

12(3)

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Western Wildlife

July 2008
Vol. 12, Number 3

NEWSLETTER OF THE LAND FOR WILDLIFE SCHEME

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- 1 JUL 2008

WESTERN AUSTRALIA

POWERFUL PREDATORS AND PASSIONATE PARENTS - THE LIFE CYCLE OF A WEDGE-TAILED EAGLE

Simon Cherriman

“The wedge-tailed eagle soars aloft, a king on outstretched wings” – how could it be said any better? This is a line from a poem my father wrote for me several years ago, and these words will never cease to be fresh in my thoughts. They immediately paint a characteristic image of Australia’s largest bird of prey, the wedge-tailed eagle (*Aquila audax*). This ‘bold eagle,’ or so its scientific name implies (*‘audax’* from the word ‘audacious’, meaning bold) is actually very shy and wary of humans and is usually observed soaring hundreds of metres above the earth on majestic, upswept wings. It is rare indeed to find a ‘wedgie’ that will stand its ground and appear bold to the observer, even during nesting.



With a wingspan of nearly 2.5 m and an average weight of 3.5 kg, the wedge-tailed eagle is the fourth largest eagle in the world. Apart from the little eagle (*Hieraaetus morphnoides*), the wedge-tail is the only ‘true’ eagle species found in Australia, possessing long legs that are fully feathered to the toes. It is easily identified by its size, large diamond-shaped tail and obvious primary feathers that give its wingtips a ‘fingered’ appearance.

Like many other raptors, wedgies have different colour morphs depending on their age. Immature birds are generally golden in colour, and progressively darken with age to achieve the almost entirely black appearance of mature adults, which also possess a golden wing-band and chestnut nape (neck) feathers.

Although timid in the presence of people, the wedge-tailed eagle is an amazing flyer, and it definitely inspires feelings of charisma and majesty when an observer is lucky enough to witness its full capabilities in the sky. During the breeding

season, eagle pairs can be observed soaring for hours together and playing courtship games hundreds of metres above the ground. In an act that displays the eagle’s true skill in the air, the male will often perform dives known as ‘pothooks’, where he plummets earthward with wings folded, before opening his wings slightly and climbing swiftly upward to reach a stall, which initiates another dive. As well as impressing his mate, these dives are also performed at the boundaries of the eagle’s territory to advertise its occupancy to other eagles.

The size of a wedge’s territory varies according to

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Wedge-tailed eagle



Adult wedge-tailed eagles are very dedicated parents, and are kept busy providing their developing young with fresh food regularly. The male eagle does most of the hunting, especially while the chick is very young, and the female spends much time brooding. Often, after having brought a partially consumed fresh kill to a perch near the nest, the male will brood the chick while the female leaves the nest and has her share of the feed. Although they are extremely powerful killers, wedge-tailed eagles are amazingly gentle when at the nest and show great care as they feed their chicks. It is indeed a fascinating experience to see a predator show these rare signs of tenderness!

food supply, landforms and human disturbance, but it is generally 30 - 50 sq km in area. Most territories in south-west WA are centralised in valley systems and contain large expanses of uncleared bushland, as well as open areas that are suitable for hunting. A massive nest of branches, often more than 2 m deep, is built in a large tree with a commanding view over the surrounding landscape. Several nests normally exist in one territory. Sometimes one nest is favoured, and other times nests are used in rotation. Little is known about why wedge-tailed eagles have several nests and what makes them choose the one they breed in each year, but it is probably related to proximity to abundant food resources.

A young eagle develops very rapidly. At about three weeks of age it has grown a lot in size but is still covered in white down. At six weeks, the eaglet is very alert shuffling around the nest, has many feather pins emerging (especially on the wings), and is beginning to learn how to stand. By ten weeks of age, a well developed covering of golden feathers has emerged, and the eaglet exercises its new wings frequently each day. During the last few weeks before fledging, the adult eagles spend much time away from the nest, and their youngster will sometimes emit continuous 'sir, yeee-sir, yeee-sir' squeals as it impatiently waits to be tended to. This call increases in intensity when an

The female eagle usually lays two eggs on a bed of fresh green (often eucalypt) leaves placed in the middle of the chosen nest, and these are incubated mostly by her for about 45 days. When they hatch, the tiny eaglets are covered in natal down that appears white and fluffy, just like a baby chicken! Initially they cannot see very well, and are brooded constantly by their parents in their first few weeks of life high in the eyrie. The young chicks are vulnerable in the early stages of development, and during this time it is common for one to kill its weaker sibling. Although cruel, this is nature's way of ensuring the strongest bird survives and its genes are passed on to represent the next generation.



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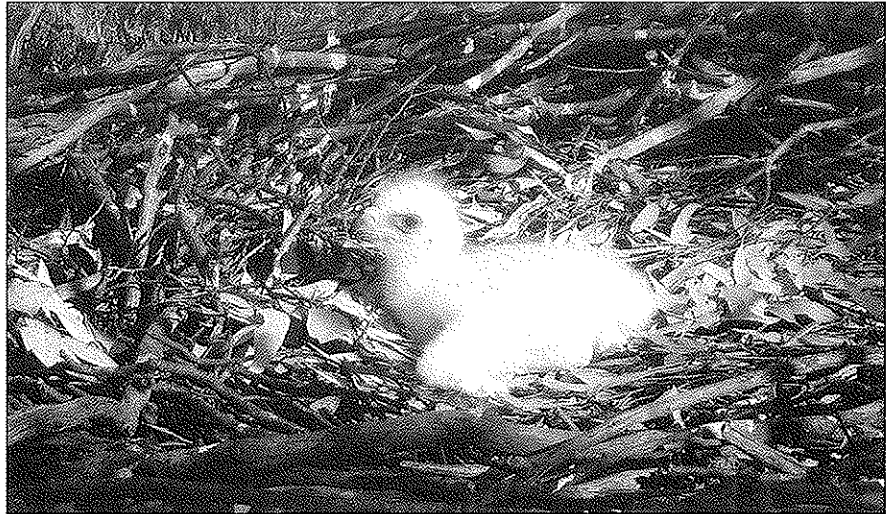
Wedge-tailed eagle

adult is nearby and becomes very loud and demanding if one lands on the nest – behaviour much like a toddler having a tantrum! After about 90 days of transformation from a tiny, white eaglet, the powerful, immature eagle is ready to make its first flight.

Being at the top of the food chain, wedge-tailed eagles don't really have any predators (except humans). Conversely, though, there is a huge variety of animals that they eat themselves. Wedgies are mostly suited to hunting small to medium-sized mammals, so in general their diet includes bandicoots, bettongs, young kangaroos and wallabies, as well as introduced species like rabbits. However, they are extremely adaptable predators eating whatever is most readily available, and sometimes feed on foxes, feral cats, piglets, birds like ravens, ducks, cockatoos, parrots, pigeons and even emu chicks, and reptiles including bobtail skinks and monitor lizards. They have also been known to cooperatively hunt adult kangaroos. Carrion is probably an important part of eagle food for breeding pairs during the non-breeding season, and all year round for non-breeding sub-adults. The increasing number of road-killed animals, particularly in country areas, has no doubt provided an extra food source for some eagles, however it is unknown how these 'artificial' meals affect eagle reproduction and the population size overall.

The most common and effective method used to determine what eagles eat is to collect the remains of prey animals from their nest. In the Perth region, I carried out a university honours project on eagle diet from 2004 to 2006. This research involved visiting the nests of several breeding pairs to collect the remains of prey, such as

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bones, fur and feathers, which had accumulated during each breeding season. These were carefully sorted, and identified by comparing the remains, for example bones, with reference material, for example skeletons from the WA Museum, to determine the species to which they belonged. Using this information, together with data from analysing regurgitated pellets also collected from eagle nests, and observations of feeding events at nests, a list of the numbers of different types of prey animals eaten during the three breeding seasons was compiled*.

Thirty-seven species of vertebrate were identified as eagle prey in the Perth region. This further highlights the adaptability of the wedge-tailed eagle to eat a wide variety of animals. Some of the species listed (for example magpie larks and rainbow lorikeets) are quite small, and it is interesting that eagles invest the energy to capture something that would appear to be of very little reward. Also, many of the native marsupials are nocturnal, which indicates that eagles are capable of hunting in semi-darkness, or working together to flush prey from its hiding place and capture it during daylight.

Wedgies were once persecuted for being supposed sheep killers and

thousands were shot through the 1900s when bounties were offered for their scalps. In most cases, the eagles were eating sheep that had died of other causes, so they are not a major threat to farmers. Research into their diet and the general shift in attitude towards conservation, means wedgies today are respected and seen as valuable assets to our unique country.

* For list of prey items recorded in this study, and of references, contact the Editor by email.

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Note:

'A King on Outstretched Wings': a documentary about the wedge-tailed eagle in the Perth region.

a DVD by Simon Cherriman
Running time: 30 mins approx.
Cost: \$20 per copy
Order by email:
aquilla84@iinet.net.au