



# Scientist deplores turtle's bum rap

A RESEARCHER has found that the endangered Mary River turtle can stay submerged for at least three days, possibly up to a week — by breathing through its bottom.

The turtle can extract about half its oxygen requirements from water by using special cloacal sacs.

University of Queensland scientist Natalie Mathie said yesterday that, in terms of air-breathing animals, the submersion could be one of the longest on record.

“If you compare them to animals like whales and seals, their maximum dives are measured in hours,” Ms Mathie said. “But it also appears the Fitzroy River turtle (which shares the same abilities) can stay down for weeks at a time.”

Ms Mathie believes the so-called bum-breather has perfected the process as a way of avoiding predators such as birds, fish or eels.

She has been studying how changes in water temperature, oxygen levels and the presence of predators affect the turtles' respiration and diving behaviour.

The turtle is unique to the Mary River and only a few hundred eggs are laid each breeding season.

Ms Mathie also tested the turtles' performance in cooler and hotter conditions and found they did not adapt well to temperature changes.

This meant the Traveston Dam would threaten them.

Ms Mathie said the dam should not go ahead, especially given that the river also contained the endangered Mary River cod and the lungfish. The turtle needed flowing streams and relatively warm water to survive and the dam would wipe these out.

Because the animals were long-lived and probably did not breed until they were about 25, the population could be in decline long before the situation was realised.

Turtle eggs were being eaten by cats, dogs and foxes — and their nests were being trampled by cattle.

Ms Mathie said Mary River turtles needed riffle zones — shallow rocky areas that ran into big pools, keeping water oxygen levels high.

Brian Williams



DAM serious threat . . . Natalie Mathie says the Mary River turtle can stay under water for days on end by novel rear-guard breathing.