## The Mallee Hen Unmasked

## JOHN GILBERT

On my arrival at Port Essington my attention was attracted to numerous immense mounds of earth, which were pointed out to me by some of the residents as the tumuli of the aborigines; on the other hand, I was assured by the natives that they were formed by the Megapode for the purpose of incubating its eggs: their statement appeared so extraordinary, and so much at variance with the general habits of birds, that no one in the settlement believed them or took sufficient interest in the matter to examine the mounds and thus to verify or refute their accounts; another circumstance which induced doubt of their veracity was the great size of the eggs brought in by the natives as those of this bird. Aware that the eggs of Leipoa were hatched in similar manner, my attention was immediately arrested by these accounts, and I at once determined to ascertain all I possibly could respecting so singular a feature in the bird's economy; and, having procured the assistance of a very intelligent native, who undertook to guide me to the different place resorted to by the bird, I proceeded on the sixteenth of November to Knocker's Bay, a part of Port Essington Harbour comparatively but little known, and where I had been informed a number of these birds were always to be seen.

1 landed beside a thicket, and had not proceeded far from the shore ere I came to a mound of sand and shells, with a slight mixture of black soil, the base resting on a sandy beach, only a few feet above high-water mark; it was enveloped in the large yellow- blossomed Hibiscus, was of a conical form, twenty feet in circumference at the base, and about five feet in height. On pointing it out to the native and asking him what it was, he replied 'Oooregoorga Rambal," Megapode's house or nest. I then scrambled up the sides of it, and to my extreme delight found a young bird in a hole about two feet deep; it was lying on a few dry withered leaves, and appeared to be only a few days old. So far 1 was satisfied that these mounds had some connexion with the bird's mode of incubation; but 1 was still sceptical as to the probability of these young birds ascending from so great a depth as the natives represented; and my suspicions were confirmed by my being unable to induce the native, in this instance, to search for the eggs, his excuse being that 'he knew it would be useless, as he saw no traces of the old birds having recently been there'. I took the utmost care of the young bird, intending to rear it if possible; I therefore obtained a moderately -sized box, and placed in it a large portion of sand. As it fed rather freely on bruised Indian corn, I was in full hopes of succeeding; but it proved of so wild and intractable a disposition that it would not reconcile itself to such close confinement, and effected its escape on the third day.

During the period it remained in captivity it was incessantly occupied in scratching up the sand into heaps; and the rapidity with which it threw the sand from one end of the box to the other was quite surprising for so young and small a bird, its size not being larger than that of a small Quail. At night it was so restless that I was constantly kept awake by the noise it made in its endeavours to escape. In scratching up the sand it only used one foot, and having grasped a handful as it were, the sand was thrown behind it, with but little apparent exertion, and without shifting its standing position on the other leg; this habit seemed to be the result of an innate restless disposition and a desire to use its powerful feet, and to have but little connexion with its feeding; for although Indian corn was mixed with the sand, 1 never detected the bird in picking any of it up while thus employed.

I continued to receive the eggs without having an opportunity of seeing them taken from the mound until the 6th of February, when on again visiting Knocker's Bay I had the gratification of seeing two taken from a depth of six feet, in one of the largest mounds I had then seen. In this instance the holes ran down in an oblique direction from the centre towards the outer slope of the hillock, so that, although the eggs were six feet deep from the summit they were only two or three feet from the side. The birds are said to lay but a single egg in each hole, and after the egg is deposited the earth is immediately thrown down lightly until the hole is filled up; the upper part of the mound is then smoothed and rounded over. It is easily known when a Megapode been recently excavating, from the distinct impressions of its feet on the and sides of the mound, and the earth being so lightly thrown over, that with a slender stick the direction of the hole is readily detected, the ease or difficulty of thrusting the stick down indicating the length of time that may have elapsed since the bird's operations. Thus far it is easy enough; but to reach the eggs requires no little exertion and perseverance.

The natives dig them up with their hands alone, and only make sufficient room to admit their bodies, and to throw out the earth between their legs; by grubbing with their fingers alone they are enabled to follow the direction of the hole with greater certainty, which will sometimes, at a depth of several feet, turn off abruptly at right angles, its direct course being obstructed by a clump of wood or some other impediment. Their patience is, however, often put to severe trials. In the present instance the native dug down six times in succession to a depth of at least six or seven feet without finding an egg, and at the last attempt came up in such a state of exhaustion that he refused to try again; but my interest was now too much excited to relinquish the opportunity of verifying the native's statements, and by the offer of an additional reward I induced him to make another effort: this seventh trial proved successful, and my gratification was complete, when the native with equal pride and satisfaction held up an egg, and after two or three more attempts produced a second; thus proving how cautious Europeans should he of disregarding the narratives of these poor children of nature, because they happen to sound extraordinary or different from anything with which they were previously acquainted.

I revisited Knocker's Bay on the 10th of February, and having with some difficulty penetrated into a dense thicket of cane-like creeping plants, I suddenly found myself beside a mound of gigantic proportions. It was fifteen feet in height and sixty in circumference at the base, the upper part being about a third less, and was entirely composed of the richest description of light vegetable mould; on the top were very recent marks of the bird's feet. The native and myself immediately set to work, and after an hour's extreme labour, rendered the more fatiguing from the excessive heat, and the tormenting attacks of myriads of mosquitoes and sand-flies, I succeeded in obtaining an egg from a depth of about five feet; it was in a perpendicular position, with the earth surrounding and very lightly touching it on all sides, and without any other material to impart warmth, which in fact did not appear necessary, the mound being quite warm to the hands. The holes in this mound commenced at the outer edge of the summit, and ran down obliquely towards the centre: their direction therefore is not uniform. Like the majority of the mounds I have seen, this was so enveloped in thickly foliaged trees as to preclude the possibility of the sun's rays reaching any part of it.

The mounds differ very much in their composition, form, and situation: most of those that are placed near the water's edge were formed of sand and shells without a vestige of any other material, but in some of them I met with a portion of soil and decaying wood; when constructed of this loose material they are very irregular in outline, and often resemble a bank thrown up by a constant heavy surf. One remarkable specimen of this description, situated on the southern side of Knocker's Bay, has the appearance of a bank, from twenty-five to thirty feet in length, with an average height of five feet; another even more singular is situated at the head of the harbour, and is composed entirely of pebbly iron-stone, resembling a confused heap of sifted gravel; into this I dug to the depth of two or three feet without finding any change of character; it may have been conical originally, but is now without any regularity, and is very extensive, covering a space of at least a hundred and fifty feet in circumference.

These remarkable specimens would, however, seem to be exceptions, as by far the greater number are entirely formed of light black vegetable soil, are of a conical form, and are situated in the densest thickets. Occasionally the mounds are met with in barren, rocky and sandy situations, where not a particle of soil similar to that of which they are composed occurs for miles round: how the soil is produced in such situations appears unaccountable; it has been said that the parent birds bring it from a great distance; but as we have seen that they readily adapt themselves to the difference of situation, this is scarcely probable: I conceive that they collect the dead leaves and other vegetable matter that may be at hand, and which decomposing forms this particular description of soil. The mounds are doubtless the work of many years, and of many birds in succession; some of them are evidently very ancient, trees being often seen growing from their sides; in one instance I found a tree growing from the middle of a mound which was a foot in diameter. I endeavoured to glean from the natives how the young effect their escape; but on this point they do not agree; some asserting that they find their way unaided; others, on the contrary, affirmed that the old birds, knowing when the young are ready to emerge from their confinement, scratch down and release them.

The natives say that only a single pair of birds are ever found at one mound at a time, and such, judging from my own observation, I believe to be the case; they also affirm that the eggs are deposited at night, at intervals of several days, and this I also believe to be correct, as four eggs taken on the same day, and from the same mound, contained young in different stages of development; and the fact that they are always placed perpendicularly is established by the concurring testimony of all the different tribes of natives I have questioned on the subject.

The Megapode is almost exclusively confined to the dense thickets immediately adjacent to the sea-beach; it appears never to go far inland, except along the banks of creeks. It is always met with in pairs or quite solitary, and feeds on the ground, its food consisting of roots, which its powerful claws enable it to scratch up with the utmost facility, and also of seeds, berries, and insects, particularly the larger species of coleoptera.

It is at all times a very difficult bird to procure; for although the rustling noise produced by its stiff pinions when flying may be frequently heard, the bird itself is seldom to be seen. Its flight is heavy and unsustained in the extreme; when first disturbed it invariably flies to a tree, and on alighting stretches out its head and neck in a straight line with its body, remaining in this position as stationary and motionless as the branch upon which it is perched; if, however, it becomes fairly alarmed, it takes a horizontal but laborious flight for about a hundred yards, with its legs hanging down as if broken. I did not myself detect any note or cry; but, from the natives description and imitation of it, it much resembles the clucking of the domestic fowl, ending with a scream like that of the Peacock.

I observed that the birds continued to lay from the latter part of August to March, when I left that part of the country; and, according to the testimony of the natives, there is only an interval of about four or five months, the dryest and hottest part of the year, between their seasons of incubation. The composition of the mound appears to influence the colouring of a thin epidermis with which the eggs are covered, and which readily chips off, showing the true shell to be white; those deposited in the black soil are always of a dark reddish brown, while those from the sandy hillocks near the beach are of a dirty yellowish white; they differ a good deal in size, but in form they all assimilate, both ends being equal; they are three inches and five lines long by two inches and three lines broad.

(These notes, taken from diaries kept by Gilbert on the Leichbardt Expedition, 1844-45, on which he was killed by North Queensland blacks, are among the first to have accurately described Australia's fabulous Incubator Birds.)