Endangered Manning River helmeted turtle thriving in some areas — and dingoes are helping

ABC Mid North Coast
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Photo: *Steps are being taken to ensure the survival of Manning River Turtle. (Supplied: Tim Faulkner)*

It is referred to as a 'living fossil' and the small, freshwater turtle lives only in the middle and upper reaches of the Manning River catchment area, on the mid-north coast of New South Wales.

In 2017 it was declared an endangered species, and Office of Environment and Heritage researcher Andrew Steed said it was at risk from habitat loss, predation and disease.

"The Manning River helmeted turtle is regarded as one of Australia's most beautiful freshwater turtles, having bright yellow stripes on its head, throat and tail," Mr Steed said.

"Its ancestors go back to about the age the dinosaurs disappeared, so 50 to 60 million years ago.

"The species is the ancestor of virtually all Australian turtles.
"It is one of only four species in the genus, two of those are also endangered in NSW.
"Its first sister is the Bellinger River snapping turtle, which only occurs in the Bellinger River and had a catastrophic population crash in 2016. The other is the Bell's turtle from up on the NSW Northern tablelands.
Mr Steed said the Manning River turtle never strayed far from the river.
"It only has a short neck, so it can't fully retract its neck into its shell, so it's very vulnerable to predation."

SURVEYS DISCOVER SOME THRIVING TURTLE POPULATIONS

Research is underway as part of the NSW Government's Saving our Species program, and recent surveys in the middle and upper parts of the Manning Valley, have revealed some encouraging signs.

Mr Steed said surveys in 2018 found 87 turtles, while the surveys done in March and April this year found a further 188 turtles, at 47 sites, including a new location upstream of Gloucester, in the south of the Manning Valley.

"This means turtles are living in new locations, a good sign they are defying the odds and populating different river systems, making the species less susceptible to extinction," he said

"In the west and the north of the valley we were getting good numbers of turtles, and a good range of sizes, indicating there's healthy breeding populations in that part of the catchment."

FOXES A BIG THREAT

Mr Steed said despite promising numbers in some areas, concerns remained.
"In the middle part of the catchment where all the rivers join together we were getting the turtles in very low numbers," he said.
"We were also catching a lot of the introduced Macquarie turtle and we are very concerned that turtle may compete and also interbreed with the Manning River helmeted turtle.

"Generally, the single biggest threat is fox predation.

"Foxes raid the nests that turtles make on riverbanks and can also eat nesting females.
"On the New England tablelands where they have been doing surveys on the freshwater turtles for a while, they have found around 97 per cent of turtle nests have been raided by foxes, so it's a critical threat to freshwater turtles.
"Feral pigs also will raid turtle nests and many were seen while our ecologists were doing snorkelling for the turtles this year."

Photo: *Researchers say dingoes are helping ensure the survival of the Manning River helmeted turtle, by preying on foxes. (Supplied: Keith Collyer)*

DINGOES AN UNLIKELY ALLY TO THE TURTLE

Mr Steed said dingoes were playing an important role in helping the Manning River turtle, and other freshwater turtles, survive.

He said the dingoes preyed on foxes and were helping control their numbers and reduce their attacks on the turtles.

"In the Manning, especially in the very rugged and remote headwaters, they have a very healthy dingo population and we think that keeps the fox numbers lower," he said.

"But down in the middle part of the Manning, where it's more open and there's more agriculture, that's where we think foxes are having their major impact on the Manning River helmeted turtle.
"It's another indication of how important these top order predators are in our ecosystems — without dingoes we'd start to see more foxes, and more predation on a lot more of our wildlife."

TOUGH BUSH TRAILS AND RIVER SNORKELLING

Mr Steed said being a turtle researcher could be challenging at times and Manning Valley residents were working with researchers and helping them access turtle sites.

"The Manning Valley is extremely rugged and remote and we had a lot of difficulty getting down to the river to be able to set traps or go snorkelling for the turtles," he said.

"The landowners were really supportive and gave us good information about which tracks to use to get down to the river."

Management strategies are now being developed to secure the turtle's long-term future, including a breeding program of an insurance population.

Manning Valley resident Kerry Guppy was at a recent turtle conservation workshop at Wingham, and said it was great to see action being taken.
"Most freshwater turtles in Australia are in decline, and one of Australia's leading turtle researchers, Arthur Georges, made a great comment," she said.

"He said 'we don't want to have the best documented extinctions, we need to take risks and intervene and not sit back and watch these animals disappear before our eyes'.

"He is working in genetics, and has also suggested that the Manning River turtle's ancestors actually go back even further than we thought, to 80 million years, so a long, long, history there."