Aerial photographic sample censuses of the flamingoes and pelicans on Lakes Nakuru and Hannington were carried out on four occasions between October 1968 and March 1969. On Lake Nakuru the estimated numbers of flamingoes varied between 172 000 and 401 000, and the pelicans between 6800 and 27 900. There were no pelicans on Lake Hannington, but the number of flamingoes varied between 507 000 and 634 000. It was not possible to distinguish between greater and lesser flamingoes, or between white and pink-backed pelicans on the aerial photographs.

On 28630 March 1969 a census was carried out on twenty-four lakes, between Lake Hannington in the north and the Singida lakes in the south. The total number of flamingoes seen was just over one million, with 22 000 pelicans.

About 100 000 lesser flamingo nests were counted from aerial photographs taken over Lake Natron in November 1969