

drought in the study area in 1986-87 resulted in frustrated breeders showing "parenting" behaviour which was appropriate to the time (breeding season), but not to the place (neighbour's nest or chicks). The observations of true parents consistently chasing off other birds bringing food supports this view. The argument, which is developed in detail in Jamieson (1986), suggests that Brown Creepers should not yet be regarded as co-operative breeders.

We thank S. Fegley and J. van Berkel for assistance in the field, and B. Gill, B. Heather, C. Miskelly and J. Waas for comments and criticism. Our research is funded by the University Grants Committee and the Department of Zoology, University of Canterbury.

LITERATURE CITED

- CUNNINGHAM, J. B. 1985. Breeding ecology, social organisation, and communicatory behaviour in the Brown Creeper (*Finschia novaeseelandiae*). Unpubl. PhD thesis, University of Canterbury.
EMLEN, S. T. 1984. Co-operative breeding in birds and mammals, In KREBS, J. R.; DAVIES, N. B. Behavioural Ecology, an Evolutionary Approach. Oxford: Blackwell.
GILL, B. J.; McLEAN, I. G. 1986. Morphometrics of the Whitehead *Mohoua albigilla* on Little Barrier Island, New Zealand. NZ J Zool. 13: 267-271.
JAMIESON, I. G. 1986. The functional approach to behaviour: is it useful? Amer. Nat. 127: 195-208.
SOPER, M. F. 1976. New Zealand Birds. Christchurch: Whitcoulls.

IAN G. McLEAN, SHELLEY DEAN and RICHARD de HAMEL, *Dept of Zoology and Edward Percival Field Station, University of Canterbury, Christchurch.*

NOTICE

Ecology Division DSIR Bibliography 1946-1986

This 72-page indexed bibliography lists 810 items and covers the 40 years of published work of Ecology Division, DSIR. The main fields of study include the ecology of New Zealand land mammals (particularly the role of introduced mammals in New Zealand ecosystems) and birds (including agricultural pests). There are also papers on New Zealand lizards, invertebrates, vegetation studies, the ecology of many offshore islands, and others of a more general nature. From 1969 to 1982 the Division was also active in freshwater research, and a number of papers deal with this topic.

The Bibliography costs \$10 and can be ordered from the Publications Officer, Ecology Division, DSIR, Private Bag, Lower Hutt. Please make cheques payable to Ecology Division, DSIR.