

Name

Russell Palmer

Phone

(089)405-5128

Email

russell.palmer@dpaw.wa.gov.au

Title

Native mosaic-tailed rats muscle-up on Iwany (Sunday Island, Kimberley) displacing invasive black rats

Abstract

Iwany (Sunday Island) is the largest (1450 Ha) of the many islands that mark the entrance to King Sound in the southwest Kimberley. This area is 'Saltwater Country' of the recently declared Bardi Jawi Indigenous Protected Area. In contrast to most other Kimberley islands, Iwany has a recent European influence, with a mission operating on the island between 1899 and 1962. It was during that time black rats (*Rattus rattus*) were introduced. They were first reported in 1909, and the last confirmed record was in 1982, when two black rats were collected during a biological survey. We surveyed Iwany and the surrounding islands in the late dry season of 2012 to determine if black rats were still present. No black rats were found during our survey or the Kimberley Islands Biodiversity Survey, which visited Iwany in 2009. We believe that the continual disturbance that humans caused through agriculture and other activities during the mission era on the island favoured the commensal black rat. Once this human-advantage diminished with the closure of the mission, the tides gradually turned back in favour of the original inhabitant, the mosaic-tailed rat (*Melomys burtoni*).

Please note your preferred format of presentation (oral or poster) or speed presentation

oral presentation

Please list all authors, their affiliations and identify the presenting author (one presenter only).

Palmer, R.1, Pyke, D.2, Meek, P.3, Bardi Jawi Rangers (presenter)2, & Morris, K.1

1 Department of Parks and Wildlife, Science Division, PO Box 51, Wanneroo, WA 6946.

2 Bardi Jawi Rangers, Kimberley Land Council, One Arm Point Community, PMB9 Broome, WA 6725.

3 NSW Vertebrate Pest Research Unit & Invasive Animal CRC, PO Box 530, Coffs Harbour, NSW 2450.