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RADIO-TRACKING TRIALS WITH REGENT HONEYEATERS *Xanthomyza phrygia* AND OTHER HONEYEATERS

HUGH A. FORD[1], DAVID GEERING[2] and ANDREW LEY[3]

[1]Zoology, University of New England, Armidale, New South Wales 2351
[2]New South Wales National Parks and Wildlife Service, PO Box 2111, Dubbo, New South Wales 2830
[3]19 Lynches Road, Armidale, New South Wales 2350

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We trialled three methods of attachment of radio-transmitters to develop a safe and effective method to use on the endangered Regent Honeyeater *Xanthomyza phrygia*. Radio-tags glued onto the backs of one Red Wattlebird *Anthochaera carunculata* and three Noisy Friarbirds *Philemon corniculatus* were lost within 12 days. One Friarbird was unable to fly after a heavy rain storm, but recovered after being dried and was seen several days later, apparently in good health. His mate laid eggs, which did not hatch, probably because the tagged bird had not fertilized them. Transmitters glued onto tail-clips were attached to one Friarbird and two Regent Honeyeaters. The Friarbird kept its radio-tag for at least 34 days, without any obvious effect. The Regent Honeyeaters lost their transmitters after 2 and 12 days, with one slipping off the tail and the other being lost when the central tail feathers were moulted. The second bird flew unsteadily at first, but later behaved normally. Radio-tags were tied and glued to the tails of two more Regent Honeyeaters. One lost its radio-tag within two days, probably because it had been attached to the second and third rectrix on opposite sides, as its central tail feathers had been lost previously. The other bird kept his radio-tag for 16 days, when the central tail feathers were moulted. During this time it continued to feed nestlings and fledglings at a high rate.

Both Friarbirds and Regent Honeyeaters travel considerable distances from their nests or fledglings to feed, up to 2 km and nearly 1 km respectively. We do not recommend that transmitters be glued onto the backs of Regent Honeyeaters, on the basis of our experience with this method on large honeyeaters. Transmitters clipped, or tied and glued, onto the tail appear to be safer, though they are appropriate for use before the breeding season rather than after it when honeyeaters moult.