

Danger heats up for Australia's platypus

June 24 2011, by Amy Coopes



Global warming could shrink the habitat of Australia's iconic duck-billed platypus by a third, researchers warned in Melbourne, with hotter drier temperatures threatening its survival.

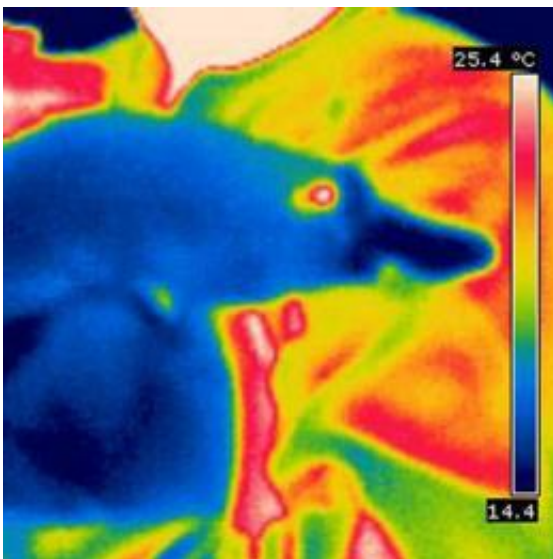
Global warming could shrink the habitat of Australia's duck-billed platypus by a third, researchers warned Friday, with hotter, drier temperatures threatening its survival.

A confusion of bird, mammal and reptile characteristics, the timid platypus is one of Australia's most cryptic creatures, feeding at night and living in deep waterside burrows to dodge predators such as foxes and eagles.

But its thick, watertight fur coat -- one of the key tools to ensuring its survival in the cool depths of rivers and waterholes -- could spell disaster in a warming climate, according to a new study from Melbourne's Monash University.

Using weather and platypus habitat data stretching back more than 100 years, researchers were able to map declines in particular populations in connection with [droughts](#) and heat events.

The team then extrapolated their findings across a range of climate change scenarios laid out by the government's science research agency, CSIRO, to model how global warming would affect the unusual [native species](#).



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"Our worst case scenario at the moment suggested a one-third reduction in their suitable habitat," researcher Jenny Davis told AFP of the work published in the journal [Global Change Biology](#).

Other human impacts, including land clearing and the damming of waterways for hydroelectric projects, had and would continue to

diminish platypus homes, she added.

"Under a drying climate we'll be taking more water away from the environment because of our human needs, and predators are going to become more of an issue for (the) platypus," she said.

The most dire predictions suggested the platypus would disappear from Australia's mainland entirely, able only to live on Tasmania and the southern King and Kangaroo islands, said Davis.

Davis said the nocturnal creature already appeared to be responding to increases in Australia's [average temperature](#), with certain populations receding from the 1960s, when a warming trend first became evident.

"Compared with 50 years ago some places have become too warm for them. Their habitat is shrinking," she said.

Classed as "common but vulnerable", the platypus is already extinct in the wild in South Australia state, and Davis said she feared it could meet a similar fate to the Tasmanian devil, whose numbers had dwindled rapidly.

"What could happen is that we could see a crash in an iconic animal and by the time that happens it's too late to do something about it," she said.

Platypus fur is finer and denser than that of a river otter or polar bear, and it has two layers: a long sleek outer and a woolly undercoat, ensuring it stays dry even when fully submerged in water.

Their average body temperature is 32 degrees Celsius (89 Fahrenheit) -- lower than most other mammals -- and they overheat rapidly when exposed to warm conditions out of the water.

Of most concern, however, is the drying up of waterways where they forage for aquatic invertebrates, with the [platypus](#) needing to eat about 30 percent of their own body weight every day to survive.

Davis said the creature's demise was "just another warning sign" of global warming's impact on Australia's unique wildlife.

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