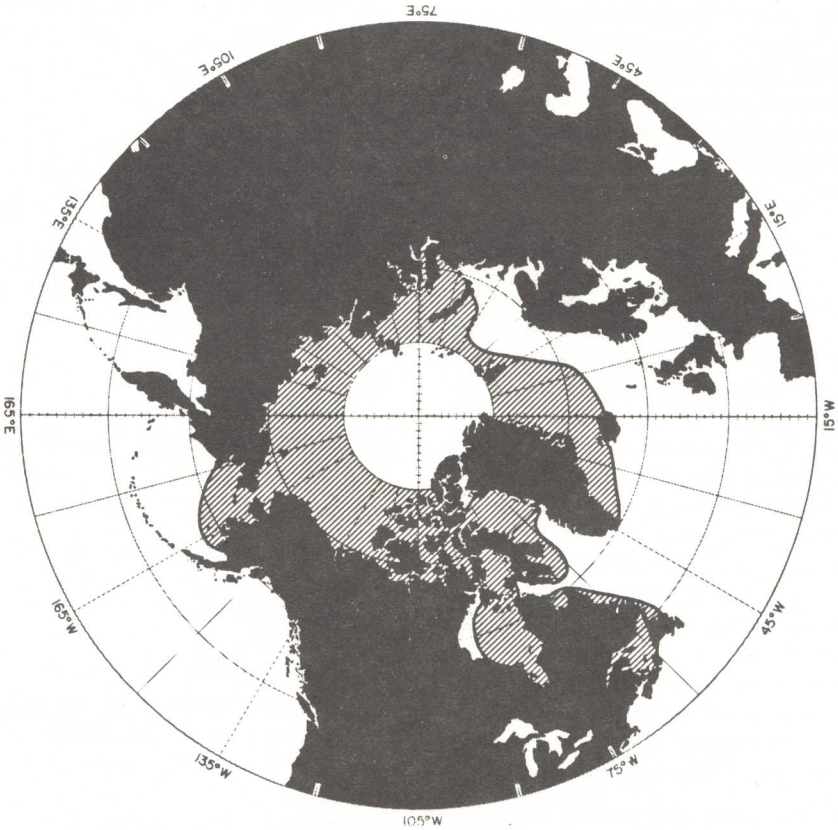

Fig. 1. Approximate limits of winter ice (15 year average).

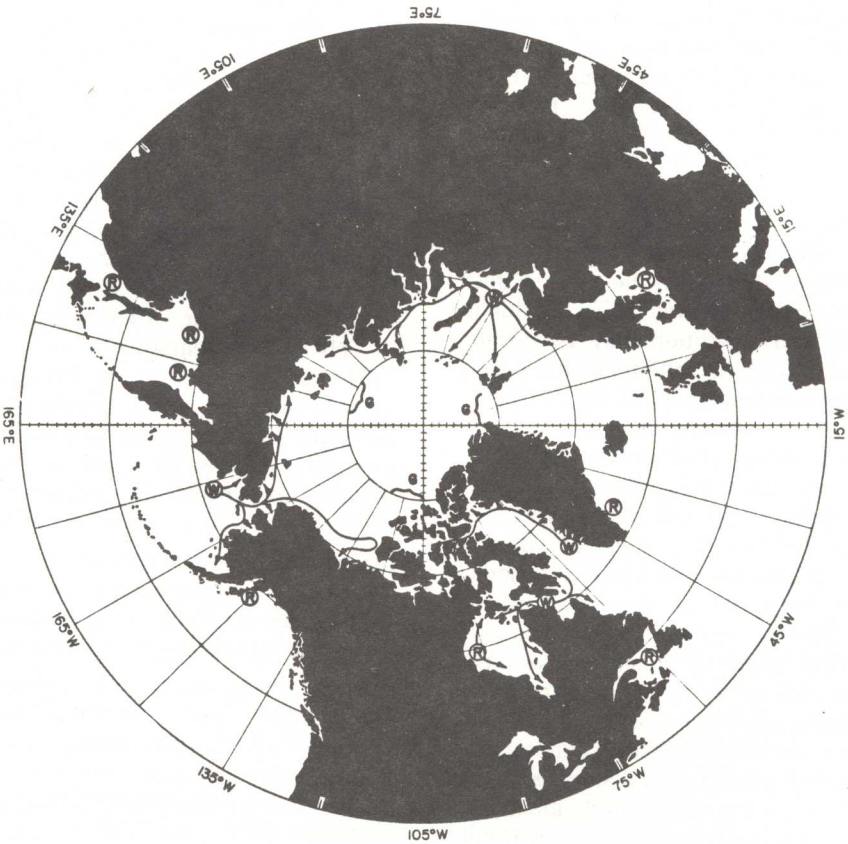

Fig. 2. Conceptual model of distribution and movements of white whales. Arrows indicate spring migrations to main summering grounds.
W — Major wintering ground.
R — Year-round population.
G — Longitudinal gap in distribution.

SC/31/SM 14

Worldwide Distribution and Migration Patterns of the White Whale (Beluga), *Delphinapterus Leucas*

(LITERATURE REVIEW)

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1. GENERAL BIOLOGY OF THE WHITE WHALE

1.1. Introduction

This report summarizes published information on the worldwide distribution and movements of white whales (or belugas), *Delphinapterus leucas,* Pallas.

The review is divided into two major sections. The first considers, in some detail, aspects of the biology of the species that relate to distribution. The second part describes the zoogeographical distribution, seasonality, and abundance of the several living stocks.

A few reports have been published recently on the distribution of white whales (Vladykov, 1944; Kleinenberg, *et al.,* 1964; Sergeant and Brodie, 1969a,b; 1975; Sergeant and Hoek, 1974), but these deal only with limited areas and do not cover the whole range of distribution.

An innovation in this study was an attempt to incorporate a review of Russian literature. Thus, this report includes information on the distribution and movements of white whales in the Russian Arctic and far eastern seas.

1.2. Morphology and life history

Distinguishing morphological features, dimensions, and body proportions are well described in the literature (Vladykov, 1944; Kleinenberg *et al.,* 1964; Sergeant and Brodie, 1969b) and clearly shown here in a photograph (Fig. 1).

White whales are easily distinguished from other cetaceans by their white coloration as adults and absence of the dorsal fin. Newborn calves are very dark grey, but within one to three years have become a much lighter grey. At birth they are between 4 and 4.5 feet (122–137 cm) long and weigh approximately 75–100 pounds (34–45 kg). They gradually become paler, and they are nearly

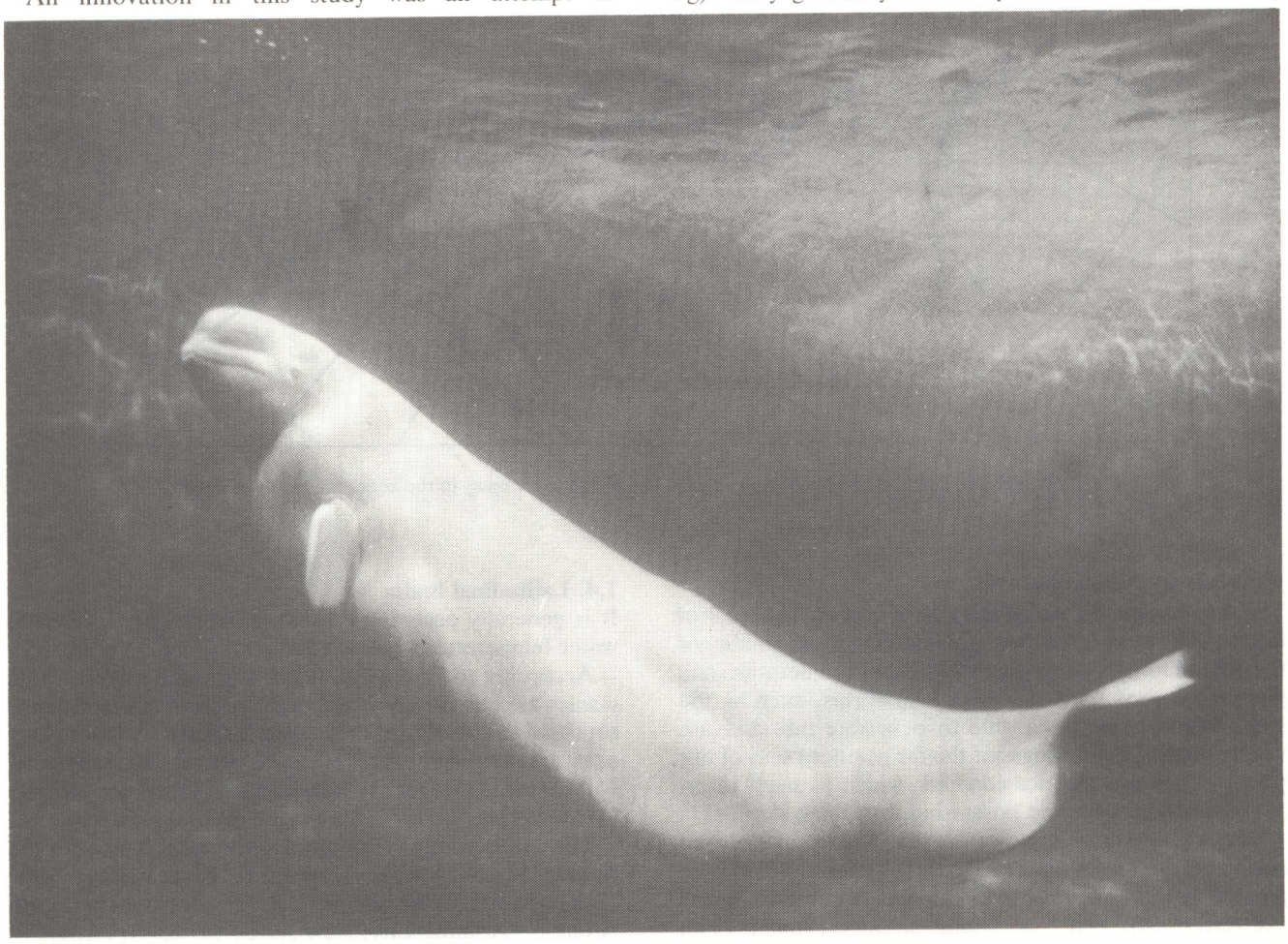

Fig. 1. External features of the white whale, *Delphinapterus leucas.*