The Editor, Sir,

## BIRD BEHAVIOUR AND EARTHQUAKES

Animal behaviour has reportedly been used in China to help fix the likely site of an impending earthquake which had been predicted by other means. In New Zealand, at least one major earthquake has been followed by several stories of animals behaving oddly for some time before the event, but seismologists have not yet felt themselves able to make use of animal behaviour as an aid to earthquake prediction.

Bird watchers may possess information that could eventually be used in association with other indications for making predictions about earthquakes. Anyone who has seen behaviour which suggests that birds (or other animals) have had foreknowledge of an earthquake, can help by contacting me at the Seismological Observatory, so that their observations can be recorded. The length of time between the premonitory bird behaviour and the shock being felt by the onlooker is of particular interest.

The ultimate usefulness of a pre-earthquake behaviour pattern will depend partly on whether it is also seen in other situations. Notes that record all unusual behaviour over extended periods could help to decide which patterns show promise. If animal behaviour is ever to be used as an aid to earthquake

If animal behaviour is ever to be used as an aid to earthquake prediction in New Zealand, it is not too soon to begin collecting the facts on which such predictions will have to be based.

M. A. LOWRY

Seismological Observatory, Geophysics Division, DSIR, P.O. Box 1320, Wellington 22 June 1976

The Editor, Sir,

## SHORT-TAILED SHEARWATER: A NEW SUBFOSSIL RECORD FROM THE CHATHAM ISLANDS

I can now report another addition to the birds which have reached the Chatham Islands. Among the bones collected at Long Beach and Te One Beach in December 1972 are the remains of at least four individuals of *Puffinus tenuirostris* (Temminck), the Shorttailed Shearwater or Tasmanian Muttonbird.

These sub-fossil bones are indistinguishable from those of recent storm-wrecks of *P. tenuirostris* which I have collected on Canterbury and New South Wales beaches, and show that at least a few stragglers have made their way to the Chathams. It is possible that more will be found as I work through the hundreds of Petrel bones awaiting identification.

R. J. SCARLETT

Canterbury Museum, Christchurch, 1 2 April 1976

NOTORNIS 23: 266 (1976)