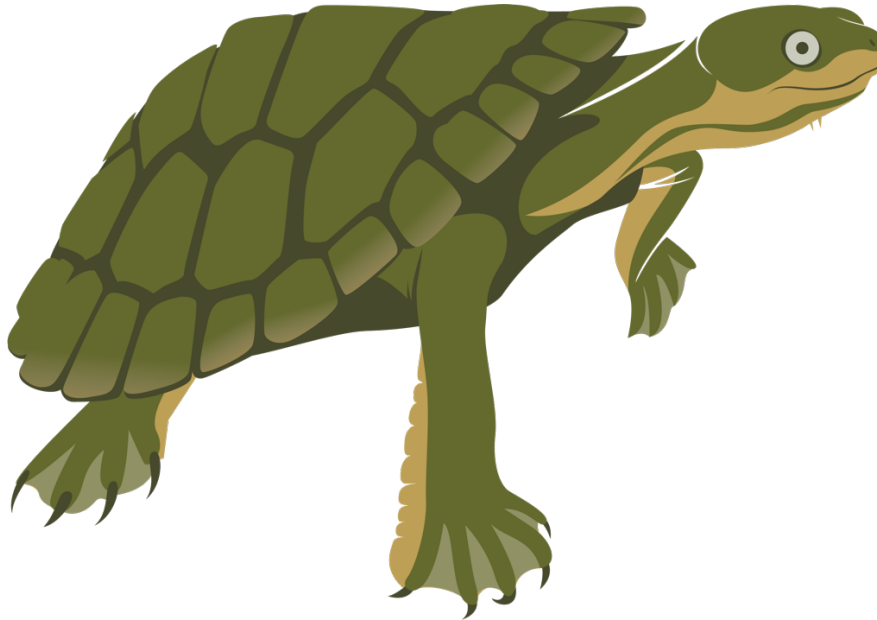


# Manning River Helmeted Turtle

(*Myuchelys purvisi*)



The genus name *Myuchelys* is formed from the Aboriginal word *myuna* meaning clear water and the Greek *chelys* meaning tortoise. The species name *purvisi* honours the Australian amateur herpetologist and teacher Malcomb Purvis, who was based in North Sydney.

The Manning River Helmeted Turtles, especially younger males, have been described as the most beautiful of Australia's freshwater turtles. Unfortunately, this makes them very attractive to turtle collectors and highly vulnerable to illegal poaching. It has been successfully bred in captive and it has been reported that the females display a high degree of fidelity to males, with courtship initiated by females.

Mature Manning River Turtles have a top shell (carapace) that is about 15 to 20cm long, broadly oval with a smooth hind edge and the below shell (plastron) is usually quite bright yellow. Males are more brightly coloured than females. There is a distinct yellow stripe from the mouth to the front leg and the underside of the tail has distinctive bright yellow stripes and patches. It has a horny plate on the top of the relatively large head and eyes are golden with brown flecks. There are two barbels under the chin.

There are four species in the *Myuchelys* genus. Bell's Turtle (*Myuchelys bellii*) is restricted to the tributaries of the Murray-Darling drainage basin that flow west from the Great Dividing Range in northern New South Wales. Bellinger River Snapping Turtle (*Myuchelys georgesi*) and Manning River Helmeted Turtle (*M. purvisi*) are restricted to the Bellinger and Manning Rivers of coastal New South Wales, respectively. The Saw-shelled Turtle (*M. latisternum*) is the most widespread, ranging from the Richmond River (NSW) in the south to the Jardine River of Cape York in the north (Qld).

The Manning River Helmeted Turtle is considered to be the oldest species in the genus, with estimates that its lineage has been in existence for up to 55 million years. It has been described a living fossil. There is ongoing conjecture about its taxonomy, with it being placed in four different genera at various times (*Elseya*, *Myuchelys*, *Flaviemys* and *Wollumbinia*).

It inhabits a relatively shallow, fast-flowing river system with a rocky and sandy bottom. It occurs mainly on boulder beds at about 2-3 metres depth and often shelters around underwater boulders and submerged logs, often in small aggregations. This is mainly a diurnal species that will bask on exposed logs and rocks or river banks near deep pools. However, it may also be observed foraging during the evening in weed beds in shallower water.

Mating usually occurs during Autumn (March-April), and up to 23 eggs are produced in a single clutch during Summer, the eggs hatching after around 8 weeks incubation. This is mainly a herbivorous species that consumes a range of aquatic plants. It is also known to feed on invertebrates, small fish and carrion.

The number of populations and population size is not known. Available records, potential habitat and topography suggest that there are populations in at least five of the seven sub-catchments of the Manning River. The Manning River Helmeted Turtle is more abundant than the Bellinger River Snapping Turtle and occurs over a larger area, however more recently the abundance of Manning River Helmeted Turtles appears to have declined dramatically.

The total population size of the Manning River Helmeted Turtle is inferred to be moderately low. Although preferred habitat is patchily distributed, Bellinger River Snapping Turtle (and by inference Manning River Helmeted Turtle) appears able to move readily between pools when conditions are suitable. Unlike some other turtles (e.g. Eastern Long-necked Turtles) both Bell's Turtle and Manning River Helmeted Turtle are largely aquatic so terrestrial movements between river systems are unlikely. Thus, the distribution of *M. purvisi* is inferred to be severely fragmented. There has been a lack of targeted surveys in the more remote and inaccessible upper catchments so the habitat value of upper catchment areas is unknown as is the presence of this species in conservation reserves.

