THE MALLEEFOWL
AN INTRODUCTION

MALLEEFOWL
Photo: "Kr.afol"

The Malleefowl (*Leipoa ocellata*) is a stocky ground-dwelling bird that occupies semi-arid mallee scrub on the fringes of the relatively fertile areas of southern Australia. It is now reduced to three separate populations: the Murray/Murrumbidgee basin, west of Spencer Gulf along the fringes of the Simpson Desert, and the semi-arid fringe of Western Australia's fertile south-west corner.

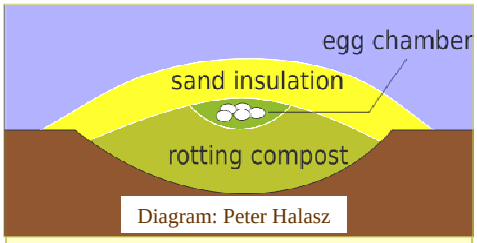
NOW YOU SEE ME, NOW YOU DON'T
Photo: "Kr.afol"

Malleefowl are shy, wary, solitary birds that usually fly only to escape danger or to reach a tree to roost in. Although very active, they are seldom seen as they freeze if disturbed, relying on their intricately patterned plumage to render them invisible, or else fade silently and rapidly into the undergrowth (flying away only if surprised or chased).

Pairs occupy a territory but usually roost and feed apart: their social behaviour is sufficient to allow regular mating during the season and little else. In winter, the male selects an area of ground, usually a small open space between the stunted trees of the Mallee, and scrapes a depression about three metres across and just under a metre deep in the sandy soil by raking backwards with his feet. In late winter and early spring, he begins to collect organic material to fill it with, scraping sticks, leaves and bark into wind-rows for up to 50 metres around the hole, and building it into a nest-mound, which usually rises to about 0.6m above ground level. The amount of litter in the mound varies, it may be almost entirely organic material, mostly sand, or anywhere in between. After rain, he turns and mixes the material to encourage decay and, if conditions allow, digs an egg chamber in August (the last month of the southern winter). The female sometimes assists with the excavation of the egg chamber, and the timing varies with temperature and rainfall. The female usually lays between September and February, provided there has been enough rain to start organic decay of the litter. The male continues to maintain the nest-mound, gradually adding more soil to the mix as the summer approaches (presumably to regulate the temperature).

MALLEEFOWL MOUND
Photo: Glen Fergus

Males usually build their first mound (or take over an existing one) in their fourth year, but tend not to achieve as impressive a structure as older birds. They are thought to mate for life, and although the male stays nearby to defend the nest for nine months of the year, they can wander at other times, not always returning to the same territory afterwards.



Cross section of a Malleefowl nest, showing the layer of sand (up to a metre thick) used for insulation; the egg chamber; and the layer of compost. The male keeps the egg chamber at a constant 33°C by opening and closing air vents in the insulation layer, and the heat is generated by the rotting compost.

The female lays a clutch of anywhere from two or three to over thirty large, thin-shelled eggs, mostly about fifteen; usually about a week apart. Each egg weighs about 10% of the female's body weight, and over a season it is common for her to lay 250% of her own weight. Clutch size varies greatly between birds and with rainfall. Incubation time depends on temperature and can be anywhere between about 50 and almost 100 days.

Hatchlings use their strong feet to break out of the egg, then lie on their backs and scratch their way to the surface, struggling hard for five or ten minutes to gain 3 to 15cm at a time, and then resting for an hour or so before starting again. Reaching the surface takes between 2 and 15 hours. Chicks pop out of the nesting material with little or no warning, with eyes and beaks tightly closed, then immediately take a deep breath and open their eyes, before freezing motionless for as long as 20 minutes.

The chick then quickly emerges from out of the hole and rolls or staggers to the base of the mound, disappearing into the scrub within moments. Within an hour it will be able to run reasonably well; it can flutter for a short distance and run very fast within two hours, and despite not having yet grown tail feathers, it can fly strongly within a day. The chicks have no contact with adults or other chicks: they tend to hatch one at a time, and birds of any age ignore one another except for mating or territorial disputes.

EUROPEAN FOX
Vulpes vulpes
Photo: "Agostino64"

The Malleefowl is considered to be a threatened species. Predation by both the introduced European Fox, and feral cats is a factor, but the critical issues are changed fire regimes and the ongoing destruction and fragmentation of habitat. These birds are particularly vulnerable to the increasing frequency and severity of drought that has resulted from global warming.

Feral cats have been recorded up to 1.6m in length

Reference: Wikipedia