The Emu - *Dromaius novaehollandiae* - standing 1.6 to 1.9 metres tall, is Australia's tallest native bird. In size, they are second only to ostriches in the world. Emus powerful legs give them great speed, some running up to 50 kilometres an hour. At full pace, a stride can measure up to 3 metres. The wings are greatly reduced, but the dark grey-brown legs are long and powerful. Each foot has three forward-facing toes and no hind toe. The sexes are similar in appearance.

The Emu has a short black bill. 'Hairy' crown. Head and throat are naked with blue skin. Adult emus have brown to grey-brown plumage of shaggy appearance; the shafts and tips of feathers are black. Solar radiation is absorbed by the tips, and the loose-packed inner plumage insulates the skin preventing heat reaching the skin and allowing the bird to be active during the heat of the day.
Runs with bouncy, swaying motion. Swims well. May be solitary, in family groups, or in large flocks. Sometimes squats to drink. Lacking the option of flight from danger the emu's main defence at close quarters is a kick with a powerful leg. If attacked from above by other birds such as the wedge-tailed eagle, emus run in a zigzag pattern.

When sufficient food and water are present, birds will reside in one area. Otherwise, emus move as needed to find suitable conditions. They are known to move hundreds of kilometres, sometimes at rates of 15 to 25 kilometres per day. Emus are not really sociable, except for young birds, which stay with their father.

Their calls consist of booming, drumming and grunting. Booming is created in an inflatable neck sac, and can be heard up to two kilometres away.

Emus eat a wide variety of leaves, grasses, fruits, native plants, and insects. In spring and summer, their diet consists mainly of flowers and seeds. In autumn, as those foods become scarce, they graze on young grass which sprouts after summer rains. In winter, herbs form the emu's main food. They eat insects when these are available, such as during grasshopper plagues.

Emus live in most Australian environments but avoid thick forest and very dry desert. They thrive on dry inland plains, sclerophyll forest and northern tropical woodlands as well as in the cold snowfield of the Snowy Mountains high country.

Three variants are found around Australia.

- **novaehollandiae** - South Australia, southern Queensland, New South Wales and Victoria; has a white ruff when breeding.
- **rothschildi** - South Western Australia; darker with no ruff in breeding plumage.
- **woodwardi** - Northern Australia; slender and paler.

A subspecies known as the Tasmanian Emu (D. novaehollandiae diemenensis) became extinct around 1865. Two dwarf species of emu on Kangaroo Island and King Island also became extinct. Emus were introduced on Maria Island near Tasmania, and Kangaroo Island near South Australia, in the 20th century and have established breeding populations there.

Today, emus are absent from heavily populated regions, especially along the Australian east coast. Despite this loss in some areas, emu numbers may have increased since European settlement. The provision of water for domestic stock, together with the emu's ability to reproduce rapidly, has favoured its survival. Estimated emu population is 625,000-725,000, with 100,000-200,000 in Western Australia and the majority in New South Wales and Queensland.

As courtship begins, the female emu's plumage becomes slightly darker. When she finds a partner, the two of them will build a nest of trampled grass, about 10cm thick and 1-2m in diameter, in open or lightly-covered country. A clutch of dark green eggs (usually between 5 and 20) measuring 130 x 90 mm, is laid at intervals of 2-4 days in May or June. The female then leaves the nest area, after which she shows no more interest in her eggs or partner. She may simply wander off to join a group of non-breeding birds, or she may find another mate and lay again.

The male incubates the eggs for eight to ten weeks. He seldom leaves the egg to eat or drink during this period, and can lose a considerable amount of weight. He waits until they are all hatched before he and his chicks leave the nest site.

Young emus can remain with their father for up to two years. Once fully grown, they may stay in the same area or wander widely in search of food, water and a mate. They become sexually mature at about 18 months of age.

The first attempts to farm emus began in Western Australia in the early 1970s. However, it was not until 1987 that emu farming, based on captive breeding, was found to be a commercially viable industry. Licences for emu farming in NSW were first issued in 1993.