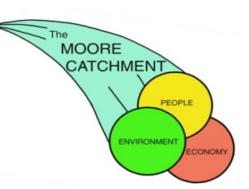
Moore Catchment Council





Annual Report 2015/2016

"To maintain and improve the health of the Moore River environment by communicating natural resource management and encouraging maximum sustainable use of resources."



natural resource management program







ROYALTIES

Front Cover Photo:

Melaleuca sclerophylla (Priority 3) and yellow Verticordia habitat north of Moora

TABLE OF CONTENTS

1	For	ward	4
2	Sta	ff & Committee	5
3	Ch	airpersons report	7
4	Exe	cutive Officer report	8
5	Fin	ance Report	9
6	Aud	dit Report	.15
7	Pro	jects Review	.17
	7.1	25th ALG – "Conservation of Carnaby's Black Cockatoos in the Moora Important Bird Area"	.17
	7.2	20 Million Trees - "Increasing forage habitat for Carnaby's Black Cockatoo in Swan Coastal Plain IBA."	.18
	7.3	20 Million Trees - "Increasing breeding habitat for Carnaby's Black Cockatoo in the Moore Catchment"	.19
	7.4	NLP - "Moore Knowledge and Opportunities: Review and Share Learnings from Ten Years of Sustainable	
		Agriculture Projects"	.20
	7.5	NACC - "Demonstration of NyPa Forage to stabilise saline land"	.21
	7.6	NACC –"Identifying cost effective ways to incorporate lime in the Moora-Miling farming district"	.22
	7.7	NACC - "Protecting Habitat of Threatened Flora and Fauna in Moore Catchment"	.23
	7.8	NACC - "Rehabilitation of the North Guilderton dunes"	.24
	7.9	NACC - "Guilderton Pyp Grass Management Plan"	.25
	7.10	State NRM - "Rehabilitation of the North Guilderton Dunes - stage 2"	.26
	7.11	State NRM - "Protecting and enhancing the Moore River biodiversity assets"	.27
	7.12	State NRM - "Planting food for endangered Carnaby's Black-Cockatoo in the Calingiri IBA "	.28
	7.13	State NRM - "Enhancing Mogumber Town Reserve as a local natural asset "	.29
	7.14	State NRM - "Planting food for endangered Carnaby's Black-Cockatoo in the Gillingarra IBA "	.30
	7.15	State NRM - "Conservation of Candy's Bush Reserve through Traditional & ecological knowledge sharing".	.31
	7.16	State NRM - "Reconnecting fragmented Malleefowl (Leipoa ocellata) habitat near Maya, WA"	.32
	7.17	State NRM - "Conserving and enhancing the Moore's natural biodiversity assets"	.33
	7.18	Wheatbelt Development Commission - "Moore Eco Trails Booklet – Moora Shire"	.34
	7.19	Lotterywest - "Jingemia Cave signage	.35
	7.20	Gunduwa Regional Conservation Association - "Reconnecting landscapes in the wheatbelt through	
		revegetation corridors"	.36
	7.21	Meat & Livestock Australia - "Moora Miling – Whole farm profit of grazing crops"	.37
8	Pub	olic events and accolades	.39
9	Мо	ore Catchment Environmental Fund	.41
1() Dej	partment of Social Service Funding	.41
1	l Mo	ore Catchment Support	.42

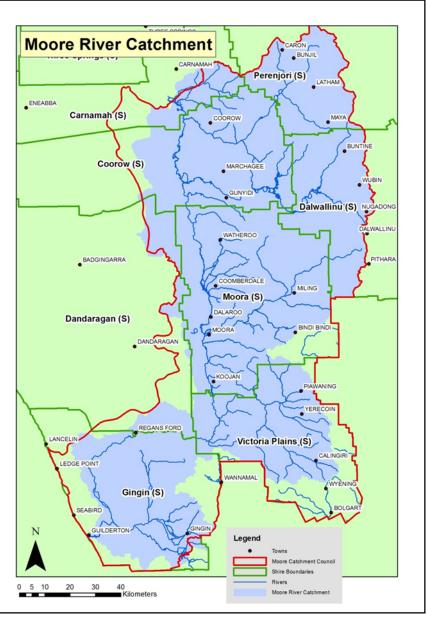
1. Forward

The Moore Catchment Council (MCC) is a not-for-profit organisation focussing on the protection and enhancement of the Moore River and its catchment.

MCC has a 15 year track record of attracting natural resource management grants and successfully completing projects that improve the Moore River catchment.

The immerse diversity of the catchment is reflected in Moore River's Industries.

The Moore River rises in the old geological zone of the Yilgarn Craton, crossing the Swan Coastal plain and discharges to the ocean at Guilderton



Industries of the Moore River Catchment include:

Broad acre agriculture Horticulture and viticulture Fishing Eco and Heritage Tourism Mining Holiday destination Sea & Tree change lifestyles

Our Natural Resource Management officers can:

Source technical information by liaising between experts in fields such as hydrology and heritage

Facilitate local and regional linkages with Federal, State and Regional natural resource management programs.

Assisting in the development and co-ordination of projects and sourcing of funding.

Facilitate workshops and identify NRM training needs.

2. Staff and Committee

Moora Office:

1 Padbury Street P.O Box 337 Moora WA 6507 Phone 08 9653 1355 NACC Office 08 9653 1366 Website: moorecatchment.org.au Facebook: www.facebook.com/moore.catchmentcouncil

Staff Summary

Natural Resource Management Officer (NRMO):



Rachel Walmsley has been a NRMO for MCC since early 2008. Rachel emigrated to Western Australia in 2007 with her partner Andrew and has qualifications in Earth Science (UK) and Sustainability (WA), and six years in waste management. During her time with MCC she has worked on approximately 50 projects including salt land reclamation using saltbush, remnant bushland conservation on private and public land, Carnaby's Black Cockatoo conservation, sustainable agriculture practices, Aboriginal engagement activities, Eco-tourism resources and coastal rehabilitation programs. Highlights include MCC's Carnaby cockatoo conservation campaign with over 100,000 native plants established so far, and widespread publicity and community awareness of this endangered species. Rachel also enjoys wildflower photography and uses those images to promote the Moore's vast array of natural assets for conservation and eco-tourism.

Executive Officer (EO):



Helen Watkins joined the team in September 2008; Helen lives in Dandaragan with husband Paul where they run an Agricultural Contracting Business.

Helen has the role of Executive Officer of the Moore Catchment Council and works 12 hours per week. Her key responsibilities are administering the Finances, doing the day to day administration of the group, Project Management of the many projects undertaken by MCC and keeping those projects on track, updating the website, keeping data bases up to date and informing members what is happening with the MCC. Helen is also involved with the both the WA Landcare Network as Secretary/Treasurer and the National Landcare Network as a member of the Members Council.

MCC Committee:

Chairperson:	Reg Beale
Vice Chairperson:	Tony White
Secretary:	Jennifer Bairstow/ Sarah Mason
Treasurer:	Lawrie Short
Committee:	Peter Waterhouse Duncan Peter Sarah Mason
	Kaye McGlew

Executive Committee

Chairperson:
Vice-Chairperson:
Secretary:
Treasurer:

Reg Beale Tony White Jennifer Bairstow/Sarah Mason Lawrie Short



Lawrie Short (Treasurer), Reg Beale (Chairperson) Helen Watkins (Executive Officer), Rachel Walmsley (NRMO), Jennifer Bairstow (Secretary) Peter Waterhouse (Committee) and Tony White (Vice Chair)

3. Chairperson's Report



With another year completed the funding challenges facing Moore Catchment Council did not lessen and staff and committee sourced all possible available funding.

Your Committee have addressed various ways of funding Moore Catchment Council in our endeavours to better service community and business environmental issues. As one would appreciate these funding issues challenge us each day as we approach the future of climate change and the delicate government agendas, state and federal.

As indicated previously there have been a number of new forums aimed at assisting co-ordinated interaction between the various environmental groups to endeavour to get better mileage out of the limited grants available and once again although the political arena appears to acknowledge various environmental issues there never seems to be enough funds when it comes to funding and grants.

Thanks to our competent staff we have attained our milestones for 2015/16 and look forward to the new milestones of 2016/2017 as we are now in receipt of grant funding which will enable us to further pursue a number of important environmental issues.

Our sole NRMO Rachel has been getting on with the tasks at hand so that MCC meets its contract project deadlines and at the same time conducting community information and site visit sessions and the many day to day challenges and projects have kept Rachel well occupied.

In closing, I record my and the committee's appreciation to our EO Helen Watkins for a job well done in her application for grant funding and equity of all grants received and attending to day to day tasks liaising between our many counterparts in the environmental area including NACC. Helen is also to be commended on her attendance at a number of Landcare events and her recognition by appointment to the Members Council for the National Landcare network.

My appreciation is once again recorded to Helen, our NRMO Rachel and members of the Committee for their support and input during the past 12 months.

Regards

Reg Beale



4. Executive Officer Report

2015-2016 Financial year saw the completion of

- State NRM Project 13004 "Reconnecting fragmented Malleefowl (Leipoa ocellata) habitat near Maya, Western Australia" \$36,325
- State NRM Project "Planting feed species for the endangered Carnaby's Black-Cockatoo (Calyptorhynchus latirostris) in the Northern Swan Coastal Plain Important Bird Area" \$45,000
- State NRM Project 13002 "Conservation of Candy's Bush Reserve through Traditional and ecological knowledge sharing" \$32,450
- Wheatbelt Development Commission Project 14C026 – Moore Eco Trails Booklet – Moora Shire \$20,000
- Lotterywest Signage at Jingemia Cave in the Watheroo National Park **\$3,000**
- State NRM Program 14163 Planting food for endangered Carnaby's Black-Cockatoo in the Calingiri IBA \$40,000
- State NRM Project 14161 "Rehabilitation of the North Guilderton Dunes stage 2" \$15,000
- NACC 1512-05-11"Identifying cost effective ways to incorporate lime in the Moora-Miling farming district" \$23,540
- NACC 1512-05-05 "Demonstration of NyPa Forage to stabilise saline land" **\$20,460**
- **25th Anniversary Landcare Grants** 25ALG-010: "Conservation of Carnaby's Black Cockatoos in the Moora Important Bird Area" **\$19,470**
- NACC Project 1615-06C-DG01– 'Rehabilitation of the North Guilderton dunes' \$10,000

New & Current Grants

- Meat & Livestock Australia Moora Miling Whole farm profit of grazing crops \$69,500 (MCC is only the sponsor of this project)
- NACC Project 1516-04-01 Protecting Habitat of Threatened Flora and Fauna in Moore Catchment \$29,009.37
- NACC Project 1615-06C-01– 'Guilderton Pyp Grass Management Plan **\$22,600**
- State NRM Project 14162 Protecting and enhancing the Moore River biodiversity assets \$35,000
- State NRM Project A15006 Enhancing Mogumber Town Reserve as a local natural asset \$34,815
- State NRM Project A15053 Planting food for endangered Carnaby's Black-Cockatoo in the Gillingarra IBA **\$52,000**
- State NRM Program A15066 "Conserving and enhancing the Moore's natural biodiversity assets" \$34,500
- 20 Million Trees program Round 1 20MT-33: "Increasing forage habitat for Carnaby's Black Cockatoo in Swan Coastal Plain IBA." **\$59,530**

• **20 Million Trees** Program Round 2 - 176: "Increasing breeding habitat for Carnaby's Black Cockatoo in the Moore Catchment" **69,575**.

• NLP Small Grants Round 1 – 0647: "Moore Knowledge and Opportunities: Review and Share Learnings from Ten Years of Sustainable Agriculture Projects" \$49,695.45

Department of Social Services
 Volunteer grants to Strengthening

Communities **\$5,000** This year the administration, running and staffing of Moore Catchment

Council (MCC) was undertaken using MCC funds that have been accumulated over the past 25 years in addition to administration and Project management funds coming out of each project, Shires in the Moore Catchment (MC) Annual contributions, equipment hire, a new fee for service contract work and Moora Miling Pasture Improvement Group (MMPIG) for the vehicle expenses. Thanks to all.

In March MCC undertook to supply an office and equipment to NACC for a NRMO.

MCC continues to look for sponsorship and grants wherever possible. Donations made to Moore Catchment Council Inc. are tax deductable

- DRG - "We are the Service Provider"

Thank you to Rachel for all your exceptional hard work throughout the year, all that grant writing, the marathon effort in seedling deliveries and your ingenious adapting of the work ute to a seedling carrier also for juggling of the numerous different small/medium projects that MCC has undertaken this year, and the pulling out of your hair working out how to do all the projects with such small project management money. As funds became tighter the Committee was called on to do various jobs and Rachel kindly took 4 weeks of her Long Service Leave to help stretch the funding and a much needed break.

I am very proud of the incredible work that Moore Catchment Council has undertaken over the last couple of years on a shoe string budget, and to be:-

- Finalist in the 2014 CSBP Environmental, Awards – Western Australian Regional Achievement and Community Awards,
- Finalist in the 2015 Fairfax Media Community Group Award – Western Australian Landcare Awards
- Finalist in the 2015 LandCorp Sustainability Award - Western Australian Regional Achievement and Community Awards
- Semi Finalist in the 2016 Landcorp Sustainability Awards - Western Australian Regional Achievement and Community Awards

Thanking all the Committee and staff for all their efforts and support during the past year.

Helen Watkins – Executive Officer



5. Financial Report

MOORE CATCHMENT COUNCIL INC

FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2016

NORTH MIDLANDS ACCOUNTING SERVICE

PO Box 110 21 Macpherson Street CARNAMAH WA 6517 PH: 08 99511044 FAX: 0899511227 Email: nmas@westnet.com.au

MOORE CATCHMENT COUNCIL INC

FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2016

INDEX

Accountants Compilation Report

Detailed Balance Sheet

Detailed Profit and Loss Statement

We have compiled the accompanying special purpose financial statements of MOORE CATCHMENT COUNCIL INC., which comprise the Statement of Profit or Loss and Other Comprehensive Income, Statement of Changes in Equity, Statement of Cash Flows and Statement of Financial Position as at 30 June 2016, a summary of significant accounting policies and other explanatory notes. The specific purpose for which the special purpose financial statements have been prepared is set out in Note 1 to the financial statements.

The Responsibility of the Director of MOORE CATCHMENT COUNCIL INC.

The director of MOORE CATCHMENT COUNCIL INC. is solely responsible for the information contained in the special purpose financial statements, the reliability, accuracy and completeness of the information and for the determination that the significant accounting policies adopted as set out in Note 1 to the financial statements are appropriate to meet the director's needs and for the purpose that the financial statements were prepared.

Our Responsibility

On the basis of information provided by the director of MOORE CATCHMENT COUNCIL INC., we have compiled the accompanying special purpose financial statements in accordance with the financial reporting framework described in Note 1 to the financial statements and APES 315 Compilation of Financial Information.

We have applied our expertise in accounting and financial reporting to compile these financial statements in accordance with the financial reporting framework described in Note 1 to the financial statements. We have complied with the relevant ethical requirements of APES 110 Code of Ethics for Professional Accountants.

Assurance Disclaimer

Since a compilation engagement is not an assurance engagement, we are not required to verify the reliability, accuracy or completeness of the information provided to us by management to compile these financial statements. Accordingly, we do not express an audit opinion or a review conclusion on these financial statements.

The special purpose financial statements were compiled exclusively for the benefit of the director of MOORE CATCHMENT COUNCIL INC. who is responsible for the reliability, accuracy and completeness of the information used to compile them. We do not accept responsibility for the contents of the special purpose financial statements.

NORTH MIDLANDS ACCOUNTING SERVICE PRACTISING ACCOUNTANTS CARNAMAH WA

10 October, 2016

MOORE CATCHMENT COUNCIL INC. Detailed Balance Sheet as at 30 June 2016

κ	Note	2016 S	2015 \$
Current Assets			
Cash Assets			
Cash at bank - Westpac A/C 145544		60,867	16,542
Cash at bank - Westpac A/C 145579		15	15
Westpac Business Reserve A/C 149203		250,183	262,896
Westpac Enfirofund Reserve A/C 158011		4,861	4,811
Cash on hand	-	89	109
	-	316,016	284,374
Receivables			
Trade debtors		58,201	76,910
		58,201	76,910
Fotal Current Assets	-	374,217	361,284
Fotal Assets	-	374,217	361,284
Current Liabilities			
Payables			
Unsecured:			
Trade creditors		20,184	44,680
	100	20,184	44,680
Current Tax Liabilities			
3ST clearing		13,295	8,050
Amounts withheld from salary and wages		1,566	1,044
1		14,861	9,094

These financial statements are unaudited. They must be read in conjunction with the attached Accountant's Compilation Report and Notes which form part of these financial statements.

MOORE CATCHMENT COUNCIL INC. Detailed Balance Sheet as at 30 June 2016

1. ³	Note 2016 \$		2015 \$
Non-Current Liabilities			
Provisions			
Employees Long Service Provision		21,780	21,780
	-	21,780	21,780
Total Non-Current Liabilities	-	21,780	21,780
Total Liabilities	-	56,825	75,554
Net Assets		317,392	285,730
, ÷			
Equity			
Retained profits / (accumulated losses)	-	317,392	285,730
Total Equity		317,392	285,730

These financial statements are unaudited. They must be read in conjunction with the attached Accountant's Compilation Report and Notes which form part of these financial statements.

à

MOORE CATCHMENT COUNCIL INC.

Detailed Profit and Loss Statement

For the year ended 30 June 2016

	2016 S	2015 S	
and a state of the			
Income			
Grants Received	271,886	254,091	
Volunteer Grants 2015	5,000		
Interest received	2,548	3,975	
Membership Fees	5,000	5,500	
Equipment Hire		91	
Donations	8,054	140	
Project Income	3,860	37,418	
Project Management Income	90,746	11,920	
Sponsorship	4,750		
Office Lease	6,205		
Refunds	833	941	
Total income	398,882	314,077	
Expenses			
Advertising and promotion	160	406	
Audit fees	2,810		
Bank Fees And Charges	170	195	
Catering - Meetings	2,711	2,658	
Inviro Small Grants		1,000	
reight		187	
ncidentals	854	262	
nsurance	3,830	3,119	
nternet Fees	854	685	
license Fees	(62)	8,085	
Miscellaneous Expenses		287	
M/V commercial - Lease	6,274	6,105	
A/V commercial - Repairs	2,322	2,452	
Office Supplies	206	764	
Office Rental	6,854	6,204	
Postage	293	722	
Printing & stationery	207	468	
Project Management Expenses	30,247	13,220	
Consultants	25,575	15,500	

These financial statements are unaudited. They must be read in conjunction with the attached Accountant's Compilation Report and Notes which form part of these financial statements.

MOORE CATCHMENT COUNCIL INC.

Detailed Profit and Loss Statement

For the year ended 30 June 2016

	2016 S	2015 \$
Fencing Materials	10,400	28,420
Field Days	16,994	5,517
Printing	644	2,507
Machinery Hire	844	-19 8 - 1 - 2 - 3
Seeds & Seedlings	81,827	40,244
Travel Expenses	6,990	2,247
Weeds and Pest Control	5,060	160
Planting Costs	6,700	47
Signage	17,970	17,931
Trial Expenses		6,700
Tree Guards	1,701	4,945
Booklet production	23,717	
Monitoring expenses	3,976	
Nesting Boxes	2,250	
Publications	35	35
Reimbursements - Fees	7,500	
Staff training	243	1,104
Staff Uniforms	60	160
Superannuation	6,284	6,051
Telephone	2,633	2,257
Venue Hire	248	125
Wages	66,150	63,700
Wages - Finance Contract	23,263	23,400
Total expenses	368,795	267,866
Profit from Ordinary Activities before income tax	30,087	46,211

These financial statements are unaudited. They must be read in conjunction with the attached Accountant's Compilation Report and Notes which form part of these financial statements.

200

6. Auditors Report

N

M

A

S

NORTH MIDLANDS ACCOUNTING SERVICE

MOORE CATCHMENT COUNCIL (INC)

Practising Accountants & Tax Agents

INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF THE MOORE CATCHMENT COUNCIL (INC)

We have audited the Income and Expenditure Books of Account of the <u>MOORE</u> <u>CATCHMENT COUNCIL (Inc.)</u> for the period ended 30th June 2016. The Executives are responsible for the preparation and presentation of the financial report and the information contained therein. We have conducted an independent audit of the financial report in order to express an opinion on it to the members.

Our audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurances as to wether the accounts are free from material misstatement. Our procedures included examination on a test basis, of evidence supporting the amounts and other disclosures in the accounts, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects the accounts are presented fairly in accordance with Australian Accounting Concepts and Standards so as to present a view <u>MOORE CATCHMENT</u> <u>COUNCIL (Inc.)</u> which is consistent with our understanding of its financial position and the results of its operation.

The audit opinion expresses in this report has been formed on the above basis.

Qualification

Due to the nature of the activities of the <u>MOORE CATCHMENT COUNCIL</u> (Inc.) our testing of income has been restricted to the amounts recorded in the books of account, but reflects a true and correct record.

Audit Opinion

In our opinion subject to the above qualification the financial accounts present fairly the financial position of the <u>MOORE CATCHMENT COUNCIL</u> (Inc.) for the period ended 30th June 2016 and the results of its operations for the period then ended in accordance with applicable Statements of Accounting Concepts and applicable Accounting Standards.

NORTH MIDLANDS ACCOUNTING SERVICE

WOOLTORTON MIPA

21 MacPherson Street, Carnamah WA 6517 PO Box 110, Carnamah WA 6517 Telephone: (08) 9951 1044 Pacsimile: (08) 9951 1227
Email: dwaynew@westnet.com.au = nmas@westnet.com.au BIGCRANGE PTY LTD #ACN 104 484 040 #ABN 38 906 867 264

16

7. Projects

25th Anniversary Landcare Grants - 25ALG-010: "Conservation of Carnaby's Black Cockatoos in the Moora Important Bird Area"

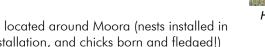
Project duration: February 2015 to 30th June 2016

Budget: \$19,470.00

Project objectives - This project will increase the numbers of Carnaby's Black Cockatoo (Calyptorhynchus latirostris) through the creation of forage/breeding habitat through revegetation using native species and placement of artificial nesting hollows around Moora.

Outcomes include :

- 1 ha remnant Salmon Gum bush block fenced off and protected for the foreseeable future;
- 6,000 native forage and nesting plant species established around Moora by landholders and during a community planting day;
- Community monitoring of the Carnaby population during April's Great Cocky Count;
- Artificial nesting log masterclass day with Wally Kerkhof and creation of log construction guide booklet;
- 5 new nesting logs made by Wally and located around Moora (nests installed in 2015 were occupied in 3 days after installation, and chicks born and fledged!)





Happy planter at the community planting day

Article: Wally's masterclass shares Carnaby knowledge

Wally Kerkhof has been concerned with Carnaby's Black cockatoos for a very long time (since a wee boy!) His comprehensive observations of the bird species over the years and his desire for conserving these endangered cockies around Moora, where they come to breed, led him to design and erect artificial nesting logs to help combat the lack of natural nesting hollows due to native vegetation clearing.

Rachel Walmsley, Moore Catchment Council's NRM Officer said "Wally has been voluntarily constructing artificial nesting logs for the past 30 odd years and I talked him into hosting a masterclass workshop to pass on his vast Carnaby knowledge and skills in making the logs. On advertising the workshop, we received huge interest from all over but wanted to limit the group size so it could allow good one-to-one interactions."

The workshop was held on Friday 15th July in Moora with a group of twenty people from different industries (landholders, bird groups, rescue centres, & students), all with a keen sense to listen to Wally's stories and takeaway practical skills to construct logs and pass the information on to others. Rachel said "Volunteer members from the Kerkhof Carnaby Group assisted in the running of the day which started with Wally talking about his background with the birds and why he does what he does. We then looked at different log designs including a number around Moora and discussed the pros and cons of each." After lunch Wally demonstrated how to burn a log to reach the desired size for the birds to nest in and explained that it can take up to 8hrs to burn out showing that making logs is a dedicated and time consuming process. Then people got stuck in and had a go at screwing on lids, cleaning out a log and preparing a log for a burn. Rachel said "Everyone went away with huge respect for Wally, new Carnaby knowledge and a jar of honey (Wally is a apiarist also). A helpful nesting log construction guide by Wally Kerkhof can be found here: <u>http://www.moorecatchment.org.au/</u> pubs/20160720 - Artificial Nest guide.pdf Huge thanks to Wally Kerkhof for letting us invade his yard, the Kerkhof Carnaby group for their help behind the scenes and on the day, and the National Landcare Program for the funding to run the day."



Wally shows how to burn out a nesting log

New nesting logs for Carnaby's in the newly fenced off bush



20 Million Trees program Round 1 – 20MT-33: "Increasing forage habitat for Carnaby's Black Cockatoo in Swan Coastal Plain IBA."

Project duration: March 2015 to September 2016

Budget: \$59,530.00

Project objectives – Carnaby's Black Cockatoo (Calyptorhynchus latirostris) are endemic to WA but are rapidly in decline with total population estimates to be less than 60,000. The Northern Swan Coastal Plain Important Bird Area (IBA) supports up to 15,000 Carnaby's Black-Cockatoo. Unfortunately past and continuing clearing of Carnaby's forage habitat is threatening their future survival. This project aims to increase Carnaby's Black Cockatoo numbers through the creation of priority forage habitat using mixed native trees and understory. Connectivity will be improved between the Gnangara/Yeal Reserves and existing remnant vegetation pockets on private land.

Outcomes include :

- 22,500 priority species for Carnaby's Black planted on 80 properties between Gingin and Guilderton on the Swan Coastal Plain. 17,200 were species which when mature will exceed 2m, 5,300 were species which when mature will be less than 2m. They included 2 Eucalypts, 5 Banksia and 4 Hakea species;
- Establishment help: 10,000 tree guards available and weed control subsidy;
- Purchase of photo monitoring app; media stories.



Huge 15 month old Banksia prionotes at Guilderton

20 Million Trees program Round 2 – 20MTR2-176: "Increasing breeding habitat for Carnaby's Black Cockatoo in the Moore Catchment"

Project duration: April 2016 to 30th June 2018

Budget: \$69,575

Project objectives – Carnaby's Black Cockatoo (Calyptorhynchus latirostris) are endemic to WA but are rapidly in decline with total population estimates to be less than 60,000. The Moore River Catchment has 7 of the 23 designated Important Bird Areas (IBAs) that support Carnaby's. Unfortunately past and continuing clearing of Carnaby's breeding and forage habitat is threatening their future survival. This project aims to increase Carnaby's Black Cockatoo numbers through increasing and connecting breeding and priority forage habitat using mixed native trees and understory. Planting will take place on both private and public land, and include engaging a local Working on Country Yued planting team.

Outcomes include :

- 27,000 trees (plants above 2 metres when mature) and 9,000 understorey plants (species below 2 metres when mature) across various sites spanning 36 hectares within the Moore River Catchment to increase and connect breeding and priority forage habitat for Carnaby's Black Cockatoo;
- Engagement of Moora Yued community to provide Working on Country opportunity.





Assessment of site east of Moora

Recently planted seedlings at Roundhill



4 Month old Melaleuca Seedling

NLP Small Grants Round 1 – 0647: "Moore Knowledge and Opportunities: Review and Share Learnings from Ten Years of Sustainable Agriculture Projects"

Project duration: April 2016 to 30th June 2018

Budget: \$49,695.45

Project objectives – This project will review sustainable agriculture projects managed by Moore Catchment Council on farms over the past decade, and assess the achievements and key learning from these projects.

Outcomes include :

- Review 123 projects sites on 80 farms and survey farmers to gauge successes/learnings;
- Video interviews with 20 farmers on their experience of sustainable agricultural projects;
- Field event showcasing various projects reviewed.



What is happening with the Brushwood industry?



What happened after this 2011 project concluded?



Did these 2011 perennial pastures work?



What happened with this 2010 Oil Mallee project?

NACC – 1512-05-05 "Demonstration of NyPa Forage to stabilise saline land"

Project duration: February 2015 to May 2016

Budget: \$20,460.00

Project objectives - This project will demonstrate NyPa Forage on salt affected land on a farm west of Moora to help stabilise a degraded lake fringe. NyPa Forage (Distichlis spicata var. yensen-4a) is a perennial salt loving forage grass which has an exceptional capacity to move salt out of the water it takes up in respiration, due to its deep root structure and it's very efficient salt gland. The project will partner NyPa Australia – licensee and supplier of NyPa, and local growers group Moora-Miling Pasture Improvement Group.

Outcomes include :

- Establish 8000 stems of NyPa on 8ha of degraded lake fringe west of Moora;
- Produce a short film on NyPa establish available online;
- Community engagement: Presentation at Gillingarra on project; Design and install project site signage; Run field day to share findings

Article: NyPa grass viewed on field walk

A field day on 16th June visited the NyPa demonstration at the Hamilton's property west of Moora. Rachel Walmsley MCC's NRM Officer said "NyPa has worked wonders on stabilising bare salt affected land in Gillingarra so the Hamilton's wanted to try it on a bare wind-blown lake fringe." The walk over revealed the NyPa establishment was quite patchy but where it had established, it looked healthy and had already started spreading. Rachel said "It may have been just too dry on the lake fringe during the summer months. Going forward though, thoughts are to encourage the established NyPa to form a 'nursery' so that runners can be picked and transplanted. The NyPa is a good long term tool to stabilise bare wet and salty areas, and it will be good to revisit the site in a few years time."

A video of the planting is available at https://youtu.be/kfqmZDGrylA



Inspecting the NyPa grass



Landholder Jim Hamilton inspecting the newly planted Nypa in Sept 2015



New NyPa sign at the project site



Healthy NyPa grass now spreading

NACC – 1512-05-11 "Identifying cost effective ways to incorporate lime in the Moora-Miling farming district"

Project duration: March 2015 to 27th May 2016

Budget: \$23,540.00

Project objectives Using lime to reduce soil acidification in this region is a necessity for better food production as this issue is one of the main limiting factors for increased production in the Moora-Miling region. As the farmers in this area are very advanced in managing soil pH, the next step is for farmers to look at speeding up the movement of lime through the soil profile so they can get a faster return on money invested in lime. The project will compare lime incorporation techniques on 5 farms using different and on-hand equipment on different soil types in the Moora-Miling region and identify the most cost effective method. Project partnership with Moora-Miling Pasture Improvement Group and Precision Soil Tech.

Outcomes include :

- 5 trial sites set up on 5 farms across the Moora-Miling region;
- Precision SoilTech engaged to carry out soil testing before and after lime incorporation;
- Lime incorporation using different machinery on farm and hired in;
- Community engagement: video interview with a farmer pre-liming <u>https://youtu.be/JyVbrG7Sj_M</u> plus video with Precision SoilTech to conclude project; field day to showcase findings and demonstrate lime incorporation/no-liming in paddock.

Article: Lime incorporation viewed on field walk

A field day on 16th June visited this demonstration at the Hamilton's property west of Moora. Wes Lefroy from Precision SoilTech explained the importance of lime application plus what happened at the 5 trial sites to test different methods of incorporating lime using a range of on-farm and hired machinery. Rachel said "Wes had three soil pits excavated to show the levels of incorporation ranging from no incorporation, to deep ripping and spading. Spading showed the best overall incorporation of lime so Wes suggests spending money on good incorporation methods for a better financial return."

Wes has also coined a mantra for liming success: Identification (soil sampling), Application (applying the right amount of lime in the right location) & Incorporation (if needed and correct method for soil type).

Video interview with Wes can be viewed at: <u>https://youtu.be/ltTlpWgy_XA</u> (4 min edit) <u>https://youtu.be/m4_Ezwa2MMU</u> (full length 12 mins)



Tony White and his liming trial site



Wes explaining the effects of liming on the soil profile

Report available at http://www.moorecatchment.org.au/projects/20161115%20-%20MMPIG%20Report.pdf

NACC Project 1516-04-01 – Protecting Habitat of Threatened Flora and Fauna in Moore Catchment

Project duration: 30th June 2015 to 31st October 2016

Budget: \$33,434.87

Project objectives MCC will facilitate the construction of fencing of priority remnant vegetation* on private land within the Moore Catchment.* Priority remnant vegetation refers to native vegetation containing either of the below

EPBC (Environment Protection and Biodiversity Conservation 1999 Act) listed species

Threatened Ecological Communities (TECs)

WA State Govt. Threatened Species and Ecological Communities

Regional and Local Assets (Includes cultural and heritage assets and good quality remnant vegetation that do not meet the criteria above criteria)

Outcomes include :

- 8.7km fencing constructed on 5 farms protecting 64.7ha of remnant native habitat and newly vegetated habitat suitable for Carnaby's Black Cockatoo;
- Community engagement: media release and social media updates.



New fencing protecting a remnant containing Balga (Grass Trees) near Piawaning



Carnaby's feeding on Balga seeds at Piawaning



Flora being protected at the Piawaning site

Article: Farmers fence bush for Carnabys

Carnaby's Black Cockatoo received an extra boost to their habitat range with five farmers around the Moore region fencing off nearly 65ha of native remnant bushland as well as recently revegetated land. Rachel Walmsley, Moore Catchment Council's NRM Officer said "This was all made possible with funding received through Northern Agricultural Catchment Council's biodiversity program funded through the Australian Government's National Landcare Program. Fencing is an expensive job and so to receive a financial incentive from the Government ensures these projects are carried out."

Projects were located at Piawaning, Roundhill, Calingiri and Beermullah and featured the fencing off of breeding and forage habitat mainly aimed at endangered Carnaby's Black Cockatoo. "Carnaby's are having it rough," said Rachel, "Birdlife Australia have just released their 2017 Cocky Count report which shows yet another decline in the total population in WA. With generous estimates of around 11,000 birds left, projects like this are helping towards Carnaby conservation in the Moore region where, unfortunately, could become one of the last remaining sanctuaries for the bird species if Carnaby's habitat clearing continues in the Perth area."

Additional reasons for fencing include preserving chunks of the Moore's native remnant bush which included a near pristine Wandoo remnant near Calingiri undisturbed by farm animals. Rachel said "With only 14% of the Victoria Plains Shire remnant vegetation remaining, protecting bush from stock damage is important in retaining the Moore's biodiversity for the future. Trees are good but looking after the understory and ground dwelling plants is also very important for biodiversity." Another project allowed help with fencing a newly revegetated paddock buffer at Beermullah planted out to Carnaby's priority species of Marri, Hakeas and Banksias.

Rachel concluded "I thank all the farmers involved and NACC for providing the funds for MCC to deliver this worthy project."

NACC Project 1615-06C-DG01– 'Rehabilitation of the North Guilderton dunes'

Project duration: 1 November 2015 to 30th June 2016

Budget: \$10,000.00

Project objectives This project will continue the remediation of the north dunes at Guilderton by revegetating and weeding the degraded old vehicle tracks. The 22ha area of fragile dunes was fenced off from vehicles in 2014 and a walk trail formalised. This project will build on works done previous to achieve the goal of restoring this area to its natural state.

Outcomes include :

- 2ha of degraded tracks revegetated using 2,000 local provenance native plants suitable for the project area;
- Community engagement: Planting and weeding day June 2016 partnering the Guilderton Community Association and 4WD Club of WA;
- Weed control works carried out by Dept of Parks & Wildlife along walk trail;
- Community engagement: media release and social media updates.

Article: Community revegetate degraded tracks on Guilderton dunes

The north Guilderton dunes were a hive of activity on 12th June as nearly 50 people aged 5 to 93 gave up their Sunday morning to volunteer their time at the annual planting event. Rachel Walmsley, Moore Catchment Council's NRM Officer said "Despite the chilly start and the threat of rain, we once again had a fabulous turn out of volunteers including local and nearby residents, plus members of The 4WD Club of WA who have a keen membership wishing to take part in rehabilitation projects up and down the coast." This is the second community planting event on the north dunes since an area was fenced off from vehicular access in 2014. Natural revegetation of the degraded tracks is occurring slowly but these extra native seedlings planted will help move things along.

The day started with a quick 101 of planting as a few people hadn't planted on sand dunes before. Rachel said "The most important tip I shared was to plant each seedling as deep as possible to ensure the roots establish well. Even though the much appreciated recent rains have made the sand very wet, it will dry out quickly and the biggest threat to success is the hot dry Midwest summer." The volunteers split into teams to tackle the three different sites and everyone got stuck in planting the 2,000+ seedlings which featured a dozen species found on the dunes. All new seedlings were fitted with corflute tree guards to protect them from the elements and nibbly pests. The weary planters were rewarded with lunch and a cuppa before a few hardcore vollies headed back on to the dunes to finish planting the last few seedlings. 32mm of rain fell Sunday night to help bed in the seedlings.

Rachel said "I thank everyone who came along to this event from near and far – you have made a real difference and I look forward to checking over the seedlings in the coming months. I also want to thank people behind the scenes including Bob Johnson for lending his trailer, Jim Laffer, Dean Brady and Barry and Ann Callen for helping move seedlings and tree guards on Saturday, Hamish Longbottom for helping coordinate, and the Guilderton Community Association for their continued support in environmental projects in Guilderton."



Dune volunteer planting team

NACC Project 1615-06C-01- 'Guilderton Pyp Grass Management Plan

Project duration: 29 February 2016 to 30th December 2016

Budget: \$22,600.00

Project objectives Sections of the primary dune system located at Guilderton are currently being degraded by infestations of Pyp Grass (Ehrharta villosa) and the biodiversity of surrounding vegetation is being undermined as a result of the spread of this invasive weed. A Management Plan is required to guide control of Pyp Grass within the town site of Guilderton. Baseline assessment is required to determine location and extent of Pyp Grass to aid comprehensive mapping of the weed in Guilderton. The identification of priority areas for Pyp Grass management and an associated revegetation strategy will form part of the Guilderton Pyp Grass Management Plan. Community liaison and involvement into Pyp Grass control is essential for long term management in Guilderton

Outcomes include :

- Assessment of Pyp Grass extent in Guilderton and creation of management plan detailing control methods, cost estimates and priority area ranking;
- Community engagement: Community workshop to discuss draft management plan; Media release.

Article: Stopping the spread of invasive Pyp grass

Sections of Guilderton's primary dune system are currently being degraded by infestations of Pyp Grass (Ehrharta villosa) and the biodiversity of surrounding vegetation is being undermined as a result of the spread of this aggressive invasive weed. In response to this threat Moore Catchment Council commissioned a survey of the Pyp grass extent in Guilderton and management actions. The report was presented and discussed at a community workshop held in Guilderton on the 7th November. Rachel Walmsley MCC's NRM Officer said "Pyp Grass was introduced into Australia for use in dune stabilisation but unfortunately it is now destroying vast hectares of native vegetation by smothering and out-competing the dune plants. It appeared in Guilderton more than 30 years ago and now covers nearly 13ha between the river and the lighthouse which is extensive compared to other coastal towns in the region. It has a fast-growing rhizome system and each plant can spread up to 9 metres per year."

Western Botanical was commissioned to produce the management report, and project manager Martin took the group through the report and the areas for priority. Rachel said "Lengthy discussions with the community workshop attendees resulted in the priority areas being rejigged, which demonstrates that this consultation was an essential part of producing this report. Estimates put the future herbicide control works at around \$90,000 which shows just how extensive it is and how difficult it is to control." The next step to obtain some funds to start the Pyp grass control works which will takes at least 3 years to kill off.

The group then visited some of the priority areas to view the Pyp grass infestations. Everyone agreed that the control works need to start soon before more good quality native dune vegetation is damaged. Pyp control projects at Jurien Bay and Cervantes show that it can be overcome and dunes restored long term. Thanks to Northern Agricultural Catchments Council through funding from the Australian Government's National Landcare Program for funding this project.



Weedy Pyp Grass on the north dunes



Exposing the roots of a single Pyp grass plant



Pyp grass is very invasive and can grow 9m per year

Report available at

http://www.moorecatchment.org.au/pubs/20161117%20-%20Guilderton%20Pyp%20Grass%20Management%20Plan.pdf

State NRM Project 14161 – "Rehabilitation of the North Guilderton Dunes - stage 2"

Project duration: 1st January, 2015 to 30th June, 2016

Budget: \$15,000

Project objectives This project is Stage 2 of the North Guilderton Dune Restoration Project which will rehabilitate 3ha of degraded tracks within the protected 22ha area. Revegetation will use a combination of native nursery seedlings and seedlings grown from community native plant propagation.

Outcomes include :

- Rehabilitation of 3ha of degraded tracks on the North Guilderton dunes through weeding of invasive species and revegetation with 3,400 native plants including Acacia Cyclops Atriplex cinerea Calothamnus quadrifidus Hardenbergia comptoniana Hemiandra pungens Melaleuca huegelii Melaleuca systema Olearia axillaris Scaevola crassifolia and Spyridium globulosum;
- Native plant propagation workshop held 13.11.15 to demonstrate and equip Guilderton community to grow local provenance seedlings for this project and beyond;
- 2 x Community planting events in June 2015 and 2016 involving 95 volunteers to plant and guard seedlings, and remove rubbish and feral weeds.

Article: Guilderton grows native plants for dune restoration

Local provenance is vitally important in revegetation programs. On Friday 13th, 20 local people attended a native plant propagation workshop in Guilderton as part of the Moore Catchment Council's State Natural Resource Management Program funded project to help rehabilitate the degraded tracks on the dunes north of Guilderton. Rachel Walmsley MCC's NRM Officer said "The aim of the day was to equip the participants with the skills and knowhow to grow seedlings



Show us your plants !

from local plant cuttings and seed. In addition, we hope that the community will grow some seedlings for the planting day in June 2016, which will not only save a few \$\$\$ on seedlings but will also ensure 100% local provenance."

Dave Bright of Regen4 Environmental Services led the group through how to select and take cuttings, and grow native seeds. An excursion out on to the dunes ID'ed plants and gathered material for a practical session on planting. Each participant went away with a mini greenhouse of cuttings and pots of planted seed. Rachel said "Hopefully in 4-6 weeks they'll be lots of new plants which will be potted on and looked after until the community planting day in June 2016. Huge thanks to Dave for running a really interesting and engaging workshop, and thanks to the Guilderton Country Club for allowing us to make a mess !!"



Richard Prince and Bon Johnson planting



Planting team 2015



Revegetated track

State NRM Project 14162 – Protecting and enhancing the Moore River biodiversity assets

Project duration: 1st January, 2015 to 31st December 2016

Budget: \$35,000.00

Project objectives — This project will protect, enhance and connect up native vegetation in the upper Moore River catchment located on agricultural land. MCC will hold educational events to ensure landholders and community are better informed of the importance of native vegetation on the farm for both biodiversity and productivity.

Outcomes include :

- Revegetating 7ha cleared land with native species by two landholders;
- 4.85km of fencing to protect and connect up native remnant vegetation on two properties;
- Land clearing event organised in conjunction with MMPIG and Dept of Environmental Regulation;
- Fungi and bugs information day 30.08.16;
- Production of a short film to showcase landholders protecting and enhancing their native vegetation.

Article: A fun-gi day had by all

Ever come across witches fingers or fairy wands poking out of a woodland floor, or know what a curry punk, russler, slippery jack or dung button is? Or seen a bug that looks like a bee but isn't a bee - only mimicking a bee? Or maybe seen a strange fungus that turns from a small puffball to a strange lattice basket upon touch? All this and more was discovered at the Magic of Mushrooms and Beauty of Bugs day organised by Moore Catchment Council 30th August. Rachel Walmsley, MCC's NRM Officer said "We've wanted to do something on fungi for a long time and with the good winter rains this year producing a bumper fungi season, it made sense to do it now. I contacted fungi and bug enthusiast Fay Arcaro to come up from Perth and wow us with her knowledge and enthusiasm for WA ecology."

The day started with a slideshow of fungi of all different sizes, shapes and colours from around WA which impressed everyone in the room. Some fungi were so small or camouflaged that it is amazing to see how they can be spotted. Faye then moved on to the bugs section which covered an array of insects and critters that we can all find in the garden or bushland. The native bees are a favourite with Faye including the spectacular blue banded bee which use a 'buzz pollination' method. Rachel said "Faye also covered what types of plants beneficial bugs like to feed on in the garden and natural pest control including parasitic wasps and preying mantis that are a huge help to organic veggie gardeners. When wanting butterflies such as Monarchs and Swallowtails, you must also plant to feed their larval stage too." The session concluded with Faye showing the group how to make 'bug hotels'. These are simple constructions made of sticks, bamboo, cardboard, gum nuts etc in old plant pots which you can locate to provide bug habitat.

After lunch, the group spent an hour wandering around Candy's Bush Reserve to look for fungi and bugs and the odd orchid or two. Rachel said "Thank you to all who came along, to Faye for inspiring us to look out for those native critters and fungi, and to the State Natural Resource Management Program for funding the event."



Bug hotel



Fungi is very important for soil health



Farmer Kristin Lefroy (right) and planting contractor Ian Pulbrook winter 2015

State NRM Project 14163 – Planting food for endangered Carnaby's Black-Cockatoo in the Calingiri IBA

Project duration: 1st January, 2015 to 30th June, 2016

Budget: \$40,000.00

Project objectives This project will help conserve and enhance the endangered Carnaby's Black Cockatoo population by increasing the amount of native forage habitat in the Calingiri Important Bird Area and Piawaning townsite.

Outcomes include:

- Engaging 10 land owners to revegetate 11ha of land within the target area with 11,000 feed species plants Hakeas, Banksias, Grevilleas, Eucalypts and Acacias. Approximately 75% success rate. Photo monitoring carried out;
- One revegetated area was protected with 2km of fencing;
- A local Yued works crew was engaged to plant 3,500 seedlings to revegetate Piawaning site;
- A Carnaby's habitat information and native seedling planting guide brochure was produced providing land managers with guidance on how and where to plant them on their property. Distributed to participants, online and at the Moora Show 2016;
- Community engagement: Carnaby information event 13.05.16 at Carrah Farms Calingiri; Community participation in Great Cocky Counts; media promotion.





Piawaning revegetation site



Yued planting team



Carnaby info day at Carrah Farm Photo: B Callen

State NRM Project A15006 – "Enhancing Mogumber Town Reserve as a local natural asset "

Project duration: 30th June 2016 to 31st December 2017

Budget: \$34,815.00

Project objectives:

This project will conserve and promote the Mogumber Town Reserve as a natural asset in the Victoria Plains Shire. New walk trails will be created, and interpretative signage will inform locals and visitors of the local ecology, history and Yued heritage.

Outcomes include:

- Creating walk trails around the reserve. A 2km circular trail using existing tracks and a 600m return track to the Moore River and historic wooden bridge;
- Designing and erecting 13 interpretive signs showing walk trails and detailing the reserve's ecology, Yued heritage, history and Carnaby's Black cockatoo importance;
- Building and erecting 5 new Carnaby's nesting logs in the reserve;
- Revegetating degraded tracks with 1,000 seedlings during a community planting day
- Hosting a reserve celebration day to highlight project, reserve's natural assets and Yued heritage.





Members of the Kerkhof Carnaby Group installing a new artificial nesting log Jun 2016



Anigozanthos humilis subsp. chrysanthus Golden Catspaw. Priority 4 species

Walk trail draft map



Grevillea bipinnatifida good cocky food



Above: Caladenia flava Cowslip orchid - visiting tourist's favourite

Right: Assessing the reserve's biodiversity with Fiona Falconer (ecologist) and local Aboriginal resident Phyllis Tomms Oct 2016



Carnaby hen breeding in new nesting log Oct 2016



State NRM Project A15053 – Planting food for endangered Carnaby's Black-Cockatoo in the Gillingarra IBA

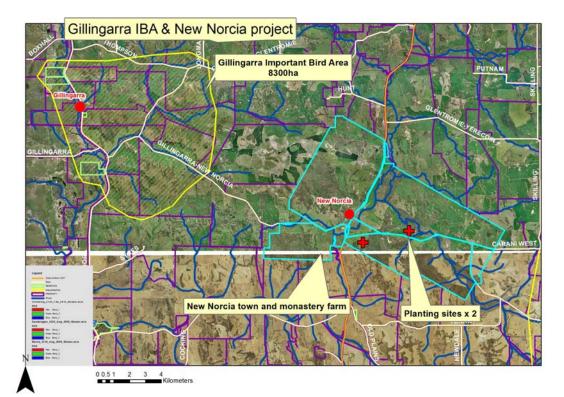
Project duration: 30th June 2016 to 31st December 2017

Budget: \$52,000.00

Project objectives: This project will help conserve and enhance the endangered Carnaby's Black Cockatoo population by increasing the amount of native forage habitat in the Gillingarra Important Bird Area and New Norcia monastery farm. Community will be engaged through an information event, planting event and interpretive signage.

Project outcomes:

- Revegetating 12ha of land within the target area with 12,000 feed species plants (Hakeas, Grevilleas, Banksias, Wandoo & Marri); Planting guide produced; Fence and protect the revegetated areas with 1km of fencing;
- Engaging local Yued group work crew to carry out 2ha revegetation at New Norcia site;
- Community engagement: Carnaby information event in Gillingarra to raise awareness of the plight of Carnaby's Black-Cockatoo and show residents how to identify feed species, unveil new Gillingarra Carnaby's signage; Community participation in the Great Cocky count; Community planting day in Gillingarra;
- Designing 4 signs raising awareness of Carnaby's and local ecology conservation (2 for Gillingarra and 2 for New Norcia).





Remnant vegetation at New Norcia

State NRM Project 13002 – "Conservation of Candy's Bush Reserve through Traditional & ecological knowledge sharing"

Project duration: 1st January, 2014 to 30th September, 2015

Budget: \$32,450.00

Project objectives - This project aims to ensure the reserve becomes an asset for Moora for both the local community and visitors, and will result in documenting and sharing traditional plus conventional ecological and heritage knowledge regarding Candy's Reserve.

Outcomes include :

- 1km walk trail created;
- Rubbish collected, weed spraying of Soursob;
- 31 signs created and erected in reserve including 3 trailhead interpretative signs detailing reserve ecology, walk trail information, and Yued Aboriginal heritage and cultural information; 8 along trail information signage; directional signage;
- Land For Wildlife accreditation;
- 2 community events: Bush medicine and food workshop 08.12.15; Reserve signage opening event 23.10.15.

Article: Candy's Bush reserve ready for exploring

A group of people from near and far gathered at Candy's Bush Reserve Moora on Friday 23rd October to witness the official opening of the new walk trail and signage project that Moore Catchment Council has been running. Candy's is an eight hectare Salmon Gum and Wandoo remnant on the edge of Moora which is important to conserve from ecological, heritage and social aspects. The overall aim of the project is to designate Candy's Bush Reserve as a natural asset to look after and for all to enjoy for years to come.

This project has been funded through the WA State Natural Resource Management program and partnered the Shire of Moora, Friends of the Moora Woodlands, Yued community, Department of Parks & Wildlife Land For Wildlife program, and Kerkhoff Carnaby's group. Rachel Walmsley, MCC's NRM Officer said "We started the event with a Welcome to Country by Colin Headland, a Moora Yued member who explained the Aboriginal relevance of the reserve, and then proceeded to unveil a memorial to Jim Pond - founding chairman of the Friends of the Moora Woodlands group and driver of the perimeter fencing project carried out in 2013."





Opening the new signage and walk trail

Proceedings moved on to the walk trail and trailhead signage which was officially opened by doing a joint cutting of the ribbon with all the stakeholders. A walk trail companion booklet was also handed out detailing the history of the reserve, Yued heritage, and what flora and bush tucker you can find (additional booklets will be available from the Moora CRC and Shire office). Rachel continued "Talks about the Carnaby's Black cockatoo artificial nests and revegetation efforts followed before Fiona Falconer, local flora guru led the group on a walk through the reserve. On return, a picnic lunch was served and then Vince Candy (who now lives in Geraldton) shared how the reserve gained its name before Father Bernard from New Norcia closed the event by making a blessing." Rachel concluded "Many thanks to everyone who helped get this project finished especially Marie Carter for gathering information, the Shire for installing all the signs and ground works, and to Joley Holliday for taking all the photos on the day."



Right: Rubbish tidy up day

State NRM 13004 - "Reconnecting fragmented Malleefowl (Leipoa ocellata) habitat near Maya, WA"

Project duration: January 2014 to June 2015

Budget: \$36,325.00

Project objectives - Moore Catchment Council, together with the North Central Malleefowl Preservation Group and a private landholder, will conduct a project to increase the number of Malleefowl around Maya through the creation of native vegetation corridors, pest control and community engagement:

Outcomes:

- 15 ha of protected native malleefowl habitat planted on a Maya property;
- 15ha baited with 1080 to decrease rabbit and fox numbers around the farm's Malleefowl habitat;
- Partnering the North Central Malleefowl Preservation Group to Increase community awareness through a Malleefowl information event;
- Creation of two malleefowl information signs for Maya and Latham;
- Register the property for Land For Wildlife status through Department of Parks and Wildlife

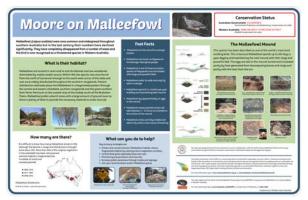
Article: Moore on Malleefowl

MCC are happy to announce the completion of the 2014/15 State Natural Resource Management Program funded Malleefowl project. Outcomes include 50,000 native seedlings planted (40ha) as a Malleefowl corridor on Maya property by a farmer. A large mix of seedlings (27 species including 6 Acacias, 4 Eucalypts, 2 Allocasuarinas, 10 Melaleucas and 2 Hakeas) were planted to ensure variety of habitat. Additional outcomes included helping to finance the North Central Mallee Fowl Preservation Group's September training event and creating interpretative signage.

MCC has received additional funds to increase the Maya Malleefowl habitat in 2016 through a joint project with Yarra Yarra Catchment Management Group funded through the Gunduwa Regional Conservation Association. Information on Malleefowl and Carnaby's Black Cockatoo was presented on a poster at the September State NRM Conference in Mandurah.



Planting in 2015



New sign - located in Latham and Maya



Poster presentation in Mandurah Sept 2015



September 2016 inspections

State NRM Project A15066 – "Conserving and enhancing the Moore's natural biodiversity assets"

Project duration: 30th June 2016 to 31st December 2017

Budget: \$34,500.00

Project objective: This project will protect, enhance and connect up native vegetation in the upper Moore River catchment located on agricultural land, and also engage the Yued community to fence and protect the Dalaroo nature reserve north of Moora. The wider community will be engaged through videos of project and interpretive signage.

Outcomes include:

Dalaroo Reserve

- Re-vegetating 8ha cleared land with native species;
- 1.55km of fencing to protect and connect up native remnant vegetation;
- Production of a short film to showcase landholders protecting and enhancing their native vegetation;
- Engagement of Yued community works crew to protect and enhance Dalaroo Reserve through fencing, rubbish collection and interpretative signage, and opening event.

Article: MCC provides opportunity to Work on Country

MCC is committed to working with the Moore's Traditional Owners - the Yued Aboriginal people. One way which we are achieving this is to include working opportunities in projects funding applications which provide paid employment to work on country. This collaboration came about from engaging members of the Yued to carry out revegetation of a degraded site at Piawaning in 2015. It worked out well and further project ideas have been planned around the Moore.

The Dalaroo reserve is a 10ha Salmon/York Gum woodland remnant

north of Moora which contains a good quality vegetation including feed

species for Carnaby's Black Cockatoo. It has pockets of pricky Melaleuca, Hakea and a saltbush wetland area. The reserve is also important historically as it was an original townsite in 1848 and housed many local Aboriginals. Today's Yued community have a close connection to the reserve through ancestors who were born and lived there. The main threat the site faced was from the illegal dumping of rubbish in the reserve and vegetation damage. MCC obtained funding through the State NRM Program Community grants 2015, made possible by the State Government's Royalties for Regions program, to combat this. Fred Mogridge led a team of Moora local Yueds in July and August to clean up the rubbish in the reserve and also to help fence the reserve from vehicles alongside I ocal fencing old timer Henry Mickan. Many thanks to the Shire of Moora for helping to clear a fence line. The reserve is now protected and available for wanders around. Formal signage will be developed next.



New fencing installed at Dalaroo with Yued Group's help





Needle Tree Hakea preissii at Dalaroo



Purple veined orchid Caladenia doutchiae at Dalaroo



Revegetation east of Moora

Wheatbelt Development Commission Project 14C026 – Moore Eco Trails Booklet – Moora Shire

Project duration: May, 2015 to June 2016

Budget: \$20,000.00

Project objectives To design and produce an eco trails booklet for the Shire of Moora for use by local community and tourists to the region.

Outcomes include:

- 10,000 of Moora Shire eco-trail booklet details walk trails, flora and fauna to be found and local Aboriginal culture;
- Apply for Lotterywest funding for new signage at Jingemia Cave in collaboration with DPAW;
- Run launch event at Jingemia Cave.

Article: Moore to explore at Jingemia Cave

After grey skies and a deluge of rain the day before, the weather couldn't have been better for the official opening of the Jingemia Cave new signage and footpath upgrade on 8th June. The cave is on the south eastern edge of Watheroo National Park and managed by Department of Parks and Wildlife (DPaW). Over 40 people, many who haven't visited the cave before, braved the slippery access road to get to the cave and were greeted by a hot cuppa and pumpkin soup.

Rachel Walmsley Moore Catchment Council's NRM Officer said "Jingemia Cave is a great place to visit to explore the local bush but many people left wanting to know more about the cave and surrounds. DPaW staff at Jurien Bay have been busy for weeks hand-building a footpath around the cave site and installing the new interpretive signage to highlight the interesting geology and guano mining history of the cave, and the ecology of the area which includes many rare plants. The signage also acknowledges the Yued Aboriginal people who are the traditional custodians of the land here." This project was a joint venture between DPaW and Moore Catchment Council and was made possible with funding through DPaW, Lotterywest, and Wheatbelt Development Commission (WDC) with Royalties for Regions funds. State Member for Moore Shane Love with representatives from DPaW, Yued, MCC and WDC officially cut the ribbon to unveil the new signs.

Rachel said "Additionally, we chose this day to launch a new eco-walk trails resource for locals and visitors to the Shire of Moora. MCC has developed a handy booklet showcasing 12 walks in the Shire, 2 wildflower drives, and guide to flora and fauna likely encountered. This was made possible by a grant received through WDC with funding from Royalties for Regions and I thank several people and groups from around Moora who helped with the content including the Shire of Moora, Yued group, Friends of the Moora Woodlands, Moora CRC and Kerkhof Carnaby Group" Copies of the eco -trails booklet are available free from the Moora Community Resource Centre. Thanks to everyone who came along to the day, Nikki Craggo for catering and to Colin Headland for driving the community bus from Moora.



Launch of Ecotrails booklet with groups' that helped put it together and Shane Love who officially launch the new resource Photo: H Legge



New Shire of Moora eco trails booklet

Lotterywest project 421007533 - "Jingemia Cave signage"

Project duration: May, 2015 to June 2016

Budget: \$3,000.00

Project objectives To create new interpretive and directional signage at Jingemia Cave for tourists to the region

Outcomes include:

- Creation of 4 new interpretative signs detailing walk trails, flora/fauna, geology, Aboriginal culture and mining history in collaboration with Department of Parks and Wildlife;
- Formalisation of walk trail around cave and placement of directional signage;
- Run signage and walk trail launch event at Jingemia Cave.



New signage at car park



New signage at Jingemia cave



Launch of new signage by Shane Love and stakeholders Photo J Holliday

Below: Interpretative walk around the walk rim with DPAW staff



Gunduwa Regional Conservation Association - Reconnecting landscapes in the wheatbelt through revegetation corridors

Project duration: May 2015 - December 2016

Partnership project between MCC and Yarra Yarra Catchment Management Group with YYCMG as proponent.

Budget: \$29,000

Project objectives Reconnect landscapes in the wheatbelt through revegetation corridors, linking existing remnants, and thereby increasing the resilience of threatened species (e.g. malleefowl, spiny tailed skink), allowing them safe access to increased areas of their native habitat; Engage the wider community in the preservation of our unique biodiversity; Raise awareness of the NCMPG and the important work they do.

Outcomes include:

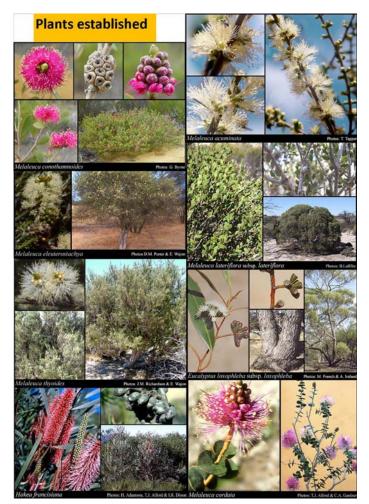
- Twenty hectares of native habitat to be created in June 2016 on three farms. Sites to be fenced from stock, feral pest baiting to occur at each site;
- Two malleefowl mounds monitored using remote infrared cameras and information gathered relayed to Malleefowl network and promoted through social media to the wider community;
- Community engagement: One interpretative sign produced for placement at Buntine to raise awareness of our unique biodiversity to locals and visitors to the area; One poster designed for promotional use at State NRM conference in Mandurah Sep 2015; Presentation at Blues for the Bush event Sep 2016; Media articles by both groups.



Left: Checking out the new remote camera equipment with landowner Peter Waterhouse Photo: L King



Presentation by Rachel and Lizzie King (YYCMG) at Blues for the Bush day 24th Sep 2016 Photo P Logue



Some of the species established to create new corridors

Meat & Livestock Australia Research – B FDP 0030: "Moora Miling – Whole farm profit of grazing crops"

Project duration: 30 May 2014 to 30 May 2017

Budget: \$69,500.00

This project is a Moora Miling Pasture Improvement Group project, Moore Catchment Council is the Sponsor organisation and is charging \$1,000.00 per annum to pay the accounts for the project. Ed Riggall has been appointed as Sub Contractor of the project and is responsible for all the reporting , Research etc.

Whole Farm Profit from Grazing Crops

As part of the MLA's national feed Investment plan, the Moora Miling Pasture Improvement Group (MMPIG) partnered with the MLA in 2014, for a three year on-farm "Producer research site" investigating the profitability of crop grazing.

Two mobs of twin lambing ewes were used, each stocked at 10 DSE. Mob 1 grazed barley before being deferred onto pasture that had been shut up for the time that they were grazing the crop and mob 2 went straight onto pasture. The FOO and feed quality were measured and ewes were condition scored in both situations in order to compare the situations and the ewe's reaction to them.

Conditions over the two years of data were very different. In 2014 we were able to graze the ewes on the crop for a month, in 2015 the false break affected the crop and pasture taking the crop grazing down to 3 weeks and enforcing supplementary feeding (750g barley/head/day) for the mob on pasture. Results over both seasons showed that the ewes that were allowed to graze the crop made large weight gains in comparison to those solely on pasture and, as expected, the pasture that was shut up while the ewes were on the crop grew significantly more feed for the lambing ewes to be deferred onto.

Year	Mob – Twins	Date of Initial CS	Date of Follow-up CS	Initial CS (mob avg.)	Follow-up CS (mob avg.)	Condition Score Increase	% Increase	Condition Score Variation	% Variation
2014	Pasture Ewes Condition Score (Mob1) 181	30-05-14	01-07-14	2.41	2.78	0.37	15.4%	-0.26	-10.8%
2014	Gazing Crop Ewes Condition Score (Mob 2) 221	30-05-14	01-07-14	2.41	3.04	0.63	26.1%	0.63	10.8%
2015	Pasture Ewes Condition Score (Mob1) 182	09-06-15	30-06-15	3.2	3.03	-0.17	-5.3%	-0.65	-20.3%
2015	Gazing Crop Ewes Condition Score (Mob 2) 222	09-06-15	30-06-15	3.2	3.68	0.48	15.0%	-0.65	20.3%

The tables below show the results of the Trial so far.

Table 3 – Barley Harvest Results

Year	Plot	Harvested	Grain Left in Paddock	Total	% yield reduction	Value of yield reduc- tion (\$ /ha)*
	Ungrazed (tonnes/ha)	2.37	0.63	3		
201 4	Grazed (tonnes/ha)	1.5	0.9	2.4	20	138.6
201	Ungrazed (tonnes/ha)	4	Minimal	4		
5	Grazed (tonnes/ha)	3.5	Minimal	3.5	12.5	115.5

Feed Availability and Quality

FOO in the barley was found to exceed requirements for the number of ewes grazing, so is effectively adlib FOO. The barley was also superior to the pasture in terms of food quality. 2015 analysis, shown above, showed the crop to be 25% more digestible than the pasture.

The deferred pasture increased it's available dry matter during the time that it was shut up. As shown in Table 3, above, in 2014 it increased by 1.2 tonnes, up to 1.7 tonnes. In 2015, the dry season reduced the gains to 372 kg (from 231kg/ha to 603 kg/ha) over 3 weeks. This is a reflection of how varied the two seasons were, with 2014 averaging 61kg per day and 2015 averaging 18 kg per day.

In both years, the ewes grazing the crop have benefitted from adlib feed of a high quality whilst grazing the crop as shown in their condition scores. They have also benefitted from more abundant pasture through deferral at lambing time, which has a knock-on effect on lamb survival, as shown in Table 4.

Ewe Condition

The condition scores measured are shown in table 1 above.

In 2014, the ewes on the crop increased their condition score by 26%. In 2015, the ewes on the crop also increased their condition score, but by a lessor amount (15%), having started at a higher score.

In 2014, the ewes on the pasture increased their condition score by 15% (FOO 500kg) and, in 2015, they lost 5% (FOO 231kg) despite being fed barley (750g/head/day).

The condition score variation over the grazing period between crop and pasture grazing ewes in 2014 and 2015 was 10.8% and 20.3 % respectively in favour of the crop grazing ewes.

These results are significant as condition score all throughout pregnancy is critical to lamb survival, especially twins.

Effect on Crop Yield

Table 3 shows that crop yields were significantly affected by grazing at the 2014 harvest (20% reduction in yield). The ewes chose to graze one section of the paddock heavily, causing the weeds to take advantage of the lack of crop competition, so that a weed burden to build up, reducing yield.

In 2015, yields for the grazed and un-grazed crops were significantly better and the difference between yields was lower (12.5%). The crop was much cleaner and due to the limited amount of grazing available the grazing more even.

Effect on Gross Margin

In 2015, the value of crop grazing to the farmer in terms of increased sheep production and reduction in supplementary feeding was calculated to be \$123.18 per ha (Andrew Thompson, Murdoch University), which exceeds the loss at harvest of \$115.50 per ha by \$7.68.

Deferred grazing has not been included in this calculation. Trials carried out by Andrew Thompson of Murdoch University have enabled the modeling of lamb survival at different FOO levels. Table 4 shows that, in 2014, ewes going onto the deferred pasture were 7% more likely to successfully rear a single lamb and 18% more likely to successfully rear twin lambs than those who were on the pasture from the beginning of the trial. In 2015, when conditions were harder so the difference in FOO was lower; ewes going onto the deferred pasture were 5% more likely to successfully rear a single lamb and 10% more likely to successfully rear twin lambs than those on pasture from the start of the trial. This is another significant benefit.

8. Public events and accolades



Landcare finalists: MCC representatives with Blackwood Basin Group

WA Landcare Awards 22nd September 2015

MCC were finalists in the 2015 Fairfax Media Community Group category and attended a gala dinner as part of the WA Landcare conference 2015. MCC missed out winning to Blackwood Basin Group who were a worthy winner.

Western Australian Regional Achievement and Community Awards 6th November 2015

MCC were finalists in the LandCorp Sustainability category for the second year running. MCC lost out to City of Kalgoorlie-Boulder but are still extremely proud to get down to the last four.



Proud finalists: Rachel Walmsley, Peter Waterhouse, Helen Watkins, Reg Beale and Kaye McGlew Photo: V Beale



Luncheon: representatives from MCC, Guilderton and Toodyay with Shane Love and Marty Aldridge Photo: Parliament House

Lunch at Parliament House

MCC were extremely excited to be invited to Parliament House for lunch on 24th February 2016 by Shane Love MLA -Minister for Moore. Shane invited MCC for their involvement with helping Guilderton win the National Keep Australia Beautiful Clean Beach award 2015. Members of the Guilderton community and also Toodyay (KAB Tidy Towns Award) also attended. After lunch, Shane showed us around Parliament House which was very interesting. It was a memorable day with great food and company. Thanks Shane.

Moora Show 2015

MCC had a display at the Moora show held on 19th September 2015. This year we moved on to the oval (away from the chooks !) and were inundated with people wanting to grab a free seedling or two to plant for the Carnaby's Black Cockatoo. Around 500 seedlings were available thanks to funding through the State and Australian Carnaby projects which MCC had been running.

There was also a competition to win a flora calendar by guessing the number of Carnabys in a photo. The sky scene was near Lancelin and featured hundreds of cockies. Well done to the winner Ken <u>Seymour</u>.







MCC's display at the Moora Show

Count the Black Carnaby's Cockatoos competition photo used at the Moora Show and the State NRM Conference



State NRM Conference Mandurah "Finding the Balance"

The theme of the Conference was finding the balance: healthy environment, productive economy held in Mandurah, September 2015.

MCC presented a poster at the Conference and ran a completion to guess the number of Carnaby's in the Photo. This was of a great interest to the attendees of the conference.

Rachel & Helen were sponsored by NACC to attend this worthwhile conference.

Thank you to NACC and the Regional Landcare facilitators for providing Community Sponsorship to attend



9. Moore Catchment Environmental Fund

This year the Moore Catchment Environmental Fund received donations of \$8,054.26.

In the 2015-2016 financial year Moore catchment council planted approx. 30,000 seedlings to increase the forage habitat for the endangered Carnaby's Black Cockatoos, provided 5 nesting boxes for the Carnaby's Black Cockatoos

Fenced 10km of remanent vegetation

Been involved in the rehabilitation of the North Guilderton dunes by planting 2,000 seedling with tree Guards for protection on sand blown tracks, held community weeding and rubbish collection days.

Planted 20ha to native habitat in Maya reconnecting landscapes in the wheatbelt through revegetation corridors for Malleefowl (*Leipoa ocellata*). Purchased two camera's for monitoring malleefowl mounts.

Numerous workshops and field days to increase public/community knowledge of endangered species, seed collecting workshops, plant propagation workshops. Indigenous Bush Tucker and Medicine workshop

The donated money was used to provide additional support for each of the 18 Environmental projects that MCC undertook over the past 12 months. Moore Catchment Council is a community based Not-For-Profit Organisation taking the lead in attracting on-ground actions to protect and enhance the Moore River Catchment.

10. Department of Social Services Funding—Volunteers Grant

This financial year MCC was fortunate to attract \$5,000 from the Department of Social Services

This programme aims to build socially cohesive and resilient communities and promote inclusion and participation of disadvantaged people in community life. Funding is provided to organisations to develop solutions and deliver responsive and integrated services that meet community needs.

Volunteer Grants aims to support the efforts of Australia's volunteers. It provides small amounts of money which organisations can use to help their volunteers. It is part of the Government's work to support the volunteers who help disadvantaged Australian communities and encourage inclusion of vulnerable people in community life.

This funding goes towards travel costs for committee and community to attend volunteer events and to purchase non consumable office and other items to help the volunteers.

11. Supporters of Moore Catchment Council



Moore Catchment Support cont.

Thank you to all the Members, Supporters, Volunteers and Funding Partners of the Moore Catchment Council without such support the Moore Catchment Council would not exist.

Photos in this publication taken by Rachel Walmsley unless otherwise indicated.

Supporting Partners: 4WD Club of WA Birdlife Australia Carrah Wildflower Walks Chittering Landcare Cockies for Landcare Fiona Falconer Friends of Moore River Estuary Friends of the Mogumber Reserve Friends of the Moora Woodland **Greenoil Nursery** Guilderton Community Association Kerkhof Carnaby's Group Ledge Point Coastcare Lower Coastal Group Lower Moore Working Group Mogumber Progress Association Muchea Nursery North Central Mallee Fowl Preservation Group NyPa Australia West Koojan-Gillingarra LCDC Yarra Yarra Catchment Management Group Yued Group