

THE MEGAPODES

THE UNIQUE MOUND BUILDERS OF THE AVIAN WORLD

Megapodes, also known as incubator birds or mound-builders, are stocky, medium-large birds with small heads and large feet in the family Megapodiidae. Megapode literally means *large foot* (Greek: *mega* = large, *poda* = foot), a reference to the heavy legs and feet typical of these terrestrial birds. All species are browsers, and all but the Malleefowl occupy well wooded habitats. Brown or black colouration predominates in the species. Many species are shy, solitary, and inconspicuous. They are superprecocial, hatching from the egg at the most mature stage of development of any bird species. When they hatch their eyes are open, they have full body coordination and strength, and fully developed wings and downy body feathers. They are able to run, pursue prey, and, in some species, even fly on the day they hatch.

Megapodes do not incubate their eggs with body heat like other birds, but bury them in massive nest-mounds of decaying vegetation, that are maintained by the male. He adds or removes litter to regulate the internal temperature while the eggs are incubating. However, some species incubate their eggs in other ways: there are burrow-nesters which use geothermal heat, and others which simply rely on the heat of the sun warmed sand. Their unique eggs have a large yolk, which is 50-70% of the total weight. The Australian Brush-turkey is the only species in which the sex ratio has proved to be incubation-temperature dependent, it is thought this is common to all Megapodes. The non-social nature of their incubation raises questions as to how the young are able to recognise other members of their species, as imprinting is the norm in other members of the order Galliformes. Recent research has concluded there is instinctive visual recognition of specific movement patterns made by the individual species of megapode.

Megapode chicks do not have an egg tooth, but they use their powerful claws to break through the shell, and then to dig their way to the surface of the mound. To do this they lie on their backs and scratch through the sand and vegetable matter comprising the mound. Like other precocial birds they live independently from their parents.

Megapodes inhabit the broader Australasian region, including islands in the western Pacific, Australia, New Guinea, and Indonesia east of the Wallace Line. They also occur in the Andaman and Nicobar Islands in the Bay of Bengal. The distribution of the family has contracted with the arrival of humans, with a number of island groups such as Fiji, Tonga and New Caledonia losing most, or all, of their species.

The Megapodiidae comprise twenty species in seven genera, and although evolutionary relationships between the genera are uncertain, the morphological grouping is clear.

R.V.C. with help from Wikipedia