

Wind Velocity (W_V)

As W_V increases beyond a certain point, it imposes a restriction on the maneuverability of sail boats and fishing lines, and generally makes recreation less desirable. Therefore, it was hypothesized that as wind velocity increases, the number of visits to the river basin will decrease.

Data for wind velocity were not available at each lake. The desired value was an average of readings at several locations at each lake, of the highest mile per hour reading recorded during the day; but the only attainable data for the entire river basin came from the Herndon Airport in Orlando, Florida [5]. Thus the same measurement was used for each of the three lakes.

Three distinct procedures were established to utilize the wind velocity values. The first method consisted of determining the number of days the wind velocity was higher than the highest mile per hour average for the year, during a particular time period. The second method entailed calculating the number of days the wind velocity was higher than the highest mile per hour average during the particular time period in question. For example, if the highest m.p.h. average for a specific time period was 18.0, and four days in that time period received a reading greater than 18.0 m.p.h., then the number of days the wind velocity was higher than the highest m.p.h. average was four. Note that the basic difference between methods one and two is that the first procedure refers to the highest mile per hour average during the year while the second refers to the time period. The third method was to compute the average highest mile per hour wind velocity for each time period. Again, it was presupposed that only extreme wind velocity readings would affect recreational activity and therefore, would be pertinent to this study.

Empirical Results

A recreational use equation was estimated for the three sampled lakes. The selection of the final equation was based upon the extent to which it was believed to describe observed conditions and upon statistical indicators of significance. The remaining portion of this section is devoted to a discussion of the estimated visits equation.

A zero-one dummy variable, L_i , was introduced as an independent variable in the general model to differentiate among the different types of lakes. The variable L_i possesses a value of "one" whenever the data being examined were collected from the lake in question and a zero at all other times. Note that Lake