26Timing of breeding

To understand the breeding strategies of owls we need to understand why they breed when they do, the timing of breeding. Compared to Europe and North America, fewer owl nests have been systematically watched in Australia. But even when David Fleay followed owls in Victoria in the 1940s there were clues about why Southern Boobooks laid eggs and fed nestlings in spring, and why Powerful Owls laid eggs in autumn and fed nestlings during winter – Boobooks feed their young many invertebrates, Powerful Owls feed their young many arboreal mammals.

Timing of breeding in Southern Boobooks

Southern Boobooks around Canberra start breeding in late August and fledge young mostly in December. This timing is less of a conundrum than is the timing of Powerful Owls because Boobook breeding is in line with most other Australian raptors and in line with many Australian birds. Many raptors in south-east Australia breed in late winter/early spring, and fledge their young in late spring/early summer, commensurate with a flush of available prey. Ornithologists find it useful to separate 'ultimate' factors, the *reason* why owls breed when they do, from 'proximate' factors, the actual *triggers* that cause owls to start breeding. Ultimate factors, the ultimate reasons for having eggs, nestlings or fledglings at a certain time of the year, can include food supply in a particular season. It is a convention in the birds of prey literature that the ultimate factor in the timing of raptor breeding is so peak food supply occurs during the nestling period (Newton 1979). However, Olsen and Georges (1993) argued that ultimate timing might relate to the