

CLUSTERING OF DUSKY WOODSWALLOWS — On August 29 at 1700 hours I noticed an effort by Dusky Woodswallows *Artamus cyanopterus* to cluster. This occurred about ten miles north-west of Cowell close to Coolanie in the eastern scarp of the ranges running parallel to the coast. The upper foothill area concerned is about 185 metres above sea level at latitude 30° 40' south.

The August 29 was a cool day with light rain earlier in the afternoon but towards evening cloud cover was thin and a cold night was predicted.

The attempt to cluster at 1700 hours was made on the underside of a bend in the limb of a Peppermint Gum *Eucalyptus odorata*, the rough bark being used for a foothold with the birds' tails perpendicular to the ground. The cluster site was about 6 metres from a dry creek bed.

At 1750 hours only about 20 birds were attempting to cluster. In the vicinity other Dusky Woodswallows were perched in nearby trees while some were still feeding 32 metres above the ground. Attempts to form a cluster continued with each fresh attempt gaining more birds but all clusters were broken up voluntarily by the birds in a nervous explosive scattering which left no single bird at the cluster site. The time between the formation and dispersal of each cluster increased slightly until the birds were quiet at 1815 hours. I could only assume

this to be the final cluster as it was dark and I left the area then with approximately 80 to 100 birds in the cluster. The clusters seemed only to be one bird deep; each bird relying on retention in the cluster by securing a foothold on the rough bark of the peppermint gum. New arrivals added to the cluster by joining the periphery of the cluster area.

Clustering of animals helps to minimise body heat loss due to radiation by reducing the body area exposed per animal. The birds at a disadvantage in heat loss considerations are the peripheral birds. These are the birds joining the cluster last but the advantage of feeding later may counteract the disadvantage of their position in the cluster. — D. VINCENT.

Accepted January, 1975