

Observed growth rate in a wild juvenile *Tursiops truncatus*

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Abstract

Studies were made on a sociable juvenile male bottlenose dolphin known to occupy a coastal area of ca 25 km² off Pembrokeshire, Wales between January 1984 and autumn 1985. Between August 1984 and October 1985, the dolphin grew in length from 2.286–2.709 m at a linear rate of ca 3.2 cm.month⁻¹. Increases in girth also occurred, with a temporary fattening in mid-summer 1985. Using a formula for converting length and girth measurements to body weight, the dolphin was calculated to have increased from under 200 kg to 295 kg over the period of observation, representing a net increase in weight of 0.24 kg.day⁻¹.

Introduction

In January 1984, an apparently solitary bottlenosed dolphin, *Tursiops truncatus*, was first recorded as a regular visitor to a narrow coastal area between 51°51'–51°52.5'N, stretching from Newgale (5°07'W) to The Cradle (5°12'W) off Pembrokeshire (see Fig. 1). From regular reports, the patrol-zone was dis-

covered to extend over ca 10 km and up to 2–3 km out to sea, comprising a home range of ca 25 km², similar to that reported for adult male bottlenosed dolphins off Florida (Wells, Irvine and Scott, 1980). The dolphin quickly became habituated to human company and would approach swimmers and divers readily, and permit handling and play. The dolphin was identified as a male, and clearly young, with an extremely scar-free and unblemished skin all-over, intact sharp teeth, and relatively small size for *T. truncatus* in U.K. waters, which can attain 4.1 m in length (Lockyer and Morris, 1985a; 1985b; 1986). The dolphin, known locally as 'Simo', remained resident until autumn 1985 when the animal disappeared. Between August 1984 and October 1985 however, we were able to study this dolphin and monitor measurements of length and girth regularly, and so record growth rate.

Methods

Anatomical measurements

The total length (L) from snout tip to tail fluke notch was measured in a straight line by using a tape held both at the snout and tail by us while swimming in

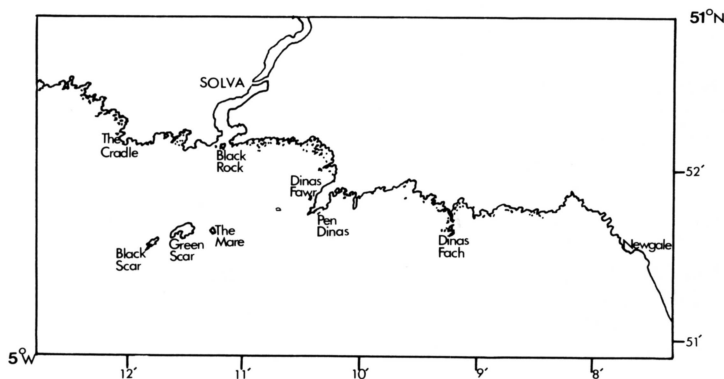


Figure 1. Map of the area patrolled by the dolphin 'Simo'.

