Progress Report STP 2019-051 (FY 2019-2020)

Modelling species interactions and other environmental factors in the Upper Warren

Ecosystem Science

Project Core Team

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Update requested

Document endorsements and approvals as of June 12, 2020, 11:13 a.m.

Project Team	required
Program Leader	required
Directorate	required

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Progress Report

This project aims to identify the major correlates of population changes in four critical weight range (CWR) mammals (woylie, chuditch, koomal, quenda) in the Upper Warren Region, including fire history, logging history, climate and weather variation and predator management. This will be done by modelling trapping data from the region from 2000-2019 across 12 transects against a range of spatially explicit variables. Some analysis will also be conducted on predator sand plot monitoring data collected between 2006 and 2012 in the Upper Warren Region, relating this to predator management intensity and other correlates.

Progress made to date includes initial exploratory modelling of correlations between predator management and CWR mammal capture rate, which suggests woylies and chuditch may have displayed initial positive responses to more intense predator management. Next steps include modelling these relationships in more detail, as well as exploring spatial and temporal variation in capture rate against other variables relating to management and disturbance histories (e.g. fire).