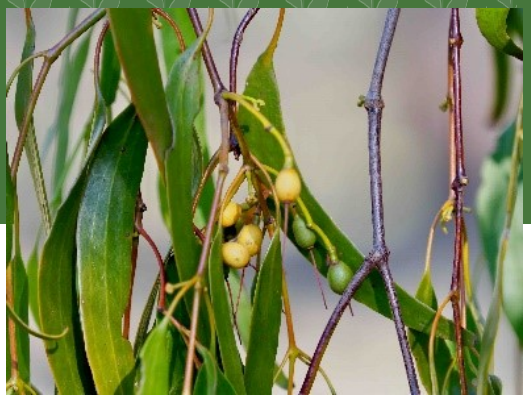
Red Hill
ENVIRONMENTAL EDUCATION CENTRE

MODULE FOUR - ECOSYSTEMS DYNAMICS

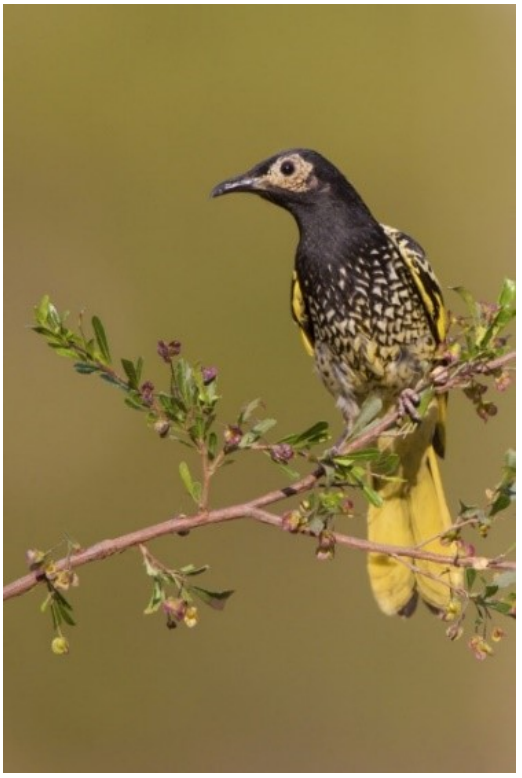
Depth Study

Regent Honeyeater



UNIT OVERVIEW

Red Hill Environmental Education Centre has partnered with the **Department of Primary Industries and Environment** (Biodiversity and Conservation), **BirdLife Australia**, **National Parks & Wildlife Services**, **Local Land Services**, **Landcare**, **Skillset** and the **local community** to deliver an **exceptional learning experience** for your **Stage 6 science students**! Students will engage in real-world, authentic science that explores the syllabus inquiry question "**What effect can one species have on the other in a community?**", focusing on the Regent Honeyeater and Box Gum Grassy Woodlands habitat.



KEY INQUIRY QUESTIONS AND CONTENT

Population Dynamics

- What effect can one species have on the other species in a community?

Students will:

- investigate and determine relationships between biotic and abiotic factors in an ecosystem, including:
  - the impact of abiotic factors
  - the impact of biotic factors, including predation, competition and symbiotic relationships
  - the ecological niches occupied by species
  - predicting consequences for populations in ecosystems due to predation, competition, symbiosis and disease
  - measuring populations of organisms using sampling techniques

Working Scientifically

- questioning and predicting
- planning investigations
- conducting investigations
- processing data and information
- analysing data and information
- problem solving
- communicating

NSW GOVERNMENT | Planning, Industry & Environment

NSW GOVERNMENT | Local Land Services

STAGE 6 – BIOLOGY

Depth Study – Regent Honeyeater

Red Hill ENVIRONMENTAL EDUCATION CENTRE

Schools will be provided with high quality teaching and learning resources to support and guide pre-fieldwork classroom study on endangered ecological communities relevant to their local environment. Students will then attend a one, two or three-day program alongside field experts that will engage students in authentic, hands-on science.

QUESTIONING AND PREDICTING

Secondary sources inspire questions and hypotheses about changes to conditions impacting populations of Regent Honeyeaters.

PLANNING INVESTIGATIONS

Planning fieldwork to Honeyeater Flat requires risk assessments, consideration of ethical issues and preparing data collection procedures.

CONDUCTING INVESTIGATIONS

Fieldwork enables collection of primary qualitative and quantitative data using methods including quadrat sampling.

PROCESSING DATA AND INFORMATION

Selecting and processing qualitative and quantitative data utilises pre-formatted sample tables and charts in Google sheets.

ANALYSING DATA AND INFORMATON

Data analysis clarifies trends, patterns and relationships determined through a valid, accurate and reliable process.

PROBLEM SOLVING

Apply and evaluate models to make predictions and solve problems. In this instance a flow chart to predict causes and effects of change and the best conservation strategies.

COMMUNICATING

Students create a scientific report for a specific purpose. For example, a video, flyer, PowerPoint or oral presentation to inform residents of the issues and environmental benefits of working to protect and/or restore remaining habitats of the Regent Honeyeater.

PROGRAM ITINERARY OPTIONS

1 Day Excursion	Munghorn Gap Nature Reserve
2 Day Excursion	Munghorn Gap Nature Reserve AND The Drip - Goulburn River NP

For bookings or further enquiries about this program, please contact Red Hill Environmental Education Centre on redhill-e.school@det.nsw.edu.au or on 02 6374 2558.