Foraging behaviour by Grey Fantail at the Sugarloaf State Conservation Area, NSW

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Over the past several years I have regularly visited a study site in the Sugarloaf State Conservation Area, near Wakefield, NSW. On three of my visits I have observed a foraging interaction involving a Grey Fantail *Rhipidura fuliginosa* and a White-throated Treecreeper *Cormobates leucophaea*. The behaviour of each bird was quite similar on each occasion, suggesting that the interaction of the two species was not unusual.

The habitat at the site where the interactions have occurred is dry sclerophyll forest containing Smooth-barked Apple Angophora costata, Black She-oak Allocasuarina littoralis, Red Bloodwood Corymbia gummifera, Ironbark Eucalyptus sideroxylon and Sydney Peppermint Eucalyptus piperita, with understorey vegetation that includes Sandpaper Fig Ficus coronata, Lantana camara and various grasses.

The dates of my observations were 15 March 2015, 20 March 2016 and 19 January 2019. My notes from the first observed interaction are reported below. The behaviours of both species were very similar on the two other occasions. Early morning on 15 March 2015 a White-throated Treecreeper flitted past at close quarters to me and landed low on the trunk of a nearby mature Ironbark. The treecreeper was followed by a Grey Fantail which landed in a Sandpaper Fig next to the Ironbark. The treecreeper proceeded to climb the trunk of the Ironbark, foraging and pulling off pieces of bark. The fantail left its perch and flew over to the treecreeper and began to follow it, often within a few centimetres of the bird as it climbed the tree searching for morsels. This behaviour continued for at least a minute until the treecreeper reached a height of approximately 6 m when it then flew on to the next tree. The Grey Fantail closely followed and again proceeded to track the treecreeper's movement up the tree before becoming lost from my sight.

The Grey Fantail was gathering small winged insects that had escaped the attention of the treecreeper as it foraged. The treecreeper did not appear to be bothered in any way. On all three occasions when I have observed this behaviour, the White-throated Treecreeper seemed completely at ease with the Grey Fantail's presence.

There was a clear benefit for the Grey Fantail from this foraging behaviour but there seems no apparent benefit for the White-throated Treecreeper. This form of one-way benefit feeding association is known as commensalism (Campbell & Lack 1985). It may in fact be a characteristic behaviour by the Grey Fantail. For example, in a study in the Maclean River valley in northern NSW, a fantail followed either a treecreeper or a Brown Gerygone Gerygone mouki on five occasions, staying within 1 m and catching insects flushed by the lead bird (Cameron 1975). Similarly, a Grey Fantail in Tasmania was shadow observed a foraging Scrubtit to Acanthornis magna in the same manner as described above (M. Newman pers. comm.). The Grey Fantail is also well known to forage around farm animals (such as horses and cattle) and people, catching insects flushed by them (Higgins et al. 2006).

Commensalism, although uncommon, is practised by some other avian species. For example, the Pilotbird Pycnoptilus floccosus is known to track the movements of the Superb Lyrebird Menura novaehollandiae, collecting food displaced during the lyrebird's scratching. The Yellow-throated Scrubwren Sericornis citreogularis has been observed following both Superb Lyrebird and Logrunner Orthonyx Australian temminckii (Higgins & Peter 2002). Hoary-headed Grebe Poliocephalus poliocephalus has been recorded following Hardhead Aythya australis when the latter was diving for aquatic plants and animals (Roderick & Newman 2013).

The Grey Fantail often joins mixed-species feeding flocks, usually of other small insectivorous passerines. The way that these mixed flocks interact is not well studied. Higgins et al. (2006) list more than 30 species which the Grey Fantail sometimes associates with in mixed flocks, including the White-throated Treecreeper and more than 20 other Australian species as well as several in New Zealand (where the nominate race of Grey Fantail occurs). Association with other species in mixed-species feeding flocks is recorded more often in the non-breeding season (Higgins et al. 2006). It is notable that my observations of commensalism by Grey Fantail have occurred in January and March, presumably still within the breeding season although probably closer towards the end of it (especially with the March observations). This suggests that commensalism may be a common behaviour by the Grey Fantail, and may occur when it forages with other species in mixed feeding flocks.

REFERENCES

Roderick, M. and Newman, M. (2013). Association between feeding Hardheads and Hoary-headed Grebes. *The Whistler* 7: 59.

Cameron, E. (1975). Habitat usage and foraging behaviour of three Fantails (*Rhipidura*: Pachycephalidae). In 'Birds of Eucalypt Forests and Woodlands: Ecology, Conservation and Management' (Eds. A.,Keast, H.F. Recher, H. Ford, & D. Saunders). Pp. 241–248. (Surrey Beatty & Sons: Sydney.)

Campbell, B. and Lack, E. (1985). 'A dictionary of birds'. (The British Ornithologist's Union, T. & A.D. Poyser Ltd: Staffordshire, England.)

Higgins, P.J. and Peter, J.M. (Eds) (2002). 'Handbook of Australian, New Zealand and Antarctic Birds Volume 6: Pardalotes to Shrike-thrushes'. (Oxford University Press: Melbourne.)

Higgins, P.J., Peter, J.M. and Cowling, S.J. (Eds) (2006). 'Handbook of Australian, New Zealand and Antarctic Birds Volume 7: Boatbills to Larks'. (Oxford University Press: Melbourne.)

Note added in proof: At 1410 on Saturday 31 August 2019 at the same location within the Sugarloaf State Conservation Area, I and a colleague witnessed two additional instances of commensalism by a Grey Fantail with a Whitethroated Treecreeper. Both instances happened mixed-species feeding flock within a approximately 30 birds containing Grey Fantail, thornbills. Golden Whistler Pachycephala pectoralis, Spotted Pardalote Pardalotus punctatus and White-throated Treecreeper. As the flock moved slowly through the lower canopy, two different fantails could clearly be seen to be following 'their own' White-throated Treecreeper while it foraged.