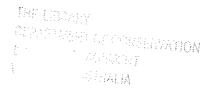
7/12/98

## Tammar Wallaby



#### Introduction

This monthly report forms the first part of an on-going monitoring protocol for tammar wallables (*Macropus eugenii*) established between Karakamia Sanctuary and the Department of Conservation and Land Management on 13/8/98. The report is based upon radio-tracking work and spotlighting surveys carried out during the first month of the tammar release.

### **Background Information**

Thirteen tammar wallables were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in spring 1998 under the agreed protocol. The animals consisted of 6 females and 7 males of various ages. Details of individual animals gathered on arrival are included in this report.

### Methods

Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, in close proximity to an open paddock area. Tammars were monitored through a combination of spotlighting and radio-tracking methodology. Four adult animals (2 males and 2 females) were fitted with radio-collars for this purpose. All animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were radio-tracked and spotlighted daily for the first week and at least weekly thereafter. A combination of day and night data was gathered for collared animals. Data was entered onto data sheets that included:- Date, Time, ID, Sex, Age, Location, and Vegetation Community.

### Results and Discussion

Sixty-three records were made in total and all data is presented, as are details of individual animals gathered on arrival. Tracking sheets are included for all radio-collared animals.

At the end of the period all radio-collared animals were alive. From the tracking sheets it can be seen that 3 animals remained relatively sedentary (F1, F2 and M2). M1 was broad-ranging earlier in the period but toward the end appeared to be utilising a discrete area in the same vicinity as M2. Home ranges appear to be approximately 10 hectares at this stage.

Thirty-six day records were made. Dryandra thickets were often used as rest-sites (over 50%), as well as thick understorey under jarrah or Marri. When considering the night records, radio-collared animals were only recorded in paddock areas twice, with the majority of records coming from Jarrah upland. However, 17 sightings of uncollared Tammars were made in the paddock area. How many individuals this relates to is unknown, but the data indicates at least four (when considering the variables of sex, size, and radio-collars). Sightings of Tammars in the paddock area were made on over 50% of spotlighting surveys (disregarding radio-tracking data). Interestingly, on the occasions when Tammars were seen there were often between 2 and 4 animals in close proximity. On the occasions when Tammars were not seen there were often aggregations of western grey kangaroos on the paddock. One interaction between an adult male and juvenile female tammar was noted. Spotlighting and radio-tracking work will continue on a weekly basis.

18/3/99

Tammar Wallaby

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### Introduction

This quarterly report forms part of an on-going monitoring protocol for tammar wallabies (*Macropus eugenii*) established between Karakamia Sanctuary and the Department of Conservation and Land Management on 13/8/98. The report is based upon radio-tracking and spotlighting surveys, and is an addendum to an earlier report (*Tammar Wallaby*, 7/12/98).

### **Background Information**

Thirteen tammar wallabies were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, in close proximity to an open paddock area.

### Methods

Tammars were monitored through a combination of spotlighting and radio-tracking methodology and were surveyed weekly. Spotlighting concentrated on a paddock area where Tammars were known to feed. Data was entered onto data sheets that included:- Date, Time, ID, Sex, Age, Location, and Vegetation Community.

### Results and Discussion

Eighty-seven records were made in total and all data is presented. Tracking sheets are also included for the 4 radio-collared animals.

At the end of the period all radio-collared animals were alive. Forty day-records were made. From the tracking sheets it can be seen that all four collared animals remained very sedentary. Three animals (F1, M1 and M2) continually used the same rest-site. All three of these rest-sites were located in dense *Dryandra sessilis* thickets. F2 frequently used a rest site in jarrah woodland with a thick understorey. Home ranges appear to be approximately 10 hectares.

Forty-six spotlight records of uncollared Tammars in the paddock area were made. How many individuals this relates to cannot be calculated with certainty, but the data indicates at least six (when considering the variables of sex, size, and radio-collars). Sightings of Tammars in the paddock area were made on over 50% of spotlighting surveys (disregarding radio-tracking data). Interestingly, on the occasions when Tammars were seen there were often between 2 and 6 animals in close proximity. No observations of pouch-young have been made at this stage. On one occasion (6/3/99) six individuals were viewed on the paddock area, none of which were radio-collared. From this information we can assume that at least 10 of the 13 Tammars released (and probably more) remain alive at Karakamia. Spotlighting and radio-tracking work will continue on a weekly basis.

20/6/99

Tammar Wallaby

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### Introduction

This quarterly report forms part of an on-going monitoring protocol for tammar wallabies (*Macropus eugenii*) established between Karakamia Sanctuary and the Department of Conservation and Land Management on 13/8/98. The report is based upon radio-tracking and spotlighting surveys, and is an addendum to earlier reports (*Tammar Wallaby 7/12/98 and Tammar Wallaby 18/3/99*).

### **Background Information**

Thirteen tammar wallables were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area.

#### Methods

Tammars were monitored through a combination of spotlighting and radio-tracking methodology. Tammars were spotlighted at least one night per week, and often more, particularly during scheduled tours when they were often seen on the paddock area. Spotlighting concentrated on this paddock area because Tammars were known to regularly feed there. Data was entered onto data sheets that included:- Date, Time, ID, Sex, Age, Location, and Vegetation Community.

### Results and Discussion

Seventy-six records were made in total and all data is presented. Tracking sheets are also included for the 4 radio-collared animals.

At the end of the period all radio-collared animals were alive, although one collar (F1) had recently failed. Other collars are also expected to fail due to diminished battery life. Fourteen day-records were made. From the tracking sheets it can be seen that all four collared animals remained relatively sedentary, particularly when compared with past tracking sheets. Three animals (F1, M1 and M2) continue to use the same rest-site. All four Tammars use rest-sites located in dense *Dryandra sessilis* thickets. The rest sites recorded in heathland for M1 and M2 on 18/5/99 may have been due to these animals being disturbed from the usual rest site (R1) whilst radio-tracking. Home ranges appear to be approximately 10 hectares. A movement of 600 m during a twelve hour period was recorded for M2. Most of the thirteen Tammars appear to aggregate in the paddock area at night time.

Sixty-two spotlight records of uncollared Tammars in the paddock area were made. How many individuals this relates to cannot be calculated with certainty, but the data indicates at least ten (when considering the variables of sex, size, and radio-collars). On one evening 7 individual animals were observed (15/4/99), with many nights recording five or more. Sightings of Tammars in the paddock area were made on over 80% of spotlighting nights (disregarding radio-tracking data). On the occasions when Tammars were seen there were often between 2 and 7 animals in close proximity. Three observations of pouch-young have recently been made (15th and 23/5/99), relating to at least 2 individuals. Spotlighting work will continue on a weekly basis.

10/2/00

## Tammar Wallaby

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WESTERN AUSTRALIA

#### Introduction

This quarterly report forms part of an on-going monitoring protocol for tammar wallables (*Macropus eugenii*) established between Karakamia Sanctuary and the Department of Conservation and Land Management on 13/8/98. The report is based upon radio-tracking and spotlighting surveys, and is an addendum to earlier reports (*Tammar Wallaby 7/12/98*, 8/3/99, and 20/6/99).

### **Background Information**

Thirteen tammar wallables were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area.

### Methods

All four radio-collars fitted to Tammars have now expired, and Tammars are now monitored through spotlighting surveys only. Tammars were spotlighted at least one night per week, and often more, particularly during scheduled tours when they were often seen on the paddock area. Spotlighting concentrated on this paddock area because Tammars were known to regularly feed there. Data was entered onto data sheets that included:- Date, Time, ID, Sex, Age, Location, and Vegetation Community.

### Results and Discussion

194 records were made in total and all data is presented.

Sightings of Tammars in the paddock area were made on over 80% of spotlighting nights. On the occasions when Tammars were seen there were often between 2 and 5 animals in close proximity. One record was made of an individual young Tammar (untagged) feeding in a Wandoo area at night time, all other records were made in 'paddock' areas. On 1/2/00 6 young Tammars (untagged) were observed in one night. Just six female Tammars were introduced to Karakamia and this data suggests that all survived and bred successfully in their first year. On other nights three tagged females have been recorded, so at least half have survived into the second year. All young are now completely independent and appear to be dispersing into the 'Myrtleford Block', former farmland with productive grassy areas (but little cover at this stage). On average 3-4 animals are seen per night. Spotlighting work will continue on at least a weekly basis.

## Tammar Wallaby



### Introduction

This quarterly report forms part of an on-going monitoring protocol for tammar wallabies (*Macropus eugenii*) established between Karakamia Sanctuary and the Department of Conservation and Land Management on 13/8/98. The report is based upon radio-tracking and spotlighting surveys, and is an addendum to earlier reports (*Tammar Wallaby 7/12/98, 8/3/99, 20/6/99 and 10/2/99*).

### **Background Information**

Thirteen tammar wallabies were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area.

#### Methods

All four radio-collars fitted to Tammars have now expired, and Tammars are now monitored through spotlighting surveys only. Tammars were spotlighted at least one night per week, and often more, particularly during scheduled tours when they were often seen on the paddock area. Spotlighting concentrated on this paddock area because Tammars were known to regularly feed there. Data was entered onto data sheets that included:- Date, Time, ID, Sex, Age, Location, and Vegetation Community.

### Results and Discussion

90 records were made in total and all data is presented.

One individual M5 was found moribund 23/3/00 and it was taken to a vet and carer and latter died of unknown causes, indications were that it was blind and probably died of old age.

Sightings of Tammars in the paddock area were made on over 80% of spotlighting nights. On the occasions when Tammars were seen there were often between 2 and 6 animals in close proximity. On one occasion 4 unknown Tammars (no ear tags) were seen in one location but more usually 1-3 individuals were spotted. On one occasion 5 tagged females were recorded which indicates a high rate of survival into there second year.

All young are now completely independent, and have been noted, on two occasions, with very large bulging pouches, obviously with pouch young. Unmarked individuals seem to be dispersing into the 'Myrtleford Block', former farmland with productive grassy areas (but little cover at this stage). Spotlighting work will continue on at least a weekly basis.

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21/12/00

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## Tammar Wallaby

#### Introduction

This six-monthly report forms part of an on-going monitoring protocol for Tammar Wallabies (*Macropus eugenii*) established between Karakamia Sanctuary and the Department of Conservation and Land Management on 13/8/98. The report is based upon spotlighting surveys only, and is an addendum to earlier reports (*Tammar Wallaby 7/12/98, 8/3/99, 20/6/99,10/2/99 and 18/7/00*).

### **Background Information**

Thirteen Tammar Wallabies were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area.

### Methods

All four radio-collars fitted to Tammars have now expired, and Tammars are now monitored through spotlighting surveys only. Tammars were spotlighted at least one night per fortnight during the period, and often more, particularly during scheduled tours when they were often seen on the paddock area. (NB: null observations are not shown in spotlighting data). Spotlighting concentrated on the paddock area because earlier work confirmed that Tammars regularly feed there. Data was entered onto data sheets that included:- Date, Time, ID, Sex, Age, Location, and Vegetation Community.

#### Results and Discussion

Sixty-five records were made in total and all data is presented in Table 1. Almost all sightings of Tammar were made in the 'paddock' area (two sightings were made in wandoo woodland). On the occasions when Tammars were seen there were often between 2 and 6 animals in close proximity. There were many more sightings of females (21) when compared to males (8). Sexes were determined by reflective colour-coded ear tags on the founder animals. A large number of sightings (36) were recorded as 'sex unknown', because no ear tags were sighted. Most, but not all, of these animals could be considered 'new' (ie 'un-tagged' recruits into the population). On some occasions, however, it may be that a tagged (founder) animal was sighted from a distance without the tag being distinguished.

There are records of founder Tammars breeding for the second year in succession at Karakamia. Furthermore, last year's young are now adult and there are records of these animals also breeding (5 records). All of this year's young appear to have left the pouch and are now 'at heel'. Spotlighting work will continue on at least a fortnightly basis.

Table 1: Tammar Spotlighting Data (18/7/00 - 21/12/00)
\* Sorted by Date: 65 Records

DATE	Time	<u>ID</u> Sex	Age	Tag?Collar	Veg	Comments
12/09/2000	N	F	Α	Υ	Paddock	
12/09/2000	) N	F	Α	Υ	Paddock	Near visitors centre
12/09/2000	N	F	Α	Υ	Paddock	
12/09/2000	N	F	Α	Υ	Paddock	
12/09/2000	) N	U	Α	Ν	Paddock	Near visitors centre
12/09/2000	) N	U	Α	Ν	Paddock	
12/09/2000	) N	U	Α	Ν	Paddock	Near visitors centre
14/10/2000	) N	М	Α	N	Paddock	
14/10/2000	N	U	Α	N	Paddock	
14/10/2000	) N	U	Α	N	Paddock	
14/10/2000	N	F	Α	N	Paddock	
15/10/2000	N C	M	Α	N	Paddock	
15/10/2000	N C	F	Α	N	Paddock	
15/10/2000	N C	U	Α	N	Paddock	
15/10/2000	N C	U	Α	Ν	Paddock	
15/10/2000	N C	Μ	Α	N	Paddock	
15/10/2000	0 N	F	Α	N	Paddock	
15/10/2000	0 N	U	Α	N	Paddock	
15/10/200	0 N	U	Α	N	Paddock	
15/10/200	0 N	U	Α	N	Paddock	
15/10/200	0 N	U	Α	Ν	Paddock	
17/10/200	0 N	U	Α	N	Paddock	Near visitors centre
20/10/200	0 N	U	Α	Ν	Paddock	
20/10/200	0 N	U	Α	N	Paddock	
20/10/200	0 N	U	Α	N	Paddock	
20/10/200	0 N	U	Α	N	Paddock	
20/10/200	0 N	U	Α	N	Wandoo	Near walk trail
20/10/200	0 N	U	Α	N	Wandoo	Near walk trail
29/10/200	0 N	F	Α	Υ	Paddock	
29/10/200	0 N	F	Α	N	Paddock	
29/10/200	0 N	F	Α	N	Paddock	
29/10/200	0 N	M	Α	Υ	Paddock	
29/10/200	0 N	М	Α	Ν	Paddock	
29/10/200	0 N	М	Α	N	Paddock	

Table 1: Tammar Spotlighting Data (18/7/00 - 21/12/00)

\* Sorted by Date: 65 Records

DATE	Time	<u>ID</u>	Sex	Age	Tag?Collar	Veg	Comments
26/10/2000	N		F	Α	Υ	Paddock	
26/10/2000	N		F	Α	Υ	Paddock	
26/10/2000	N		F	Α	Υ	Paddock	
26/10/2000	N		F	Α	Υ	Paddock	
26/10/2000	N		F	Α	Υ	Paddock	
26/10/2000	N		U	Α	N	Paddock	
26/10/2000	N		U	Α	N	Paddock	
26/10/2000	N		U	Α	N	Paddock	Small animal
11/11/2000	) N		U	Α	N	Paddock	large pouch young
13/11/2000	) N		U	Α	N	Paddock	
13/11/2000	) N		U	Α	N	Paddock	
17/11/2000	N		F	Α	N	Paddock	
17/11/2000	) N		F	Α	N	Paddock	
17/11/2000	) N		М	Α	N	Paddock	
17/11/2000	) N		U	Α	N	Paddock	Last years young
17/11/2000	) N		U	Α	N	Paddock	This years young
17/11/2000	) N		U	Α	N	Paddock	This years young
18/11/2000	) N		U	Α	Ν	Paddock	
20/11/2000	N		F	Α	N	Paddock	
20/11/2000	N C		М	Α	N	Paddock	
20/11/2000	N (		U	Α	Ν	Paddock	last years young
20/11/2000	N C		U	Α	Ν	Paddock	last years young
20/11/2000	N C		U	Α	N	Paddock	last years young
02/12/2000	) N		U	Α	Ν	Paddock	last years young
02/12/2000	N C		U	Α	Ν	Paddock	This years young
02/12/2000	N C		U	Α	N	Paddock	This years young
02/12/2006	N C		F	Α	N	Paddock	
05/12/200	N C		U	Α	Ν	Paddock	under Acacias
13/12/200	N C		U	Α	Ν	Paddock	under Acacias, last yrs
13/12/200	0 N		F	Α	N	Paddock	under Acacias
13/12/200	0 N		F	Α	Ν	Paddock	under Acacias

### KARAKAMIA SANCTUARY

27/6/01

Tammar Wallaby

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#### Introduction

This six-monthly report forms part of an on-going monitoring protocol for Tammar Wallabies (*Macropus eugenii*) established between Karakamia Sanctuary and the Department of Conservation and Land Management on 13/8/98. The report is based upon spotlighting surveys only, and is an addendum to earlier reports (*Tammar Wallaby 7/12/98, 8/3/99, 20/6/99, 10/2/99, 18/7/00 and 21/12/00.* 

### **Background Information**

Thirteen Tammar Wallabies were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area.

### Methods

All four radio-collars fitted to Tammars have now expired, and Tammars are now monitored through spotlighting surveys only. Tammars were spotlighted at least one night per fortnight during the period, and often more, particularly during scheduled tours when they were often seen on the paddock area. (NB: null observations are not shown in spotlighting data). Spotlighting concentrated on the paddock area because earlier work confirmed that Tammars regularly feed there. Data was entered onto data sheets that included:- Date, Time, ID, Sex, Age, Location, and Vegetation Community.

### Results and Discussion

Two hundred and nine records were made in total and all data is presented in Table 1. Almost all sightings of Tammar were made in the 'paddock' area (four sightings were made in wandoo woodland and two sightings were made near the manager's residence). On the occasions when Tammars were seen there were often between 2 and 6 animals in close proximity.

Sexes were determined by reflective colour-coded ear tags on the founder animals. There were many more sightings of females (51) when compared to males (19) this may reflect the visibility of the two coloured ear tags. Red tags being the more visible and the possibility of missing blue tags from long distances. A large number of sightings (139) were recorded as 'sex unknown', because no ear tags were sighted. Most, but not all, of these animals could be considered 'new' (ie 'un-tagged' recruits into the population). On some occasions, however, it may be that a tagged (founder) animal was sighted from a distance without the tag being distinguished.

There are records of founder Tammars breeding for the third year in succession at Karakamia. Two of last year's young were recorded (determined by their size). Spotlighting work will continue on at least a fortnightly basis.

Table 1: Tammar Spotlighting Data 26/12/00 - 27/6/01
\* Sorted by Date

DATE	<u> </u>	Time	Sex	Age	Tag? Collar	Veg	Comments
26/12/2000		N	U	Α	N	Paddock	
26/12/2000		N	F	Α	Υ	Paddock	
26/12/2000		N	F	Α	Υ	Paddock	
26/12/2000		N	F	Α	Υ	Paddock	
26/12/2000		N	U	J?	N	Managers	This years young?
28/12/2000		N	U				No Tammars sighted
05/01/2001		N	U				No Tammars sighted
15/01/2001		N	F	Α	Υ	Paddock	Northern Edge of
19/01/2001		N	F	Α	Υ	Paddock	Middle of
20/01/2001		N	U	Α	N	Paddock	Western Side of
22/01/2001		N	Ü	Α	Ν	Paddock	
22/01/2001		N	U	Α	Ν	Paddock	
22/01/2001		Ν	F	Α	Υ	Bush	Southern side of Pad.
22/01/2001		N	Ų	Α	Ν	Paddock	
23/01/2001		N	F	А	Y	Paddock	
23/01/2001		N	F	Α	Υ	Paddock	
23/01/2001		N	U	Α	N	Paddock	
23/01/2001		N	U	Α	N	Paddock	
23/01/2001		N	F	Α	Υ	Paddock	
24/01/2001		N	U				No Tammars sighted
05/02/2001		Ν	U				
05/02/2001		N	Ų				No Tammars sighted
09/02/2001		N	М	Α	Υ	Paddock	near Acacias
18/02/2001		N	U				
18/02/2001		N	F		Υ		
18/02/2001		Ν	F		Υ		•
19/02/2001		N	U			Paddock	
19/02/2001		N	U			Paddock	
19/02/2001		N	U			Paddock	
19/02/2001		N	U			Paddock	
19/02/2001		Ν	U			Paddock	
21/02/2001		N	F		Υ	Paddock	
21/02/2001		Ν	U			Paddock	
21/02/2001		N	U			Paddock	

Table 1: Tammar Spotlighting Data 26/12/00 - 27/6/01
\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag? Collar	Veg	Comments
21/02/2001		N	U			Paddock	
21/02/2001		N	F		Υ	Paddock	
21/02/2001		N	U			Paddock	
21/02/2001		N	U			Paddock	
22/02/2001		N	U			Paddock	
22/02/2001		N	U			Paddock	
24/02/2001		N	F		Υ	Paddock	
24/02/2001		N	F		Υ	Paddock	
05/03/2001		N	F		Υ	Paddock	
05/03/2001		N	F		Y	Paddock	
05/03/2001		Ν	М		Y	Paddock	
05/03/2001		N	U			Paddock	
05/03/2001		N	U			Paddock	
07/03/2001		N	F		Υ	Paddock	
07/03/2001		N	U			Paddock	
07/03/2001		N	U			Paddock	
07/03/2001		N	F		Υ	Paddock	
07/03/2001		N	U			Paddock	
10/03/2001		N	U			Paddock	
10/03/2001		N	U			Paddock	
10/03/2001		N	U			Paddock	
10/03/2001		N	U			Paddock	
10/03/2001		N	F		Υ	Paddock	
10/03/2001		N	М		Υ	Paddock	
10/03/2001		Ν	U			Paddock	
18/03/2001		Ν	M		Υ	Paddock	
18/03/2001		N	U			Paddock	
18/03/2001		N	U			Paddock	
18/03/2001		N	U			Paddock	
18/03/2001		N	U			Paddock	
18/03/2001		N	U			Paddock	
18/03/2001		N	U			Paddock	
23/03/2001		Ν	М		Υ	Paddock	
23/03/2001		Ν	U		Y	Paddock	

Table 1: Tammar Spotlighting Data 26/12/00 - 27/6/01
\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag? Collar	Veg	Comments
23/03/2001		N	U			Paddock	
23/03/2001		N	U			Paddock	
23/03/2001		N	U			Paddock	
24/03/2001		N	U			Paddock	
24/03/2001		N	U			Paddock	
24/03/2001		N	U			Paddock	
24/03/2001		N	U			Wandoo	
24/03/2001		N	F		Y	Paddock	
24/03/2001		Ν	U			Paddock	
24/03/2001		N	F		Υ	Paddock	
24/03/2001		N	U			Paddock	
25/03/2001		N	υ			Paddock	
25/03/2001		N	F		Υ	Paddock	
25/03/2001		N	F		Υ	Paddock	
25/03/2001		N	U			Paddock	
25/03/2001		N	U			Paddock	
25/03/2001		N	U			Paddock	
25/03/2001		N	М		Υ	Paddock	
25/03/2001		N	U			Paddock	
26/03/2001		N	М		Υ	Paddock	
26/03/2001		N	F		Υ	Paddock	
26/03/2001		Ν	U			Paddock	
26/03/2001		N	U			Wandoo	
26/03/2001		N	U			Paddock	
26/03/2001		N	М		Y	Wandoo	
26/03/2001		Ν	F		Υ	Paddock	
26/03/2001		N	F		Υ	Paddock	
31/03/2001		N	M		Υ	Paddock	
31/03/2001		N	Ų			Paddock	
31/03/2001		N	U			Paddock	
31/03/2001		N	U			Paddock	
31/03/2001		Ν	U			Paddock	
31/03/2001		N	U			Paddock	
31/03/2001		N	U			Paddock	

Table 1: Tammar Spotlighting Data 26/12/00 - 27/6/01
\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag? Collar	Veg	Comments
31/03/2001		N	М		Υ	Paddock	
01/04/2001		N	U			Paddock	
03/04/2001		N	U				
07/04/2001		N	U	SA		Paddock	Last years young
07/04/2001		N	U			Paddock	
07/04/2001		N	U			Paddock	
07/04/2001		N	M		Υ	Paddock	
07/04/2001		N	F		Υ	Paddock	
07/04/2001		Ν	F		Υ	Paddock	
07/04/2001		N	M		Υ	Paddock	
08/04/2001		N	М		Υ	Paddock	
08/04/2001		Ν	U			Paddock	
08/04/2001		N	U			Paddock	
08/04/2001		N	U			Paddock	
08/04/2001		Ν	U			Paddock	
08/04/2001		N	U			Paddock	
08/04/2001		Ν	F		Υ	Paddock	
08/04/2001		N	F		Υ	Paddock	
08/04/2001		N	U			Paddock	
10/04/2001		Ν	U			Paddock	
10/04/2001		Ν	F		Y	Paddock	
10/04/2001		N	F		Υ	Paddock	
10/04/2001		N	U			Paddock	
10/04/2001		N	U			Paddock	
10/04/2001		N	U			Paddock	
10/04/2001		Ν	U			Paddock	
10/04/2001		Ν	M		Υ	Paddock	
10/04/2001		Ν	F		Y	Paddock	
17/04/2001		N	U			Paddock	
17/04/2001		Ν	U			Paddock	
17/04/2001		Ν	F		Υ	Paddock	
19/04/2001		N	F		Υ	Paddock	
20/04/2001		Ν	М			Paddock	
20/04/2001		Ν	U			Paddock	

Table 1: Tammar Spotlighting Data 26/12/00 - 27/6/01
\* Sorted by Date

DATE	<u> ID</u>	Time	Sex	Age	Tag? Collar	Veg	Comments
20/04/2001		N	U			Paddock	
20/04/2001		N	U			Paddock	
20/04/2001		N	F		Υ	Paddock	
20/04/2001		N	U			Paddock	
20/04/2001		N	F		Y	Paddock	
20/04/2001		N	U			Paddock	
20/04/2001		Ν	U			Paddock	
20/04/2001		N	M		Υ	Paddock	
20/04/2001		Ν	F		Υ	Paddock	
20/04/2001		N	F		Υ	Paddock	
20/04/2001		N	U			Paddock	
20/04/2001		N	U			Paddock	
20/04/2001		N	U			Paddock	
22/04/2001		N	U			Paddock	
22/04/2001		N	M		Υ	Paddock	
22/04/2001		Ν	U			Paddock	
22/04/2001		N	U			Paddock	
22/04/2001		N	F		Υ	Paddock	
25/04/2001		N	U			Paddock	
26/04/2001		N	U			Wandoo	
26/04/2001		N	U			Paddock	
26/04/2001		N	U			Paddock	
26/04/2001		N	F		Υ	Paddock	
26/04/2001		N	F		Υ	Paddock	
26/04/2001		N	F		Υ	Paddock	
26/04/2001		N	F		Υ	Paddock	
26/04/2001		N	М		Υ	Paddock	
26/04/2001		N	U			Paddock	
26/04/2001		N	U.			Paddock	
28/04/2001		N	U			Paddock	
28/04/2001		N	F		Υ	Paddock	
28/04/2001		Ν	U			Paddock	
28/04/2001		N	U			Paddock	
28/04/2001		Ν	U			Paddock	

Table 1: Tammar Spotlighting Data 26/12/00 - 27/6/01
\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag? Collar	Veg	Comments
28/04/2001		N	U			Paddock	
29/04/2001		N	U			Paddock	
29/04/2001		N	U			Paddock	
29/04/2001		N	U			Paddock	
05/05/2001		N	U			Paddock	
07/05/2001		N	Ų			Paddock	
07/05/2001		N	U			Paddock	
07/05/2001		N	F		Υ	Paddock	
07/05/2001		Ν	U			Paddock	
07/05/2001		Ν	U			Paddock	
21/05/2001		N	U			Front Paddock	
21/05/2001		N	U			Front Paddock	
21/05/2001		N	U			Front Paddock	
21/05/2001		Ν	U			Front Paddock	
22/05/2001		N	U			Paddock	
22/05/2001		Ν	U			Paddock	
22/05/2001		Ν	U			Paddock	
22/05/2001		Ν	U			Paddock	
26/05/2001		Ν	U			Paddock	
26/05/2001		Ν	U			Paddock	
26/05/2001		Ν	U			Paddock	
26/05/2001		Ν	U			Paddock	
26/05/2001		N	F		Υ	Paddock	Founder
26/05/2001		Ν	U			Paddock	
26/05/2001		N	F		Υ	Paddock	Founder
26/05/2001		N	U			Paddock	
26/05/2001		N	U			Paddock	
26/05/2001		Ν	U			Paddock	
26/05/2001		Ν	U			Paddock	
28/05/2001		N	F		Υ	Paddock	
28/05/2001		Ν	U			Paddock	
28/05/2001		Ν	F		Υ	Paddock	
28/05/2001		Ν	М		Υ	Paddock	
28/05/2001		Ν	U			Paddock	

Table 1: Tammar Spotlighting Data 26/12/00 - 27/6/01
\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag? Collar	Veg	Comments
28/05/2001		N	U			Paddock	
28/05/2001		N	U			Paddock	
28/05/2001		N	Ų			Paddock	
28/05/2001		Ν	U			Paddock	
28/05/2001		N	U			Paddock	

### KARAKAMIA SANCTUARY

27/12/01

Tammar Wallaby

Macropus eugenii

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& LAND MANAGEMENT
WESTERN AUSTRALIA

### Introduction

This six-monthly report forms part of an on-going monitoring protocol for Tammar Wallabies (*Macropus eugenii*) established between Karakamia Sanctuary and the Department of Conservation and Land Management on 13/8/98. The report is based upon spotlighting surveys only, and is an addendum to earlier reports (*Tammar Wallaby 7/12/98, 8/3/99, 20/6/99,10/2/99, 18/7/00, 21/12/00 and 27/6/01*)

### **Background Information**

Thirteen Tammar Wallabies were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area.

### Methods

All four radio-collars fitted to Tammars have now expired, and Tammars are now monitored through spotlighting surveys only. Tammars were spotlighted at least one night per fortnight during the period, and often more, particularly during scheduled tours when they were often seen on the paddock area. (NB: null observations are not shown in spotlighting data). Spotlighting concentrated on the paddock area because earlier work confirmed that Tammars regularly feed there. Data was entered onto data sheets that included:- Date, Time, ID, Sex, Age, Location, and Vegetation Community.

### Results and Discussion

One hundred records were made in total and all data is presented in Table 1. Almost all sightings of Tammar were made in the 'paddock' area (two sightings were made in Wandoo woodland and one along the central track on the walk trail). On the occasions when Tammars were seen there were often between 2 and 7 (av. 4.8) animals in close proximity.

Sexes were determined by reflective colour-coded ear tags on the founder animals. There were many more sightings of females (16) when compared to males (9). This may reflect the visibility of the two coloured ear tags, red tags being the more visible from long distances. A large number of sightings (75) were recorded as 'sex unknown', because no ear tags were sighted. Most, but not all, of these animals could be considered 'new' (ie 'untagged' recruits into the population). On some occasions, however, it may be that a tagged (founder) animal was sighted from a distance without the tag being distinguished.

There are records of founder Tammars breeding for the third year in succession at Karakamia. Three of this year's young were recorded (determined by their size). Spotlighting work will continue on at least a fortnightly basis and data will also be collected during guided tours.

It is now rare to do a spotlighting run and not see at least one or more Tammar Wallabies at Karakamia.

Table 1: Tammar Spotlighting Data 23/6/2001 - 28/12/2001
\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag? Collar	Veg	Comments
23/06/2001		N	U		Ν	Paddock	
23/06/2001		N	U	J	Ν	Paddock	This years young
23/06/2001		Ν	U		N	Paddock	
13/08/2001		N	U		N	Paddock	wet night
13/08/2001		N	U		N	Paddock	wet night
13/08/2001		Ν	U		N	Central track	wet night
13/08/2001		Ν	U		Ν	Paddock	wet night
13/08/2001		Ν	F		Ν	Paddock	umarked female with
13/08/2001		Ν	F		Υ	Paddock	wet night
13/08/2001		N	U		Ν	Paddock	wet night
13/08/2001		N	F		Υ	Paddock	wet night
13/08/2001		N	F		Υ	Paddock	wet night
31/08/2001		N	U		N	Front Paddock	
31/08/2001		Ν	U		Ν	Paddock	
09/09/2001		N	U		Ν	Paddock	
09/09/2001		Ν	М		Υ	Paddock	
09/09/2001		Ν	U		Ν	Paddock	
09/09/2001		Ν	U		Ν	Paddock	
09/09/2001		Ν	U		Ν	Paddock	
09/09/2001		Ν	F		Υ	Paddock	
09/09/2001		Ν	F		Υ	Paddock	
09/09/2001		Ν	F		Υ	Paddock	
09/09/2001		N	M		Υ	Paddock	
09/09/2001		Ν	F		Υ	Paddock	
09/09/2001		N	F		Υ	Paddock	
10/09/2001		Ν	U		Ν	Paddock	
10/09/2001		Ν	U		N	Paddock	
10/09/2001		Ν	M		Y	Paddock	
10/09/2001		Ν	U		N	Paddock	
10/09/2001		Ν	U		N	Paddock	
05/10/2001		N	U		Ν	Paddock	
05/10/2001		Ν	U		Ν	Paddock	
05/10/2001		Ν	U		Ν	Paddock	
05/10/2001		Ν	U		N	Paddock	

Table 1: Tammar Spotlighting Data 23/6/2001 - 28/12/2001

\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag? Collar	Veg	Comments
23/11/2001		Ν	U	А	N	Paddock	
23/11/2001		N	U	Α	N	Paddock	
24/11/2001		N	U	Α	N	Paddock	
24/11/2001		N	U	Α	Ν	Paddock	
24/11/2001		N	U	Α	Ν	Paddock	
24/11/2001		Ν	U	Α	Ν	Paddock	
24/11/2001		Ν	U	А	Ν	Wandoo	
24/11/2001		N	U	А	N	Paddock	
24/11/2001		Ν	U	Α	Ν	Paddock	
25/11/2001		Ν	U	J	Ν	Paddock	
25/11/2001		N	U	J	Ν	Paddock	
25/11/2001		N	U	Α	Ν	Paddock	
25/11/2001		N	F	Α	Ν	Paddock	
25/11/2001		Ν	U	Α	Ν	wandoo	
25/11/2001		Ν	M	Α	N	Paddock	
25/11/2001		N	F	Α	Ν	Paddock	
03/12/2001		N	F	Α	Ν	Paddock	
03/12/2001		N	F	Α	Ν	Paddock	
03/12/2001		Ν	М	Α	Ν	Paddock	
03/12/2001		N	U	Α	Ν	Paddock	
03/12/2001		Ν	U	Α	Ν	Paddock	
03/12/2001		Ν	U	Α	Ν	Paddock	
03/12/2001		Ν	U	Α	Ν	Paddock	
19/12/2001		Ν	U	Α	Ν	Paddock	
19/12/2001		Ν	U	Α	Ν	Paddock	
19/12/2001		N	U	Α	Ν	Paddock	
19/12/2001		N	U	А	Ν	Paddock	
19/12/2001		Ν	U	А	Ν	Paddock	
19/12/2001		Ν	F	А	Ν	Paddock	
19/12/2001		Ν	М	А	N	Paddock	
19/12/2001		Ν	U	Α	Ν	Paddock	
19/12/2001		Ν	F	Α	Ν	Paddock	

Table 1: Tammar Spotlighting Data 23/6/2001 - 28/12/2001
\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag? Collar	Veg	Comments
05/10/2001		N	U		Ν	Paddock	
07/10/2001		N	U		N	Paddock	
07/10/2001		N	U		N	Paddock	
07/10/2001		N	U		N	Paddock	
10/10/2001		N	U		N	Paddock	in SW corner
10/10/2001		Ν	U		N	Paddock	in SW corner
10/10/2001		Ν	U		N	Paddock	in SW corner
10/10/2001		Ν	U		N	Paddock	in SW corner
10/10/2001		N	U		Ν	Paddock	in SW corner
13/10/2001		N	U		N	Paddock	
13/10/2001		N	M		Υ	Paddock	
13/10/2001		Ν	U		N	Paddock	
14/10/2001		N	U		Ν	Paddock	
14/10/2001		N	M		Υ	Paddock	
19/10/2001		N	U		N	Paddock	in SW corner
19/10/2001		N	U		Ν	Paddock	in SW corner
20/10/2001		Ν	U		Ν	Paddock	along walk trail
20/10/2001		N	U		Ν	Paddock	along walk trail
20/10/2001		Ν	U		Ν	Paddock	along walk trail
20/10/2001		N	F		Υ	Paddock	under Acacia
20/10/2001		N	U		N	Paddock	under Acacia
20/10/2001		N	U		N	Paddock	under Acacia
24/10/2001		N	U		N	Paddock	
26/10/2001		N	U	Α	Ν	Paddock	
26/10/2001		Ν	M	Α	Ν	Paddock	
11/11/2001		N	U	Α	N	Paddock	near edge, very flight,
11/11/2001		N	U	A	N	Paddock	near edge, very flight,
21/11/2001		Ν	U	A	Ν	Paddock	
21/11/2001		N	U	Α .	Ν	Paddock	
21/11/2001		N	U	A	N	Paddock	
21/11/2001		N	U	A	Ν	Paddock	
21/11/2001		N	U	A	N	Paddock	
21/11/2001		N	U	A	Ν	Paddock	
23/11/2001		Ν	U	А	N	Paddock	

### KARAKAMIA SANCTUARY

24/06/02

### Tammar Wallaby

Macropus eugenii

#### Introduction

This six-monthly report forms part of an on-going monitoring protocol for Tammar Wallabies (*Macropus eugenii*) established between Karakamia Sanctuary and the Department of Conservation and Land Management on 13/8/98. The report is based upon spotlighting surveys only, and is an addendum to earlier reports (*Tammar Wallaby 7/12/98, 8/3/99, 20/6/99,10/2/99, 18/7/00, 21/12/00 ,27/6/01, and 27/12/01*).

### **Background Information**

Thirteen Tammar Wallabies were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in Spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area.

### Methods

All four radio-collars fitted to Tammars have now expired, and Tammars are now monitored through spotlighting surveys only. Tammars were spotlighted at least one night a month during spotlight tours when they were often seen on the paddock area. (NB: null observations are not shown in spotlighting data). Other data is collected opportunistically when staff are working at night around the sanctuary. Spotlighting concentrated on the paddock area because earlier work confirmed that Tammars regularly feed there. Data was entered onto data sheets that included:- Date, Time, ID, Sex, Age, Location, and Vegetation Community.

#### Results and Discussion

Sixty-five records were made in total and all data is presented in Table 1. Most sightings of Tammar were made in the 'paddock' area and one was recorded in the Wandoo, three along central track and a number recorded east of the 'causeway' including two within the Rosedale Block. On the occasions when Tammars were seen there were often between 2 and 10 (av. 4) animals in close proximity.

Sexes were determined by reflective colour-coded ear tags on the founder animals. There were 11 females and 7 males observed. A large number of sightings (48) were recorded as 'sex unknown', because no ear tags were sighted. Most, but not all, of these animals could be considered 'new' (ie 'untagged' recruits into the population). On some occasions, however, it may be that a tagged (founder) animal was sighted from a distance without the tag being distinguished (or the tag has fallen off.)

There are records of founder Tammars breeding for the third year in succession at Karakamia with sightings of small individuals. Spotlighting work will continue on at least a monthly basis.

It is now rare to do a spotlighting run and not see at least one or more Tammar Wallabies at Karakamia. Animals are still being seen with radiocollars but unfortunately with the difficulties in trapping Tammars, they are difficult to recover. Tammars are now spreading throughout the sanctuary with staff sightings in the Rosedale and Murtleford Block.

Table 1: Tammar Spotlighting Data 27/12/2001 - 06/05/2002

\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag?	Collar	Veg	Comments
27/12/2001		N	U	ل	N	Paddock		
27/12/2001		N	U	J	N	Paddock		
27/12/2001		Ν	М	Α	Ν	Paddock		
27/12/2001		Ν	U	j	Ν	Paddock		
02/01/2002	٠	N	U	Α	N	Paddock		
02/01/2002		N	U	Α	N	Paddock		
02/01/2002		N	U	Α	Ν	Paddock		
02/01/2002		Ν	U	Α	Ν	Paddock		
02/01/2002		N	U	Α	Ν	Paddock		
09/01/2002		N	U	Α	Ν	Paddock		
09/01/2002		N	U	Α	Ν	Paddock		
09/01/2002		N	U	Α	Ν	Paddock		
09/01/2002		N	U	Α	Ν	Paddock		
09/01/2002		Ν	U	Α	Ν	Paddock		
20/01/2002		Ν	U	Α	Ν	Paddock		
20/01/2002		Ν	U	Α	Ν	Paddock		
20/01/2002		N	U	Α	N	Paddock		
20/01/2002		Ν	U	Α	Ν	Paddock		
20/01/2002	ş	Ņ	F	Α	Ν	Paddock		
20/01/2002	•	N	F	Α	Ν	Paddock		
20/01/2002		Ν	U	Α	Ν	Paddock		
20/01/2002		N	U	Α	Ν	Paddock		
23/01/2002		N	M	Α	N	Paddock		
23/01/2002		N	М	Α	Ν	Paddock		
23/01/2002		N	F	Α	Ν	Paddock		
23/01/2002		N	U	Α	N	Paddock		
23/01/2002		N	F	А	Ν	Paddock		
23/01/2002		N	U	А	Ν	Paddock		
23/01/2002		N	U	А	Ν	Paddock		
19/02/2002		N	F	А	Ν	east side	of causeway	
19/02/2002		N	M	Α	Ν	east side	of causeway	
19/02/2002		Ν	U	J	Ν	east side	of causeway	
19/02/2002		N	U	Α	N	under ros	edale house	pergola
19/02/2002		Ν	U	Α	Ν	under ros	edale house	pergola

Table 1: Tammar Spotlighting Data 27/12/2001 - 06/05/2002

\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag? C	ollar	Veg	Comments
20/02/2002		N	U	Α	Ν	Paddock	:	
20/02/2002		N	U	Α	N	Wandoo		
20/02/2002		Ν	U	Α	Ν	Central tr	ack	
20/02/2002		N	U	Α	N	Paddock	:	
20/02/2002		N	F	Α	Ν	Paddock	(	
20/02/2002		N	F	Α	N	Paddock		
20/02/2002		Ν	F	Α	Ν	Paddock	;	
20/02/2002		N	F	Α	N	Paddock	;	
20/02/2002		N	U	Α	N	Paddock	(	
20/02/2002		N	U	Α	Ν	Paddock	(	
20/02/2002		Ν	F	Α	Ν	Paddock	(	
20/02/2002		Ν	М	Α	Ν	Paddock	(	
09/03/2002		N	F	Α	Ν	Tammar	Thickets	
09/03/2002		N	М	Α	Ν	Tammar	Thickets	
10/03/2002		N	U	Α	Ν	Tammar	Thickets	
10/03/2002		Ν	Μ	Α	N	Tammar	Thickets	
10/03/2002		N	F	Α	Ν	Tammar	Thickets	
19/03/2002		N	U	Α	Ν	Paddocl	<	
19/03/2002	,	Ņ	U	Α	Ν	Paddocl	<	
19/03/2002		Ν	U	Α	Ν	Paddoc	<	
25/04/2002		N	U	Α	Ν	Central 7	rack	Nat
26/04/2002		Ν	U	Α	Ν	Paddocl	<	
26/04/2002		Ν	U	Α	Ν	Central 7	rack	Nat
26/04/2002		N	U	Α	Ν	Paddocl	<	
26/04/2002		N	U	Α	Ν	Paddocl	<	
26/04/2002		Ν	U	Α	Ν	Paddocl	<	
26/04/2002		Ν	U	Α	N	Paddocl	<	
27/04/2002		N	U	Α	N	Paddoci	<	
27/04/2002		Ν	U	А	Ν	Paddocł	<	
27/04/2002		N	U	А	Ν	Paddocl	<	
27/04/2002		Ν	U	Α	Ν	Paddock	<	

### KARAKAMIA SANCTUARY

24/12/02

Tammar Wallaby Macropus eugenii

THE LIGHTLY
DEPARTMENT OF CONSERVATION
& LANG MAD TO VINT
WESTERN ALL FOREM

### Introduction

This six-monthly report forms part of an on-going monitoring protocol for Tammar Wallabies (*Macropus eugenii*) established between Karakamia Sanctuary and the Department of Conservation and Land Management (DCLM) on 13/8/98. The report is based upon spotlighting surveys only, and is an addendum to other six monthly reports commencing in 1998.

### **Background Information**

Thirteen Tammar Wallabies were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in Spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area. Radiocollars have now all expired.

### Methods

Tammars are now monitored through spotlighting surveys at least one night a month during spotlight surveys. (NB: null observations are not shown in spotlighting data). Other data is collected opportunistically when staff are working at night around the sanctuary. Most records are made in the open paddock areas because Tammars regularly feed there. Data was entered onto data sheets that included:- Date, Time, ID, Sex, Age, Location, and Vegetation Community.

### Results and Discussion

Fifty eight records were made in total and all data is presented in Table 1. Most sightings of Tammar were made in the 'paddock' area, 1 in the Rosedale Block and several in the Jarrah/Marri area. On the occasions when Tammars were seen there were often between 2 and 10 animals in close proximity.

Sexes were determined by reflective colour-coded ear tags on the founder animals. Two unmarked individuals were determined to be females due to an obvious pouch. There were 10 known females and 1 known male observed. A large number of sightings (47) were recorded as 'sex unknown', because ear tags were not sighted. Most, but not all, of these animals could be considered 'new' (ie 'untagged' recruits into the population). On some occasions, however, it may be that a tagged (founder) animal was sighted from a distance without the tag being distinguished (or the tag had fallen off.)

It is now exceedingly rare not to see Tammar Wallabies at Karakamia during spotlighting walks. Animals are still being seen with radio collars, but unfortunately with the difficulties in trapping Tammars (due to very high Woylie numbers), they are difficult to recover. There are records of founder Tammars breeding for the fourth year in succession at Karakamia with sightings of tagged females with young on successive years. Tammars are now spreading throughout the sanctuary with opportunistic sightings in the Rosedale and Murtleford Blocks. Spotlighting work will continue on at least a monthly basis.

Table 1: Tammar Spotlighting Data 06/05/2002 - 16/12/2002
\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag?Collar	Walk	Veg	Comments
23/06/2002		N	U	Α	N	Υ	Paddock	
23/06/2002		N	U	Α	N	Υ	Paddock	
23/06/2002		N	F	Α	Υ	Υ	Paddock	
23/06/2002		N	U	Α	N	Υ	Paddock	
23/06/2002		N	U	Α	N	Υ	Paddock	
23/06/2002		N	U	Α	N	Υ	Paddock	
23/06/2002		N	U	Α	Ν	Υ	Paddock	
23/06/2002		N	U	Α	N	Υ	Paddock	
27/06/2002		N	М	Α	Υ	Ν	Paddock	Roo shooting night
27/06/2002		Ν	U	Α	N	Ν	Paddock	Roo shooting night
27/06/2002		N	U	Α	N	N	Paddock	Roo shooting night
27/06/2002		N	U	Α	N	N	Paddock	Roo shooting night
27/06/2002		N	U	Α	N	Ν	Paddock	Roo shooting night
27/06/2002		N	U	Α	N	Ν	near office	Roo shooting night
27/06/2002		N	U	Α	N	Ν	Rosedale	Roo shooting night
27/06/2002		N	F	Α	Υ	Ν	Paddock	Roo shooting night
27/06/2002		N	U	Α	N	Ν	Paddock	Roo shooting night
27/06/2002		N	U	Α	N	Ν	Paddock	Roo shooting night
03/07/2002		N	U	Α	N	Υ	Paddock	
03/07/2002		N	U	Α	N	Υ	Paddock	
03/07/2002		N	U	Α	N	Υ	Paddock	
03/07/2002		N	F	Α	Υ	Υ	Paddock	MPY
03/07/2002		N	U	Α	N	Υ	Paddock	,
03/07/2002		N	U	Α	N	Υ	Paddock	
01/08/2002		N	U	Α	N	Υ	Paddock	
01/08/2002		N	F	Α	Υ	Υ	Paddock	
01/08/2002		N	U	Α	N	Υ	Paddock	

Table 1: Tammar Spotlighting Data 06/05/2002 - 16/12/2002

\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	e Tag?Collar	Walk	Veg	Comments
01/08/2002		N	U	Α	N	Υ	Paddock	
13/10/2002		N	U	Α	N	Υ	Paddock	
13/10/2002		N	U	Α	N	Υ	Paddock	
13/10/2002		N	U	Α	N	Υ	Paddock	
13/10/2002		N	U	Α	N	Υ	Paddock	
21/10/2002		N	U	Α	N	Υ	Jarrah/Marri	
21/10/2002		N	F	Α	N	Υ	Jarrah/Marri	Young at heel
09/11/2002		N	U	Α	N	Υ	Paddock	
09/11/2002		N	U	Α	N	Υ	Paddock	
09/11/2002		N	U	Α	N	Υ	Paddock	
15/11/2002		N	U	Α	N	Υ	Paddock	
15/11/2002		N	F	Α	Υ	Υ	Paddock	
15/11/2002		N	F	Α	Υ	Υ	Paddock	
15/11/2002		N	U	Α	N	Υ	Paddock	
15/11/2002		N	U	Α	N	Υ	Paddock	
15/11/2002		N	U	Α	N	Υ	Paddock	
15/11/2002		N	U	Α	N	Υ	Paddock	
22/11/2002		Ν	U	Α	N	Υ	Jarrah	
22/11/2002		Ν	U	Α	N	Υ	Jarrah	•
22/11/2002		N	U	Α	Ν	Υ	Paddock	
22/11/2002		N	F	A	N	Υ	Paddock	young at heel
22/11/2002		N	U	А	N	Υ	Paddock	
28/11/2002		N	U	A	N	Ν	Paddock	late walk around
28/11/2002		N	U	Α	N	N	Paddock	late walk around
28/11/2002		N	U	Α	N	Ν	Paddock	late walk around
28/11/2002		Ν	U	Α	N	Ν	Paddock	late walk around
28/11/2002		Ν	U	Α	N	N	Paddock	late walk around

J. ...

Table 1: Tammar Spotlighting Data 06/05/2002 - 16/12/2002
\* Sorted by Date

DATE	<u>ID</u>	Time	Sex	Age	Tag?Collar	Walk	Veg	Comments
28/11/2002		Ν	F	Α	Υ	N	Paddock	late walk around
28/11/2002		N	F	Α	Υ	N	Paddock	late walk around
28/11/2002		N	U	J	N	N	Paddock	late walk around
28/11/2002		N	U	J	N	N	Paddock	late walk around

### KARAKAMIA SANCTUARY

**Dec 2003** 

## **Tammar Wallaby**

Macropus eugenii

### Introduction

This report forms part of an on-going monitoring protocol for Tammar Wallabies (*Macropus eugenii*) established between Australian Wildlife Conservancy (AWC) and the Department of Conservation and Land Management (DCLM) on 13/8/98. The report is based upon spotlighting surveys only, and is an addendum to other six monthly reports commencing in 1998.

### **Background Information**

Thirteen Tammar Wallabies were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in Spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area. Radio-collars have now expired.

### Methods

Tammars are monitored during spotlight surveys conducted on a monthly basis along two separate transects. The first transect (bushland) incorporates jarrah uplands, marri woodlands, heathland and wandoo woodland. The second transect incorporates a permanent creekline where Tammars are only rarely recorded. Other records are collected opportunistically when staff are working at night. Most records are made in the open paddock areas. Data is entered onto data sheets that included: Date, Time, ID, Sex, Age, Location, and Vegetation Community.

#### **Results and Discussion**

**Table 1 - Tammar Observations** 

WT – Walk trail transect, ST – Stream Transect, O - Opportunistic

Date	No	Weather	Comments	Transect
18/06/03	0	Fine & very Cold		ST
26/08/03	0	Fine & Cold		ST
5/09/03	8	Fine & Mild		WT
16/09/03	0		Only Ringtails	О
17/09/03	7	Fine & Mild	one with PY	WT
30/09/03	0	Cloudy, light rain earlier		ST
16/10/03	0		Only Ringtails	О

27/10/03	0		Only Ringtails	0
28/10/03	9	Fine, Cloudy & Cool	1 young at heel	WT
29/10/03	3		3 blue tags, one very	О
			battered, fur missing	
30/10/03	0	Fine, Cloudy & Cool		ST
20/11/03	0			ST
2/12/03	7	Fine and Clear	1 red ear tag	WT
11/12/03	0	Fine & Mild	Stream	O
11/12/03	6	Fine & Mild	Rosedale paddock, just	О
			slashed	

During this period there was 5 stream transects (ST), 4 walk trail transects (WT) and 6 opportunistic counts (though 3 of these noted only Ringtails and 1 only Tammars.) As seen in Table 1, forty Tammar sightings were recorded. Most sightings of Tammar were made in the open areas near the Visitors Center. Breeding was recorded on two occasions, most sightings did not record an ear tag. An original male founder was noted in poor condition with fur missing (29/10/03).

It is now very common to see Tammar Wallabies at Karakamia during surveys of the bushland transect. They are not, however, often recorded during the creekline transect. This is not surprising as it is not their preferred habitat at Karakamia. Occasionally animals are seen with radio-collars. However, with the difficulties of trapping Tammars (due to very high Woylie numbers), collars are difficult to recover. Tammars have spread throughout the sanctuary with opportunistic sightings over an extensive area. Spotlighting work will continue on at least a monthly basis.

### KARAKAMIA SANCTUARY

Conservation Library Dept. of Environment and Conservation Kensington, W.A.

Dec 2004

Tammar Wallaby Macropus eugenii

### Introduction

This report forms part of an on-going monitoring protocol for Tammar Wallabies (*Macropus eugenii*) established between Australian Wildlife Conservancy (AWC) and the Department of Conservation and Land Management (CALM) on 13/8/98. The report is based upon spotlighting surveys only, and is an addendum to other six monthly reports commencing in 1998.

### **Background Information**

Thirteen Tammar Wallabies were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in Spring 1998 under an agreed protocol. The animals consisted of 6 females and 7 males of various ages. Four adult animals (2 males and 2 females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area. Radio-collars expired in 1999.

### Methods

Tammars are monitored during spotlight surveys conducted on a monthly basis along two separate transects. The first transect (Walk trail) incorporates jarrah uplands, marri woodlands, heathland and wandoo woodland. The second transect (Creek line) incorporates a permanent creek line where Tammars are only rarely recorded. Other records are collected opportunistically when staff are working at night. Most records are made in the open paddock areas. Data is entered onto data sheets that included: Date, Time, ID, Sex, Age, Location, and Vegetation Community.

### **Results and Discussion**

Table 1: Tammar Sightings

Walk trail	Date	No	Weather
Transect	23/7	3	Fine & Cold
	18/9	7	
	22/9	7	Cool
	4/10	25	Fine
	8/12	5	Hot & Still
	13/12	8	Hot, Humid but clear

Creekline	Date	No	Weather
Transect	10/8	0	
	14/9	0	Fine & Cold
	9/10	0	Cloudy, light drizzle
	14/12	0	Hot & Humid after Thunderstorm

During this period there were 4 Creek line transects and 6 Walk trail transects undertaken. As seen in Table 1, fifty-five Tammar sightings were recorded, although none during the monthly Creekline

transects. (This is not unusual as their preferred habitat at Karakamia is more open areas.) Most sightings were made during 1 night (4/10) when 25 were observed during an evening walk on the paddock.

Most sightings of Tammar were made in the open areas in the vicinity of the Visitors Centre. Breeding has been noted, with a large number of recently independent young seen in the paddock. Tammars have spread throughout the sanctuary with opportunistic sightings over an extensive area (data not included here). Spotlighting work will continue on at least a monthly basis.

Conservation Library
Dept. of Environment
and Conservation
Kensington, W.A.

### KARAKAMIA SANCTUARY

June 2005

## Tammar Wallaby Macropus eugenii

#### Introduction

This report forms part of an on-going monitoring protocol for Tammar Wallabies (*Macropus eugenii*) established between Australian Wildlife Conservancy (AWC) and the Department of Conservation and Land Management (CALM) on 13/8/98. The report is based upon spotlighting surveys only, and is an addendum to other six monthly reports commencing in 1998.

**Background Information** 

Thirteen Tammar Wallabies were translocated to Karakamia Sanctuary from Tutanning Nature Reserve in Spring 1998 under an agreed protocol. The animals consisted of six females and seven males of various ages. Four adult animals (two males and two females) were fitted with radio-collars, and all animals were fitted with reflective ear tags to enable identification whilst spotlighting (females red and males blue). Tammars were released into Karakamia on the night of 12/11/98 in dense thickets of Dryandra and Hakea, and in close proximity to an open paddock area. Radio-collars expired in 1999.

### Methods

Tammars are monitored during spotlight surveys. The methodology has been modified to include three consecutive nights every three months instead of one night every month as part of an overall monitoring strategy and involves recording numbers of all vertebrates observed along two transects. The first transect (Walk trail) incorporates jarrah uplands, marri woodlands, heathland and wandoo woodland. The second transect (Creek line) incorporates a permanent creek line where Tammars are only rarely recorded. Other records are collected opportunistically when staff are working at night. Most records are made in the open paddock areas. Data is entered onto data sheets that included: Date, Time, ID, Sex, Age, Location, and Vegetation Community.

#### Results and Discussion

Table 1: Tammar Sightings

Creekline	Date	Number	Comments
Transect	20/1	0	323.1
	24/1	0	
	25/5	0	
	26/5	0	
	27/5	0	

Walk-trail	Date	Number	
Transect	14/1	7	
	14/5	4	- 1 II
	25/5	4	11/2

Opportunistic Sightings	31/5	13	Main driveway to visitors centre
	9/6	13	4 with Pouch Young, wet windy night

During this period there were five Creek line transects and three Walk trail transects undertaken and two opportunistic recordings. As seen in Table 1, forty one Tammar sightings were recorded, although none during the monthly Creekline transects. (This is not unusual as their preferred habitat at Karakamia is more open areas.) Staff have observed large numbers of tammars in the front paddock and visitors centre paddock in recent months including many females with large pouch young.