EFFECTS OF FIRE ON BIRDS IN THE GIBSON DESERT: SOME PRELIMINARY RESULTS

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Four pairs of quadrats, each of 1 km², were selected to cover the range of habitats present in an area of the Gibson Desert Nature Reserve used for aerial burning experiments. Quadrats 1A and 1B were in sand dunes and swales with *Grevillea* spp. shrubs over *Plectrachne schinzii* and *Triodia basedowii* hummock grassland, Quadrats 2A and 2B were in *Acacia aneura* shrubland/low woodland, Quadrats 3A and 3B were in an alluvial plain with scattered eucalypts and patches of very open mulga shrubland over *P. schinzii* and *T. basedowii* hummock grassland, and Quadrats 4A and 4B were in lateritic rises with patches of very open mulga low woodland over *Triodia basedowii* hummock grassland. Six counts, each of one hour and spread over five to six days, were conducted in each quadrat, with each pair being counted simultaneously by two observers. Start times were rotated so each pair was counted at different times in the morning. Counts were conducted in autumn and spring. One autumn and one spring count was made before the 'A' quadrat of each pair was patch burnt in September 1988.

Matrices of species presence/absence and total count were analysed using the dendrogram routine of PATN. Quadrats of each pair were more similar to one another than to any other quadrat for both pre-burn counts. Rainfall since the fires has been low and there has been little plant regeneration. The results of the count conducted in the autumn after the burn showed that Quadrats 2A and 2B were most similar with all other quadrats in a second group. All counts since have produced a similar pattern to the pre-burn data.