NUS National University of Singapore | Department of Biological Sciences, Faculty of Science

SEMINAR

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Hosted by Dr Darren Yeo

The Freshwater Crayfish of Australia – The Invasion from Within



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The Australian Continent is home to the second-most diverse freshwater crayfish fauna in the world with 141 species from 10 genera. This fauna includes many of the world's largest species of freshwater crayfish (including the largest species at ~1 m overall length), but also some of the smallest. The Australian fauna is almost entirely endemic and features some of the world's rarest, most endangered, slowest growing and longest lived species (over 35 years in some cases). Other species, notably from genus Cherax are among the world's hardiest, ecologically aggressive, highly fecund and fastest growing species. Due to traits that are desirable to aquaculture and recreational fishers, some species of Cherax have been extensively translocated over large distances within Australia, and have established large self sustaining feral populations. There is now sufficient evidence to suggest that Eastern Australia is being steadily invaded by these native, yet highly invasive species. This invasion poses a serious threat to other species of freshwater crayfish (many of which are rare and endangered), but also endangered non-crayfish species, and key freshwater habitats. In this presentation I will, 1) provide a brief introduction to the freshwater crayfish fauna of Australia, 2) provide some background on the native but highly invasive Cherax quadricarinatus and Cherax destructor, 3) outline what is known about the invasion of Eastern Australia by these species, 4) present the results of recent work on the *C. quadricarinatus* invasion, and finally, 5) discuss the implications of these findings in the context of the on-going invasion of Australia by *Cherax spp.*

Artwork by Ann Nee, DBS, NUS