Phil

THREATENED SPECIES NETWORK COMMUNITY GRANTS

ANNUAL REPORT

PROJECT: WA04/100

# CONSERVING PILBARA OLIVE PYTHONS ON THE BURRUP


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## INTRODUCTION

This project investigates aspects of the ecology and conservation status of the Pilbara Olive Python on the Burrup Peninsula in Western Australia. The project was funded under the third round of Threatened Species Network Community Grants program. This report outlines the results of the project from its commencement to the end of 2001. As the project is ongoing, a final report will be prepared at the end of 2002.

The work outlined in this report has been conducted by members of the Nickol Bay Naturalists' Club, who are predominantly residents of the towns of Dampier and Karratha. The project has been very successful with five olive pythons implanted with transmitters and radio-tracked in the Pistol Ranges section of the Burrup Peninsula (Figure 1). This project has provided the first comprehensive data on the ecology of this threatened python in the western Pilbara, particularly in the dissected habitat typical on the Burrup Peninsula. In addition, members have elevated local knowledge of the species markedly with several radio interviews, a television segment, a school competition and a school visit to the site. Not all the objectives listed below have been met to date, however by the end of the project in 2002, our knowledge of the python should be greatly improved and some positive conservation actions undertaken.

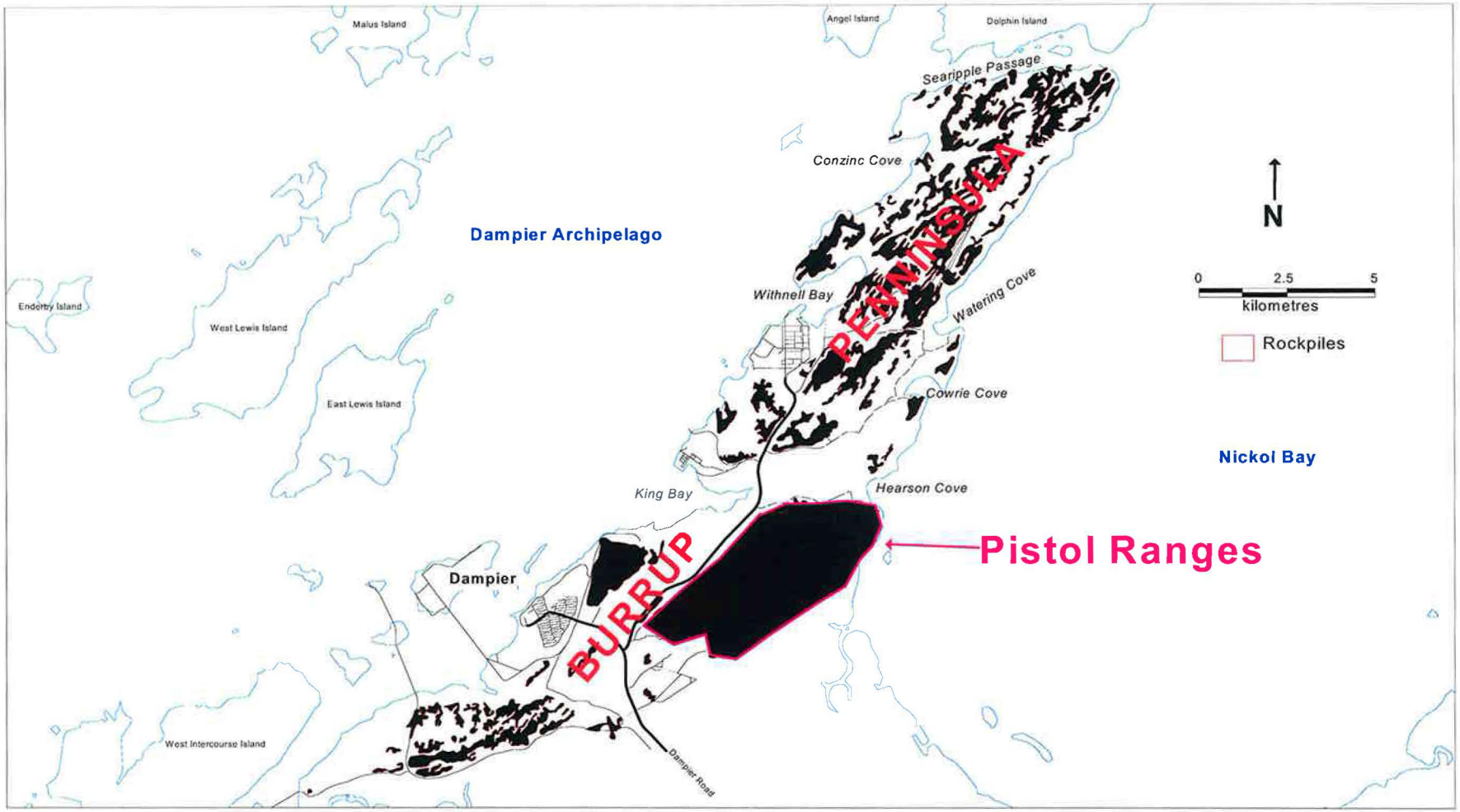


Figure 1 Map of the Burrup Peninsula showing the location of the Pistol Ranges.

### *Project objectives*

The project was undertaken to address the following objectives:

a) Identify critical Pilbara Olive Python habitat on the Burrup Peninsula, particularly significant rockholes;

b) Erect effective road signage to reduce road mortalities;

c) Educate the local community and industry about the species and other Burrup wildlife;

d) Involve school students in a local conservation issue;

e) Provide information for a recovery plan for the Pilbara Olive Python;

f) Collect data on other threatened or restricted species on the Burrup (e.g. Rothschild's Rock-wallaby); and

g) Confirm whether the Pilbara Olive Python occurs on nearby islands in the Dampier Archipelago (there is a suspected sighting from Dolphin Island).

### *Background*

The Pilbara Olive Python, *Morelia olivacea barroni* (also listed under the genus *Liasis*) is a large python endemic to the Pilbara region of Western Australia. It was originally described by Laurie Smith of the Western Australian Museum on the basis of just eight specimens collected over a period of about 100 years (Smith 1981). However, its presence in the Pilbara has been long recognized and it is typically described as a "rock python". Whitlock (1923) reported coming face to face with a submerged rock python in the Hamersley Ranges in 1922.

*Morelia olivacea barroni* is a threatened species listed under the auspices of State and Federal legislation as follows:

"Vulnerable" Environment Protection and Biodiversity Act (1999); and

"Fauna that is rare or likely to become extinct" Schedule 1 of the WA Wildlife Conservation Act (1950).

It was listed in the Reptile Action Plan (Cogger *et al.* 1993) as "rare and insufficiently known".

Pilbara Olive Pythons are reputed to grow as long as 6.5 m in length (Shine 1991), but most adults are in the range of 3 - 4 m in length (D. Pearson, CALM, unpublished data). They are probably the largest snake to occur in Western Australia. Little is known about the ecology or the conservation status of the species. It appears to prefer rocky habitats usually in close proximity to water and feeds on vertebrates (Pearson 1993, Barker and Barker 1994).

The Burrup Peninsula is an area of immense scenic beauty combined with considerable biological and cultural richness. The Peninsula is formed by the massive outcropping of a dark volcanic rock, granophyre, which weathers along regular joints resulting in a bizarre landscape of jumbled rock piles interspersed with small creeklines and rocky spinifex flats. While this rock type is widespread in the Pilbara, nowhere is it as extensive in a coastal environment as on the Burrup Peninsula. Thousands of Aboriginal

petroglyphs festoon the rocks, which are home to several threatened species including olive pythons.

## PROJECT OUTCOMES

### *Radio-tracking of pythons on the Burrup*

A radio-tracking program of Pilbara Olive Pythons was commenced to answer several of the objectives outlined above, particularly the identification of critical habitat and to provide information on the ecology of the species for any future management plans. The radio-telemetry work was based in the Pistol Ranges (Figure 1) due to their closeness to the towns of Karratha and Dampier and the ease of access for volunteers (four-wheel drive usually not required). This environment is challenging for radio-telemetry as the rockpiles shield radio-signals and the rugged topography often makes it difficult and arduous to physically locate pythons.

Olive pythons were captured opportunistically by members of the Naturalists' Club or by Department of Conservation and Land Management (CALM) staff while head-torching or tracking other pythons. All captured pythons were measured (length, weight and head dimensions) and marked by removing half a ventral scale in a pre-determined pattern. The removal of a ventral scale has no long term effect on pythons and has been successfully used to mark over 750 carpet pythons (Pearson *et al.* 2002).

Those pythons to be implanted with transmitters were anaesthetized and implanted with a Holohil® transmitter through a small lateral incision about 20 cm anterior to the vent. The transmitter and the aerial were both inserted in the body cavity to ensure that it did not act as a potential site of infection. Large pythons were fitted with a SI-2T transmitter with an approximate battery life of 24 months. Smaller pythons were fitted with a SI-2Ts transmitter with a smaller battery and an emitting life of 18 months.

A total of five pythons were implanted with transmitters and their details are outlined below with photos of the snakes. Accurate home range sizes will be determined at the end of the study. An aerial photograph of a segment of the Burrup Peninsula – Pistol Ranges is also shown for each python with the sites where it has been located. The location captions on the photograph take the form of Python id number, followed by month and then day. For example, "B10415" indicates Python B1 on April 15th. The letter "C" instead of a "B" indicates the original capture site of the python.

***Abbey*** *(B1: scale clip # 23)*

Juvenile female; total length 2 638 mm; snout-vent length 2 280 mm; weight 2.5 kg. Captured at 1920 hr on 13/08/2000 in the Pistol Ranges. Implanted with a Holohil SI-2Ts transmitter (150.929 MHz) on 14/08/2000 and released at point of capture on 15/8/2000. Battery life of 18 months.

Abbey (Figure 2) was originally found close to a large rock-pool and over the subsequent months of tracking was always located in vast granophyre outcrops (Figure 3). She was located on just seven occasions and observed

just once (15/04/2001) when she was stretched out moving very slowly through a rock-pile. After this date, her signal was not heard again and despite extensive searches she was not relocated. This probably indicates that the transmitter failed prematurely although it is possible she moved beyond the range of our sweeps. Her transmitter had a weak signal and we had to be quite close to get any signal.

Figure 2 Abbey travelling over rockpile on 15/04/2001.

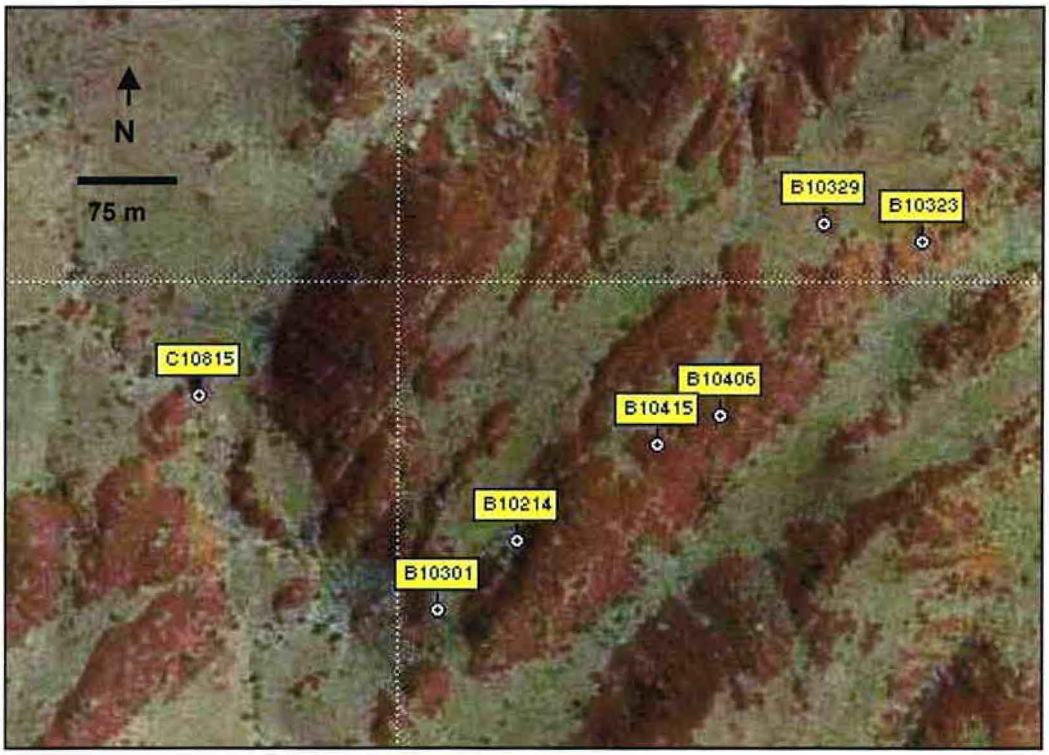


Figure 3 Plot of Abbey's movements from capture on 13/08/00 to 15/04/01.

***Olivia*** *(B2: scale clip # 25)*

Juvenile female; total length 2 857 mm; snout-vent length 2 485 mm; weight 2.7 kg. Captured at 2040 r on 09/01/2001 in a gorge near Hearson Cove. Implanted with a Holohil SI-2Ts transmitter (150. 689 MHz) on 09/01/2001 and released on 10/01/2001. Battery life of 18 months.

This python was captured at a seepage close to one of the most popular rock-art sites in the Hearson Cove area. She was located on 33 occasions up to the end of 2001 (Figure 4). On most occasions, she was sheltering in rock-piles but on January 25 and February 8, 2001 she was located at night in ambush positions alongside a euro pad (Figure 5). On other occasions,

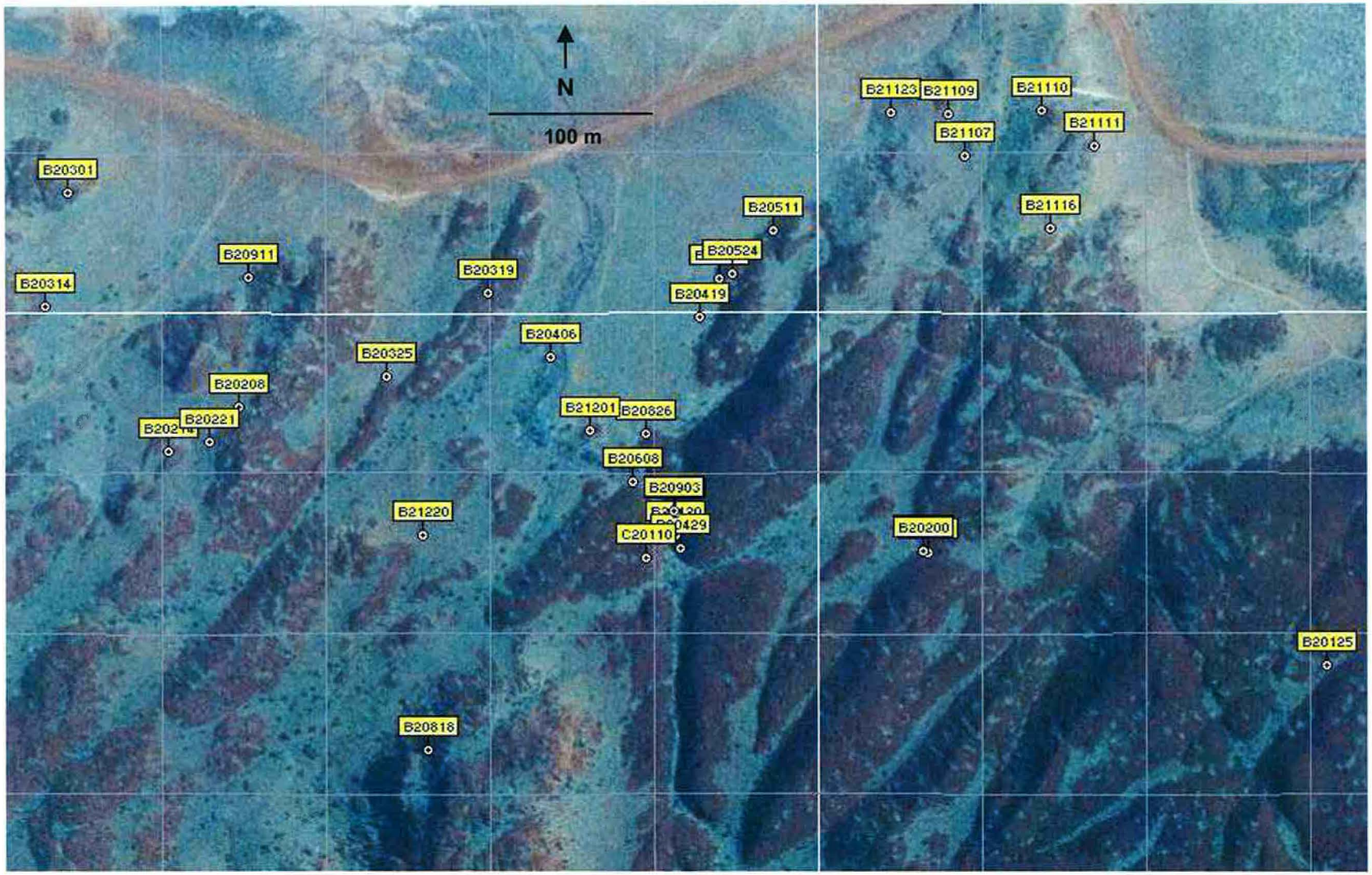


Figure 4 Plot of Olivia'a movements from capture on 09/01/01 to 20/12/01.

particularly in the warmer months, she was observed stretched out and was probably in the process of moving from one rock-pile to another.

Figure 5 Olivia in ambush mode on a euro pad and moving through the understorey adjacent to a rockpile.

***Pilia*** *(B3: scale clip # 28)*

Adult female; total length 3 610 mm; snout-vent length 3 200 mm; weight 5 kg. Thin condition, may have bred in the previous summer. Captured at 2030 hr on 11/02/2001 near a rockhole in the Pistol Ranges. Implanted with a Holohil SI-2T (150.469) on 13/2/2001 and released on 14/2/2001. Battery life of 24 months.

This python was located on 42 occasions before she was found dead on 12 December 2001 (Figure 6). The cause of death was not determined, however, her thin condition and the extremely dry conditions which persisted on the Burrup Peninsula during 2001 may have contributed to severe nutritional stress. Pilia was found most often in extensive granophyre outcrops and less often along the small creeklines that dissect these outcrops (Figure 7).

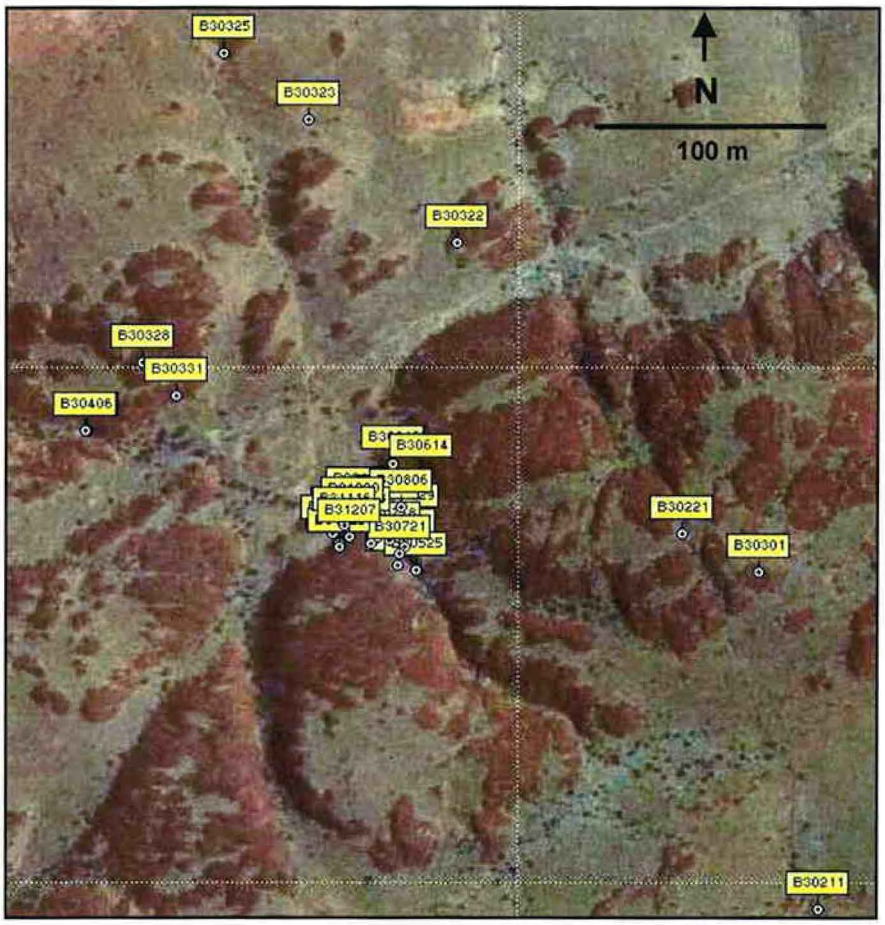


Figure 6 Plot of Pilia's movements from capture on 11/02/01 to 12/12/01.

Pilia was observed in ambush positions on three occasions. Interestingly, when located in late June and early July, Michael Tutt and Mary White (personal communication) noted that she was emitting a strong odour. The

mechanism by which olive pythons find each other for mating purposes is not known, but in other pythons it is known that the female lays a pheromone trail to attract males. Given that the breeding season of Pilbara Olive Pythons is in winter (based on observations at Millstream, D. Pearson, CALM, unpublished data) the smell detected by the Naturalists' Club volunteers could have been related to the production of these pheromones.

Figure 7 Pilia out foraging and resting in ambush mode on large granophyre rock.

***Gypsy*** *(B4: scale clip # 29)*

Adult female; total length 3 425 mm; snout-vent length 2 990 mm; weight 5.65 kg. Captured at 2100 hr on 29/03/2001 near Hearson Cove and flown to Perth. Implanted with Holohil SI-2T (150.108 MHz) on 01/04/2001 and flown back to Karratha. Released on 02/04/2001. Battery life of 24 months.

As with the other five pythons, Gypsy was mostly located within the huge boulder piles that typify the Burrup Peninsula and mostly could not be directly observed. The 11 occasions when she was observed were during spring and summer months. Twice she was seen in ambush positions. When located on 7 December 2001, her stomach was extremely distended indicating she had just consumed a large meal, probably a juvenile euro (Figure 8). Her behaviour was extremely defensive, with repeated striking at the Naturalist's Club volunteers. By December 20 the stomach bulge had disappeared. During the course of the 2001 tracking program Gypsy was located on 28 occasions (Figure 9).

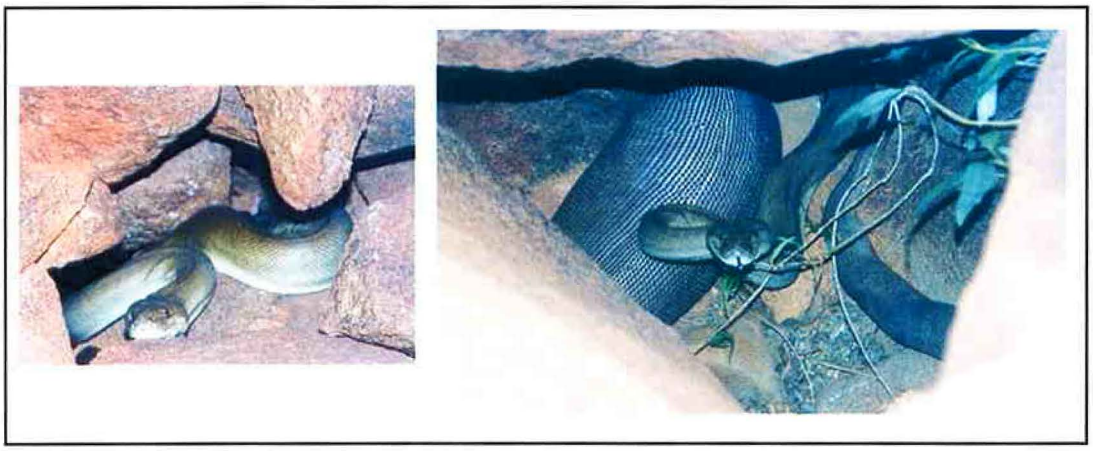

Figure 8 Gypsy with and without distended stomach.

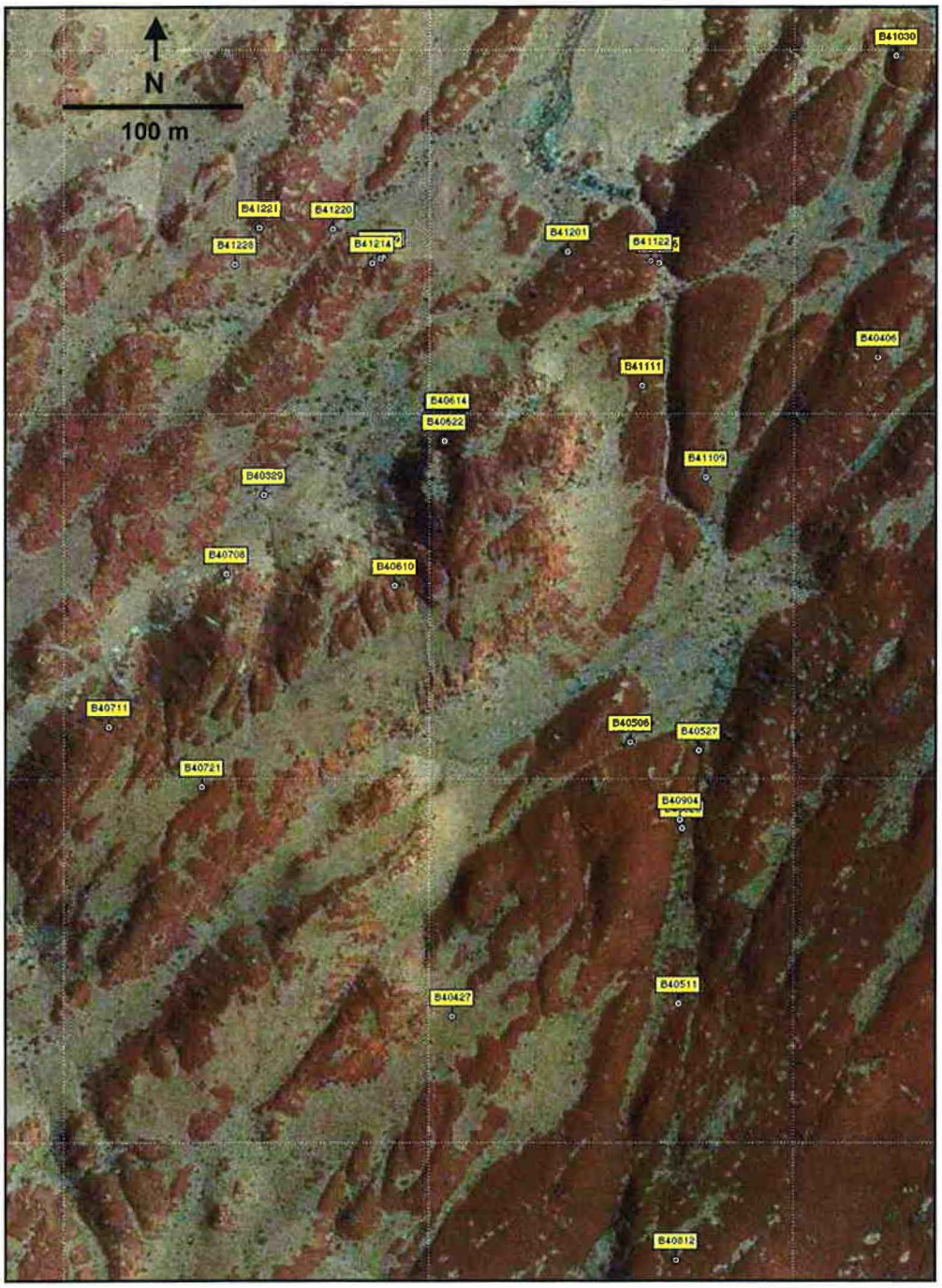


Figure 9 Plot of Gypsy's movements from capture on 01/04/01 to 26/12/01.

***Oliver*** *(B5: scale clip # 30)*

Adult male; total length 3 800 mm; snout-vent length 3 360 mm; weight 11.3 kg. Captured at 1945 hr on 25/05/2001 in the Pistol Ranges and flown to Perth. Implanted with Holohil SI-2T (150.589) on 05/06/2001, flown back and released on 06/06/2001.

This python was captured 2 m away from the adult female "Pilia" on 25/05/2001 and was probably involved in courting behaviour. After release, he returned to Pilia and was located with her under rocks on 8 June. Oliver remained at this site for the next six weeks and then moved away. He was found moving on most occasions when located in June and July (mate searching?) (Figure 10). However, he was lost after 26 July and not relocated again until January 2002, about 4 km away. It seems likely that when first captured, he had moved well outside his normal home range to search for females, so no signal could be picked up once he returned to his own home range after the breeding season. Oliver was the largest python located and subsequently tracked during the 2001 program (Figure 11).

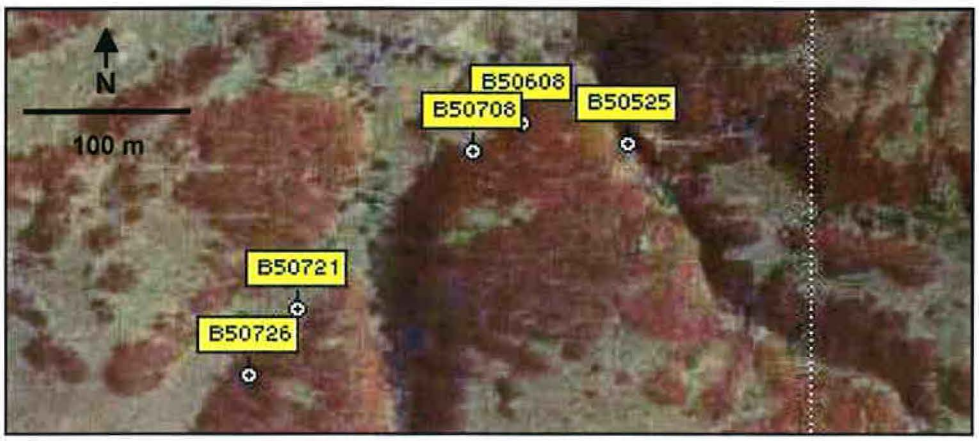


Figure 9 Plot of Oliver's movements from capture on 25/05/01 to 26/07/01.

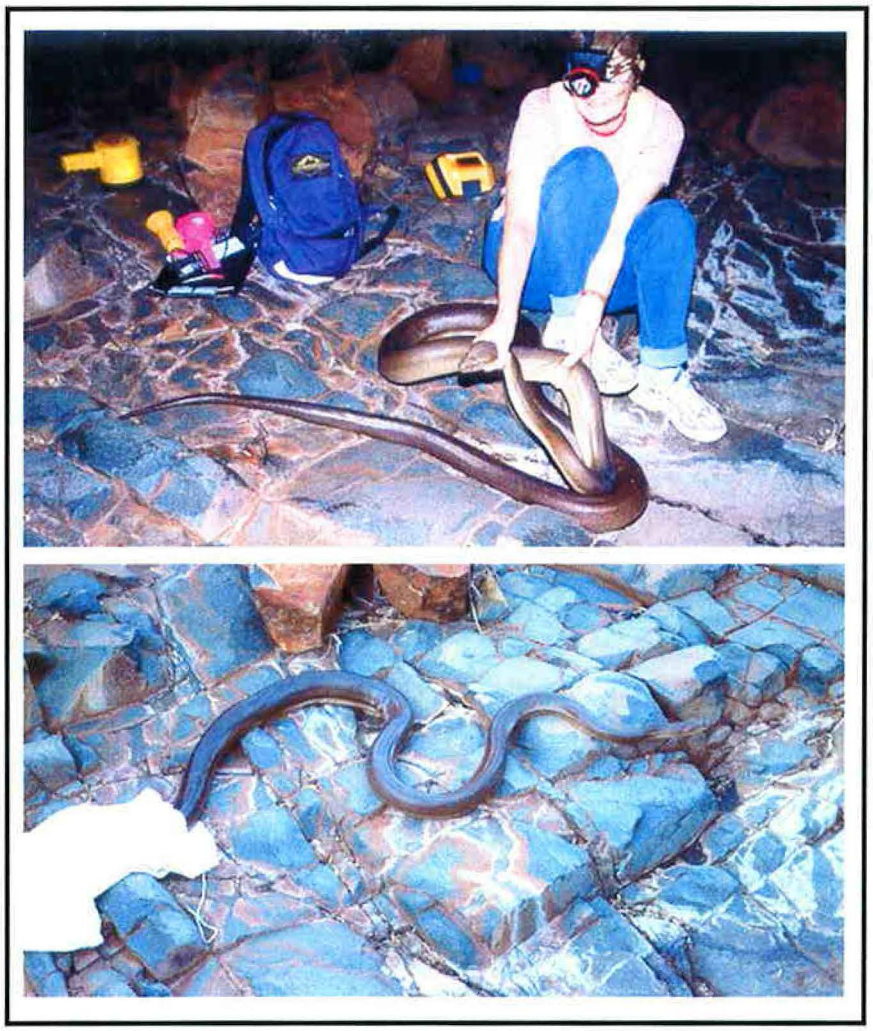

Figure 10 Oliver at time of capture and upon release.

Several other olive pythons were encountered when radio-tracking the five larger pythons but these other snakes were not implanted due to their size or their location. Where possible measurements were taken of these pythons and these are listed below:

1) Scale clip # 26: Small juvenile female (total length 1 212 mm; snout-vent length 1 042 mm; weight 140 g). Captured on 13/01/2001 and released the following day after measurements and marking.

2) Scale clip # 31: Juvenile female (total length 2 131 mm; snout-vent length 1 845 mm; weight 1 350 g). Captured on 21/07/2001 and released the following day after measuring and marking.

Figure 11 Portrait of a juvenile female captured on 21/07/2001.

3) Not marked. Unsexed (total length 1 780 mm; weight 1.66 kg). Captured on 11/05/2001 in rocky creekbed with pools, released immediately after measurement.

Figure 12 Portrait of a juvenile olive python captured on 11/05/2001.

4) Not marked. Unsexed neonate (total length < 1 000 mm; weight 240 g). Captured on rocky valley floor, released immediately after measurement.

Figure 12 Portrait of a neonate olive python.

In summary, radio-tracking work to date has indicated that Pilbara Olive Pythons on the Burrup Peninsula shelter almost exclusively in granophyre rock-piles, but are occasionally found in neighbouring spinifex grasslands, especially when attempting to capture pre item through ambush. They may move vast distances and have large home ranges. Reproductive females probably discharge a pheromone to attract males during the mating season, which is tentatively from May to July. Our one adult male travelled ae enormous vast distance from his normal home range (approx. 4 km) to locate a reproductive female. We observed only one feeding event, with a large adult female eating a juvenile euro.

One of the most encouraging aspects of the radio-telemetry study has been the number of people that have ventured out in the evening to radio-track pythons. This has included Nickol Bay Naturalists' Club members, their family and friends, visiting relatives and friends, herpetologists from Perth and overseas and many other interested members of the general public. This has provided a fabulous opportunity for people to see the pythons, locate and learn about these cryptic animals in an "exciting" way and experience a walk on the Burrup Peninsula by night.

***Involvement of local schools in python conservation***

The five pythons captured in the Pistol Ranges were initially labelled with the unimaginative tags of B1 through to B5, or they were known by the

transmitter frequencies. As a means to stimulate local interest from school children in the project, the teaching staff at Dampier Primary, in particular Sue Mitchell, ran a competition to find suitable names for the five pythons. Sue is very familiar with the pythons on an individual basis since she is frequently involved in radio-tracking excursions.

Using the Dampier Primary school's Education Department website (http://www.dampier.wa.edu.au/yr4/olivepythons.html), Sue posted a competition (see Appendix 1) and primary school students were encouraged to enter with the chance of winning two copies of Rick Shine's book "Australian Snakes" (donated by the author) or other books about snakes by Steve Parish.

For background knowledge, the students read fact sheets prepared by David Pearson and researched various web pages on the Internet. This research included the excellent web site established by Michael Tutt (http://www.starwon.com.au/~mlt/pythons/pythons.html) which containing photographs of the reptiles to be named. Year 1 and 2 children worked with older buddies to receive the same information at their level of understanding. The keen interest of the students' excited parents and several family groups arranged to go tracking with Naturalist's Club volunteers as a result. At the conclusion of the Naming Competition, a shortlist was distributed to Project Leaders and after considerable discussion and debate, four names were agreed upon: Abbey (B1), Olivia (B2), Pilia (B3) and Oliver Lightning (B5). Gypsy (B4) retained the nickname given to her by Naturalist's Club

volunteers, as it was so appropriate for her behaviour. Philip Brace, Treasurer of the Nickol Bay Naturalists' Club, presented the winners of the competition with their book prizes at a special school assembly, in November, 2001.

Several classes extended their study of the pythons producing story maps, life cycle flow charts, poetry and art work. Michael Tutt kindly donated his personal photo collection for display, as well as various items of interest, including sloughed skin and snake handling implements. He spoke to senior students on an overnight camp on the Burrup Peninsula, outlining the objectives of the project and demonstrating the use of the tracking equipment. The next day students were able to inspect the rockhole used by Olivia (B2) the night before, containing several examples of uric acid and according to the children, still permeating her strong 'musky' odour.

Two classes of children attended David Pearson's P.O.P. (Pilbara Olive Python) slide show and thoroughly enjoyed his particularly entertaining serpent mimes and characterisations. The book prize-winners were able to thank David in person and this event was reported in the Dampier Despatch (Appendix 2) and North West Telegraph (Appendix 3). The P.O.P. section on the Year 4 web page has taken on a life of its own and is now a mixed bag of facts, digital images and emotional responses from both teacher and children. (See Appendix 1 for a hard copy of the entire web page).

### *Media reporting of the project*

There has been considerable interest in the Pilbara Olive Python and the project locally, nationally and from overseas. ABC local radio (ABC North West - 6KP) conducted two interviews with project participants. In addition, Kate Seiper from 6KP accompanied by an ABC TV crew (Figure 14), filmed members on a regular radio-tracking excursion for the television program "Radio Pictures" on April 19 2001. The segment of Radio Picture featuring the Olive Pythons was screened in August and September 2001.

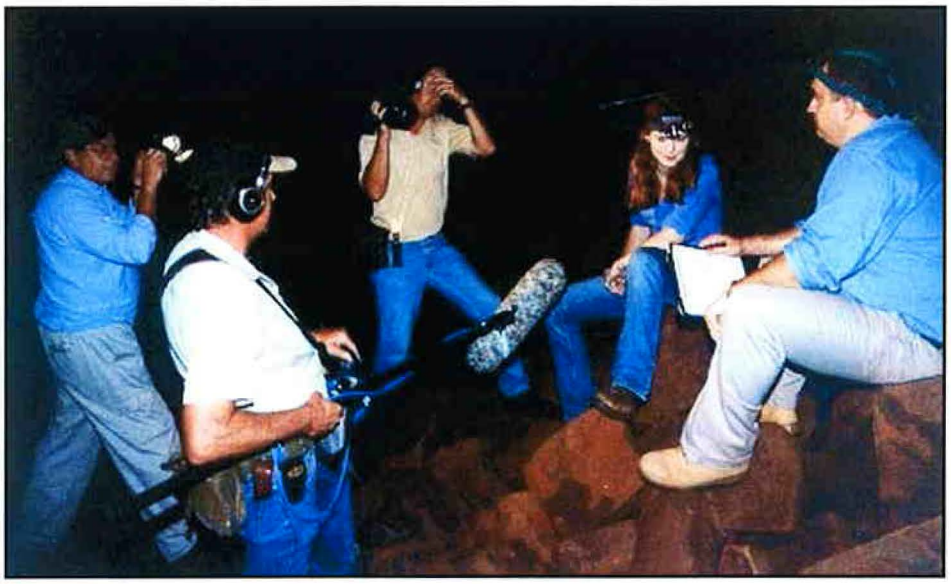

Figure 14 Jason Brennan from the Nickol Bay Naturalists' Club being interviewed by Kate Seiper from ABC radio during the production of a Radio Picture segment.

As mentioned earlier, a newspaper article appeared in the North-west Telegraph on 21 November describing the python naming competition run by Dampier Primary School and showing the prize winners. An article on the project, with a colour photograph, also appeared in The West Australian newspaper (Appendix 4). A short article and photo about the project was

also published in the National Heritage Trust's journal "Natural Heritage" (No. 11) under the banner "Tracking secretive six-metre snakes in WA" (Appendix 5).

A German film crew from VOX TV and sponsored in part by the Western Australia Tourism Commission, filmed a half-hour documentary in November 2001 on Pilbara Olive Pythons for the program "Teirzit". It featured footage of Naturalists' Club members radio-tracking pythons on the Burrup Peninsula by day and night and discussing the home ranges of the snakes while examining locations on the computer. The documentary was shown to an estimated German audience of 1.5 million people in Germany in January 2001. In the course of filming, a visit was made to Roebourne Primary School to obtain footage of the local school children reading from a book they had illustrated titled "Olive Python Dreaming".

***Searches for Pilbara Olive Pythons in the Dampier Archipelago***

A report of Pilbara Olive Pythons occurring on Dolphin Island to the north of the Burrup Peninsula was investigated by David Pearson in July 2001. Two nights were spent on the Island head-torching for pythons but no animals nor any signs (sloughed skin or droppings) were recorded. Further survey of this Island and Malus Island are proposed during 2002.

### *Use of data collected during radio-telemetry*

Some of the basic ecology of the pythons determined through the radio-tracking work on the Burrup Peninsula, was used by David Pearson while preparing reports on the likely presence of Pilbara Olive Pythons on proposed petrochemical plant sites in the King Bay tidal flat area on the Burrup Peninsula. Management actions to limit free water thereby reducing the attractiveness of proposed plant site to pythons and/or their prey were suggested as appropriate management strategies to limit interactions between pythons and personnel working on such projects. In addition, recommendations were made to reduce the likelihood of python mortality as a consequence of road crossing and vehicle interactions.

* * * *

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# Appendix 1

## Dampier Primary School's Pilbara Olive Python Web pages

## ~ Pilbara Olive Pythons ~

Photo courtesy of Michael Tutt

These beautiful snakes live only in the Pilbara region of Western Australia. They are very shy and rarely seen. POPs (Pilbara Olive Pythons) can grow up to 6.5 metres long but most adults only grow to around 3 or 4 metres. In the sun their olive green scales can reflect the sunlight at different angles, causing a "rainbow" sheen. This phenomenon is known as **iridescence**.

Most of the time they spend their days squeezed into tight rock crevices to avoid the hot Pilbara sun and only come out after dark to hunt. Unfortunately this is when many of them perish, run over by cars.

We knew very little about these snakes until a project was started in 1996. Scientists captured and placed small radio transmitters inside the bodies of the pythons. The reptiles' temperature and movements were tracked, providing us with the first really accurate information about their behaviour.

The Burrup Project commenced in 2000 and is being run by the Nickol Bay Naturalists Club, with assistance from CALM. In 2001, the children from Dampier Primary School participated in a Naming Competition for 4 of the 5 pythons. To assist in their understanding of these shy serpents, they read fact sheets supplied by Senior Research Scientist David Pearson, and studied the web pages of local CALM Volunteer, Michael Tutt.

If you'd like to read more about the Project, check out these pages:

- What's in a name?
- And the winners are ...
- Making Contact with Olivia
- Gypsy's Banquet
- The Kid's Response

## LINKS

Pilbara Olive Python information and photos (courtesy Michael Tutt):

http://www.starwon.com.au/~mlt/pythons/pythons.html

Olive Python information:

http://www.vpi.com/5VPIBreeders/OlivePython/OlivePython.htm

http://www.smuggled.com/auspyt3.htm

# ~ WHAT'S IN A NAME? ~

**Dampier kids were recently involved in the "Name a Pilbara Olive Python" Competition. The children read fact sheets and studied web pages before making their suggestions. The following names were shortlisted and forwarded to members of CALM and the Nickol Bay Nats for final judging. Good luck everyone!**

| YEAR | CHILD | PYTHON | YEAR | CHILD | PYTHON |
|---|---|---|---|---|---|
| 1 | Clair | Ghosty | 4 | Andrew | Roundabout |
| 1 | Paige | Greeny | 4 | Bill | Stretch |
| 1 | Yolanda | Rosie | 4 | Caitlin H | Ollie |
| 1 | Aaron | Lofty | 4 | Ashley | Hiss |
| 1 | Kirsten | Mundy | 4 | Cobie | Scales |
| 1 | Leighton | Thunder | 4 | Brodie | Khaki |
| 1 | Sam | Lightning | 4 | Reece | Aussie |
| 1 | Joe | Peaves | 4 | Jack | Whippy |
| | | | 4 | Morgan | Queen |
| 2 | JessieAnn | Oliver | | | |
| 2 | Chelsea | Olivia | 6 | Rachel | Rock Star |
| 2 | Maddison | Sandie | 6 | David | Rainbow Slider |
| 2 | Sophie | Pilia | 6 | Michelle S | Rock 'n Roll |
| 2 | Georgia | Stellaluna | 6 | Henry | Sunny |
| 2 | Toshina | Starlight | 6 | Jaime | Olive Oil |
| 2 | Kate | Shelley | 6 | Jos | Shadow |
| 2 | Tony | Snaky | 6 | Karl | Rock Rider |
| | | | 6 | Kristina | Rolly |
| 3 | Monique | Slinky | | | |
| 3 | Erin B | Stretchy | 7 | Stacey | Squash |
| 3 | David | Moonbeam | 7 | Grace | Abbey |
| 3 | Zoe | Mischief | 7 | Alison | Mileage |
| 3 | Ryan H | Long Liz | 7 | Shonelle | Drucilla |
| 3 | Ivy | Rainbow | 7 | Alice | Tilly |
| 3 | Jessica | Slither | 7 | Kristie | Saturn |
| 3 | Rachel | Acacia | | | |

**Several children suggested the names "Olivia" and "Oliver". Year 2 students are currently holding those names for the purpose of creating the table.**

**And, the winners are...**

Click here to find out!

# And The Winners Are...

**After much talk and deliberation between representatives of CALM and The Nickol Bay Nats, the following decisions were made:**

| |
|---|
| B1 to be named Abbey (proposed by Grace Jefferies - Year 7) |
| B2 to be named Olivia (proposed by Josh May - Year 3 - and several others) |
| B3 to be named Pilia (proposed by Sophie Ahern - Year 2) |
| B4 to retain the name Gypsy, as it is so appropriate for her. |
| B5 to be named Oliver (proposed by Emma Kitching - Year 4 - and several others) Oliver also has the nickname Lightning, as he moves so quickly away when it suits him (proposed by Sam Crouch). So he is to be known as Oliver Lightning. |

Thank you everyone who participated in the Competition, including the judges - David, Michael, Jason and Philip and a special thanks to David Pearson from CALM for organising the book prizes and Rick Shine for donating them.

**Pilia coming through the spinifex**

(Photo courtesy of Michael Tutt)

**Like to read a poem about Olivia?** Click here!

# ~ MAKING CONTACT WITH OLIVIA ~

Walking this ancient land, even the flatter aspects

Are full of surprises and hidden pitfalls.

Beds of dry grass disguise irregular-shaped rocks,

Spinifex insinuates itself into socks and finger tips

And the hills of rocks where we climb

Are sharp, jagged and at the most inopportune time, quite unstable.

But the nights are beautiful, clear and balmy,

With crisp, gentle breezes to refresh after a steady climb.

We're tracking shy serpents - Pilbara Olive Pythons,

Relative giants of the reptile world.

We have the advantage of radio transmitters

But still they confound us.

Hidden deep inside the cracks and hollows,

The rocks above them echo to confuse the tracker.

Michael, quite passionate about these girls,

Calls out to them, willing them to signal back.

The antennae suddenly directs and focuses our attention.

A huge rock overlooks a narrow ledge

And it is here, that he locates the coiled python.

She watches us calmly from her safe retreat,

While we peer in with torchlight and camera flash.

A strong yet strangely familiar odour is evident,

Michael says urine - we are all God's creatures!

A small head in comparison to the rest of her body,

Her alert eyes sparkle as she constantly tastes the air.

Quite a contrast in colour from an olive brownish back

To sides of yellow, fading to cream underneath.

Olivia finally grows tired of being watched

And departs in a slowly uncoiling dignified fashion,

Upwards and away, deep inside her rocky home.

# ~ GYPSY'S BANQUET ~

After two unrewarding hours searching for B1 and B5, imagine our surprise at finding Gypsy so quickly, but in a very delicate state. After the initial shock of wondering just who was down the rock hole, how many there were and if we had indeed located the fabled six metre python, we eventually realised that Gypsy had consumed a most substantial meal and only very recently. Being unable to move, she obviously felt quite vulnerable and was weaving her head around and making quick lunges upwards as we took photos of that impressive belly. How could she have taken that size prey in? The creamy skin underneath her upper body was slack and hanging loosely, no doubt stretched to capacity to pass that meal along. Her defensive behaviour certainly intimidated me! As I was looking through the camera's viewfinder, I saw her lunge towards me. My instinctive reaction was to step backwards, causing me to fall back amongst the rocks. I made a bit of a mess of my forearm but managed to keep the camera safe. The thickest part of her body was almost 20 centimetres across. A Euro joey perhaps? She obviously could not move any distance at all and we think she will need to be stationary for some days for the natural processes to work. We will try to keep an eye on her and record the time interval before she moves off. What an amazing sight though! And her agitated behaviour was something else-this from the girl who normally takes our presence with a sigh and a degree of acceptance.

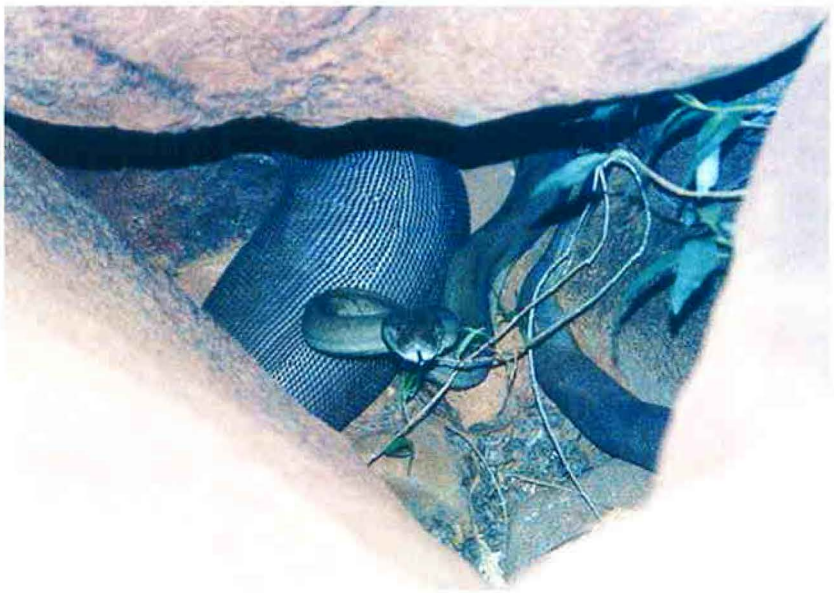


Photo courtesy Michael Tutt

Click here to see how the kid's respond to the POP project!

# ~ Python Art ~

**"... In the sun their olive green scales can reflect the sunlight at different angles, causing a "rainbow" sheen. This phenomenon is known as iridescence."**

**(Artwork by Emma, Year 5, Nov '01)**

**MEDIUM: 'Scratchback' using wax crayons and glitter.**

Click me to read Jarrod's great poem about the Olive Python!

# ~ Python Poetry ~

The Olive Python is our natural neighbour,

Gypsy is our friend and she really likes to tour,

Doesn't like summer days, instead she likes the night,

When you're looking through the bush, she might give you a fright.

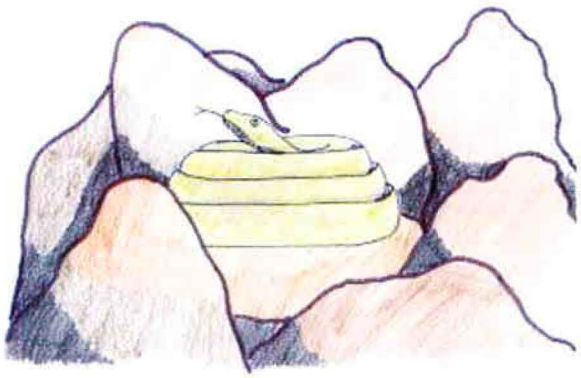
If you hang around them, they might seem wet and slimy,

But in fact the truth of the matter is, they're really smooth and shiny,

If you want to keep them in our beautiful outback,

Just please walk around them and don't be slack.

By Jarrod, Year 6, Nov '01



CLICK ME TO READ ABOUT OLIVER LIGHTNING!

# Appendix 2

## Report on the Pilbara Olive Python Competition in the Dampier Despatch.

# Dampier Despatch

20 November, 2001 Issue #16

Dampier Primary School

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### Special Event

P & C AGM

Tuesday,
20 November
7.30 pm.
in the staffroom

Members are urged to attend.

### Pilbara Olive Python Competition

*Winners of the "Name a Pilbara Olive Python Competition" presented by Mr Philip Bruce.*

*Dampier children were recently involved in the "Name a Pilbara Olive Python Competition". A selection of names were judged by representatives from CALM and the Nickol Bay Naturalists Club. The results were:*
*B1: "Abbey" Grace Jefferis Yr 3*
*B2: "Olivia" Joshua May Yr 3*
*B3: "Pika" Sophie Ahern Yr 2*
*B4: "Gypsy" She retains her name as it suits her so well.*
*B5: "Oliver Lightning" (Oliver) by Emma Hitching Yr4 and the nickname (Lightning) by Sam Couch Yr 1*
*Mr Philip Bruce, a volunteer for CALM, presented the winners with their book prizes at the Year One Assembly. The books were organised and donated by Mr David Pearson from CALM and Rick Shine, the author of three of the books. It was a beaut way to introduce the children to these harmless, endangered creatures and created the catalyst for some outstanding work in the classroom.*

*Sue Michel*

### Upcoming Events

| | |
|---|---|
| P & C AGM 7.30pm (Staffroom) | Tuesday, 20 November |
| Year 1/2 Assembley | Thursday, 22 November |

# Appendix 3

## Article on the Pilbara Olive Python Competition published in the North West Telegraph

Page 4 — NORTH WEST TELEGRAPH, Wednesday, November 21, 2001

CALM'S senior research scientist David Pearson with Dampier Primary School students Josh May, Sam Crouch, Sophie Ahern, Grace Jefferies and Emma Kitching, the winners of the school's Name the Pilbara Olive Python Competition.

# Students provide names for endangered pythons

DAMPIER Primary School students were asked to come up with names for three of five Pilbara olive pythons being radio-tracked on the Burrup Peninsula by the Nickol Bay Naturalist Club, after club members decided B1, B2 and B3 were not imaginative enough.

Competition winners Josh May, Sam Crouch, Sophie Ahern, Grace Jefferies and Emma Kitching came up various names, including Olivia, Oliver, Pilia, Abbey and the nickname Lightening.

The students received their book prizes during a recent school assembly, with the books then placed in the school library for all to enjoy.

Last week, the school's year four and six students were also visited by CALM's senior research scientist David Pearson, who has been studying Pilbara olive pythons for five years.

His presentation included a slide show on the snakes, followed by an active question and answer session.

He said little is known about Pilbara olive pythons, with the WA Museum only having 18 specimens collected over the past 100 years.

He said they were an endangered species, were non-venomous, could grow to 6m in length and lived about 30 years but, until his research project started, little was known about their habits or habitats.

"Various people around the Pilbara, namely in Pannawonica, Tom Price and Millstream, and last year the Nickol Bay Naturalist Club in Karratha, started tracking Pilbara olive pythons," he said.

"This involves a radio-transmitter being inserted into the python, and they're then tracked to learn more about their habits."

He said the tracking program meant they were continuously learning more about Pilbara olive pythons, a sub-species of the more common olive pythons found in northern Australia.

"Despite their large size, they're difficult to find as they usually only emerge at night to catch their food," he said.

"They're non-venomous and rely on grabbing animals with their teeth and coiling themselves around that animal until it dies, then they swallow it.

"They're certainly no risk to humans, and once a transmitter is inserted into their bodies, we can track them for up to two years."

He said the area's most well-known Pilbara olive python was Mr T, a popular tourist attraction in Millstream.

# Appendix 4

## Article on the Burrup Peninsula Olive Python Project published in The West Australian newspaper.

# Snake wired to help species survive

■ By Sean Cowan

A RADIO transmitter and whip aerial have been implanted in an olive python found across the red rocks of the Burrup Peninsula.

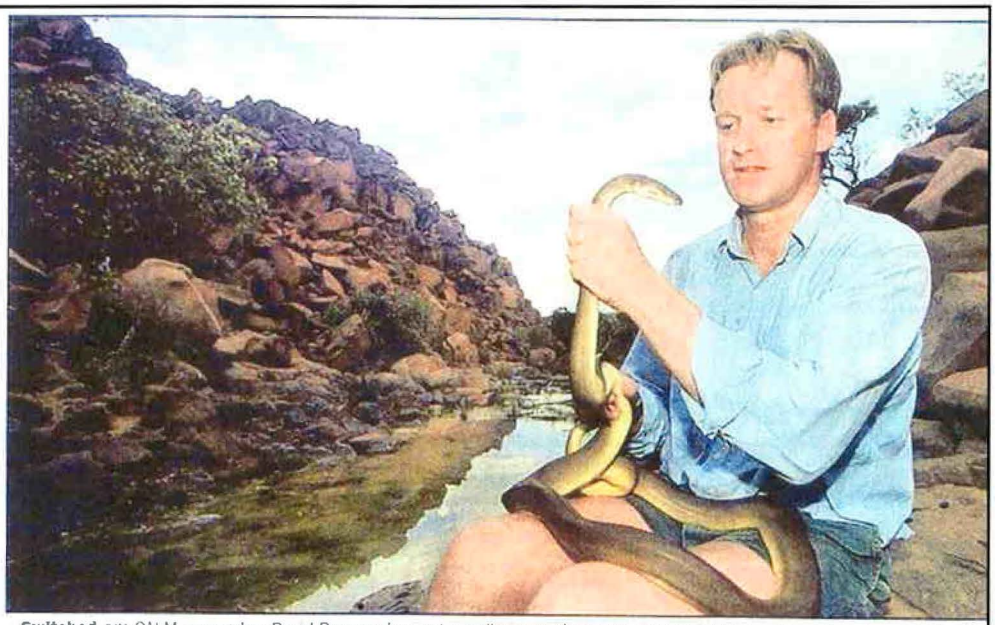
The operation didn't take long — an injection, a small cut, a few stitches and it was over.

It was done by Department of Conservation and Land Management research scientist David Pearson so the snake, found on Tuesday, could be tracked by local nature enthusiasts. The transmitter emits a radio signal from inside the 3m snake which is read by a radio receiver as a beeping sound.

The tracking program aims to document the movement, habits and diet of the creature, native to the Pilbara. A Federal Government grant had paid for the program.

"These snakes are native to the Pilbara and they get up to about 6.5m but most of the big ones are about 4m long and weigh about 20kg," Mr Pearson said. "They are considered an endangered species but they are locally abundant around Millstream and Karijini national parks.

"These transmitters allow us to track the snake for about 18 months and are also temperature sensitive so we can measure the temperi Mr Pearson said Australia had different snake species but fe been studied in depth. Despit lack of poison, olive pythons often killed by people who th they were poisonous brown sn



**Switched on:** CALM researcher David Pearson has put a radio transmitter and whip aerial in an olive python found at the Bur Peninsula. A program aims to track the endangered snakes to learn more about them. PICTURE: DIONE DAVIDSON

# Appendix 5

## Article on the Burrup Peninsula Olive Python Project published in National Heritage (No. 11).

**TRACKING SECRETIVE SIX-METRE SNAKES IN WA**

Environmental volunteers in the Pilbara region of Western Australia are helping scientists research the elusive Pilbara Olive Python of the Burrup Peninsula.

The Nickol Bay Naturalists Group has received $11,700 from the Threatened Species Network Community Grants, a joint initiative of the Federal Government's Natural Heritage Trust and the World-Wide Fund For Nature. Funds will contribute to a better insight into the ecology of this giant nationally-threatened tropical python, particularly into its reproductive cycle and the location of its nests.

The Pilbara Olive Python grows to almost six metres in length and includes bats, birds, rock wallabies and small kangaroos in its diet, but Nickol Bay Naturalists President Stephen Van Leeuwen said the creatures are surprisingly docile.

"We've caught 15 snakes so far and five were fitted with transmitters so we can track their movements," he said.

"They're used to being at the top of the food chain and tend to freeze when approached by people, rather than trying to zip away. Then it's just a matter of being game enough to pick one up.

"They're not venomous but their jaws are designed to hang on tight to their prey so a bite would hurt. The main problem catching them is their sheer length and strength, since they attempt to coil around arms and legs to avoid being put into a bag."

Stephen said the transmitters had already provided some unexpected insights into python behaviour.

"We were very surprised by the number of snakes we found in a one kilometre square area," he said.

Research scientist with WA's Department of Conservation and Land Management, David Pearson said the snake's fondness for a secure rocky crevice made it difficult to follow them with the transmitters, but the volunteers' perseverance was paying off.

Since the group started monitoring the Pilbara Olive Pythons, the snakes have become a notable attraction. Many people from Karratha and the nearby mining town of Dampier have ventured out to the Burrup area to see the pythons, as have visiting tourists.

"The information we're gathering will be important for the snake's future protection," he said.

*A Pilbara Olive Python (Photo: Michael Tutt)*

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