

## Notes on Wedge-tailed Eagle Behaviour

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Observations on the behaviour of Wedge-tailed Eagles *Aquila audax* involving lambs are detailed for two separate cases at different locations in New South Wales. Notes on display and piracy are also included.

### Eagles and Lambs

The first case concerns an immature pair of Wedge-tailed Eagles on a Corriedale stud near Coleambally, N.S.W., observed from 4-7 July 1977. This pair was evidently trying to establish a territory between those of two adult pairs. The immature eagles were regularly seen soaring together, and once attempting copulation. They were in the vicinity of a particular rabbit-infested belt of Cypress Pines *Callitris columellaris* growing on sandy soil, except when prevented by the presence of the adult pair just to the north. This was observed to happen on the afternoon of 6 July.

The next morning at approximately 10:30 hours the immature eagles were perched out on a cleared Boree *Acacia pendula* plain, over a kilometre south of the pines. The soil here was clay, ground cover was sparse due to grazing and there were no rabbits. Near their perch was the fresh carcass of a lamb which they had undoubtedly killed early that morning. Talon punctures in the skull and throat, and fresh blood around the wounds were consistent with evidence of ante-mortem eagle attack as described by Rowley (1970). Almost total removal of flesh and organs from the body and limbs (by ravens *Corvus coronooides* and *C. mellori* after the eagles) prevented an assessment of the lamb's health, beyond the fact that there was no skeletal damage not attributable to the eagles. The landholder considered that the eagles had finished off a lamb weakened by some other cause, since eagles were usually scavengers here and not an economic problem.

The interesting part about this case is the size and weight of the lamb, which according to the landholder was about a month old and would have weighed 8.5-11.5 kg. Brown (1976) states that eagles usually kill prey of less than their own weight, but there are exceptions. Cooper (1969) records an immature Golden Eagle *Aquila chrysaetos*, which is about 1 kg heavier than a

Wedge-tailed, killing a healthy and vigorous Red Deer calf weighing 20.5 kg, about four times its own weight. The Wedge-tailed Eagle is often credited with killing adult kangaroos, sick sheep, calves, foxes, etc., some of which would be at least eight times its own weight. Until some recorded weights of its heaviest victims are published, much of the Wedge-tail's killing feats must remain hearsay.

The second case concerns three immature Wedge-tailed Eagles diving at a mob of sheep near Adaminaby, N.S.W., on 14 January 1978. At about 10:30 hours\*, the three eagles were soaring in the wind around a cleared hilltop, and diving at each other and at the sheep. There were no lambs present. The eagles appeared to be 'playing', and did not actually strike at the sheep although they approached close enough to do so. At first the sheep were not alarmed, but after several close passes, part of the mob rushed down the hillside a short distance. The eagles appeared to tire of the 'game' after this, and resumed soaring.

This behaviour could easily have been interpreted as attempted predation. However, following Brooker (1974) and other observations of my own, it is clear that the birds were not hunting. Their leisurely behaviour was more characteristic of high aerial activity which dominates the middle of the day, rather than low aerial hunting which is done early and late. The whole episode was similar to the account given by Morris (1973) of a Wedge-tailed Eagle 'playing' with a horse.

### Display

Display in the Wedge-tailed Eagle is well-documented by Brooker (loc. cit.). I observed an interesting variation of this in the Warrumbungle Range near Coonabarabran, N.S.W., on 2 October 1976. At about 13:00 hours, four

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\* Times given are Eastern Standard Time and have been adjusted from Daylight Saving Time.

eagles were performing aerobatics in the strong wind around the summit of Bluff Mountain. One was an adult male performing an undulating display flight and evidently attempting to repel three intruding immatures. The young birds were also diving at each other, apparently in 'play'. Once, instead of dodging its 'attacker', the lower bird rolled and presented its talons to the other, so that both immature eagles performed several 'cart-wheels' with interlocked talons before breaking away.

Brown (loc. cit.) states that the cartwheeling or whirling stage of display is rarely reached in the genus *Aquila* (although common in Sea Eagles *Haliaeetus*), being very occasionally reported for the Tawny Eagle *A. rapax* and Verraux's Eagle *A. verreauxi*. It is well-known that 'play' in young animals often includes the performance of activities which will have a specific function in adult life. It was unfortunately not possible to sex the cartwheeling young Wedge-tails. Any instances of cartwheeling by a mated adult pair of Wedge-tails, as distinct from simply rolling and foot-touching, would be well worth reporting.

A further variation of display behaviour was observed about 5 km south-west of Berry, N.S.W. An adult pair and their almost independent juvenile were regularly observed from 25-31 January 1978. On 30 January, at about 13:00 hours,\* all three were soaring together. The young bird soared close beneath its mother, rolled and briefly presented its talons to her before righting itself. The adult did not appear to respond in any way. The juvenile was large enough to be a female, and it appeared that in 'play' it was performing the female role in the foot-touching stage of display. It is interesting that it did not require the stimulus of another eagle diving at it to elicit the rolling and talon-presenting response.

A component of courtship display not mentioned by Brooker (loc. cit.) for the Wedge-tailed Eagle, or Brown (loc. cit.) for any eagle species, is low-level close pursuit of the female by the male. A resident adult pair of Wedge-tailed Eagles was observed from 19-23 July 1977 near Capertee, N.S.W. On 21 July at about mid-day, both birds were soaring together. They performed a typical undulating display flight, which brought them down to tree-top level. The male then closely pursued the female over an erratic course, keeping a precise position virtually on her tail. This

was performed with continuous wing-beats by both birds, and was watched until they were lost to view behind a hill. Their nest was thought to be in their general direction of flight. In intensity, this activity appeared to be the low aerial equivalent of the rolling and foot-touching stage of display.

### Piracy

I have never seen a Wedge-tailed Eagle pursue and rob another predator of its prey, as distinct from simply dominating other scavengers at a carcass. Although there are generalizations in print to the effect that they often steal food from other predators, there appear to be few if any published instances of this. Again according to Brown, true piracy is rare in *Aquila* apart from the Tawny Eagle where it appears almost compulsive in nature. Cases of pursuit and piracy by the Wedge-tailed Eagle, particularly towards other raptor species, would also be worth reporting.

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### References

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