

# ECU South West Campus – Biodiversity Hotspot

- Lot 664, 684 and 560 make up the South West Campus

- These lots are Crown Reserves Under Management Order to the University, so the state owns the land and ECU Manage it as a Tertiary Education Facility

- The same approval requirements for any activity, construction or clearing apply as to any development on State Land.





## Environmental Plans for the South West Campus

- Environmental Management Plan (EMP) Implementation Schedule - August 2006
- Flora and Vegetation Survey - September 2007
- Fauna Assessment - February 2008.

### Other related Plans include:

Conservation of Carnaby's Black Cockatoo on the Swan Coastal Plain, WA - December 2006.

Fire Management Plan – 2006 - 2010

# Environmental Management Plan (EMP) Implementation Schedule

This was developed to ensure that the campus can meet future increased growth of students and development and still maintain a strong environmental conservation ethos for the long term.

- Assessment – of the existing environment (soil, hydrology, geology, vegetation etc.)
- Management Strategies – identifies future use and long-term management strategies for the natural environment.
  - Drainage and Nutrient Management Plan
  - **Vegetation and Fauna Management Plan**
  - Waste Management Plan
  - **Site Rehabilitation Plan**

# Fauna Assessment

## Key Findings

- Three species of conservation significance were identified:

Species	Habitat
<ul style="list-style-type: none"><li>• Western Ringtail Possum (Conservation Importance 1)</li></ul>	Peppermint Low Wood
<ul style="list-style-type: none"><li>• Carnaby's Black Cockatoo (Conservation Importance 1)</li></ul>	Tuart/Banksia Woodland
<ul style="list-style-type: none"><li>• Quenda (Conservation Importance 2)</li></ul>	Wetland habitats



<http://www.environment.gov.au>



<http://www.australianfauna.com>



[http://www.jarrahbark.com/env\\_s](http://www.jarrahbark.com/env_s)

2. The presence of these species will have implications for future clearing and development on the SW campus under the State and Federal Legislation.

# Flora and Vegetation Survey

(Within native remnant vegetation)

- One plant taxa of state conservation significance was recorded – *Caladenia speciosa*.
- Ten vegetation complexes identified in the survey area.



*Caladenia speciosa*

*Caladenia speciosa*  
[www.florabase.calm.wa.gov.au](http://www.florabase.calm.wa.gov.au)

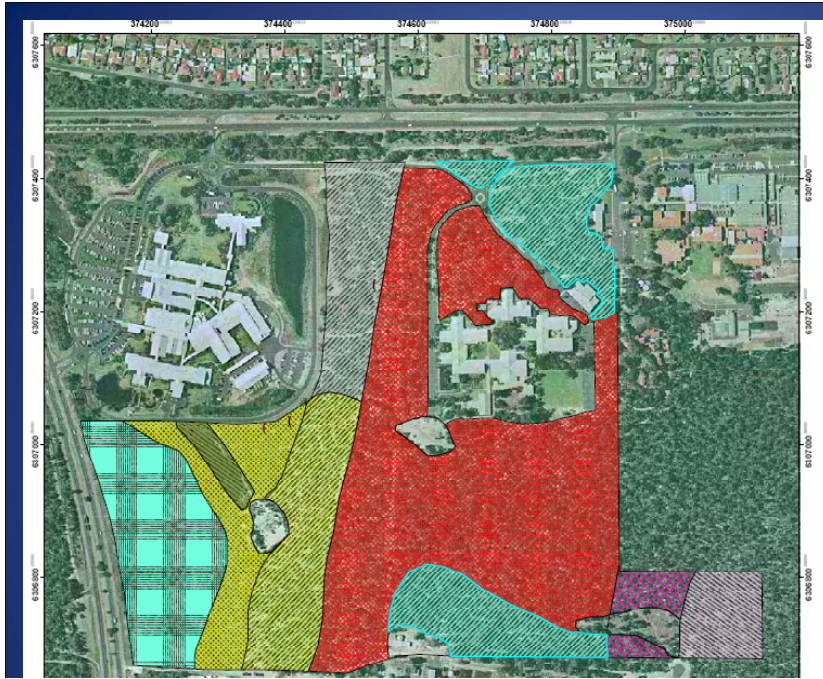
Photo: A.P.Brown



Complex 1: Tuart – Open Woodland over Jarrah – Marri –  
Banksia attenuata – Peppermint Low Woodland.

## Management consideration for future development:

- 1. Protection of rare flora and fauna
- 2. Maintaining connectivity between adjacent blocks of native veg.



# Vegetation Associations

	P4 <i>Caladenia speciosa</i>		Marri Open Woodland over <i>Banksia grandis</i> / <i>B. attenuata</i> Low Woodland
<b>Vegetation Type</b>			Cleared
<b>Type</b>			Jarrahi/ <i>Banksia attenuata</i> Low Woodland
			Marri/ <i>Mealeuca prelesiana</i> / <i>Banksia littorea</i> Low Woodland
	Jarrahi/ Marri Open Woodland over Jarrahi/ Marri/ <i>Banksia attenuata</i> Low Woodland		Mixed heath (previously disturbed from old Rifle Range)
	Jarrahi/ Marri/ <i>Banksia attenuata</i> Low Woodland		Tuart Open Woodland over Jarrahi/ Marri/ <i>Banksia attenuata</i> / Peppermint Low Woodland
			Tuart/ Marri Open Woodland over Peppermint/ Jarrahi/ Marri/ <i>Banksia attenuata</i> Low Open Forest (Peppermint dominated)

# Land for Wildlife



- Land for Wildlife is a voluntary property registration scheme for landholders who wish to manage areas of wildlife habitat on their property.
- It encourages and assists landholders to include nature conservation along with other land management objectives.
- ECU became a member in 2008
- Western Wildlife Newsletter – provides info on wildlife and habitats and experiences of other landholders.

# Biodiversity Program

Environmental improvement Program captures all aspects of the program including targets and objectives/risks/ legal requirements/management principles/resources/records/documents. This info is managed in an organised way through the **Environmental Management System**.

Objective: While Edith Cowan university occupies this tenancy Facilities and Services will **identify and manage the biodiversity values** of the South-West Campus and ensure compliance with relevant environmental legislation

# Biodiversity Program

## Targets:

- 100% legal compliance with relevant state and commonwealth legislation
  - Bush Fires Act
  - Env Prot Act
  - APA Clearing Regulations
  - Wildlife Conservation act
  - South West Regional Strategy for the Natural Resources
- No net loss of biodiversity (number of species present) on the South West Campus as a result of development.
  - Review and develop a monitoring system

# Biodiversity Program

## Risks

- Not complying to legal requirements
- Loss of the western ringtail possum, canaby's black cockatoo, phascogale & quenda.
- Loss of the orchid *Caladenia speciosa*
- Spreading weeds and subsequent loss of native veg
- Spread of dieback and subsequent decline in Tuart (*Eucalyptus gomphocephala*) condition.

# Biodiversity Program

## **Biodiversity**

- Biological diversity (biodiversity) is the variety of life, and may be measured at a genetic, species or ecosystem level.
- Vegetation survey in 2007 showed we have 250 plant taxa, 47 of those are introduced species (weeds). None were declared rare but the one orchid species is significant.
- Fauna survey in 2008 recorded mammals. Reptiles, amphibians and birds.

# Biodiversity Management Action Group

## **Action Group**

- We are opening up this program to all interested staff to be involved.
- The group will be managed by Environmental Services, we will be setting the agenda for what projects need to be done and by when
- A committed group of people interested in biodiversity.
- Willing to help organise events including administrative procedures.
- Meet on a monthly basis – propose the second Thursday of every month. This will include at least 1 hour per meeting per month plus planning and organising in between meetings.

Thank You for coming along

We hope you have the time and  
passion to be involved.