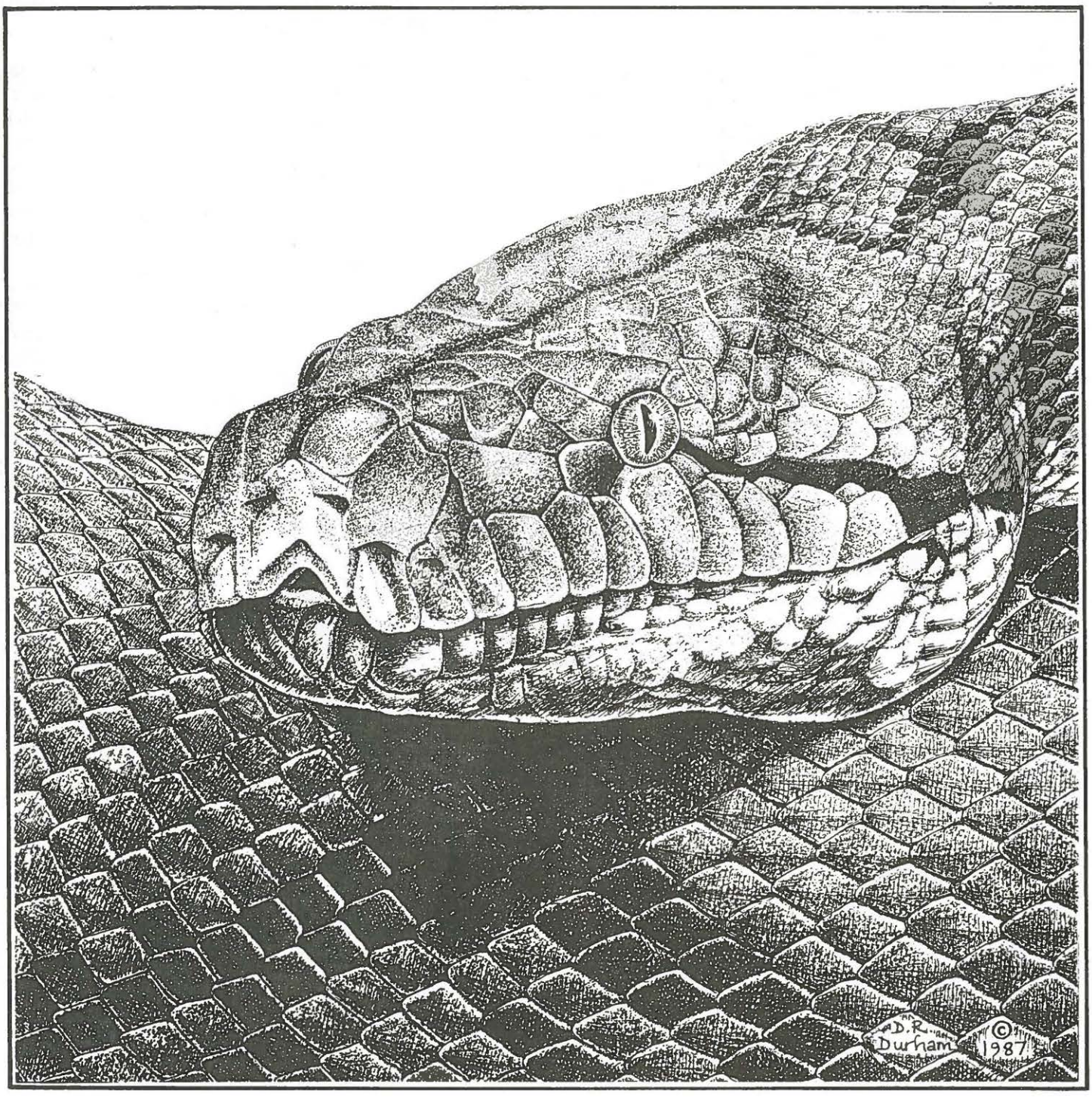
SNAKE KEEPER

VOLUME 1 NUMBER 6 JUNE 1987 £1.00p



INFORMATION

The South Western Herpetological Society

The South Western Herpetological Society was formed in 1972 for the purpose of promoting an interest in the study of reptiles and amphibians, both in the wild and in captivity.

Membership is open to both amateurs and professionals and the current annual subscription is £8. This amount covers all members of the family living under one roof. The S.W.H.S. endeavours to encourage youngsters by allowing Junior members (under the age of 18 years) to pay an annual subscription of £5 each. Overseas members pay the equivalent of £10 annually. The society's year runs from January to January but the subscription is waved in the case of members joining during or later than October, until the following January.

Meetings are usually held on the second Sunday afternoon of the month. These are mostly held at the Middlemoor Police Training H.Q., Exeter. The society usually engages various eminent speakers from universities or other societies to address the members. Occasionally visits are organised to herpetological or zoological establishments. The society also puts on various displays of reptiles and amphibians for the general public.

A monthly newsletter is published, giving details of meetings, and two journals are published annually. The S.W.H.S. liaises with over 20 societies and universities throughout the world and material received from them is included in the library which is reckoned to be one of the finest of its type in this country.

The membership includes staff of zoos, universities and museums although the majority of members join with only an amateur's knowledge. This quickly builds up through the companionship of the more knowledgeable members.

Since its formation, the society has achieved considerable status; both past and present members have been involved in official surveys in Trinidad and Tobago, The Canary Islands, etc. Several were involved in the BBC2 series "Life on Earth". The S.W.H.S. was called upon to advise the Government on its "Dangerous Wild Animal Act", prior to its passing.

With the introduction in recent years of the laws pertaining to conservation, and the discontinuation of importation of many species of wildlife, the society has included a Captive Breeding Committee as a recognised section of the society. Many members breed their own stock or work to this end with other members.

If you would like to join the South Western Herpetological Society please contact the secretary, Mr Frank Gibbons. His address is 'Acanthus', 59 St. Marychurch Road, Torquay, Devon, TQ1 3HG.

The Association of British Wild Animal Keepers

Membership Secretary
2a Northcote Road
Clifton
Bristol
BS8 3HB

Leigh Herptile Society

The Secretary
27 Siddley Street
Leigh
Lancs
WN7 5AZ

REPTILE AND AMPHIBIAN EXHIBITION

The Thames and Chiltern Herpetological Group are holding an exhibition of Reptiles and Amphibians at Amersham Community Centre, Amersham, Bucks on Saturday, 25th July. The event starts at 11am and continues until 5pm. Admission charges are 70p for adults and 30p for children. Enquiries to the Secretary, T.C.H.G., 30 Milton Dene, Woodhall Farm, Hemel Hempstead, Herts.

Our herpetological society listings page will be published every alternate month.

SNAKE KEEPER

Vol 1 No 6 June 1987

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INDEX

Potential growth rate of Pythons and Boas 4

Fond memories of Egg-Eaters 6

The day of the Anaconda 7

Our success and failure with Indian Pythons 8

Life with snakes 9

Breeding snakes is as easy as ABC? 10

Live food and the law 12

The substrate debate 13

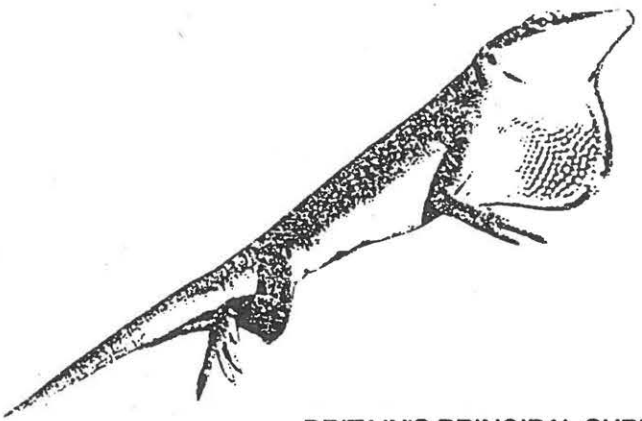
Junior Snake Keeper 14

Front cover: Reticulated Python
Python reticulatus
by David Durham

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POTENTIAL GROWTH RATE OF PYTHONS AND BOAS

by Kevin J. Hingley

There is a lot of information available on the captive maintenance and propagation of Boid snakes, and for many years the subfamilies of Boas and Pythons have been firm favourites amongst herpetologists, professional and amateur alike. Unfortunately, all too often the prospective snake keeper gives very little thought to the potential size some species of the so-called 'giant snakes' can attain. It is difficult to associate a vivarium full of hatchlings and the 12 to 14 feet long specimen in the vivarium next door when visiting a reptile dealer's premises, especially when the person who wishes to buy a youngster is given the impression that his or her snake will take years to reach that size.

Obviously, growth rate is dependent on several governing factors including vivarium size, temperature (which governs metabolic rate) and the amount of food offered to the snake. Growth rate can be controlled or governed by maintaining a moderate temperature regime coupled with a moderate intake of food items. If on the other hand a constantly high temperature regime is maintained then the snake can be expected to have a higher metabolic rate and will digest its food more rapidly and expect to be fed more often. As most large Boids are rather lazy snakes, the high intake of food will lead to rapid growth, and a small Python or Boa quickly becomes a larger animal requiring not only a larger cage, but also an increase in food items to satisfy its larger appetite. In my experience with Boids, a temperature of 23 to 25 degrees C (75 to 80 degrees F) is adequate, and temperatures above that are usually unnecessary, unless a particular specimen refuses to feed at a moderate temperature. High temperatures are not only responsible for an increase in appetite, but they can also lead to a snake becoming bad tempered. I once owned an 8' Reticulated Python (P.reticulatus) that was a very tame snake until its vivarium became overheated due to a thermostat which stuck. Upon entering the room where my vivariums were, this snake began striking repeatedly at me only to bounce off the sliding glass front. My main concern was that the snake would damage its snout, but when I slid open the front of the vivarium the snake could easily lunge forward in order to defend itself. Not having a grab stick the only thing I could do was to throw a large snake bag over its head and grab it behind the head in order to restrain it (and avoid a potentially nasty bite) and remove it to cooler quarters until it calmed down. Having mended the thermostat, and cooled down the snake and its vivarium, I replaced the snake in its cage and everything was back to normal. I think this demonstrates very well the fact that even 'tame' snakes can become a real problem at needlessly high temperatures. That Python would take dead mice very gently from my hand as a rule, and I considered it to be a real softy.

Returning to the main issue of potential growth rate, we need really only concern ourselves with two forms, the Burmese Python and the Reticulated Python. This is due to their popularity more than anything. Nowadays a large Boa Constrictor may only measure seven to eight feet, and whilst they may be potentially dangerous, I would not consider the average growth rate of the Boa Constrictor to be on a par with that of the Reticulated and Burmese Pythons. Growth rate in Boa Constrictors is usually fairly slow and steady, and most specimens usually take three to four years to grow to four or five feet in length. The two Pythons I've mentioned are quite capable of reaching lengths of 8 to 10 feet within 12 months. I have come across both extremes over the years, having seen Burmese Pythons that were allegedly 12 months old yet only two feet in length, and another Burmese that was said to be only 10 months old and measured 13 feet in length. The undersized Pythons were housed in small vivariums and fed "about a mouse each month" according to their owner. The large Python was housed in a large vivarium and was given 10lb of rabbits every fortnight according to its owner. Whether the actual size of the vivarium has a bearing on growth rate or not is debatable. It is a fairly widely accepted theory that the growth rate of fishes is dictated by the size of the aquarium in which they are housed, along

with the number of other fish sharing the aquarium. This is where the term 'stunted growth' comes into play. As far as reptiles are concerned this theory should not be discounted, but this aspect of herpetology will need a lot more research in order to be able to draw any positive conclusion.

It is doubtful that either the Burmese or Reticulated Python in a private collection will ever reach the 'record' size given for each species/subspecies. The Reticulated Python is on record for being the longest snake in the world today, with authenticated measurements of specimens 33 feet in length. There are similar reports of the Burmese Python being capable of reaching 30 feet. With this in mind, a lot of consideration should be given before buying what could be more than a handful of snake in a short space of time. It is not impossible for either of these two Pythons to attain a length of 10 feet within a year of birth, and even though the growth rate does slow down with maturity, you could end up with a 12, 14 or 16' Python sooner than you imagined. This is a frightening prospect when you consider all those cute little hatchlings at your local dealer's. Of course, if the temperature is maintained at a moderate level, and the owner can control the urge to inadvertently overfeed a Python because the poor blighter always looks hungry, then the growth rate can be controlled to some degree. Even so, the average size of both forms looks something like this; First year - 4 to 6 ft, Second year - 8 to 10 ft, Third year - 10 to 14 ft.

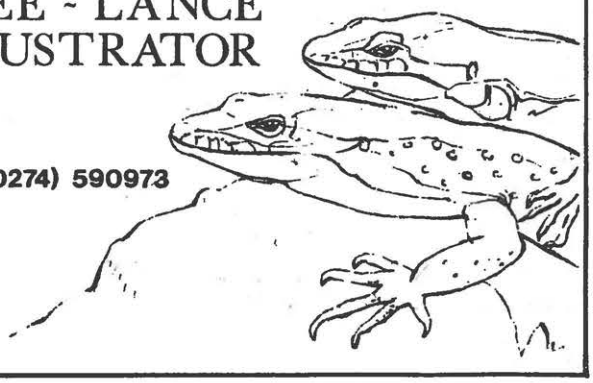
I monitored the food intake and growth rate of a hatchling Burmese Python back in 1981. This particular specimen was a dustbin, and never refused a meal. The first week it was in my collection it ate nine mice. At that time it was 50cm (20 inches) long. After that first week it was given three mice per week, and after a month it measured 60cm (24 inches) long with a girth of 7cm. A further month on it measured 97cm (38 inches) with a girth of 12.5cm (5 inches). At that stage it underwent a slough, which it managed without any problems, and after that I considered it large enough to be fed on small rats. After a further month it had reached a length of 130cm (51 inches) with a girth of 15cm (6 inches). It then underwent another slough, and a month later measured 138cm (54 inches) long with a girth of 15cm (6 inches). By this time our winter had set in, and as my vivaria were in an unheated room, the average temperature in the vivaria was 20 degrees C, and all of the tropical species I kept at that date displayed a much lower food intake due to the fall in temperature. By the end of February 1982 the Python measured 140cm (55 inches) with a girth of 17.5cm (7 inches). So in seven months from the date of purchase it had grown from 50 cm to 140 cm and had consumed a total of 52 mice, rats and gerbils in that time.

It's not just the young snakes that have to be considered either. I can recall buying a rather sickly 8' female Reticulated Python that had a heavy infestation of nematodes (parasitic worms). Once this snake had been wormed and was receiving the full benefit of its food intake, it quickly grew to a length of 12' taking just 3 months to do so. So if you are considering buying either of these Pythons, think hard about it first. Make sure you will be able to house and handle it properly and safely when the time comes.

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Fond memories of Egg Eaters

by Kevin J. Hingley

I can vividly recall owning a pair of these snakes back in 1979. Like most of the African species that reach our shores, they appeared at my local dealers' in October or November, and I bought them in early December. It didn't occur to me at the time that I would have some difficulty in obtaining suitably sized eggs for them - they were only twelve inches long, not much larger than hatchlings - so any hope of them tackling even the smallest pullet eggs was out of the question. I managed to get around this problem by using a small syringe and soft rubber catheter to force feed them on beaten albumen and yolk from ordinary hens' eggs. This method did have the occasional drawback however. When these snakes feed voluntarily on suitably sized eggs the shell is regurgitated, and on odd occasions these snakes would go through the motions of attempting to regurgitate after being force-fed, and by doing so would regurgitate the albumen/yolk mixture I had given them. Fortunately they kept more feeds down than they threw up, and by the spring they were big enough to tackle eggs up to the size of yearling hen pigeons, these being supplied by an uncle of mine who kept racing pigeons. The eggs had to be extremely fresh otherwise they would be rejected by the snakes.

The pair I owned were both Common Egg-eaters, Dasypeltis scabra, and fairly typical specimens they were too. Both were a grey-brown colour, with dark brown rhomb shaped markings running along the dorsum, and similarly coloured zig-zag markings on the sides of the body. On the head and neck were 3 'V' shaped markings, all forward pointing. The abdomen was light grey with darker speckling. With this species, the inside of the mouth (buccal membrane) is purple or black, and this can easily be seen when the snake is in the act of swallowing an egg, or when it adopts a defensive stance. The buccal membrane is highly elastic, enabling these snakes to swallow eggs much larger than their own heads. The few teeth that may be present are rudimentary, and in the unlikely event of a bite would not be capable of drawing blood. The process of swallowing may take 15 to 20 minutes for large eggs but, as soon as the egg has been passed into the throat, it is dealt with very quickly by downward pointing projections (ventral processes or hypapophyses) that are used to break through the eggshell. The hypapophyses are extended bone growth on the underside of the neck vertebrae that penetrate the oesophagus. Undulating movements of the neck cause these projections to break the shell and this combined with strong muscular contractions cause the shell to collapse and force the contents of the egg into the stomach. The shell is then regurgitated, and its usual shape is probably best described as resembling a miniature dug-out canoe. This remarkable feat is something that has to be seen to be believed, and once seen is not easily forgotten.

One of the other interesting things about these snakes, and other members of the genus, is the fact that they feed exclusively on birds' eggs. When one considers that the availability of the eggs is limited to the breeding season of the birds, then it becomes obvious that these snakes will have to go without food for the greater part of the year, possibly up to 8 months. Most authorities suggest that they do not supplement their diet with any other form of food once the supply of eggs has been depleted, although I vaguely recall reading somewhere that they also eat reptile eggs.

The eye has a vertical slit pupil, suggesting that these are nocturnal snakes. They are active during the day though, both in the wild and in captivity. In captivity they require a day temperature of 25 to 28 degrees C, falling to 22 degrees C overnight. In addition to several branches, I placed a disused birds nest in the vivarium (resting on the branches) and both snakes spent a fair bit of time resting in it but would not feed on any eggs placed in the nest. To get around this I used a small plant saucer, containing a little peat to prevent the eggs rolling around while the snakes were swallowing them. A small dish of water was also provided but I never saw them drinking from it. Perhaps most of the moisture they require is provided by the eggs on which they feed.

In the wild they feed indiscriminately on

birds' eggs, displaying no preference for the eggs of a particular species of bird. Weaver birds (Family Ploceidae) are frequent victims of these snakes; some species are said to build extra nests in the hope that the egg-eater will raid the wrong nest. Certain other weaver birds reputedly strip the thorns from the branches of the Acacias where they build their nests, leaving nothing for the snake to get a grip on in order to reach the nest.

When disturbed or molested, Egg-eaters coil up their body and open the mouth, displaying the dark buccal membrane. If this fails to deter the intruder, the coils are rubbed together, and serrated scales on the sides of the body create a rasping or hissing noise. Due to the colour and pattern of the snake they are often mistaken for Carpet or Saw-scaled Vipers, Echis spp., where both species have the same distribution.

They are not a difficult species to maintain, although the task is made easier if you know someone who is breeding small aviary birds and is prepared to supply their eggs to you on a regular basis.

The day of the Anaconda by L.P.Jarvis

One Sunday morning, six years ago, whilst lending a hand at a local fish exhibition where I had been asked to put on a display of snakes, the following incident happened which proved to be the start of a very exciting day.

I had just put the last snake, a beautiful docile 14' Reticulated Python called Pandora, into her cage when suddenly an urgent voice from behind asked for help. As I turned around, I realised it was an old friend, Tony Marsh, from Wigan.

He handed me a sack and urged me to put it in a cage quickly. The sack was very heavy and I untied the strings. I slid back the door of a large empty cage and proceeded to empty the contents of the sack into the cage. To my surprise, a nice shiny Anaconda slid gently and unhurriedly into the cage. When its snout met with the glass door at the other end of the cage it pushed it open and darted out. "Watch out Tony, it's getting out", I shouted. With that, Tony attempted a neck grip, but it was too late. "Ahh! it's got me", he shouted. The snake had anchored its jaws onto his right hand like a vice. In a split second his whole right arm was encased to the shoulder with the snake's coils.

By this time we had attracted a small crowd of people all offering their assistance with various suggestions to relieve my friend's predicament.

During the excitement I estimated the snake to be 9 to 10ft in length and probably female. Suddenly Tony shouted "Can't you get this thing off me?" By this time he was having difficulty in moving his fingers due to pressure on his arm muscles and tendons.

I proceeded to release Tony from the increasingly bad tempered snake. I found the old sack that the snake had arrived in and started to tap its snout with it, hoping it would release its jaws and bite the sack. After a few minutes the snake retaliated. It awkwardly tore its jaws from Tony's hand and struck the sack, burying its teeth deeply. The rest of the Anaconda still firmly encased Tony's arm. The snake was obviously determined not to let go. I managed to find the tail and started to unwind it from the increasingly agitated Tony. Just then the snake resorted to another means of defence by defecating, leaving me with a large amount of excrement dribbling down the front of my shirt and the foulest smell imaginable. Slowly and surely I proceeded to unwind the snake until Tony's arm was free.

We finally put the snake and its sack back into the cage, making sure the incident could not be repeated by securing the glass sliding doors with masking tape.

Tony, by now, was looking rather white and his hand was very swollen. "Are all Anacondas like that?" Tony asked. "I've never met a docile one yet", I replied.

On looking back to that Sunday of 1980 and many other encounters with Eunectes murinus, I have come to the conclusion that this snake is not a good candidate for the average private collection. It certainly lives up to its vernacular name of SUCURI - That which bites quickly.

Our success and failure with Indian Pythons

by Lee Evans and Nicola Holbrook

Our first Indian Python, which had been imported, measured about five feet in length. It was a male, which we had had for three years and ten months when we purchased a twelve foot female. Freda the female arrived by train from a pet shop in Leeds.

Unfortunately the train journey had upset Freda and the first problem we came across was a respiratory infection (ie. cold). This worried us as we had never come across this sort of thing before, so we took her to the local veterinary clinic.

Swabs were taken from Freda's mouth and sent off to a laboratory, where three different kinds of bacteria were detected. As a result Freda had to undergo a course of three injections of an antibiotic recommended by a reptile expert in Bristol. The snake had difficulty in breathing and her nostrils became blocked. We dealt with this by syringing her nose twice daily with luke warm water to flush it through. Three drops of an antibiotic (also recommended to us) were inserted into each nostril.

Vick was dissolved in water and put into her cage to help her breathe. Within a month we had cured this problem: then came the next.

We had noticed red bruising on some of Freda's scales. We were not worried at first because we thought that the injections had caused it, although we did get more concerned when it spread to other parts of her body and we found ourselves back at the vets.

Our vet took swabs once again; this time it was of the bruised patches. She again passed this on to the laboratory, and the diagnosis was a fungal infection.

A course of sixteen injections was then needed over a period of two weeks. We also had to swab her with a red liquid called Pepperdine into the not so open sores and a white liquid called Overzine into the deeper sores. This cleaned and at the same time helped to dry the sores.

The cost of all the treatment over the last nine months that we have had her was just over one hundred pounds.

Freda refused food from December the 19th 1986. Archie, the male, had been back with Freda for the previous two weeks. Freda and Archie then mated in the evening on the 22nd of January 1987. We were able to observe the mating which lasted for two hours.

Freda laid her eggs one day before the two months cycle was supposed to be up, which was Thursday, the 19th of March 1987. The first six eggs had arrived by six o' clock in the morning and by dinner time there were ten eggs. By that evening thirteen eggs had appeared. Friday came and by the evening there were sixteen eggs. By Saturday morning of the 21st March there were seventeen eggs. The last egg came along on Sunday 22nd March around teatime.

When all the eggs had been laid they were all white and looked to be hard-shelled. On the next Monday a few green patches started to appear. They seemed to smell off.

The only time that Freda left her eggs was when she was thirsty and wanted to have a drink. On a couple of occasions five or six eggs were out of the nest, so we just put them back in and she incubated them once again. We also noticed slight indents in the eggs and slight shrivelling.

Cage conditions

We kept the cage floor covered with south serney pebbles about two inches deep whilst Freda laid her eggs. We sprayed the cage and Freda with tepid water three times daily, the first time being 7am, the second time would be around dinnertime and the third in the evening.

Temperatures

We kept the daytime temperature at 85 - 87 degrees F. The night time temperature was 75 degrees F.

After a month the eggs seemed to get worse, so we sought further advice from Chris and Marcia Martin (at Cheltenham). They thought that Freda was almost definitely too young and her eggs had been

infertile, or, alternatively, that Archie was not mature. We think that Freda will be five years old next year and so we hope that we will have more success with our eggs.

Life with snakes

by John Hayward

Since the age of ten I have been involved with the keeping of snakes, much to the horror and often dismay of my long-suffering parents.

Over the years my mother grew accustomed to frozen hamsters, rats and rabbits sharing a place with the beefburgers in the fridge. She has often been unable to have a bath because "the snake's going to shed in a day or two and a few hours in the bath helps him" or been woken up with a recently escaped Python curled up by her feet, which she returned to its tank after the shock.

My father said it was a craze, a fad, and that it would pass. Fifteen years later he still has a dim view of my interest and has a "Why my son?" look in his eye when I try to express the qualities of snake keeping to his business colleagues.

Fortunately, as I got older and got my own home, my interest does not take place in their conventional home - a relief to my father, I'm sure.

I started with our native Grass Snakes which, much to the disgust of my parents, ate equally nasty animals such as frogs and newts and, when young, earthworms. I graduated to Garter, Dice and Ribbon Snakes which fed on strips of fish - much more acceptable.

Corn Snakes and other Rat Snakes (Black and Yellow) caused more concern because they ate mice (my parents kept these when they were young) and, as my father found out, they bite.

Then came the final straw, Pythons and Boas. It was time to move, and I did, cars loaded with various vivariums and occupants. My parents drove away leaving me in my new home, only to return an hour later with a 4' aggressive Black Rat Snake which had appeared in their car whilst my dad was negotiating a roundabout. The snake was around the gear stick and did not appreciate my dad's attempt to change down a gear. It bit the offending hand causing a minor panic as cars swerved around my father's car.

Settled in my new home, I was in my element with two Boa Constrictors, two Indian Pythons, one Reticulated Python and two Royal Pythons, to name but a few.

Neighbours were growing suspicious, bright lights on in every room, myself arriving home with Guinea pigs and rabbits, none of which were ever seen again.

Then came the summer. Red hot weather. I would sit on the grass at the front of my house with two Pythons or Boas at a time. All were over five feet long and two at a time was controllable. The snakes seemed to enjoy it. People would walk along the grass fronts but mine was given a wide berth by most pedestrians. There was no worn brown track across my lawn.

However, curiosity creeps in all of us and my enthusiastic talks seemed to convert most of the passers-by. After a while they would handle the snakes and even "talk to them".

So, fifteen years on, I still have my interest and I have learnt a great deal. There have been disappointments but diseases etc. have all been coped with. Breeding has taken place, babies hatched and live born reared and sold to give others the pleasure and knowledge that I have received. I am, by no means, an expert, just a happy and enthusiastic herpetologist who continues to learn, and be fascinated by, a beautiful and, in some cases, affectionate creature.

The snake is a misunderstood animal and often their keepers are the same. This is a fact born out of ignorance but it's nice to know that some of us are trying to, shall we say, "give them a leg to stand on".

Breeding snakes is as easy as ABC?

by Chris and Marcia Martin

This article is going to deal with one of the many questions we are asked by the numerous people who visit us or we see at various reptile clubs we go to. The question is, "How do you breed your snakes so successfully?"

Talking to some people, it soon becomes clear that they can't or won't appreciate the physical or mental attitude of the snake. It should be absolutely clear to the pet owner that the condition of the reptile and its housing are of paramount importance.

Many years ago we were asked to look at an 8ft dark phase Indian Python that a person, who I shall call Jim, wanted to purchase. We were taken to a flat and shown an old kitchen sink in the corner of a bedsit. We removed the perspex that covered the sink and stared in. Curled up in the corner was a snake. It was surrounded by a hundred or so rotting chips - as in fish and chips. The snake had no water.

The flat had a strange smell. When we enquired about the strange aroma we were told that an 'alternative tobacco' was used.

When we asked why the snake was kept under these conditions we were told that about a year ago its owner had got fed up with it and dumped it at the flat saying he would be back to pick it up. When we got back to the house of the prospective new owner we were in no doubt that he should not purchase the snake. We tried to explain how screwed up this snake would be, both physically and mentally. This snake was not the ideal first time pet. Alas, our warnings fell on stony ground.

To Jim's credit he did build a nice 4'x 4'x 3' vivarium equipped with heating and lighting equipment he bought from us. After a minor surgical problem was put right the snake started to eat a menu of rats. After about three weeks the snake started to get irritable. Over the next four weeks the snake got more and more irate until all Jim had to do was open the door into the room where the snake was kept. This would be enough to cause the snake to strike continuously at the glass. Jim was worried. Our only explanation of the snake's behaviour was that it was suffering from withdrawal symptoms due to the 'alternative tobacco' that he was used to.

After a week the phone rang. It was Jim asking for our help again. The problem was his wife had just told him that she was pregnant and she didn't want the snake around. So the following day the snake was installed in one of our tanks.

Because the snake was striking at the glass at the slightest movement, we covered the glass with a blanket. Even so, we had to tread very softly around the house otherwise it would strike out wildly. Over the next three months, the snake slowly calmed down and resumed feeding. We found him a good home in Wiltshire. Whether this snake would be any good for breeding is open to discussion.

In our opinion, the best chance of anyone succeeding with breeding is to start with British-bred babies. If possible, purchase the snakes from a private breeder. Usually, the price will be a lot lower than a pet shop. Most reptiles are now bred in captivity somewhere in the world, so be careful if the snake is advertised as captive-bred. Ask where it was captive bred. If the reptile was born in captivity in the USA, that reptile can be advertised as captive-bred but it is still an import. That is why when we advertise our stock we always state British-bred.

If you are prepared to wait, sometimes for a year or more, for good quality stock you should reap the benefit over the years. What is the point of purchasing second-rate stock and keeping it in a third-rate set-up? The reptile will die maybe in six months or a couple of years. Then what do you do? Do you spend another £100 or so for another second-rate snake? Don't you think it would be more sensible to wait and get good stock and purchase a good technical set-up? We are at a loss when we hear of people spending hundreds of pounds on stock but refusing to spend under £40 for a good quality heater and thermostat unit. Sometimes people are honest enough to come back to us and admit that their light bulb set-up killed their charge. Let us make it clear: we aren't saying that if you purchase our equipment

that your reptile will live and breed for years. What we do say is that your reptile will have the best chance of a long life. If you can keep your reptile happy and healthy you will stand more chance of breeding.

It is the responsibility of every owner to research the species they keep. Most reference libraries have temperature charts for countries throughout the world. Just look up the region that the reptile comes from and set the thermostat to the required temperature. You should adjust the temperature monthly.

At one of the reptile clubs that we go to a person used to ask us every month, "How do you breed your Boas?" We would reply that the temperature should be 90 degrees F. Our questioner would answer that this was too high and would say that it only needs to be 75 degrees. We would then make an excuse and talk to someone else. If he had checked the temperature charts he would have seen that the average daytime temperature for that region is 90 degrees F throughout the year.

Controlling the photoperiod is always important so that the reptile knows what the season is. What is the point of laying a clutch of eggs if winter is just around the corner?

So, to sum up, get good advice from a private breeder. Purchase British-bred babies. Purchase good quality heating and lighting equipment. Keep your reptile in as stress-free an environment as possible.

Chris and Marcia welcome enquiries about any aspect of snake-keeping (except veterinary problems) providing an sae is enclosed. Their address is 18 Ballinode Close, Cheltenham, Glos. GL50 4SQ. Telephone Cheltenham 573477.

Classified Advertisments

Rates: 10p per word. Min. 10 words
Box No. £2. Deadline 20th June.

FOR SALE

Florida King Snake. Male, 5'6". Offers or exchange for young Common Boa Constrictor. Telephone Hugh, Great Missenden 2029.

Adams Reptiles
Specialists in captive-bred reptiles, delivery arranged, trade also supplied. Telephone 01 679 6901.

WANTED

Mature male Gopher snake. Tel: Northampton 61188.

Florida/Eastern Indigo Snake. (Blue black) Cash waiting, will collect. Hatchling or mature snake, either sex. T.Nicholson 0474 351600.

J.S.K. Competition Results, issue 4.

1 Cook's Tree Boa
2 Boa Constrictor
3 Emerald Tree Boa
4 Rosy Boa

Winner: P.Harrison, Stockport.

Snake Keeper News

UNWANTED PASSENGER

After watching the F.A. Cup Final at a friend's house, a Northamptonshire woman returned to her car and was somewhat shocked to find a snake crawling across the dashboard. This was her first encounter with a snake, an animal of which she is not overfond. She locked the car and contacted the RSPCA for help.

The next morning an RSPCA Inspector called and proceeded to remove various parts of the vehicle's interior in a thorough search for the snake. However, the snake was not found and the woman now intends to sell the car in case the elusive reptile is still waiting for a ride.

The snake was described as being about twelve inches long and brownish in colour with a yellow stripe.

ROYAL PYTHON HATCHLINGS

Two of Roger Grenville's four Royal Python eggs featured in last month's Snake Keeper have hatched. The first hatchling appeared on the 9th May and the second was just emerging from its egg on the 17th May. The other two eggs have failed. Roger has taken some photographs which we hope to print next month with a more detailed account.

Live food and the law

by Cassandra Oakes

Snake-keeping, and a snake's eating habits, can be extremely controversial, particularly the issue of live versus dead food. I have tried to find out where we, as snake-keepers, stand as regards feeding live food to snakes within current legislation relating to the keeping and feeding of wild animals.

I have deliberately avoided the moral issue as it is something we are all well aware of. We may have a biased opinion, but there is a general unwillingness to bring the live food debate into the open and stand up for "snakes' rights".

In my investigations I have come up against much secrecy, vagueness and confusion. Finding the true facts and eliminating hearsay has proved difficult. The local branch of the RSPCA, the local Environmental Health Office and numerous pet shops have given me both their professional and personal opinions. I thought initially that the answers I sought would be found in one or other of the many animal laws - this is not the case.

The following Acts were looked at:

Protection of Animals Act 1911
Cruelty to animals etc (still in use)

Pet Animals Act 1951
Licensing of pet shops (still in use)

Dangerous Wild Animals Act 1976
Licensing and housing of dangerous wild animals

Endangered Species Act 1976
Import & Export Controls

Wildlife and Countryside Act 1981/5
Badger baiting etc

Zoo Licensing Act 1981
Licensing and inspection of zoos

Animal Health Act 1981
Control of dogs, sheep, rabies, disease, exportation, licences

Animal Health & Welfare Act 1984
Humane slaughter of cattle, artificial breeding of livestock, registration of veterinary drug merchants

It is generally understood that it is an offence to put a live animal into a cage for a snake to kill by itself. This is where the professional bodies can disagree.

The RSPCA is likely to prosecute under the Protection of Animals Act 1911 if it has been reported that an animal is allegedly being ill-treated e.g. a live mouse fed to a snake. According to my local RSPCA, whether or not someone is guilty of cruelty depends on the interpretation of this Act which forbids torturing, terrifying or infuriating an animal, or making it the victim of unnecessary suffering. The feeding of one animal to another is not mentioned specifically in this or any other Act.

A test case is needed on this issue. To date there have apparently only been unfounded reports of cruelty or court cases where the defendant has pleaded guilty. A not-guilty plea would give an opportunity to argue that the mouse (or whatever) had not been subject to unnecessary suffering, that being killed instantly by a snake could be more 'humane' than other means of killing, and equally that the snake might suffer if it was not allowed live food. As things stand, the RSPCA have no legal ruling that cruelty has taken place when a snake is given live food.

I have been told by various pet shops that it is an offence for them knowingly to sell an animal to be used as snake food. This is not mentioned in the Pet Animals Act 1951 under which pet shops are licensed. Licences are issued by the District Environmental Health Office which is primarily concerned that animals are kept in a clean and healthy manner and, although selling live animals for food is not usually an offence, each District Council may apply its own rules. In my district it is up to the pet shop owner whether they sell an animal as food, live or dead. Many pet shops will turn a blind eye in my experience, but a shop that won't sell an animal as food must be respected - they may not want to, or may not be allowed to by the terms of their licence. Where shops sell dead food, it must have been killed humanely and can either be sold fresh or frozen.

The EHO said that if there were any specific legislation about live food, it would be very difficult to enforce as evidence could only be obtained by spying

on people in their homes or in pet shops, or relying on hearsay and gossip. The police would not want to be involved; it would be a job for a more specialised body. The laws available to EHOs at the moment would make it impossible for them to prosecute the snake keeper solely on the grounds of feeding live food.

The only rule seems to be that live food must not be given in front of an audience. Presumably this is to stop morbid voyeurism and avoid offence to the public. The EHO also emphasised that discretion is the key when buying or using any form of live food - if snake keepers respect other people's opinions there should be no trouble.

CONCLUSION

As the snake keeper's position is generally unclear, any relevant rules and regulations should be made easily available. This could be done in several ways. Firstly, pet shops could openly display their personal and/or professional policies with regard to selling animals for food. A notice issued by the EHO with the licence would be more obvious to customers, but a handwritten notice signed by the owner would do. The thought of pet shop stock being used as food might be abhorrent to some customers but it would avoid any potential trouble or embarassment to the shop or the customer. This is especially important for a pet shop which sells snakes, as they usually carry a stock of live mice and one would fully expect to be able to buy some; this is not necessarily the case.

When a local herpetological society is formed, it could be given, on request, copies of the pet shop by-laws relevant to its area. It could then pass these to members along with other helpful information. National societies should have access to all the local by-laws which they could supply to isolated snake keepers or members who have to buy their food away from home (e.g. where they work, or because there is no local supplier etc). This would ensure that any snake keeper responsible and caring enough to join a society would be able to avoid the kind of trouble which can give snake keeping a bad name. This, in turn, would help the RSPCA, the EHOs, pet shops, societies, keepers and moralists!

Lastly, information about difficulties, new laws etc could be circulated through society newsletters and magazines such as Snake Keeper.

I want to emphasise that I only sought information for this article locally and opinions differed immensely. Local opinions may not be those of relevant national bodies.

I should like to thank the Nottinghamshire Chairman of the IHS and the many people I talked to for their help.

The substrate debate

by Mandi McKinney

My boyfriend and I first started keeping snakes a few years ago with a few Garter Snakes in a 3' vivarium. We experimented with different substrates, starting with small pebbles similar to fish tank pebbles. This proved to be a messy business when the snake dirtied its tank as it was almost impossible to clean off. We then switched to artificial grass which also proved to be impractical. We now keep an 8' Indian Python and a 5' Reticulated Python in a 6' vivarium. We started with newspaper as a substrate but the snakes developed a pinkish rash on their undersides. We wondered if the print could be causing the rash. It was then that we tried lining paper, available from decorating shops or hardware stores. It costs about 65p a roll. It gives the tank a clean white base and is easy to change and causes no irritation.

Articles on all subjects related to snakes are welcome. These should preferably be typed but legible hand-written articles are quite acceptable. Snake Keeper is constantly searching for items of interest relating to snakes. Whatever you've written, seen, drawn, photographed (b&w) discovered, invented, bred, lost or cured WE ARE INTERESTED!

NEXT ISSUE:
A history of the Reptile House at London Zoo.
Hertfordshire snake keeper- Fred Parkyn
Quarantine - How essential is it?
Day/night temperature variation
The False Water Cobra in captivity
Breeding Corn Snakes
Tree Snakes

Coming soon..coming soon...coming soon....
Snake Keeper T-shirts
Details next month

JUNIOR SNAKE KEEPER

Snake charmers

by Lee Bowler

Snake charmers have been around for quite a long time. Their shows, or acts, take place in busy markets, street corners and other busy public places in North Africa, the Indian sub-continent and sometimes Morocco. The snake charmer's equipment consists of baskets, a flute, a good crowd of people and, most important, the snakes.

The most commonly used snakes are Cobras (Naja), and occasionally an assistant will display in his arms a large Boid snake, eg. Indian Python (Python molurus molurus). There is more to snake charming than most people realise. For instance, most people think the snakes are dancing to the music played by the snake charmer on his flute. This is not true; as you know snakes have no ears, so they cannot hear the sound, only 'sense' vibrations. The snake is, in fact, following the movement of the charmers flute, where the flute goes, the snake usually follows.

The act is simple and goes as follows. The charmer will sit with his baskets around him and will then start to play his music. After a while when he has attracted a large enough crowd, he quickly removes the lid of the basket and moves the flute slowly around. The snake is shocked by the bright light and rears up and forms its characteristic hood. After a while the fakir or charmer stops playing and the snake remains still.

Then comes the most dangerous part of the act, known as the Cobra kiss. The charmer leans forward towards the snakes head and appears to touch the snake's head with his mouth or offers his forehead for the snake to kiss. The success of this trick depends on the charmer's knowledge of the snake's pattern of behaviour.

Many people ask the question "Do the snakes still possess their fangs?" The answer is mostly yes: the snakes have been thoroughly trained and the charmers also take a big gamble. Even if the fangs were removed they would regrow and again be capable of killing.

Another question often asked is "How do you train a Cobra not to bite?" The charmer will make a metal image of a face or flute. The snake is then tormented and encouraged to bite the image. When it does strike it results in pain, the fangs can even be knocked out and cause quite serious mouth injuries. This routine is repeated daily until the snake, however angry it may be, will not strike.

In Morbund, not far from Delhi, most of the men are professional snake charmers. Every year a snake charming festival is held. The charmers are taught about the nature of the snakes, how to perform, skills for snake catching, spotting, handling and the religious aspect. After training, a test is taken judged by the oldest professional.

In Hindu religion, the Cobra is treated as a sacred animal, so the snakes tend to get slightly better treatment than they would with a Mohammedan charmer who has no specific place for snakes in his religion. The Hindus keep their snakes for about six months, then they are replaced by new ones. The Muslims keep their snakes until they die, which in most cases is not long, as they are rarely properly cared for, especially with regard to feeding.

After being caught, the snakes are under great stress and refuse to feed, unless given a large vivarium fitted out with its natural environmental surroundings. None of these conditions are set up by their owner. The fakir, after keeping a few Cobras, realises that they are not interested in food so doesn't attempt to feed the snakes.

Before releasing the snakes, the orthodox Hindus carry out a quite pointless ritual feeding. Two bowls of milk and meat are placed in front of the snake. If by chance the snakes happen to crawl through one of the bowls, it is regarded as a sign of favour, but for a lot of the Cobras it is too late to be released. Within days of release they either die or are killed by predators. Where do the snakes that die in captivity go? To a graveyard: the Hindus give them a ceremonial burial, especially

if it is a King Cobra (Ophiophagus hannah). On the whole, snake charmers are bad news to snakes and often death too.

The Florida Garter Snake in captivity

by Richard Proctor

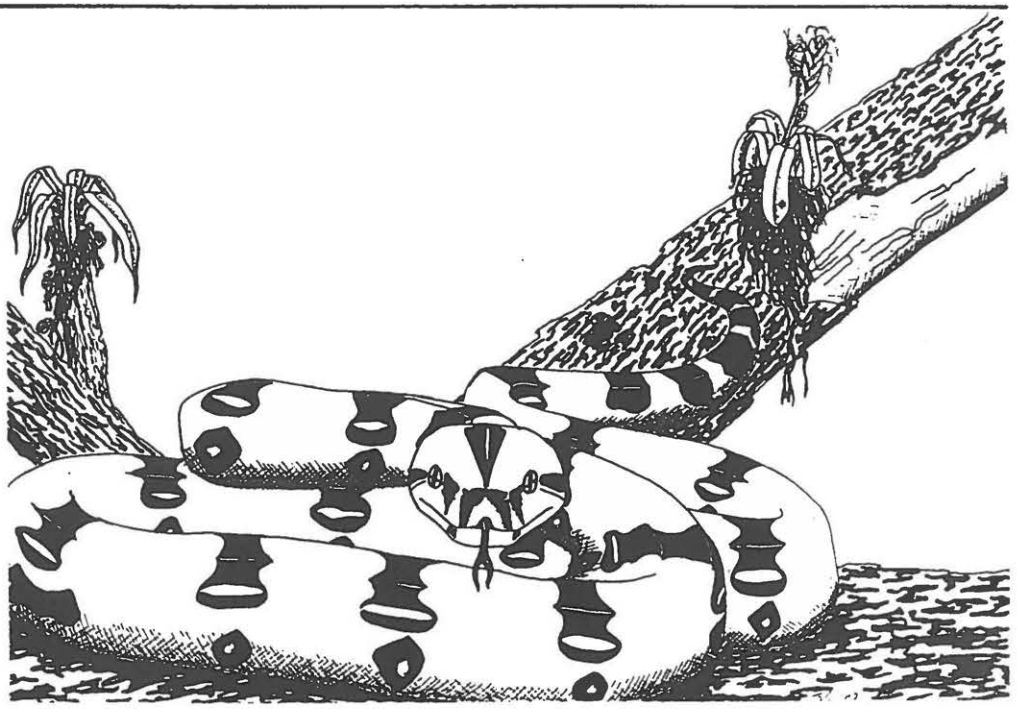
Any cage 2'x 1'x 1' or larger will suffice for an adult Florida Garter Snake, Thamnophis sirtalis similis, the best one being an all glass aquarium. As these snakes are very slender and agile, special care must be taken to ensure that they have no means of escape. Ventilation is important though as they like to live in a humid atmosphere.

Peat is often recommended for the substrate but in my experience with small snakes this can cause problems when it sticks to the mucous on the food and lodges in the mouth. Newspaper is also recommended as being very hygenic but as this has the disadvantage of being less aesthetic, I have found gravel more satisfactory. A bowl of water must be provided as they like to soak for long periods although they must not be allowed to do this for more than 24 hours as they may get a fungus infection. If gravel is used the bowl can be firmly sunk into it; with other mediums a good heavy bowl will be needed to ensure that the snake does not tip it over. These snakes are fairly nervous so they will need a hiding place. The best sort is a half flower pot but a box or slab of stone could be used. As they like to climb a climbing stick must be provided.

Heat and light must be provided as this species is less hardy than some and needs a winter temperature of 18-20 degrees C and a summer temperature of 21-25 degrees C. The winter photoperiod is about six hours and the summer photoperiod about nine hours.

These snakes thrive best on a diet of small frogs which provide natural elements such as calcium. They will also take tadpoles that have been left in the water basin. At certain times of the year when it is impossible to feed frogs or tadpoles, worms will have to be given but care must be taken not to collect them from in or around manure heaps as these will have broken down organic chemicals in their bodies. If you feed solely on earthworms you must first dust them with a vitamin/mineral supplement. Contrary to popular belief, Florida Garter Snakes do not eat fish.

These snakes are very colourful and easy to keep and so make an ideal introduction to snake keeping. Since I have kept one I have only encountered two problems. The first one when he caught a cold, due I think, to the inadequate heating that I installed when I first acquired him. This was cured by raising the temperature of the vivarium. Another time he fasted for six weeks and although he remained very active he did lose weight and I was very concerned about him. After six weeks he started eating again and I have had no further problems. My snake is now tame enough to take food from my fingers whilst I am handling him.



Boa Constrictor
by Jan Stipala

Jan lives in Cornwall and is 16 years old. He started keeping snakes at the age of 12. He has kept Dice Snakes and Boa Constrictors and has a Corn Snake and an Indian Python at present.

The Reptile Breeding Foundation

The Reptile Breeding Foundation was established in 1973. Its primary purpose is the conservation and preservation of rare and endangered species of reptiles and amphibians through a concentrated programme of captive propagation and educational programmes.

The Foundation, which is a non-profit, registered charitable organization, advocates the conservation and preservation of all wildlife and all natural resources, and they encourage programmes which will give the public a better understanding of the world around us, and a greater appreciation of our natural heritage and environment.

Through the captive breeding propagation programme of the Foundation, rare and endangered species of reptiles are supplied to zoos and institutions, so that no more of these animals need to be taken out of the wild, natural environment.

The Foundation offers a wide variety of lectures, talks and presentations to interested groups and individuals. The public are invited to contact them with questions and problems which may be encountered in keeping reptiles as pets, or with questions pertaining to these animals in the wild.

The Foundation's first major breeding successes occurred in the 1970's with a genus of West Indian Boas called Epicrates. They still have a number of these individuals in their collection, while many of their captive-born young have been placed in zoos to assist in breeding programmes elsewhere. In October of last year, another Cuban Boa, Epicrates angulfier, was born. An additional rare species of snake with which they had an earlier success, is the Madagascar Boa, Acrantophis dumerili.

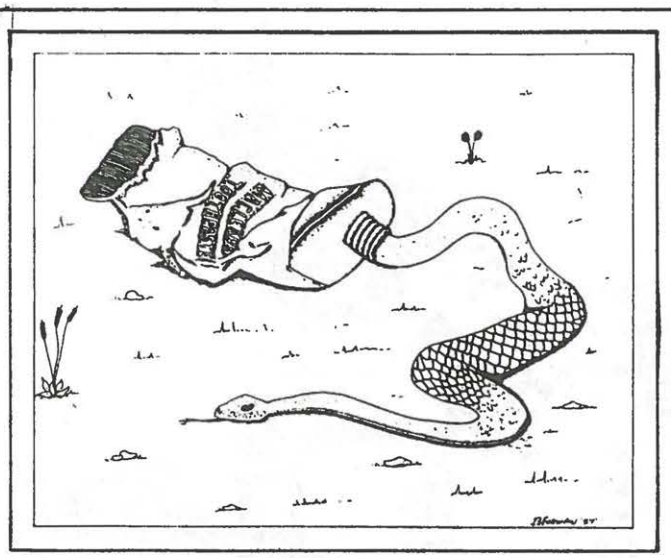
The Reptile Breeding Foundation has also had good breeding success with certain species of lizard including the Round Island Day Gecko, Phelsuma guentheri, the Frog-Eyed Sand Gecko, Teratoscinus scinus and the Mongolian Frog-Eyed Sand Gecko, Teratoscinus przewalskii.

In 1977 the Foundation was presented with the prestigious Edward H. Bean Award by the American Association of Zoological Parks and Aquariums for their breeding success with the Caribbean Boas of the genus Epicrates.

Spring 1986 saw the production of their twice-yearly journal, the Herpeto-culturist, followed in the winter of 1986 by their quarterly newsletter, Scales And Tales. The journal is a fine production, featuring articles, book reviews, cartoons, and advice with much use of very effective line drawings. The director of the Foundation, Thomas A. Huff is also editor of the journal and the magazine's pages are liberally sprinkled with his humour.

For further information write to

The Reptile Breeding Foundation
P.O.Box 1450
Picton
Ontario
Canada
KOK 2TO



JUNIOR SNAKE KEEPER QUIZ by C.G.Pywell-Fox

1 ---- Snake. Used in breakfast cereals.
2 ----- Python. Used in black pudding.
3 --- Eating Snake. Used in omelets.
4 ------- Snake. Used in pies with mush-
5 ---- Snake. Used in custard. rooms.
6 ----- Python. Garnish for prawn cocktail
7 ----ing Snake. Usually with chips.
8 ---- Adder. Type of pastry.
9 ----r-ve Snake. Exotic fruit.
10 ----- Snakes. Used in tea and coffee.

Answers on a postcard please. The first correct entry drawn on the closing date of 30th June will win a £5 book token. Winner notified by post.