

Blue-Sky, Megan

CAHA #2454

From: Fox, Lori
Sent: Tuesday, September 21, 2010 9:20 AM
To: Blue-Sky, Megan
Subject: FW: sorry, use this one
Attachments: Intercept_Writeup.docx

For the CAHA admin, thanks!

Lori Fox

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From: Mansfield, Carol A. [mailto:carolm@rti.org]
Sent: Tuesday, September 07, 2010 8:49 AM
To: Fox, Lori; Mansfield, Carol A.
Subject: sorry, use this one

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From: Mansfield, Carol A.
Sent: Friday, September 03, 2010 5:04 PM
To: 'Fox, Lori'
Cc: Mansfield, Carol A.
Subject: short summary of visitor intercept survey

Hi Lori,

I attached a short summary of a few results from the visitor survey for you to see. There are a few changes I need to make to the document next week (and, of course, we need to write up the report and the generate the rest of the stats), but I wanted you to see what we had so far if there was anything you wanted to use in the visitor experience section.

In addition, 98% rated their trip as very good or good (84% very good).

Let me know if you have questions,
Carol

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Beach Visitors

To support the required analyses and to collect information relevant to park management, NPS contracted with RTI International to conduct an intercept survey of visitors using the ocean-side beaches. The primary goal of the visitor intercept survey was to understand the current visitor use of the Seashore and how visitors' self-reported behavior would change under different management conditions. The details of the study are described in the final report (RTI 2010e).

The population for the Visitor Intercept Survey consists of two separate sampling populations. The first sampling population is all visitors on open beaches in the Seashore from 6 a.m. to 10 p.m. between August 4th, 2009 and March 29th, 2010. The Seashore beaches were divided into 168 segments of varying lengths based on the expected number of visitors at the beach segment. To ensure that we had at least one three-day interview trip taken during the low winter season, we created two seasonal strata out of the 34 weeks in the first sampling population. Five trips were taken during the first strata consisted of the 17 weeks between August 4th and November 30th, 2009. One trip was taken during the lowest visitation strata, which consisted of the 17 weeks from the beginning of December 2009 through the end of March 2010.

The second sampling population consists of visitors at 12 selected beach areas in the Seashore from 10 a.m. to 6 p.m. Friday through Monday between June 15th and July 26th 2010. The 12 selected beach areas are: Oregon Inlet Campground; Oregon Inlet; Hatteras Island Pier Beach; Avon Pier Beach; Lighthouse Beach; Cape Point; South Beach; Frisco Pier Beach; Hatteras Inlet (Hatteras); Hatteras Inlet (Ocracoke); Ocracoke Village Beach; and South Point Ocracoke.

Field staff took eight 3-day trips to the Seashore to interview beach visitors (six for the first sampling population and two for the second). Each selected day, field staff traveled to two randomly selected clusters of beaches and conducted interviews in two randomly selected beach segments per cluster. Two hours of interviewing was allotted for each beach segment. Groups of beach visitors were selected using systematic sampling based on the number of groups within the segment. In total, 96 beach segments were visited for interviews and 245 interviews were completed. The data from the counting trips was weighted based on sampling design and the probability that a segment was selected for counting at a certain time or a certain day.

Results

According to the survey results in Table 1, the most popular activities at the Seashore are "swimming, sunbathing, or enjoying the beach" and "bird watching/wildlife watching". The activities "driving on the beach during the day" and "beach fishing", both of which are

potentially impacted by new ORV management, are done by an estimated 40.7% and 37.5% of visitors in the sampling population, respectively. Table 2 lists weighted percent of the sample that selected each activity as their primary activity for the trip. Beach fishing was the primary purpose of the trip for 22.8% of visitors.

**Table 1. What activities have you done so far this trip?
Mean estimate and 95% confidence interval.**

Activity	Mean	Low	High
Pier fishing	5.5%	0.4%	10.6%
Beach fishing	37.5%	25.6%	49.4%
Charter (offshore) fishing	1.8%	0.0%	4.4%
Swimming, sunbathing, or enjoying the beach	99.4%	98.0%	100.0%
Surfing or kite-surfing	17.2%	4.2%	30.3%
Birdwatching/wildlife-viewing	70.7%	63.2%	78.2%
Take a ferry	38.5%	10.7%	66.2%
Visit the Cape Hatteras Lighthouse or Bodie Island Lighthouse	22.6%	9.0%	36.2%
Visit historic sites in Cape Hatteras National Seashore	18.4%	9.3%	27.4%
Canoeing, kayaking, or sailing	6.2%	1.8%	10.7%
Driving on the beach during the day?	40.7%	27.2%	54.2%
Driving on the beach at night after 10pm	4.5%	0.7%	8.3%
Other	12.4%	2.0%	22.8%

**Table 2. What is your primary activity for this trip?
Mean estimate and 95% confidence interval.**

Activity	Mean	Low	High
Beach fishing	22.8%	7.3%	38.2%
Swimming, sunbathing, or enjoying the beach	63.2%	48.8%	77.6%
Surfing or kite-surfing	6.9%	0.0%	16.5%
Visit the Cape Hatteras Lighthouse or Bodie Island Lighthouse	0.5%	0.0%	1.3%
Driving on the beach during the day	0.7%	0.0%	1.9%
Other	6.0%	0.0%	13.0%

From Table 3, awareness of beach driving among visitors to the Seashore is high, with 91.6% aware that some Seashore beaches are open to vehicles. Additionally, 58.7% of visitors are aware that some beaches previously open to vehicles are now closed at some point during the year. Current management of ORVs did not affect the planning of trips for 93.4% of visitors, however 4.2% of visitors reported making plans closer to time of the trip due to uncertainty of beach closures.

Table 3. Knowledge and Impact of Current Management
Mean estimate and 95% confidence interval.

Question	Answer	Mean	Low	High
Before you arrived at Cape Hatteras National Seashore for this trip, did you know that some beaches at Cape Hatteras National Seashore were open to vehicles?	Yes	91.6%	84.0%	99.3%
	No	8.1%	0.5%	15.8%
	Don't Know	0.2%	0.0%	0.6%
Before you arrived at Cape Hatteras National Seashore for this trip, did you know that certain parts of the seashore that have been open to vehicles in the past are now closed to vehicles during parts of the spring, summer and fall?	Yes	58.7%	47.3%	70.0%
	No	40.1%	28.4%	51.9%
	Don't Know	1.2%	0.0%	2.7%
How would you say the uncertainty about whether specific parts of the seashore would be open to vehicles affected when you started planning for this trip?	Didn't Affect	93.4%	88.1%	98.7%
	Farther in Advance	1.8%	0.0%	3.9%
	Made Plans Closer to the Time of the Trip	4.2%	0.2%	8.2%
	Don't Know	0.6%	0.0%	1.5%

When presented with a description of some features of ORV management under a draft of alternative D, 32.7% of visitors reported that it is unlikely that they would have taken their current trip to the Seashore if the alternative had been in place. Instead, 12.0% of visitors reported they would have gone to a different beach outside of North Carolina, while 7.9% would have stayed home (Table 4).

Table 4. Predicted Impact of Alternative D

Question	Answer	Mean	Low	High
If the plan on this map had been in place *before* you made any plans or reservations for this trip and before you put down any money on deposits, how likely is it that you would still have taken this trip?	Very Likely/Somewhat Likely	67.3%	49.1%	85.6%
	Somewhat Unlikely/Very Unlikely	32.7%	14.4%	50.9%
What do you think you most likely would have done instead?	Go to Another Part of the Outer Banks	4.8%	0.0%	12.5%
	Go to a Different Beach in North Carolina	0.8%	0.0%	1.9%
	Go to a Different Beach outside North Carolina	12.0%	2.3%	21.7%
	Go to Somewhere Else	0.5%	0.0%	1.5%

Comment [c1]: Are these percents supposed to add up to 100%?

When presented with a description of ORV management under a draft version of alternative F, 93.5% of visitors reported that they would likely still have taken their current trip to the Seashore. 3.3% of beach visitors reported they would have stayed home if alternative F had been in place before they made plans (Table 5).

Table 5. Predicted Impact of Alternative F

Question	Answer	Mean	Low	High
If the plan on this map had been in place *before* you made any plans or reservations for this trip and before you put down any money on deposits, how likely is it that you would still have taken this trip?	Very Likely/Somewhat Likely	93.5%	86.2%	100.0%
	Somewhat Unlikely/Very Unlikely	6.3%	0.0%	13.6%
	Don't Know	0.2%	0.0%	0.4%
What do you think you most likely would have done instead?	Go to Another Part of the Outer Banks	0.1%	0.0%	0.2%
	Go to a Different Beach in North Carolina	0.2%	0.0%	0.5%
	Go to a Different Beach outside North Carolina	0.5%	0.0%	1.1%
	Go to Somewhere Else, But Not an Ocean Beach	2.3%	0.0%	7.2%
	Stay Home	3.3%	0.0%	8.3%
	Don't Know	0.0%	0.0%	0.1%