

## CORRESPONDENCE

### ICE CONDITIONS IN MCMURDO SOUND: EFFECT ON ADÉLIE PENGUINS

I was interested to read Bernard Stonehouse's account (*Polar Record* Vol 13, No 87, 1967, p 775–78) of the effect of ice conditions in McMurdo Sound upon the nesting of Adélie Penguins (*Pygoscelis adeliae*) at Cape Royds. His mention of lowered breeding success in years of firm spring ice reminded me of a similar situation that some years ago resulted in the complete failure of a local population of these penguins to rear their young.

During the summer of 1958–59 fast ice persisted in south-western coastal regions of the Antarctic Peninsula where in other years there were considerable areas of open water. Many islands that supported colonies of Adélie Penguins were thus cut off from feeding grounds and on one of these, Detaille Island (66° 52' S, 66° 48' W), the presence of the FIDS Base "W" allowed P. O. White to describe the effects of such conditions upon breeding (unpublished FIDS report Q 90/1958/W). At the time penguins began to return the ice edge was at least 45 miles away in all directions; nevertheless, in spite of having to walk in over the ice, the rookery was apparently fully occupied and between 1500 and 2000 eggs were laid by the end of November. When chicks began to hatch in December the ice edge was still 30–40 miles away and remained more or less so for the rest of the season. By mid-January numbers of chicks and adults were dwindling rapidly and by the end of the month there was only 35 chicks left. All of these died or were killed by Skuas (*Catharacta skua*) by mid-February; few chicks had developed sufficiently for feathers to appear through their down and none of the adults moulted in the rookery as in previous years.

It is worth noting that it was not only the penguins that found the ice too much that season. During March RRS *John Biscoe* and USNS *Northwind* together made several unsuccessful attempts to re-supply Base "W", which was hurriedly abandoned by men and dogs (*Polar Record*, Vol 10, No 67, 1961, p 392–93) at the end of the month.

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