

## **Progress Report STP 2013-016 (FY 2015-2016)**

# **A comparative health and disease investigation in the woylie: captive vs free-range enclosure vs wild**

**Animal Science**

### **Project Core Team**

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Update requested

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**Project Team**

required

**Program Leader**

required

**Directorate**

required

## **A comparative health and disease investigation in the woylie: captive vs free-range enclosure vs wild**

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### **Progress Report**

This project investigates if disease is a significant factor in the declines and lack of recovery of the woylie. Comparisons are made over time of the health and disease of woylies in three varying population management systems - wild, predator-free sanctuary and captive. Sampling from the Perup Sanctuary gives the opportunity to investigate and focus on the role of disease in the absence of introduced predators.

Health testing at these sites has been completed and included haematology, biochemistry, gastrointestinal parasite load, anti-oxidant and vitamin levels, and determination of stress levels using hair, faecal and serum cortisol. Screening for significant marsupial pathogens and diseases has included haemoparasites, toxoplasmosis and selected viruses (Wallal & Warrego orbiviruses and macropodid herpesviruses). Significant progress has been made in the data analysis and writing up phases. Reference ranges for haematology and serum biochemistry are being established, and a journal paper on the findings of herpesvirus screening is underway.