

# **Visitor Trends and Impacts in Vilsandi National Park, Saaremaa Island, Estonia**

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By

Matthew Burnam<sup>1</sup>, Graduating Senior, Dr. Stuart Cottrell<sup>1</sup>, Associate Professor, and Dr. Jana  
Raadik-Cottrell with Kuressaare College of Tallinn University of Technology

<sup>1</sup>Department of Human Dimensions of Natural Resources  
Colorado State University  
Fort Collins, Colorado, 80525 USA

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Matt Burnam, B.S., Stuart Cottrell, PhD, and Jana Raadik-Cottrell, PhD  
Human Dimensions of Natural Resources (<http://warnercnr.colostate.edu/welcome-to-hdnr/>)  
Colorado State University  
1480 Campus Delivery  
Fort Collins, CO 80523 USA  
Office Phone: +1 970-491-7074  
Fax: +1 970-491-2255  
Email: [Stuart.Cottrell@colostate.edu](mailto:Stuart.Cottrell@colostate.edu)

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*Summary:*

*Vilsandi National Park on Saaremaa Island, Estonia, is ecologically significant and sensitive, and tourism in the area, as with many natural areas, is increasing. The following research study was conducted in the summer of 2011. A survey was administered in hopes of providing useful information to Estonian regulatory agencies, regional stakeholders, and tourism operators that can be used to properly plan for and accommodate tourism growth in and around the park. The results of the study indicate foreign tourists are coming to Vilsandi National Park in order to experience nature in an unspoiled state. Many tourists indicated that they enjoy the relative lack of regional development, but also expressed frustration with the lack of goods and services available within and on the periphery of the park. Many also identified a lack of logistical and interpretive information at the different sites throughout the park. Overall, those who visit Vilsandi consider it to be a true gem of the Baltic region and through proper management it can continue to be so far into the future.*

## Acknowledgements

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## Project Partners

**Stuart Cottrell, PhD, Associate Professor, Colorado State University** – provided overall project coordination,

**Jana Raadik-Cottrell, PhD, Tourism lecturer /researcher at Kuresaare College of Tallinn University of Technology** provided onsite supervision, logistics, survey support, and organized stakeholder meetings for this project, see [www.ttykk.edu.ee/TTYKK\\_en.php](http://www.ttykk.edu.ee/TTYKK_en.php)

**RMK** (*specific contact TBD*), Estonian State Forest Service that manages visitor flows at Vilsandi National Park.

**Maarika Toomel**, Owner / Manager of Heritage Tours provided accommodations as well as insight of information and visitors services offered at Vilsandi National Park, <http://www.parimusmatkad.ee/eng>

**Matt Burnam, CSU Warner College undergraduate intern**: Matt worked on this project as an intern conducting field research and report writing.

**Mihkel Paju, and Karin Saks from Kuresaare College of Tallinn University of Technology** ([www.ttykk.edu.ee/TTYKK\\_en.php](http://www.ttykk.edu.ee/TTYKK_en.php))– this students teamed up with Matt Burnam to carry out field research etc.

**Table of Contents**

Introduction ..... 1

Methods ..... 4

Results ..... 7

Discussion ..... 12

Conclusion ..... 18

References ..... 20

Appendix A Onsite Survey English Version..... 21

Appendix B English Survey descriptive results..... 23

**Table of Figures**

Figure 1: Tourist Map of Saaremaa, Estonia ..... 1

Figure 2: RMK Map of Vilsandi National Park ..... 2

**Table of Tables**

Table 1: Ages of Respondents ..... 7

Table 2: Countries of Origin ..... 8

Table 3: Reason for Visiting ..... 9

Table 4: Sources of Travel Information ..... 10



Vilsandi National Park is located in Kihelkonna Parish on the west coast of Saaremaa Island. This national park includes a portion of the western coastline of Saaremaa, Vilsandi Island (the largest island in the park), and more than 150 other small islands and islets. Visitestonia.com reports the size of Vilsandi National Park as 238 km<sup>2</sup>; 163 km<sup>2</sup> of sea and 75 km<sup>2</sup> of land (Vilsandi, 2011). The information center for the park is located at Loona Manor, on the southeastern edge of the park.

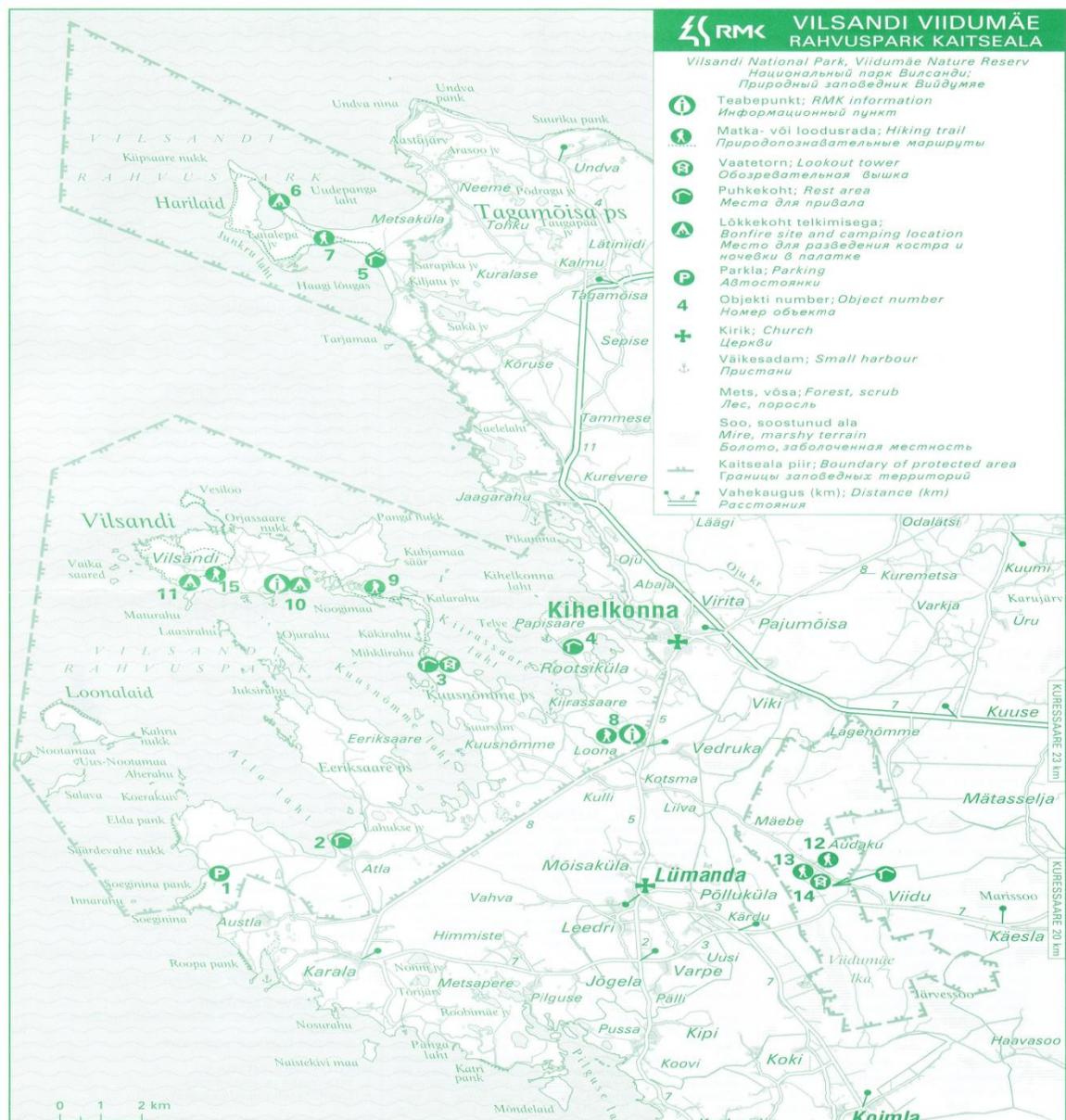


Figure 2: RMK Map of Vilsandi National Park (Regio, 2011)

Saaremaa Island, and specifically the islets of Vilsandi National Park, marks the confluence of several migratory routes for birds. The need for protection for this area was recognized early in the 20<sup>th</sup> Century and the park was established in 1910 as a bird sanctuary, even before Estonia became an autonomous nation (in 1918). The park remained a protected area through German and Soviet occupations. Being the western-most point of the Soviet Union, Saaremaa Island was off limits even to Estonians because of a strong military presence. To this day, the islets of the park are nesting grounds for many species of birds. Therefore, they are protected from boat and foot traffic until mid-July each summer.

In addition to the variety of bird species, Vilsandi National Park's rich ecosystem features nearly all of the fauna found on mainland Estonia, including moose (or European elk), red deer, roe deer, fox, gray seal, and wild boar. Brown bear and wolf are the only examples of Estonian megafauna that do not exist on Saaremaa Island. 36 species of orchids can be found in and around Vilsandi National Park, 32 of which are native to the island. Several of these species are rare and are therefore protected. Different species of these orchids bloom in phases throughout the summer, prompting hobby botanists to travel to Saaremaa in the summertime in search of some of these rare species.

Visitor management issues have been developing in Vilsandi National Park over the last two decades. As with many natural areas around the planet, interest (and therefore visitor numbers) has been increasing in recent years. Because of this, human impacts on the park have been increasing as well. Since regaining independence, the people and the government of Estonia have struggled economically. This has led to a lack of funding for some of Estonia's parks and natural areas. In turn, this lack of funding has left Vilsandi with an underdeveloped infrastructure, very little oversight, and no management or enforcement of park regulations. It would seem that Vilsandi National Park is reaching a

critical turning point in its visitor management needs; as visitor numbers increase each year so do the impacts left behind by tourists coming to experience this piece of Estonian nature.

This research project was conducted on behalf of the Center for Collaborative Conservation at Colorado State University as part of a collaborative conservation project in sustainable nature-based tourism. The overall goal of the project is to work with the various local stakeholders of Vilsandi National Park in order to help provide information that is useful in managing tourism to the park and enhancing the visitors' wilderness experience. The project involves collaboration among staff from Vilsandi National Park, the Estonian Ministry of the Environment, Estonian Forest Service, tourism NGOs, Kuressaare College Branch of Tallinn University of Technology, and other protected area stakeholders on Saaremaa Island.

## **Methods**

The purpose of this study is to collect information from tourists (primarily foreign), including demographic information, details of their visit, and qualitative data about their overall experience in the park for the purpose of visitor management planning. Data was collected through a series of interviews and through the distribution of a paper survey to tourists at different locations within the park.

Initially, information was recorded in approximately 20 different scripted interviews conducted with tourists in the English language. The script for the interview was modified slightly on a case-by-case basis in order to uncover and explore details of some of the responses provided by interviewees. Responses from the interviews were recorded into an Excel database which became a foundation for the final data set. The script was then modified and converted into a paper survey for wider distribution (see Appendix A). A nearly-identical version of the survey was created in the Estonian language (Appendix B). This version was distributed to some locals visiting the different sites within the park, and other Estonian tourists who would understand the questions better in their native language or would

feel more comfortable responding in Estonian. When possible, the survey was administered as a verbal interview, with the interviewer recording the responses directly onto the survey form for the interviewee. This method allowed the interviewees to be more descriptive in their responses without the burden of writing out their answers, and allowed the interviewers to probe for more details when appropriate.

Interviews were conducted and surveys were distributed and collected at four different data collection sites within and around the park; Loona Manor, Harilide Peninsula, Papissaare Harbor, and a tourist information center in Kihelkonna village. Each of these sites was seen to have reliable flows of tourists, or heavy flows of traffic much of which is tourist traffic. Additionally, parking lot vehicle counts and observations of vehicle origins were made at Loona, Harilide, and Papissaare in order to get an idea of from where motor tourists are traveling.

Loona Manor is a small piece of property featuring a refurbished 13<sup>th</sup> Century manor house and several satellite buildings. The Loona Manor site is identified to the public as the information center for Vilsandi National Park. There are two main buildings on the site; a manor house which operates as a guesthouse and café, and a refurbished stable which operates specifically as an RMK visitor center with maps, brochures, information, and an onsite representative to interact with visitors. Data was collected from overnight guests at the guesthouse (or at the tent sites available on the manor grounds) as well as day visitors stopping by for food or coffee. Additionally, when it was open (9:00 to 17:00 daily) data was collected from visitors of the RMK information center on the lawn (weather permitting) or inside of the information center with the help of an RMK representative.

The Harilide Peninsula is located in the northernmost portion of Vilsandi National Park. This is a popular site for tourists because of the Kiipsaare Lighthouse, a tent camping site, and very nice swimming beaches on either side of the peninsula. The parking lot which serves the entire peninsula is

located at the end of a dirt and gravel road, approximately 7km from the nearest paved roadway. Visitors can only reach the Harilide Peninsula by private vehicle or bicycle as there is no public transportation to this area. Data was primarily collected in the parking lot as almost everyone that accesses the area must pass through the lot.

The tiny village of Kihelkonna is found on the eastern edge of the park, approximately 3km north of Loona Manor. This is essentially the only municipality near Vilsandi National Park. A tourist information booth which is open daily is found inside of the civic center building in Kihelkonna. While this site is not within the park boundaries, its proximity to the park made it a relevant site for collecting data from foreign visitors to Vilsandi National Park. Paper surveys in English and Estonian were left onsite with workers at the information booth for distribution.

Papissaare Harbor is a pre-WWI harbor and hangar located within the park approximately 2km west of Kihelkonna village. Papissaare serves as the only launching point to access Vilsandi Island via a hired boat. A public boat operating on a regular schedule makes several trips per week between the harbor and Vilsandi Island. Private charter boats operate from this site as well. Data was collected from visitors returning from Vilsandi Island on the public boat on Tuesday and Friday afternoons.

The Statistics Package for the Social Sciences (SPSS) was used to conduct the analysis. This involved frequencies and descriptive statistics when appropriate. Open-ended responses were tabulated by categories (e.g., Question 6 “main reason for visit” with categories such as nature, bird watching) to reduce the total number of responses to logical categories for presentation purposes. An overview of responses is presented in tabular form and provided in Appendix C.

## Results

The survey received 47 responses, including 9 recorded interviews and 38 paper responses. Of the paper responses, approximately 21 were filled out by the interviewer while verbally asking the questions to the respondent. The remaining paper responses were filled out by the respondent on their own, with less interaction with the interviewers. The rate of refusals for the survey was in the 50 – 70% range, with the most common reason for refusals being language-related such as not speaking English, or not being comfortable with their ability to speak English. Other reasons for refusals included not having any experiences in the park yet (meaning they just arrived in the park) and not having time to take the survey (meaning they did not want to be distracted from other activities).

*Visitor demographics.* In order to gather demographic information, respondents were asked about their age, level of education, and country of origin. 34.1% of those surveyed were in the 40 – 49 year old age range and another 22.7% were 50 – 59 years old. The average age of survey respondents was 46 years old (with a standard deviation of 13 years).

*Table 1: Ages of Respondents*

Age	Count	%
< 19	1	2.3
20 - 29	3	6.8
30 - 39	8	18.2
40 - 49	15	34.1
50 - 59	10	22.7
60 - 69	5	11.4
> 70	2	4.5
Total	44	100

56% of the respondents of the survey were male and 44% were female. However, this merely indicates the gender of respondent. Nearly all visitors were in couples or mixed gender groups. In many of these cases a spokesperson would provide responses for the entire group.

More than half of the foreign tourists surveyed were from either Finland or Germany. 29.8% of respondents traveled to Saaremaa from Finland, and another 27.7% traveled from Germany. Interviews were conducted with tourists from Australia and the United States as well. However, most of the other

respondents were from other parts of Europe including Sweden, Switzerland, France, The Netherlands, and Austria (See Table 2: Countries of Origin, p. 8).

*Details of visit.* Respondents were asked questions about the duration of their visit to Saaremaa and Vilsandi National Park, the activities in which they plan to participate (or did participate) while in the region, the sources of information they used in planning their visit, and the money they spent while in the region. 59% of guests to Vilsandi National Park were visiting as a day trip, or for a single day. Many of these people (> 42%) were staying overnight at hotels and guesthouses in and around Kuressaare. 41% of the park visitors stayed overnight in or near the park. These people either stayed overnight at the Loona Manor guesthouse (14%), camped out overnight in a tent or recreational vehicle (15%), or stayed at a tourist farm or other accommodation adjacent to the national park.

*Table 2: Countries of Origin*

<b>Country</b>	<b>Count</b>	<b>%</b>
Finland	14	29.8
Germany	13	27.7
Sweden	3	6.4
Switzerland	3	6.4
Austria	2	4.3
Belgium	2	4.3
Holland	2	4.3
Australia	1	2.1
France	1	2.1
Italy	1	2.1
Netherlands	1	2.1
Poland	1	2.1
Russia	1	2.1
United Kingdom	1	2.1
USA	1	2.1
Total	47	100

The most commonly reported duration for day trips is around 6 hours (40.9%). For overnight stays, the average length of stay for guests in Vilsandi National Park is 2 days, whereas the average length of stay for tourists on Saaremaa Island is between 2 and 5 days.

83% of those surveyed were visiting Vilsandi National Park for the first time. The remaining 17% of visitors had visited the park before. However, it was observed that most of these return visitors were in a group with at least

one person who was a first time visitor.

As one would expect in a national park, guests' primary reasons for visiting Vilsandi National Park were overwhelmingly nature based (see Table 3). When asked, the most common responses to this question were, "to see the nature", "to be in the nature", or other variations making a general reference to nature in the park (44.4%). Many other responses were more specific references to nature-based activities such as "bird watching" (8.9%) and "seeing wildlife" (6.7%). The most common non-nature-based responses to this question were references to "touring" (6.7%, meaning car touring or RV/caravan touring), and "biking" (2.2%, meaning bicycle touring). It should be noted that bicycle touring is very quickly becoming more popular on Saaremaa Island. Locals report a noticeable increase in the number of bicycle tourists on Saaremaa. Bicycle tourists point out that Saaremaa is a good destination for bike tours because of the flat geography and the relative lack of motor traffic on the highways away from Kuressaare.

*Table 3: Reasons for Visiting*

<b>Reason</b>	<b>Count</b>	<b>%</b>
Nature	20	44.4
Bird Watching	4	8.9
Recreation (Photography, motor cross, etc)	4	8.9
Other (photography, motor cross)	4	8.9
Wildlife	3	6.7
Touring	3	6.7
Holiday	2	4.4
Lighthouse	2	4.4
Biking	1	2.2
Camping	1	2.2
Family History	1	2.2
Total	45	100

The most common activities conducted by guests in the park were physical activities such as hiking (64.4%) and bicycling (13.3%, referring to bicycling as a short duration activity, rather than bicycle touring as an overall purpose of the visit). Swimming and beach going were also common responses. The

more general activity of “sightseeing” was a common reply (8.9%). This activity could be combined with other physical activities like hiking.

*Table 4: Sources of Travel Information*

<b>Source of Information</b>	<b>Count</b>	<b>%</b>
Internet	10	23.3
Information Centers	8	18.6
Books	6	14
Friends	4	9.3
Word of Mouth	3	7
Other	3	7
Travel Organization	3	7
Map	2	4.7
Brochures	1	2.3
Tour Guides	1	2.3
Loona RMK	1	2.3
Magazines	1	2.3
Total	43	100

When asked about the sources of information (Table 4) used before or during their visit, 23.3% of respondents reported that they used the internet for the main source of information for planning. 18.6% report utilizing Estonia’s tourist information centers, which includes the offices in Tallinn, Kuressaare, and Kihelkonna. 16.3%

received word-of-mouth information (including 9.3% responding with “friends” and another 7.0% saying “word of mouth”).

Respondents were asked about the money they spent while in or near Vilsandi in order to consider the economic impacts to the region. 59% of park visitors indicated that they did not spend any money while in the park. Of those that did spend money, 60.0% spent less than 100€. The most common purchase was food and beverage, whereas the most money spent was on accommodations (range = 2-420€, average = 155€), and transportation (range = 5-560€, average = 177€) which includes rental vehicles, public transportation, and fuel. Thirty-eight percent of respondents indicated that there were purchases that they would like to have made in the park.

*Visitor experiences and satisfaction.* In order to help identify the parks strengths and weaknesses, interviewees were asked to identify what they liked most and least about the park, what they felt could be done to improve the park, and to rate their overall experience in the park on a scale of 1 to 10. When

asked what they like most about the park, 42.1% responded with a reference to “nature”. Eighteen percent indicated that they like the calm, quiet, and/or solitude. Additionally, 18.4% made reference to the landscape (This consists of 10.5% responding with “coastline” and 7.9% responding with “landscape”).

Conversely, when asked what they like least about the park the most common response was “insects” (21.4%). These respondents provided this reply somewhat jokingly, knowing that nothing could actually be done about Saaremaa’s insect population. Other guests indicated, with sincerity, that they had difficulty finding locations (17.9%) or that they feel the motor and bicycle routes are poor (7.1%). Another 7.1% point out that there was a lack of signage and information (or information in English) once they arrive at certain sites. 10.7% indicated that pollution or litter is what they like least.

Building upon these shortcomings, respondents were asked what could be improved about the park. About 60% of visitors suggested improvements to the information that is available to tourists. This includes 36% suggesting better interpretive information at sites, with many of them indicating that making information available in English would be helpful. The other 24% suggested improving the park’s signage. Other suggested improvements include better maps, improved tent camping sites, garbage cleanup, and improved public transportation.

It is important to point out that the park ultimately receives positive satisfaction scores from visitors rating their overall experience. Visitors seem quite satisfied with their experience in Vilsandi National Park. Most respondents provided satisfaction scores between 7 and 10, with 8 being the most common score given, making an average score of 8.2.

Visitor traffic flows were monitored and recorded at each of the survey sites. At the Harilide and Loona sites a log was kept to record each vehicle’s country of origin (from the license plate), group size, and approximate time of arrival and departure (to determine the duration of the stay at the site). At

Harilide it was observed that 80 – 90% of the vehicles were of Estonian origin, groups range from 2 – 5 people with an average size of 3 people, and the duration of stay is normally between 1 – 6 hours with an average around 3 hours. On weekdays during the summer tourist season 20 – 40 vehicles may pass through the Harilide parking lot and on weekends 50 – 80 vehicles may visit the site (weather dependent). Conversely, at Loona Manor 80 – 90% of vehicles were of foreign (non-Estonian) origin, and the average duration of stay was 1 hour (not including overnight stays at the guesthouse). During the week 5 – 15 vehicles may visit the Loona site, and 10 – 25 may visit on weekend days (excluding special events). The Papissaare Harbor and Kihelkonna tourist information center sites experience relatively light tourist traffic flows in comparison, and therefore it was not necessary to make such detailed observations.

## **Discussion**

Scripted interviews allowed respondents to provide detailed qualitative responses to the survey questions. When appropriate, interviewers could ask for respondents to elaborate on their replies so the data recorded would be as specific as possible. If and when some respondents were required to write out their own responses they sometimes will not be as descriptive as possible because they do not want to take the time required to write out all of their thoughts. People were found to be more descriptive in recorded interviews and when interviewers would fill out the paper forms for them. Additionally, this allowed interviewers to take notes and focus on the most important points made in interviews, ask for additional elaboration on valuable information, and to disregard information that is not useful or pointless.

The spoken interview format also helped with clarification of some of the survey questions. The surveys were written and interviews conducted in English, which was often the second language of tourists in the park. Normally the respondents had no trouble understanding the survey questions.

However, occasionally they would be uncertain of the meaning of a question. For example, one survey question asks, “Where did you get information about the park?” If the respondent looked confused when asked this question or if they asked for clarification, the interviewer could reword and expand on the question in a way that might make more sense, such as, “When planning your trip and when traveling to Vilsandi, how did you research what you want to see and do?” Restructuring questions in this way would often help those that do not speak English as their native language, as long as interviewers are careful to make sure that the meaning of the question is still the same and they are not leading the respondent towards a certain response.

The Harilide Peninsula and Loona Manor survey sites yielded the most survey responses and some of the most valuable comments of the study. Many people at Harilide made specific comments about the information available and their expectations of the site. It seemed that many visitors arriving at the Harilide peninsula parking lot were somewhat uninformed or unaware of what to expect from the area. Many were not aware that the Kiipsaare Lighthouse was a 3km walk from the parking lot. Subsequently, many of these people were not properly equipped for a 6km round-trip hike. Some visitors arrive wearing sandals or flip-flops not suited for a hike this long. Others brought small children but did not feel comfortable taking them on such a long walk. Specifically, a Swiss couple in their early-30s arrived by car with a toddler. They attempted to reach the lighthouse with the toddler in a stroller, but returned to the parking lot within 30 minutes. “We’re disappointed that we didn’t see the lighthouse. We didn’t realize it was so far. This pram isn’t suited for such a long hike. If they are going to promote the lighthouse they should also set expectations, tell people to wear hiking shoes.”

This scenario was not uncommon. Upon arriving at the Harilide parking lot groups would often approach the survey takers to ask for information about the site. Perhaps this is because people seem more approachable or accessible than the map in the corner of the parking lot. Whatever the reason,

survey takers were approached multiple times each day by people seeking information. Most often they were asked, “How far to the lighthouse?” or, “Which beach is better?” or, “Where can we get some water?” It was observed multiple times per day that groups would immediately return to their vehicle and leave the site without even attempting the hike once they learned that the lighthouse was 3km away. Other groups that did attempt the hike but failed returned to their vehicles and often indicated that they either ran out of time or ran out of water. Whether they did or did not attempt the hike to the lighthouse, when they learned that it was 3km away many visitors commented that, “they should put a sign at the trailhead.”

Other visitors to Harilide indicated that they had difficulty locating the Harilide parking lot. A Finnish couple in their early-40s explained, “I think we took a wrong turn on the way out here. I’m not sure where we ended up, but it took us a while to find this place.” A German couple in their mid-50s had better luck finding the parking lot, but explained, “We thought we’d never get here. There weren’t many signs so we weren’t sure if we were even going the right way.” On the paved road from Kihelkonna to Harilide there is an official sign indicating the gravel road turnoff to Harilide. There are several intersections on the 7km stretch gravel road. Some are marked with small wooden, hand-carved signs pointing toward Harilide, however they are old and faded and do not necessarily stand out to motorists.

While 59% of survey respondents did not spend any money in or around the park, many respondents indicated that there were goods or services that they would have been willing to spend money on while in the park. 38% of them indicated that they would be willing to purchase food and beverages (often upon completing the 6km round-trip at Harilide). 14.3% stated that they would be willing to pay for campsites. 9.5% indicated that they would be willing to pay for a boat trip to Vilsandi Island and another 9.5% mentioned that they would like to purchase horse rides. These services actually

are available in and near the park. Perhaps this indicates that they either did not know where to make these purchases, or they felt they did not have enough convenient options.

It should be noted that there are very few ways to spend money in the park. There are no convenience stores, markets, or petrol stations within the park. The nearest places to purchase food and drinks are the two convenience stores in Kihelkonna village. The nearest place to purchase fuel is in the village of Karla, more than 10km outside of the park. Some of the only ways to spend money within the park are for accommodations, meals, guide services, and bicycle rentals. Accommodations are available at the Loona Manor guesthouse and at other tourist farms on the periphery of the park. Meal service within the park boundaries is only available at Loona Manor. Other small restaurants are located just outside the park boundary in Lumanda (about 12km south of Kihelkonna) and in Kihelkonna village. Meal service is also available at some of the tourist farms in and near the park. However, meal service at many of these locations is only available seasonally or by reservation.

A similar visitor survey was conducted by RMK in the summer of 2010. This survey was done in the Estonian language rather than English and was therefore focused on local people and Estonian tourists rather than international tourists. Despite this, a number of similarities and a few key differences were found in the results. Both studies reveal that the most common and most important reason for visiting the area is to “be in nature” or other nature-related activities. The durations of stays in each study were similar. However, the 2010 RMK study observed the number of *nights* stayed, whereas this study observed the numbers of *days* stayed. In both studies the respondents made negative observations of, or gave poor satisfaction scores to, the park’s signage, information boards, and waste management. Respondents also noted that the park offers very few spending opportunities. Ultimately, the average satisfaction scores were nearly identical. Average satisfaction in 2010 was 4.13

on a scale of 1 – 5 (translating to 8.26 on a scale of 1 – 10). In 2011 the average satisfaction score was 8.2 on a scale of 1 – 10.

Each of the differences between the 2010 and 2011 studies could be attributed to the different samples from each study; the 2010 sample being primarily Estonian and the 2011 sample being primarily non-Estonian. The 2010 Estonian study found that 48% of the visitors were coming to Vilsandi for the first time, whereas the 2011 foreign study reports 83% of visitors were first-time visitors. 44% of the tourists surveyed in 2010 were visiting the park for a single day (day trip), compared to 59% in the 2011 survey. This result seems counterintuitive considering that those that live closer to the park would be less likely to stay overnight. However, tourists that originate from farther away may be attempting to visit more destinations, resulting in a shorter stay at each location. Another difference was noted in the sources of information used in planning the trip. In 2010, 58% of those surveyed reported using friends, acquaintances, and other word-of-mouth resources in planning their trip. In 2011, 23.3% reported using the internet as their primary source of planning information and only 16.3% reported using word-of-mouth sources (consisting of 9.3% responding with “friends” and another 7.0% saying “word of mouth”). This difference is also most likely due to the sample of each survey. Estonians have more access to friends, acquaintances, and other word-of-mouth resources that have experiences in Vilsandi National Park (RMK 2010 citation here).

Strengths and weaknesses of each of the data collection sites were considered and should be pointed out. The Harilide Peninsula yielded the most responses to the survey and had the steadiest visitor flows. Many tourists that visit Vilsandi make the trip to Harilide to see the Kiipsaare lighthouse and enjoy the beaches. Groups would often stay for several hours at a time and could easily be approached as they returned to their vehicles to leave. Groups were almost always surveyed at the end of their day trip to the area so their experience on the peninsula was fresh on their mind. However,

Harilide also has the most local traffic of all of the survey sites in Vilsandi. It was estimated through parking lot counts that 80 – 90% of the visitors to the area were Estonian, many of them being local to Saaremaa. Weekday afternoons after 15:00 (3:00PM) and all day Saturday would normally bring a rush of locals to the beach when the weather was sunny and warm. Weekdays from morning until 15:00 and on Sundays there were normally more (but not exclusively) foreign tourists coming into the area. (When asked about the contrast in local and foreign tourist traffic patterns between Saturdays and Sundays, locals suggest it is because, “Estonians rest on Sundays.”)

The Loona Manor survey site had much less traffic than Harilide, but a much higher ratio of foreign to local tourists. With a guesthouse and RMK information center on this site, this location is geared for foreign tourists and leaves very few reasons for locals to visit. The manor property is divided into two survey locations; the guesthouse and the information center, each with its own set of strengths and weaknesses. Many of the visitors to the guesthouse were there for an overnight stay. Others visited for coffee or lunch which kept them on the property for an hour or more. The longer duration of their stays made it easy for an interviewer to approach them shortly before their departure after a meal, or in the morning after an overnight stay. However, in this setting there were times that could be considered inappropriate to approach visitors, such as during meals or while they were on the upstairs guest floor. Visits to the RMK information center were normally much shorter in duration. Tourists at this site were sometimes on-the-move and less willing to stop to take a survey. The RMK representatives at the site were enthusiastically willing to help administer surveys, so survey forms were left for distribution even when interviewers were not available to be onsite.

Almost all tourists visiting the Papisaaere Harbor were there to catch a public or chartered boat to Vilsandi Island. Except for special occasions, it is rare for tourists to visit this site for other reasons. Chartered boats operate according to demand and not on a regular schedule. Therefore, (with limited

manpower) it is nearly impossible to have an interviewer present each time this boat returns from Vilsandi Island. The public boat accommodates day trips to Vilsandi Island on Tuesdays and Fridays, leaving Papissaare at 9:00 and returning to the harbor at around 16:45 (4:45PM). The boat carries up to (approximately) 16 people. The regular schedule of this boat allowed an interviewer to be present at the harbor on Tuesday and Friday afternoons to conduct surveys with tourists who spent the day on the island. These site visits were often brief and would normally only yield one or two responses because most people exit the boat, walk to their car in the parking area, and leave.

The information booth in Kihelkonna was normally very quiet during weekdays, sometimes with visits from only one or two groups of tourists. Weekends were busier with 6 to 10 groups passing through. Because of light visitor traffic it was more efficient to leave paper surveys with the employees of the information booth for distribution, rather than have an interviewer wait at the site to conduct interviews. Employees of the information booth were young people; primarily high school students or recent high school graduates, and were always willing to assist with survey distribution.

## **Conclusion**

Vilsandi National Park is considered by many to be a hidden gem of natural areas in the Baltic region. The need for visitor monitoring and management in Vilsandi National Park is becoming more apparent, considering the increase in tourism in the region in recent years. As seen through the comparison between the 2010 RMK survey results and the results in this study, it is equally important to consider foreign tourists as well as Estonian tourists. As tourism increases in the area, and as the park develops, yearly visitor surveys will continue to reveal and monitor the strengths and weaknesses of the park. It may eventually become necessary for personnel to be present in the park every day, for the sake of the park and its nature.

Visitor experiences are currently being impacted by the types and amount of information provided within the park. When compared with other forms of visitor management development (improved roadways, developed campgrounds, full-time personnel staffing, visitor centers, etc.), making improvements to the information made available to tourists may be the most cost-effective way of affecting visitor experiences and satisfaction.

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**Please indicate below approximately how much for each service**

Food and beverage _____	Transportation _____
Accommodation _____	Books / Maps _____
Guide Services _____	Other: please specify _____

10. Please indicate if there are any services you would be willing to pay for during your next visit to the National Park?

11. What do you like **best** about the area? (What do you enjoy most about Vilsandi and Saaremaa?)

12. What do you like **least** about the area?

13. What could be done to improve your visit to the park?

14. On a scale of 1 to 10 with 10 being the perfect trip, how satisfied are you overall with your experience to the national park? \_\_\_\_\_ Rating

**Finally we would like to ask some questions about you personally. All answers will be kept confidential.**

15. Your sex? \_\_\_\_\_ Male \_\_\_\_\_ Female

16. Your age? \_\_\_\_\_ Years

17. Your marital status? \_\_\_\_\_ Single \_\_\_\_\_ Married \_\_\_\_\_ Divorced \_\_\_\_\_ Widow

18. How much formal education have you had? (**Check the highest**)

\_\_\_\_ Grade school

\_\_\_\_ Some college/vocational

\_\_\_\_ Masters degree

\_\_\_\_ High school

\_\_\_\_ Bachelor/university degree

\_\_\_\_ Doctoral

Do you have any other Comments?

**Thank you so much for your time**

## Appendix B. Vilsandi National Park International Visitor Survey Results Summer 2011

A preliminary survey of international visitors to Vilsandi National Park was conducted July 9 to July 30, 2011. The purpose of the survey was to collect basic information about international visitors to VNP. Surveys were conducted at 4 locations including Harilide Peninsula, Loona RMK Center, Loona Manor, and Papissaare Harbor.

Survey Location	Count	%
Harilide Peninsula	19	40.4
Loona RMK	18	38.3
Loona Manor	8	17.0
Papissaare Harbor.	2	4.3
Total	47	100.0

### 1. Country

Country	Count	%
Finland	14	29.8
Germany	13	27.7
Sweden	3	6.4
Switzerland	3	6.4
Austria	2	4.3
Belgium	2	4.3
Holland	2	4.3
Australia	1	2.1
France	1	2.1
Italy	1	2.1
Netherlands	1	2.1
Poland	1	2.1
Russia	1	2.1
United Kingdom	1	2.1
USA	1	2.1
Total	47	100.0

### 2. Where are you staying while visiting the park [or Saaremaa Island]?

Location	Count	%
Kuussaare	14	33%
Loona Manor	6	14%
RV	4	10%
Tenting areas	2	5%
Summer Home	2	5%
Pilguse Manor	2	5%
Camping lake Karujarv	2	5%
Tourist farm	2	5%
Summer house in Karala	1	2%
Pidula	1	2%

Muldre	1	2%
Kuressaare Go Spa	1	2%
Karla	1	2%
Hotell Saaremaa	2	5%
Grand Rose, Kuressaare	1	2%
Total	42	100%

3. Is this your first visit to the park? **(17%; n=8) No (83%; n=38) Yes**

3a. **If No**, How many times have you been here previously?

Previous Visits	Count	%
1	3	37.5
3	1	12.5
5	2	25.0
7	1	12.5
10	1	12.5
Total	8	100.0

4. Was this trip to Vilsandi National Park a: **59% (n=27) Day Trip 41% (n=19) Overnight Visit**

5. How long/ days will you spend in Vilsandi National Park on this trip?

# Hours Visit	Count	%	# Days Visit	Count	%
1	1	4.5	1	5	21.7
2	4	18.2	2	10	43.5
3	4	18.2	3	4	17.4
4	2	9.1	4	1	4.3
5	1	4.5	5	2	8.7
6	9	40.9	14	1	4.3
8	1	4.5			
Total	22	100.0	Total	23	100.0

5a. How many days you stay on Saaremaa?

# Days	Count	%
1	2	4.9
2	6	14.6
3	6	14.6
4	11	26.8
5	7	17.1
6	1	2.4
7	3	7.3
10	2	4.9
14	1	2.4
21	1	2.4
30	1	2.4
Total	41	100

6. What is the main reason you are visiting the park?

<b>Reasons</b>	<b>Count</b>	<b>%</b>
Nature	20	44.4
Bird Watching	4	8.9
Recreation (Photography, motor cross, etc)	4	8.9
Other (photography, motor cross)	4	8.9
Wildlife	3	6.7
Touring	3	6.7
Holiday	2	4.4
Lighthouse	2	4.4
Biking	1	2.2
Camping	1	2.2
Family History	1	2.2
Total	45	100.0

7. What activities do you plan to do or have done while at the park? (hiking, fishing....):

<b>Activity</b>	<b>Count</b>	<b>%</b>
Hiking	29	64.4
Biking	6	13.3
Sightseeing	4	8.9
Beach	1	2.2
Boating	1	2.2
Nature	1	2.2
Camping	1	2.2
Bird Watching	1	2.2
Other	1	2.2
Total	45	100.0

8. Where did you get information about the park?

<b>Information Sources</b>	<b>Count</b>	<b>%</b>
Internet	10	23.3
Information Centers	8	18.6
Books	6	14.0
Friends	4	9.3
Word of Mouth	3	7.0
Other	3	7.0
Travel Organization	3	7.0
Map	2	4.7
Brochures	1	2.3

Tour Guides	1	2.3
Loona RMK	1	2.3
Magazines	1	2.3
<b>Total</b>	<b>43</b>	<b>100.0</b>

9. Did you spend any money on services or activities during your visit to the park? 59% (n=22) No 41% (n=15) Yes

If yes, about how much money did you spend total:

<b>Total Spent on trip</b>	<b>Count</b>	<b>%</b>
Less than 100 Euros	9	60.0
100 - 199 Euros	1	6.7
200-299 Euros	2	13.3
400-499 Euros	1	6.7
500 Euros	1	6.7
1400 Euros	1	6.7
<b>Total</b>	<b>15</b>	<b>100.0</b>

Please indicate below approximately how much for each service in Euros

<b>Service Items</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Average</b>	<b>Std. Deviation</b>
a. Food and beverage	15	2	280	73	84,4
b. Accommodation	8	2	420	155	162,0
c. Guide Services	2	2	90	46	62,23
d. Transportation	5	5	560	177	227,7
e. Books / Maps	7	2	25	11	8,6
Other money spent (insect spray & fuel)	2	5	140	73	95,5

10. Please indicate if there are any services you would be willing to pay for during your next visit to the National Park?

<b>Services</b>	<b>Count</b>	<b>%</b>
Food & Beverage	8	38.1
Camping	3	14.3
Guides	3	14.3
Boat Trip to Vilsandi	2	9.5
Horseback Riding	2	9.5

Entrance Fees	2	9.5
Place to Clean Fish at campsite	1	4.8
<b>Total</b>	<b>21</b>	<b>100.0</b>

11. What do you like **best** about the area? (What do you enjoy most about Vilsandi and Saaremaa?)

<b>Like Best</b>	<b>Count</b>	<b>%</b>
Nature	16	42.1
Calm, solitude, quiet	7	18.4
Coastline	4	10.5
Landscape	3	7.9
Lighthouses	2	5.3
Infrastructure (signs, etc.)	2	5.3
Touring - sightseeing	2	5.3
Hikes	1	2.6
Wildlife	1	2.6
<b>Total</b>	<b>38</b>	<b>100.0</b>

12. What do you like **least** about the area?

<b>Least Like</b>	<b>Count</b>	<b>%</b>
Other	6	21.4
Insects (flies, mosquitoes)	6	21.4
Difficulties in finding places	5	17.9
Pollution - litter	3	10.7
Poor Routes - car and bike routes	2	7.1
No Information - (lack of in English)	2	7.1
Weather	1	3.6
Noise	1	3.6
No food or groceries	1	3.6
Nothing - meaning very good	1	3.6
<b>Total</b>	<b>28</b>	<b>100.0</b>

13. What could be done to improve your visit to the park?

<b>Recommendations</b>	<b>Count</b>	<b>%</b>
Information about areas, available in English etc.	9	36.0
Signs - directions, more, better	6	24.0

Better Maps	2	8.0
Improve Camping Facilities	2	8.0
Other	2	8.0
Better Roads	1	4.0
Restaurants - food, drink, etc	1	4.0
Clean up garbage on beaches and area	1	4.0
Public transportation – more	1	4.0
Total	25	100.0

14. On a scale of 1 to 10 with 10 being the perfect trip, how satisfied are you overall with your experience to the national park?

Satisfaction Score	Count	%
2.0	1	2.3
5.0	1	2.3
6.0	1	2.3
7.0	6	14.0
8.0	18	41.0
9.0	6	14.0
10.0	10	23.3
Total	43	100.0

Average = 8.2

15. Your sex? 56% (n=25) Male 44% (n=20) Female

16. Age of Respondents.

Age	Count	%
19	1	2.3
20-29	3	6.8
30-39	8	18.2
40-49	15	34.1
50-59	10	22.7
60-69	5	11.4
70-75	2	4.5
Total	44	100.0

Average age = 46 years old (*Standard Deviation* = 13)

17. Your marital status?

Status	Count	%
Single	11	30.6
Married	24	66.7
Divorced	1	2.8
Total	36	100.0

18. How much formal education have you had? (*Check the highest*)

Educational Level	Count	%
High School	6	16.2
Some college / vocational school	2	5.4
Bachelor / University Degree	14	37.8
MS Degree	10	27.0
Doctoral degree	5	13.5
Total	37	100.0

Do you have any other Comments?

Comments	Count
Did not realize it is such a long walk to lighthouse	1
First day of trip	1
Found some parts of the park to be crowded. They are concerned about the effects on wildlife if tourism continues to increase in the area.	1
German family visiting their summer home. Came for Ancestry tourism as well	1
Good luck!	1
Hope this place stays beautiful for years to come	1
I didn't know I could not drive to the lighthouse	1
Just arrived, haven't had many experiences yet	1
Just arrived, haven't spent money yet	1
Much different than Sooma, would like to climb Lighthouses. This is a beautiful place	1
Pre-paid tour	1
Professor of zoology, biology	1
Sad we haven't seen any seals	1
This place could use more picnic tables	1

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This place needs a pub	1
Very disappointed about not being able to see the Lighthouse. They feel that if it is advertised- increase expectations Should also be set about the trail, distance, what type of Shoes to wear, etc.	1
Very nice place. We'll be back!	1

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