FACTORS INFLUENCING CHICK SURVIVAL IN THE WEDGE-TAILED EAGLE Aquila audax

LISA COLLINS and DAVID B. CROFT

School of Biological, Earth and Environmental Sciences University of New South W ales Sydney, New South Wales 2052 rPresent address: UNSW Arid Zone Field Station, Fowlers Gap via Broken Hill, New South Wales 2880;

Corresponding author: :d.croft@unsw.edu.au

Received: I0 April 2006

Nest-site characteristics of the Wedge-tailed Eagle Aquila audax were studied in 1999 at Fowlers Gap, in arid western New South Wales, by measuring parameters of nest trees for five active nests and eight other nests. Parental and chick behaviour and prey items were recorded at five nests by remote time-lapse video surveillance through the nestling period to fledging, and prey populations were surveyed. The five monitored nests were mostly in live gums Eucalyptus sp. in creeks and the other nests were mostly in non-eucalypts in other habitats. Six clutches were all of two eggs; fledging success was 0.64 young per pair per year over 14 pair-years 1997-99. The eagles' breeding diet consisted of mammals (25% by number) and reptiles (72%) mostly juvenile kangaroos Macropus sp. (20%) and Bearded Dragons Pogona vitticeps (68%). By biomass, important prey were mammals (78%: kangaroos 73%) and reptiles (21%). Rabbits were scarce in the environment and in eagle prey; the eagles strongly selected juvenile kangaroos relative to their abundance, but took rabbits in proportion to their abundance. Parental and siblicidal behaviour is described. Sample sizes were too small to draw definitive conclusions, but tree canopy cover, human disturbance, sibling competition and prey size and availability all appeared to have some influence on chick survival.