

NSHS NEWS

The Newsletter of the Nova Scotia Herpetoculture Society • Spring 1998

Peril in Peril

by Steven Gonsalves

ANY SNAKE ENTHUSIAST should be able to recognize this boid right away: it's the beautiful Ball Python (*python regius*). Now, this isn't your average Ball Python! Take a good close look at his lower back and notice the bumps. I drew them there on purpose because this is my python; he suffers from a rare disease called *Osteitis Deformans*. It's similar to *Paget's Disease*, found in humans. Groups of vertebrae are fused and amorphous bone formations protrude into the body cavity, as well as visual lumps on the spine. Hey, by the way, my snake's name is Lord Peril, but you can just call him Peril. All right. The cause of this disease (I read) is unknown, but I figure that if it's a bone prob-

lem, then it could be from a lack of calcium in the diet. I also read that there is no cure.

I guess that Peril came down with this bone disease because when I first purchased him from Pets Unlimited, he refused to eat for a long time, and missed out on some major nutrients. Also, when I lived in Digby, the pet store was not consistent and sometimes I couldn't find mice. When he was young, he had to go 15 days between



Illustration by Steven Gonsalves

feedings, 5 times. Like I said, "The cause is unknown." I'm just throwing out suggestions. I imagine you're all wondering – is it fatal? Well, because of the bone formation protruding into the body cavity, it's important to closely observe the snake and make sure that everything's in working order. If the protrusions interfere with the lungs or heart, there will probably be big problems. However, Peril has had the disease for 11 months and seems to be doing well (he eats well, sheds well, has no stress signs, etc.) His growth, though, will likely be stunted due to his irregular bones. Is it painful? I wish I knew! Is it contagious? My Boa doesn't seem to have it. Can it

occur in any snake? I've heard of it in rattlesnakes, corn snakes and boas as well.

If you know any facts about the curious deformation *Osteitis Deformans*, I would love to hear about it.

Here are ways to contact me:

E-mail: Sgonsalv@Kingstec.nssc.ns.ca

Tel: 902-678-3727

Herp News

prepared from news items provided by K&W Herp Haven

40 Million Year Old Lizard Found in Amber

FOX NEWS NETWORK, 03 February 98

Warsaw, Poland: Polish scientists are studying a lizard that has been preserved in Baltic amber for 40 million years, the head of Warsaw's Museum of the Earth said Monday.

"This is important as lizards have been found in Dominican amber, but for Baltic amber this is a real rarity due to the state of conservation," said Krzysztof Jakubowski, director of the museum under the Polish Academy of Sciences.

"We will only know what academic significance it may have after detailed research," Jakubowski told Reuters.

The lizard, the second known to have been discovered in amber on the Baltic coast in a century, was found near the city of Gdansk by a local jeweler who passed it on to the museum.

Wild Men of the Winter Games go Snaky (Excerpts)

THE GLOBE AND MAIL (Toronto), 19 February 98

Nagano: Weirder than a snowboarder on dope. Stranger than a Russian ice dancer. Just when you thought you'd heard and seen it all at the Winter Games, comes this: bobsledders on snake.

Yes, you read that correctly. U.S. bobsledders are high on snake meat.

That's the story here, and a lot of people are sticking to it. Some, however, are not. They think reports of U.S. bobsledders dining on reptiles without arms is just a figment of someone's imagination, probably Chip Minton's.

Mr. Minton, a pushman for U.S. driver Brian Shimer, is a powerfully built, bizarre guy who sports a blond crew cut and has the Olympic rings tattooed on his left bicep. For parttime work, he calls himself Mr. World Class and whacks people in the head. He does this for Ted Turner's World Championship Wrestling. His other parttime job is much easier. He is a prison guard.

Mr. Minton is supposedly the guy who persuaded fellow bobbers that snake meat is chock full of rare but legal stamina builders. According to truth, or complete rumour, the U.S. crew is chowing down on a snake concoction. They mix it with beans and chili sauce for a special chili con cobra.

Strange Health Problem Plagues Alligators

FOX NEWS NETWORK 09 February 98

Miami: American alligators, which spent 18 years on endangered and threatened species lists, are again at risk, this time because of a hormonal problem that may impede their ability to reproduce, scientists said Monday.

The populations of alligators in three Florida lakes; giant Lake Okeechobee, Lake Apopka, and Lake Griffin; have dropped in recent months, prompting researchers to test the coldblooded predators for an explanation.

Louis Guillette, a professor of zoology at the University of Florida, said researchers studying the reptiles found that males had significantly depressed testosterone levels. Females had elevat-

ed levels of estradiol, the principle estrogen found in vertebrates.

They also identified problems with the animals' thyroid hormones, he said.

"It raises a major red flag for us," Guillette told Reuters. "... It could mean that these animals would not mature properly. They could have altered reproduction. They could have altered resistance to disease."

Similar hormonal problems, which later were linked to a major pesticide spill, caused the alligator population in Lake Apopka, just northwest of Orlando, to drop sharply in the early 1980s, he said.

Rare Gecko Find Excites Scientists

NEW ZEALAND PRESS ASSOCIATION 12 February 98

Nelson: The discovery of a rare nocturnal lizard hundreds of kilometres from its only known habitat has excited conservation workers and scientists.

The Black-eyed Gecko, previously found only in the Seaward and Inland Kaikoura ranges was discovered by Motueka conservation officer Tim Shaw on Mount Arthur in Kahurangi National Park.

Mr Shaw was leading four holiday volunteers on a Department of Conservation survey of ferns, giant wetas, and beetles when he turned over a rock and found the gecko last month.

Mount Arthur was geologically a completely different area from the Kaikoura ranges and had been isolated for 1 million years.

Mr Shaw said DOC would ask a Motueka-based expert on lizards, Tony Whitaker, to spend some nights in the Mount Arthur area in an effort to discover the extent of the black-eyed gecko population there.

Scientists Create Genetically Engineered Frog

REUTERS 26 February 98

Washington: Genetic engineering works in sheep, rabbits and mice but scientists have so far been unable to get it to work in frogs—until now, California researchers reported on Thursday.

A team at the University of California, San Diego said they had found a way to introduce foreign genes into a frog, at least temporarily.

Reporting in the journal *Nature Biotechnology*, they said they had managed to introduce genes into African clawed toads for a fluorescent protein normally produced by jellyfish.

"This technique is not what we call a stable transgenic. Right now we don't know that the DNA is actually integrated into the chromosome," Dr. Sylvia Evans, a specialist in heart development, said in a telephone interview.

The approach was more like gene therapy, in which a gene is temporarily introduced into cells but does not become a permanent part of an animal's genes.

But it will allow scientists to produce transgenic frogs—frogs that carry working genes from other species—for experimental work.

The Burmese Python *Python molurus bivittatus* (Part I)

An in depth article on the distribution, selection, health, husbandry & maintenance in captivity of *Python molurus bivittatus*

By Justin M. Corliss

The Burmese Python

The Burmese python has been one of the largest snakes available to the pet trade and has established itself as of the easiest to breed as their popularity based on availability has grown tremendously over the years. Having a generally docile disposition and a rather large body size this snake has been a favorite among hobbyists seeking large tame boids that are substantial in size in comparison to the common colubrid type snakes that are generally short and slender. Having been so widely available in the pet trade for so many years the Burmese python could be one of the most written about species in the pet trade. In fact there has been so few articles in the reptile magazines about their captive husbandry that it boggles the mind in comparison. In this paper I intend to bring about some of the basic parameters required for keeping this large python in captivity.

The Burmese python originated from the Burma and east though southern Asia and into the Indonesian archipelagoes. Most of the Burmese pythons collected for the pet trade were from Thailand and Viet Nam. Today most of the Burmese that are found in the pet trade are fortunately all captive raised and thus their collection from the wild is primarily for the leather trade which has dropped in recent years as the demand for snake skin leather has been dropping consistently throughout the past 7 years. Aside from being a pest to local chicken farmers in their native country of origin, there is little 'lore' that is known of this huge snake in comparison to the similar sized if not smaller anaconda from South America. There has never been a documented account of a Burmese python eating a human. A very large 20 foot Burmese may in fact be able to ingest a small person, yet this hasn't seem to have occurred in recent years. So, lets not test the theory and become a statistic!

The Burmese python commonly lives in dense tropical lowland growth throughout the Asian subcontinent that is primarily rainforest. These are nocturnal animals whose activity period starts at dusk and ends around dawn. During the day they commonly find hollows or covered areas where they lie hidden to sleep. In the evening, if the snake is hungry it may seek prey—yet commonly they lie in wait of prey to cross a game trail or otherwise. In terms of activity, unless the snake is seeking prey—or a mate, they are generally very inactive which may simply be a matter of energy conservation. The Burmese python seeks warm blooded prey by way of body heat as they possess heat sensors known as labial pits along the upper and lower lips just at the snout. These heat pits combined with the Jacobson's organ that is used to detect particles of air that are brought into the mouth with the twin tined tongue enable the

snake to form an outline of potential prey in the dark of night. These snakes are constrictors and upon grabbing a prey item with its mouth, they entwine the prey in its coils and tighten the coils when the prey exhales. When the prey item breathes out, the snake squeezes harder thus preventing it from breathing more air in and thus suffocating the prey. All prey is then swallowed whole. Common prey items for the Burmese python in the wild range from all forms of small rodent like vertebrates to larger mammals, birds and fowl. A large Burmese python can capture, kill and eat a boar or a small deer in the wild. Like all snakes, the Burmese can swim and is often near enough to water to capitalize on prey that associates itself with water like ducks and mammals that come to the water to drink; however, the Burmese is not aquatic like the anaconda as the Burmese is more adept at life on land. These are terrestrial animals, better known as almost being fossorial in nature—yet they are not burrowers. These snakes are not known to be climbers as their weight is best displaced on land than in the trees. They can climb when needed, yet do not make this part of their normal activities.

The Burmese python is known to easily reach 14-16 feet in length. There is at least one Burmese that has been accurately measured at 22 feet in length. Males are normally smaller than females. Their longevity is still being gauged yet 12-17 years could be considered an aggregate of age, yet there are some individuals that are easily in excess of that as the Burmese in captivity may reach over 20 years in age.

Large Snake Considerations

As the popularity in the Burmese grew in the late 80's and early 90' primarily due to their availability through their ease of breeding, the Burmese came to be one of the most commonly kept snakes in captivity. The problem with the Burmese came when many of these snakes began to attain their normal adult proportions of in excess of 12 foot and weighing more than 100 pounds. Long before ever considering such a snake the long term commitment to its housing, feeding and cleaning should be taken into serious consideration. A Burmese python can reach proportions under proper conditions of 14 feet and weigh almost 200 pounds in as early as 3 years of age. The huge caging requirements as well as feeding requirements are often the reasons for many people to lose interest in these snakes. The need for a consistent source of large feeder rabbits at a reasonable price as well as the space for a large heated cage are important concerns when considering these large snakes. To think that you could merely get rid of the snake when it gets big is an idea of the very distant past when zoos used to take

large snakes in and add them to their displays. This is no longer possible. The idea of giving the snake to someone else when you can no longer provide for the snake is reason enough to never get one. If you want a giant snake - be prepared for one. You must of course wonder where you are going to be in 5-10 years. Will you still be able to care for the snake correctly? Will you be able to get food for it when it gets big? Will you have the space required for the cage it will eventually need? It has been my experience that all to many people fail to realize the potential of these gentle giants and are faced with these dilemmas and have no where to turn. The ethics of these situations is really an issue. The Burmese like any other animal has the right to be cared for correctly. The issue of providing proper caging and heating and feeding are paramount and are required at all times and should never be neglected in anyway. With that diatribe out of the way, we can begin to look at how to care for the burmese in captivity, once its eventual dimensions have been considered.

Housing

The baby Burmese python is a handsome and large snake for a baby. They average between 12-22 inches as babies which puts them at the adult size of many colubrid type snakes. As a baby these pythons can be housed in a cage as simple as a 10 gallon tank. They will however quickly outgrow this cage and a bigger cage will be required. It is recommended that the largest cage you can afford be purchased with the baby—however not so large that maintaining the needs of the baby snake may be impaired. A 20 gallon long (30x12x12) or even better a 30 gallon breeder tank (36x18x12) would be the best way to go. I always recommend that these snakes be put in tanks that are minimally 18 inches deep when the snakes are small (under 8 feet) as this will provide ample room to move around, capture and ingest prey correctly. Stay away from narrow tanks like the 55 gallon or the 30 gallon fish tanks. The width of 12 inches is very limiting. A snake can easily reach 8 foot in a 30 breeder tank and preparations should then be made to build a large, sturdy, escape proof cage. The dimensions of a large cage are totally up to the builder, yet recommendations of 6'-8' long and 30" deep should be a normal guideline. The height is not a major issue of course as these are not climbing snakes. A height of at least 2 feet is normally appropriate as this would allow for a shelf in the cage that could provide a hiding place as well an alternate area to be in, thus increasing the surface area in the cage. When designing these cages, I always recom-

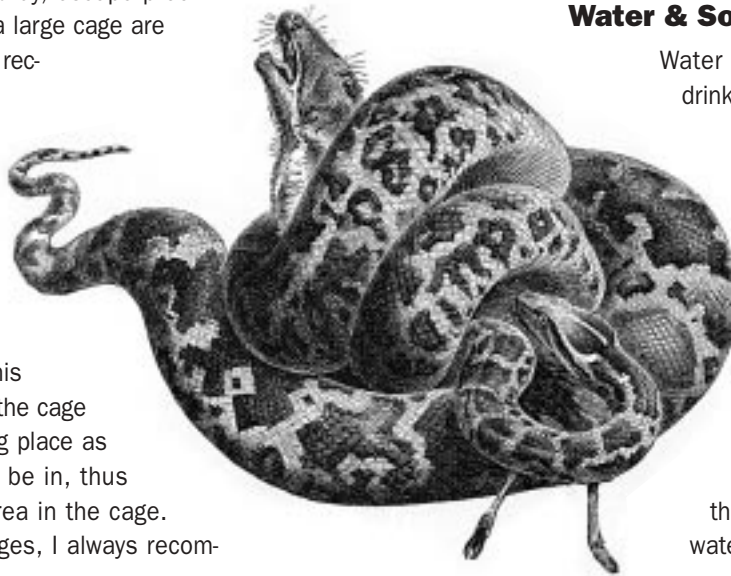
mend that as much of the cage be solid rather than screened to prevent excessive air flow which could be detrimental to the snake. It is also important to be certain that these cages are elevated off the ground so as to avoid cold drafts and breezes that always exist on the floor of most homes. In terms of thermal gradients the floor is always the coldest place in any room—as heat rises, so always put your reptile cages well above the floor. A large cage could be limited to only the door openings being screened to allow for moderate but not excessive air flow. When building a large cage being escape proof as well as maintainable are important considerations. You must be able to get into the cage and clean it easily and the cage must be totally escape proof. Large mobile pythons in the normal home or facility can be the perfect ingredient for disaster. Locking doors and well secured screening should help prevent most disasters. If a large cage is built, contact paper makes a good material to use to cover the floor and some of the sides to prevent against staining and absorption of urates and fecal material—as well as spilled water.

Substrate

A substrate should always be provided to aid in locomotion as well as an absorption medium for spilled water and for drying out fecal material and urates. There are many products on the market that can accommodate these needs—yet none other than aspen wood particles that can be recommended. Many of these products are easily discouraged against as they either do not absorb properly (green indoor/outdoor carpet, newspaper) can be toxic to the snake (cedar or pine bedding) can cause digestive tract impactions (sand, corn cob, gravel & walnut by products) or can be factors contributing to the growth of fungus, mold or mildew (corn cob, rabbit pellets & cypress mulch). Aspen wood particles has proven to be the product of choice for the past 10 years as it is readily passed if ingested, absorbs liquid very readily which reduces odor, mold, mildew and bacteria dramatically and it is easy to clean.

Water & Soaking

Water should always be available for drinking only. The water bowl should never be big enough for the snake to climb into. A snake that has a 'soaking' basin in its cage will readily soak in it, yet it will also defecate in it, which can create a potentially pathogenic cesspool of bacteria—which the snake will be forced to drink from as it is the only water available—don't think they are smart enough to tell good water from bad water!



Water also dissipates heat very quickly—so the ‘soaking’ basin is normally the coldest part of the cage—which with the snake in it, can cause dramatic temperature losses to the core of the snake very quickly, which would compromise its immune system—leaving it open to all sorts of maladies. In other words there should never be a basin of water large enough for the snake to climb into—only big enough for it to drink out of. As a matter of practiced husbandry for large boids, I have always encouraged periodic soakings of the snake. A warm bath that is closed—by way of a large plastic container with a lid (with holes drilled in it) or a screen covered glass tank with heated water of about 90°F should be used to allow the snake to soak occasionally for up to an hour or more at times. This can be done 2–3 times a week. The closed container allows for breathing of moisture laden air produced by the humidity in the container. If the snake defecates in the soaking basin—the snake should be removed, towel dried and either returned to its cage—or started over to get at least an hour’s soaking in. The snake should not be allowed to soak for so long that the water loses most of its heat. The water should always be warm. Some people set up a separate tank that they use only for heating water that is used for soaking. This tank is drained and cleaned as needed—but always heated with a submersible aquarium heater.

Heating

Glass tanks can be heated with undertank heater pads that heat one side of the tank allowing a ‘cool’ area on the other side of the tank that will allow the snake to thermoregulate. Thermoregulation allows the snake to move to where it is warm when it needs it and to where it is ‘cooler’ when it needs it. This type of setup will always be needed, no matter how big the snake is it should always have a warm area and a ‘cool’ area. When mentioning a ‘cool’ area what is meant is an area no cooler than 75°F, a warm area may be up to 95°F. The new ceramic heaters work rather well; however, these are not basking snakes so the provision of a heat source that produces temps in excess of 95°F would not be consistent with their wild history. The undertank heaters work best, yet in certain parts of the country additional heat may be necessary - or depending on the size of the cage or the average ambient temperature of the room the cage is in—a ceramic heater may be needed - situation dependent. It has been a forgone conclusion of course that no one uses heat rocks anymore, but for reiteration for anyone that hasn’t been awake for the past 10 years, heat rocks can be some of the worst heating sources available and are grossly inappropriate for pythons. These devices often produce elevated temperatures on their surface that normally causes 2nd and 3rd degree burns on the snake. They also do not radiate heat appropriate to heat an environment, they tend to be local only. The best thing to use these devices for are paper weights or landfill material.

Lighting

Almost nothing needs to be said here. These are nocturnal snakes that hide during the day, and live at the bottom of the forest where little light penetrates. A simple photoperiod of 12 hours of light and 12 hours of darkness is required. No special lighting is required at all. It is actually a better recommendation to provide subdued lighting for their day period, like a black light (NO UV implied!) or a painted florescent bulb. All lights that produce ultraviolet lighting should be avoided to prevent blindness and cataracts. Also avoid any lights listed as ‘full spectrum’

Cage Furniture

Even as babies these are large snakes so providing for it may be difficult. These snakes should always have a hiding place - someplace they can get into to feel secure and safe—as well as to hide from the light of day. This can be provided in a number of different ways such as a ½ log hiding place or a shoe box. As the snake gets bigger (in a couple of weeks!) a board with 4 shallow legs on it can be placed in the cage to provide a shelf and a hiding place. This same ‘shelf’ can be increased when the snake gets bigger to provide a more appropriate hiding place. Large pieces of driftwood could be used to aid in shedding and potentially increase exercise as the snake will move over it and around it seeking prey. As the snake gets big, its cage furniture should be secured to the cage to prevent it from being moved around to much thus potentially causing problems with the cage.

Justin Corliss is an advanced amateur herpetologist based in Bartonsville, PA where he operates Reptiles Pet Store. His papers and articles have appeared in professional and non-technical publications.

Part II, including Feeding and Notes on Obesity in Captivity, will appear in our next issue.

Further Reading

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Gans, C. & Huey, R.B. 1988. *Biology of Reptilia* Vol. 1-20, Alan R. Liss Inc.

Zug, G.R., 1993., *Herpetology* Academic Press, Inc., San Diego, CA

Ross, R. et al, 1990., *The Reproductive Husbandry of Pythons & Boas*. The Institute of Herpetological Research, Stanford California

You might be a herper if...

Excerpts from Melissa Kaplan's Herp Care (<http://www.sonic.net/~melissk/youmight.html>)

- ...you hand a written disclaimer before letting anyone new in your house.
- ...redecorating the house means finding a way to squeeze in another aquarium.
- ...you buy fluorescent lights by the case for your terrariums.
- ...the electric company asks you why you need a 200 amp service when all your major appliances are gas.
- ...you never have to turn on the heat because the cages provide enough for you, as well as your herps.
- ...your biggest database on your computer is your herps' logbook.
- ... your mother has never owned an old pillowcase...
- ...you buy bleach but never use it in laundry.
- ...someone at the emergency vet leans over and asks you if your animal is real.
- ...someone at your door selling magazines and he doesn't have any your interested in.
- ...you buy cable just for the Discovery channel.
- ...someone yells "You have a mouse on your counter!" and you reply "Its not fully defrosted yet..."
- ...you have chased away Jehova's Wintnesses with your Python.
- ...the thought of a burglar in your house makes you giggle.
- ...you sex fruit flies when you're at a grocery store

- ...you wonder if it's legal to claim 10 dependents on your income tax return, after all... they're your kids.
- ...the people at your office know your reptiles by their first names.
- ...the thought of stealing your neighbor's driftwood lawn ornament has crossed your mind.
- ...you carefully step over that snail on the sidewalk while exclaiming, "Oh! Turtle food!"
- ...you give containers of meal worms as presents.
- ...your house is the yearly field trip for the neighborhood school.

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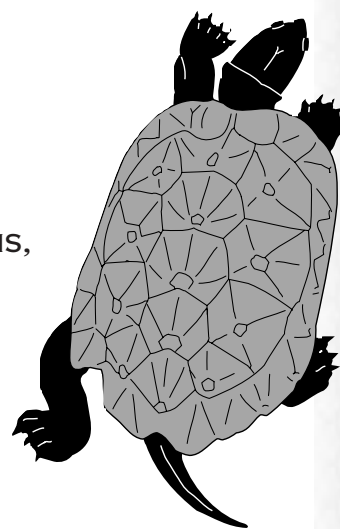
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CAPTIVE-BRED LIZARDS AND HERP SUPPLIES:

- GIANT DAY GECKOS
- STANDING'S DAY GECKOS
- FIRE SKINKS
- LEOPARD GECKOS
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- VITA-LITES®
- SUPERWORMS, MEALWORMS, GIANT FLIGHTLESS FRUITFLIES
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VIVARIUM CONSULTANTS 902 876-2692, ASK FOR NEIL

Gecko Talk—Standing's Day Gecko

by Neil Meister

STANDING'S DAY GECKO (*Phelsuma standingi*) is one of the most interesting of the larger Day Geckos and one of the most rewarding to keep. Although not as flashy as the more common Giant Day Gecko (*P. madagascariensis grandis*), they have a more subtle beauty expressed in intricate markings and unique behaviour. This column will cover basics of care and breeding as well as personal observations. The author welcomes additional comments and questions.

These geckos are more amicable towards each other than many of their related species (both male and female *Phelsuma* can be quite aggressive), although they do not tolerate animals outside of their immediate family group.

Description

Standing's Day Gecko is rather large for a gecko, most individuals average a stocky 20 to 26 cm (8 to 10.25 inches) in total length. Exceptional individuals can reach 30.5 cm (1 foot).

The ground colour is usually light grey or brown with darker fine reticulations. When in peak colouration during feeding or basking, the head is light green and the tail is light blue. Hatchlings have much brighter colouration with strong green and blue banding on a dark background. The pattern and colours gradually fade as the animals grow.

If inactive, the colouration is often duller, giving them an overall grey appearance. When cool they take on darker colours to help absorb light and heat. Likewise, these geckos turn pale in response to hot conditions.

Some individuals have an overall light blue or turquoise colour. I have heard claims that these animals are from different populations than the "normal" coloured individuals, but I have not been able to find published confirmation of this.

Behaviour

P. standingi reportedly lives in sexual pairs on tree trunks. They supposedly mate for life! (Henkel & Schmidt, 1995). I have, however, successfully paired captive-bred females with Wild-caught males. Established adult pairs or trios (1 male, 2 females) will reportedly tolerate juveniles until they reach sexual maturity (Bartletts, 1995). However, caution should be used when introducing geckos of varying size as Standing's Day Geckos will eat other geckos. I once had a female escape from her terrarium into an adjacent one where she consumed three small juvenile Giant Day Geckos.

In my experience, this species is fairly social as far as geckos go. Established pairs rarely squabble and sometimes share basking spots. They are not overly competitive at feeding times, often simultaneously sharing the same dish of fruit baby food. On one occasion I observed a male peeling sloughing skin off a female's back and eating it. The female did not seem to mind, they even appeared to be cooperating, although

I'm not sure if the male was motivated by a desire to help his mate or to fill his stomach!

Husbandry

As these lizards come from the dry thorn forest in southwest Madagascar, their husbandry is a bit different from the day geckos of the rainforest.

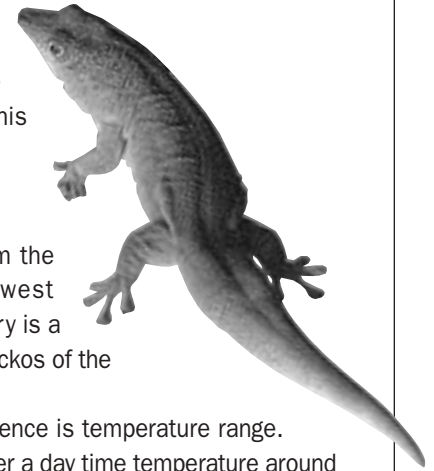
The most notable difference is temperature range. Standing's Day Geckos prefer a day time temperature around 28 to 30°C (mid-80's F) with a hot spot of 35 to 38°C (95 to 100° F). The night-time temperature should drop to 20°C (68°F), give or take a few degrees if breeding is to occur.

As with most animals that have evolved to cope with a fairly dry environment, frequent, heavy misting is not as important as with most species of day gecko. A moderate misting once daily in the evening or morning is adequate to provide drinking water and enough humidity for proper ecdysis. A water dish is not required.

An adult pair can be housed in screen or glass vivaria with dimensions of at least 60 cm (2 ft) high by 40 cm (approx 16 in) by 40 cm. I have used 27 gallon hexagonal aquariums with great success. Individuals can be housed in slightly smaller quarters. Glass enclosures must have screen tops or ventilation panels in the sides.

Substrate can consist of perlite-free potting soil, orchid bark or newsprint. If newsprint is used, a container of bark or soil should be provided for nesting. Plants should be sturdy enough not to be damaged by climbing geckos. Snake-plant (*Sansevieria spp.*) and potted pineapples have worked for me.

Full-spectrum lighting is recommended, it will help to show off the lizards' natural colours as well as aid in calcium metabolism. I have used vitalites mounted directly on top of screen tops for several years. The tubes should be changed annually. If vitamin D₃-calcium supplements such as Rep-Cal or Miner-all I are used, additional UVB seems unnecessary. Use a small to medium spotlight to heat a basking spot. Horizontal perches should be provided under the light. If other heating is required, use an undertank heating pad and make sure that there is adequate substrate to disperse the heat. Do not use hot-rocks as they are unreliable and only heat a small part of the enclosure. There should be areas in the vivarium that do not heat up to more than 30°C (86°F) to allow the geckos to thermoregulate. Heating should be turned down or off at night to provide a necessary night-time temperature drop. This drop is important in triggering reproduction.



Feeding

Virtually all commonly available insect foods are acceptable fare for these lizards. Crickets, mealworms, waxworms and superworms (*Zoophobas*) are all readily consumed. Live insects should be offered twice per week. I usually offer 6 crickets, or 3 superworms per gecko per feeding. Waxworms are used every couple of weeks, usually offered in combination with crickets (3 or 4 of each per lizard). All insects should be gut-loaded with fish flakes, greens, fruit or vegetables. Mixing supplements, fish flakes and other dry foods into the waxworm medium will similarly increase nutritional value.

Insects should be dusted with Rep-Cal or Miner-all I every second feeding for reproductively active females. Calcium is also provided in the form of crushed chicken egg shells or by



recycling gecko egg shells once they have hatched. Females will usually readily their own egg shells once they have hatched.

Day geckos are also frugivorous. This part of their diet can be easily provided using fruit baby food such as strained apricot, banana, mango or peach offered once per week. I mix calcium supplements in equal parts with Herptivite (a multivitamin) into the baby food. Bee pollen can also be added, but it doesn't seem to be necessary. Nekton Tonic-R can be used in place of Herptivite and Rep-Cal/Miner-all.

Breeding

If kept as described in this article, Standing's Day Geckos should begin breeding between mid-February and mid-April. Egg-laying may continue until September or October.


Courtship consists of side-to-side jerking movements of the head, usually initiated by the male & responded to by the female. The male usually approaches the female, with increas-

ing head movements and, if she is willing, mating follows in the usual gecko fashion. The male grasps the female's loose skin in the neck area, places one forelimb on her back and positions his lower body under hers, lifting her tail until the sexual organs are in opposition. Mating can last from 5 to 20 minutes and may occur outside of the egg-laying season.

Eggs are most often laid in pairs which are "glued" to each other, but are not affixed to the laying surface or substrate.

Single eggs are sometimes laid. Usually the eggs are buried just under the substrate or are secreted under some cage furniture. They may also be laid more in the open in wedged between leaves of plants such as *Sansevieria*.

Incubation takes 55 to 65 days at temperatures varying between 25–26°C (77–78°F) at night to 29–31°C (84–87°F) during the day. Fluctuating the temperatures daily in this range produces both sexes.

Husbandry for juveniles is similar to that for adults, except for enclosure size and frequency of feeding. 5 or 10 gallon tanks will house one or two juveniles until they are several months old, at which time they should be moved to adult quarters. Hatchlings and juveniles should be fed at least the equivalent of 4 to 6 crickets every second day. I calcium-dust all insect prey for juveniles until they reach 10 cm (6 inches), then I cut it back to every second feeding. Baby food/supplement mix should be offered once or twice weekly 



The author welcomes all criticisms and comments and is interested in corresponding with others interested in Standing's Day Gecko. Contact:

*Neil Meister
14 Sugar Maple Drive
Timberlea, Nova Scotia
Canada B3T 1G3*

E-mail: neil.meister@semaphor.ns.ca

References:

Bartlett, R.D. & P. Bartlett, 1995. *Geckos*. Hauppauge, New York: Barron's Educational Series.

Henkel, F.W. & W. Schmidt, 1995. *Geckoes*. Malabar, Florida: Kreiger Publishing Company.

McKeown, S, 1993. *The General Care and Maintenance of Day Geckos*. Lakeside, California: Advanced Vivarium Systems.

RepTrade

Reliable Reptile Boarding

Going away and need someone to look after your reptiles? Reasonable rates, seven years experience. Kept in heated reptile room. Any creatures great or small. For more information please call Jane at (902) 757-1757.

For Sale:

One juvenile Gopher snake. Male, is a year and 4 months old. Asking \$50.00. Please call Jane at (902) 757-1757.

For Sale:

0.02 c.b. Columbian Boas. Please call Jane at (902) 757-1757.

For Sale:

Breeding trio of California King snakes. One Black and Yellow banded king, one albino banded king, and one albino striped king. Would like to sell together but will consider separating to right persons. They are at least 4 yrs old, ready for breeding! asking \$100 each or \$275 for the trio. Price is firm! All are C.B. and eat very well. Please call Jane at 757-1757.

For Sale:

Breeding pair of albino California Kings, banded phase. Will be ready to breed this summer! Both are captive bred and eating very well. Asking \$200 for the pair. Call Jane at 757-1757.

For Sale:

Breeding pair of aberrant pattern California King snakes, banded phase. Will be ready to breed this summer! Both are captive bred and eating very well. Asking \$175 for the pair. Call Jane at 757-1757.

For Sale:

- Tomato Frog (captive-bred)—\$40
- Leopard Geckos—\$40 to \$55 ea. depending upon size
- Israeli Sand Geckos *Stenodactylus sp.*—\$12 (babies) (eggs incubating now)
- 0.03 captive-bred Madagascar Day Geckos (*Phelsuma madagascariensis grandis*)—\$40 ea.
- 0.1 captive-bred Koch's Day Gecko, adult (*Phelsuma madagascariensis Kochi*)—\$45 ea.
- Captive-bred Standing's Day Geckos—\$125.00 ea. (available in June)
- Captive-bred Fire Skinks (*Riopa fernandi*) very colourful and friendly, eats insects, soaked Repto-Min, Tubifex and canned cat food—\$35. (available in late May or June)
- Superworms \$3.00 per dozen, \$10 per 50 count, \$18 per hundred. Waxworms 10 cents each.

Call Neil at (902) 876-2692 after 6 p.m. or leave message.

Attention Phelsuma Breeders: I would like to correspond with anyone breeding Day Geckos especially *Phelsuma standingi* and *P. barbouri*. Also interested in all *Uroplatus spp.* *Rhacodactylus spp.* Please write to Neil Meister at 14 Sugar Maple Drive, Timberlea, Nova Scotia, Canada B3T 1G3 or phone (902) 876-2692. e-mail: neil.meister@semaphor.ns.ca

For Sale: Leopard Geckos, c.b. '97, \$45. Call Michael at 477-4983. 1.0 Desert Banded-Gecko, c.b. '97, \$35.

Wanted:

- *Rhacodactylus spp.*
 - Standing's Day Geckos (*Phelsuma standingi*)
 - *Uroplatus henkeli* & *Uroplatus phantasticus* (Leaf-tailed Geckos)
- Call Neil at 876-2692 after 6 p.m. or leave a message.

Snake portraits by Steven Gonsalves (see the cover of this issue): If you would like me to do a portrait of your snake, I charge \$20.00 for a 9" x 12". Here are ways to contact me: e-mail: Sgonsalv@Kingstec.nssc.ns.ca Tel: 902-678-3727 Mail: 3 Hartlen Court, Kentville, NS B4N 4Z2.

Looking for good homes for Iguanas and turtles. The NSHS is often asked to adopt Iguanas and Red-eared Sliders. Please call Neil at 902-876-2695 if you can house any of these animals.

Wanted: Any used reptile books at a reasonable price. Call Jane at 757-1757 after 6pm.

Feeder Rats and Mice: Pinkies, fuzzies, young adults and large adults available. All colour varieties. Live or frozen. Fed high quality foods. Discounts on large quantity orders. Prices start at \$1.00 and up. Please call Jane at 757-1757, leave message if no answer and I will get back to you. By appointment only, some deliveries available.

Announcements:

Note: We are working on booking guest speakers for 1998–99 meetings. We have several spaces left if anyone would like to volunteer or recommend someone.

Show & Tell: Members are invited to bring one or more animals to NSHS meetings & give a brief, informal presentation. Please notify Neil at 876-2692 in advance.

Mon, April 20, 1998: NSHS meeting at Nova Scotia Museum of Natural History, 1747 Summer St, Hfx. Time: 7:30 pm–9:30 pm. Guest speaker: Wes Von Papineau, Topic: Newts

Fri April 24 to Sat April 25: Metro Toronto Reptile Symposium. Guest speakers include: Bill Love, Peter Kahl, Wayne Hill, Dave Roberts, Wes Von Papineau, Scott Allen and Dr. Dale Smith, DVM. Contact Grant at 905-274-8018 for tickets.

Mon, May 18, 1998: NSHS meeting at Nova Scotia Museum of Natural History. Time: 7:30 pm–9:30 pm. Guest speaker: TBA

Sat, May 30, 1998: NSHS Open House at the Nova Scotia Museum of Natural History. Bring your animals to meet the public & support the club! Noon to 4 pm. Set up at 11:30 am.

Mon, June 15, 1998: NSHS meeting at Nova Scotia Museum of Natural History. Time: 7:30 pm–9:30 pm. Guest speaker: TBA

If you wish to make an announcement or place an ad, please mail to:

Nova Scotia Herpetoculture Society
c/o Nova Scotia Museum of Natural History
1747 Summer Street, Halifax, Nova Scotia B3H 3A6

Note: Use full name of society when addressing mail—please do not abbreviate. Classified ads are free to members. Non-member ads are 5 cents per word. Advertising rates are \$50 for a full page, \$25 for 1/2 page, \$15 for 1/4 page and \$10 for 1/8 page.

In Memoriam

THOMAS HUFF

THOMAS ALLAN HUFF passed away on Wednesday January 14, 1998 at age 50, after complications with cancer. In the past half century he touched many people and animals with his love and kindness. He will be greatly missed, but well remembered.

When Tom was a young boy he had a great love for animals, but was allergic to anything with fur, and thus made the only logical decision and began bringing reptiles to his home in San Francisco. This childhood hobby turned into a lifetime career, and he has changed the world of herpetology as a result.

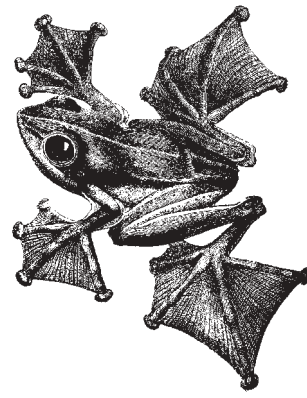
In Tom's younger years he worked at the Josephine D. Randall Jr. Museum and later left the University of California at Davis to accept a job at the San Francisco Zoo. At the zoo, Tom worked mainly with the big cats and apes, and then went home to his wife Caren and their own private zoo of reptiles, ferrets, a raccoon, a family of otters, and various other animals who came to live with them. In 1972 Tom was a co-founder and Associate Director of The Institute For Herpetological Research, and a founding member of the International Herpetological Symposium. That year he was also invited to come to Canada to open the Reptile Breeding Foundation, which he created to provide a place, the only one in the world, to refine breeding techniques of the most rare and endangered reptiles and amphibians. Tom gained a worldwide reputation for his skill and achievements, lectured extensively both in Ontario and around the U.S., was published extensively and was advisor on captive breeding projects to the governments of both Colombia and Guyana. Tom was Director of the Foundation for 18 years, and since the closing of the Foundation, he and his family ran The Exotarium, a public display of reptiles, amphibians and invertebrates, which was dedicated to educating the public about these often misunderstood animals, and about the threat of extinction to so many species.

For the thirty years Tom and Caren were married their love only continued to grow and this love created the perfect atmosphere for raising their three children Jeremy, Leah and Jessica. Tom became an incredible friend and role model for his children, who will remember so much more than his public self. Tom was dedicated to the preservation of the animal world and taught by example every day of his life. He instilled a fascination for nature and travel in all of his children, and whenever possible Tom and Caren would take their children on vacations to nurture a sense of wonder at the diversity of life and experience. Tom had a particular love for the poetry of Robert Service, and many nights, both on stage and off, would treat his family and friends to perfect recitations of these wonderful stories. Tom held a deep passion for life in all its forms and his spirit lives on in his son Jeremy who is pursuing a career in arachnology, and Leah who is pursuing one in anthropology and ethno-medicine. Tom will be greatly missed by his family, friends, and the herpetological community...

NEW MEMBERSHIP APPLICATION

If you're interested in joining, please fill out this form and bring it (or a photocopy) with your membership fee (\$10) to the next meeting or mail it to:

Nova Scotia Herpetoculture Society
c/o Nova Scotia Museum of Natural History
1747 Summer Street
Halifax, Nova Scotia
B3H 3A6



Name: _____

Address: _____

Phone: _____

Interests: _____

What do you expect from a herpetoculture society?

Please feel free to make suggestions:

