

ANU Seminar

EVOLUTION, ECOLOGY, & GENETICS RESEARCH SCHOOL OF BIOLOGY

Thursday 11 August 2011, 1pm



Using conditioned taste aversion to mitigate the impacts of cane toads on an endangered predator

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Even when we cannot eradicate an invasive species, we can potentially reduce its ecological impact. In tropical Australia, the critically endangered northern quoll *Dasyurus hallucatus* is threatened by the invasion of the highly toxic cane toad *Bufo marinus*. Since cane toads invaded the Northern Territory, quoll populations on the mainland have plummeted. Efforts to halt the spread of cane toads have failed, and toads will soon invade the Kimberley, one of the quoll's last strongholds. In an effort to prevent future quoll extinctions, we developed a new approach for mitigating the impact of cane toads on northern quoll populations. Rather than focusing on toads, we manipulated the feeding behavior of the predator. In the lab, we successfully induced an aversion to live cane toads in captive-reared quolls. We then reintroduced captive-reared 'toad smart' quolls to Kakadu National Park, and monitored their long-term survival. Our field results are encouraging, and suggest that conditioned taste aversion may offer a potential solution for conserving an iconic Australian predator.

For further info please contact:
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**Seminars are held in the Gould Wing Seminar Room, Building 116 Daley Rd, ANU
ALL STAFF AND STUDENTS ARE WELCOME TO ATTEND**