## SHORT NOTE

## Aerial pursuit and predation of European goldfinch (*Carduelis* carduelis) by Australian magpie (*Gymnorhina tibicen*)

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On 28 Feb 2007 I witnessed an Australian magpie (*Gymnorhina tibicen*) pursue and kill a European goldfinch (*Carduelis carduelis*). At 1340 h, I was driving on the south-western fringe of Christchurch city. My attention was drawn to an adult magpie swooping down from tree-top level and crossing the road about 20 m in front of my vehicle. I was able to see that the magpie had positioned itself directly behind a low-flying juvenile goldfinch, also flying across the road, but on a different angle.

The goldfinch immediately altered its flight path and began flying evasively. The magpie approached to within 0.2 m as it pursued the goldfinch across the road and over an adjacent area of grassland. The pursuit covered a distance of about 60 m and lasted about 20 seconds before the magpie struck the goldfinch in flight and knocked it to the ground. The goldfinch fell into long grass and the magpie immediately landed and stood above the spot where the goldfinch had landed. I suspect the goldfinch was merely stunned at this stage as it made several attempts to take flight. Each time however, the magpie knocked the goldfinch back to the ground and after a brief struggle seized the goldfinch in its bill and killed it.

Once the goldfinch was caught, the magpie held it alternately by the neck and head, and proceeded to bash it against the ground before pecking vigorously at the head. After about a minute, the magpie flew back across the road and landed in a eucalyptus tree. It then bashed the goldfinch's body against a thick branch. I assume that the magpie would have eaten the goldfinch while perched, but

in several attempts to approach close enough to take a photograph, I repeatedly flushed the magpie until it eventually flew off and landed in a grassy field about 40 m distant (Fig. 1). Here the magpie bashed the goldfinch several times, pulled feathers from the head, neck and upper body, and appeared to eat part of the body. I did not see if the magpie ate the whole goldfinch or just part.

My observation of an Australian magpie pursuing and killing a European goldfinch is similar to reports of magpies attacking other bird species, including European skylark (*Alauda arvensis*) (Porter 1993), blackbird (*Turdus merula*) (Moon 1968), song thrush (*(Turdus philomelos)* (McCaskill 1945) and black cormorant (*Phalacrocorax carbo*) (Hall 1962). Most instances of magpies attacking other bird species can be attributed to either nest predation (Morgan *et al.* 2006; Sanders & Maloney 2002), territorial aggression (Morgan *et al.* 2005), or possibly redirected aggression (Morgan *et al.* 2007). However, unlike these earlier reports, the magpie I observed actively engaged in the aerial pursuit, killing and consumption of a small passerine.

Active predation by Australian magpie of other bird species is rare (Morgan et al. 2005; Parker 2007), although Oliver (1955) noted that "it kills such birds as come in its way, and as it is a very fast flier small birds have little chance of escaping." McCaskill (1945) and Oliver (1955) both compiled lists of bird species reportedly killed by Australian magpies. Such species include Australasian harrier (Circus approximans), New Zealand pigeon (Hemiphaga novaeseelandiae), tui (Prosthemadera novaeseelandiae), bellbird (Anthornis melanura), New Zealand pipit (Anthus novaeseelandiae), silvereye (Zosterops lateralis), New Zealand fantail (Rhipidura



Fig. 1 Australian mapgie carrying European goldfinch after it caught and killed it following an aerial pursuit.

fuliginosa), grey warbler (Gerygone igata), ring-necked pheasant (Phasianus colchicus), rock pigeon (Columba livia), song thrush, blackbird, skylark, house sparrow (Passer domesticus), yellowhammer (Emberiza citronella), domestic fowls (Gallus sp.) and canary (Serinus canaria). While some of these species (such as Australasian harrier), were probably killed as a result of territorial aggression, others (such as house sparrow and blackbird) were observed to be killed and eaten. These records and the incident

reported in this paper clearly illustrate that when opportunity arises, the Australian magpie is a capable aerial predator.

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