

Table 14.—Estimating the percent of recreationists utilizing the three lakes by the use of overflight counts (season III), in the Kissimmee River Basin, 1970

Lakes	People per day	Percent of recreationists utilizing the three lakes
Lake Gentry	18.84	
Lake Tohopekaliga	183.75	
Lake Marian	34.12	
Total of three lakes	236.71	
Total for river basin	1026.65	
		236.71
		1026.65 = .231

To estimate the total number of recreationists for the year, the seasonal totals were combined (see Table 13). When employing the overflight method, it is assumed that the proportion of the number of people actually participating in water oriented recreation (as observed by the overflights) to the total number of recreationists utilizing the lake facilities is constant among the lakes. Thus, if the overflight counts actually represent 40 percent of all recreationists at Lake Marian, it should also represent 40 percent of all visitors at Lake Gentry, and so forth.<sup>17</sup>

The relationship between total recreational visits and water level can be formulated. The total visits ( $V_T$ ) is expressed as a function of daily visitation at each sampled lake ( $V_i$ ), proportion of visits on sampled lakes to entire basin ( $P_j$ ), and the number of days in each of the three time periods ( $d_{aj}$ ):

$$V_T = \sum_{i=1}^3 \sum_{j=1}^3 V(i) \left( \frac{d_{aj}}{p_j} \right) \quad (21)$$

where  $i$  refers to the three sampled lakes and  $j$  refers to the three time periods. Expanding over the time periods, the relationship becomes:

$$V_T = \sum_{i=1}^3 (V_i) \frac{d_{a_1}}{p_1} + \sum_{i=1}^3 (V_i) \frac{d_{a_2}}{p_2} + \sum_{i=1}^3 (V_i) \frac{d_{a_3}}{p_3} \quad (22)$$

<sup>17</sup>Other methods could be utilized to estimate the number of visits for the entire river basin. For example, the proportion of access points on the three sampled lakes to the basin could be used. This was applied in [1].