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The monotremes

There are only three types of living monotreme – the short-beaked echidna, the long-beaked echidna and the platypus. They are mammals, and like all mammals they have fur and produce milk to nourish their developing young. But in a lot of ways they are not quite like their fellow mammals – the marsupials and the placentals. The most obvious difference is that platypuses and echidnas lay eggs (oviparity), and so their young are hatched, not born alive.

Since humans are placentals and humans write the textbooks, monotremes often get put in their place as ‘almost’ mammals or Prototheria in the Latin of scientific nomenclature. This placental-biased view of monotremes as some sort of early test model that wasn’t quite right has tarnished them for two centuries. However, as we shall point out in this book, monotremes have been around for a lot longer than placentals and have remained masters of their environmental niches. That means that even if they are not very good at being humans or laboratory rats, they are in fact very, very good at being echidnas and platypuses.

Monotremes are often listed as being Australian, but both types of echidna are found in New Guinea, although the living long-beaked echidna is not found in Australia at all. The platypus is a ‘fair dinkum’ Aussie these days, but its ancestry includes a South American relative that lived in Argentina just after the dinosaurs disappeared from the scene.