FAST TRACK FREEWAYS NO GOOD FOR SLOW MOVING, SLOW GROWING TURTLE

Our major roads and freeways are often the quickest way of getting from A to B, but for the slow moving common long-necked turtle (Chelodina longicollis) they can be a threat to their existence.

As part of a long term study, Royal Botanic Gardens Victoria Ecologist Dr Andrew Hamer, working in their Australian Research Centre for Urban Ecology, has been monitoring turtle populations at 20 wetlands around greater Melbourne for the past six years. He and his team have returned to the sites again this summer.

Dr Hamer wants to find out what impact roads have on the turtle population.

“Preliminary evidence shows that by fragmenting habitat, road networks can have a direct impact on the mortality of turtles.

“This is particularly evident where road networks are located close to turtle habitat.

“Given that the female common long-necked turtle takes between 11 to 12 years to reach reproductive maturity, we’re concerned about the impact that road mortality has on the viability of turtle populations.”

Dr Hamer says that road culverts may potentially mitigate the impact of road mortality by offering safe passage between waterbodies, but that this is largely untested in Australia.

Population monitoring sites include some naturally occurring remnant wetlands as well as constructed sites such as storm water retention ponds and lakes in the greater Melbourne region.

The study sites include Elsternwick Park and Blackburn Lake, as well as the outer suburban sites of Bundoora Park and Nillumbik Park in the north, and Wylies Creek Wetlands at Cranbourne Gardens in the south-east.

The monitoring program involves measuring the turtles to determine size and an approximate age, which assists researchers in determining population density and viability at each site.
Dr Hamer and his team will continue their monitoring work throughout January, February and March, and include a series of public EarthWatch expedition days, where members of the public can join the research team.

Vacancies are still available for the *Turtle on the move* EarthWatch expeditions. Further information on the public expeditions is available from the EarthWatch website at [http://au.earthwatch.org/expeditions/turtles-on-the-move-one-day](http://au.earthwatch.org/expeditions/turtles-on-the-move-one-day)

Findings from this ongoing study were recently published in *Austral Ecology: a journal of ecology of the southern hemisphere* (2016), volume 41.

**ENDS**

**BACKGROUND**

**About the common long-necked turtle:**

- *Chelodina longicollis* or the common long-necked turtle is an Australian freshwater species, indigenous to Victoria
- They are migratory, moving between suitable wetland habitat
- Females are larger than males and at maturity reach between 165–185 mm and 142–152 mm respectively
- They mature slowly, with males reaching reproductive maturity between 7–8 years and females between 11–12 years

**About Australian Research Centre for Urban Ecology (ARCUE):**

ARCUE is the Australian Research Centre for Urban Ecology, a research Division of Royal Botanic Gardens Victoria based at The University of Melbourne. ARCUE undertakes research to increase the understanding of the ecology, restoration and management of biodiversity in urban and suburban areas around the world.

**Source:**