



Australian
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PhD exit seminar: Crying wolf to a predator. Vocal mimicry by the brown thornbill in response to danger

Thursday 29 August 2013, 1pm

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Gould Seminar Room, (Rm 235) Gould Building (Bldg. 116), Linnaeus Way, ANU



Vocal mimicry is common among birds, but its function is usually unknown. Birds often mimic heterospecific alarm calls in response to predators, suggesting potential functions in preventing predation; however, an anti-predator function for vocal mimicry is yet to be shown. During my PhD, I examined the form and function of vocal mimicry in the brown thornbill (*Acanthiza pusilla*), a species historically claimed to mimic heterospecific vocalisations but with no formal evaluation. I found that both male and female thornbills mimic a large range of heterospecific vocalisations, including contact calls, songs, and alarm calls. Despite the diversity in the types of vocalisations they can mimic, thornbills predominantly mimic heterospecific alarm calls in response to danger, and even mimic different types of heterospecific alarm calls in response to different types of danger. When their nest is under attack, thornbill parents primarily mimic heterospecific aerial alarm calls; alarm calls used by heterospecifics to warn others about flying predators. A playback

experiment on the thornbill's primary nest predator, the pied currawong (*Strepera graculina*), found that currawongs respond to the thornbill's mimetic aerial alarm calls as if a flying predator is present (either scanning the sky for danger or fleeing to safe location). My findings suggest that thornbills mimic heterospecific alarm calls to distract predators attacking their nest, giving their nestlings an opportunity to flee the nest and escape predation.

Presented by

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