

## THE MALLEE - FOWL

by

P.K. Tomlinson

There has been considerable attention paid to wildlife inhabiting forested areas in Western Australia, particularly over the last few years. This increasing awareness from the general public towards fauna and flora has resulted from the realization of the dangers of extermination to certain species of wildlife in the South West.

With the current trend in conservation and preservation of the existing flora and fauna, people are more conscious of the need to conserve our natural heritage of beauty and wonders of such fine West Australian bushlands. Thus people today are more observant to any unusual or rare occurrences of fauna in West Australia.

During July 1971 Forest Guard Max Campbell and I were conducting a dieback survey in the north eastern region of Walpole Division, when we discovered an interesting structure in the table drain of a forest road. The structure resembled a small crater approximately 8 feet in diameter at the apex of the cone, 16 feet in diameter at the base, with a height of  $3\frac{1}{2}$  to 4 feet. The crater showed remarkable symmetry and excited interest as to what its origin and purpose was.

Consulting fellow local officers within the Department it was suggested the crater was probably built by a mound-building bird.

Subsequent enquiries to the West Australian Museum revealed the bird was the Mallee Fowl, and the first reported sighting in this area.

The Mallee Fowl belongs to the order of Galliformes, family Megapodiidae, species *Heipoa ocellata*. Common native names are Gnow and Ngow-o. In the eastern states it is known as Lowan, from where the town of Lowan in Victoria received its name.

Mallee Fowls are found in open mallee and sand plain country, south and west of a line from Cape Farquhar to Kathleen Valley, Corregie and the Warburton Range and also a narrow coastal strip in the south, mainly around The Warren River, Cape Leeuwin, Mentille, Naturaliste and near Busselton.

The Mallee Fowl is a rather large bird, weighing between 4-4½ lbs with a length between 22-27 inches. The bird is easily recognized as the body is brown with black and white cross-markings to the feathers, tail is tipped white, under parts white with a prominent black strip down the centre of the upper breast and legs a blue-grey colour.

The nesting habits of the Mallee Fowl are the most outstanding characteristics of the bird. They excavate a hole in the sand about 3 feet deep and 6 feet across. The male bird then scrapes a heap of sand and dry leaf litter into a large mound measuring up to 15 feet across and 2½ feet in height. The eggs are laid in the wall of the chamber at intervals of 5-6 days starting in early September and continuing until the end of December. The number of eggs laid by the female varies between 15 to 24 in one season.

The basic idea of the nesting habit is for the male bird to form a mound with litter and sand into which the eggs are laid and incubation effected from the heat caused by the decaying litter. If sufficient heat is not produced the male bird opens the mound on a hot day to capture the solar heat, and closes the nest with a drop in temperature. As usual the male bird engages in the major part of the work; i.e. constructing the mound, gathering litter, opening the mound for the female bird to lay her eggs and controlling the temperature at about 33-34°C. It is not known how the male bird gauges the temperature but one theory suggests the bird's tongue, or a sensitive part of his mouth is used.

The eggs have an incubation period of between 50-90 days depending on the temperature in the mound. Some eggs are hatching while others are incubating because of the time intervals between laying. When the eggs are hatched, the chick struggles out of the mound and down the side to take shelter in the nearby bush where it leads an independent life from both parents and other chicks.

The male bird never moves more than 100 yards away from the nest while the female wanders further to feed on seeds, buds, young shoots and insects.

After the incubation period is over, the birds will begin to re-build the nest after a short period when they briefly associate together at a common feeding ground.

During my observation of the Mallee Fowl I sighted the male and female birds once, the male taking cover in the nearby scrub and the female running along the ground for over 20 meters and flying with some difficulty into a tree.

The road where the nest is, has been closed to the general public to avoid disturbing the birds, and to try and ensure an increase of bird activity in the area. The location has not been stated to avoid any unnecessary disturbance by eager observers.

Any further information or sightings by Forest Officers would be gratefully acknowledged.