Department *of* Biological Sciences
Seminar Announcement
(Biodiversity & Ecology Journal Club)

NUS National University of Singapore

Catastrophic extinctions follow deforestation in Singapore

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The looming mass extinction of biodiversity in the humid tropics is a major concern for the future, yet most reports of extinctions in these regions are anecdotal or conjectural, with a scarcity of robust, broad-based empirical data. Here we report on local extinctions among a wide range of terrestrial and freshwater taxa from Singapore (540km^2) in relation to habitat loss exceeding 95% over 183 years. Substantial rates of documented and inferred extinctions were found, especially for forest specialists, with the greatest proportion of extinct taxa (34–87%) in butterflies, fish, birds and mammals. Observed extinctions were generally fewer, but inferred losses often higher, in vascular plants, phasmids, decapods, amphibians and reptiles (5–80%). Forest reserves comprising only 0.25% of Singapore's area now harbour over 50% of the residual native biodiversity. Extrapolations of the observed and inferred local extinction data, using a calibrated species–area model, imply that the current unprecedented rate of habitat destruction in Southeast Asia will result in the loss of 13–42% of regional populations over the next century, at least half of which will represent global species extinctions.

The talk will cover the significance of the data presented in the paper, as well as the implications for conservation efforts and the future of biodiversity research.

Ref: "Catastrophic extinctions follow deforestation in Singapore" . Barry W. Brook, Navjot S. Sodhi & Peter K. L. Ng, 2003. Nature Vol 424: 420-423

Date: **27 Aug 2003, Wed**
Time: **4 - 5 pm**
Venue: **LT20**
Dept of Biological Sciences
Science Drive 4
Host: **A/P Benito Tan**

All are welcome

Visitors may park at Carpark 10
See map :http://rmbr.nus.edu.sg/RMBR.JPG

Designed by Yong Ann Nee, Dept of Biological Sciences, NUS