Millegarne             | 1                     | 1,1% |
| Saltö                  | 1                     | 1,1% |
| Sjuhalla               | 1                     | 1,1% |
| Skallö                 | 1                     | 1,1% |
| Skillingenäs           | 1                     | 1,1% |
| Bökevik                | 1                     | 1,1% |
| Sölvesborg             | 1                     | 1,1% |
| Funkön                 | 1                     | 1,1% |
| Garnanäs               | 1                     | 1,1% |
| Torsnäs                | 1                     | 1,1% |
| Dragsö                 | 1                     | 1,1% |
| Ekenäs                 | 1                     | 1,1% |
| Hällaryd               | 1                     | 1,1% |
| Väbynäs                | 1                     | 1,1% |
| Close to the sea       | 1                     | 1,1% |
| Karlshamn archipelago  | 1                     | 1,1% |
| Ronneby archipelago    | 1                     | 1,1% |
| Western archipelago    | 1                     | 1,1% |
| Several islands        | 1                     | 1,1% |

**C10. Are you interested in buying a second home in the Blekinge archipelago? (Missing: 103).**

3,4% Yes, to visit during the summer

3,6% Yes, to live in permanently

6,1% Yes, to visit during both the summer and the winter 86,9% No

**D. This part is about noise. We would like to know more about your experiences and opinions regarding noise, as a visitor of the Blekinge archipelago in May-August, 2007, and more generally in this area and in Sweden.**

**D1. What is your general attitude towards noise free zones through restrictions for all motor traffic (on land and water) in Sweden?** (Missing: 10).

3% Very negative    6,9% Negative    28,7% Neutral    32,7% Positive    16% Very positive  
12,7% No opinion

**D2. What is your general attitude towards noise free zones through restrictions for motorboat traffic in Sweden?** (Missing: 9).

2,6% Very negative    9,1% Negative    30,1% Neutral    30,2% Positive    16,5% Very positive  
11,4% No opinion

**D3. Did you experience any kind of noise from the sources mentioned below during your visit to the Blekinge archipelago in May-August, 2007? Circle one number for each alternative.**  
(Missing = M, see below).

|  | Nothing | Almost nothing | Some  | Rather much | Much |
|--|---------|----------------|-------|-------------|------|
| Small private boats (M=23)                 | 49,4%   | 28,8%          | 15,9% | 4,3%        | 1,6% |
| Large private boats (M=21)                 | 47,6%   | 28,5%          | 16,5% | 6,1%        | 1,3% |
| Military ships (M=25)                      | 60%     | 25,5%          | 10,5% | 3,3%        | 0,7% |
| Tour boats (M=26)                          | 65,2%   | 25,5%          | 7,4%  | 0,5%        | 1,3% |
| Jet-ski/water scooter (M=20)               | 58,1%   | 19,4%          | 13,6% | 4,1%        | 0,2% |
| Road traffic (M=24)                        | 59,9%   | 23,5%          | 12,5% | 3,6%        | 0,5% |
| Industry (M=25)                            | 81,6%   | 16,1%          | 2,4%  | 0%          | 0%   |
| Passenger planes at a high altitude (M=20) | 61,3%   | 24%            | 10,4% | 2,7%        | 1,6% |
| Military planes (M=16)                     | 46,3%   | 20,8%          | 20,6% | 9,1%        | 3,2% |
| Helicopters (M=18)                         | 47,9%   | 22%            | 22,3% | 6,1%        | 1,8% |
| Loud people (M=22)                         | 56,7%   | 28,8%          | 2,6%  | 0,9%        | 1,1% |
| Music (M=24)                               | 62,3%   | 27,1%          | 8,3%  | 1,6%        | 0,7% |

Other, state what (Number of respondents: 31): Poland ferries (n=5), lawn mowers (n=6), dogs (n=4), construction work (n=3), ice-cream truck (n=2), the ferry (n=2), barbequing (n=2), power saw (n=2), moped (n=2), jet-ski (n=1), helicopter (n=1), drunk people (n=1).

**Where in the Blekinge archipelago did you experience rather much or much noise in May-August, 2007? Use the map as a help.** (Number of respondents: 111):

|                        |                      |                 |                 |
|------------------------|----------------------|-----------------|-----------------|
| Aspö (n=5)             | Anö (n=1)            | Bokö (n=2)      | Bollöarna (n=1) |
| Bökenäs (n=5)          | Bökevik (n=2)        | Garnanäs (n=1)  | Hasslö (n=8)    |
| Hällaryd (n=2)         | Hällevik (n=2)       | Jordö (n=2)     | Järnavik (n=2)  |
| Ekö (n=2)              | Karlshamn (n=3)      | Karön (n=2)     | Korsanäs (n=1)  |
| Listeby skärgård (n=3) | Lyckebyfjärden (n=1) | Långören (n=1)  | Matvik (n=5)    |
| Nättraby (n=1)         | Ronneby (n=2)        | Saltärnan (n=1) | Saxemora (n=2)  |
| Senoren (n=3)          | Skillingenäs (n=1)   | Spjälkö (n=4)   | Sturkö (n=4)    |
| Styrsö (n=1)           | Tallhamnen (n=1)     | Tjurkö (n=5)    | Tjärö (n=2)     |
| Torhamn (n=1)          | Trolleboda (n=4)     | Tärnskär (n=1)  | Tärnö (n=7)     |

Ungskär (n=2)

Verkö (n=1)

Vettekulla (n=3)

Karlskrona skärgård (n=12) East coast (n=1)

Along the fairways (n=1)

**D4. What factors do you think may be of importance as measures for reducing noise from motorboats in the Blekinge archipelago?** *Circle one number for each alternative. (Missing = M, see below).*

|   | Of no importance | Of some importance | Of great importance |
|---|------------------|--------------------|---------------------|
| Speed limit in the fairways (M=56)                        | 16,7 %           | 7,1%               | 35,6%               |
| Safety cameras (for boat traffic) in the fairways (M=70)  | 31,3%            | 15,2%              | 31,9%               |
| Limited use of the area for certain types of craft (M=63) | 20,4%            | 11,8%              | 39%                 |
| Limited use of the area for certain activities (M=65)     | 20,3%            | 12,1%              | 41,3%               |
| Information leading to greater consideration (M=60)       | 12,9%            | 9,3%               | 32,8%               |
| Prohibition of boats that make too much noise (M=61)      | 16,1%            | 11,6%              | 32,7%               |

**D5. Are there, in your opinion, any “quiet areas”, i.e. areas almost free of noise, in the Blekinge archipelago?** (Missing: 77).

51,3% Yes

48,7% No

Where? (Total of respondents: 194):

**The “quiet areas” in the Blekinge archipelago. The individual number of respondents who stated this place and percentage.**

|                                  |                         |                              |                     |
|----------------------------------|-------------------------|------------------------------|---------------------|
| Aspö 11 (5,7%)                   | Almö 1 (0,5%)           | Bollö 1(0,5%)                | Bökevik 1 (0,5%)    |
| Djupvik 1 (0,5%)                 | Ekenabben 1 (0,5%)      | Ekö 4 (2,1%)                 | Flaggskär 1(0,5%)   |
| Eriksbergsstränder 1 (0,5%)      | Garnanäs 6 (3,1%)       | Hallarna 1 (0,5%)            | Hanö 10 (5,2%)      |
| Hasslö 6 (3,1%)                  | Herrgårdsviken 1 (0,5%) | Hällaryd 1 (0,5%)            | Ingelsvik 1(0,5%)   |
| Jordö 7 (3,6%)                   | Järnevik 11 (5,7%)      | Karlshamn archipelago 2 (1%) |                     |
| Lindö 1 (0,5%)                   | Matvik 1 (0,5%)         | Millegarne 4 (2,1%)          |                     |
| Nabben 1 (0,5%)                  | Saxemora 1 (0,5%)       | Senoren 3 (3,1%)             | Sköneviks 1(0,5%)   |
| Spjälkö 3 (3,1%)                 | Sternö 1 (0,5%)         | Sturkö 5 (2,6%)              | Tjurkö 10 (5,2%)    |
| Tjärö 3 (3,1%)                   | Torhamn 1 (0,5%)        | Torhamns udde 2 (1%)         | Trolleboda 3 (3,1%) |
| Tärnö 3 (3,1%)                   | Ungskär 1 (0,5%)        | Utklippan 18 (9,3%)          | Utlängan 2 (1%)     |
| Islands 21 (10,8%)               | The sea 6 (3,1%)        | The archipelago 5 (2,6%)     |                     |
| The outer archipelago 20 (10,8%) |                         | The forest 3 (3,1%)          |                     |
| Everywhere 5 (2,6%)              | The coast 1 (0,5%)      | Nature harbours 1 (0,5%)     |                     |

**D6. What is your attitude towards noise free zones through restrictions for all motor traffic (on land and water) in the Blekinge archipelago?** (Missing: 17).

4,5% Very negative    11,9% Negative    38,1% Neutral    24,2% Positive    8,9% Very positive  
12,3% No opinion

**D7. What is your attitude towards noise free zones through restrictions for motorboat traffic in the Blekinge archipelago?** (Missing: 14).

3,9% Very negative    12,2% Negative    35,3% Neutral    25,7% Positive    9,4% Very positive  
13,5% No opinion

**D8. What is your attitude towards speed limits for motorboats in the Blekinge archipelago?** (Missing: 13).

3% Very negative    7,4% Negative    23,4% Neutral    34,3% Positive    21,4% Very positive  
10,4% No opinion

**D9. What is your attitude towards safety cameras (for boat traffic) in the fairways in the Blekinge archipelago?** (Missing: 14).

10,3% Very negative    14,9% Negative    32,8% Neutral    20,7% Positive    8% Very positive  
13,3% No opinion

**E. Here are some questions regarding your opinions as a visitor in the Blekinge archipelago in May-August, 2007, when it comes to the shoreline protection, restrictions against moving about freely, and nature reserves. There are also questions concerning a possible future establishment of wind power in the Blekinge archipelago.**

**E1. Sweden has for a long time had a shoreline protection, meaning that the beaches are accessible to the public, and must not be built upon or closed. State your opinion about the statements below as being a visitor of the Blekinge archipelago in May-August, 2007.**

*Circle one number for each statement.* (Missing = M, see below).

|   | <b>Totally disagree</b> | <b>Partly disagree</b> | <b>Neutral</b> | <b>Partly agree</b> | <b>Totally agree</b> |
|---|-------------------------|------------------------|----------------|---------------------|----------------------|
| The access to beaches/areas close to the shore is good. (M=11)  | 2,6%                    | 13,4%                  | 15,9%          | 37,9%               | 30,2%                |
| The public access to the beaches has been improved the last couple of years. (M=24)                     | 7,9%                    | 11,2%                  | 62,1%          | 11,6%               | 7,2%                 |
| The municipalities, and not the state, should have more influence over the shoreline protection. (M=17) | 14,4%                   | 11,8%                  | 33,7%          | 22,8%               | 17,3%                |

**E2. Did buildings or activities prevent you from moving about freely in areas close to the shore in the Blekinge archipelago in May-August, 2007?** (Missing: 11).

76,4% No, not at all.

20,6% Yes, to some extent.

3% Yes, a lot.

**Why?** (Number of respondents: 106)

| <b>Hindrance for moving freely</b>                                   | <b>Number of respondents</b> | <b>%</b> |
|--|------------------------------|----------|
| Sealed off areas/ closed roads/fences (private ownership is claimed) | 33                           | 31,1%    |
| Sites bordering on the sea   | 18                           | 17%      |
| Housing along the shore line   | 15                           | 14,2%    |
| Housing in the way   | 8                            | 7,5%     |
| Bridges with prohibition signs ("Private")                           | 4                            | 3,8%     |
| Too many private areas   | 4                            | 3,8%     |
| Cattle   | 3                            | 2,8%     |
| Military areas   | 3                            | 2,8%     |
| Exemptions from the shore line protection                            | 2                            | 1,9%     |
| The shore line protection  | 2                            | 1,9%     |
| "Private" areas down to the water                                    | 1                            | 0,9%     |
| Public areas become private  | 1                            | 0,9%     |
| Second home owners who are sealing off areas                         | 1                            | 0,9%     |
| No clear boundaries  | 1                            | 0,9%     |
| Too many permanent buildings   | 1                            | 0,9%     |
| Second homes on the beach  | 1                            | 0,9%     |
| Second homes transformed into permanent housing                      | 1                            | 0,9%     |
| Landowner's aggression   | 1                            | 0,9%     |
| Beware of the dog - sign   | 1                            | 0,9%     |
| Camping grounds  | 1                            | 0,9%     |
| Second home sites  | 1                            | 0,9%     |
| Not able to walk along the shore line                                | 1                            | 0,9%     |
| Unclear site boundaries  | 1                            | 0,9%     |
| Respect towards the second home owners                               | 1                            | 0,9%     |

**E3. Did you visit the former military areas in May-August, 2007 (after the restrictions had been removed)?** (Missing: 17).

65,4% No, not at all.

23,5% Yes, to some extent.

11,1% Yes, a lot.

**Why?** (Number of respondents: 133)

| <b>Reason</b>                 | <b>Number of respondents</b> | <b>%</b> |
|-------------------------------|------------------------------|----------|
| I have a second home there    | 21                           | 15,8%    |
| Interesting areas             | 19                           | 14,3%    |
| Good hiking                   | 12                           | 9%       |
| Beautiful nature              | 12                           | 9%       |
| Accommodation/housing         | 11                           | 8,3%     |
| Curiosity                     | 6                            | 4,5%     |
| To visit family/friends       | 5                            | 3,8%     |
| Boat excursion                | 5                            | 3,8%     |
| Hasslö                        | 4                            | 3%       |
| Museum at Aspö                | 4                            | 3%       |
| Picking berries and mushrooms | 4                            | 3%       |
| The bridges                   | 3                            | 2,3%     |
| Good anchoring                | 3                            | 2,3%     |
| Biking                        | 3                            | 2,3%     |
| Passing by/short cut          | 3                            | 2,3%     |

|                                  |   |      |
|----------------------------------|---|------|
| Angling                          | 2 | 1,5% |
| The areas have become accessible | 2 | 1,5% |
| Attractive areas                 | 2 | 1,5% |
| Guided tour                      | 2 | 1,5% |
| Excursion                        | 2 | 1,5% |
| Nice beaches for swimming        | 2 | 1,5% |
| Bird watching                    | 2 | 1,5% |
| Architecture                     | 1 | 0,8% |
| Coincidence                      | 1 | 0,8% |
| Peace and quiet                  | 1 | 0,8% |
| Nearby                           | 1 | 0,8% |

**E4. Did the bird and/or seal sanctuaries (with visit restrictions) affect your planning of the visit to the Blekinge archipelago in May-August, 2007? (Missing: 7).**

96,7% No, not at all.

2,5% Yes, to some extent.

0,9% Yes, a lot.

**Why?** (Number of respondents: 12).

| Reasons for affecting the planning  | Number of respondents | %     |
|-------------------------------------|-----------------------|-------|
| Prohibition against going ashore    | 5                     | 41,7% |
| Consideration to nature             | 4                     | 33,4% |
| No kayaking in the bird sanctuaries | 1                     | 8,3%  |
| Avoidance of certain islands        | 1                     | 8,3%  |
| Some islands are not visited        | 1                     | 8,3%  |

**E5. Did the bird and/or seal sanctuaries (with visit restrictions) prevent you from moving about freely in the Blekinge archipelago in May-August, 2007? (Missing: 13).**

95,6% No, not at all.

3,7% Yes, to some extent.

0,7% Yes, a lot.

**Why?** (Number of respondents: 13).

| Reasons for not moving freely              | Number of respondents | %     |
|--|-----------------------|-------|
| Prohibition against going ashore           | 8                     | 61,5% |
| Some islands have restrictions             | 2                     | 15,4% |
| Avoidance of certain islands               | 1                     | 7,8%  |
| It is not possible to go ashore with kayak | 1                     | 7,8%  |
| Consideration                              | 1                     | 7,8%  |

**E6. Did you visit any of the nature reserves during your stay in the Blekinge archipelago in May-August, 2007? (Missing: 9).**

50,6% Yes

29,7% No

19,7% I don't know

**E7. As a visitor in the Blekinge archipelago in May-August, 2007, how were you affected by the nature reserves? (Missing: 20).**

0% Very negative

0,2% Negative

27,1% Neutral

27,1% Positive

22% Very positive

23,7% No opinion



**E8. What is your attitude towards building wind power stations in the Blekinge archipelago?**  
(Missing: 17).

15,7% Very negative    16 % Negative    22,8% Neutral    26,6% Positive    13,2% Very positive  
5,7% No opinion

**E9. An expansion of wind power involves a great visual change of the landscape. Being a visitor in the Blekinge archipelago in 2007, please evaluate the following scenarios:** (Missing = M, see below).

|  | Very negative | Negative | Neutral | Positive | Very positive |
|--|---------------|----------|---------|----------|---------------|
| 1-2 wind power station(s) within sight on <u>rare</u> occasions. (M=34)                    | 16%           | 10,7%    | 29,8%   | 31,2%    | 12,3%         |
| 10-12 wind power stations (in a group) within sight on <u>rare</u> occasions. (M=34)       | 22,8%         | 17,5%    | 25,1%   | 25,3%    | 9,3%          |
| 1-2 wind power station(s) within sight on <u>repeated</u> occasions. (M=34)                | 24,3%         | 23,7%    | 26,3%   | 18,2%    | 7,5%          |
| 10-12 wind power stations (in a group) within sight on <u>repeated</u> occasions. (M=29)   | 34,8%         | 27,5%    | 20,6%   | 10,6%    | 6,6%          |
| The knowledge of wind power stations in the archipelagic area, without seeing them. (M=32) | 9,7%          | 7%       | 35,2%   | 23,4%    | 24,7%         |

**F. Here are some questions about your general opinions regarding archipelagic or coastal landscapes in SWEDEN.**

**F1. When visiting a Swedish coastal or archipelagic landscape, how do you feel about:**  
*Circle one number for each statement.*

|   | Very negative | Negative | Neutral | Positive | Very positive |
|---|---------------|----------|---------|----------|---------------|
| there being camping grounds/sleeping cabins (M=15)  | 1,2%          | 2,1%     | 16,2%   | 46,9%    | 33,6%         |
| there being guest harbours (M=22)   | 0,4%          | 0,9%     | 18,2%   | 42,1%    | 8,5%          |
| there being access to toilets, hot showers, indoor kitchen facilities, etc. (M=13)        | 0,7%          | 2,3%     | 15,9%   | 42,9%    | 31,9%         |
| there being bathing-places with lifeguards and service (M=15)                             | 1,1%          | 3%       | 37,7%   | 35,5%    | 22,7%         |
| there being protected nature areas (M=17)   | 0,4%          | 0,2%     | 14,3%   | 41,2%    | 44%           |
| there being marked out hiking paths (M=8)   | 0%            | 0,4%     | 11,9%   | 41,9%    | 45,8%         |
| there being marked fairways/boating routes (M=14)   | 0%            | 0,9%     | 20,4%   | 31,6%    | 47,2%         |
| there being information boards on nature and culture (M=10)                               | 0,4%          | 0,2%     | 5,5%    | 37,9%    | 56,2%         |
| there being boats running regularly to the islands (M=10)                                 | 0,5%          | 0,2%     | 9,4%    | 36,8%    | 53,1%         |
| there being guided tours in the area (M=10)   | 0,9%          | 1,2%     | 34,5%   | 35,9%    | 27,5%         |
| there being public transportation within the area (touring boat, bus, train, etc.) (M=10) | 2,8%          | 6,5%     | 21,5%   | 37,5%    | 28%           |
| there being larger areas having speed   |               |          |         |          |               |

|  |                          |                 |                |                 |                          |
|--|--------------------------|-----------------|----------------|-----------------|--------------------------|
| and/or engine power restrictions (M=13)  | 0,4%                     | 0,9%            | 15%            | 40,5%           | 43,3%                    |
| seeing traces of other visitors<br>(e.g. fireplaces, wear, rubbish) (M=9)                  | 62%                      | 27,1%           | 8,1%           | 1,9%            | 0,9%                     |
| hearing noise (e.g. motor sound) (M=14)  | 26,8%                    | 48%             | 23,2%          | 1,1%            | 0,9%                     |
| there being installations<br>(phone masts, wind power stations) (M=14)                     | 13,8%                    | 26,4%           | 42,6%          | 14,2%           | 3%                       |
| meeting other people (M=13)  | 0%                       | 2,5%            | 23,5%          | 54,9%           | 19,1%                    |
| there being a local population (M=10)  | 0,5%                     | 0,4%            | 9%             | 37,7%           | 52,5%                    |
| being able to experience peace and quiet<br>(M=12)   | 0,4%                     | 0,4%            | 8,7%           | 37,1%           | 53,5%                    |
| areas more than 5 kilometres from<br>the nearest settlement, harbour, road, etc.<br>(M=13) | 4,8%                     | 12%             | 52,9%          | 18,8%           | 11,5%                    |
| being able to stay the night<br>without seeing or hearing other people (M=16)              | 1,4%                     | 3,6%            | 48,9%          | 28,8%           | 17,3%                    |
| there being easy accessible beaches (M=11)   | 0%                       | 0,7%            | 16%            | 43,6%           | 39,7%                    |
| there being nature untouched by humans<br>(M=11)   | 0,5%                     | 0,9%            | 12,5%          | 38,8%           | 47,3%                    |
| there being emergency phones (M=13)  | 1,1%                     | 1,9%            | 33,5%          | 35%             | 28,5%                    |
| there being rare animals and plants (M=14)   | 1,1%                     | 0,7%            | 19,3%          | 39%             | 39,9%                    |
| being able to spend the night<br>freely in a tent, sailboat, etc. (M=10)                   | 0,7%                     | 2,1%            | 22,9%          | 36,3%           | 38%                      |
| being able to move about freely in the area<br>(M=9)                                       | 0,5%                     | 1,2%            | 6%             | 36,7%           | 55,5%                    |
| meeting foreign visitors (M=11)  | 0,7%                     | 0,9%            | 34,6%          | 38,3%           | 25,6%                    |
| there being noise free areas (M=11)  | 1,1%                     | 1,2%            | 27,7%          | 37,4%           | 32,6%                    |
|  | <b>Very<br/>negative</b> | <b>Negative</b> | <b>Neutral</b> | <b>Positive</b> | <b>Very<br/>positive</b> |

**G. Finally, a few questions about yourself and your household. Of course, all answers will be dealt with confidentially, and the result will not reveal individual answers.**

**G1. Please, state your Home postcode ..... Home country:** All 578 respondents: Sweden.  
**Home town** (Number of respondents: 559)

| Home town  | Number<br>of respondents | %    | Home town     | Number<br>of<br>respondents | %    |
|------------|--------------------------|------|---------------|-----------------------------|------|
| Karlskrona | 41                       | 7,3% | Gemla         | 1                           | 0,2% |
| Lund       | 31                       | 5,5% | Glimåkra      | 1                           | 0,2% |
| Karlshamn  | 29                       | 5,2% | Grevie        | 1                           | 0,2% |
| Växjö      | 29                       | 5,2% | Gustavsberg   | 1                           | 0,2% |
| Malmö      | 28                       | 5%   | Gävle         | 1                           | 0,2% |
| Stockholm  | 24                       | 4,3% | Bromölla      | 1                           | 0,2% |
| Ronneby    | 23                       | 4,1% | Bräkne hoby   | 1                           | 0,2% |
| Lyckeby    | 12                       | 2,2% | Bröby         | 1                           | 0,2% |
| Trelleborg | 9                        | 1,6% | Hisings backa | 1                           | 0,2% |

|                |   |      |              |   |      |
|----------------|---|------|--------------|---|------|
| Limhamn        | 8 | 1,4% | Hisings Bad  | 1 | 0,2% |
| Kalmar         | 7 | 1,3% | Hjältevad    | 1 | 0,2% |
| Kristianstad   | 7 | 1,3% | Huddinge     | 1 | 0,2% |
| Hässleholm     | 7 | 1,3% | Brösarp      | 1 | 0,2% |
| Asarum         | 6 | 1,1% | Arvika       | 1 | 0,2% |
| Lidingö        | 6 | 1,1% | Hällevik     | 1 | 0,2% |
| Sölvesborg     | 6 | 1,1% | Hällviken    | 1 | 0,2% |
| Göteborg       | 5 | 0,9% | Hästö        | 1 | 0,2% |
| Täby           | 5 | 0,9% | Höganäs      | 1 | 0,2% |
| Solna          | 5 | 0,9% | Hönö         | 1 | 0,2% |
| Uppsala        | 5 | 0,9% | Hörby        | 1 | 0,2% |
| V. Frölunda    | 5 | 0,9% | Ingelstad    | 1 | 0,2% |
| Linköping      | 4 | 0,7% | Johanneshov  | 1 | 0,2% |
| Helsingborg    | 4 | 0,7% | Jämshög      | 1 | 0,2% |
| Rödeby         | 4 | 0,7% | Karlsberg    | 1 | 0,2% |
| Spånga         | 4 | 0,7% | Klippan      | 1 | 0,2% |
| Åstorp         | 4 | 0,7% | Kungälv      | 1 | 0,2% |
| Upplands Väsby | 4 | 0,7% | Kävlinge     | 1 | 0,2% |
| Eksjö          | 3 | 0,5% | Lerberget    | 1 | 0,2% |
| Hägersten      | 3 | 0,5% | Linghem      | 1 | 0,2% |
| Danderyd       | 3 | 0,5% | Mantorp      | 1 | 0,2% |
| Bromma         | 3 | 0,5% | Listerby     | 1 | 0,2% |
| Järfälla       | 3 | 0,5% | Ljungbyholm  | 1 | 0,2% |
| Jönköping      | 3 | 0,5% | Lomma        | 1 | 0,2% |
| Kallinge       | 3 | 0,5% | Löberöp      | 1 | 0,2% |
| Märsta         | 3 | 0,5% | Löddeköpinge | 1 | 0,2% |
| Markaryd       | 3 | 0,5% | Magelhem     | 1 | 0,2% |
| Nacka          | 3 | 0,5% | Mellbystrand | 1 | 0,2% |
| Nättraby       | 3 | 0,5% | Moheda       | 1 | 0,2% |
| Rottne         | 3 | 0,5% | Motala       | 1 | 0,2% |
| S. Sandby      | 3 | 0,5% | Mullsjö      | 1 | 0,2% |
| Saltsjö-boo    | 3 | 0,5% | Norrhult     | 1 | 0,2% |
| Staffanstorps  | 3 | 0,5% | Mölbo        | 1 | 0,2% |
| Södertälje     | 3 | 0,5% | Mölnbo       | 1 | 0,2% |
| Trollhättan    | 3 | 0,5% | Mölnadal     | 1 | 0,2% |
| Uddevalla      | 3 | 0,5% | Norrtälje    | 1 | 0,2% |
| Vellinge       | 3 | 0,5% | Norsborg     | 1 | 0,2% |
| Bjärred        | 2 | 0,4% | Nyköping     | 1 | 0,2% |
| Alvesta        | 2 | 0,4% | Olofström    | 1 | 0,2% |
| Arkelstorp     | 2 | 0,4% | Oxie         | 1 | 0,2% |
| Bunkeflostrand | 2 | 0,4% | Påskallavik  | 1 | 0,2% |
| Djö            | 2 | 0,4% | Ramdala      | 1 | 0,2% |
| Ekerö          | 2 | 0,4% | Rodeby       | 1 | 0,2% |

|                 |   |      |            |   |      |
|-----------------|---|------|------------|---|------|
| Enskede         | 2 | 0,4% | Rävemåla   | 1 | 0,2% |
| Eslöv           | 2 | 0,4% | Sandared   | 1 | 0,2% |
| Halmstad        | 2 | 0,4% | Sandhult   | 1 | 0,2% |
| Hovås           | 2 | 0,4% | Segeltorp  | 1 | 0,2% |
| Höllviken       | 2 | 0,4% | Simrishamn | 1 | 0,2% |
| Huskvarna       | 2 | 0,4% | Sjöbo      | 1 | 0,2% |
| Jämjö           | 2 | 0,4% | Sjömarken  | 1 | 0,2% |
| Katrineholm     | 2 | 0,4% | Skanör     | 1 | 0,2% |
| Lessebo         | 2 | 0,4% | Skarpnäck  | 1 | 0,2% |
| Lindesberg      | 2 | 0,4% | Skogstorp  | 1 | 0,2% |
| Ramlösa         | 2 | 0,4% | Skuggstorp | 1 | 0,2% |
| Nybro           | 2 | 0,4% | Skänninge  | 1 | 0,2% |
| Norrköping      | 2 | 0,4% | Skärblacka | 1 | 0,2% |
| Rönninge        | 2 | 0,4% | Slöinge    | 1 | 0,2% |
| Sigtuna         | 2 | 0,4% | St Mellösa | 1 | 0,2% |
| Saltsjöbaden    | 2 | 0,4% | Stocksand  | 1 | 0,2% |
| Skövde          | 2 | 0,4% | Sundbyberg | 1 | 0,2% |
| Sollentuna      | 2 | 0,4% | Svedala    | 1 | 0,2% |
| Ängelholm       | 2 | 0,4% | Säffle     | 1 | 0,2% |
| Tingsryd        | 2 | 0,4% | Sändaby    | 1 | 0,2% |
| Trensum         | 2 | 0,4% | Söderhamn  | 1 | 0,2% |
| Tvååker         | 2 | 0,4% | Södermor   | 1 | 0,2% |
| Ulricehamn      | 2 | 0,4% | Taberg     | 1 | 0,2% |
| Vetlanda        | 2 | 0,4% | Tjörnarp   | 1 | 0,2% |
| Vaggeryd        | 2 | 0,4% | Tollarp    | 1 | 0,2% |
| Dalarö          | 1 | 0,2% | Tomelilla  | 1 | 0,2% |
| Dalby           | 1 | 0,2% | Torhamn    | 1 | 0,2% |
| Allingsås       | 1 | 0,2% | Torsås     | 1 | 0,2% |
| Dannike         | 1 | 0,2% | Tullinge   | 1 | 0,2% |
| Bankeryd        | 1 | 0,2% | Tyresö     | 1 | 0,2% |
| Drottningstjärn | 1 | 0,2% | Vallentuna | 1 | 0,2% |
| Aneby           | 1 | 0,2% | Varberg    | 1 | 0,2% |
| Bjuv            | 1 | 0,2% | Veberöd    | 1 | 0,2% |
| Enköping        | 1 | 0,2% | Värnamö    | 1 | 0,2% |
| Borlänge        | 1 | 0,2% | Väröbacka  | 1 | 0,2% |
| Eskilstuna      | 1 | 0,2% | Ystad      | 1 | 0,2% |
| Annerstad       | 1 | 0,2% | Åby        | 1 | 0,2% |
| Falkenberg      | 1 | 0,2% | Åhus       | 1 | 0,2% |
| Falsterbo       | 1 | 0,2% | Åkarp      | 1 | 0,2% |
| Fjällbacka      | 1 | 0,2% | Åkersberga | 1 | 0,2% |
| Floda           | 1 | 0,2% | Årsla      | 1 | 0,2% |
| Furulund        | 1 | 0,2% | Älmhult    | 1 | 0,2% |
| Färlöv          | 1 | 0,2% | Älmult     | 1 | 0,2% |

|             |   |      |        |   |      |
|-------------|---|------|--------|---|------|
| Gantofta    | 1 | 0,2% | Älvsjö | 1 | 0,2% |
| Örebro      | 1 | 0,2% |        |   |      |
| Örkelljunga | 1 | 0,2% |        |   |      |
| Östersund   | 1 | 0,2% |        |   |      |

**G2. When were you born? Year 19\_\_\_\_\_**

| Age groups   | Male       | Female     | Total      |
|--------------|------------|------------|------------|
| 1920 - 1935  | 37         | 17         | 54         |
| 1936 - 1940  | 31         | 25         | 56         |
| 1941 - 1945  | 49         | 49         | 98         |
| 1946 - 1950  | 44         | 43         | 87         |
| 1951 - 1955  | 27         | 53         | 80         |
| 1956 - 1960  | 27         | 31         | 58         |
| 1961 - 1965  | 20         | 29         | 49         |
| 1966 - 1970  | 25         | 24         | 49         |
| 1971 - 1975  | 5          | 10         | 15         |
| 1976 - 1980  | 6          | 9          | 15         |
| 1981 -       | 0          | 3          | 3          |
| <b>Total</b> | <b>271</b> | <b>293</b> | <b>564</b> |

**G3. What is your sex?** (Missing=5)      52% Woman      48% Man

**G4. What is your civil status?** (Missing=6)

12,9% Single      82% Married/Cohabiting      3,8% In a relationship but not living together  
1,2% Living with parents

**G5. What is your highest completed education? Tic one alternative.** (Missing=8)

12,6% Compulsory school/Junior secondary school      20,7% University/College, 3 years or less  
18,4% Upper secondary school      36,3% University/College, more than 3 years  
3% Folk high school      8,9% Other education

**G6. What was the approximate *total* disposable income of your household in 2007, after deducted taxes?** (Missing=47)

1,5% Up to 99 999 SEK      9,2% 100 000 – 199 999 SEK      20% 200 000 – 299 999 SEK  
21,3% 300 000 – 399 999 SEK      19,8% 400 000 – 499 999 SEK      28,2% More than 500 000 SEK

**G7. Will you visit the Blekinge archipelago again?** (Missing=7)

89% Yes, definitely      11% Maybe      0% No

**G8. What is your overall opinion of the Blekinge archipelago in May-August, 2007?** (Missing=7)

55,2% Very good      34,7% Good, only one or two things could have been better  
9,5% Rather good, some things could have been better  
0,2% Bad, most things could have been better      0,5% Very bad

***Thank you very much for your valuable contribution!***  
***Please, use the post-free reply envelope and return the questionnaire***  
***as soon as possible!***

## **APPENDIX 2. The questionnaire survey in the Blekinge archipelago. Swedish version.**

*Enkätundersökning*

*Blekinge skärgård 2007*

### **Besök i Blekinge skärgård år 2007**

Detta frågeformulär vänder sig till Dig som har varit besökare i Blekinge skärgård maj-augusti 2007. Området studien omfattar framgår av enkätens karta – se bifogat. Studien ingår i ett forskningsprojekt med syftet att förbättra kunskapen om besökare och fritidshusägare i Blekinge skärgård. Med kunskap om besökarnas aktiviteter och upplevelser samt vilka områden de har besökt kan planering och förvaltning av området förbättras.

Genom ett slumpmässigt förfarande har Du valts ut att medverka i denna enkätundersökning. För att resultaten ska bli tillförlitliga är det viktigt att så många som möjligt svarar på enkäten! Du deltar naturligtvis konfidentiellt och numret på enkäten är endast till för att jag inte ska skicka en påminnelse till Dig som redan har svarat. När undersökningens resultat redovisas kommer det aldrig att framgå vad enskilda personer har svarat.

**Vänligen, skicka tillbaka den ifyllda enkäten i det portofria  
svarskuvertet  
så snart som möjligt!**

Har du några frågor om undersökningen, kontakta projektledare Rosemarie Ankre.

**Ett varmt tack på förhand för Din medverkan!**

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Projektledare  
Fysisk planering BTH och  
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Prof. Lars Emmelin  
Fysisk planering BTH och ETOUR

Undersökningen genomförs av Institutionen för Fysisk planering, Blekinge Tekniska Högskola (BTH) i samarbete med turismforskningsinstitutet ETOUR ([www.etour.se](http://www.etour.se)). Den finansieras av EU-projektet Interreg III B *Project Network Sustainable Tourism Development in the Baltic Sea Region* ([www.agora-tourism.net](http://www.agora-tourism.net)) och av Stiftelsen för kunskapsfrämjande inom turism (Nutek) samt av Blekinge länsstyrelse.

# FRÅGEFORMULÄR

F. Till att börja med, några frågor om Ditt boende, färdmedel och tillgänglighet i Blekinge skärgård maj-augusti år 2007. I detta område inkluderas Karlskrona, Ronneby, Karlshamn och Sölvesborg kommuner, se kartan. Sedan följer frågor om upplevelser av konflikter i området maj-augusti 2007 samt om Dina åsikter om möjliga framtida åtgärder av konflikter.

A1. Ringa in vilka datum Du besökte sommaren Blekinge skärgård 2007 i almanackorna nedan. Markera samtliga dagar Du besökte området!

☐ Jag äger fritidshus i Blekinge, men besökte **inte** Blekinge skärgård maj-augusti 2007 - därför när jag besvarar enkäten, tänker jag på mitt senaste besök. Jag besökte Blekinge skärgård **senast den**

| MAJ 2007 |    |    |    |    |    |    |
|----------|----|----|----|----|----|----|
| M        | T  | O  | T  | F  | L  | S  |
|          | 1  | 2  | 3  | 4  | 5  | 6  |
| 7        | 8  | 9  | 10 | 11 | 12 | 13 |
| 14       | 15 | 16 | 17 | 18 | 19 | 20 |
| 21       | 22 | 23 | 24 | 25 | 26 | 27 |
| 28       | 29 | 30 | 31 |    |    |    |

| JUNI 2007 |    |    |    |    |    |    |
|-----------|----|----|----|----|----|----|
| M         | T  | O  | T  | F  | L  | S  |
|           |    |    |    | 1  | 2  | 3  |
| 4         | 5  | 6  | 7  | 8  | 9  | 10 |
| 11        | 12 | 13 | 14 | 15 | 16 | 17 |
| 18        | 19 | 20 | 21 | 22 | 23 | 24 |
| 25        | 26 | 27 | 28 | 29 | 30 |    |

| JULI 2007 |    |    |    |    |    |    |
|-----------|----|----|----|----|----|----|
| M         | T  | O  | T  | F  | L  | S  |
|           |    |    |    |    |    | 1  |
| 2         | 3  | 4  | 5  | 6  | 7  | 8  |
| 9         | 10 | 11 | 12 | 13 | 14 | 15 |
| 16        | 17 | 18 | 19 | 20 | 21 | 22 |
| 23        | 24 | 25 | 26 | 27 | 28 | 29 |
| 30        | 31 |    |    |    |    |    |

| AUGUSTI 2007 |    |    |    |    |    |    |
|--------------|----|----|----|----|----|----|
| M            | T  | O  | T  | F  | L  | S  |
|              |    | 1  | 2  | 3  | 4  | 5  |
| 6            | 7  | 8  | 9  | 10 | 11 | 12 |
| 13           | 14 | 15 | 16 | 17 | 18 | 19 |
| 20           | 21 | 22 | 23 | 24 | 25 | 26 |
| 27           | 28 | 29 | 30 | 31 |    |    |

A2. Se almanackorna ovan, markera vilket Ditt sällskap var samt antalet personer per kategori (räkna inte med Dig själv!). Använd symbolerna nedan.

Exempel: F 3 Ö 2 i ruta 6 juli. Dvs. sällskap av familj och vänner, 3 personer vid besöket den 6 juli. av övriga personer, 2 personer -"-

- F (Familjen och släkt)      V (Vänner och bekanta)  
 A (Arbetskamrater)      Ö (Övriga personer)      ☐ Inget sällskap, jag reste ensam.

**A3. Vid Ditt senaste besök i Blekinge skärgård (maj-augusti 2007), hur många resdagar hade Du sammanlagt från det att Du lämnade hembostaden till det att Du kom hem igen? \_\_\_\_\_ dagar**

**A4. Vilket/vilka färdmedel använde Du för att ta Dig till Blekinge skärgård maj-augusti år 2007 från Din hemort? Kryssa i ett eller flera alternativ.**

- |   |                               |
|---|-------------------------------|
| <input type="checkbox"/> Egen bil                       | <input type="checkbox"/> Tåg  |
| <input type="checkbox"/> Hyrbil                         | <input type="checkbox"/> Buss |
| <input type="checkbox"/> Bil med husvagn/husbil         | <input type="checkbox"/> Flyg |
| <input type="checkbox"/> Egen båt                       |                               |
| <input type="checkbox"/> Annat färdmedel, vilket? ..... |                               |

**A5. Hur har Du färdats inom Blekinges skärgårdslandskap maj-augusti år 2007? Kryssa i ett eller flera alternativ.**

- |                                   |   |   |                               |
|-----------------------------------|---|---|-------------------------------|
| <input type="checkbox"/> Segelbåt | <input type="checkbox"/> Kanot/kajak    | <input type="checkbox"/> Bil              | <input type="checkbox"/> Buss |
| <input type="checkbox"/> Motorbåt | <input type="checkbox"/> Vandringsleder | <input type="checkbox"/> Motorcykel/moped |                               |
| <input type="checkbox"/> Turbåt   | <input type="checkbox"/> Cykel          | <input type="checkbox"/> Fyrhjuling       |                               |

☐ Annat färdmedel, vilket? .....

**A6. Vilken är Din uppfattning om möjligheten att färdas med kollektiva färdmedel inom Blekinge skärgård maj-augusti år 2007?**

- ☐ Mycket negativ    ☐ Negativ    ☐ Neutral    ☐ Positiv    ☐ Mycket positiv  
☐ Har ej åkt kollektivt

**A7. Tag ställning till följande påståenden om möjlig framtida tillgänglighet i Blekinge skärgård. Ringa in en siffra för varje påstående.**

|   | Helt oenig | Delvis oenig | Neutral | Delvis enig | Helt enig |
|---|------------|--------------|---------|-------------|-----------|
| Fler områden bör bli möjliga att nå med kollektivtrafik/turbåtar.....         | 1          | 2            | 3       | 4           | 5         |
| Det bör finnas fler markerade leder och informationsskyltar.....              | 1          | 2            | 3       | 4           | 5         |
| Det bör finnas fler parkeringar vid friluftsområden/naturreservat.....        | 1          | 2            | 3       | 4           | 5         |
| Fler områden bör bli möjliga att nå med gästhamnar för motorbåt/segelbåt..... | 1          | 2            | 3       | 4           | 5         |

**A8. Har Du besökt Blekinge skärgård före maj-augusti år 2007?**

- ☐ Ja      ☐ Nej → gå vidare till fråga A11

**A9. Ange ungefär hur många gånger Du har varit i Blekinge skärgård under följande tidsperioder:**

År 2007 \_\_\_\_\_ År 2005 – 2006 \_\_\_\_\_ År 2000 – 2004 \_\_\_\_\_ 1995 –  
 1999 \_\_\_\_\_ År 1990 – 1994 \_\_\_\_\_ År 1985 – 1989 \_\_\_\_\_ Före år 1985 \_\_\_\_\_

**A10. Vilket år besökte Du Blekinge skärgård för första gången? .....**



**A11. Vad har Du för åsikt om antalet besökare i Blekinge skärgård maj-augusti år 2007?**

*Kryssa i ett alternativ.*

- ☐ Alldeles för få     
 ☐ Något för få     
 ☐ Varken för få eller för många     
 ☐ Något för många     
 ☐ Alldeles för många

**A12. Konflikter uppstår ibland på grund av olika intressen, aktiviteter eller användning av mark och vatten. Har Du upplevt konflikter i Blekinge skärgård maj-augusti år 2007?**

*Ringa in en siffra för varje påstående.*

|   | Inte<br>alls | Lite | En del | Ganska<br>mycket | Mycket |
|---|--------------|------|--------|------------------|--------|
| Andra besökare som utförde <u>andra</u> aktiviteter än jag själv..... | 1            | 2    | 3      | 4                | 5      |
| Andra besökare som utförde <u>samma</u> aktiviteter än jag själv..... | 1            | 2    | 3      | 4                | 5      |
| Direkt kontakt med andra besökare. ....                               | 1            | 2    | 3      | 4                | 5      |
| Vetskapen om andra besökares närvaro...                               | 1            | 2    | 3      | 4                | 5      |
| Etableringen av fritidshus.....                                       | 1            | 2    | 3      | 4                | 5      |
| Utveckling av infrastruktur, VA, belysning mm.....                    | 1            | 2    | 3      | 4                | 5      |
| Buller.....   | 1            | 2    | 3      | 4                | 5      |
| Strandskydd.....  | 1            | 2    | 3      | 4                | 5      |
| Restriktioner för rörelsefrihet.....                                  | 1            | 2    | 3      | 4                | 5      |
| Med fiskenäringen.....  | 1            | 2    | 3      | 4                | 5      |
| Med jordbruksnäringen.....  | 1            | 2    | 3      | 4                | 5      |
| Med lokalbefolkningen.....  | 1            | 2    | 3      | 4                | 5      |

**Finns det andra konflikter än ovanstående som Du har upplevt ganska mycket eller mycket maj-augusti 2007 i Blekinge skärgård?**

**A13. Se fråga A12 ovan – gällande de konflikter Du har upplevt ganska mycket eller mycket, beskriv hur Du upplevt konflikterna och orsakerna till varför Du tror att konflikterna har uppstått:.....**

**A14. Vilken är Din inställning till nedanstående möjliga framtida åtgärder för att motverka konflikter i Blekinge skärgård? Ringa in en siffra för varje påstående.**

|   | Mycket<br>negativ | Negativ | Varken<br>eller | Positiv | Mycket<br>positiv |
|---|-------------------|---------|-----------------|---------|-------------------|
| Förbjuda tillträde till särskilt känsliga områden.                  | 1                 | 2       | 3               | 4       | 5                 |
| Endast låta ett visst antal personer besöka ett område åt gången.   | 1                 | 2       | 3               | 4       | 5                 |
| Tydligare informera om naturens känslighet.                         | 1                 | 2       | 3               | 4       | 5                 |
| Zonering där besökare och olika användare styrs till olika områden. | 1                 | 2       | 3               | 4       | 5                 |
| Införa förbud mot större grupper av besökare.                       | 1                 | 2       | 3               | 4       | 5                 |
| Utöka strandskyddet.  | 1                 | 2       | 3               | 4       | 5                 |

**G. Denna del innehåller frågor om Dina aktiviteter och Dina upplevelser i Blekinge skärgård maj-augusti år 2007. Sedan följer frågor om Dina åsikter om möjlig framtida utveckling i området.**

**B1. Vilken/vilka aktiviteter ägnade Du Dig åt i Blekinge skärgård år 2007?**

*Kryssa i ett eller flera alternativ.*

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Träffa släkt och vänner | <input type="checkbox"/> Vistas i fritidshus | <input type="checkbox"/> Bär- och svampplockning      |
| <input type="checkbox"/> Sola och bada           | <input type="checkbox"/> Dyka                | <input type="checkbox"/> Campa/bo i husvagn           |
| <input type="checkbox"/> Segla                   | <input type="checkbox"/> Paddla kanot/kajak  | <input type="checkbox"/> Tälta                        |
| <input type="checkbox"/> Jetski/vattenskoter     | <input type="checkbox"/> Vila och avkoppling | <input type="checkbox"/> Uppleva landskapet           |
| <input type="checkbox"/> Motorbåtsurer           | <input type="checkbox"/> Vandra              | <input type="checkbox"/> Ha picknick/grilla i naturen |
| <input type="checkbox"/> Fritidsfiska            | <input type="checkbox"/> Vind/vågsurfat      | <input type="checkbox"/> Andra aktiviteter            |

**B2. Se ovan fråga B1. Ringa in den huvudsakliga aktiviteten. Även om Du bara har angett ett alternativ ovan, så ska den ringas in!**

**B3. Hur stor erfarenhet har Du av den aktivitet Du ringade in?**

- ☐ Ingen erfarenhet    ☐ Viss erfarenhet    ☐ Stor erfarenhet    ☐ Mycket stor erfarenhet

**B4. Hade Du tillgång till en segelbåt i Blekinge skärgård maj-augusti år 2007?**

- ☐ Ja    ☐ Nej

**B5. Hade Du tillgång till en motorbåt i Blekinge skärgård maj-augusti år 2007?**

- ☐ Ja    ☐ Nej

**B6. Vilka faktorer påverkade Dig att besöka Blekinge skärgård maj-augusti år 2007?**

*Ringa in en siffra för varje påstående.*

|  | Ingen<br>betydelse |   | Viss<br>betydelse |   | Mycket stor<br>betydelse |
|--|--------------------|---|-------------------|---|--------------------------|
| Möjligheter till naturupplevelse.....      | 1                  | 2 | 3                 | 4 | 5                        |
| Möjligheter till kulturupplevelse.....     | 1                  | 2 | 3                 | 4 | 5                        |
| Bra vatten, stränder och bottnar.....      | 1                  | 2 | 3                 | 4 | 5                        |
| Tillgången till fritidshus.....            | 1                  | 2 | 3                 | 4 | 5                        |
| Möjligheter till segling.....              | 1                  | 2 | 3                 | 4 | 5                        |
| Möjligheter att nyttja motorbåt.....       | 1                  | 2 | 3                 | 4 | 5                        |
| Möjligheter till fritidsfiske.....         | 1                  | 2 | 3                 | 4 | 5                        |
| Möjligheter till fysisk aktivitet.....     | 1                  | 2 | 3                 | 4 | 5                        |
| Möjligheter till vandring.....             | 1                  | 2 | 3                 | 4 | 5                        |
| Kommunikationerna till och från öarna..... | 1                  | 2 | 3                 | 4 | 5                        |
| Komma bort från arbetet.....               | 1                  | 2 | 3                 | 4 | 5                        |
| Komma bort från hemmet.....                | 1                  | 2 | 3                 | 4 | 5                        |
| Tillgången på boende och service.....      | 1                  | 2 | 3                 | 4 | 5                        |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| Att umgås med släkt och vänner.....       | 1 | 2 | 3 | 4 | 5 |
| Frånvaro av restriktioner och hinder..... | 1 | 2 | 3 | 4 | 5 |
| Möjlighet till lugn och ro.....           | 1 | 2 | 3 | 4 | 5 |
| Uppleva ensamhet.....                     | 1 | 2 | 3 | 4 | 5 |

Finns det andra faktorer som hade stor eller mycket stor betydelse (4-5), ange i så fall vilka:

**B7. Under Ditt besök i Blekinge skärgård maj-augusti år 2007, upplevde Du några av följande påståenden? Ringa in en siffra för varje påstående.**

|                                     | Inte<br>alls |   | Till<br>viss del |   | Mycket |
|-------------------------------------|--------------|---|------------------|---|--------|
| Trängsel (för många besökare).....  | 1            | 2 | 3                | 4 | 5      |
| Stark exploatering.....             | 1            | 2 | 3                | 4 | 5      |
| Slitage på mark och växtlighet..... | 1            | 2 | 3                | 4 | 5      |
| Erosion.....                        | 1            | 2 | 3                | 4 | 5      |
| Nedskräpning.....                   | 1            | 2 | 3                | 4 | 5      |
| Vågsvall.....                       | 1            | 2 | 3                | 4 | 5      |
| Toalettavfall i vattnet.....        | 1            | 2 | 3                | 4 | 5      |
| Algblomning.....                    | 1            | 2 | 3                | 4 | 5      |
| Fästingar.....                      | 1            | 2 | 3                | 4 | 5      |

**B6. Nedan följer ett antal påståenden kring möjlig framtida utveckling i Blekinge skärgård.**

**Markera vad som stämmer bäst med Din uppfattning. Ringa in en siffra för varje påstående.**

|   | Mycket färre | Något färre | Som nu | Något fler | Mycket fler |
|---|--------------|-------------|--------|------------|-------------|
| Antalet naturreservat bör vara.....       | 1            | 2           | 3      | 4          | 5           |
| Antalet badplatser bör vara.....          | 1            | 2           | 3      | 4          | 5           |
| Antalet motorbåtar bör vara.....          | 1            | 2           | 3      | 4          | 5           |
| Antalet fiskeodlingar bör vara.....       | 1            | 2           | 3      | 4          | 5           |
| Antalet fritidshus bör vara.....          | 1            | 2           | 3      | 4          | 5           |
| Antalet gästhamnar bör vara.....          | 1            | 2           | 3      | 4          | 5           |
| Antalet semesteranläggningar bör vara.... | 1            | 2           | 3      | 4          | 5           |
| Antalet besökare bör vara.....            | 1            | 2           | 3      | 4          | 5           |

**B7. Anser Du att turismen bidrar till ett bevarande av natur- och kulturmiljön i Blekinge skärgård?**

☐ Ja, något. *Varför?*

☐ Nej, inte alls.

☐ Ja, mycket. *Varför?*

**B8. Anser Du att turismen hotar natur- och kulturmiljön i Blekinge skärgård?**

☐ Ja, något. *Varför?*

☐ Nej, inte alls.

☐ Ja, mycket. *Varför?*

**C. Nu kommer några frågor om var i Blekinge skärgård Du var som besökare maj-augusti 2007 samt Ditt boende. Dessutom vill vi veta mer allmänt om fritidshusboende i Blekinge skärgård.**

**C1. Vilken/vilka platser besökte Du i Blekinge skärgård maj-augusti år 2007? Kryssa i ett eller flera alternativ. Ta gärna hjälp av kartan!**

- |   |                                       |  |
|---|---------------------------------------|--|
| <input type="checkbox"/> Aspö           | <input type="checkbox"/> Hörvik       | <input type="checkbox"/> Sickelön      |
| <input type="checkbox"/> Aspöskär       | <input type="checkbox"/> Inlängan     | <input type="checkbox"/> Skärva        |
| <input type="checkbox"/> Arpö           | <input type="checkbox"/> Ivö          | <input type="checkbox"/> Slädö         |
| <input type="checkbox"/> Björnön        | <input type="checkbox"/> Joggesö      | <input type="checkbox"/> Spjutsö       |
| <input type="checkbox"/> Bollöarna      | <input type="checkbox"/> Jordö        | <input type="checkbox"/> St. Ekön      |
| <input type="checkbox"/> Boön           | <input type="checkbox"/> Järkö        | <input type="checkbox"/> Stekön        |
| <input type="checkbox"/> Bökenäs        | <input type="checkbox"/> Järnavik     | <input type="checkbox"/> Sturkö        |
| <input type="checkbox"/> Dragsö         | <input type="checkbox"/> Karön        | <input type="checkbox"/> Styrsö        |
| <input type="checkbox"/> Drottningsskär | <input type="checkbox"/> Kidö         | <input type="checkbox"/> Säljö         |
| <input type="checkbox"/> Dunsön         | <input type="checkbox"/> Knösö        | <input type="checkbox"/> Tjörö         |
| <input type="checkbox"/> Ekenäs         | <input type="checkbox"/> Kollevik     | <input type="checkbox"/> Torhamn       |
| <input type="checkbox"/> Ekö            | <input type="checkbox"/> Kristianopel | <input type="checkbox"/> Torhamns udde |
| <input type="checkbox"/> Elleholm       | <input type="checkbox"/> Krokås       | <input type="checkbox"/> Trummenäs     |
| <input type="checkbox"/> Eneholmen      | <input type="checkbox"/> Kungsholmen  | <input type="checkbox"/> Ungskär       |
| <input type="checkbox"/> Eriksberg      | <input type="checkbox"/> Kvalmsö      | <input type="checkbox"/> Utklippan     |
| <input type="checkbox"/> Flaggsskär     | <input type="checkbox"/> Kølvingssö   | <input type="checkbox"/> Utlängan      |
| <input type="checkbox"/> Flaksskär      | <input type="checkbox"/> Lindö        | <input type="checkbox"/> Utö           |
| <input type="checkbox"/> Fäjö           | <input type="checkbox"/> Matvik       | <input type="checkbox"/> Vanö          |
| <input type="checkbox"/> Garnanäs       | <input type="checkbox"/> Maltkvarn    | <input type="checkbox"/> Vagnö         |
| <input type="checkbox"/> Gullö          | <input type="checkbox"/> Mulö         | <input type="checkbox"/> Verkö         |
| <input type="checkbox"/> Gåsfeten       | <input type="checkbox"/> Nastensö     | <input type="checkbox"/> Videskär      |
| <input type="checkbox"/> Haglö          | <input type="checkbox"/> Nordersund   | <input type="checkbox"/> Vångsö        |
| <input type="checkbox"/> Hanö           | <input type="checkbox"/> Ornö         | <input type="checkbox"/> V. Bokön      |
| <input type="checkbox"/> Harö           | <input type="checkbox"/> Pukavik      | <input type="checkbox"/> Ytterön       |
| <input type="checkbox"/> Harön          | <input type="checkbox"/> Ramsö        | <input type="checkbox"/> Äspeskär      |
| <input type="checkbox"/> Hasslö         | <input type="checkbox"/> Rollösö      | <input type="checkbox"/> Öppenskär     |
| <input type="checkbox"/> Hällevik       | <input type="checkbox"/> Saltärna     | <input type="checkbox"/> Ö. Bokön      |
| <input type="checkbox"/> Hästö          | <input type="checkbox"/> Senoren      |  |

☐ Andra platser

**C2. Se fråga C1 ovan – skriv vid platserna Ditt huvudsakliga boende (se koder nedan) samt antalet nätter Du övernattade. Exempel: ☐ Hanö T 2 nätter**

**Boende:**

**F** = Fritidshus

**V** = Vandrarhem, hotell eller konferensgård

**HP** = Hyrt privat hus eller fritidshus

**H** = Husvagn eller husbil

**S** = Släkt och/eller vänner

**B** = Båt

**T** = Tält

☐ **Jag övernattade inte**

**C3. Se fråga C1 ovan, vilken plats är viktigast för Dig? Ringa in ett av alternativen ovan.**

**C4. Varför är denna plats viktigast för Dig? Kryssa i ett eller flera alternativ.**

☐ Havet och stranden

☐ Bra boende

☐ Fritidshuset

☐ Uppleva natur och kultur

☐ Lättillgänglighet

☐ Människor som finns på platsen

☐ Tystnad, lugn och ro

☐ Segling

☐ Åka motorbåt

☐ Annat, vad?

**C5. Har Du regelbundet tillgång till fritidshus i Blekinge skärgård?**

☐ Ja

☐ Nej → gå vidare till fråga C8

**C6. Vem äger fritidshuset Du har tillgång till?**

☐ Jag själv/make/maka/sambo

☐ Vänner och bekanta

☐ Släkt

☐ Jag hyr/lånar regelbundet av någon annan

**C7. Skulle Du vilja utöka tidsperioden av Ditt boende i ett fritidshus i Blekinge skärgård?**

☐ Ja, med ett par veckor per år

☐ Ja, med ett par månader per år

☐ Nej

**C8. Skulle Du vilja bo permanent i Blekinge skärgård?**

☐ Ja

☐ Nej → gå vidare till fråga C10

**C9. Var i Blekinge skärgård skulle Du vilja bo permanent?**

**C10. Är Du intresserad av att köpa ett fritidshus i Blekinge skärgård?**

☐ Ja, för att besöka sommartid

☐ Ja, för att bo permanent

☐ Ja, för att besöka både sommar- och vintertid

☐ Nej

**D. Denna del handlar om buller. Vi vill veta mer om Dina upplevelser och åsikter om buller som besökare i Blekinge skärgård maj-augusti 2007, samt om buller i området och i Sverige mer allmänt.**

**D1. Vilken är Din uppfattning om bullerfria zoner genom restriktioner för allmän motortrafik (på land och vatten) i Sverige i allmänhet?**

☐ Mycket negativ

☐ Negativ

☐ Varken positiv  
eller negativ

☐ Positiv

☐ Mycket positiv

☐ Ingen åsikt

**D2. Vilken är Din uppfattning om bullerfria zoner genom restriktioner för motorbåtstrafik i Sverige i allmänhet?**

☐ Mycket negativ

☐ Negativ

☐ Varken positiv  
eller negativ

☐ Positiv

☐ Mycket positiv

☐ Ingen åsikt

**D3. Upplevde Du i Blekinge skärgård maj-augusti år 2007, någon grad av buller från nedanstående källor? Ringa in en siffra för varje alternativ.**

|                          | Inget | Nästan inget | Något | Ganska mycket | Mycket |
|--------------------------|-------|--------------|-------|---------------|--------|
| Mindre privatbåtar.....  | 1     | 2            | 3     | 4             | 5      |
| Större privatbåtar.....  | 1     | 2            | 3     | 4             | 5      |
| Militärbåtar.....        | 1     | 2            | 3     | 4             | 5      |
| Turbåtar.....            | 1     | 2            | 3     | 4             | 5      |
| Jetski/vattenskoter..... | 1     | 2            | 3     | 4             | 5      |
| Vägrafik.....            | 1     | 2            | 3     | 4             | 5      |
| Industri.....            | 1     | 2            | 3     | 4             | 5      |

|                             |   |   |   |   |   |
|-----------------------------|---|---|---|---|---|
| Trafikflyg på hög höjd..... | 1 | 2 | 3 | 4 | 5 |
| Militärflyg.....            | 1 | 2 | 3 | 4 | 5 |
| Helikopter.....             | 1 | 2 | 3 | 4 | 5 |
| Högljudda människor .....   | 1 | 2 | 3 | 4 | 5 |
| Musik .....                 | 1 | 2 | 3 | 4 | 5 |
| Annat, ange vad.....        | 1 | 2 | 3 | 4 | 5 |

**Var i Blekinge skärgård maj-augusti 2007 upplevde Du ganska mycket eller mycket buller? Ta hjälp av kartan.**

**D4. Vilka faktorer anser Du kan ha betydelse som åtgärder för att minska buller från motorbåtar i Blekinge skärgård? Ringa in en siffra för varje påstående.**

|   | Ingen<br>betydelse |   | Viss<br>betydelse |   | Mycket<br>stor betydelse |
|---|--------------------|---|-------------------|---|--------------------------|
| Fartbegränsning i farlederna.....                                   | 1                  | 2 | 3                 | 4 | 5                        |
| Hastighetskameror (för båttrafik) i farlederna.....                 | 1                  | 2 | 3                 | 4 | 5                        |
| Begränsning i rätten att nyttja området för vissa farkoster .....   | 1                  | 2 | 3                 | 4 | 5                        |
| Begränsning i rätten att nyttja området för vissa aktiviteter ..... | 1                  | 2 | 3                 | 4 | 5                        |
| Information som skapar allmän hänsyn.....                           | 1                  | 2 | 3                 | 4 | 5                        |
| Förbud mot båtar som bullrar mycket.....                            | 1                  | 2 | 3                 | 4 | 5                        |

**D5. Anser Du att det finns "tysta områden", dvs. i det närmaste fria från buller i Blekinge skärgård?**

☐ Nej ☐ Ja Var?

**D6. Vilken är Din uppfattning om bullerfria zoner genom restriktioner för allmän motortrafik (på land och vatten) i Blekinge skärgård?**

☐ Mycket negativ ☐ Negativ ☐ Varken positiv eller negativ ☐ Positiv ☐ Mycket positiv  
☐ Ingen åsikt

**D7. Vilken är Din uppfattning om bullerfria zoner genom restriktioner för motorbåtstrafik i Blekinge skärgård?**

☐ Mycket negativ ☐ Negativ ☐ Varken positiv eller negativ ☐ Positiv ☐ Mycket positiv  
☐ Ingen åsikt

**D8. Vilken är Din uppfattning om fartbegränsningar för motorbåtar i Blekinge skärgård?**

☐ Mycket negativ ☐ Negativ ☐ Varken positiv eller negativ ☐ Positiv ☐ Mycket positiv  
☐ Ingen åsikt

**D9. Vilken är Din uppfattning om hastighetskameror (för båttrafik) i farlederna i Blekinge skärgård?**

☐ Mycket negativ ☐ Negativ ☐ Varken positiv eller negativ ☐ Positiv ☐ Mycket positiv  
☐ Ingen åsikt

**E. Nu kommer frågor om Dina åsikter som besökare i Blekinge skärgård maj-augusti 2007 om strandskydd, om restriktioner mot att röra sig fritt samt om naturreservat. Därtill kommer frågor om möjlig framtida etablering av vindkraft i Blekinge skärgård.**

**E1. I Sverige har vi sedan länge ett strandskydd som innebär att stränderna ska vara tillgängliga för allmänheten, och får inte bebyggas eller spärras av. Tag ställning till dessa påståenden som besökare i Blekinge skärgård maj-augusti 2007. Ringa in en siffra för varje påstående.**

|  | Helt<br>oenig | Delvis<br>oenig | Varken<br>eller | Delvis<br>enig | Helt<br>enig |
|--|---------------|-----------------|-----------------|----------------|--------------|
| Tillgängligheten till strandnära områden/<br>stränder är god.                                | 1             | 2               | 3               | 4              | 5            |
| Tillgängligheten till stränderna för allmänheten<br>har under senare år blivit allt bättre.  | 1             | 2               | 3               | 4              | 5            |
| Kommunerna, i stället för staten, borde få större<br>inflytande över hur stränderna skyddas. | 1             | 2               | 3               | 4              | 5            |

**E2. Har bebyggelse eller andra verksamheter hindrat Dig från att röra Dig fritt i strandnära områden i Blekinge skärgård maj-augusti 2007?**

- ☐ Ja, något. *Varför?* ☐ Nej, inte alls.  
☐ Ja, mycket. *Varför?*

**E3. Har Du under maj-augusti 2007 besökt de tidigare militärområdena i Blekinge skärgård, sedan restriktionerna försvann?**

- ☐ Ja, något. *Varför?* ☐ Nej, inte alls.  
☐ Ja, mycket. *Varför?*

**E4. Påverkade fågel- och/eller sälskyddsområden (med besöksrestriktioner) Din planering av att vara i Blekinge skärgård maj-augusti år 2007?**

- ☐ Ja, något. *Varför?* ☐ Nej, inte alls.  
☐ Ja, mycket. *Varför?*

**E5. Har fågel- och/eller sälskyddsområden (med besöksrestriktioner) hindrat Dig från att röra Dig fritt i Blekinge skärgård maj-augusti år 2007?**

- ☐ Ja, något. *Varför?* ☐ Nej, inte alls.  
☐ Ja, mycket. *Varför?*

**E6. Har Du varit i ett eller flera av naturreservaten i Blekinge skärgård maj-augusti år 2007?**

- ☐ Ja ☐ Nej ☐ Vet inte

**E7. Som besökare i Blekinge skärgård maj-augusti 2007, hur påverkades Du av naturreservaten?**

- ☐ Mycket negativ ☐ Negativ ☐ Varken positiv eller negativ ☐ Positiv ☐ Mycket positiv  
☐ Ingen åsikt

**E8. Vad anser Du om eventuella byggen av vindkraftverk i Blekinge skärgård?**

☐ Mycket negativ      ☐ Negativ      ☐ Varken positiv eller negativ      ☐ Positiv      ☐ Mycket positiv  
☐ Ingen åsikt

**E9. En utbyggnad av vindkraft innebär en visuell förändring i landskapet. Som besökare i Blekinge skärgård år 2007, tag ställning till följande påståenden:**

|  | Mycket negativt | Negativt | Varken eller | Positivt | Mycket positivt |
|--|-----------------|----------|--------------|----------|-----------------|
| 1-2 vindkraftverk inom synhåll vid <u>enstaka</u> tillfälle                              | 1               | 2        | 3            | 4        | 5               |
| 10-12 vindkraftverk (samlade i grupp) inom synhåll vid <u>enstaka</u> tillfälle          | 1               | 2        | 3            | 4        | 5               |
| 1-2 vindkraftverk inom synhåll vid <u>upprepade</u> tillfällen                           | 1               | 2        | 3            | 4        | 5               |
| 10-12 vindkraftverk (samlade i grupp) inom synhåll vid <u>upprepade</u> tillfällen       | 1               | 2        | 3            | 4        | 5               |
| Själva vetskapen om att det finns vindkraftverk i skärgårdsområdet, utan att jag ser dem | 1               | 2        | 3            | 4        | 5               |

**F. Nu följer några frågor om Dina åsikter kring ett skärgårds- eller kustlandskap generellt i SVERIGE.**

**F1. När Du besöker ett svenskt kust- eller skärgårdslandskap, vad anser Du om:**

*Ringa in en siffra för varje påstående.*

|  | Mycket negativt | Negativt | Varken eller | Positivt | Mycket positivt |
|--|-----------------|----------|--------------|----------|-----------------|
| att det finns campingplatser/övernattningsstugor                                       | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns gästhamnar   | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns tillgång till toalett, varm dusch, möjlighet till matlagning inomhus mm. | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns badplatser med badvakt och service                                       | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns skyddade naturområden  | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns markerade vandringsleder   | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns utpräklade farleder/båtsportsleder                                       | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns informationstavlor om natur och kultur                                   | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns regelbundna båtturer till öar  | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns guidade turer i området  | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns allmänna kommunikationer inom området (turbåt, buss, järnväg etc.)       | - 2             | - 1      | 0            | +1       | + 2             |
| att det finns större områden med restriktioner mot hastighet och/eller motorstyrka     | - 2             | - 1      | 0            | +1       | + 2             |
| att se spår efter andra besökare   |                 |          |              |          |                 |



|  |                        |                 |                     |                 |                        |
|--|------------------------|-----------------|---------------------|-----------------|------------------------|
| (ex. eldplatser, slitage, skräp)   | - 2                    | - 1             | 0                   | +1              | +2                     |
| att höra buller (t ex. motorljud)  | - 2                    | - 1             | 0                   | +1              | +2                     |
| att det finns installationer (telemaster, vindkraftsverk)                        | - 2                    | - 1             | 0                   | +1              | +2                     |
| att träffa andra människor   | - 2                    | - 1             | 0                   | +1              | +2                     |
| att det finns en bofast befolkning   | - 2                    | - 1             | 0                   | +1              | +2                     |
| att kunna uppleva avskildhet och stillhet  | - 2                    | - 1             | 0                   | +1              | +2                     |
| att det är ett område med längre än 5 km till närmsta bebyggelse, hamn, väg etc. | - 2                    | - 1             | 0                   | +1              | +2                     |
| att kunna övernatta utom syn- och hörhåll från andra människor                   | - 2                    | - 1             | 0                   | +1              | +2                     |
| att det finns lättillgängliga badstränder  | - 2                    | - 1             | 0                   | +1              | +2                     |
| att det finns av människan orörd natur   | - 2                    | - 1             | 0                   | +1              | +2                     |
| att det finns nödtelefoner   | - 2                    | - 1             | 0                   | +1              | +2                     |
| att det finns sällsynta djur och växter  | - 2                    | - 1             | 0                   | +1              | +2                     |
| att kunna övernatta fritt i tält, segelbåt etc.                                  | - 2                    | - 1             | 0                   | +1              | +2                     |
| att kunna röra sig fritt i området   | - 2                    | - 1             | 0                   | +1              | +2                     |
| att möta utländska besökare  | - 2                    | - 1             | 0                   | +1              | +2                     |
| att det finns bullerfria områden   | - 2                    | - 1             | 0                   | +1              | +2                     |
|  | <b>Mycket negativt</b> | <b>Negativt</b> | <b>Varken eller</b> | <b>Positivt</b> | <b>Mycket positivt</b> |

**G. Slutligen, några frågor om Dig själv och Ditt hushåll. Alla svar behandlas naturligtvis konfidentiellt och i redovisningen framgår det aldrig vad enskilda personer har svarat.**

**G1. Ange Din bostads:**      **Postnummer**.....      **Ort** .....      **Land**.....

**G2. När är Du född? Födelseår 19**\_\_\_\_\_

**G3. Jag är:**      ☐ Kvinna      ☐ Man

**G4. Vilket är Ditt civilstånd?**

- ☐ Ensamstående
- ☐ Gift/sammanboende
- ☐ Särbo
- ☐ Hemmaboende hos föräldrar

**G5. Vilken är Din högsta avslutade utbildning? Kryssa i ett alternativ.**

- ☐ Grundskola/Realskola
- ☐ Gymnasium
- ☐ Folkhögskola
- ☐ Universitet/högskola upp till 120 poäng
- ☐ Universitet/högskola över 120 poäng
- ☐ Annan utbildning:

**G6. Ungefär hur stor var den *sammanlagda* disponibla inkomsten i Ditt hushåll under år 2007 efter avdragen skatt?**

- ☐ Upp till 99 999 kr      ☐ 100 000 – 199 999 kr      ☐ 200 000 – 299 999 kr  
☐ 300 000 – 399 999 kr      ☐ 400 000 – 499 999 kr      ☐ Över 500 000 kr

**G7. Kommer Du att besöka Blekinge skärgård igen?**

- ☐ Ja, helt säkert      ☐ Ja, kanske      ☐ Nej

**G8. Totalt sett, vilket omdöme ger Du Blekinge skärgård maj-augusti år 2007?**

- ☐ Mycket bra      ☐ Dåligt, det mesta kunde ha varit bättre  
☐ Bra, endast några få saker kunde ha varit bättre      ☐ Mycket dåligt  
☐ Ganska bra, några saker kunde ha varit bättre

*Varmt **tack** för Din värdefulla medverkan!*

*Använd det portofria svarskuvertet och återsänd vänligen enkäten snarast möjligt!*

### APPENDIX 3. Registration card youth hostel and camping grounds.

#### Skärgårdsbesökare 2007/ Archipelago visitors 2007/ Schärengartenbesucher 2007

Fyll i ett kontaktkort per person. Om ni är flera i gruppen ber vi alla över 15 år att fylla i ett kort./ One card per person, please./ Eine Karte pro Person, bitte.

Ifyllt/ Filled in/Ausgefüllt am:      **Dag/Day/Tag**       **Månad/Month/Monat**

**Namn/Name/Name** \_\_\_\_\_

**Adress/Address/Strasse u Hausnr.** \_\_\_\_\_

**Postnr/Postcode/Postleitzahl** \_\_\_\_\_ **Hemort/Town/Wohnort** \_\_\_\_\_

**Land/Country/Staat** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Födelseår/Date of birth/Geburtsdatum** \_\_\_\_\_ **Man/Male/Männlich** ☐ **Kvinna/Female/Weiblich** ☐

1. **När anlande du till Blekinge skärgård och när planerar Du att åka härifrån?** When did you arrive to the Blekinge archipelago and when are you planning to leave? Wann war der Tag Ihrer Anreise und wie lange haben Sie vor zu bleiben?

**Ankomstdatum/Day of arrival/Tag der Anreise** \_\_\_\_\_

**Avresedatum/Day of departure/Tag der Abreise** \_\_\_\_\_

2. **Vilken är Din huvudsakliga aktivitet under besöket?** Which is your main activity during the stay?

Welche ist die hauptsächliche Aktivität während Ihres Besuches?

**Tack för Din hjälp! / Thank you for your help! / Vielen Dank für Ihre Mithilfe!**

*Rosemarie Ankre Projektledare*

*BTH/ETOUR*

*Lars Emmelin Prof. Fysisk*

*planering BTH samt ETOUR*

### APPENDIX 4. Tour boat.

#### Skärgårdsbesökare 2007/ Archipelago visitors 2007/ Schärengartenbesucher 2007

Fyll i ett kontaktkort per person. Om ni är flera i gruppen ber vi alla över 15 år att fylla i ett kort./ One card per person, please./ Eine Karte pro Person, bitte.

Ifyllt/ Filled in/Ausgefüllt am:      **Dag/Day/Tag**       **Månad/Month/Monat**

**Namn/Name/Name** \_\_\_\_\_

**Adress/Address/Strasse u Hausnr.** \_\_\_\_\_

**Postnr/Postcode/Postleitzahl** \_\_\_\_\_ **Hemort/Town/Wohnort** \_\_\_\_\_

**Land/Country/Staat** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Födelseår/Date of birth/Geburtsdatum** \_\_\_\_\_ **Man/Male/Männlich** ☐ **Kvinna/Female/Weiblich** ☐

1. **Är Ditt besök över dagen JA** ☐ **eller med övernattning JA** ☐ **antal nätter** \_\_\_\_\_

Is your visit over the day **YES** ☐ **or** do you stay overnight **YES** ☐ number of nights \_\_\_\_\_

Bleiben Sie nur fuer einen Tag **Ja** ☐ **oder** haben Sie vor ueber Nacht zu bleiben **Ja** Anzahl der Nächte \_\_\_\_\_

2. **Vilken är Din huvudsakliga aktivitet under besöket?** Which is your main activity during the stay?

Welche ist die hauptsächliche Aktivität während Ihres Besuches?

**Tack för Din hjälp! / Thank you for your help! / Vielen Dank für Ihre Mithilfe!**

*Rosemarie Ankre Projektledare*

*BTH/ETOUR*

*Lars Emmelin Prof. Fysisk planering BTH samt ETOUR*

## APPENDIX 5. Eriksberg.

### Skärgårdsbesökare 2007/ Archipelago visitors 2007/ Schärengartenbesucher 2007

Fyll i ett kontaktkort per person. Om ni är flera i gruppen ber vi alla över 15 år att fylla i ett kort./ One card per person, please./ Eine Karte pro Person, bitte.

Ifyllt/ Filled in/Ausgefüllt am:      **Dag/Day/Tag**       **Månad/Month/Monat**

**Namn/Name/Name** \_\_\_\_\_

**Adress/Address/Strasse u Hausnr.** \_\_\_\_\_

**Postnr/Postcode/Postleitzahl** \_\_\_\_\_ **Hemort/Town/Wohnort** \_\_\_\_\_

**Land/Country/Staat** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Födelseår/Date of birth/Geburtsdatum** \_\_\_\_\_ **Man/Male/Männlich** ☐ **Kvinna/Female/Weiblich** ☐

**1. Äger Du eller har tillgång till ett fritidshus i Blekinge? Ja** ☐ *Var?*

Do you own or have access to a second home in Blekinge? Yes ☐ *Where?*

Besitzen Sie ein eigenes Sommerhaus oder haben Sie Zugang zu einem Sommerhaus in Blekinge?

Ja ☐ *Wo?*

**2. Var övernattade Du föregående natt? Where did you stay last night? Wo haben Sie letzte Nacht übernachtet?**

**Tack för Din hjälp! / Thank you for your help! / Vielen Dank für Ihre Mithilfe!**

*Rosemarie Ankre Projektledare      BTH/ETOUR*

*Lars Emmelin Prof. Fysisk planering BTH samt ETOUR*

## APPENDIX 6. Guest harbours.

### Skärgårdsbesökare 2007/ Archipelago visitors 2007/ Schärengartenbesucher 2007

Fyll i ett kontaktkort per person. Om ni är flera i gruppen ber vi alla över 15 år att fylla i ett kort./ One card per person, please./ Eine Karte pro Person, bitte.

Ifyllt/ Filled in/Ausgefüllt am:      **Dag/Day/Tag**       **Månad/Month/Monat**

**Namn/Name/Name** \_\_\_\_\_

**Adress/Address/Strasse u Hausnr.** \_\_\_\_\_

**Postnr/Postcode/Postleitzahl** \_\_\_\_\_ **Hemort/Town/Wohnort** \_\_\_\_\_

**Land/Country/Staat** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Födelseår/Date of birth/Geburtsdatum** \_\_\_\_\_ **Man/Male/Männlich** ☐ **Kvinna/Female/Weiblich** ☐

**1. När anlände Du till Blekinge skärgård för att segla och när planerar Du att lämna skärgården?**

When did you arrive to the Blekinge archipelago to sail and when are you planning to leave? Wann war der Tag Ihrer Anreise und wie lange haben Sie vor zu bleiben?

**Ankomstdatum/Day of arrival/Tag der Anreise** \_\_\_\_\_

**Avresedatum/Day of departure/Tag der Abreise** \_\_\_\_\_

**2. Vilken hamn låg Du i föregående natt? Which harbour did you stay at last night? In welchem Hafen haben Sie mit Ihrem Boot letzte Nacht geankert?**

☐ Gästhamn \_\_\_\_\_

☐ Naturhamn \_\_\_\_\_

**Tack för Din hjälp! / Thank you for your help! / Vielen Dank für Ihre Mithilfe!**

## APPENDIX 7. The field workers' sampling.



### EGEN SAMPLING

#### Skärgårdsbesökare 2007/ Archipelago visitors 2007/ Schärengartenbesucher 2007

Fyll i ett kontaktkort per person. Om ni är flera i gruppen ber vi alla över 15 år att fylla i ett kort./ One card per person, please./ Eine Karte pro Person, bitte.

Ifyllt/ Filled in/Ausgefüllt am:

Dag/Day/Tag

Månad/Month/Monat

Namn/Name/Name

Adress/Address/Strasse u Hausnr.

Postnr/Postcode/Postleitzahl

Hemort/Town/Wohnort

Land/Country/Staat

Email:

Födelseår/Date of birth/Geburtsdatum

Man/Male/Männlich ☐ Kvinna/Female/Weiblich ☐

1. När anlände du till Blekinge skärgård och när planerar Du att åka härifrån? When did you arrive to the Blekinge archipelago and when are you planning to leave? Wann war der Tag Ihrer Anreise und wie lange haben Sie vor zu bleiben?

Ankomstdatum/Day of arrival/Tag der Anreise

Avresedatum/Day of departure/Tag der Abreise

2. Vilken är Din huvudsakliga aktivitet under besöket? Which is your main activity during the stay?

Welche ist die hauptsächliche Aktivität während Ihres Besuches?

Tack för Din hjälp!/ Thank you for your help!/ Vielen Dank für Ihre Mithilfe!

Rosemarie Ankre Projektledare  
planering BTH samt ETOUR

BTH/ETOUR

Lars Emmelin Prof. Fysisk

## **APPENDIX 8. Interview questions.**

**Interview Elisabet Wallsten, the Blekinge county administration board and coordinator for the Blekinge archipelago Candidate biosphere reserve.**

**Interview Åke Widgren, Nature department, the Blekinge county administration board.**  
Date 230408.

### *The establishment of a future biosphere reserve*

- What lies behind the attempt of establishing a biosphere reserve of the Blekinge archipelago? Which are the strong factors?
- Which knowledge has Blekinge county administration board received from other biosphere reserves (Swedish or foreign)? How has the knowledge affected the description and vision of the Blekinge archipelago?
- Which are the strengths with a biosphere reserve?
- Which are the weaknesses with a biosphere reserve?
- How should the biosphere reserve function as a tool for sustainable development according to the Blekinge county administration board?
- Has there been any expressed criticism against the plans of a biosphere reserve (locally, regionally, politically etc.)?
- How is the local reply to the biosphere reserve? Has the Blekinge county administration board consulted different groups of society – the difference of consultation and participation?
- How is the relationship between the Blekinge county administration board and the municipal planning?
- What has it meant that Sölvesborg decided to withdraw from the process?

### *Conflicts*

- Are there conflicts in the area which the Blekinge county administration board would like to handle by the biosphere reserve and by zoning? If so, which conflicts and how exact? Can the conflicts be identified geographically?
- Is noise a conflict? If yes, how should it be handled? Has noise any significance in the planning for tourism and outdoor recreation?
- Does the Blekinge county administration board believe that there are “quiet areas” in the archipelago? If yes, where? Should there be noise-free areas created? Yes or no – why?

### *The zoning*

- How should the zoning be accomplished in the Blekinge archipelago? Where should the core areas, the buffer zones and the transformation areas be? Which deliberation is behind it? Are there any difficulties? If yes, why and where?
- Are there any plans for more nature reserves, which could be core areas?
- Does the Blekinge county administration board focus upon a certain zone? If yes, why?
- Which significance do the different zones have for different parts of the archipelago’s development? How is development defined? Has Karlskrona municipality a special priority?
- Which connection has the establishment of a biosphere reserve have to nature tourism, protected areas and regional development? How should nature and culture conservation, and tourism/outdoor protection interact?

### *Tourism and outdoor recreation*

- Does the Blekinge county administration board believe that the nomination of a biosphere reserve is strength for tourism development? How and why?
- Which significance has a biosphere reserve has for visitors, according to the Blekinge county administration board? To second home owners? How should visitors/second home owners get knowledge of the biosphere reserve?
- Why tourism development wasn't part of the preliminary studies and how will the Blekinge county administration board to work with the tourism issues in the future? How should tourism development look like in a biosphere reserve – vision and concrete measurements?
- How could the Blekinge county administration board use visitor segmentation as a method? How should the visitors be controlled? Where?
- How is the work of becoming a biosphere reserve proceeding? Which desired developed is wanted by Karlskrona municipality?

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**Interview SO Petersson, Karlskrona municipality.** Date 240408.

**Interview PO Mattsson, Karlshamn municipality and  
Lena Axelsson, head of tourism in Karlshamn municipality.** Date 270508.

**Interview Anna-Karin Sonesson, Ronneby municipality and  
Emma Berntsson, Ronneby municipality.** Date 090708.

### *The establishment of a future biosphere reserve*

- What lies behind the attempt of establishing a biosphere reserve of the Blekinge archipelago? Which are the strong factors?
- How should the biosphere reserve function as a tool for sustainable development according to the municipality?
- Which knowledge has municipality received from other biosphere reserves (Swedish or foreign)? How has the knowledge affected the description and vision of the Blekinge archipelago?
- Which are the strengths with a biosphere reserve?
- Which are the weaknesses with a biosphere reserve?
- Has there been any expressed criticism against the plans of a biosphere reserve (locally, regionally, politically etc.)?
- How is the local reply to the biosphere reserve? How have the local people been able to express themselves?
- Is there a cooperation between the municipalities of Blekinge – if yes, of is it organised? How is the relationship between the municipal planning and the county administration board?
- What has it meant that Sölvesborg decided to withdraw from the process?

### *The zoning*

- How should the zoning be accomplished in the Blekinge archipelago? Where should the core areas, the buffer zones and the transformation areas be? Which deliberation is behind it? Are there any difficulties? If yes, why and where?
- What is important to the Karlskrona municipality to consider at the zonation?
- Which significance do the different zones have for different parts of the archipelago's development? How is development defined? Has Karlskrona municipality a special priority?

### *Conflicts*

- Are there conflicts in the area which Karlskrona municipality would like to handle by the biosphere reserve and by zoning? If so, which conflicts and how exact? Can the conflicts be identified geographically?
- Is noise a conflict? If yes, how should it be handled? Has noise any significance in the planning for tourism and outdoor recreation?
- Does Karlskrona municipality believe that there are "quiet areas" in the archipelago? If yes, where? Should there be noise-free areas created? Yes or no – why?

### *Tourism and outdoor recreation*

- Does Karlskrona municipality believe that the nomination of a biosphere reserve is strength for tourism development? How and why?
- Which significance has a biosphere reserve has for visitors, according to Karlskrona municipality? To second home owners? How should visitors/second home owners get knowledge of the biosphere reserve?
- Why wasn't tourism development part of the preliminary studies and how will Karlskrona municipality to work with the tourism issues in the future? How should tourism development look like in a biosphere reserve – vision and concrete measurements?
- Does Karlskrona municipality believe that visitors and second home owners could add planning and be part of planning? If yes, how? For example in the work with the biosphere reserve?
- How does Karlskrona municipality regard that the comprehensive plan could develop further by knowledge of tourism and outdoor recreation? Which methods are wanted in planning to increase the knowledge of tourism and outdoor recreation?
- How is the work of becoming a biosphere reserve proceeding? Which desired developed is wanted by Karlskrona municipality?







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