Project Update: March 2017

To date, fieldwork has already been conducted at Bedimet Island in Lake Ossa, with a series of monthly surveys (12 days per month) taking place from October 2016 to March 2017. We have the following progress to report.

I. Habitat preferences and feeding by Louisea edeaensis.

Louisea edeaensis was found to prefer small temporary freshwater bodies such as puddles that are near to small permanent streams. The species was also found on land adjacent to streams under fallen leaves where it benefits from the damp and humid conditions and gets protection from predators (Fig1. a-c; reports in 2015 and 2016; Mvogo Ndongo *et al.*, 2017). We also reported for the first time that *L. edeaensis* feeds on live prey, such as millipedes (Fig1. d,e), as well as on plants and detritus.

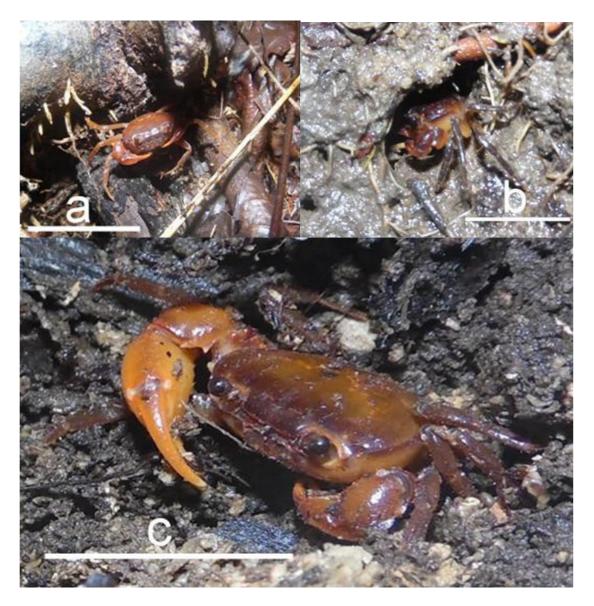




Fig 1. Louisea edeaensis in its natural habitat (a,b,c), and feeding on a millipede (d,e).

II. Investigations of population structure: juveniles, subadults, and adults

Specimens collected were retained in aquaria (Fig. 2) for 2 hours for the purposes of data collection, before they were released back to their habitat. We found six juveniles, 12 sub-adults ($5^{\circ} + 7^{\circ}$) and seven adults ($3^{\circ} + 4^{\circ}$), but we did not collect any adult females that were either ovigerous or were carrying hatchlings.



Fig 2. Specimens of *L. edeaensis* retained in aquaria during the field work.

III. Threats faced by Louisea edeaensis

Encouragingly, the water chemistry data indicated that there had been a fall in the pollution levels of the aquatic habitats on Bedimet Island from 2015 to 2017. The reduction in the overall negative impact by humans on *L. edeanesis* can be attributed in part to our attempts to educate local farmers on Bedimet island of Lake Ossa to the

importance of not destroying or polluting aquatic habitats when they are working their lands. We also discovered for the first time that ants can be added to the list of the natural predators of this endangered species (see Fig. 3).



Fig 3. Ants (shown by arrows) are predators of *Louisea edeaensis* (shown by arrow)