

# **Oregon dunes national recreation area, USA: a trend examination of trip characteristics, crowding, and satisfaction levels (2002, 2006, and 2011)**

**Alan R. Graefe**, The Pennsylvania State University, USA  
**Robert C. Burns**, West Virginia University, USA

In response to growing visitation and peak use congestion at certain sites within the Oregon Dunes National Recreation Area (ODNRA), Oregon, USA, USDA Forest Service officials from the Siuslaw National Forest identified a need to better understand the customers who use the area. After an initial survey of visitors in the summer 2002 recreation season, a follow up study was conducted during the summer 2006 and 2011 recreation seasons. Those follow up surveys were designed to closely resemble the initial survey and build on previous studies at similar coastal settings. On-site interviews were conducted with a total of 1842 respondents (442 visitors in 2002, 487 visitors in 2006 and 913 visitors in 2011). Survey days were stratified across morning, afternoon and evening timeframes during week and weekend days from June through September each year. Just over eighty percent of the interviews were conducted at sites within the ODNRA near Reedsport, Oregon, with the remainder completed at the Sand Lake area, on the northern Oregon coast. The focus of this investigation was an evaluation of visitor perceptions of conditions at the Oregon Dunes National Recreation Area and Sand Lake area during the summer 2002, 2006 and 2011 recreation seasons. Results of the initial 2002 survey suggested that visitors generally:

- encountered about the same number of visitors as they expected,
- did not experience much conflict or interference from other visitors,
- perceived the area and its surroundings to be in good condition,
- had a good time during their visit, and
- did not feel that there were too many people or OHVs on the beach.

Responses to many of the questions changed dramatically between 2002 and 2006. However, the 2011 data had greater similarities to the original data collected in 2002. There were differences in both the characteristics of the visitors and their perceptions during the 2006 study. For example, in 2006 there were less first time visitors than in both the 2002 and 2011 studies. Also, the visitors in 2006 stayed at the ODNRA for a longer period of time whereas the 2002 and 2011 visitors stayed nearly the same length of time. Yet, the 2011 visitors travelled the farthest to recreate at the Oregon Dunes area than visitors from the other studies. In 2006, a greater amount of visitors travelled to the areas at the ONDRA from states outside of Oregon.

A series of questions dealing with acceptable numbers of beach users and OHVs showed that most visitors in 2002 found the social conditions that they encountered acceptable. There were differences between the riding areas, however. Visitors at Sand Lake reported higher encounter and crowding levels than those at sites within the main Oregon Dunes NRA. In 2006, the differences between Oregon Dunes and Sand Lake were still evident, but the visitors were much less tolerant of other OHVs and reported seeing smaller numbers of other riders while recreating. In 2011, visitors reported seeing an even smaller amount of other riders on the Dunes. Yet these visitors indicated that they would be comfortable seeing an overall higher number of other riders while recreating at the ODNRA than the 2002 and 2006 visitors. Visitors in 2006 showed greater awareness than 2002 visitors of what to expect in terms of crowding. Conversely, a larger percentage of visitors in 2011 reported seeing less crowding than they expected.

Survey results between the three years indicate that Oregon Dunes visitors express increasing levels of satisfaction with their visits and would like to see management continue in the directions that are currently being pursued. Visitor perceptions of acceptable crowding levels have changed throughout the studies as well. Despite the fact that overall use has increased at the ODNRA, the data shows growing visitor tolerance to crowding.

Discussion during the presentation will focus on understanding the role of crowding and conflict in predicting overall satisfaction. We will test the hypothesis that a floating base of satisfaction is the result of management actions over the past decade, including a ban on alcohol and increased ranger patrols. In addition differences in the visitor characteristics and trip characteristics will be examined to understand how the respondents have changed over the three waves of data collection.