Warming nibbles away at croc dives

CROCODILES could find it harder to locate food and take refuge from predators as global warming bites. So says Hamish Campbell of the University of Queensland in St Lucia, Australia. His team recorded the dives made by 10 juvenile freshwater crocodiles in Lakefield National Park, Queensland, over 15 days in both summer and winter.

Campbell's group tagged the crocs - which dive periodically to catch food, rest and avoid predators - with two recorders that clocked time underwater, the depth reached and the water temperature. The team found that the crocs' dives were, on average, 2 minutes shorter in summer than in winter. In hot conditions the crocs also took fewer dives lasting longer than 50 minutes, making on average just one such dive in summer compared with 12 in winter (Proceedings of the Royal Society B, DOI: 10.1098/rspb.2010.09.02).

A crocodile's metabolic rate rises with its body temperature, so in warmer water crocodiles use up oxygen more quickly and resurface more often, cutting dive times.

The team thinks the observations could offer an insight into how crocodiles might fare as the climate warms. Sustained periods of warmer water might reduce crocodiles' ability to find food and dodge predators, they say.