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Paul F. J. Eagles ^a , William van Hemessen ^a & Maria Legault ^a

^a Department of Recreation and Leisure Studies, University of Waterloo, Waterloo, Ontario, Canada, N2L 3G1

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ADVANCE BOOKING BEHAVIOUR OF PARK VISITORS: ONTARIO PROVINCIAL PARKS

Paul F. J. Eagles*, William van Hemessen, and Maria Legault

Department of Recreation and Leisure Studies

University of Waterloo, Waterloo, Ontario, Canada. N2L 3G1

*corresponding author at eagles@uwaterloo.ca

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INTRODUCTION

As technological methods for booking travel plans in advance have become more accessible to travellers, advance-booking activities have increased across the spectrum of different travel types (Chen & Schwartz, 2006; Huh & Park, 2010; Lee, 2008; Ong, 2012). Within any park system, and specifically within the Ontario Parks system, research on the advance-booking behavior of visitors can aid managers in understanding which sites are most desirable to visitors (i.e. developed vs. undeveloped campsites), the characteristics of visitors (e.g. preference for independent vs. group travel), and how to best manage advance-booking behavior. Different from most accommodation reservation systems, advance-booking in the Ontario Parks system requires that payment be made online at the same time as requesting a specific accommodation site (Ontario Parks, 2011a). Visitors who book and pay early for their park site in this manner

will have certain expectations for their trip, and managers must be responsive to their needs to provide a satisfactory experience (Crompton & Kim, 2004; Hall & Cole, 2000).

Advance-booking motivation and behavior is frequently studied within the context of tourism. Research conducted within this field contributes to marketing, service provision, and planning for tourism businesses, governments, and other organizations (Chen & Schwartz, 2006, 2008; Huh & Park, 2010; Iverson, 1997; Law & Leung, 2000). Zalatan (1996) suggested that distance travelled, familiarity with the site, socio-demographics (e.g. age and income), and use of a travel agent by the tourist are all determinants of advance-booking time. Tourism businesses, for example, have found it helpful to understand advance-booking behavior for the purpose of targeting specific tourist groups (Chen & Schwartz, 2008; Law & Leung, 2000). It is here proposed that parks could similarly benefit from research into booking behavior. Due to the paucity of studies explicitly investigating this topic, the present research claims only to be an initial foray into the world of booking behavior of park visitors (Chen & Schwartz, 2006; Kim & Kim, 2004; Lee, 2008).

Scholarly evaluations of the interactions between park visitors and booking systems could elucidate characteristics of this relationship relevant to daily management activities. For example, park managers did not give sufficient attention to the importance of international visitors to parks, for example the inability to rent camping equipment (Eagles, 1998; Iverson, 1997). An evaluation of the booking-related challenges facing international tourists could encourage more frequent visitation by foreign travellers seeking to contribute financially to Canada's protected spaces (O'Neill, Riscinto-Kozub & Van Hyfte, 2010). Repeat visitation by domestic travellers is also not connected to the structure of the booking system (Eagles, 1998).

Analysis of booking behavior could provide information on the facility type and service level desired by each demographic group and data on these connections is conveniently stored in online databases (O'Neill et al., 2010; Ontario Parks, 2011a). Managers could use this information to pre-emptively ascertain visitor's desires, thus creating a positive experience and encouraging repeat visitation (O'Neill et al., 2010).

Managers could also use information on advance-booking behavior to motivate potential travellers to become park visitors (Eagles, 1998). Within the tourism literature, information, expectation, and competition are all factors connected to the booking behavior of travellers (Chen & Schwartz, 2006; Schwartz, 2008). Visitors make different decisions based on the amount of information available to them regarding the destination (Schwartz, 2008). This information also contributes to the visitor's expectations surrounding the purchase decision and their ultimate level of satisfaction with the trip experience (Eng & Niininen, 2005; Gursoy & Chen, 2012). Satisfaction can be linked to the willingness of the individual to return to the same location again in the future (Parasuraman, Zeithaml & Berry, 1985). Lastly, competition between visitors for specific sites can alter how early booking occurs and how much money is spent (Schwartz, 2008).

This paper investigates the connections between advance-booking behavior and the park visitor's motivation and behavior. Accordingly, the literature review will draw out relevant features of the Ontario Parks system, relate this information to booking procedures, and address the theoretical issue of satisfaction within the park visitor's experience. Within the data analysis section of this paper, the variables will be analyzed to present managers with strategies for encouraging international, domestic, and reluctant visitors to visit the parks. Managers could

attract visitors to the park by providing more desirable campsite and accommodation options; this will aid in an overall, positive experience for the park visitor. The discussion section of this paper will draw these connections for the reader, make comments on managerial implications, and the conclusions will suggest future directions for more comprehensive, related research.

LITERATURE REVIEW

Characteristics of the Ontario Provincial Parks (OPP)

The accommodations available, equipment requirements and booking processes in Ontario Provincial Parks' (OPP) have implications for the interactions between site, visitor, and management activities. The OPP is an old, large park system which manages a high volume of visitation each year. In 2008, it contained 330 parks covering 7.8 million hectares of land and water, of which 116 parks have visitor facilities. In that same year, the OPP system had 26,992 accommodation options that catered to 1.31 million campers that undertook 4.97 million visitor nights of activity in the parks. The campers and day users combined engaged in 9.53 million visitor days of activity in 2008 (Ontario Parks, 2009). Consequently, competition is high for available resources amongst potential visitors to the Ontario Parks. This competition is heightened by the limited types of accommodation and equipment available to the visitors when booking.

There are only 5 national parks in Ontario, and several do not provide camping and the others have a very limited supply. The Conservation Authority system is the second largest provider of campsites, with an inventory of 8,000 sites (Baldin, Deadman & Eagles, 2004). However, these

are found in small parks that lack the spectacular natural features available in provincial parks. Private sector campgrounds are abundant, but cater to high density camping with few natural environment attributes. Therefore, the Ontario Provincial Parks system is the premier provider of wilderness camping in Ontario.

Based on the history and policy of the park agency, accommodation types in a single Ontario Park include a mix of campsites, lodges, and cabins. However, cabins are found in only a few parks and lodges in only one park. Visitors with a superior level of information on the park, either from past visits or research (e.g. online or word of mouth), will prefer certain sites over others (Brunner, Stocklin & Opwis, 2007). The type and number of accommodation options include: back country campsites (7,671), non-electric campsites (11,678), campsites with electricity (7,671), group campgrounds (250), yurts (52), cabins (5), and cottages (8) (Ontario Parks, 2009; Vanstaalduinen, pers. comm.). Cabins are retrofitted ranger cabins in the interior of a few parks, and yurts are semi-permanent tents provided by the park on front-country campsites. Visitors are expected to use tents or recreational vehicles when they select a regular campsite for their park stay. Accommodation type is therefore closely linked to equipment type. This has implications for the nature of the visitor's booking and park experience.

Equipment type refers to the type of camping equipment used by a visitor. When booking a campsite within OPP, visitors are prompted to declare the type of equipment that they will use during their stay. This ensures that the visitor's equipment is appropriate for the campsite. The options provided on the booking system include: one tent, two or more tents, camper trailer, small trailer, large trailer, or an extra-large recreational vehicle. Cabins and yurts are also counted as equipment types. Opportunities to buy or rent camping equipment within provincial

parks are very limited; thus, most campers must either own the necessary camping accoutrements or rent from private sector providers outside the parks. Recreation vehicle rentals for camper's use, for example, are often only available in major cities distant from the parks and are expensive. This situation could present barriers to international visitors or lower-income domestic travellers (Eagles, 1998). Park managers should be aware of the connections between accommodation availability, site type, and the booking experience. The interactions between each have important implications for the ease with which potential visitors can make a site reservation and the ultimate level of satisfaction they derive from their park stay.

Characteristics of the OPP Booking System

The booking system of the OPP has changed over time and its current operational system affects the interactions between site, visitor, and management activities. For decades, sites were booked by visitors upon arrival at the park; generally regarded as being an equitable and inexpensive method of allocation. In the early 1990s, however, some North American parks began to encourage booking in advance of a park visit through first telephone and later internet sources. OPP followed this example and launched a toll free telephone number for advance-booking in the early 1990s. The demand for the system was so large that over 1 million telephone calls were attempted within the first 24 hours of the system's initial operations, indicating a very high pent up demand (Vanstaalduinen, pers. comm.). When Internet booking became available for OPP its use increased and the use of the call center declined (Vanstaalduinen, pers. comm.). Duman and Tanrisevdi (2011) found that the tourists studied had high levels of involvement with

Internet use in vacation decisions, suggesting higher levels of internet use in destination choice and booking in recent years.

Booking in advance of a trip has two major implications for the visitor's behavior and pre-trip experience. First and foremost, the OPP system requires that the visitor provide substantial amounts of information about the trip well before their booking. They must state the specific site that they want, the equipment type they intend on using, and the party size expected. Party size represents the number of individuals anticipated to be using a site at the time of booking. OPP policy states that only six people can stay at a campsite in one booking reservation, unless they are members of a family group. The volume of information required from the visitor before the booking process, as well as the fact that immediate payment for the trip is required, has several implications for the present research.

High information requirements for the booking process could affect the visitor's motivation levels towards the trip, as well as their expectations of the experience. Travellers may not be motivated to visit Ontario's park system because of the challenge in locating the requisite accommodations and equipment. This is especially true given that the potential visitor will be forced to pay for the campsite immediately, making their booking behavior a confirmation of action and a financial investment. This holds an element of risk, since the potential visitor may be hesitant to this costly decision. However, advanced booking may also be seen as reducing risk as it enables the potential traveller to be assured of an appropriate accommodation option when planning a vacation. In addition, travel agents provide limited assistance in this regard as the system does not allow third party booking or sales of accommodation options (Eagles, 1998).

Visitors to the Ontario Parks are penalized for making significant alterations to their reservation request once it is booked. Booking alterations are permitted, but financial penalties are applied to those who shorten their trip, cancel entirely, or fail to arrive at the site on the stated date. The penalties for shortening or cancelling a visit range from 50 percent to 90 percent, depending on how early the visitor reserved the campsite (Ontario Parks, 2011b). "No show" visitors (i.e. those who fail to arrive on their stated date) are automatically charged full fees for one night in addition to the penalties mentioned above (Ontario Parks, 2011b).

Alternatively, the high level of information required in advance-booking will cause the visitor to develop specific expectations for their park experience. Unless the visitor has already been to the campsite and has first-hand knowledge, they will be learning about the location through online, word-of-mouth, or physical sources of information (e.g. park newsletters or brochures) (Evanschitzky & Wunderlich, 2006; Kim, Hallab & Kim, 2012). In 2012, the campsite reservation system started to include photos of each campsite, but these were not available in 2008. Based on the pictures, visitors will develop expectations of their campsite, its attributes and their quality. A manager's ability to meet this expected service level will determine whether or not the visitor returns to the campsite in the future (O'Neill et al., 2010).

Secondly, and on a related note, the nature of the advance-booking system harmonizes the types of sites available and the needs of visitors. During the booking process, visitors are provided with the option of a map, list, or calendar view for selecting the site they would like to reserve (Ontario Parks, 2011a). They are thus able to navigate easily through a range of different options for choosing their preferred site, and are assured that the site they desire will be available to them upon their arrival. Managers are also able to see, with relative ease, the most popular sites and

therefore where the majority of their financial and personnel resources should be focused. Consequently, the booking system helps assure visitors that they are more likely to be provided with a satisfactory experience and helps managers more effectively provide targeted services. This section has highlighted how the accommodation, equipment types, and booking processes associated with the OPP have implications for the interactions between the visitor, site, and manager. Booking in advance forces the visitor to provide a high volume of information about their trip, which impacts their purchase motivations as well as trip expectations. How these variables connect to the visitor's satisfaction will be discussed in more depth next.

Visitor Satisfaction with the Park Experience

The connection between visitor satisfaction and booking behavior relates to the degree of communication between visitors and managers. Visitor satisfaction can be broadly defined as an individual's emotional response to service quality (Lee, Graefe & Burns, 2004; McMullan & Gilmore, 2003; Silverberg, Backman & Backman, 1996). The concept can be estimated by managers, with relative accuracy, by asking visitors to provide feedback on a Likert-style scale and applying a specific formula to their responses (Eng & Niininen, 2005). The formula is: the visitor's rating of their expectation (VE) for the trip is subtracted from a rating of their experience (VQ) (Eng & Niininen, 2005). As already discussed, the booking system forces the potential visitor to formulate certain pre-trip expectations. For some visitors, the booking system may also affect their satisfaction with the experience by limiting the spontaneity of their trip (Hall & Cole, 2000). Spontaneity is often an important factor motivating tourists to undertake travel, and can have a variable effect on the risk the visitor associates with their trip expenses

(Crompton & Kim, 2004). For others, assurance of suitable accommodation will reduce the risk of having an inappropriate site or not being able to obtain a site during high volume vacation periods.

Managers can use the booking system to evaluate the needs of visitors coming to their parks. This information can lead to improvements in service quality and more efficient fulfillment of the visitor's needs. Researchers have determined some connections between booking behavior and visitor type. Légaré and Haider (2008) characterized three "motivation-based clusters" of visitors to the Chilkoot Trail National Historic Site of Canada. It was found that "heritage tourism" cluster members booked campsites farther in advance than those in the "nature appreciation" cluster (Légaré and Haider, 2008). Galloway (2002) identified three clusters of park visitors based on individual characteristics and motivations for visiting Ontario Parks: Cluster 1 was defined by an "active enjoyment of nature"; Cluster 2 by the motivation to "escape stress"; and Cluster 3 was defined as "sensation seekers". Managers could use research such as this to provide more spontaneous, natural, or educational adventures within the park, based on visitor preference.

Booking systems also allow managers to plan for visitor capacity, at peak times, during the season. If managers know how many visitors to expect during a certain period of time, they can concentrate financial and personnel resources into that time period. Park visitors almost always travel in groups, and the booking system provides managers with an estimation of group size. Fagan and Eagles (2000) found that only 2.7 percent of younger campers and 4.1 percent of older campers travelled alone within the OPP, meaning that over 96 percent of campers travelled in groups (Figure 1). Managers able to handle peak capacity within the park are more likely to

avoid problematic service shortages and provide a higher-quality experience to visitors (McMullan & Gilmore, 2003).

This section has provided an overview of the key literature surrounding the concept of booking in the OPP, with reference to the implications for visitors and managers. Booking in advance requires that the visitor provide specific information about their park visit. This information, and simultaneous payment requirement, could impact the visitor's motivations and expectations for the park experience. From a park manager's perspective, however, information from advance-booking could be used to more efficiently meet specific visitor needs and avoid service delays during periods of peak capacity. In the following sections, data from the OPP booking system will be related to this body of literature to identify how managers might increase park visitation levels.

METHODS

This research investigated the advance-booking behavior of OPP campers between September, 2007 and November, 2008, providing data for 2008. Throughout the rest of this analysis, the word 'campsite' is used to refer to all types of accommodations offered by OPP (including both cabin and yurts). Data from the lodges, which are privately operated, were not available. Advance-booking data were also not available for the eight park cottages within the OPP, as they are booked directly with the administrative office of each individual park. Other categories which were not used in the present analysis include "canoe park", "moorage", and "storage" site types. These categories were removed because they contained few records (i.e. they are infrequently booked in advance) and do not relate to the research in question.

Originally, the database contained a total of 360,212 records. We removed, for the purpose of this analysis, those records which contained null values for site type, party size, or arrival date. A total of 706 records (0.002% of the sample) were excluded for this reason, leaving 359,506 reservations for the analysis. These data represent a census of accommodation reservations for all 116 operating provincial parks in Ontario for 2008. The unit of analysis used is one reservation, which represents one visit by a party of people at one accommodation location in a provincial park. A party consists of one or more individuals who travel together and stay at a park-provided accommodation facility, usually a campsite. Advance reservation records within the OPP are assembled from online, telephone, and at-park sources.

For each reservation, the reservation system records:

- 1) The park name,
- 2) The origin of the reservation (i.e. call center, internet, or in-person),
- 3) The year of the reservation,
- 4) The date of the reservation,
- 5) The date of the arrival at the park,
- 6) The party size,
- 7) The home city of the camper,
- 8) The province of the camper,
- 9) The postal code of the camper (for Canadians only),
- 10) The site type:
- a. Cabin
- b. Electric

- c. Group Camp
- d. Non-electric
- e. Yurt
- f. Storage (i.e. when a camper over-winters his/her recreational vehicle in the park),
- g. Canoe Park (i.e. interior campers pay for the privilege of long-term parking),
- 11) The rate type (i.e. regular or senior),
- 12) The pay type (i.e. MasterCard, Visa, American Express, debit card or cash),
- 13) The equipment type:
- a. Back Country Equipment
- b. 1 Tent
- c. 2 or more Tents
- d. Cabin
- e. Camper Trailer
- f. Large Trailer
- g. Small Trailer
- h. Extra-large Equipment
- i. Yurt

For this analysis, information was drawn from the following categories: year of reservation (2008), the date of the reservation, the date of arrival at the park, the party size, the type of site booked, and the type of equipment to be used. Both site type and equipment type were categorical variables. Party size was a quantitative variable in the original database; however, we

recoded it into a categorical variable using SPSS. Consequently, parties of seven or more individuals were combined into a single category.

For this analysis, the length of advance-booking ("booking length") was calculated as the difference in days between the date a visitor reserved a campsite and the date of arrival at the park. This ranged from 0 to 384 days. Some visitors did not reserve a site in advance, instead reserving a site upon their arrival at the park. These records were assigned a booking length of 0 days. The "back country" site type records contained no information on equipment type, so these records were assigned a new category, called "back country equipment". The only two back country access methods in Ontario parks are by canoe or by foot; therefore, we assumed that back country equipment would be canoes and tents, or backpacks and tents.

Two key assumptions were made in order to perform the analysis. First, the campsite reservations were viewed as independent cases. Since the database available to us did not indicate the identity of the individual who booked, we did not know whether multiple reservations were made by the same individual at different times. It is possible that some visitors camped at a provincial park more than once in 2008. Second, it was assumed that the party size stated was the number of individuals the registrant intended to bring to the site at the time of booking. However, Ontario Parks allows additional visitors to be added or removed to the reservation *post hoc*. For example, a campground visitor might invite friends or family members to join them after they have made the reservation; alternately, some visitors might find themselves unable to travel with their party. When these guests arrive at the park, they are added or subtracted to the party size in the original reservation record. We acknowledge, then, that it is

possible some reservations were made for fewer or more individuals than were recorded under party size.

The data received from Ontario Parks were in an ACCESS database. We transferred the data to an SPSS database for analysis. The statistical analysis was performed using IBM SPSS statistical software. A univariate ANOVA was used to test for between-subjects effects of the three variables on booking length. We then performed a one-way ANOVA and a *post-hoc* Tukey test on each variable independently to test for significant differences in mean booking length between categories. Huh and Park (2010) used a similar method of analysis in their examination of the relationship between trip planning and the traveller's biological age, time of travel, and generational cohort.

RESULTS

In this database of 359,506 reservations, 154,725 (43%) were made in advance using the online service, and 91,027 (29%) were made through the call centre. The use on the internet service was increasing over time, while the use of the call center use was decreasing (Vanstaalduinen, pers. comm.). A total of 99,106 (28%) reservations were made upon arrival at the park, revealing that 72% of reservations were made before arrival at the park, indicating a high degree of use by OPP campers. The popularity of the online service hints at the competition surrounding certain campsites, as well as the convenience of online booking. However, the use of at-park reservations suggests that some people may not have internet access, lack sufficient information to make an advance-booking, or prefer spontaneous travel.

Of the 353,001 reservations with home location information, 336,158 (95.2%) were from a Canadian address and 16,843 (4.8%) had an international address.

Combined, the three variables of party size, type of site booked, and equipment type explained 15% of the variation in booking length (R²=0.15). Of this figure, party size resulted in the largest variation in booking length (R²=0.08), followed by equipment type (R²=0.06), while site type explained comparatively little variation in booking length (R²=0.02). These results suggest that managers will be unlikely to encourage groups to book further in advance based exclusively on party size, type of site, or equipment type. Other variables which could be influencing the visitor's advance-booking behavior could be their level of awareness of the park, amount of perceived time for booking, or willingness and ability to plan ahead. Rather than focusing on the aggregated statistics presented above, researchers and managers should delve into the meanings hidden within each data set. This requires a triangulation of the data, analysis statistics, and literature.

A breakdown of the information within the party size category begins this process. Mean booking length differed by party size, and was the most influential of the three variables analyzed (p<.000). Groups of six individuals booked the farthest ahead, while single campers booked the least time in advance. Groups of five people and seven or more people had the second longest booking times, and were not statistically different from each other (Table 1 and Figure 2). The data in Table 1 suggests that groups of four or more individuals book farther ahead than smaller groups and solo campers. As has already been mentioned, 96 percent of campers were found to travel in groups (Fagan and Eagles, 2000). Consequently, it is likely that

the significance of party size to advance-booking behavior is related to the centrality of group travel to the park experience.

Different equipment types can also be broken down to indicate their influence on advance-booking behavior, based on mean booking length (p<.000). Visitors booked cabins farthest ahead (101 days), while those visiting the park with only one tent booked 27 days in advance of their trip (Table 2). This finding suggests that visitor competition for undeveloped sites is much lower than for developed sites, as well as possibly indicating that individual's travelling with little equipment are more able to be involved in more spontaneous travel. Data in Table 2 also suggest that individuals with larger recreation vehicles (e.g. larger trailer) book further in advance. This could be because of the difficulties associated with travel using a large trailer or vehicle. Consequently, campers appear to be eager to confirm the availability of a campsite and campground that can handle their large recreational vehicles before starting out on the trip.

As has already been mentioned, equipment type and site type are closely related. In this data set on site type, mean booking length varies for the same reasons as within equipment type (p<.000). Sites with cabins (95 days) and yurts (87 days) were booked farther ahead, while back country sites (41 days) were reserved in closest proximity to the date of travel (Table 3). Back country sites are relatively flat pieces of ground cleared to allow for the placement of a tent. Consequently, those sites with little infrastructure are subjected to less competition and may also be more attractive to adventurous individuals uninterested in extensive pre-planning of their trip. Sites with minimum levels of infrastructure, non-electric campsites for both front country and

backcountry, have the lowest mean booking lengths, due to the large supply of these types of sites and the relative simplicity of equipment type used a tent.

To generate proxy data for mean occupancy rates at each campsite, we also calculated the "intensity of use" for each campsite. This value puts the information just discussed into context and provides deeper insight into required managerial action. In 2008, there were 26,992 sites in the entire OPP system. We divided the number of reservations for each site type by the number of those site types in the parks system in 2008; this figure we termed intensity of use, i.e. the number of reservations per site for each site type. Table 4 shows the breakdown of different site types and their intensity of use. Site types with the highest intensity of use, cabins at 59 reservations per year and yurts at 41 reservations per year were booked the farthest in advance, cabins at 95 days and yurts at 87 days. This suggests the high level of competition for these sites causes people to book further in advance. These sites are also the most useful for all weather conditions, and especially so for cold and rainy weather. Site types with the lower intensity of use were booked (non-electric front country at 16 reservations per year, and back country at 4 per year) were booked the shortest in advance, non-electric front country at 46 days and back country at 41 days. There is one anomaly where group campgrounds are booked at a low 9 times per year but were booked at an intermediate 54 days in advance. These campgrounds are used by a unique user group, large social organizations such as church groups or children's clubs.

In the following section, the data, analysis results, and literature will be more thoroughly connected. Related implications for park managers will also be discussed.

DISCUSSION AND MANAGERIAL IMPLICATIONS

The analysis reveals that in this study advanced booking is well accepted by the park users, with 72% of all campers booking in advance. This high level of utilization suggests that all park systems should consider providing advance-booking opportunities for accommodation.

Party Size Influence on Advance-Booking Length

The vast majority of the users travel in groups, with the size of the party affecting booking behaviour, with larger groups much more likely to book farther in advance than smaller groups and individuals. Party size is thought to be related to booking length because of the popularity of group travel in parks, but the characteristics of each group type hold implications for management action (Fagan and Eagles, 2000). Figure 2 reveals that the length of the period between booking and arrival of the park peaks with groups of 6 at 70 days in advance and declines according to group size with single travellers booking only 10 days in advance. It is probable that as the number of travellers in a group increases, the complexity of making travel arrangements also increases, encouraging more pre-trip planning further in advance with large groups.

In Figure 2, larger parties booked farther in advance than small ones, with one exception. For the largest groups of over seven individuals, the bookings were typically for recreation groups (e.g. church groups, childrens' clubs, boy scouts, etc.) who used the specialized group campgrounds. It is expected that demand for these very large sites is lower, thus reducing competition levels. This moderates the effect of advance-booking time for very large groups;

although pressured to plan early for the event, these groups do not feel the need to compete and the number of days they book in advance drops off. Managers could encourage more parties of over seven individuals to book their site early by advertising specific information about the location and providing large groups with lenient cancellation fees to overcome their fear of a risky financial investment (e.g. in the case of inclement weather).

Since OPP policy states that only six people can be involved in one booking reservation, this becomes the 'default' maximum number of campers at non-group campsites. Parties of less than seven individuals most often booked regular campsites (i.e. back-country, electric, and non-electric), furthering the above suggestion that there are connections between party sizes, site type, and booking behavior. Those booking for groups of six do so slightly earlier; this could be because they want to secure an appropriate site for their trip or because they are booking so far in advance that they are uncertain of the total number involved in their party. Managers could motivate more travellers to book this early by offering financial incentives for bookings of six people, while also making it clear that there are no penalties for arriving with fewer campers.

Equipment Type Influences on Advance-Booking Length

Managers could also better manage visitation by examining the data related to equipment type. This research showed that those using recreation vehicles booked much farther ahead than those using tents alone. There are several possible explanations for this behaviour. First, this could be due to the difficulty some people experience in obtaining and transporting large equipment, which would then entail a higher degree of trip planning. Second, it may reveal a shortage of suitable sites for recreation vehicles within the park system. It may also be that

individuals travelling with less equipment are more interested in spontaneous travel experiences and book closer to the date of travel. Managers might consider responding to this issue in several ways. First, it would be desirable to increase the number of campsites available for recreation vehicles. Given that these vehicles are suitable for a broader range of weather conditions than tents; such sites might attract more use in the shoulder seasons. Additionally, managers might consider offering rentals of recreational vehicles parked permanently on the campsites, removing the need for recreational vehicle ownership and transport, or recreation vehicle rental and transport from some users.

Site Type Influences on Advance-Booking Length

An examination of the data associated with the variable of site type suggests sites which possess a highly developed infrastructure (e.g. cabins, yurts) experience higher levels of competition and are booked farther in advance. This may be because visitors prefer the all-weather attributes of this option, compared to the use of undeveloped sites, or are satisfied customers who have previously enjoyed the high-quality services of the cabin or yurt. However, it may also be because these sites are relatively few in number, with only 52 yurts and 5 cabins, (see Table 4), with demand greater than supply (Iverson, 1997; Chen & Schwartz, 2008). This suggests that managers might respond by providing more developed accommodation infrastructure, such as cabins and yurts, in the parks. In combination with enhanced dispersal of relevant information, these sites could help attract to the parks unmotivated domestic and international visitors, as well as those who do not own or wish to use tents or recreational vehicles.

LIMITATIONS

The variables used in this study were limited to those deemed important by the park managers who set up the park booking system. Very little information on the socio-demographic characteristics of the bookers or the members of the travel groups was available to the researchers, as all personal information had been removed by the park agency. Consequently, we were unable to make assumptions related to the types of individuals booking the sites, though their preference for developed versus undeveloped sites was obvious. In future, research should be done which connects the socio-demographics of the camper to their booking behavior and inpark experience (e.g. Huh & Park, 2010). Studies such as these are frequently done in the general tourism field, yet are oddly absent in the literature on camping behavior.

We also had to make two central assumptions to perform the data analysis, within the limitations of the available data. First, we were unable to ascertain whether or not a single visitor was responsible for booking multiple trips throughout 2008. This information would have been valuable for determining the popularity of certain site types for repeat visitors. Second, we assumed that the party size remained the same between the booking and the actual park visit. Understanding how party size changes between these two time periods could help managers to predict the visitor capacity of the park at certain times of year.

CONCLUSIONS

One purpose of this paper was to relate information on advance-booking behavior of park visitors to management action. Specifically, the variables of party size, type of recreation equipment, and type of accommodation were examined in relation to how far in advance visitors book specific park sites. The comparison of these different variables illustrates how and when visitors book campsites has important information on site desirability, visitor characteristics, and management regulation. Suggestions contained within this study could be used by park managers to refine their accommodations options to encourage international and domestic, and visitors to take action and visit the Ontario Parks.

International visitors find it difficult to transport for their entire vacation all of the camping gear necessary for tent camping. We suggest several options for this group. First, parks with significant international usage could provide a full suite of camping gear available for rental. The challenge of obtaining adequate camping equipment (Eagles, 1998) has still not been addressed in the Ontario Provincial Park system, except for outfitters in some parks who provide such gear for wilderness and back country travel. The addition of camping equipment rentals in front country campgrounds is a useful option. Second, there are private companies that provide recreation vehicles for rent, typically in major cities near international airports. However, this requires the renter to drive the vehicles to and from the parks, and the cost of rental and transport is expensive. This research suggests that the park agency could provide rentals of recreational vehicles permanently situated on campsites in the parks. This would be much less expensive for

some users than the long term, travel rental of RVS, would be much easier for the user, and would be less expensive to the user.

Although there are other factors accounting for how far in advance visitor's book park sites, the characteristics of each data set provide information for managers. Our results suggest that visitor competition is higher for developed sites and for sites that can accommodate large recreational vehicles, possibly because of the scarcity of such sites. Managers must acknowledge that these sites are difficult for visitors to access, and respond by providing more infrastructure of this type. In contrast, some visitors want a spontaneous trip experience and are less concerned about competition. For this group, managers must find ways to provide pre-trip information to create reasonable expectations, so that experiences within the park can be satisfying for the visitor. These are both challenging tasks for managers. Further research within this topic could assist in this goal.

Future research on advance-booking behavior should examine different parks, under different conditions, and with different variables involved. It would be useful to better understand travel distance and country of origin influences. Before this can occur, however, it would be valuable for the collection of booking information within Canadian parks to become more comprehensive and information-rich. This would allow park managers to access the diversity of information so desperately needed for adequate communication levels with potential park visitors. Only through communication with park visitors can managers adequately provide satisfying and fulfilling experiences for Canadians and international visitors.

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Table 1. Mean booking length amongst party sizes.

Criterion	F-value	P<	7+	6	5	4	3	2	1
Booking Length	6286.797	.000	61 ^{1,2}	70	62 ²	60 ¹	41	28	10

Note: means that share superscripts are not significantly different (p<.05) using Tukey test.

Table 2. Mean booking length amongst equipment types.

Criterion	F-value	P<	Cabin	Yurt	Extra- large	Large Trailer	Camper
Booking Length	3652.357	.000	101	87 ²	84 ²	62	57

Criterion	2+ tents	Small Trailer	Back Country	1 Tent
Booking Length	52	45 ¹	45 ¹	27

Note: means that share superscripts are not significantly different (p<.05) using Tukey test.

Table 3. Mean booking length amongst site types.

Criterion	F-value	p<	Cabin	Yurt	Group Camp	Electric	Non- electric	Back Country
Booking Length	691.756	.000	95 ²	87 ²	61	54	46 ¹	41 ¹

Note: means that share superscripts are not significantly different (p<.05) using Tukey test.

Table 4. Number of sites and intensity of use for each site type.

Site Type	Number of Sites	Intensity of use (reservations per site)
Cabin	5	59
Yurt	52	41
Cottages	8	Not Applicable
Group Camp	250	9
Electric	7,328	19
Non-electric	11,678	16
Back Country	7,671	4

Figure 1. Distribution of group sizes based on camper age.

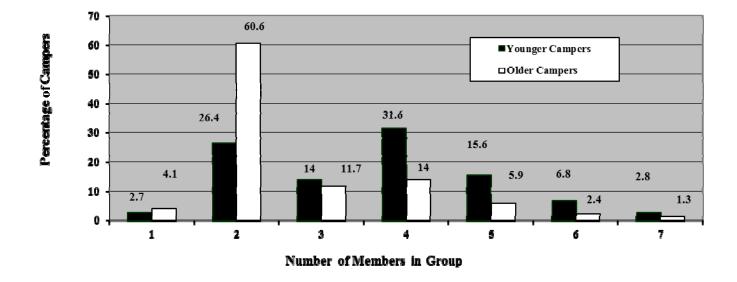


Figure 2. Mean booking length for different party sizes.

