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Landowner of offset site	Ian, Trish and James Taylor	
Location and address of offset site	"Woolly and Creek Paddocks"	
	Lot 1 TP16458	
	Warrambeen Pty Ltd,	
	Rokewood – Shelford Rd, Shelford.	
Offset Proponent	Rosenthal	
Responsible Authority	Golden Plains Shire, DSE and DEWHA	
Report number / Year	Year 5 / 2019	
Start Year	2015	
Type of Offset	Vegetation and Golden Sun Moth	
Size of Offset	86 Ha	
Signature	Jano Tay	
Date	03 rd March 2019	

Information to be included:

- A copy of the Management Action Table from the OMP with information on which actions have been completed for the year/s of this reporting period;
- A description of the specific monitoring results from surveys undertaken for vegetation/flora species;
- A description of the specific monitoring results from surveys undertaken for significant fauna species, such as the Golden Sun Moth
- Fencing work;
- Success of weed and pest animal control work;
- Successful management tools (i.e. techniques used to control weed species, protection of new plants, monitoring technique, etc.);
- Any problems or issues experienced (i.e. new infestation of weed species, storm damage to fencing, etc.)
- Include any corrective actions and contingency measures where monitoring indicates that there has been a degradation in the native vegetation and Golden Sun Moth population and habitat; and,

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Summary of Independent Monitoring Assessment

(Excerpt from Ecology & Heritage Partners Final Vegetation Assessment 2020)

"The study area largely supports the Plains Grassland Ecological Vegetation Class (EVC), present in varying conditions across the site. Wallaby-grass Rytidosperma sp. and Spear-grass Austrostipa sp. were common native species present across the offset site. Additional native species present included Kangaroo Grass Themeda triandra, Common Wheat-grass Anthosachne scabra, Cranes-bill Geranium Geranium retrosum, Clover Glycine Glycine latrobeana, Slender Tick-tree-foil Desmodium varians and Bidgee-widgee Acaena novae-zelandiae."

Monitoring results for vegetation/flora species

(Excerpt from Ecology & Heritage Partners Final Vegetation Assessment 2020)

"The vegetation assessment revealed that whilst still exceeding the targets for biomass and weed cover, both biomass and weed cover across the Rosenthal Offset were substantially lower than previously recorded, indicating that the revised Management Actions were effective. It is understood that the extended grazing period will be implemented again during the 2020 period. This should further reduce biomass and weed coverage. If the revised Management Actions are implemented per the revised OMP it is expected that targets for biomass and weed cover will be met over a period of several years.."

"Recent management efforts have led to the reduction of mature Saffron Thistle specimens within the offset site, however mature Spear Thistle was observed in high numbers in discrete areas of the study area. Regeneration of Saffron Thistle, Spear Thistle and Serrated Tussock was also evident across the site. Ongoing intensive weed management control is needed to ensure high threat weeds do not re-establish and spread within the study area.

Whilst Wild oat is present in a high cover and is persisting throughout the study area, coverage of the species was substantially lower than observed during previous monitoring periods. This is likely a result of the extended grazing period implemented in 2019 per the revised OMP. Ongoing management action should be continued to reduce biomass levels, through crash grazing as detailed in the revised OMP."

GSM Monitoring

(Excerpt from Ecology & Heritage Partners Final Vegetation Assessment 2020)

"Per the endorsed OMP (Ecology and Heritage Partners Pty Ltd 2015) formal Golden Sun Moth surveys were not undertaken within the Rosenthal Offset site for the 2019/20 monitoring period. Despite the lack of formal surveys, a high number of Golden Sun Moth were observed during the Vegetation Assessment (>500 individuals). This is substantially higher than observed during the 2018/19 monitoring period (Ecology and Heritage Partners Pty Ltd 2019)."



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Successful management tools

(i.e. techniques used to control weed species, protection of new plants, monitoring technique, etc.)

The combination of grid spraying in spring and crash grazing in the dryer months is proving to be successful in reducing weed coverage especially Saffron Thistle and Wild Oats. A program is in place to continue to target any re-emerging plants.

Whilst still exceeding the targets for biomass and weed cover, both biomass and weed cover across the Rosenthal Offset are substantially lower than previously recorded according to Ecology & Heritage Partners 2020, indicating that the revised Management Actions are effective. Extended grazing times will continue in 2020. This should further reduce biomass and weed coverage.

(Excerpt from Ecology & Heritage Partners Final Vegetation Assessment 2020)

"If the revised Management Actions are implemented per the revised OMP it is expected that targets for biomass and weed cover will be met over a period of several years."

Corrective actions and contingency measures

(Where monitoring indicates that there has been a change in the native vegetation and Golden Sun Moth population and habitat)

Approval from the DoEE was achieved and sheep were grazed longer during 2019. This increased grazing was effective in reducing biomass and weed cover across the Rosenthal Offset. This will continue for 2020 to further reduce coverage and help Warrambeen reach targets set out in the OMP.

Warrambeen continued an intensive 3 pass weed program which included; hand spraying and manual chipping of high threat weeds to continue to reduce their seed set.

Photos

Photographs on USB stick are available on request

Weed and pest animal control work

Biomass Control:

The OMP grazing regime was adapted to allow extended grazing, this will continue for 2020

IN	No. SHEEP	OUT
01/07/2019	100 Ewes	10/09/2019
21/9/2019	2000 Ewes	11/10/2019



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Weed Cover / Control:

Phil Spark and four staff, were engaged to grid spray paddock

- Fluroproponate, Round Up, Amine, Galon and colour dye.
- Over 110 hours were spent by the weed management team spot spraying weeds targeting Serrated Tussocks, Brambles, Broadleaf and Thistles. This occurred throughout November; 11/11/19, 22/11/19 and 26/11/19
- The area impacted by Wild Oat will continue to be heavily grazed to bare ground.
- Chemical Invoice attached see Appendix 3.
- Photos of Weed Control see Appendix 4.

Fox and Rabbit Control:

- Ongoing shooting programme maintained every second month with registered shooters.
- No warrens have been located so no fumigation or ripping has been conducted.
- Rabbit scats are observed infrequently.

Fencing work

Fencing undergoes regular checks and maintenance as per the Farm program, all are in good condition and stock proof

Management Plan 2020

The current vegetation assessment by Ecology and Heritage Partners Pty Ltd. determined that the Rosenthal offset site supports the Plains Grassland Ecological Vegetation Class, present in varying conditions across the site.

The extended grazing program as approved by the DoEE was successful during 2019 and will continue to help ensure our targets for bare ground, Biomass control and weed coverage are met within the required timeframes. This will include targeting high threat weeds by strategic grazing in conjunction with the 3 pass weed control program; spot spraying and manual removal. The 3 pass weed control program will continue to be monitored regularly by landowner to assess its effectiveness. Weed control work will follow grazing periods as this is considered essential in effective weed management.

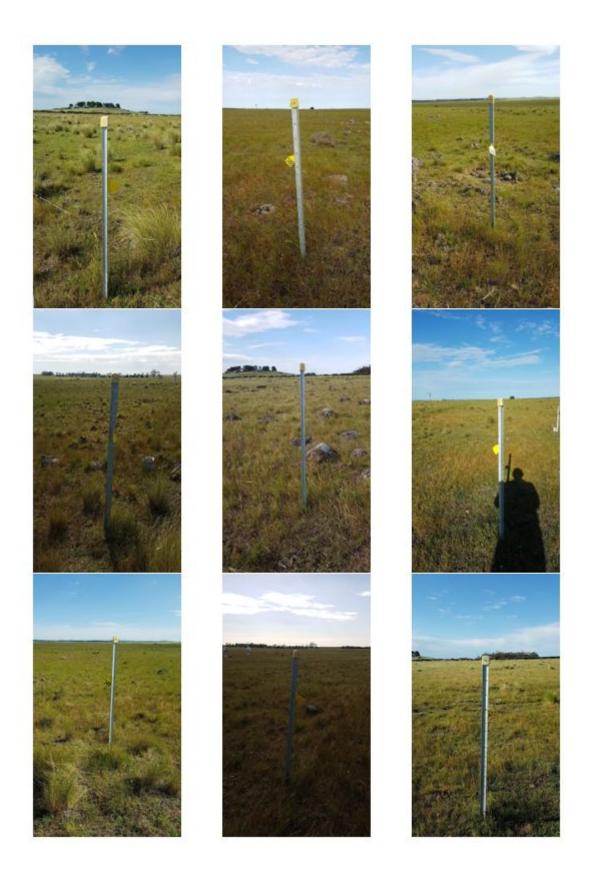
Attachments

Appendix 1 – Management Action Table

Table 12: Management Actions Table

Year	Action	Management action	Responsible authority / personnel	Timing of action	Date completed
5	5.1	Conduct weed control	Landowner/Bushland Management Contractor	Species dependent	November 2019
5	5.2	Monitor populations of pest animals and conduct control works if required	Landowner/Pest Animal Contractor	After peak breeding season - late summer/early autumn	2019
5	5.3	Maintain fences	Landowner/Fencing Contractor	As required	2019
5	5.4	Monitor biomass density and implement stock grazing regime or develop ecological burn/ fuel reduction plan if appropriate	Landowner/Bushland Management Contractor/CFA	Summer/Autumn	2019
5	5.5	Monitor and assess works, and prepare progress report	Suitably qualified ecological specialist	Five years after commencement of OMP	Dec 2019- March 2020
6	6.1	Conduct weed control	Landowner/Bushland Management Contractor	Species dependent	
6	6.2	Monitor populations of pest animals and conduct control works if required	Landowner/Pest Animal Contractor	After peak breeding season - late summer/early autumn	
6	6.3	Conduct monitoring for vegetation and Golden Sun Moth	Suitably qualified ecological specialist	Six years after commencement of OMP	
6	6.4	Maintain fences	Landowner/Fencing Contractor	As required	
6	6.5	Monitor biomass density and implement stock grazing regime or develop ecological burn/ fuel reduction plan if appropriate	Landowner/Bushland Management Contractor/CFA	Summer/Autumn	

Appendix 2 - Photos Taken November, 2019

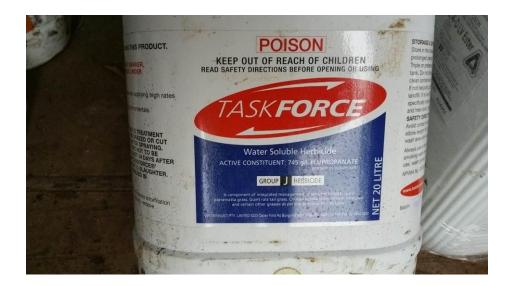








Appendix 3 – Chemical Drum



Appendix 4 – Weed Control

