

FEEDING ECOLOGY OF THE WEDGE-TAILED EAGLE *Aquila audax* IN NORTH-WEST QUEENSLAND: INTERACTIONS WITH LAMBS

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The diet of the Wedge-tailed Eagle *Aquila audax* was studied by analysis of pellets ($n = 145$) and prey remains from four sites in the north-west Queensland sheep rangelands and one non-sheep site in north Queensland. Eagle behaviour around lambs was observed from a hide at sheep camps at three sites (total 216 h), and post-mortems were conducted on 29 dead lambs from three sites. In north-west Queensland the diet of breeding adult eagles from remains ($n = 216$) at 12 nests, consisted of 53 percent mammals, 23 percent birds and 19 percent reptiles by number, and 89 percent mammals, 10 percent birds and 1 percent reptiles by biomass. Diet of breeding adults and non-breeding sub-adults combined, from pellets, consisted of 67 percent mammals, 25 percent birds and 8 percent reptiles by number, and 75 percent mammals, 24 percent birds and 1 percent reptiles by biomass. Eagles ate some lambs (17% by number and 15% biomass in remains, 33% and 21% in pellets) but could not be distinguished from live prey. The higher proportion of lamb in the pellet data may reflect a higher level of scavenging or predation on lambs by non-breeding immature eagles than by breeding adults. In north Queensland the eagles' diet at two nests consisted, by number, of 78 percent mammals and 22 percent birds in remains ($n = 21$) and 86 percent mammals and 14 percent birds in pellets; biomass contributions were 97-98 percent mammals and 2-3 percent birds. No attacks on lambs were observed; of 29 dead lambs, eagles killed one viable lamb (3%) and two lambs of unknown viability. The dietary data, together with differences between sites in eagle numbers, age classes, seasonal fluctuations and nesting activity, suggest the following interpretation: most of the few lamb deaths and injuries attributed to raptors were caused by non-breeding eagles, and that by their territorial defence adult eagles may exclude immatures and thus provide a measure of protection to lambing flocks.