

### Lab 1: Data Entry, Manipulation and Display

The following report focuses on visitor data for Ontario provincial parks. Table 1 provides information on provincial parks in southeastern Ontario. Although, Mark S. Burnham had the least visitors, Bon Echo would be a better option for solitude since it had the least amount of visitors per hectare assuming a steady flow of visitors throughout the year. If, however, the number of visitors increased significantly during certain times of the year, such as long weekends, the park may not be quiet during these times. Additionally, it is assumed that the entire extent of the park is open to recreational activities such as camping, swimming, and hiking, if this is not the case and a large area of the park is not developed the ratio of visitors per hectare may be misleading.

*Table 1 Provincial park visitor data from 2010 in the southeastern region of Ontario. Source: Park Statistics, Ontario Parks, 2010*

Region	Park	Area (ha)	Visitors	Visitors (per ha)
Southeast	Bon Echo	8294	181767	21.92
Southeast	Charleston Lake	2353	89977	38.24
Southeast	Darlington	209	118818	569
Southeast	Emily	83	81198	980
Southeast	Ferris	198	15915	80.4
Southeast	Fitzroy	198	83779	423
Southeast	Frontenac	5214	27875	5.346
Southeast	Lake on the Mountain	104	129802	1250
Southeast	Lake St Peter	478	12792	26.8
Southeast	Mark S Burnham	39	5271	140
Southeast	Murphys Point	1239	48884	39.45
Southeast	North Beach	89	28535	320
Southeast	Petroglyphs	1643	13254	8.067
Southeast	Presqu'ile	982	212614	217
Southeast	Rideau River	98	38329	390
Southeast	Sandbanks	1551	601266	387.7
Southeast	Sharbot Lake	80	29734	370
Southeast	Silent Lake	1619	49552	30.61
Southeast	Silver Lake	43	27832	650
Southeast	Voyageur	1465	132626	90.53

The percentage of total area for Quetico, Algonquin, and Killarney park is 6.02%, 9.78%, and 0.62%, respectively. The largest park, Polar Bear, accounted for 29.82% of the total area of provincial parks in Ontario, whereas the smallest park, Kama Hill, accounted for only 0.000013%.

The relationship of visitors over time has been plotted in Figure 1. From 2001-2007 the number of visitors appears to be steady and then drops from 2008-2010. The year 2000 saw an unusually low number of visitors.

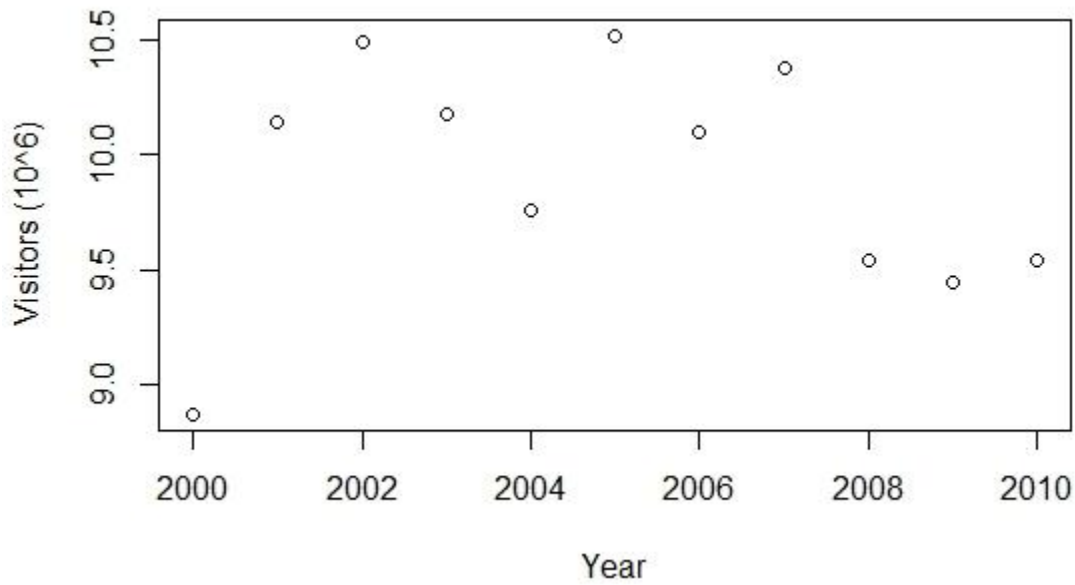


Figure 1. Total visitors per year for Ontario provincial parks from 2000 to 2010. Source: Park Statistics, Ontario Parks, 2010.

A histogram has also been plotted to show the range of the total number park visitors (Figure 2). From the plot, it can be observed that the provincial parks experienced 10-10.5 million visitors each year most frequently.

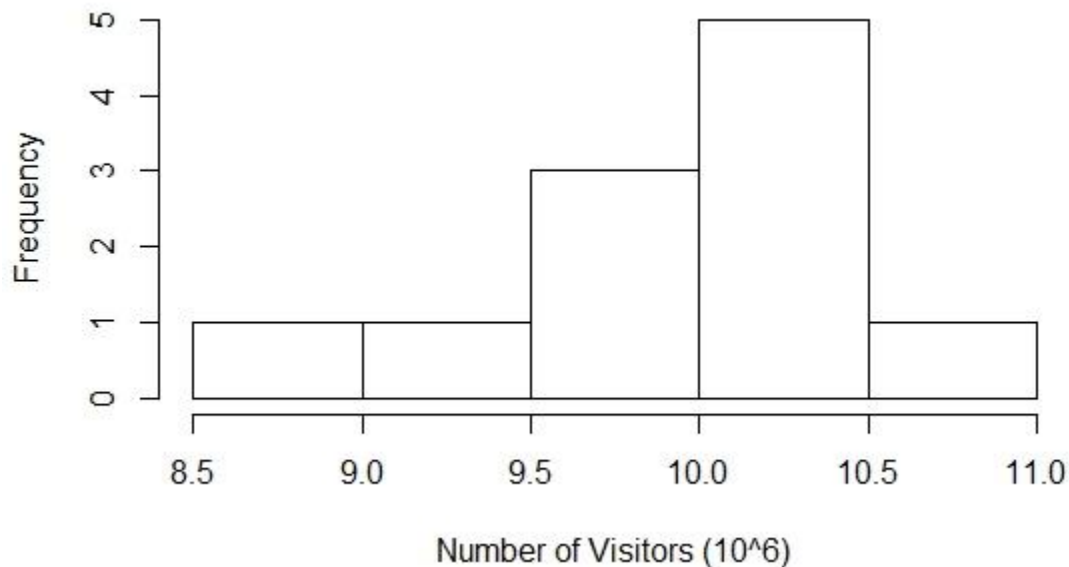


Figure 2. Frequency of Ontario provincial park visitors per year from 2000 to 2010. Source: Park Statistics, Ontario Parks, 2010.

The level of measurement for the region variable is nominal since it is both discrete and qualitative and the categories are unordered. Visitors per ha is an example of a ratio level of measurement since it is both continuous, quantitative, and a value of zero is not arbitrary. The year variable is ordinal since it is discrete and ordered.