```
3
```

in ınt ıe-

ail ger

igis ıađ ıas

 $\mathbf{n}\mathbf{d}$ ids oile nts do

gid

hat uth -12;

14) -37; . L. and 0-5; 3: ılm,

38) Ρ. inn. . R. Soc.

19:

-08; 258-39) itchbbs, . N. -72.

**⊆**еп-

May 1968 Keast: Seasonal Movements in Australian Honeyeaters 209

Lack, D. (1944) Ibis 86: 260-286; (1949) Genetics, Paleontology and Evolution, Princeton: 299-308; (1951) Proc. Xth Intern. Ornith. Congress: 409-448; Lamm, D. and Wilson, S. (1966) 65: 183-205; Lawrence, C. C. (1946) 45: 245-6; Leach, H. A. C. (1929) 28: 177-82; Liddy, J. (1962) 61: 285-91; (1966a) Aust. Bird Bander 4: 8-9; (1966b) 65: 87-103: Lord F. A. R. (1956a) 56: 100-28: (1956b) 56: (1966b) 65: 87-103; Lord, E. A. R. (1956a) 56: 100-28; (1956b) 56: 163-4.

Mayr, E. (1942) Systematics and the Origin of Species, Columbia Univ.
Press; Mellor, J. W. (1919) S.A.O. 4: 74-8; McGilp, J. N. (1923) 22: 274-287; McGillivray, W. (1924) 24: 13-24; Miller, R. S. (1937) 36: 249-53; (1939) 38: 341-3; Milne, H. V. (1938) 37: 247-50; Morse, F. C. (1922) 22: 24-38.

Nielson, L. (1966) **65**: 305-9; North, A. J. (1906-1909) Nests and Eggs of Birds Found Breeding in Australia and Tasmania. Australian Museum, Sydney II, 380 pp.; Norton, S.P.W. (1922) **22**: 39-44.

Parsons, F. E. and McGilp, J. N. (1934) S.A.O. **12**: 192-201.

Robertson, J. S. 1958) **58**: 370-4; Robinson, A. (1939) **38**: 461-6; Ryan, J. V. (1951) **51**: 175-6.

Salomonson, F. (1951) The Birds of Greenland Venenhagen, 609 pp. (1955)

Salomonsen, F. (1951) The Birds of Greenland, Kopenhagen, 608 p.; (1955) Biol. Meddel. Kongel. Dansk. Vidensk. Selsk. 22: 1-62; Sargent, O. H. (1928) 27: 185-92; Sedgwick, E. H. (1937) 36: 291-3; (1940) 46: 237-48; (1947) 46: 349-78; (1952) 52: 285-96; Serventy, D. L. (1937) 37: 90-4; (1948) 47: 241-286; Serventy, D. L. and Whittell, H. M.

37: 90-4; (1948) 47: 241-286; Serventy, D. L. and Whittell, H. M. (1962) Birds of Western Australia, Paterson Brokensha, Perth, 427 pp.; Sharland, M. S. R. (1925) 25: 94-103; (1958) Tasmanian Birds: how to identify them, Angus and Robertson, Sydney; Storr, G. M. (1947) S.A.O. 18: 31-6; (1953) 53: 225-48.
 Thomas, D. G. A. (1947) S.A.O. 18: 62-5.
 Udvardy, M. D. F. (1951) Oikos 3: 98-123.
 Waterhouse, J. A. (1941) 40: 385-7; Watson, I. (1955) 55: 312; Webster, H. O. (1947) 47: 63; White, H. L. (1916) 15: 259-60; White, S. A. (1921) 21: 84-94; White, S. R. (1946) 46: 81-122; Whitlock, F. L. (1921) 21: 170-187; (1924) 23: 248-81; (1925) 25: 69-89; Wolstenholme, H. (1922) 22: 141-148.

Calling of the Ground Parrot.—Observations made in southern Queensland have increased knowledge of the habits of the Ground Parrot, Pezoporus wallicus. It has been established that at dusk and dawn, Ground Parrots call for a period of approximately 20-30 minutes. Further, on some days, birds fly during the calling period.

Observations were made over a period of two months, in typical Ground Parrot habitat, at an area known to contain Ground Parrots. Thirty-three afternoon and two dawn visits were made to the area between July 10, 1967 and September 9, 1967; five afternoon and two dawn visits were made to other areas in the district. On every one of these visits, the half-hour period of calling was heard. Sporadic calls, in the form of either a single call or a call followed by a response, were heard during the day and night on random visits made to the area. However, long periods, other than at dawn or dusk, could be spent there without a call being heard.

Over the two months, as the days grew longer, the calling period became later in the afternoon and carlier in the morning.

The birds have several recognizably different calls, and variations on each call. To describe them in general terms, I can only say that the calls are high pitched (two friends were unable to hear them because of the high frequency), and most commonly ascend the 210

scale. The calls carry well, particularly on a still evening. A call can be uttered without any response, or uttered with an immediate response from another bird. Sometimes a call would apparently stimulate calls from several birds (unless this was coincidental haphazard single calling), and there could also be periods of intensive calling when several birds animatedly call at the same time, giving the impression of a "chorus".

It was found that, on some days, the birds voluntarily fly during the calling period. Flights of several hundred yards were observed, and, in fact, this is how the call was confirmed as that of the Ground Parrot—three birds were seen silhouetted against the western sky, calling as they flew low over the vegetation towards us. However, because of the light conditions, I saw birds flying on only a few occasions (either they were in silhouette or I happened to be close to a bird. I more often heard the call moving, and

noted flights in this way.

It will be interesting to discover whether the behaviour observed during these two months is constant throughout a year. If it is, it would be a simple way of determining whether Ground Parrots are in a certain area. Further, it could be used to estimate approximate populations, although how exactly it can be applied will only be known when calling behaviour of possible social groups is unravelled. Difficulties arise in attempting to count populations, because of the pattern of calling, and the fact that the birds can change their position by a quick flight. A further confusing factor is that on rare occasions birds were seen to fly without calling. However, in my opinion, this could be that the bird was alarmed into flight by the presence of the observer. Anyone who has flushed these birds during the day, knows they do not call when alarmed in this way. From records I kept on each visit, I could account for at least seven birds within the range of my hearing, over a radius of 400 yards.

These observations were made on the suggestion of and with the encouragement of Prof. John Le G. Brereton, and it is hoped to present a more detailed joint article on the Ground Parrot at a later date. However, it was felt that in the meantime, this brief note could prove useful to many observers and encourage observations to be made in other districts.—MRS. CAROLE BEVEGE, Gostwyck Street, Uralla, N.S.W.

data res ren und inv

Hig wa Mu ser oth thi

> No has it I tur

> > Bl

Tr

Gu a r wit cor Th

sho wit sin clo

(W

sho