



GOLDEN VALLEY TREE PARK
BALINGUP

PO Box 191 Balingup WA 6253

GVTP (Inc) Parks and Wildlife Services (PaWS) (DBCA) and
South Regional TAFE Bunbury Partnership

Learning Precinct Case Study: Black Cockatoo Habitats and Tree Identification

Notes Prepared by Gary Hodge Chair Golden Valley Tree Park (Inc) Management Committee (May 2020)

Background

In 2019 the current Management Committee, in line with its Constitution, articulated a vision for the Park as:

- ❖ a place of beauty, tranquility and rejuvenation;
- ❖ a place of learning and transformation; and
- ❖ a community-developed and internationally recognised arboretum comprising World and Australian tree collections.

The opening up of the Park as a place of learning and transformation by the Management has enabled the Park to begin to realise its potential as a rich learning environment for current and future generations of young Australians

The disciplines and certificate areas of Conservation and Land Management, Parks and Gardens, Indigenous Heritage, Tourism, Information Technology, Hospitality and Carpentry and Joinery have been identified as suitable for supporting student learning and skills outcomes.

As of April 2020, some 70 students from Conservation and Land Management and Information Technology have come to the Park on field trips as part of their Certificate 11-IV courses. The COVID-19 epidemic has temporarily halted this flow of students.

This cohort of SR TAFE students

A cohort of seven Year 12/SR TAFE students looked in great detail at tree identification and the roosting and eating habits of Black Cockatoos using several measures.

Samples of student work follow in the photo story.

These particular students spend two full days a week at South Regional TAFE on Cert 2 Conservation and Land Management courses and three days at local high schools.

Genuine Exchanges of Learning and Knowledge

Watching Park Co-Founder and Local Park Coordinator Dr Chrissy Sharp and South Regional TAFE lecturer Zoe Kissane in deep and extended exchanges with students was probably the most satisfying two hours that I, as Chair, have ever spent in the Park.

Dr Sharp captured the students' sense of wonder and awe (a proven way of engaging students in learning) through having a very large and heavy Bunya nut (*Araucaria bidwillii*) ready at the Australian Collection information entrance for them to explore, feel and taste.



Tree Identification

Students were then questioned on their prior knowledge of four genus and species of trees in the entrance to the Australian Collection that were common to the South West and to record their observations

No.	Family name	Genus	Species	Distribution	Brief description
1	Eucalyptus	maculosa	Jarra		
2	Quercus	lucida	Marr		
3	Acacia	pyramis	Black Hill		
4	Araucaria	bidwillii	Yarra		
5	Eucalyptus	victrix			
6					
7					
8					
9					
10					

Mission: Finding Black Cockatoo Habitats

The students then moved deeper into the Australian Collection in the hope of finding and measuring the evidence of Black Cockatoo roosting and eating habits.

Dr Sharp explained how the differing beaks of the Carnaby, Baudin's and Forest Red Tailed Cockatoos determined how the nuts were eaten, and this information was used as part of the students' observation and recording.



The students recorded the tree species, the GPS location of each tree, the Diameter Breast Height (DBH), whether there was fruit on the trees and counted the feed residues using a square ground area measuring tool.

Bush Survey Flora: data sheet (habitat trees for Black cockatoos)

Location: KALGOORNE

Transect #	Quadrat # & GPS	Tree (Genus species)	GPS of tree (Lat, Long)	DBH (cm)	Size class (S,M,L)	Fruit on tree (Y/N)	Feed residues #1	Feed residues #2	Feed residues #3	Feed residues (Average)	Comment
NA		CORYMBIA LACINOPHYLLA	33.80108 115.83125	120		Y	15	5	10		one dead
		ACACIA IMPLEXA	33.80143 115.83143	19		Y	0	5	1		
		E. MARGINATA	33.80143 115.83125	72		Y	0	0	0		
		CORYMBIA CALOMYLA	33.80154 115.83143	240		Y	3	8	5		
		ACACIA IMPLEXA	33.80154 115.83125	15		Y	6	43	32		

Appearance of Black Cockatoos and Professor Lyn Beazley AO FAA FTSE

As if on cue, a flock of Black Cockatoos suddenly appeared overhead and roosted in the very tree (*Rates Tingle*) that former WA Chief Scientist and Fellow of the Australian Academy of Science Professor Lyn Beazley (AO FAA FTSE) chose as the Management Committee's acknowledgement of her contribution to community education in the Park October 2019!

Students were able to see and hear how the Black Cockatoos after a raucous landing, gradually became quieter and quieter as they roosted.

The students counted around 20 cockatoos in the flock. If you look closely you will see the Black Cockatoos who remained in place for the entire time we were there.



Possibly my favourite photo of the site visit and to me captures the value of the GVTP-PaWS (DBCA)-SR TAFE partnership and its longer-term potential is this photo of a student and Dr Sharp in deep discussion and learning from each other on the procedures associated with measurement of the Black Cockatoo activity on this spot.



The students worked hard, were on task throughout the just over two hour exercise and left on the bus back to Bunbury very happy with the applied learning achieved.

My thanks to Management Committee members Dr Chrissy Sharp, then Secretary Wendy Kurz, Jan Helsham and Ania Boltic committee representative in their support to get the South Regional TAFE first term activity up and running.

My thanks to Andrew Sandri, PaWS GVTP committee representative and District Operations Officer Parks and Visitor Services Blackwood District Department of Biodiversity, Conservation and Attractions for his support and advocacy.

Gilbert Stockman Senior National Park Ranger (Busselton) from Parks and Visitor Services Blackwood District also provided induction support and ensured protocols around student learning activities were observed.