MEGAPODIUS TUMULUS, Gould.

Mound-raising Megapode.

Megapodius tumulus, Gould in Proc. of Zool. Soc., February 8, 1842. Oooregoorgā, Aborigines of the Cobourg Peninsula.

Jungle-fowl, Colonists of Port Essington.

The discovery of a species of *Megapodius* in Australia, as soon as the northern portions of the country should be subjected to a careful investigation, is no more than might have been expected, considering that New Guinea and the adjacent islands are the great nursery of this extraordinary tribe of birds.

When the Megapodius Tumulus first came under my observation I conceived it to be the M. rubripes of M. Temminck, and it was not until I had examined specimens of that species in the Museums of Paris and Leyden that I was satisfied of its being distinct. Its much greater size and more than proportionately powerful legs are among the specific differences which will be observable by those who may feel disposed to institute a comparison. Interesting as this bird must be to every naturalist, to myself it is peculiarly so, since the valuable notes on its habits and economy which happily I am enabled to give fully confirm all that I had previously asserted respecting the extraordinary mode of incubation of the Talegalla, verifying the opinion I have before expressed, that Megapodius, Talegalla and Leipoa are most nearly allied genera forming part of a great family of birds, whose range will be found to extend from the Philippines through the islands of the Indian Archipelago to Australia.

The Megapodius Tumulus is rather numerously spread over the whole of the Cobourg Peninsula on the north coast of the Australian continent, where the British settlement of Port Essington is now established; future research will doubtless require us to assign to it a much wider range, probably over the whole extent of the north coast.

The following account of its habits is taken from Mr. Gilbert's notes; and, novel and extraordinary as my description of those of *Talegalla* and *Leipoa* may have been considered, this will be read with even greater interest.

"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 Jungle-fowl 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 a 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 a 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 places 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. I 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 vellow-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, 'Oooregoorgā Rambal,' Jungle-fowls' 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 I was satisfied that these mounds had some connexion with the bird's mode of incubation; but I 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 of no use, 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, I 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 sixth 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 Jungle-fowl has been recently excavating, from the distinct impressions of its feet on the top 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 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 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 indicating the length of time that may have elapsed since the bird's operations.