

Table V and fig. 7 show the number of nesting pairs counted during the third week of December between 1945 and 1964, from which it can be seen that the total population increased some two and a-half times in 19 years. The best-fitting curve of geometric increase (which is a straight line if logarithms of numbers are plotted) is also shown in fig. 7; it has an annual rate of increase of 5.3% and is a remarkably good fit, the correlation being 0.91. The deviations from a steady rate of increase are presumably due to differing breeding and survival rates in different years. The population dynamics of this gannetry will be studied in detail in a later paper. The table also shows the development of the subsidiary nesting area ("New B") from its first nest in 1946-47, and it is interesting to note that while "Old B" has been increasing fairly steadily at 3½% per annum, the rate of increase at "New B" over the last few years has been 8%.

TABLE VI.—Comparison of the Hawke's Bay Ganneteries Population in 1945/46, 1946/47, 1957/58 and 1964/65.

Gannetry	1945-46	1946-47	Year	1957-58	1964-65
			Mean No. of Nesting Pairs		
Cape Kidnappers	2,307	2,337	2,322	2,425	2,060
Black Reef	376	263	320	883	1,038
Kidnappers Plateau	196	160	178	278	487
Totals	2,879	2,760	2,820	3,586	3,585

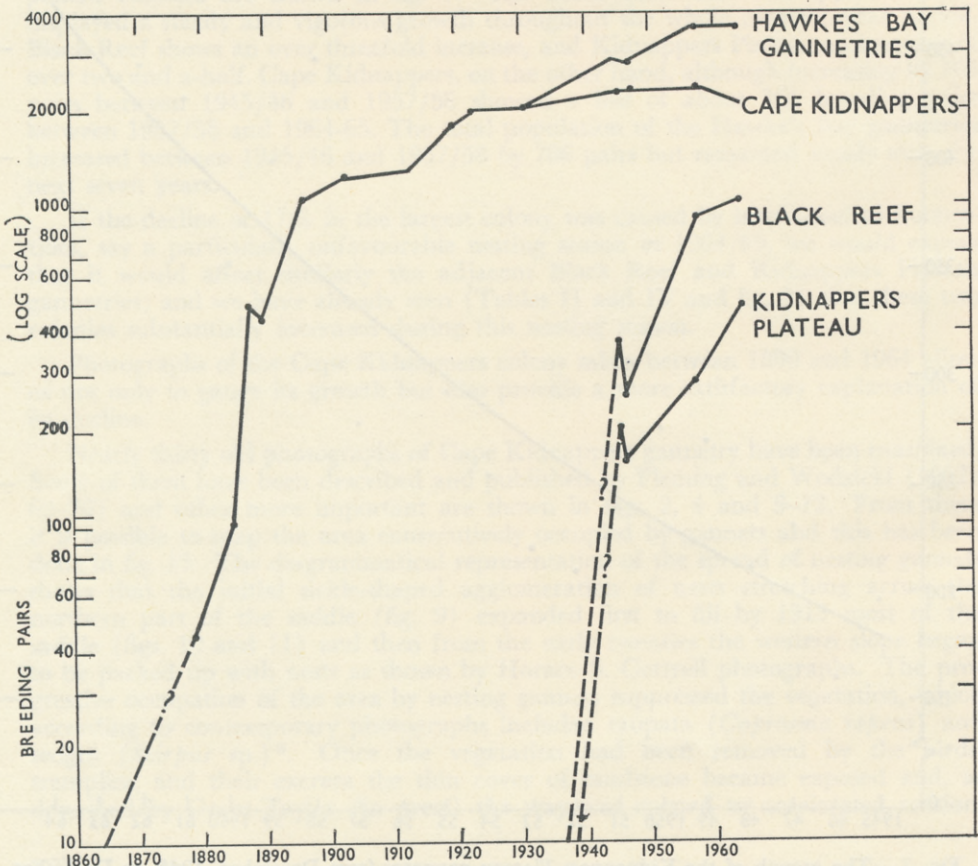


FIG. 8.—The population (in pairs) of Hawke's Bay ganneteries from 1879 to 1964.