

DETECTABILITY OF BIRDS THROUGH THE DAY IN SOFTWOOD SCRUB REMNANTS AND OPEN EUCALYPT FOREST ALONG ROADSIDES AT TALLEGALLA, SOUTH-EAST QUEENSLAND

G. J. LEACH¹ and D. J. WATSON²

¹P.O. Box 568, Kenmore, Queensland, 4069

²6 Nairana Avenue, Manly West, Queensland, 4179

Received 11 May, 1993

Strip transects (300 × 40 m) through softwood scrub remnants and eucalypt open-forest along roadsides in south-east Queensland were censused from sunrise to mid-afternoon to determine diurnal changes in detectability of bird species and individuals. Censuses, comprising two consecutive 40-minute surveys by two teams of 2 to 4 persons, were repeated four times on each of four days over a year.

Fifty-eight species were observed in the softwood scrub and 56 in the eucalypt forest. There were 29 to 40 species and 206 to 400 individual observations per habitat per day. Total number of species and individuals was usually low just after sunrise then increased to a relatively stable level for the remainder of the day in the softwood scrub but declined from early- or mid-morning peaks in the eucalypt forest. However, diurnal patterns of detectability differed between species.

We conclude that total numbers of species and individuals censused on strip transects in communities as rich as those at Tallegalla are largely independent of the time of day, provided the first 1 to 2 h after sunrise are avoided. Censusing should therefore aim to maximize habitat and seasonal replication rather than establish diurnal trends. Where the avifauna is less rich, or emphasis is on a small subset of species, census times will need to be compatible with diurnal changes in detectability.