

Inter-Censal Estimates, 1931-41.—The 1931 Census population was the starting point in the calculation. The original figures by sex and single years of age were used up to age 25, and graduated figures (preserving 5-year totals) from age 25 onwards. The decision to use graduated figures was made after a study of the concentrations on even ages; it may be seen that these concentrations are greatest at middle and older ages. The sharp fluctuations at younger ages were traceable to disturbances in births occurring during and after the War of 1914-18, which should not be smoothed out.

From among the children born in each census year the deaths occurring in that period were subtracted, the number living at age 0 at each anniversary of the census being so obtained. At each other single year of age the deaths were subtracted from the census figures to give a first approximation to the number at the next higher age in the following calendar year. The process was carried through successive years to 1941, and gave what might be called an "expected" figure for that year. This expected figure for 1941 was compared with the actual and the difference noted at each year of age. The official estimates of population were compared with the total of all ages and both sexes at each anniversary of the Census and the discrepancy distributed in the same way as the difference between actual and expected at 1941. This difference, numbering about 90,000 persons in all ages for the 10-year period*, is largely attributed to migration into or out of the country, and seems a satisfactory age-sex distribution to use for the discrepancy each year.

Post-Censal Estimates, 1941-44.—After the 1941 Census, exact births and deaths were not available when the calculation was made and accordingly some degree of estimation was used in respect of both. For the births, it was necessary to use preliminary vital statistics records. For the deaths, the 1940-42 Life Table seemed to provide an appropriate set of rates and avoided the necessity of awaiting official breakdowns.

A similar calculation will be made giving the age and sex for inter-censal years according to provinces.

Canadian Life Tables, 1941.—Life Tables have now been calculated on the basis of the deaths of 1940-42 and the population of 1941. These are the second official Life Tables to be published for Canada, the first having been calculated on the basis of the deaths of 1930-32 and the population of 1931.

The present tables show for males an expectation of life at age 0 of almost 63 years, and for females of over 66 years. Just over half the males reach the age of 70 and among the females more than half reach 73. These figures show material increases over 1930-32 mortality when the expectations of life at age 0 were 60 and 62 years for males and females, respectively.

* This corresponds to the result of comparing the immigration figures of Canada, the United States and the United Kingdom. The net movement between Canada and the United States was an emigration of 34,543 during the period from July 1, 1933, to June 30, 1939 (1943-44 Year Book, p. 186), and between Canada and the United Kingdom an emigration of 78,184 during the period from Jan. 1, 1931, to June 30, 1939 (1941 Year Book, p. 125).