

FAUNA

THANKS FOR YOUR HELP!

Kellie Mantle



With a pink body and purple claws, the Dunsborough burrowing crayfish is a colourful animal.

Surveys in early October 2007 confirmed the presence of the endangered Dunsborough burrowing crayfish (*Engaewa reducta*) on four Land for Wildlife properties with several other LFW properties also likely to contain them.

Conditions for looking for these small terrestrial burrowing crayfish were ideal with recent, much needed rainfall recharging the watertable in the vegetated swamps and seepage areas. This prompted the burrowing crayfish to do a bit of 'spring cleaning', building and maintaining their burrows. The characteristic surface mud chimneys of the burrowing crayfish were easily identifiable by looking for the freshly dug piles of dirt pellets. There were some pretty impressive structures observed, ranging from a few centimetres in height up to 30-40cm and seeming to defy gravity.

Attempts to look for burrowing crayfish in March of this year proved to be quite challenging. Not only are the swamp areas rather warm and a tiger snake's haven, but it appears that over the summer months the burrowing crayfish retreat down to the water table via their extensive burrow system to sit out the hot dry

periods. Burrowing activity practically ceases over this time and the existing surface chimney structures erode and collapse into an indistinguishable pile of sand.

Several burrowing crayfish specimens were collected from LFW properties by rather laborious means (digging a deep hole in the sticky mud!) and will be crucial to Quinton Burnham's PhD

study on the *Engaewa* (pronounced en-GAY-wah) genus which is currently known to contain five species, three of which are listed as threatened fauna under the *Wildlife Conservation Act 1950*. Quinton will be investigating *Engaewa* DNA to try and understand the evolutionary relationships, patterns of distribution as well as habitat requirements. This will vastly improve our knowledge of the burrowing crayfish and help in developing appropriate conservation management strategies.

Burrowing crayfish are referred to as a 'short-range endemic species'. These are usually relict species from the Gondwanan era that have become tied to habitats that still provide moist conditions (eg. wetlands, swamps, caves or constructed shelters). Other examples of short-range endemics include some arachnid, snail and

millepede species. Poor dispersal abilities, seasonal activity patterns and very restricted distributional ranges are characteristic of short-range endemic species, which makes them particularly vulnerable to human disturbance and gives rise to their poor conservation status. This is certainly the case for the Dunsborough burrowing crayfish which is ranked as endangered because of its limited geographical distribution, <200km², known from only a handful of locations, poorly represented in the conservation reserve system and threatened by stock trampling, dam construction and continuing habitat fragmentation.



A chimney composed of pellets of sticky grey mud.

Efforts by LFW property owners to protect remnant vegetation on their properties are contributing significantly to the conservation of this species. Many thanks to all those landholders for their hospitality, enthusiasm and help in our search for the beautiful and unassuming Dunsborough burrowing crayfish.

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