

On Galahs and Vortices

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Galahs *Eolophus roseicapillus* are renowned for their playful behaviour. It is often cautioned that such a statement is anthropomorphic and unscientific but it must also be stated that 'play behaviour' in humans can be described solely in terms of learning and socialisation, ignoring the personal 'enjoyment'.

Ian Rowley describes one aspect of Galah's 'play' in what he terms as 'mad flight' (Rowley 1990); a fast noisy aerobic display amongst trees. One rarely observed behaviour of Galahs seems more clearly play behaviour; flying into and wheeling around willy-willies (dust devils). We first heard of this from John Ryder who had witnessed it some years ago from his farm north of Coonabarabran. Whilst driving a tractor across a paddock, he was aware of a flock of Galahs approaching a large willy-willy on the other side of the paddock. With quite deliberate action they flew towards the base of the vortex and with loud calls and aerobatics spiralled up within the column, leaving at the top and rapidly descending to the base for a re-entry. The flock continued this for some time as the dust devil crossed the paddock.

GG witnessed the same behaviour in early March 1991. The afternoon had been hot and sunny; very suitable for the formation of willy-willies. Being both a tornado chaser and a professional photographer, GG took the opportunity of going in search of these smaller vortices. About 15 km west of Tamworth a relatively large willy-willy was seen, around 20 m across and raising grass and dust well into the air. However, it was in the distance and not sufficiently well defined in structure to make photography worthwhile. The willy-willy moved across a lightly treed paddock at around 15 kph, swaying the trees wildly, suggestive of wind speeds internal to the vortex of 70-80 kph. As it moved away, five or six Galahs flew quite deliberately into the willy-willy, just above the tree canopy. They continued their wingbeats whilst being spun rapidly around the circumference. Suddenly about 20 more Galahs appeared in the vortex but it was not clear whether they had flown in

from an adjacent perch or from a tree across which the willy-willy had passed. Their behaviour was quite deliberate and playful, screeching loudly as they spun around. They controlled their height from just above the tree-tops to around 50 m height, whilst dust and grass was raised past them by the vertical motions in the vortex. Occasionally a Galah would be thrown out of the column but would then turn around and re-enter. They remained within the vortex for at least one minute before the willy-willy was lost from sight in the trees.

Perhaps the strangest case is of Galahs deliberately flying into a tornado. This was reported by John McDonald of 'Sunnyside' near Binnaway in the central-west New South Wales. RHM McN was conducting interviews with eye-witnesses of a small tornado that had passed to the north of Binnaway on 10 February 1990. John had witnessed the tornado pass within 50 m of the farmhouse from which he viewed it. Before its closest approach, when still about a kilometre distant and crossing an open paddock, he saw a flock of birds he believed to be Galahs fly into the vortex to be almost immediately 'spat out'. This comes as no surprise; powerful winds of around 150 km/hr being typical for a tornado of this intensity. Isolated trees within the paddock had many large branches of up to 50 cm diameter torn off and flung up to 50 m. The tornado had periods of greater intensity, felling up to 50% of trees in some forested areas.

Tornadoes and dust devils differ in both their intensity and how they form. A 'fair-weather' phenomenon, the dust devil is a small-scale rising spiral of surface-heated air. The tornado, on the other hand, being produced within the powerful updrafts of a thunderstorm, can encompass the strongest winds on the Earth's surface (Snow 1984).

It is generally assumed that tornadoes are rare in Australia and this perception remains widespread despite studies by American tornado researchers that Australian tornadoes may be as frequent and intense as U.S. tornadoes (Minor & Peterson 1979; Snow 1984). A de-

scriptive account of Australian tornadoes has recently been published (Seargent 1991). There is no question that in any one location, tornado occurrence is rare and it is unlikely that many Galahs would experience more than one tornado during their life. However, willy-willies would be encountered many dozens of times each summer. Thus, it is not surprising that Galahs might mistake the much stronger tornado vortex, only to get a rude shock!

It would appear that this is a purely cultural behaviour and not necessarily common to all Galahs in all localities (all the above reports come from a relatively small part of central New South Wales), or at all times. More observations and additional anecdotes would be

necessary to define the extent of this behaviour in Galahs and if it occurs in any other bird species.

References

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