

Progress Report

This project aims to investigate the biodiversity and ecological impact of ectoparasites across a range of threatened mammalian hosts in Western Australia. Mammals from diverse environments including islands, south-western forests and semi-arid regions were sampled in different seasons from 2006 to 2010. The ectoparasite fauna from a variety of threatened mammalian species were sampled and in most cases identified to species level using existing keys. A literature review was conducted and new host-parasite lists constructed for animals including woylies and boodies (*Bettongia* species), *Rattus fuscipes*, quenda (*Isodon obesulus*), golden bandicoot (*Isodon auratus*) and common brushtail possum (*Trichosurus vulpecula*). A putative new species of *Ixodes* tick found on the woylie was examined using light microscopy and Scanning Electron Microscopy. Ticks and fleas were examined using molecular methods for the presence of Trypanosomes (in an effort to identify the arthropod vector for Trypanosomes found in woylies and other mammals), but none were found.