

Project Update: December 2011

Fiji has been identified as a 'hotspot' in the Pacific region because of its high biological diversity and endemism. Invasive alien species (IAS) such as cane toads have a negative ecological and economic impact, particularly on small island ecosystems such as Viwa Island. Viwa Island has potential to act as an open sanctuary for conservation education and threatened species recovery. Invasive mammals including rats, cats and dogs have been already eradicated through previous conservation projects. The current project focuses on manual removal of adult cane toads (*Rhinella marina*) and creation of exclusion fences to avoid the entry of toads into natural breeding areas of the endangered Fijian ground frog (*Platymantis vitiana*). Large fences were established measuring 50 cm high, 30 cm deep (buried into the ground), with the top 10 cm of the barrier overhanging on the outside to prevent cane toads climbing the barrier (this method is used by the Townsville Frog Society to stop toads getting into frog ponds). Natural breeding sites of the ground frog have been fenced similarly after manual removal of all adult cane toads from these sites. Eradication team workers collect adult cane toads by hand (using gloves). All live toads that were collected were killed humanely. The recommended method by most animal ethics committees is by concussion of the brain by striking the cranium, followed by pithing, decapitation or maceration. The reproductive cycle of the ground frog will be monitored annually using non-invasive field endocrinology methods to find out whether the manual removal and set-up of exclusion barriers benefit the recovery of the ground frogs. The youths on Viwa Island will provide assistance with the annual surveys and manually remove any adult toads that enter the ground frog habitats.



Left: Fijian ground frog. Right: Viwa youth helping in removal of toads from Fijian ground frog habitat.