



WESTERN AUSTRALIAN SOCIETY of AMATEUR HERPETOLOGISTS (Inc)  
(Member of the Australasian Affiliation of Herpetological Societies)

**STOP PRESS! –  
Armadale – 10 June:**

*Magistrate dismisses  
charges brought by  
CALM against Phil  
Glover Re. his legal  
rehabilitation of a tiger  
snake.*

# NEWSLETTER

10 June, 1999  
(19)

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## What is going on?

If there was ever a time to keep your nose clean and operate within the written word of the law it is now. No matter how ambiguous you consider that law to be.

I don't know how many more WA people with an amateur interest will be targeted prior the new keeping system being implemented.

I don't know what benefit to conservation, general public relations and an improved alliance between volunteers/amateur herpetologists and CALM's Wildlife Branch will result from an overzealous enforcement of the act.

The direction things have taken since WASAH's final meeting

with CALM personnel on 5 January this year can only be described as backward. Never before can I remember a time when amateur herpetologists were being so intensively targeted in this state.

Surely we need a more objective appraisal of the situation by the department. It must remember that it is dealing with individual citizens that are subjectively involved. Any negative action, especially when there is a more positive alternative, will result in an equally negative reaction from the concerned individual and we will not move forward at all.

WASA is a society of people with a common interest. It cannot be denied that we have been discriminated against in this state. Several members have, as individuals, pursued their rights of appeal and attempted to obtain information through the

available legal channels of the Ombudsman and the FOI Legislation. Although this may increase the workload for the principal people in CALM's Wildlife Branch, and it may be argued that this has diverted resources away from the redrafting of the regulations causing delays, those individuals cannot be deprived their rights on the premise that to pursue these may disadvantage others. We should not ask a fellow member to make a sacrifice that we would be loath to make ourselves.

The people that had reptiles confiscated during the January raids are concerned for the animals' welfare. Although unsubstantiated, numerous reports have suggested the health in some has deteriorated, while many others have been released.

CALM cannot divulge information on their health, nor

allow an independent inspection because they are evidence and only the prosecutorial personnel have access. This may be legally correct, but the reasoning is a little difficult to understand in this situation.

To accede to an inspection request should not impact on the case in any way, unless the reports of poor health are correct. If the reports of many being released are also correct then one can assume no charges have been laid relating to these, or it further detracts from the reasoning behind the refusal.

**Was the *Cryptoblepharus plagiocephalus* one of those released?**



At this point in time there are at least ten members or Snakebusters experiencing problems related to legal proceedings or confiscations.

## **Good things can happen!**

I was impressed with the positiveness that was displayed during the November 1998 through to January 1999 discussions between CALM and WASAH. Sadly, however, most of that has been washed away and replaced with the same old mistrust of CALM caused by the increased persecution several members are now experiencing.

What we require is a recognition by CALM of the positive contribution to conservation we have made to date culminating in a peace offering.

This could be by the indiscriminate issuing of

licences to keep under present policy, exercising considerably more discretion in decisions on whether or not to initiate legal proceedings, and appreciate that in the past its refusal to acknowledge correspondence and issue licences has contributed to many of the problems related to the attitudes of amateurs in WA, which in turn has led to the unlicensed keeping of reptiles here.

I plead with the decision-makers within CALM to move into the new millennium on a positive note. Let us all attempt to forge a mutual respect between both parties. People with an interest in reptiles and amphibians are ordinary citizens, not criminals!

As has already been demonstrated, we can all work together - **let us do it again!**

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## **WASAH Display**

WASAH set up a display at the 9th Annual Koi Society Show in Canning Vale on Sunday 18th April after the Koi Society invited our Society to do so.

The difficulty of obtaining a permit and the unavailability of snakes at the time for this meant that we were restricted to a poster display only.

The display was set up early Sunday morning by RBC. We had posters, membership forms, information sheets, and brochures promoting the Armadale Reptile Centre and a few snake sloughs adorned the posters.

Bruce George dismantled the display late on Sunday,

Thanks Robert and Bruce.

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## **THINK LIKE A REPTILE**

A part of my job at the WA Museum is systematically going through the entire herpetological collection. During this I have come across some very interesting reptiles. While working through the "*Ctenotus atlas*" (a common striped skink generally associated with triodia in the Goldfields) I came across a series of lizards collected during a museum biological survey on Yuinmery Station, located near Sandstone on the Paynes Find road. This series just did not look like typical *atlas*. It had an extra pair of stripes and paler legs and tail. These differences are quite subtle but when dealing with the genus *Ctenotus*, it is usually all you need

Anyway as they were collected over a decade ago the museum did not have any fresh tissue. A good reason for a trip to collect a few, get some photographs and have a few laughs. During the Easter break Bruce George, David Robinson, Anne Flint, David Knowles and I headed off to Yuinmery to do just that - well at least that's what we were hoping. According to the Survey Report the lizards were pit-trapped at a site with Eucalypts over Triodia near Shepherd's Well, about 9 km east of the station. This type of habitat is just great for striped skinks and the weather was beautiful - nice sunny days in the mid to high

20's. Everything should be active

Unfortunately, when you are dealing with reptiles, things quite often do not go your way. You may think it is perfect weather for herp to be active but the reptile in question is not a thinker. Reptiles only move for a good reason (ie to feed, breed, etc.) and respond to certain environmental and climatic conditions based on a programmed instinct that has probably remained unchanged for an immense period of time. I have been up in the Pilbara and Kimberley on nights when you would guarantee the roads will be swarming with reptiles only to find that hardly a thing is moving. Frustrating!

On this particular trip the lizard we were after eluded us because it was not active. The interesting thing is that at our campsite there were three different *Ctenotus* spp. running amongst the triodia, but not the one we wanted. What we need to do is return to the site near Shepherd's Well and install some pit traps during spring (Sept/Oct) and see what happens. Hopefully we will hit the jackpot then.

The other interesting thing we noticed on this trip is that while the little skink was inactive, a big, lumbering *Varanus panoptes* close to 1.5 metres can be actively foraging for food. These goannas were quite numerous on this trip despite the weather being rather mild. They may be able to internally regulate their temperature?  
BM

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# Tee Shirts

Could all those owing money for WASAH tee shirts please ensure that they send this to 169 Egina St, Mt Hawthorn @ \$22 per shirt.

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## ANOTHER WASAH SURVEY SUCCESS

WASAH has just completed a herpetological survey of Manning Lake in Hamilton Hill. A total of 19 pit traps were operated for over 50 nights during November-December 1998. These types of surveys on remnant bushland areas are very important as they provide invaluable baseline data on local distribution, relative abundance and habitat preferences of our reptiles and frogs. The WA Museum maintains a major database on herpetofaunal assemblages in Perth. Surveys are great fun and you learn heaps about our scaly mates. This survey yielded the following species:

**Sandplain Froglet**  
*Crinia insignifera*  
**Moaning Frog**  
*Heleioporus eyrei*  
**Western Banjo Frog**  
*Limnodynastes dorsalis*  
**Slender Tree Frog**  
*Litoria adelaidensis*  
**Motorbike Frog**  
*Litoria moorei*

**Spiny-tailed Gecko**  
*Strophurus spinigerus*  
**Sandplain Worm Lizard**  
*Aprasia repens*  
**Gray's Legless Lizard**  
*Delma grayii*  
**Burton's Legless Lizard**  
*Lialis burtonis*  
**Western Bearded Dragon**  
*Pogona minor*  
**Fence Skink**  
*Cryptoblepharus plagiocephalus*  
**West Coast Ctenotus**  
*Ctenotus fallens*  
**Western Limestone Ctenotus**  
*Ctenotus lesueurii*  
**Two-toed Earless Skink**  
*Hemiergis quadrilineata*  
**Perth Lined Lerista**  
*Lerista lineata*  
**Common Dwarf Skink**  
*Menetia greyii*  
**Southern Pale-flecked Morethia**  
*Morethia obscura*  
**Western Bluetongue**  
*Tiliqua occipitalis*  
**Bobtail**  
*Tiliqua rugosa*  
**Black-naped Snake**  
*Neelaps bimaculatus*  
**Dugite**  
*Pseudonaja affinis*  
The good thing about surveys is that you get a real feel for an area and can repeat your efforts at a later date to see if any changes have occurred. So if you know of an area nearby that requires the WASAH 'golden touch' let me know and we will hit it.  
  
A big 'you beauty' to members Roger Renolds, Kylie Oliver, Thomas Rasmussen and Ross Daglish (wherever he is?) for operating the Manning Lake survey.  
BM

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## Letter from the past

Just a short note to let you know about the outcome of my court appearance. I greatly appreciate your reference and wish to thank you for it.

It has been nearly twelve months since my reptiles were confiscated, and I was very worried about the outcome, especially when I learnt that the Fisheries and Wildlife Department had organised a Crown Prosecutor to fly up from Perth just for my case. This turned out to be true and after reading out the arresting officer's report he asked that the maximum penalties be applied as this sort of thing should be stamped out. My solicitor then put forward our case and submitted my references, which came under scientific, public interest and government. The *scientific* consisted of people like yourself, the Australian Museum, reptile parks (in SA, Vic, NSW, Qld), Australian Herp Society, Harold Ehmann, Graeme Gow, etc, plus one from North America. The *public interest* came from the General Manager of Goldsworthy Mining, the local vet, the local town council, all my neighbours, the local boys' brigade, cub scouts and lots more I can't remember off hand.

My trump card was the letters written by the local members of both the Upper and Lower Houses of Parliament expressing support for me at the trial and in my case for a licence. The other turning point was when my solicitor stated that three of the confiscated reptiles were sent to Perth Zoo and promptly died.

One which I had since 1974 lasted just ten days only.

After much deliberation the magistrate stated the following,

***“The [Western Australian Wildlife Conservation Act], as he interpreted it, was meant to cover and protect fauna from profiteers, smugglers and the abject uninformed and he could not see that I came within these parameters. Also, taking into consideration my age, work, community spirit, that I had no previous convictions of any kind (including traffic) and my long-standing concern and passion for reptiles he could not see no other alternative than to dismiss all charges outright and recommend that I apply for a licence without delay.”***

I had to pay \$111.60 court costs as I pleaded guilty and was free to leave none the worse for the experience. This, in essence, has given me the green light on all my previous work. Also to apply for a licence. I think it is a big step forward for herp people in WA....

Peter Tight, Hedland, 28 July 1983

## Letter on the Mulga Snake

I am writing to confirm the odd behaviour displayed by a Mulga Snake today on our property.

This snake went about five metres up a thin wandoo tree, curled up around some branches in the manner of a python and stayed in this position, very calm and relaxed, from about 1.30pm until 6pm, when Klaas Gaikhorst

### IMPORTANT NOTICE!

*The views expressed by contributors to the WASAH Newsletter are not necessarily those of the Executive, the Society or its members. As editor I tend towards minimal censorship as I believe everyone's opinions should be heard, but I will exercise this if I believe an article's content reflects poorly on WASAH.*

Brian Bush

from the Armadale Reptile Centre shook it out of the tree. Even though my husband and I looked at it frequently during this time, it could have come down had it wanted to do so.

It was obviously interested in the young Carpet Python on a nearby tree, but that certainly does not explain why it behaved like a python.

The crossbanding on its underside did not help to make it easier for an untrained observer like myself and I was thinking, "Is it a python? Is it a mulga, or what?"

Well, mulga it was.

I must emphasise again that its behaviour in the tree was exactly the same as that I have observed in pythons whilst in a tree. It curled up and froze in that position.

It became a little cross when dislodged from the tree.

A healthy-looking creature with no visible injuries, only some old scars.

Perhaps you can shed some light on why it behaved this strange way. If you can, I would appreciate hearing from you.

Monica Strauss, Toodyay - 29 March 1999

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## UNUSUAL STATISTICS

The following information was gathered from the Australian Bureau of Statistics, Report ABS 4102.0 and borrowed from CCRFG (Page 9).

- Australians spend \$36.3m per week feeding and caring for cats and dogs - \$6 per week per cat, \$10 per week per dog.
- Australians spend 2.5m hours per day caring for, grooming and exercising dogs - 38 minutes for pedigree cats, 25 minutes for non-pedigree cats, 50 minutes for dogs. At \$10 per hour, the time spent is worth \$25m per day.
- Domestic cats destroy about 75m native animals a year, or about 25 per cat. The RSPCA sheltered 104192 animals in 1993-94 - 43762 dogs, 42126 cats and 18304 other animals. 50% of dogs were put down and 74% of cats.
- In 1994, There were an estimated 17.8m household pets in Australia; 59% of house-holds had at least one pet. The estimated numbers of pets were (millions):

**Birds - 6.02**

**Cats - 2.48**

**Fish - 4.30**

**Chickens - 0.91**

**Dogs - 3.13**

**Rabbits - 0.34**

**Horses - 0.16**

**Guinea Pigs - 0.18**

### **Other (includes spiders, frogs, etc) - 0.31**

- The feral cat population is estimated at between 5.6 and 18.4 million.

Don't you just love the fact that we are all "OTHER" pet owners! Hopefully, the statistics may change and show that more and more people out there are opting for "pets" (for want of a better word) that are herpetological in nature.

## THE BIG STING WAS UNSTUNG

Travelling around the scrub collecting and photographing herp is great fun. The problem is: because you have this interest you are generally considered a criminal, or at least up to no good.

WASAH member John Smith and I recently encountered a problem with the authorities while on a legitimate museum collecting trip in the Pilbara Region.

After the good rains we were keen to sample frogs from Newman to Sandfire Roadhouse. It was great to see so much water laying around.

Anyway, on our way home while in Newman we planned to get a unit and have a sleep before going spotlighting that night.

After we left the caravan park to get a bite to eat, the owner of the park decided, for some unknown reason, to have a look inside our

room. From then on the course of events is bizarre.

He discovered an esky full of moving bags (mainly frogs), assumed that wildlife smugglers were in town and immediately rang the Newman police. They, in turn, contacted customs, staked out our rooms and had us under surveillance for the next few hours until confronting us parked on the side of the road eating our chicken and chips and waiting for the sun to go down. Our vehicle was searched and

### **FOR SALE**

**The durable super professional, and scintillating extendable pocket snake hook.**

**ONLY \$20 each**



we had a heap of questions thrown at us they wanted answers to. During this time of interrogation our bonafides were established through 'phone calls and we were left alone to do our business.

You are probably thinking,

"Hey, they are just doing their job, they don't know what you are up to and so on."

That's fine, but I think it would have saved a lot of time and resources if the police had just bothered to make a single phone call to the Pilbara wildlife authority's regional office in Karratha. At least before sending in the troops.

It is a good thing we followed procedure and contacted CALM

prior to departing on this trip to let them know we would be in the area.

BM

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## When Khaki Came To My Place

What is it like to be raided and treated like a hard core criminal? I have never previously seen a search warrant, nor had my rights read to me, so it was a new experience.

At 5.45 pm on 7 January 1999 I had three Wildlife Officers on my doorstep wanting to search the premises for any unlicensed reptiles. An hour later I had seven of them in my house.

When they knocked on the door I had just come out of the shower. I was literally caught naked. They had a warrant. My back room housed 18 snakes which I had been unsuccessful getting licensed, or I considered were unlikely to be licensed.

The time for getting upset came when they started moving the reptiles. As you can imagine, these animals that I have looked after for many years were being taken away to face an uncertain future. I actually went out into the backyard and kicked my rubbish bin around for a while to relieve my frustration.

Rather than bag the snakes, I allowed them to be taken in their respective boxes, hoping to reduce any stress they might experience.

The next day I found out that I was not alone. Bruce George and Russell Brown had also

been raided at about the same time - a major crack down.

They must expect people to be keeping unlicensed reptiles in a state that has no licensing system to allow the keeping for hobbyist purposes

It was interesting how the media stated, ".....the reptiles were being kept for private study, were in good condition and that we were members of a reptile club (no mention of an incorporated society in the WA media coverage). They mentioned the illicit wildlife trade as if we were linked to it in some way. The Eastern States media coverage was more critical of WASAH - how this came about I do not know.

Finally, I apologise for any apparent cynicism in this piece, although I do believe it is entirely justified.

BM

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## Help needed with frogs!

(Compliments *Frogwatch*)

Much help is still needed with the frog fungus research. This is especially so over the next month as we enter the period of peak frog activity around Perth. Everyone can help by reporting any major change in frog numbers from previous seasons or any observations of sick or dead frogs. If possible, sick or dead frogs should be delivered to the Francis Street entrance of the WA Museum, accompanied by a label with details of collecting locality, the collector's name and delivery date. If it is not possible to deliver specimens, please place them in a fridge and contact the

Museum on 94272826 to arrange for collection.

Special help is needed with collecting road-kill frogs over the next month or so. During this period, large numbers of frogs are usually killed on roads where ever they run close-by major breeding sites. These road-kill samples can be used to determine the incidence of fungal infection in the general population. Even badly mashed frogs can be useful, provided there is a recognisable hand or foot included in the remains. However, it is necessary that the specimens are moderately fresh (ie, not completely rotten and not dried out), hence collecting must usually be done in the evening or early the next day. To collect samples you will need a small container of preservative; and some rubber gloves, both of which I will provide. Anyone who might be able to help with this important aspect of the fungus research program is asked to contact Ken Aplin on (08) 94272826.

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## You can't tell a book by its cover!

On Friday 12 March I had a call to remove a juvenile dugite in Westfield, about 8-10 kilometres from where I live in Gosnells. I attended the call and rescued the snake from amongst ten burly, half-charged men!

As I was leaving, the gentleman who made the call said, "What do I owe you mate?"

"A small donation would be fine." I replied.

“Well I ain’t got anything on me at the moment, but give me your address and I will drop something off to ya.”

After much reluctance on my part I handed him my address, mainly to shut him up - talk about persistence!!!

On Monday afternoon there’s a knock on the front door and here’s this fellow wielding a \$20 note in front of my face, “Here you are mate.”

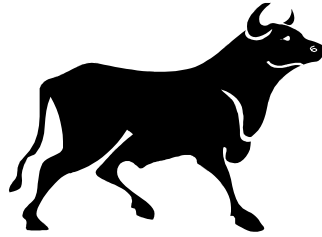
The best part of the story is that this big fellow rode a pushbike all the way to my place.

**Who said gratitude’s dead?**

BG

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## **HERPTALES**



## **Ken’s Creed**

*Reprinted from a very old newspaper report, author unknown - it demonstrates that our paths are pre-ordained - it is in the genes and, except for the type of fauna involved, this article could be about me.*

Ken’s the oldest “Bird Trapper” in existence-- He trapped birds for the Zoo when it was in Moore Park, [Sydney] and that wasn’t yesterday-- Appropriately his name’s Bush-- You know-- “A bird in the hand is worth two in the Bush”.

He’s planning a big expedition to Texas, Queensland, for the Zoo-- Hopes to trap the rare Paradise Parrot and some Bar

Birds-- Saloon variety I expect--

Ken’s a bit of a character with some rare philosophy to back him up-- Quietest boy in the bar sort of fellow-- This is one of his little games:--

***I must have a beer at eleven***

***It’s a duty that must be done***

***If I don’t have a beer at eleven***

***I must have eleven at one.***

Well, I’m hoping to go with him on this expedition and be able to record the trials and tribulations of a philanthropic self-taught ornithologist.

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## **PRESSURE?**

No pressure is obvious from the legal proceedings hanging over their heads. In this recent photo, Bruce and Brad take a breather while in the field at Yuinmery chasing an elusive *Ctenotus* (see article this issue).

The best therapy is being in the bush, away from the non-constructive, non-productive negativity, where one can -

**CONTRIBUTE  
POSITIVELY**

From the *Wanneroo Times* (18 May 1999)  
You Beauty Snakebusters!

## Community Opinion

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# Scary snake tale

WHILE taking my dogs for a walk in the park between Lake Joondalup and Scenic Drive, I saw a tiger snake sunning itself in the grass.

After alerting a young couple with two children who were down at the children's swings 20 metres away, I went home and rang the council rangers' department.

They showed no interest, just said "that's wildlife" and gave me CALM's number.

CALM, in turn, said "not our responsibility" and said the snake would be gone by the time they could get around to coming, but suggested I rang Snake Busters.

Snake Busters arrived 10 minutes after being called, caught the snake and took it away, I forgot to ask the woman from Snake Busters what her name was; but to her and Snake Busters may I say a big thankyou.

To the council and CALM: It's good to see the motto of passing the buck is still around.

*Jock Lawrie,  
Wanneroo.*

★ Star letter. The writer — who wins a double pass to a Greater Union cinema — should contact the editor on 9233 3000 to arrange collection.



## VALE

*A herp and good friend of many WASAH members fortunate enough to meet him during his extended visit to Oz from the USA. Burdened in life after one accident, it was to be another that finally took him on 3rd Feb '99. Rest in peace Rob Mount - you can throw away that milk jug now.*

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### *Reptiles and Frogs of the Perth Region*

is

now out of print.

But don't worry, a revised edition is

in prep

**YOU BEAUTY!**



## **Captive-bred Carpet Python Applications**

**Four of these are being processed and by the time you are reading this they will have been issued.**

**If you did not upgrade your application with the additional information required by CALM, then do this now!**

### ***The Tony Pattison Encouragement Grant***

**In memory of an enthusiastic lad with a profound love of herpetology, one hundred dollars will be made available by WASAH annually to a successful applicant for any herpetologically related project. Grant funds are the result of donations WASAH received after Tony's funeral. His parents Dave and Lyn requested that people do this rather than purchase flowers. They have also kindly donated as a component of each grant a terrarium made to the successful applicant's specifications.**

**All applicants must be members of the society and less than eighteen years of age. The money will be used to assist in the project, such as for fares or fuel to visit a study area, towards equipment ie, terrariums, terrarium fittings, to purchase reference books, etc.**

**The successful applicant will be required to provide an article for the *WASAH Newsletter* on their project within twelve months of obtaining the grant. This will include mention of the *Tony Pattison Encouragement Grant* and how this was used to assist in their project.**

**Applications to be made in writing to reach the executive by September of each year with the successful applicant being notified in writing shortly after and their name published in the following *WASAH Newsletter*.**

**WASAH  
GENERAL MEETING**

“in the bush”

**Sunday 11 July, 1999**

**Noon**

(bring a sandwich or BBQ wood & drinks)

at

**Melaleuca Park**

*picnic area*

Neaves Road, Bullsbrook/Wanneroo

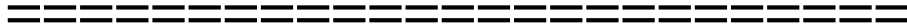
(Track to picnic area on north side of Neaves Rd)

**Guest Speaker:**

**Various Members**

(anyone on the day with keeping experience)

**“Husbandry Aspects”**



We thought a meeting solely related to keeping would be appropriate.

*Let us trust the weather is OK*

**WASAH EXECUTIVE COMMITTEE**

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1832

WASAH is an informal group of people with similar interests - all wishing to keep for private study and "love", frogs, turtles, lizards or snakes!  
  
WASAH joined the Affiliation of Australasian Herpetological Societies in 1994.

Address all correspondence related to this newsletter to:  
**The Editor, 9 Birch Place, Stoneville, Australia 6081**

# THE F-FILES

## Frog Fungus Facts

(Compliments *Frogwatch*)

This is a brief summary of what is currently known and not known about the biology of the chytrid fungus which is infecting our local frogs. It is designed to answer some of the most commonly asked questions.

### Is it a fungus or a virus?

*The chytrid is a parasitic fungus. It is a member of a large group of soil and aquatic fungi which do not normally invade animal tissues.*

### Could it have always been here?

*Almost certainly not. Parasites usually do not kill their natural hosts. Australian frogs also show no immune reaction to the presence of the parasite and this is more typical of a native host with a new parasite.*

### Where does it originally come from?

*The Australian frog fungus appears to be identical with that inflicting Central and North American frogs. The fungus appears to be a new invader to both of these continents. It may have come out of Africa, perhaps with frogs destined for zoos or on the African Clawed Toad, *Xenopus*, which is commonly used in laboratories around the world.*

### How did it get to WA?

*The most likely means of introduction is through frogs shipped accidentally with boxes of fruit. It is not uncommon for a tree frog to emerge from these boxes, and many of the shipments are coming from areas where the fungus is endemic. Anyone coming across one of the imported animals should report it to the WA. Museum, CALM's Wildlife Branch or the Australian Quarantine Inspection Service.*

### How long has it been here?

*We don't yet know for sure, but my feeling is that it has probably been here for only 1-2 years at the most.*

### How does it infect frogs?

*The fungus spreads via a free-swimming spore which enters the skin of its victim. Once inside the skin cell, the spore matures and reproduces to produce a new batch of spores, which are released back onto the skin of the frog and then into the environment. This cycle takes about 4 days. Frogs probably catch the fungus through direct contact with another infected animal, or from infected water.*

### Does it affect tadpoles as well as frogs?

*Yes. But in tadpoles it can only reproduce on the mouthparts which are made of keratin. The health of*

*tadpoles does not appear to be affected by the fungus. As tadpoles change into froglets, the skin becomes keratinised and the fungus spreads across the skin. Froglets often die soon after metamorphosis.*

### Can all species catch the fungus?

*Yes, as far as we know all frogs can be infected.*

### What actually kills the frogs?

*Most appear to die as a result of toxic damage to internal organs. This is probably caused by enzymes produced by the fungus during its reproduction. Some may die because of disruption to the physiology of the skin, which plays a major role in respiration. The time from infection to death has been found to be 1-2 weeks in experimental tests.*

### How can we recognise an infected frog?

*This is not always possible. In some cases they show a sloughing of infected skin from the belly and limbs. Some individuals are lethargic or appear to be trembling due to muscle spasms while others seem reluctant to bring their hindlegs into a natural position. Some appear perfectly healthy up until almost the last moment. Accurate diagnosis can only be performed at present by cutting a thin section of skin. This can be done on a toe removed from a live animal or on a preserved specimen.*

### Are all frog species killed by-the fungus?

*Possibly not. Some species are known to be infected but have not shown any decline in population numbers in the wild. This may be because they are less susceptible, or it may reflect differences in their behaviour or reproductive biology.*

### Can it spread-in- water, or on plants or soil?

*Almost certainly in water, and possibly in moist soil or on wet plants. The fungus cannot survive drying out, so probably can't be spread in dry soil or by wind dispersal. That's some small comfort!*

### Can it infect humans or other animals?

*Humans, almost certainly not. Trials have been conducted on fish, without any sign of infection. It is possible that the frog fungus can infect some kinds of invertebrates, but so far it has not been found anywhere except on frogs themselves.*

### Is it just a symptom and not a cause of frog declines?

*It has been suggested that the fungus is only now killing frogs because they are weakened by other factors, such as environmental pollutants. This does not appear to be the case. Frogs which have died from fungal infection are often in excellent condition otherwise, with large fat reserves and good organ colour.*

# ***GENERAL MEETING***

**6 March 1999**

## **MINUTES**

- 1. Convene Meeting** - 7.35 pm at Perth Zoo Education Centre
- 2. Attendance** - 38 members, 27 visitors
- 3. Apologies** - Jamie Stuart, Russell Brown, Sandy Griffin and Roger Reynolds
- 4. Correspondence Tabled** -
  - Data base update request from Alexander Library.
  - Perth Cichlid Society (16-09-98) inviting WASAH to set up an informational display at their Fish Expo @ Perth Zoo - we did.
- 5. President's Report** -
  - BB welcomes all, particularly the large group of visitors.
  - Mentions Tony Pattison's death and reads out the *Thankyou Card* WASAH received from Tony's parents.
  - Mentions recent CALM raids (7 January '99) on three WASAH executives and how disappointed he was with the whole thing coming two days after WASAH's completion of a productive time during discussions with CALM.
- 6. Vice-President's Report** - NTR
- 7. Treasurer's Report** - Nil. Treasurer absent.
- 8. General Business** -
  - Eric Kidd has query for President on executive position titled "Executive Minder" - why it is called thus, when was the Minder formally elected and what is the Minder's job? BB responds by referring back to a previous newsletter wherein it was published that the executive recognised the need for an additional executive member and asked Bruce George to fill this position temporarily. The title "Executive Minder" is a play on words (a bit of fun) similar to a gardener being given the title "Building & Surrounds Groundsperson". Bruce was elected unopposed, as were all office bearers, in June 1998. President promises to clarify the issue with Eric (clarification included in this newsletter).
  - BB mentions topical book available and for sale at the meeting entitled *Attracting Frogs to your Garden*.
- 9. Editor's Report** - • NTR
- 10. Call for further business** - Nil
- 11. Speaker** - • BB introduces Dr Mike Bamford, regular contributor to *Earth 2000* as Guest Speaker on "Bobtail Biology".
- 12. Meeting Adjourned** - • 8.45 pm and as is usual, refreshments and socialising followed.

At the March '99 meeting a member requested information on the executive position listed in the *WASAH Newsletter* as "Executive Minder". Following is a letter sent to that member clarifying the position. The only discrepancy here is the position was listed on the March '98 nomination form as "Executive Assistant".

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7 March, 1999

Dear Sir,

Regarding your concern as to 'how, where or why for' the fifth executive position, irrespective of the title of that position, the following comes from our constitution.

**15.1** The Executive Committee, herein called the Committee, shall consist of the following---

- (a) President;
- (b) Vice President
- (c) Secretary;
- (d) Treasurer; and
- (e) additional Committee members as the need may arise, eg Editor of newsletter.

**15.3** of the *WASAH Constitution* states,

**The Committee may temporarily fill a vacancy within its ranks, if such should occur during the year, with a member of their choice until the position is formally filled during elections at the following annual general meeting.**

Members were notified of the need for a fifth executive officer in *WASAH Note of February 1998: Important Notice* (Page 2, 2nd last paragraph under subheading 'Elections' and I quote -

**We are organising nomination forms for all executive positions. These will be forwarded in March with elections for executive positions of president, vice-president, secretary, treasurer and executive assistant being held in June 1998. The new position was deemed necessary on 12 February 1998 when the executive nominated Bruce George to temporarily fill the position.**

Nomination forms for the five execution positions, viz. (President, Vice-president, Treasurer, Secretary and Executive Assistant) were included in *WASAH Newsletter No. 14* dated 15 March 1998. The rest is history - no one put their hand up to oppose any of the five already filling the positions so all were returned with the fifth position becoming permanent and filled by Bruce George.

The name *Executive Minder* reflects a bit of the devil in us all (well, most of us).

Yours sincerely,



Brian Bush

## Krefftt's Tiger Snake: An Update

By Peter Mirtschin (details below)

Some time ago (see Appendix of *WASAH Newsletter* No. 16), some of you may remember I mounted a push to get some additional land re-zoned as Conservation Park in the southern Flinders Ranges, South Australia.

The privately owned land was on the market and some of us believed annexing this land to the Flinders Ranges National Park complex would give the Krefft's Tiger Snake (*Notechis ater ater*) - probably the rarest snake in South Australia, a better chance of survival.

The acquisition of this land was already on the SA Department of Environment, Heritage and Aboriginal Affairs' (DEHAA) list, but it was way down in priority and we had little chance of convincing the Government to allow it to jump the queue.

I sent around a post to a large list of herpetologists from within SA, interstate and overseas and drew the comparison between the funds required to purchase the land and the salaries of a few of the executives of DEHAA. It was suggested that scrapping a few of their jobs would pay for the land in a few years and would return far more than the seemingly wasteful pouring of funds into their pockets.

Many of you can take a bow for your assistance. It paid off. A number of you wrote letters to the Minister and I understand that DEHAA got sick of having to reply to them and moved its priority up to the front. It was subsequently purchased and is now called the Warren Bonython Link Land.

In the great scheme of things, it matters very little whether I went to the opening of the Park or not. Who cares? The thing that matters more is the reason why I wasn't asked. One can only speculate that perhaps there are quite a few people in DEHAA who do not want any spotlight thrown on the value of their jobs.

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## EXCREMENT EATING (COPROPHAGY) IN THE AUSTRALIAN MULGA SNAKE (*PSEUDECHIS AUSTRALIS*)

Brian Bush, 9 Birch Place, Stoneville, WA 6081

Eating the excrement of other animals has been observed by me in the domestic dog (*Canis familiaris*) and bobtail skink (*Tiliqua rugosa*). The domesticated rabbit (*Oryctolagus cuniculus*) is known to eat its own faeces. There is scant record of this in snakes and no previously published accounts for Australian species. Banks (1984) reports coprophagy in a Forest Cobra (*Naja melanoleuca*) and Wolfgang Wuster (pers. com.) observed this in a False Water Cobra (*Hydrodynastes gigas*).

A captive-bred subadult Mulga Snake (*Pseudechis australis*) in my care regularly eats defrosted adult mice but has recently been observed devouring its own dried faeces. No other aspect of this snake's behaviour nor the applied husbandry is remarkable. It is housed in a similarly furnished terrarium to other long-term captive individuals, although I have observed none of the others demonstrating coprophagy. Whether this behaviour is aberrant in this species can not be determined from this particular case as stomach contents analysis, as done by Shine (1987), would not necessarily confirm the existence of separately ingested faeces. Any faecal matter found forward in the digestive tract may be overlooked, or considered the result of secondary ingestion.

Anyone keeping this species will be aware of its disgusting habit of spraying its faeces over a large area. Even its hunting behaviour leaves a lot to be desired - when being fed it often opens its mouth and lunges forward attempting to swallow whatever it contacts.

I have observed individuals in my care attempting to swallow, or swallowing stones, water containers, sticks, sloughs, electric blanket and even the terrarium itself.

In this excrement-eating individual the behaviour is deliberate. It prods, nudges and pushes the dried faeces to free them from the paper substrate. Some difficulty is apparent though as it attempts to position the rigid meal longitudinally in its mouth for swallowing.

Fresh wet faeces are quickly avoided immediately the tongue comes into close contact with them.

If any Australian snake could be considered a "bottom-feeder" then it is the Mulga Snake - what a dag! This observation also demonstrates that recycling is not a human innovation, but has been ongoing in some other organisms long before we became involved with it!

### REFERENCES

**Banks, C.B.** 1984. *Naja melanoleuca* (Forest Cobra Coprophagy. *Herp Review* 15 (4): 11.

**Shine, R.** 1987. The evolution of viviparity: Ecological correlates of reproductive mode within a genus of Australian snakes (*Pseudechis*: Elapidae). *Copeia* (3): 551-563.