

WESTERN AUSTRALIAN SOCIETY of AMATEUR HERPETOLOGISTS (Inc.)

(Member of the Australasian Affiliation of Herpetological Societies)

NEWSLETTER

1 December 2000 (24)

What is the Minister doing?

Cheryl Edwardes has been sitting on the redrafted legislation since September – if she commenced the public discussion process straight away, then the six weeks required for this would be completed now. The legislation could have been implemented prior the election in early 2001. Her procrastination may now cause the whole thing to fall over and force WASAH to start lobbying all over again. If this eventuates then it is damn disappointing, and not just for WASAH, but also for Gordon Wyre - he must have invested so much time and energy into drafting the new regulations. The

Subcommittee is less than impressed with this

unnecessary delay. Jamie and Simon have both been in contact with the minister's office in the hope of receiving some explanation, although unsuccessfully.

There are those members who will believe this is all part of an orchestrated plan by parties unknown to undermine the introduction of the new system. It would appear that they have been proved correct in what they predicted. However, if there is intent to undermine the new regulations then it must be coming from an upper management person or group that is senior enough to manipulate the minister.

I just hope the delay is related to the minister's uncertainty as to when an election will be called. Keep in mind that one was mooted for as early as 9 December 2000.

With the right press release, coinciding with the publication of the public discussion process in the newspaper, the minister can raise her profile at an opportune time relative to the state election in 2001. Maybe this is the strategy being employed by her advisors – let us hope so! I am getting worn out fielding calls from people asking, "What's going on?"

Okay so now I've heard everything...

According to Channel 7 News the Galapagos tortoise that Steve Irwin has at Australia Zoo is not only the oldest in the WORLD ... but was brought to Australia by no less than CHARLES DARWIN himself!

All of this would be half believable except for one small

fact ... they said the tortoise was 100 years old right.... well Charles Robert Darwin has been dead since 1882 as far as I remember ... so unless he dragged his sorry backside out of the ground and jumped a ship to Australia in 1900 (and just happened to bring along a *Geochelone elephantopus nigra* in his baggage).

Interestingly enough, according to captive longevity records for this species, the oldest living specimen is in the private collection of Richard Cary Paull in the United States, and has only been in captivity a mere 72 years and 5 months, having been acquired on the 6th June, 1928 ... followed closely by another specimen (GALAP Studbook #850246) in the Honolulu Zoo that was acquired from the wild on the 29th September 1929 ... making a total of 71 years and 2 months (and according to the database this animal was collected as a juvenile, so this age is probably very close to being the animals natural age)

I don't know who is sillier ... Steve for spinning the yarn, or Channel 7 for believing it and putting it to air!

Something else occurs to me ... Charles Darwin's only visit to Australia was at the end of the voyage of HMS Beagle (1831-6) ... arriving in Sydney Cove on the 12th January 1836 and departing for Hobart Town on 30th January, 1836 - arrived Hobart Town on 5th February, 1836 and reaching the Cocos Islands on 1st April, 1836 enroute to England

Are we to believe that Harriet the Galapagos tortoise is actually over 164 years of age???

Does anyone know where Harriet really came from?

Well there you go folks ... according to Channel 7 ... Steve says that poor old Harriet was captured by Charles Darwin himself in 1835, and is now 175 years old!

David Williams

REPTILES OF THE SOLOMON ISLANDS

Is now available on CD. This is a revised edition of my 1980 book of the same title. The contents of the CD are in html format and can be read by any web browser on either Mac or PC platforms. Navigation through the CD is easy with an interactive Contents page and interactive Photo Index as well as numerous links within the keys and species accounts. There are detailed accounts of all the reptiles currently known from the Solomons - over 80 species. Almost all of these species are illustrated - many with colour variants - in 156 high quality photographs. A sample page from the CD can be viewed at:

http://www.members.dingoblue .net.au/~mikemccoy/geckos/Ge ckos1.html

I am selling this CD for AUD\$44 (inc. GST& postage). Payment can be made by bank draft, personal check (in Australian dollars only) or by credit card (Visa or MasterCard only, 3% surcharge applies).

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BARDICK - a small snake with a big attitude

For a small snake the bardick is one of my favourites. Growing to 70 cm with a stocky build and distinct head it sure does leave a lasting impression. Many people remark on how similar it looks to a small death adder, which is not surprising. Indeed some evidence suggests that they are closely related. At the moment the Bardick belongs to a monotypic genus Echiopsis with the species name curta. This suits me as they have had a rather unstable taxonomic history (like most small Aussie elapids), including being lumped with the tiger snake genus Notechis. You may have heard of the Lake Cronin Snake? It was thought to be related to the Bardick. Even though they behave and look similar this rare Goldfields elapid has recently been placed in its own genus -Paraplocephatus atriceps.

The Bardick is generally found across southern coastal Australia where it can be either rare or extremely common in

places. For instance the population east of Adelaide is listed as vulnerable while here in the west they are common north of Perth and on the south coast. I remember spotlighting with Busho on Lort River Station where we collected about 25 Bardicks in one night on unsealed roads in what was mainly cleared-paddock country. I took a photograph of these snakes in a garbage bin after we weighed and measured the lot. By contrast near Perth it is infrequently seen now due to development but some recent records include the Trigg Dunes, Swanbourne, Burns Beach and Joondalup. As human density drops off towards Lancelin it becomes reasonably common and is often found on the road at night, which is the best way to find it, as it is mainly nocturnal. You can turn it up during the day beneath dead vegetation or other cover. By the way, any Bardick records from the general Perth area are worth recording.

The main thing I like about the Bardick is its defence attitude. for a small snake it sure acts tough. Most individuals, but especially the females, after capture and while being photographed, will defend themselves vigorously in a fashion similar to a much larger elapid. Holding the head aloft with the forebody in the characteristic S-shape and striking repeatedly with much determination. Any movement you make is followed with a twisting of the elevated head. This caused me to think of another common name for it the 'Gun Turret Snake'.

Most Aussie snake books will tell you to treat large bardicks with caution. Please do, as they can sure 'pack a punch'. Bardicks do well in captivity and include mammals in their diet. This is rare in small elapids with most feeding on lizards and frogs. Keeping lizard feeders is a real pain, but not so with the larger individuals of this species taking mice. Like most Aussie elapids they will eventually settle down in captivity abandoning the 'Gun Turret' look, though I must say, it is appealing in these snakes.

I have always wondered about the common name "bardick". All I know is that it is aboriginal, but what does it mean?

BM

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THE SUNSET FROG

Imagine finding a frog in the southwest that looked so different you knew immediately it was a new species. Back in 1994 a bloke called Pierre Horwitz did exactly that, but it was not only a new species but also an entirely new genus. The common name was suitably applied to describe its brilliant orange and blue belly. This prompted further surveys and detailed research, which lead to its formal description in 1997 -Spicospina flammocaerulea was known: a unique name for such a unique frog.

Undoubtedly the highlight of the year for me was the opportunity to see the Sunset Frog in its habitat and photograph it. Even though it is now known from a dozen or so populations it is extremelyn localised and appropriately declared threatened. You may wonder, "Well it remained undiscovered all this time." So what difference does it make now that Homo sapiens know of its existence. Well, probably not much, but at least we can keep an eye on the beast and learn something about this truly remarkable frog. The scientists

have estimated the Sunset Frog to he a very ancient species being between 33-36 million years old. Remarkable information when you consider that *Tyrannosaurus rex* only wandered the earth for a mere 2 million years.

I was privileged to accompany Robert Davis and Mike Smith from the University- of WA on a Sunset Frog monitoring and survey trip. Funny enough, both guys are doing their PHD

projects on different frog species that are common and widely distributed. I was told later that this was the more appropriate path to take. When I reached down to catch my first Sunset Frog I was blown away by its distinct features of massive parotoid glands, extremely elevated rough circular skin and striking colouration. From the top it looks rather dull being almost black but its feet are orange and the belly is a combination of orange and blue. Check out Robert Browne-Cooper's photograph of this species in the latest museum frog book. It makes you wonder why so many small frogs are brilliantly coloured on the belly where it is out of sight. The general rule in nature is that bright colours attract mates or deter predators. The South American poison arrow frogs are a good example. The Sunset Frog has bright orange spots on either side of the cloaca, which made me wonder if for defence it arched its back and projected these at a potential predator like some overseas frogs do? If it was flicked onto its back by a predator then maybe the sudden flash of colour would be intimidating.

I learned much about the Sunset Frog from Rob and Mike and was able to see calling males and mating pairs. The camera got a good work out and we discovered a few extra populations. We also found an individual that was light orange on the back. You beauty – long live the Sunset Frog. BM



Rubber Snakes!

Part of the work I do includes courses on safe catching techniques using live snakes for personnel required, as part of their work duties, to relocate venomous snakes. During an enquiry from a company interested in putting some of its employees through my course, I was advised by its representative that she had contacted a competitor and they do something similar, but with rubber snakes!

Imagine, for example, big tough miners using grab sticks to catch rubber toys. It is analogous to teaching an adult to drive a vehicle using a pedal car!

Jokes aside, undertaking this form of training is irresponsible in the extreme. It does not take

into consideration the course participant's psychological state of mind – the most ophidiaphobic person could catch a rubber toy.

I would sure hate to send a person out to catch a venomous snake with the false belief he had been trained to do this after bagging a few children's toys!

Excursion to Lake Mealup

The following is from an email to RBC from a representative of the group looking after the Lake Mealup area after WASAH's recent visit and RBC's reply. It is disappointing that this has happened, especially as the Lake Mealup Preservation Society so kindly allowed us to visit this area. I was there and unaware of any undue disturbance, however some of this is going to be visually obvious after rolling over rotten logs (especially banksias) and raking through the litter and soil beneath. I remind members to take care when looking beneath rocks and logs to return them as close as possible to their original position.

One negative point – some of our members have since commented with displeasure that logs which had been moved during searches were not replaced in their original location, but left in a disturbed condition. This is disappointing, and the committee have asked me to remind WASAH that Mealup should be treated as a nature reserve – which it is, just not CALM owned - and material returned to its original location as far as possible after examination.

I'm sorry to hear that habitat disturbance was obvious at Lake Mealup after the WASAH



excursion. I'm hoping that Lake Mealup Preservation Society members noted that logs had been rolled back to their original positions, even if the soil below had been racked through and spread out a bit. I'll give you a call soon to find out how much disturbance there was, and talk to the executive about this.

On a much more positive note, a new record for this nature reserve was recorded. It was the small elapid commonly called the Black-backed Snake (*Parasuta nigriceps*).

No Ctenotus "gemmula" were found although it was I nice day out in the bush. The following species were recorded –

Sun Skink Cryptoblepharus plagiocephalus, Two-toed **Earless Skink** Hemiergis quadrilineata, West-coast Four-toed Lerista Lerista elegans, Common Dwarf Skink Menetia greyii, Southern Pale-flecked Morethia Morethia obscura, Bobtail Tiliqua rugosa, **Southern Blind Snake** Ramphotyphlops australis, Tiger Snake Notechis scutatus, Black-backed Snake Parasuta nigriceps and Dugite Pseudonaja affinis.



CALM-WASAH LIAISON SUBCOMMITTEE

Home numbers

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.

WASAH EXECUTIVE COMMITTEE

President/Editor: Brian Bush (08) 9295 3007
Vice-President: Robert Browne-Cooper (08) 9445 2409
Secretary/Treasurer: Brad Maryan (08) 9444 6412
Executive: Bruce George (08) 9490 2107; Russell Brown (08) 9390 8091

December Meeting

With half the Executive interstate and this time of the year sneaking up so fast, plus I have been so busy away from home, that it has been beyond my organisational skills to set up a meeting for December.

I suppose, until we know what the minister is doing with the new regulations, we might as well take a break.

We might all need our strength to take on the whole new concept of keeping in WA.

With this in mind I have included some of WASAH's basic Care Sheets as an appendix to this issue.



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

GENERAL MEETING

15 September 2000 MINUTES

- **1. Convene Meeting** 7.40 pm at Perth Zoo Education Centre.
- **2. Attendance** Did you count Busho? I did not. Whose got the book?
- 3. Apologies Eric Kidd, David Knowles, Thomas Rasmussen.
- **4. Correspondence Tabled** Frog awareness program at Perth Zoo and WASAH involvement as contact group for those interested in herpetology. Letter received from Eric Kidd regarding future of new keeping system and concerns with it.
- **5. President's Report** Same as last meeting regarding herp keeping regs, not much to comment on regarding this, except to be patient with proceedings. A full 6-week period will be allowed for public comment before parliamentary approval.
- **6. Vice-President's Report** NTR
- **7. Treasurer's Report** Real concerns regarding financial future of WASAH. Currently less then \$900 in the bank and with pending newsletter and journal we need to seriously consider ways to improve this situation.
- **8. General Business** Further discussion on new regulations. The possibility that a change in government could be a serious impediment to our cause. The release of new regulations to not coincide with school holidays to reduce likelihood of mass enquiries.
 - Rats and mice for sale courtesy of Phil Glover, see advert in newsletter.
 - BB raised possibility of a cricket match for December meeting with some dates being tossed around.
 - Bruce George outlined CALM's concern with WASAH field excursions without the appropriate licence. BB mentions CALM's speedy response to his application for the Mealup excursion.
 - Amelia Briggs was approached to possibly conduct reptilehandling courses etc. through her Vet school studies. Sounds like a good idea, good on ya 'Dr' Amelia.
- 9. Editor's Report NTR
- **10. Call for further business** NTR

11. Speaker - Our own Robert Browne-Cooper presented an "eye opening" slide show of his recent visit to Europe, mainly Switzerland. It clearly emphasised how advanced herpetoculture is overseas. Us poor sods in WA may as well be on a different planet. Thanks Rob, the slides were terrific.

12. Meeting Adjourned - 8:50 pm



WASAH CARE SHEETS:

Basic guides to the captive maintenance of some Western Australian reptiles. Thanks to John Weigel for allowing us to draw on much of his 1988 work, Care of Australian Reptiles in Captivity. Common names & total lengths used here are from Harry Ehmann (1992).

TREE FROGS

(Hylidae)

NORTHERN GREEN TREE FROG (Litoria caerulea)
WESTERN GREEN TREE FROG (Litoria moorei)

And other similar sized tree frogs

HOUSING: Adult frogs are not difficult to maintain in captivity. They can be adequately housed indoors in glass vivaria of suitable sizes to suit numbers. Do not overcrowd, a pair in a 40 x 20 cm tank should have ample room. Being arboreal, the cage can be decorated with either living plants or branches and foliage. A combination of a 50/50 gravel/pebble mixture and water will make an ideal substrate. A low-maintenance alternative is a shallow dish or trough of water that can be easily removed for cleaning. Vivaria can be regularly misted with water to maintain moist environment -use rainwater where possible as tap water contains chemicals.

All frogs are nocturnal, however they will bask during the day for short periods. A very low wattage bulb can be provided although extreme caution is needed in the installation so that frogs can't contact hot globe and because of the heat-retaining properties of water.

FEEDING: Frogs can have voracious appetites and generally only eat live food. A variety of invertebrates (i.e. flies, crickets, moths and mealworms) can be provided about twice a week. Large frogs will consume small ones so only house frogs of similar size together. Dusting your food items with vitamin powder will be beneficial in keeping your frogs healthy.

CAPTIVE BEHAVIOUR/BREEDING: Frogs adjust readily to captivity. Avoid excessive handling and always wash hands before and afterwards. Compatible pairs will breed if suitable conditions are provided. Only male frogs call.

IMPORTANT NOTE: Because of the chytrid fungus in Western Australia never release captive frogs in the bush. A better action would be to provide a wildlife-friendly garden with ponds and rockeries to encourage once-captive frogs to establish there.

Never release species found outside your area into the garden.

SMALL GECKOS (up to 15 cm)

(Gekkonidae)

CLAWLESS GECKO (Crenadactylus ocellatus)
VARIEGATED DTELLA (Gehyra variegata)
BYNOE'S GECKO (Heteronotia binoei)
WHEATBELT STONE GECKO (Diplodactylus granariensis)
SPECKLED STONE GECKO (Diplodactylus polyophthalmus)
WESTERN SADDLED GECKO (Diplodactylus pulcher)
NORTHERN SPINY-TAILED GECKO (Strophurus ciliaris)
WESTERN SPINY-TAILED GECKO (Strophurus spinigerus)

And other similar sized terrestrial or arboreal geckos

HOUSING: An adult pair will require an indoor vivarium of at least 30 cm in length. Plastic Tupperware-like containers are suitable. Cage furnishings should include a hiding place, i.e. pieces of bark, small rocks and leaflitter, or a combination of these. Arboreal species prefer branches/twigs to perch on. Artificial shelters such as margarine containers, cardboard boxes, etc with access holes are adequate. Hiding places should be placed in warm positions in the vivarium. Most geckos prefer to thermoregulate while remaining concealed. If species is arboreal suitable vertical hiding places should be provided.

All Australian geckos are nocturnal. To stimulate this activity and improve your ability to observe them, either a red or blue globe can be installed to warm the vivarium at night. A white globe of appropriate wattage can be used during the day when needed. A gradual cline of temperatures in the vivarium should be maintained by placing globe at one end. Periodically record the temperatures in the vivarium to determine what the geckos prefer.

A small water bowl should be provided at all times. Lightly spray the interior with a water atomiser as geckos may only drink by licking up the droplets.

FEEDING: A variety of insects such as adequately sized mealworms, crickets, grasshoppers, cockroaches and moths will be readily taken. Many ground geckos feed on termites. Food can be offered every 2-3 days.

CAPTIVE BEHAVIOUR/BREEDING: Geckos adjust readily to captivity despite being shy in the wild. Keep handling to a minimum. Record any breeding behaviour. All Australian geckos lay eggs with one or two per clutch.

LARGE GECKOS (larger than 15 cm)

(Gekkonidae)

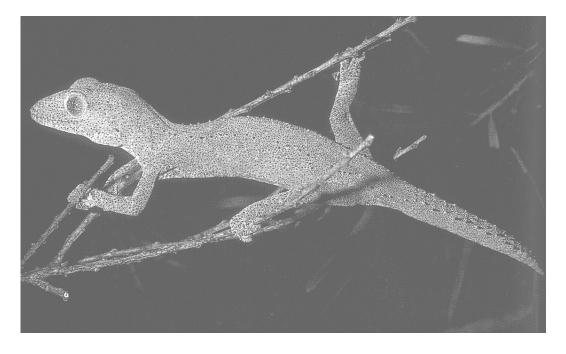
MARBLED VELVET GECKO (Oedura marmorata)
RETICULATED VELVET GECKO (Oedura reticulata)
THICK-TAILED GECKO (Underwoodisaurus milii)

And other large terrestrial or arboreal geckos

HOUSING: Similar for preceding species, however may require larger indoor glass vivarium at least 40-50 cm long. Adequately sized hiding places should be made available - provide several to determine preference. Again place these in a warm position in the vivarium. Some large geckos like the Knob tailed Geckos *Nephrurus* spp. are burrowers, requiring suitable amounts of sand to facilitate this. Substitute burrows can be made by using cut Pieces of tubing etc. Remember to design the vivarium so that substrate and furnishing collapses are avoidable.

Stimulating nocturnal activity and feeding is similar for preceding species. Large gecko species may accept pink mice. Do not mix small and large species together as cannibalism may occur.

Adult male geckos can be recognised by the presence of a pair of bulbous protrusions located just behind the vent. These represent the inverted hemipenes. In some female geckos check swellings can appear. These are calcium deposits used for egg production. It may not be desirable to house males together as fighting may occur during the breeding season. Depending on facilities and gecko numbers a back-up vivarium may be required for separation.



DRAGON LIZARDS

(Agamidae)

CRESTED DRAGON Ctenophorus cristatus (TL to 37 cm)
NETTED DRAGON Ctenophorus inermis (TL to 28 cm)
ORNATE DRAGON Ctenophorus ornatus (TL to 29 cm)
WESTERN NETTED DRAGON Ctenophorus reticulatus (TL to 29 cm)
WESTERN BEARDED DRAGON Pogona minor (TL to 40 cm)
WESTERN HEATH DRAGON Tympanocryptis adelaidensis (TL to 12c)

And other similar sized terrestrial and semi-arboreal dragons

HOUSING: If housed indoors, one or two adults will require an indoor glass vivarium at least 60-100 cm. Dependent on numbers and size, for instance Western Heath Dragon (*T. adelaidensis*) is a small species that can be kept in a smaller vivarium. Most Australian dragons are sun-loving lizards that will require heating with an ultraviolet light globe Or tube, (eg. Gro-lite or Tru-Lite brand) positioned so to allow basking. Thermal gradients are very important for lizards that enjoy the sun. Do not allow it to get too cool at night. A range of 28-32°C around basking area should be suitable during the day.

Housing dragons outdoors during the warmer months and inside in winter is another option especially suited to those species that occur naturally in your area. A smooth walled enclosure at least 60 cm below the ground, and 120 cm above with wire mesh lid (to avoid predation by cats etc.) will do. Situate the enclosure in a position where it receives more than 6-8 hours of sunlight and some shade. Pay close attention to weather forecasts. Remember that any reptile can overheat. The easy alternative is a portable lightweight outdoor enclosure. Experimentation and convenience induces proper husbandry techniques.

Cage furnishings should include branches (not so important for Western Heath Dragon) and suitable hiding places, deep leaflitter etc. for use at night. Crested Dragon (*C. ornatus*) will prefer exfoliated granite slabs for shelter.

A source of fresh water should be provided at all times, like geckos lightly spray the interior of enclosure as dragons often obtain water by licking up droplets.

FEEDING: The listed species feed on a wide variety of invertebrates, i.e. mealworms, crickets, grasshoppers, cockroaches and beetles. Remember, if you are harvesting insects from backyards and other places, make sure that no spraying of chemicals has occurred. All are very active lizards and will appreciate the benefits of chasing and devouring live food.

SMALL PYTHONS

(Boidae)

CHILDREN'S PYTHON Antaresia childreni (TL to 100 cm) PYGMY PYTHON Antaresia perthensis (TL to 60 cm) STIMSON'S PYTHON Antaresia stimsoni (TL to 100 cm)

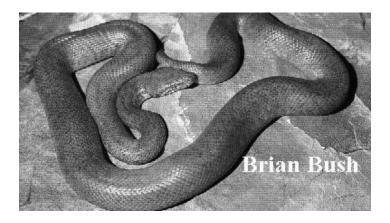
And other small python species

HOUSING: An indoor glass vivarium at least 60-80 cm long is needed to house one or two adults. Due to their small size Pygmy Python (*A. perthensis*) will require less room. Remember that pythons arc low energy specialists, as a result they are masters of doing nothing: activity is minimal. Generally pythons are more nocturnal than diurnal. They do bask and arc active during the day but to a lesser extent. To stimulate nocturnal activity a red or blue light globe may be installed to light and warm the enclosure at night. The cage can be warmed during the day using the same globe or by installing a second light fitting for a normal white light (or ultraviolet) globe of appropriate wattage. Other alternatives are electric blanket or heat pad at one end of the cage. A thermal gradient is the goal.

Cage furnishings can include a low flat hide box or suitably sized piece of bark in a warm area of the enclosure. Water to be provided at all times in a container large enough for snake to soak in.

FEEDING: Most adults will readily accept mice. Some specimens of the Pygmy Python may require a diet of lizards, but will eventually take mice. Juveniles will require lizards initially. Feed weekly or fortnightly. Try not to overfeed; pythons can become obese quickly in captivity.

CAPTIVE BEHAVIOUR/BREEDING: Juveniles and newly captured adults may initially be timid but will quickly settle in captivity. They are generally amenable to handling. Sex can be determined by probing. All pythons are egglayers.



LARGE PYTHONS

(Boidae)

BLACK HEADED PYTHON Aspidites melanocephalus (TL to 300 cm)
WOMA or SAND PYTHON Aspidites ramsayi (TL to 230 cm)
WATER PYTHON Liasis fuscus (TL to 300 cm)
OLIVE PYTHON Liasis olivaceus (TL to 650 cm)
SOUTH-WESTERN CARPET PYTHON Morelia spilota imbricate (TL to 250 cm)

And other large pythons

NOTE: A large python can deliver a rather painful bite. Generally most pythons are placid in captivity. If for some reason your snake is highly irritable and not amenable to handling you may have to re-think your choice. Captive bred individuals are best.

HOUSING: Large pythons arc best kept separated, except during mating. This reduces problems that can occur during feeding- Housing is dependent on size of snakes. As a guide to house one or two adult specimens about 2 metres long, an indoor glass vivarium or glass-fronted wooden box (even Perspex is fine) with minimal dimensions 50 x 100 x 100 cm should be provided. This size will allow the arboreal species to climb. For terrestrial pythons like Black-headed Python and Woma (Aspidites spp.) the length and width can be greater than the height. The general rule should be at least half the length of the longest snake; the minimum width should be half the measurement of the cage length. Heating can be provided similar to that described for the small pythons. The optimum temperature range in middle of enclosure should be maintained between 24-28° C. Cage furnishings should include strong climbing branches, not really necessary for Aspidites spp., but they do occasionally climb. Suitable hiding places like wooden or heavy plastic hide boxes, PVC pipe (make sure you can remove any animal when necessary) and solid baskets are ideal. Substrates should be user-friendly, eg newspaper, pea-gravel, carpet and woodchips. Olive and water pythons often soak in their water bowls, make sure it is large enough to allow this.

FEEDING: Thawed warm-blooded prey such as rodents, chickens etc. will be readily taken by adult snakes. Juveniles may require lizards initially, but can be quickly weaned on to young mice. Meals should be offered about once a week or fortnight. Watch your feeding regime, an obese snake is an unhealthy one.

CAPTIVE BEHAVIOUR/BREEDING: Newly captured specimens may be nervous and bite. Most individuals will settle down in captivity and become amenable to handling. Sexing can be determined by probing or prominent claw on male's cloacal spurs.

SMALL VENOMOUS SNAKES

(Elapidae)

YELLOW-FACED WHIPSNAKE Demansia psammophis (TL to 80 cm)

ROSEN'S SNAKE *Suta fasciata* (TL to 60 cm)

CROWNED SNAKE *Drysdalia coronata* (TL to 65 cm)

BARDICK Echiopsis curta (TL to 70 cm)

ORANGE-NAPED SNAKE *Furina ornata* (TL to 60 cm)

RINGED BROWN SNAKE *Pseudonaja modesta* (TL to 70 cm)

GOULD'S HOODED SNAKE *Parasuta gouldii* (TL to 55 cm)

BLACK-BACKED SNAKE *Parasuta nigriceps* (TL to 60 cm)

NOTE: Large specimens can inflict bites that can produce quite severe local symptoms i.e. swelling and pain. Most bites from small elapids are similar to a bee sting. Frequent exposure to venoms may result in a hypersensitive reaction in the keeper.

HOUSING: House one or two adults indoors in a glass vivarium at least 50-70 cm long. This is dependent on size of snakes. Cage furnishings should include suitable hiding places such as low flat hide boxes or appropriately sized and shaped pieces of bark. If using sand, limit this to only a shallow layer. Whip snakes (*Demansia* spp.) do well on sand in captivity, however an absorbent paper towel substrate with leaflitter is suitable also.

Heating is dependent on activity cycles of species kept. As whip snakes and Ringed Brown Snake are typically diurnal, a basking globe at one end of enclosure should be provided or place cage on electric blanket. The other genera are primarily nocturnal and may only require the ambient temperature of the room. However, they do thermoregulate by changing positions beneath a rock so you may want to duplicate this in captivity using an electric blanket as a substrate heater. A blue or red globe may be installed to provide heat and maintain normal activity. A shallow water dish should be available at all times.

FEEDING: The majority of Australia's small elapids feed on lizards and frogs. However, some adult specimens of Crowned Snake (*D. coronata*), Bardick (*E. curta*) and Ringed Brown Snake (*P. modesta*) etc. may take young mice. Force-feeding should only be considered as a last resort. Feed once a week.

CAPTIVE BEHAVIOUR/BREEDING: Initially most small elapids will be timid but will quickly settle down in captivity. Handling should be kept to a minimum. Due to nocturnal habits some snakes, eg hooded snakes (*Parasuta* spp.) will be secretive during the day, but will be very active at night. Try to avoid disturbing resting snakes or consider keeping the diurnal species. Sex can be determined by tail length, shape or probing. Both egglayers and livebearers are included here.