

**WADDEN SEA ECOSYSTEM No. 25**

**Quality Status Report 2009  
Thematic Report No. 3.4**

# **Tourism and Recreation**

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## Colophon

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### 3.4.1 Introduction

#### 3.4.1.1 Economic factor tourism

Tourism has continued to play a very important role in the economy. The total revenue in Denmark is 8.9 billion Euros per year, accounting for 2.8% of the national income and around 100,000 jobs, which corresponds to approximately 5.2% of the employed (VisitDenmark 2007, see also the German/Danish economic portal: [www.GrenzNet.com](http://www.GrenzNet.com)).

According to the German Tourism Association (2008) the tourism sector accounts for yearly revenues of around 150 billion Euros, and the total proportion of jobs dependent on tourism in Germany is around 8% (Deutscher Tourismusverband DTV e.V. 2008). On the average, it accounts for about 6% of the gross national product.

In the Netherlands, tourism generates around 35 billion Euro in revenue. It accounts for 3% of the national income (Centraal Bureau voor de Statistiek 2008) and employs 7.2% of the population (Instituut Service Management 2008).

The total revenue in Denmark is 8.9 billion Euros per year, accounting for 2.8% of the national income and around 100,000 jobs, which corresponds to approximately 5.2% of the employed (VisitDenmark 2007, see also the German/Danish economic portal: [www.GrenzNet.com](http://www.GrenzNet.com)).

The statistics on overnight stays in the Wadden Sea states show that tourism plays a very important role, particularly in the coastal regions.

The umbrella organization for tourism marketing in Denmark estimates a total of 37.6 million overnight stays along Denmark's coasts. The German-Danish economic portal assesses tourism there to have an importance similar to neighboring Germany. For southern Jutland alone a figure of 9.5 million overnight stays is given for the year 2006. The immediate vicinity of the coast is estimated to account for around 6.6 million overnight stays in the Wadden Sea region (personal communication T. H. Christensen, 31 October 2008).

The Nordseetouristik Service GmbH estimates the number of overnight stays in the North Sea coastal area to be around 15 million annually (Höfinghoff 2008), which is about one third of the total volume of overnight stays in Schleswig-Holstein. In Lower Saxony, the North Sea coast and the East Frisian Islands account together for around 13,4 million overnight stays, which also amounts to around one third of the total volume (IHK Ostfriesland and Papenburg.).

In the Netherlands, 88 million overnight stays were estimated in 2007 of which 13.5 million were estimated for the provinces of Friesland and Groningen (13.7 million in 2008) (Instituut Service Management, 2008 and 2009). 4.4 million of these overnight stays were counted on the Wadden Sea islands of Friesland. On the island of Texel (Province of North-Holland), the number of overnight stays amounted to 3.9 million in 2006 and 2007, and 4.1 million in 2008 (pers. comm. VVV Texel)

A look at the indicator for "tourism intensity" (the ratio of overnight stays to inhabitants) reveals the significant role of tourism, particularly for the – mainly rural – coastal areas bordering the Wadden Sea.

In Germany, the national average for tourism intensity is around 4 overnight stays per inhabitant. In the recreational areas at the North Sea coast in Schleswig-Holstein, an average of 67 overnight stays per inhabitant is documented. This means that 37.5% of the aggregate income on the west coast is coming from tourism. For the year 2005, it is estimated that 41,600 of the 110,900 inhabitants in the North Sea recreational area earned their livings from tourism, generating total annual revenues of 1.5 billion Euros. Two thirds of this came from overnight tourism and one third from day trips (Wirtschaftsförderungsgesellschaft Nordfriesland 2006).

Due to the structural similarities between Germany and Denmark, it can be assumed that Danish tourism intensity is of a comparable order of magnitude. For the Netherlands, which has the highest population density in Europe, a lower tourism density can be expected. The corresponding value added to the gross domestic product will thus be lower there.

#### 3.4.1.2 Resource Nature

The fact that nature is the main resource which can be marketed by tourism is underlined each year with the new publication of the travel analysis by the research council "Vacation and Travel" (Forschungsgemeinschaft Urlaub und Reisen, F.U.R. Kiel). Also, the study "Vacation trips and the environment", by the "Study group for tourism and development" (SfTE), has documented for years the fact that nature is the central element determining the appeal of the area for tourists (DTV 2005). An intact natural environment is an important factor for vacation satisfaction for 84% of the German populace (SfTE 2005). In its travel analysis for the year 2006, the research council "Vacation and Travel" found that 36% of the German populace

### Best Practice example: Socio-Economic-Monitoring

Since 1999 the Schleswig-Holstein Wadden Sea National Park Bureau has been carrying out a so-called Socio-Economic Monitoring (SEM). The monitoring entails counts of Wadden Sea guided walks as well as surveys of inhabitants and guests, addressing running topics and current issues in the national park. The SEM in 2008 showed among other things that North Sea tourists in Schleswig-Holstein place value on recreation (89%), nature (29%), health (16%) and sports (14%) (multiple answers were possible) (Institut für Bäderforschung in Nordeuropa (N.I.T.), 2006/2007 nach Nationalparkverwaltung Schleswig-Holsteinisches Wattenmeer (Hrsg.), 2008B ([http://www.wattenmeer-nationalpark.de/themen/SOEM\\_Bericht\\_2008.pdf](http://www.wattenmeer-nationalpark.de/themen/SOEM_Bericht_2008.pdf)))

consider a "nature vacation" to be a form that they would either consider or are actually planning for the near future (F.U.R. 2006). Of those interested in a vacation at the North Sea coast, the proportion is, with 45%, even higher (Nationalparkverwaltung Schleswig-Holsteinisches Wattenmeer 2008a). The chance to visit a nature preserve or national park is important for 33% of the German populace (SfTE 2005).

Surveys in Denmark also document the fact that nature is a significant factor determining the choice of a travel destination. In Danish studies 82% per cent of the visitors named nature as the motivation for their trip, followed by the tidiness of the countryside (64%) as well as the safeness and child-friendliness (60% each) (VisitDenmark 2007).

In a representative study carried out in 2006 by the Emnid Institute on behalf of Europarc, it became evident that vacationers also regard the protective status of a national park to count towards "vacation quality" and to at least have a positive influence on the choice of destination. Seventy-one per cent of the questioned answered in the affirmative when asked whether they prefer to spend their vacation in an area where nature is protected as a national park (Nationalparkverwaltung Schleswig-Holsteinisches Wattenmeer 2008a).

### 3.4.2 Update of tourism data

The update of information for this Quality Status Report on tourism and recreational activities has been carried out on the basis of the parameters used for 2004. This continued consideration allows comparisons, at least in some areas, and makes it possible to recognize trends in the development. The structure was changed slightly for the QSR 2009. In the following, the parameters will be divided into those which describe the general tourism market and those related to activities. As in the previous years, the latter are separated into land-based and water-based uses of the Wadden Sea.

Particularly the numbers of guest arrivals and overnight stays are useful for describing tourism demand. Setting them in relation to each other, an average stay duration can be derived. This

### Trilateral Policy and Management

It is the aim to reduce disturbance caused by recreation and tourism by introducing and applying information systems and/or temporal and spatial zoning. (WSP § 3.1.12, identical with 5.1.8).

Speed limits within the tidal area have been, or will be, imposed where such is deemed necessary. (WSP § 4.1.9)

The recreational values of the Wadden Sea will be maintained and to this end,

- in the ecologically most sensitive areas, zones have been or will be established where no recreational activities, including excursion ships and recreational boating, is allowed;
- the use of jet skis, water skis and similar motorized equipment has been, or will be, prohibited, or limited, to small designated areas;
- within the Conservation Area, new marinas will be avoided and the extension of the existing marina capacity will only be allowed within the approved levels;
- wind surfing has been, or will be, limited. (WSP § 4.1.21)

Speed limits for ships have been, or will be, imposed, if this is deemed necessary, taking into account safety, environmental and recreational factors. (WSP § 4.1.22)

The negative effects of hovercraft and hydrofoil craft and

other high-speed craft are minimized by the following strategies:

- In The Netherlands and Germany, hovercraft and hydrofoil craft are forbidden in the tidal area of the Conservation Area; new, other high speed craft are forbidden outside the designated shipping routes in the area;
- In Denmark, applications for new, high-speed craft can only be granted on the basis of an Environmental Impact Assessment and if it is not in conflict with the nature protection targets for the area. (WSP § 4.1.23)

It is the aim to reduce disturbance caused by recreation and tourism by introducing and applying information systems and/or temporal and spatial zoning. (WSP § 5.1.8, identical with 3.1.12 and 4.1.24).

Ground water extraction will be managed in such a way that no negative effects on wet dune valleys occur. (WSP § 5.1.10)

Disturbance in significant breeding areas will be reduced and access to these areas will be made more predictable for birds, i.e. using only certain footpaths on salt marshes, beaches and dunes (information system for visitors). (WSP § 9.1.6)

Driving cars in breeding areas on beaches and in dunes is prohibited. (WSP § 9.1.8)

(Trilateral Wadden Sea Plan (WSP), 1997)

Tourism-related Parameter	Denmark		Germany				The Netherlands	
			Lower Saxony		Schleswig-Holstein			
	QSR 04	QSR 09	QSR 04	QSR 09	QSR 04	QSR 09	QSR 04	QSR 09
Arrivals				x		x		x
Overnight stays >9	x	x	x	x	x	x	x	x
Average duration of stay in days			x	x	x	x	x	x
Number of beds	x		x - total value for Germany	x	x - total value for Germany	x	x	
Bed capacity utilization		x		x		x		
Foreign visitors in %		x		x		x		x
Daily spending (commercial operations)		x	General value and Weser-Ems Region	x				x
Revenues from overnight visitors		x		x		x		x
Day trips				x		x		x
Total revenues	x	x		x	x	x	x	x
Number of employees		x		x				
Gray accommodations market			x		x	x		
SÖM Report					x	x		

Table 1:  
Overview of tourism related parameter available for the QSR 2004 and 2009.

is especially important for the development of products and marketing, since it indicates the marketability of potential offerings.

The number of beds, set into relation with the number of overnight stays, gives information about the capacity utilization of the accommodations, and an insight into the economic status of the hospitality industry of a region. Together with knowledge about the daily spending of visitors to the region, it is possible to calculate the tourism-related revenues of the first and second chains of economic value added (DWIF 2005).

The following table gives an overview of the data which were shown in the QSR 2004 compared with those which are available for the QSR 2009. Updates have not been made available by the bureaus of statistics and/or tourism organizations for all parameters in the different countries. In these cases attempts were made to complete the data by personal communication with the experts in each country.

Due to the high degree of variability in the survey methods, particularly of the tourism parameters in the individual Wadden Sea states, the descriptions of the development in tourism will first be given separately for the different countries

and then summarized in order to point out trends and draw conclusions.

A comparison of the tourism data compiled for the QSR 2004 with the recent data were not be carried out because the statistical methods have been modified in some of the regions which considerably limits the conclusions that can be drawn from these data

### 3.4.2.2 Basic data on tourism demand

#### Denmark

The number given for overnight stays in commercial operations in the Danish Wadden Sea (excluding camping) was 3.1 million for the year 2007 (dwif-Consulting GmbH, 2008, Lecture by Mathias Feige, Tourismstag Schleswig-Holstein, 19 November 2008). The average capacity utilization of beds was 33.1% (SGVSH, 2008b).

The average amount of money spent by tourists in the Danish Wadden Sea region was 54Euro per day (personal communication Christensen, 31 October 2008).

In the year 2007, 2.3 million overnight stays were registered for hotels, holiday resorts, camping resorts, hostels and marinas. Multiplying this

### Specific features of the data collection for tourism parameters in Denmark

The Danish statistics are based mainly on larger accommodations with more than 40 beds and camping resorts with more than 75 sites. The statistics for overnight stays include summer bungalows, hotels, holiday resorts, camping resorts, hostels and marinas (personal communication Christensen, 31 October 2008). Since the renting structure in the Danish Wadden Sea area is of a similarly small scale as in Germany, it can be assumed that the actual number of beds and accommodations is much higher than the statistics show.

figure by the average daily expenditures yields revenues of 125.3 million Euros.

In the year 2006, the number of overnight stays registered in the counties of Ribe and South Jutland was 4,315,200 for summer bungalows alone. For the year 2007 there are no data available for summer bungalow guests (personal communication Christensen, 31 October 2008).

The revenue generated by the renting out of summer bungalows was 233 million Euros in 2006. Taken together this would yield a calculated revenue of around 358.3 million Euros.

In the houses covered by the statistics, the beds were distributed in the municipalities of Varde, Esbjerg, Fanø and Tønder over 27 hotels, 15 holiday resorts, 34 camping resorts as well as 12 Hostels and Marinas. Together, the hotels and holiday resorts generated 95.2% of the revenue in the branch and the camping resorts 96.4%. In 2007, the 88 operations surveyed, registered a total of 2,319,900 overnight stays, of which 56.3% were at camping grounds, 42.1% in hotels and holiday resorts, as well as 1.4% in hostels and marinas (personal communication Christensen, 31 October 2008) (Table 2).

The revenues calculated for 2007 in the regions Varde, Esbjerg, Fanø, Tønder and Vejen are thus 241.4 million Euros. In total, around 10,000 per-

sons are employed in the tourist industry in this region. It is assumed that this would amount to a total of around 3,500 full-time jobs (personal communication Christensen, 31 October 2008).

### Germany

The German states Lower Saxony and Schleswig-Holstein are considered individually in the following, since the surveys are carried out separately in the two states.

For Lower Saxony, the tourism organization "Tourismusverband Nordsee e.V." published for the first time its "Concept for the future of North Sea tourism 2015" in the year 2008. This makes it possible to present the tourism industry of the region in great detail for the year 2007. The data on tourism in Schleswig-Holstein are based on the surveys of the "Savings Bank Tourism Barometer", supplemented by the regional collections of annual tourism statistics by the North Sea coastal resort association (Nordseebäderverband Schleswig-Holstein e.V., NBV), which also covers the "gray accommodations market".

### Specific features of the data collection for tourism parameters in Germany:

The official tourism statistics from the Bureau of Statistics in Germany include all operations with more than eight beds. Operations with less than nine beds are thus not represented in their figures. However, in rural structured regions like the North Sea coast of Schleswig-Holstein the percentage of vacation accommodations rented out by small operations can be up to 80%. These belong to the so-called "gray accommodations market" and are not accounted for in the official statistics.

### Lower Saxony

The number of beds available in the coastal areas of the Lower Saxony Wadden Sea was 75,958 for the year 2007 (17,283 of which were hotel beds) (Tourismusverband Nordsee e.V., 2008). In 2007

Table 2:  
Tourism on the Danish  
North Sea coast

	No. of enterprises				No. of overnight stays			
	2004	2005	2006	2007	2004	2005	2006	2007
Hotels*	28	28	27	27	396,200	388,300	418,800	412,700
Holiday resorts	15	13	14	15	366,200	302,900	288,400	564,100
Camping resorts	36	35	35	34	1,368,500	1,321,900	1,392,200	1,311,100
Hostels & marinas**	12	12	12	12	36,200	35,400	35,300	32,000
<b>TOTAL</b>	<b>91</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>2,167,100</b>	<b>2,048,500</b>	<b>2,134,700</b>	<b>2,319,900</b>
* Data include hostels for Esbjerg Municipality								
** Data only cover marinas for Esbjerg Municipality								
Data are limited to information from hotels and holiday resorts with 40 beds or more and camping resorts with 75 units or more. These are known to account for 95.2% and 96.4% of the market turnover respectively.								
Source: Newsletter for Service enterprises from Statistics Denmark ( <a href="http://www.dst.dk/HomeUK.aspx">http://www.dst.dk/HomeUK.aspx</a> ) 2007:16 and 2008:11, (personal communication Christensen, 31 October 2008, 7 November 2008).								

Region North Sea	Duration of stay in days	Ø Daily expenditures per person* (Euro)	Revenues (Euro)
Commercial operations	11,614,000	67.42	783,036,000
Operations with < 9 Beds	9,109,000	47.70	434,483,000
Tourist camping	1,807,000	25.60	46,251,000
Long-term camping	3,626,000	16.90	60,386,000
Recreational vehicles	412,000	37.20	15,332,000
Vacation bungalows	2,832,000	25.10	71,075,000
Visits to friends and relatives	7,570,000	19.50	147,799,000
Day trips	32,555,000		824,767,000
<b>TOTAL</b>	<b>69,525,000</b>		<b>2,383,129,000</b>
* from dwif data			
Source: Tourismusverband Nordsee e.V., 2008			

Table 3:  
Tourism at the North Sea coast of Lower Saxony in the year 2006

Lower Saxony had more than 1.86 million visitors to the coastal regions and islands and 13.4 million overnight stays. At the seaside resorts 4.7 million overnight stays and 698,128 visitors were registered. The number of overnight stays on the East Frisian Islands was 9.1 with a total of 1.16 visitors (overnight stays: 65.8% on the islands and 34.2% on the mainland; visitors: 62.5% on the islands and 37.5% on the mainland). This corresponds to a duration of stay of 7.8 days on the islands and 6.8 days on the mainland (IHK Ostfriesland and Papenburg, 2008). In comparison to the year 1985 this means a reduction in the duration of stays by half, which is in agreement with general vacationing trends.

In recent years, overnight stays in accommodation enterprises with more than nine beds have decreased in the region. Between 2000 and 2007 operations with more than nine beds in the East Frisian Islands lost more than ten per cent, and on the coast (including Bremerhaven) there was a decrease of more than 5%. In contrast, operations with less than nine beds have shown a light upsurge in the number of overnight stays (calculated from research results). As a result, the total number of overnight stays remain on a same level. (Tourismusverband Nordsee e.V., 2008).

The bed capacity utilization in 2007 was 35.2% on the islands and 31.3% on the mainland. The

proportion of foreign guests staying overnight was 0.5% on the islands and 2% in the coastal mainland (SGVSH, 2008a).

In the year 2006 there were a total of 69.5 million days of stay, and revenues of 2.38 Euros were generated (see Tab. 3). After subtracting the value-added tax, this amounts to tourism-generated net revenues of 2.12 billion Euros for the North Sea coast of Lower Saxony. 38% of these revenues can be allotted to gastronomy, 20% to accommodations, 25% to retail sales, 8% to services, 7% to maintenance and 2% to transportation. For the region, a job equivalent of 40,383 full-time jobs in tourism is calculated (Tourismusverband Nordsee e.V., 2008).

#### *Schleswig-Holstein*

In the year 2007 there were 7.867.300 overnight stays in operations with more than nine beds on the North Sea coast of Schleswig-Holstein. The number of beds is declining slightly (Tab. 4). In 2007, there were almost 65,000 beds available on the North Sea coast, and the utilization of this capacity was around 33.2%. The proportion of foreign guests was 1.1% in 2007 (SGVSH, 2008a, 2007).

In the so-called "gray accommodations market" around 36,000 beds were available in vacation rentals during 2007. In that year there were around 3.5 million overnight stays in these rentals

	2007	2006	2005	2004
Overnight stays > 8 Beds	7,867,300	7,530,900	7,393,100	7,440,200
Number of beds > 8 Beds	64,973	64,911	65,290	63,378
Bed capacity utilization	33.20%	31.80%	31.10%	30.90%
Day trips	n.s.	15 Mio	13.8 Mio.	14 Mio.
Source: SGVSH (2008, 2007, 2005)				

Table 4:  
Tourism at the North Sea coast of Schleswig-Holstein

along the North Sea coast of Schleswig-Holstein. With a capacity utilization of 25.5%, these operations lie below those with more than nine beds (SGVSH, 2008a, 2007).

In the tourism statistics of the North Sea coastal resort association (Nordseebäderverband Schleswig-Holstein e.V., NBV), the official and the "gray" accommodations markets are presented together. This results in a total bed capacity of 115,865 beds for the year 2007, for which 15.7 million overnight stays were recorded, 12.5 million of which were in vacation rentals and hotels. A total of 1,932,872 guests were registered, and the average stay was seven days (NBV, 2007).

Day trips to the North Sea coast of Schleswig-Holstein play a prominent role. In the year 2006 there were 15 million day trips, of which 83.2% were recreational and 16.6% for business purposes. The expenditures were 33.10 Euro/day for recreational day guests and 16 Euro/day for business travelers. This results in revenues of 453.7 million Euros for day trips, of which 413.7 million Euros were spent by recreational visitors and 40 million Euros by business travelers (SGVSH, 2008a, 2007).

In order to determine the revenue from tourism in the Wadden Sea region of Schleswig-Holstein for the year 2005, expenditures of 73.30 Euros per overnight guest and 33.10 Euros per day guest were assumed (NBV Schleswig-Holstein, 2006). The number of overnight stays in the year 2007 was 15.7 million. If these figures are multiplied, this yields a total revenue of 1.15 billion Euros for overnight stays.

For the year 2007 there are no data on day trips, so the 12.5 recreational day guests from the year 2006 are taken as a basis for calculations, which yield additional revenues of 413.7 million Euros. Taken together, this amounts to approximate revenues of 1.5 billion Euros for the North Sea coast of Schleswig-Holstein.

Table 5:  
Number of enterprises in  
the provinces of Groningen  
and Friesland in 2007,  
Source: Instituut Service  
Management, 2008.

	Groningen	Friesland	Total
Hotels	74	176	250
Accommodation with breakfast (Logies en ontbijt)	140	286	426
Erfgoedlogies	44	47	91
Camping	113	349	462
Recreation parks	22	153	175
Group accommodations	28	186	214
Marinas	45	218	263
<b>Total</b>	<b>466</b>	<b>1415</b>	<b>1881</b>

#### The Netherlands

The basis for the description of the tourism market in the Netherlands is the study "Toerisme in Cijfers 2003 – 2007" and "Tourisme in Cijfers 2009" published by the "Instituut Service Management" and „Toerisme en recreatie in cijfers 2008" published by the „Centraal Bureau voor de Statistiek".

The region of the tourism analysis for which statistical data are published covers the entire provinces of Frisland and Groningen and the island of Texel (Province of Noord-Holland) (the so-called "Wadden Sea Region"<sup>9</sup>). The same area was chosen for the QSR 2004 and in the NetForum project (2000) although not all tourism is entirely related to the Wadden Sea. A more specific analysis of the Wadden Sea related tourism to was outside the scope of the QSR but is recommended for future analyses.

In the year 2007 1,362 operations on the Wadden Sea islands and at the North Sea seaside offered a total of 263,859 beds (personal communication Hilkhuijsen, 26 November 2008). Amongst other, 250 hotels and 462 camping grounds offer accommodation in the Provinces of Groningen and Friesland, In total over 1880 enterprises were recorded.

#### Specific features of the data collection for tourism parameters in the Netherlands

The statistics for Studie "Toerisme en recreatie in cijfers 2008" covers operations, hotels, holiday bungalows and campgrounds with more than five beds.

The report "Toerisme in Cijfers 2003 – 2007" and the update "Toerisme in Cijfers 2009" published by the "Instituut Service Management" is a best practice example compiling tourism data for North Netherlands. Amongst other, detailed overnight statistic and expensed are compiled for various sectors (hotels, accommodations with breakfast, camping grounds, holiday homes, group accommodation and marinas). All data are statistically harmonized and published in the reports which ensures a comparison of the data.



Accommodation categories	2005			2006			2007			2008		
	Groningen	Friesland	Total	Groningen	Friesland	Total	Groningen	Friesland	Total	Groningen	Friesland	Total
Hotels / pensions	523	1,195	1,718	528	1,251	1,779	498	1,231	1,729	503	1,191	1,694
Accommodation	35	88	123	33	97	130	40	103	143	40	121	161
Camping (tourism)	404	1,623	2,027	429	1,686	2,115	410	1,548	1,958	439	1,492	1,931
Camping (permanent)	494	2,388	2,882	522	2,392	2,914	491	2,380	2,871	476	2,351	2,827
Group accommodation	65	979	1,044	58	987	1,045	58	948	1,006	55	950	1,005
Holiday home	466	2,881	3,347	488	2,968	3,456	481	3,194	3,675	457	3,396	3,853
Second home	118	282	400	121	280	401	126	297	423	120	315	435
Water sports	156	1,576	1,732	160	1,570	1,730	164	1,554	1,718	158	1,601	1,759
<b>Total</b>	<b>2261</b>	<b>11,012</b>	<b>13,273</b>	<b>2,339</b>	<b>11,231</b>	<b>13,570</b>	<b>2,268</b>	<b>11,255</b>	<b>13,523</b>	<b>2,248</b>	<b>11,417</b>	<b>13,665</b>

In addition, on the island of Texel, number of beds is about calculated to 44,000 (no specification of type of accommodation)

In 2007, 13.5 million overnight stays were estimated for the provinces of Friesland and Groningen (13.7 million in 2008) (Instituut Service Management, 2008 and 2009). 4.4 million of these overnight stays were counted on the Wadden Sea islands of Friesland. On the island of Texel (Province of North-Holland), the number of overnight stays amounted to 3.9 million in 2006 and 2007, and 4.1 million in 2008 (pers. comm. WV Texel)

In addition, over 60 million day trippers were estimated in the provinces of Groningen (31.7 million) and Friesland (31,4 milion) in 2007 (Instituut Service Management, 2008).

On the Dutch Wadden Sea island, the number of overnight stays amounted to 8.5 million in 2008 (4.1 million Texel, 4.4 on the Frisian Wadden

Sea islands) (Instituut Service Management, 2009, and pers. Comm., Texel WV).

In Figure 1, the overnight stays in the provinces of Groningen and Friesland in 2008 are differentiated into various sectors, the largest amount (28 %) covers holiday homes (Instituut Service Management, 2009). No detailed information is available for the Wadden Sea islands.

The average expenditures of day trippers were calculated with 14.02 Euro (Instituut Service Management, 2008). In total, 63.1 million day trippers were estimated which results in a total of 884 million Euro revenues in the provinces of Groningen and Friesland. Together with the income from overnight stays (530 million Euro), the total revenue of 1.4 billion Euro was gained from the tourism sector in the provinces of Groningen and Friesland in 2007 (Instituut Service Management, 2008). No data are available for the island of Texel.

Table 6:  
Overnight stays differentiated between the various sectors in the provinces of Groningen and Friesland 2005 – 2008) Source: Instituut Service Management, 2009.

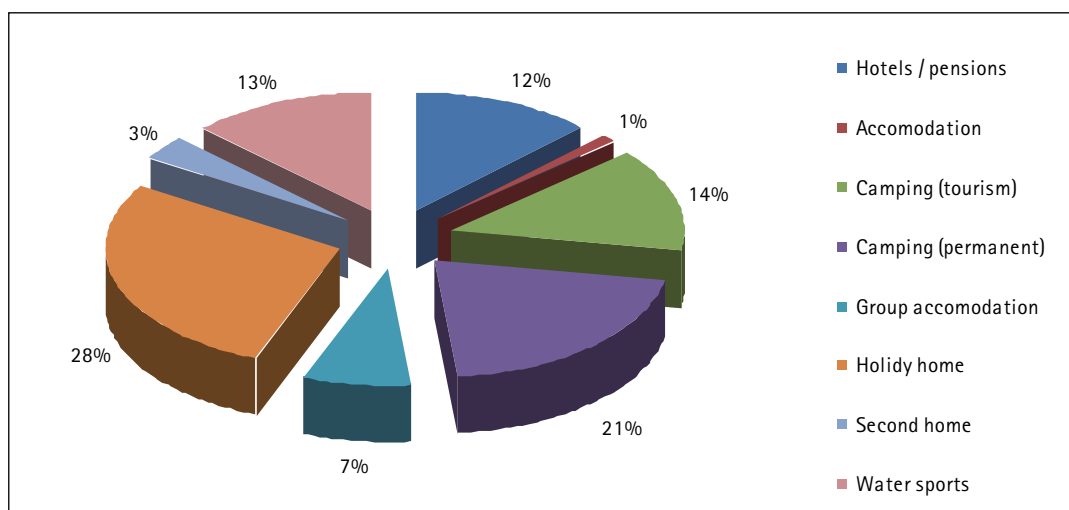


Figure 1:  
Distribution of overnight stays in the provinces of Groningen and Friesland in 2008. Source: Instituut Service Management, 2009.

Table 7:  
Expenditure for each accommodation category in Euro and % in the provinces of Groningen and Friesland. Source: Instituut Service Management, 2008.

	2005						2006						2007					
	Groningen		Friesland		Total		Groningen		Friesland		Total		Groningen		Friesland		Total	
	Euro	%	Euro	%	Euro	%	Euro	%	Euro	%	Euro	%	Euro	%	Euro	%	Euro	%
Hotels / pension	32	36%	73	17%	105	20.8%	33	36%	77	18%	110	21.1%	31	35%	77	18%	108	20.4%
Accommodation with breakfast (Logies en ontbijt)	2	2%	4	1%	6	1.2%	2	2%	5	1%	7	1.3%	2	2%	5	1%	7	1.3%
Camping (tourism)	11	12%	42	10%	53	10.5%	11	12%	44	10%	55	10.5%	11	12%	41	9%	52	9.8%
Camping (permanent)	13	15%	62	15%	75	14.9%	14	15%	63	15%	77	14.8%	13	15%	64	15%	77	14.5%
Group accommodation	2	2%	30	7%	32	6.3%	2	2%	31	7%	33	6.3%	2	2%	30	7%	32	6.0%
Holiday homes	16	18%	101	24%	117	23.2%	17	19%	105	24%	122	23.4%	17	19%	115	26%	132	24.9%
Second home	3	4%	8	2%	11	2.2%	4	4%	8	2%	12	2.3%	4	4%	9	2%	13	2.5%
Water sports	10	11%	96	23%	106	19.8%	10	11%	97	23%	107	20.5%	10	11%	98	22%	108	20.4%
Total	88	100%	417	100%	505	100%	92	100%	430	100%	522	100%	91	100%	439	100%	530	100%

Table 8:  
Revenues from day trippers and overnight stays in the provinces of Groningen and Friesland in 2007. Source: Instituut Service Management, 2008.

	Day trippers (Mio. Euro)	Overnight stays (Mio. Euro)	Total (Mio. Euro)
Groningen	444	91	535
Friesland	440	439	879
Total	884	530	1414

### 3.4.2.3 Evaluation of the basic data on tourism demand in an overall context

Tourism has considerable economic importance in the Wadden Sea region. Cumulating all the available data on overnight stays in the Wadden Sea region yields a total of approximately 49,2 million overnight stays for 2007. However, the number of overnight stays is probably much higher in all regions because many small enterprises are not covered by the official statistics.

Nature is the dominating factor which is increasingly determining the attractiveness of the region for tourism. This is partly due to the desire of most of the visitors to experience "intact nature and environment" described above. In addition, it is most probably also the result of an increased willingness for cooperation on the part of the national parks, protection areas and the regions, as well as more professionalism in the marketing of the natural environments together with regional and local stakeholders (Maschewski 2008).

Taken together, the day guests visiting the Wadden Sea states generate revenues of 2.1 billion Euros. The reason for this increase in comparison

to earlier surveys of day trippers has most probably only to a certain degree to do with the developments described above, although they, of course play a role. Surely more important, however, is the fact that the role of this market has only begun to become known in the regions during the past few years, and targeted surveys and comprehensive analyses of this market are thus relatively young.

The daily expenditures given for the different regions vary to a high degree, ranging from 26,60Euro in the Netherlands over 54Euro in Denmark and up to 67.42Euro in Lower Saxony and 73.30Euro in Schleswig-Holstein. This amounts to an average daily expenditure for a tourist in the Wadden Sea region of 55,33Euro.

In the year 2007, the revenues generated by overnight stays in the Wadden Sea region amounted to 3.5 million Euros, whereby the value for Lower Saxony is based on calculations from the year 2006. The revenues in Germany, with 1.5 billion Euros for Lower Saxony and 2.2 billion Euros for Schleswig-Holstein, are markedly above those in Denmark, with 358.3 million Euros, or in the Netherlands, with 530 million Euros. For the

	Denmark	Germany		Netherlands	TOTAL 2007
		Lower Saxony	Schleswig-Holstein		
Arrivals	n.s.	1.86 million	1.9 million	4.8 million*	n.s.
Overnight stays	6.6 million	13.4 million	15.7 million	13.5 million**	49,2 million
Average duration of stays in days	n.s.	7.2	7	5.4*	n.s.
Number of beds	n.s.	75,958 beds	115,865 beds	263,859 beds*	n.s.
Bed capacity utilization	33.1% South Denmark	31.3% mainland, 35.2% islands	33.20%	n.s.	n.s.
Foreign guests %	88.1% in summer bungalows	0.5% islands, 2% mainland	1.10%	27.5% *	n.s.
Daily expenditures (commercial operations)	54 Euro	67.42 Euro	73.30Euro.	39,19 Euro overnight stay, 14,02 Euro daytrippers***	n.s.
Revenues from overnight stays	358.3 million Euro	1.5 billion Euro ***	1.15 billion Euro	530 million Euro**	3.5 billion Euro
Day trips	n.s.	32.5 million ***	12.5 million ***	63.1 million **	n.s.
Revenues from day trips	n.s.	824.7 million Euro ***	413.7 million Euro ***	884 million Euro**	2.1 billion Euro
Total revenues	358.3 million Euro	2.38 billion Euro ***	1.5 billion Euro	1.4 billion Euro**	5.6 billion Euro
Jobs	3,500	40,383	n.s.	38.138**	n.s.
* Data refer to Wadden Sea islands and North Sea seaside locations in operations with more than 5 beds, including camping sites for the entire Dutch coastal region					
** Data refer to the Provinces of Groningen and Friesland. (Number of overnight stays for the Frisian Wadden Sea islands is 4.1 million and the island of Texel (Province of Noord Holland) is 4.4 million.					
*** Value from 2006					
Sources: Denmark: SGVSH, 2008, Lecture at tourism conference. Overnight stays and revenues refer to hotel data from 2007 and summer bungalow data from 2006. Lower Saxony: IHK East Frisia and Papenburg 2008, SGVSH, 2008, Tourismusverband Nordsee e.V., 2008. Schleswig-Holstein: SGVSH, 2008, Nordseebäderverband 2007. The Netherlands: Central Bureau voor de Statistiek, 2008, Instituut Service Management, 2008, 2009					

Table 9:  
Summary of basic tourism data in the Wadden Sea regions in 2007.

year 2007, this calculation, based on the data described above, yields a higher value of 5,6 billion Euros.

The average length of stay has declined markedly for all regions in recent years, which corresponds to the general trend in travel toward more and shorter trips. This is also the case for tourism in the Wadden Sea region. The utilization of bed capacity is around 33% for all countries, which is an average value for rurally structured areas.

The numbers of foreign guests vary, which lies in the nature of the very heterogeneous structure of the available facilities in the different countries. Denmark, with 88.1% in summer bungalows, lies markedly higher than the Netherlands, with 27.5%, and Germany stands out extremely with only 1.0%. Even though there is certainly potential for growth in the German market, at the moment no strong growth in the foreign sector is to be expected. The focus in marketing of the German Tourism Center (Deutsche Zentrale für Tourismus, DZT) for foreign tourism is in the segment of city and cultural travel.

The designation of the Wadden Sea area as World Heritage would surely present new chances for marketing, since this decision would bring with it a number of new platforms in the global competition. This would have positive consequences for the economics of the region and should therefore be considered in future marketing strategies.

### 3.4.3 Land based tourism and recreation

#### 3.4.3.1 Tidal flat walking

The land-based activities related to tourism and recreation will be evaluated in the following according to the number of guided tidal flat walks in the individual countries. The counts of tidal flat walks are carried out using different methods in the various countries:

In Lower Saxony five aerial surveys were carried out during the period from 2000 to 2007 at "times of maximum tourist density" (= good weather, weekend, season). During the aerial surveys, all people observed in the coastal area between the

mouths of the Ems and Elbe rivers were counted. The counts differentiated between groups hiking in the tidal flats, individual hikers in the flats, hikers at the beach and hikers starting at boats. It can be assumed that the groups hiking in the tidal flats were in practically all cases accompanied by guides (Frank, 2007). In the year 2008, the aerial surveys were discontinued.

In Schleswig-Holstein, the National Park guides and the nature conservation NGOs are obliged to report the number of guided tours (flat walking) and number participants to the National Park Administration. Tours by non-certified tidal flat guides and private tours are reported on a voluntary basis. Therefore, a complete registration of all guided tours cannot be guaranteed by this method.

In the Netherlands, the Stuurgroep Waddenprovincies surveys and publishes the annual numbers of guided tidal flat walks. The walks are grouped into three categories. In the first category, the Type A excursions, tours are offered by seven organizations for groups of 50 to 70 participants. Type B excursions are organized for smaller groups of at most 12 persons. Type C-licenses are individual hikers (no participants are allowed) and excursions.

Around half of the tours are carried out by individual guides, the other half by License Type A guides. The number of participants in excursions of the types A and B are limited to 50,000 per year. The number of Type C excursions is not recorded.

For Denmark no new data have become available since the Quality Status Report 2004.

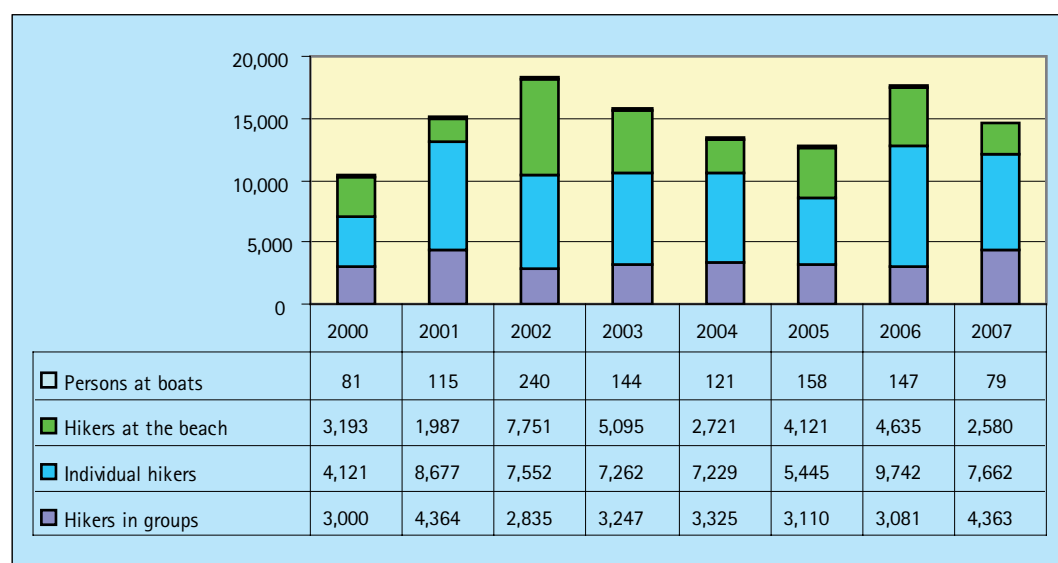
### Monitoring Results

In the Wadden Sea area of Lower Saxony, the quantitative results on the tidal flat hiking groups vary to a great degree from year to year, which points to a low reliability of the survey methods. The distribution of the categories surveyed is, however, similar over the years. The greatest proportion is made up by the individual hikers, followed by the groups and the hikers at the beach. For the year 2007 the results show that 52% were in the category individual hikers, 29.7% were hikers in groups, 17.6% were hikers at the beach and 0.5% were persons at boats (Frank, 2007, unpublished) (Figure 2).

The values from Schleswig-Holstein present a much more consistent picture. A total of 6,204 hikes with almost 125,000 participants were carried out in the year 2007 (Table 10). There was a marked increase of around 50% in the number of guided tours in the Wadden Sea between the years 1999 and 2007. The size of the groups walking the tidal flats decreased during this period. In the year 1999, the average group consisted of 27 participants; in 2007 the number had decreased to 20. The majority of the tours (69%) were carried out by members of NGOs (Schutzstation Wattenmeer), 23% by National Park guides, 3% by members of „Öömrang Ferian“ and 2% each by employees of the National Park Service, independent guides and employees of the NABU (Nationalparkverwaltung Schleswig-Holsteinisches Wattenmeer, 2008c, unpublished).

In the Netherlands the majority of walking tours are carried out in the "Groninger Wad" and in the eastern part of the "Frisian Wad". The number

Figure 2:  
Results of aerial counts  
in summer in the Wadden  
Sea of Lower Saxony in the  
period 2000–2007 (sum of  
five flights, respectively).  
Source: Frank, 2007.



	1999	2000	2001	2002	2003	2004	2005	2006	2007
Participants	114,719	108,281	113,681	115,951	112,905	111,039	106,052	105,750	124,904
Number of guided tours	4,123	4,467	4,682	4,924	4,934	4,847	4,515	4,637	6,204
Average size of groups (number of participants)	27.8	24.2	24.2	23.5	22.8	22.9	23.5	22.8	20.1

Table 10:  
Number of guided tours  
(tidal flat walking) and  
numbers of participants  
in the Schleswig-Holstein  
Wadden Sea region for the  
period 1999-2007. Source:  
Nationalparkverwaltung  
Schleswig-Holsteinisches  
Wattenmeer, 2008c, un-  
published.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Type A excursions	32,071	30,598	33,999	32,430	27,227	30,253	26,182	26,182	21,088	22,458	24,964
Type B excursions	4,376	4,582	5,694	5,700	5,682	4,981	5,268	4,933	2,604*	7,107	5,244
Excursions for envi- ron. education	33,000	34,928	37,575	38,822	46,230	35,963	50,851	51,524	30,132*	53,847	44,033
Total	69,447	70,108	77,268	76,952	79,139	71,197	82,301	82,639	53,824	83,412	74,241

Table 11:  
Participants in guided tours  
in the Dutch Wadden Sea.  
\*incomplete data. Source:  
QSR 2004, Stuurgroep  
Waddenprovincies, 2008,  
unpublished.

of participants in excursions of the types A and B was 30,208 for the year 2007. The limit of 50,500 participants set for this type of excursion was thus not reached in 2007 (Table 11).

#### Conclusions

The number of tidal flat tours in the countries bordering the Wadden Sea appears to remain at a continuously high level and in some cases to show an increase. Particularly the Schleswig-Holstein Wadden Sea National Park has shown significant growth in this respect. Since the numbers of tours and participants are assessed with widely varying methods in the different countries, the available data do not seem to be a sufficient basis for deriving reliable trends for all countries. Against the background of growing numbers of visitors in all countries bordering the Wadden Sea, in can however be assumed that the total numbers of tidal flat walks (e.g. individual hikers or unregistered tours) is much greater than represented here. Since, as can be seen for example in Schleswig-Holstein, large numbers of visitors are involved, it is urgently recommended that consistent methods of data collection should be applied. Only on the basis of sound data the needs for protection and utilization can be balanced.

### 3.4.4 Water-based tourism and recreation

#### 3.4.4.1 Recreational boating

##### Regulations

Since the last Quality Status Report 2004 there have been no changes in regulations for boating in any of the countries.

##### Methods

Various indicators are used to depict the development of recreational boating. In the Netherlands the number of sluice passages are counted; in the

other areas of the Wadden Sea data are generated by aerial surveys.

##### Sluice passages

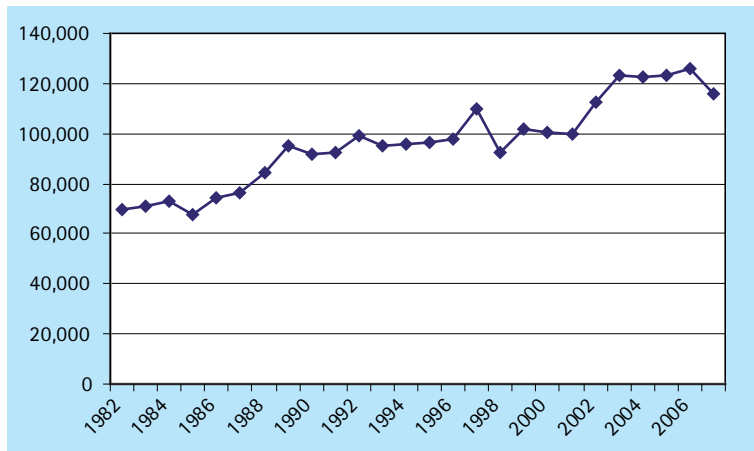
The Wadden Sea coast of the Netherlands can only be reached from the open sea and from the German Wadden Sea by way of sluice passages. There are eight localities on the North Sea coast which have sluices: Den Helder, Den Oever, Kornwerderszand, Harlingen, Lauwersoog, Delfzijl, Termuntenzijl and Nieuw Statenzijl. The number of passengers on the boats passing through have been recorded since 1982.

##### Aerial surveys

In Denmark data have been collected since 1980 on recreational boating and other outdoor activities in the Wadden Sea people on the beach, beach sailing, windsurfing, recreational fishing, people outside the beach/dune areas, recreational boating, horseback riding, and hunting. The National Environmental Research Institute (NERI) and the Ribe Environmental Center have aerial counts carried out over the region. The last survey was in 2004. In comparison to 1980, the number of flights was reduced by 25 - 33%. Since 2003, only shipping as a whole has been monitored and not individual types of leisure boats and ships (personal communication Christensen, 31 October 2008, 07 November 2008).

In the Schleswig-Holstein Wadden Sea the „Wasser und Schifffahrtsamt“ (WSA) had the number of watercraft surveyed by plane. The aerial surveys are carried out in connection with the monitoring responsibilities of the National Park Office. The objective of the surveys is to count all seabirds, seals and watercraft. In 2007 twenty aerial counts were carried out from March to September in the Wadden Sea areas of North Frisia and Dithmarschen.

**Figure 3:** Development of the number of sluice passages of recreational boats in Dutch harbors connecting to the Wadden Sea, period 1982 – 2007 (Den Helder, Den Oever, Kornwerderzand, Harlingen, Lauwerssoog, Delfzijl). Source: [http://www.interwad.nl/Feiten\\_en\\_Figuren.1901.0.html#c7999](http://www.interwad.nl/Feiten_en_Figuren.1901.0.html#c7999)



In Lower Saxony aerial surveys were carried out in the Wadden Sea area in the months May to August from 1988 to 1998 by the "Wasser- und Schifffahrtsdirektion" (WSD) Nordwest. These surveys were discontinued in 1998.

In the Netherlands aerial surveys were carried out in the years 1980, 1982, 1988, 1995, 2000 and 2005. Since 1995 the Stuurgroep Waddenprovincies has carried out surveys every five years. In the year 2005 four flights were carried out in the period from May to August. All four were on weekends, three at high tide and one at low tide.

### 3.4.4.2 Monitoring Results

#### Sluice passages and marinas

In the year 2007, a total of 115.651 sluice passages were recorded in the Dutch Wadden Sea. Since the year 1982 the number of sluice passages has increased continuously. With 126,002 passages in 2006, the highest number was recorded since 1982 (69,808 passages). In recent years the number of passages has been consistently over 115,000 (Figure 3).

#### Aerial surveys

In the Danish Wadden Sea the distribution of the different outdoor activities hardly changed over the period 1980 to 2004 (Table 12). The largest proportion (85%) was represented by people on the beaches followed by people outside the beaches and dunes. Wind surfing and beach sailing are underrepresented in the counts, because they were carried out on days with little wind. Hunters were also underrepresented, since the counts were carried out during full daylight. On the average, ten wind surfers were counted in 1980 and 2004. The number of beach sailors/kite buggies increased from 1-2 in 1980 to 2-91 in 2004. The number of boats anchored in the Wadden Sea area and in the harbors behind the dikes was 900 in 2004 (personal communication Christensen, 31 October 2008, 07 November 2008; data provided by Laursen / Frikke).

The aerial surveys of 2005 show that the western Wadden Sea of Lower Saxony is the area with the highest density of shipping traffic (in

**Table 12:** Comparison between 1980 and 2004 data on distribution between different outdoor activities.

Activity	1980*	2004**
People on the beach	86.4%	85.4%
Beach sailing	0.1%	1.0%
Windsurfing	0.9%	0.5%
Recreational fishing	1.4%	0.1%
People outside the beach/dune areas	8.5%	10.8%
Recreational boating	1.9%	0.9%
Horseback riding	0.0%	0.5%
Hunting	0.9%	0.2%
* Aerial surveys by NERI on days with light wind in the period July–November		
** Number of flights reduced to 25–33% compared to the 1980 surveys		
Source: John Frikke, Environmental Centre, Ribe and Karsten Laursen, National Environmental Research Institute (NERI) personal communication Christensen, 30 October 2008, 7 November 2008		

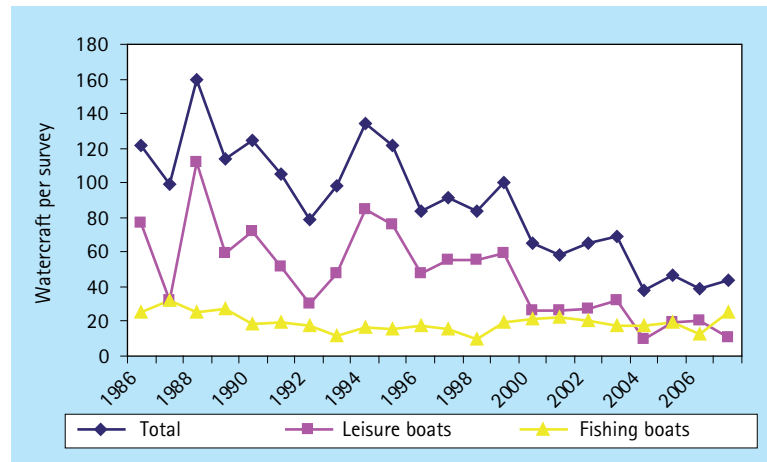


Figure 4: Average number of boats per flight in the Schleswig-Holstein Wadden Sea National Park in the period 1986–2007. Source: Nationalparkverwaltung Schleswig-Holsteinisches Wattenmeer, 2008d, unpublished.

1995: 78%, and in 2000: 69%). The highest shipping density of 8.4% was observed in the Frisian Wadden Sea. In previous surveys this value was rather stable and around 10%. In the vicinity of the Engelsmanplaat 10.6% of the boats were counted, which is in good agreement with the value from 2000 of 11%. In the area of the Groninger Wad and the Ems-Dollar around 10% were registered as well. In the year 2005 a total of 1,516 ships were counted during the flights. In the Wadden Sea of Schleswig-Holstein, counts in the North Sea during the years 1986 to 2007 yielded between 38 and 159 ships (Nationalparkverwaltung Schleswig-Holsteinisches Wattenmeer, 2008d) (Figure 4). The number of boats was normally highest in the North Frisian region between the islands of Föhr and Amrum and the mainland.

#### General Trends

In the Netherlands, the number of sluice passages has increased since 1982. In Schleswig-Holstein the numbers of ships counted has declined since 1986, even though there was a slight increase in 2007 compared to 2006. The available data may not be really sufficient for a quantitative comparison of recreational boating in the entire Wadden Sea region, but indicated general trends in the single Wadden Sea region. In order to incorporate this TMAP parameter into the data base for future QSRs, a more uniform method of data acquisition is recommended.

### 3.4.5 Conclusion and recommendations

Tourism represents an important and ever growing market in the Wadden Sea region, as the 49,2 million total overnight stays, the over 6 billion Euro total revenue and the presentation of the other key data on tourism demand has shown clearly. For the people living in the predominantly rurally

structured regions of the countries bordering the Wadden Sea, there is in most cases no alternative to tourism. It therefore appears to be of utmost importance to harmonize the existing surveys and find reliable parameters for quantitative monitoring of the activities and impacts of the visitors to the Wadden Sea region. The parameters determined at present and, especially, their interpretation is not suitable to indicate reliable trends for the entire Wadden Sea. A prerequisite for assessing the effects of recreational activities is the use of uniform parameters and – in particular – reliable survey methods, which is the only way the actual impacts on the Wadden Sea area can be assessed. The indicators regarding the tourism market in the countries allow a reliable estimation of the developmental trends, even though they differ in definitions and survey methods. However, the presently used approaches for recording land-based and water-based activities in the various are not adequate for a trilateral assessment. In this respect there is great heterogeneity of methods and approaches. During the process of defining uniform impact parameters, it would therefore appear reasonable to carry out surveys on vacationers in the region and to analyze their main activities in order to be able to react to changes in human activities in a timely fashion. A good example can already be found in the Schleswig-Holstein Wadden Sea National Park. The objective should be a multi-dimensional market research instrument with which demand as well as changes in utilization behavior, as well as the impacts on nature and the environment can be monitored. It should also form the basis for coordinated regional development concepts in the Wadden Sea region, which are clear in direction but allow for flexible and just solutions to the many challenges posed by nature protection, tourism and recreation.

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