

J.A. Williams, S.M. Dawson and E. Slooten. 1993. The Abundance and Distribution Of Bottle-Nosed Dolphins (*Tursiops-Truncatus*) In Doubtful Sound, New-Zealand. Canadian Journal Of Zoology (10): 2080-2088.

Abstract:

Photographic identification and standardized zigzag surveys were used to study the distribution and abundance of bottlenose dolphins in Doubtful Sound, New Zealand. Forty individuals were identified from nicks and markings on their dorsal fins. Chapman's and Bailey's modifications to the Lincoln - Petersen estimate and the computer program CAPTURE were used to estimate the number of marked individuals in the population, which ranged from 30 to 40 animals for three survey periods (two summers and a winter). The proportion of identifiable individuals in the population was assessed empirically as 65.5%. These data resulted in a total population estimate of approximately 58 individuals. The majority of the dolphins in the catalogue were found in each survey period, indicating their residency in the fiord. Movements of dolphins around the sound were not predictable, but there were areas in which dolphins were more likely to be found and other areas in which dolphins were never seen. However, there were no obvious seasonal or daily movement patterns.