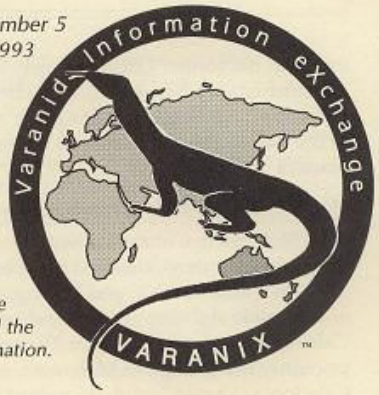
Volume 3 Number 5
1 October 1993

VaraNews



— Varanews is the newsletter of Varanix™, the Varanid Information eXchange. Varanix was founded to help promote responsible captive care of monitor lizards through education and the open exchange of information.

General

See the next to last page for general information about Varanix

Membership Renewals: Please note the new membership dues, shown on page 7: $12 U.S. and $15 outside the U.S. This $2 increase is to cover the costs of additional publications and an expanded newsletter.

Varanix: Purpose and Goals

A fundamental purpose of Varanix is to provide members answers to their captive husbandry questions, the primary vehicle being the pages of this newsletter. The core of what you read in Varanews is the result of a group of several "staple" contributors, complemented by an increasing number of informative articles by both amateur varanophiles and professional herpetologists alike.

Memberships: You may have noticed that zoos are offered this newsletter for free. Other "special circumstance" free memberships are also extended to institutions and individuals. (In a few cases outside the US, the local currency is so weak that even $15 per year would be a sizable chunk of ones income.)

The hopes behind the decision to offer free memberships were that recipients would use the pages of Varanews to share their wealth of experience and knowledge with amateur varanophiles. Since very little has been received to date, this is a "front page" request to hear from you.

Naturally, a series of detailed articles and photos would be nice, but this is asking a bit much (especially since contributors only receive a few extra copies of the issue with their article, accompanied by the warm glow that comes from knowing they've helped improve at least one captive monitor's life by educating its keeper). Realistically, we're asking for the time it would take to occasionally jot down a few notes on diet, housing, natural habitat, behavior, etc. Maybe a few photos accompanied by a caption. Of course, notes on successful captive breedings are always a source of inspiration for others. If nothing else, let readers know what monitors are in your collection so they can stop by when in your area. (I know I'm not the only one who, when traveling, seeks out local zoos, public aquariums, etc.)

Please realize it is the paid memberships which are subsidizing the free ones; there is no other source of revenue to cover the costs of printing, mailing, etc. (And every organization is acutely aware of these expenses!)

Phone calls: The phone line is primarily intended to provide callers with the basic information about Varanix. Questions left in messages are handled like those mailed in; they are addressed in Varanews. Unfortunately, personal responses are seldom possible.

Medical questions: Varanix would like to hear from any reptile veterinarians who would consider responding to questions requiring immediate medical attention. This can be managed in whatever manner is convenient for you. The stress here is to respond to problems of an urgent nature, and not necessarily provide a general call-in line. (This is based on the assumption that you have a practice and personal life to attend to.)

Tegus: This is the periodic offer to readers interested in articles and information on tegus. While there have been a number of people interested in "reading", there has been nothing submitted for publication. If you would like to write or review such articles, please let Varanix know. Tegu-philes will be accommodated with an insert to Varanews.

Baby Komodos Arrive at Zoo Atlanta

On July 1, 1993, Zoo Atlanta received two of the National Zoo's October 1992 *Varanus komodoensis* hatchlings (which should now be on exhibit in the reptile building). Michael Fost was one of the zoo officials to welcome them upon arrival, their new home made possible by a $15,000 grant from congressman Newt Gingrich to the National Zoo. At that time, the baby komodos were approximately 3 ft TL and weighed about 14 oz each.

Geography 101

Daniel Bennett would like to draw your attention to the reference to *V. griseus* living in Russia in the brief summary of the IHS Symposium in Varanews 3(3). Daniel states: "*V. griseus* does not live in Russia. It is

found in the former USSR - namely in Uzebekistan, Turkmenistan, Khazakstan, Tadjikistan and western Kirgiziya". Apologies for this error, which was due to the indiscriminate misuse of the term "Russia" in place of "USSR".

Update on New Caledonia Locality Information

Sean McKeown, Curator of Reptiles at Chaffee Zoological Gardens, clarified some of the points made in Varanews 3(3) and 3(4) regarding the report of a possible sighting of *V. indicus* on New Caledonia. Sean specifies that "*Varanus indicus* is primarily indigenous to Melanesia, of which New Caledonia is a part", and "*V. indicus* has been introduced by man onto Guam and nearby islands of Micronesia. The islands are a great distance from the islands of Melanesia".

Referring to the possibility of a "mistaken identity", he adds that in addition to the large skinks which inhabit the island, some of the largest surviving species of geckos, the genus *Rhacodactylus*, are also present.

Reader Questions

Below are some of the questions readers have sent in. You are invited to respond to as many as you like. When responding, it would be most helpful if you specify the volume(issue) of Varanews and the number of the reader question. When appropriate, please include reference material.

1. My monitor is constipated. What do I do?

2. Is it possible to allow a mature savannah monitor "free range" in a room of the house? Can it be trained to use a litter box?

3. I'm looking for information on the blue-tailed monitor, *Varanus kalabecki*.

4. My savannah monitor hisses and squirms when I handle him. Will he stop this behavior if I handle him frequently? He had difficulty shedding his skin last time. Would it be okay to let him soak in warm water? Could this harm him? I would like to take him out on a harness on warm days for some natural sunlight. How do monitors respond to a leash/harness?

5. Where can I get a copy of the video, "Enter the Dragons"?

6. Based on advice from someone in a local herp society, I've been feeding my savannah monitor beef heart slices, coated in vitamin supplements, and the occasional cricket. Someone else I know said I should use dog or cat food. The monitor does seem to like the beef heart. As soon as she is large enough, I want to begin feeding her mice. Advice or suggestions?

7. Taxonomy & pronunciation: One reader suggested a section which unveiled the mysteries of scientific terms, their meaning and pronunciation. (Robert Sprackland's recent articles were the inspiration for this letter.)

8. Where can I find captive bred monitors?

9. I am looking for schools (both undergraduate and graduate) with an emphasis on herpetology.

10. Over one year ago, I obtained a Nile monitor measuring 19.5 in TL. Housed in a 55-gallon aquarium, he is fed 3 times a week on a diet of mice, crickets, goldfish and skinks with vitamin supplements. My most recent measurement showed a growth of only 2 inches. What gives?

Response: This question actually raises a few questions. Has the monitor been checked for parasites which could be inhibiting growth? What temperature gradient does the enclosure provide? It has been demonstrated in a limited study on Nile monitors that temperature greatly affects growth (Buffenstein & Louw). Of 10 *V. niloticus* in the study, those that had access to their preferred body temperature of 34 C (93.2 F) showed a mean weight gain from 45 g to 72.91 g (1.6 oz to 2.6 oz), or about 60% gain, over a 6-week period. Those kept at 24 C (75.2 F) for the same period showed a mean weight increase to 50.33 g (1.8 oz), or about a 12% increase. (Length was not measured in the study; weight was not indicated in the letter.)

My experience with one *V. n. ornatus*, which measured 20.5 in TL when acquired, showed increases in total length of 1 inch and better per month. (Measurements were taken every 3 - 4 months.)

naclerio

Cited

Buffenstein, R. & G. Louw. 1982. Temperature effects on bioenergetics of growth, assimilation efficiency and thyroid activity in juvenile varanid lizards. *J. therm. Biol.* Vol. 7, pp. 197-200.

Monitoring Medicine

This section is intended to help the varanophile understand the medical aspects of captive husbandry. What you learn here will hopefully help you work more actively with a qualified veterinarian/experienced herpetoculturist when dealing with medical problems. You are invited to send in your questions and to respond to questions posted in this section.

This information is not a substitute for training and years of experience. Always work with someone qualified in the medical treatment of monitors.

Say Ahhhhh

In Vol. 3 Num. 1 (1993) of the Bulletin of the Association of Reptile and Amphibian Veterinarians (ARAV), Scott Stahl, DVM, suggests using a clean rubber kitchen spatula for keeping a lizard's mouth open in order to examine its oval cavity. Inexpensive to buy, they can be disinfected and reused. Thomas Boyer, DVM, suggests using several 5-inch cotton-tipped applicators for the same purpose, which are disposed of after use. (Neither suggestion indicates if there a size limit for the "patient".)

The ARAV Bulletin is "intended to be a source of information for veterinarians involved in public and private practice on reptiles and amphibians".

Membership is open to "civilians" for $30, which gets you 4 issues of the Bulletin. For details, contact Jackie Zdziarski, DVM; ARAV Membership Chairperson; P.O. Box 9158; Zoological Dept., Busch Gardens; Tampa, FL 33674. (813) 987-5546.

Are you anxious about a monitor medical problem and growing frustrated trying to get some answers. If you only had a computer and a modem ...

The Herpetology Online Network has extended an invitation to ARAV members to participate in HerpNet, including a public message that area that lets you to consult with participating veterinarians. See the Ads/Notices for HerpNet's number and modem settings.

On behalf of Varanews readers, we ask that you please forward any useful message threads you come across to Varanix (see next to last page for email address) so we can pass along the information to those members not yet online.

Publications

This is where books, magazines, newsletter articles, etc. of interest to Varanix members will be discussed. If you know of any good publications, send in the title, author, publisher and publication date/issue. Comments on its focus and usefulness are most welcome.

Reptiles magazine, *P.O. Box 6040; Mission Viejo, CA 92690-9953*

The first issue (Sept/Oct 93) of this new bi-monthly magazine dedicated to the care of reptiles and amphibians presented a range of topics, including discussion of frogs/toads, lizard mania, caring for chameleons and iguanas, medical and lighting questions, herbivore diets and mite/tick infestations. Columns included general and veterinarian Q&A sections and news.

Perhaps the most pleasant surprise was the last section "Living With Reptiles" which featured a color photo of a Dumeril's monitor and a one-page description how the author, Chris Kelly, uses a food item tied on fishing line to "entice" the occasional escapee from hiding spots in the house.

Educational and informative, Reptiles promises to be worth the $18/year subscription. If you subscribe, don't forget to include a note saying you want to see articles on monitors. (The magazine's sister publication, Aquarium Fish, also provides useful information if you are interested in semi-aquatic habitats for your monitors. The regular pond section is a good source of design and filtration ideas.)

Understanding Reptile Parasites,
Roger Klingenberg, DVM. 1993. Advanced Vivarium Systems, Lakeside, CA 92040.

From the Introduction: "One [goal] is to provide an understanding of, and ability to apply, basic principles in the identification, diagnosis, and treatment of common reptilian parasites. The other goal is to convey an understanding of how captivity + stress + parasites = disease, and the ways this scenario can be avoided or treated".

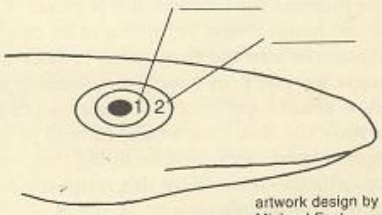
This 80-page paperback manual is intended to help the reader understand the side of captive husbandry most of us hope we never have to deal with but are most likely unable to avoid: the parasite world and how it affects our reptiles. The text is accompanied by numerous photos and diagrams covering diagnostic procedures, parasite identification (including a how-to on fecal exams), treatment and the author's recommendations and non-recommendations for drugs used in the control of parasites. This is a good basic reference, especially at less than $10.

Varanus dumerilii: Study on relationship between eye color and sex

Michael Fost writes: I have noticed a correlation between eye color and sex among a small sample of Dumeril's monitors. Of specific interest are the color of the 2 rings surrounding the pupil. If you have access to positively sexed specimens, please take a few moments to jot down the information below. (For your convenience, this section can be photocopied and filled-in for mailing.) Of course, photos are most welcome. When enough responses have been received, the results will be published in Varanews.

Specimen name or ID number:
Color 1 (ring closest to pupil):
Color 2 (iris):

(ring size exaggerated in diagram)



artwork design by Michael Fost

Sex of specimen:
How sex was determined:
Approximate age of specimen and length of time in captivity:
(Please be as accurate as possible, e.g., captive 2 years; 16 in total length when acquired)
Size of specimen:
(SVL = snout to vent length, TL = total length)

Send to: Michael Fost
Zoo Atlanta Reptile Dept.
800 Cherokee Ave. SE
Atlanta, GA 30315-1440

or call:
404-987-3933
404-624-5655 (preferred)

Original Articles

Possible topics include, but are not limited to, any aspect of captive care, reports on captive breeding, personal experience, description of natural habitats, flora & fauna, legislation.

Foraging Behavior in the Black Tree Monitor, *Varanus prasinus beccari*

Wm. Holmstrom, Superintendent
Dept. of Herpetology,
Wildlife Conservation Park,
Bronx, NY 10460

On the morning of 19 August 1993, while reviewing the Wildlife Conservation Park reptile and amphibian exhibits with Michael Muscat, a visiting reptile keeper from the Taronga Zoo in Sydney, Australia, we observed a male black tree monitor, *Varanus prasinus beccari*, foraging for insects among the rock litter at the bottom of its enclosure. The exhibit substrate consisted entirely of smooth, flat, dark gray stones. The ovoid stones were fairly uniform in size and averaged approximately 5 cm in depth throughout the exhibit floor. Ten randomly sampled stones had average dimensions of 3.1 x 3.7 x 1.2 cm thick and ranged from 11.2 gm to 29.9 gm, averaging 20.3 gm in weight. Additional exhibit furniture included tall potted plants, stumps and vines. A small pool was available for drinking and soaking.

The pair of monitors were provided at least one feeding per week of the following items: pink or fuzzy mice, crickets (*Acheta domestica*), super meal worms (*Zophobas morio*), and wax worms (*Galleria mellonella*). The insects were released into the enclosure and quickly dispersed throughout the substrate, providing ample opportunity for the lizards to forage ad lib.

The exhibit was illuminated from 0600 to 1900 hr with one 20 watt cool white fluorescent, one 20 watt BL black light fluorescent, and two 75 watt incandescent reflector spot light bulbs, which were controlled by an electric timer. The monitors typically basked for an hour or so each morning before beginning to move about the exhibit, foraging randomly. Ambient temperature averaged 26 C and basking spots reached 34 C.

The male *V. p. beccari* (SVL 31 cm, TL 86 cm, wt. 310.6 gm) was observed at approximately 0815 hr vigorously pursuing prey beneath the pebble surface, plunging his snout between stones and occasionally pulling out a super meal worm. The monitor was also observed following the progress of insects beneath the stones, lunging, often unsuccessfully, at them. At one point during our observation we watched the monitor grasp one of the pebbles in its mouth, displace it 5 or 6 cm to one side, and catch the meal worm that had been beneath the stone. It appeared to be a deliberate act. If the monitor had mistakenly grabbed the stone in an attempt to catch the prey, one would expect it to drop the stone immediately, rather than move it. Auffenberg (1988) described Gray's monitor (*Varanus olivaceus*) flicking aside leaves and other litter with its snout while foraging for snails. While black tree monitors frequently moved stones aside by clawing, it seems very unusual for a reptile to manipulate its environment in the manner we observed. Whether this was a deliberate act, or only appeared to be so, is not known from the limited observation. Staff will be watching carefully for further evidence of this behavior. Have other readers witnessed similar behaviors?

Conversions Used in Article

cm	in
3.1	1.2
3.7	1.5
1.2	.5
31	12.2
86	33.9
5	2
6	2.4
gm	**oz**
11.2	.4
29.9	1.1
20.3	.7
310.6	11
C	**F**
26	78.8
34	93.2

Literature Cited

Auffenberg, W. 1988. Gray's Monitor Lizard. Univ. Presses Florida. 419p.

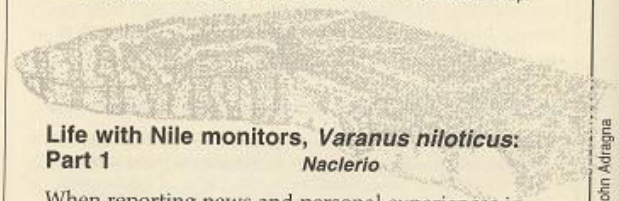


Illustration: John Adragna

Life with Nile monitors, *Varanus niloticus*: Part 1

Naclerio

When reporting news and personal experiences in Varanews, I make a conscious effort to portray issues in context and avoid adding my personal slant. What follows *are* my personal opinions and approach to the captive maintenance of the Nile monitor (or any other animal, for that matter).

Most of the comments and suggestions are based on an 8-year experience living with Nile monitors, both *Varanus niloticus niloticus* and *Varanus niloticus ornatus*. This article is my partial response to some of the more common reader questions, including personal experiences, captive housing, feeding and keeping several monitors together.

The Vision

How a monitor will do in our captive care is greatly influenced by our "vision" of how the captive fits into our lives. If it's to be a living "decoration" to keep around for a couple of years for show and tell during casual social events, then a small, sterile lab-type setup may meet ones definition of acceptable captive care. If we view the relationship as a lifelong commitment to the monitor in which it will thrive and (hopefully) reproduce, captive care takes on an entirely different meaning.

The moment the first monitor is brought into the home should be the beginning of an ongoing, interactive learning experience. If there were a single, simple, proven recipe describing all there is to know about captive care, someone would have written The Book; we would all read it; and all captive creatures would be living long, healthy, reproductive lives. Since this is not the case, where do we look for answers?

The first two places many of us turn are literature and people familiar with the monitor(s) we have, or are about to acquire. Many amateur varanophiles know where that can sometimes lead. The suggestions and guidelines often vary from person to person and we are soon confused with conflicting information on diet, cage size, handling, etc. (Varanix was born out of my personal frustration on both accounts. I knew no one who kept monitors and the readily-available literature on lizards offered little more than a few sketchy paragraphs on Nile monitors.)

Over the past few years, we've seen an increase in the number and quality of reptile-related publications. Inexpensive, "friendly" computer technology has also opened up new avenues of information via electronic bulletin boards. Even though this makes it easier to find out general captive husbandry guidelines, species-specific information about the captive care of monitors is still a bit scarce.

Fundamental Axiom: Mother Nature Knows Best

Undoubtedly, personal reports on successful captive maintenance of monitors are important sources of information. Even more important is learning about the monitor's life in the wild: what does it eat, what are the natural habitat and climate like, what is its natural range, etc.?[1] Monitors were thriving in their respective habitats long before we latecomer humans arrived on the scene. It is therefore unreasonable to expect a monitor to instantly adapt to "hostile" new surroundings that have nothing in common with its homeland. It's like packing clothes for a trip to Tahiti and ending up in Alaska in the dead of winter (well, maybe late fall). I would be stressed out, to say the least.

Once we get past the first hurdle of meeting the basic environmental (heat, light, diet, etc.) and psychological (e.g., hide spots and the enclosure providing sense of security) needs, the captive itself is perhaps the best teacher. A healthy, alert, active, "confident" monitor is a good indication captive conditions are in order.[2] (Successful captive reproduction is an even a better indicator!)

My First

Q: What should I feed it? A: Pinkie mice and vitamin-dusted crickets.
Q: Is it tame? A: Yes.
Q: How big will it get? A: About 5 feet long.

These were but a few of the many questions I had, and the store employee's answers I got, when I decided to bring home the 287 g (10.1 oz), 22 in (55.9 cm) TL, Nile monitor, *V. n. ornatus*. I didn't have a clue about monitor lizards at the time, other than knowing there were some big lizards called Komodo dragons.

I also didn't think much about the sales guy throwing a towel over the monitor when catching and putting it into the cardboard box. I began wondering just how tame it really was after the snapping and thrashing that greeted me when moving it to its temporary home: a screen-covered 40-gallon fish tank furnished with artificial turf, a ceramic water bowl, a wooden-planter-turned-upside-down hide spot, and a heating pad under the tank. Once the monitor was situated, I was off to the bookstore and libraries in search of information about this magnificient little creature.

[Note: This has been an account of how **not** to go about bringing a monitor (or any new life) into your household. Learn about the animal first, then make an informed decision.]

Today

I would like to share a kind of mixed bag of some of the observations I've made and things my Nile monitors have taught me. Future articles will expand on these, and other, topics.

Observations

- Nile monitors react to activity and changes in their enclosure. With my first *ornatus*, his curosity during water changes was the first step towards what evolved into an excellent relationship.[3] If I am working in an enclosure housing confident monitors, they often wander over to inspect what I'm doing to the point they become a nuisance to the task at hand.
- Two normally nervous *ornatus*, who often hid when anyone approached, became less inclined to scurry for cover when placed in an enclosure where they could watch people approach from across the room and whose "ground level" was 4 - 5 ft above the room floor. Now that they were pretty much at my eye level, though tensed and alert they remained in the open at my approach.
- *niloticus* defecates in, or near, water more frequently than *ornatus*.
- Both *niloticus* and *ornatus* enjoy running water. They will often sit under the recirculating pump return pipe in their water tank. When a stint in the bathtub is required, a slight trickle of water seems to reassure even the most nervous type enough to "hide" under water rather than thrash about seeking escape.
- In the case of 2 male *niloticus* housed together, the subordinate one will often immediately carry food items to a covered spot which seems to offer some protection from the dominant one trying to steal the food.
- *niloticus* will remain in the direct sunlight for longer periods than *ornatus*. Under identical conditions outdoors, I've observed *niloticus* remain in the direct sun for over an hour whereas *ornatus* retired to the shade in about 30 minutes. On one occasion it was a bright, sunny day with a shade temperature of 83 - 85 F (28.3 - 29.4 C) and ground temperature, measured with a probe at the surface, ranging between 101 - 104F (38.3 - 40 C). (This makes sense since *ornatus* is indigenous to West African forests, *niloticus* inhabiting more open terrain.)

Captive Housing

A random collection of captive housing notes...

Substrate: Indoor enclosures are constructed of wood and plexiglas, the smallest being 6 x 12 x 6 ft (1.8 x 3.6 x 1.8 m). The wood floor is covered with 6-mil plastic sheet (found in hardware stores and home improvement centers) and covered with a "mosaic" of flat rock (found at building supply

stores). On the average, pieces are 1/2 - 1 inch thick and measure 1 x 1 ft up to 2 x 2 ft; this is so they can be removed and cleaned as required. The majority of the rock is non-abrasive slate. The rest are pieces of "sandpaper surface" flagstone which help file the monitors' nails as they walk across it, especially if the pieces are on a slight incline. (Avoid using too much abrasive stone as this can make the monitor's feet raw.)

Minimum cage size: Bigger is Best. My response to the question about "minimum" cage size is: "the same as its natural range". This is somewhat unrealistic for the majority of us, but at least it's a goal to shoot for. Simplistically, if you will not be able to give up the equivalent of a room in your home to house an adult Nile monitor, it may be worth considering a smaller species. (Remember, these are personal opinions!) Caring for several adult *V. niloticus* has forced my quest for space outdoors.

I have yet to provide an area so large that the monitor has not been interested in investigating every nook and cranny during the course of a day. This includes a walled-in outdoor area measuring 40 x 50 ft (12 x 15 m).

Feeding: Variety. My monitors' diet is a staple of fresh-killed rodents, randomly accompanied by crayfish, Hill's Zu/Preem exotic feline diet, vitamin-supplemented strips of beef/chicken/shrimp and occasional hardboiled eggs.[4] A couple of drops of Avitron (liquid bird vitamins) are added to the food every second or third feeding. (I also discovered by accident that they will vigorously "attack" chunks of cheese.) Juveniles are fed 3 or 4 times per week. Adults are fed once or twice per week with occasional fasts of 2 weeks.

Keeping several monitors together: The only case where two monitors have remained together for any length of time is 2 male *niloticus*, now in the 5 ft (127 cm) TL range. (They were determined to be male based on hemipenal eversion when defecating.) Together since they were 16 - 18 in TL, there is occasional chasing, biting, and combat, with seldom more than a scratch on either. Both have been observed acting as the aggressor, though this is typically the larger's role.

Regardless of how they may get along most of the time, feeding time requires special care. If one monitor is swallowing prey, the other will often raise up and strike the other, clamping down on the back of the neck or head of the one eating. This will even happen after the prey has been completely swallowed. I try and avoid this by simultaneously getting a separate food item to each (though the monitors don't always cooperate).

For this reason alone, there should be minimal size difference between cohabitants. With jaws designed for crushing mussels and invertebrates, a Nile monitor can do serious damage to another monitor's skull.

I introduced a third male of similar size into the outdoor enclosure [6 x 18 ft (1.8 x 5.5 m)] housing the pair. Even with numerous hide spots and crawl spaces, the dominant resident was constantly after the newcomer. On a couple of occasions I saw him grasping the newcomer by the base or mid-section of the tail. In less than a week, I removed the third monitor to more "pleasant" surroundings.

I invite you to compare your experiences with what you have read and share your observations with other readers in future issues of Varanews.

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[1] One good example is **The Regenia Registers of 'Gogga' Brown (1869-1909) "Memoranda on a species of Monitor or Varan"** by William Branch in Mertensiella #2 (see last page for address). This 50-page paper shares insights into both the captive and wild life of the White-throated, or Rock, Monitor. It is based on a daily journal covering 40-years by a man who not only observed them in their native habitat in South Africa but also attended to a total of 229 specimens "feeding them regularly, covering them with blankets at night, particularly in winter, and observing them closely". There are also 3 pages of notes on the Nile monitor, *V. n. niloticus*.

[2] I use "confident" to describe animals which are not afraid of me and allow me to approach and touch them, though this does not imply they enjoy being handled. It typically takes months for them to reach the "confident" stage.

[3] Over eight years later, that first *ornatus* is approximately 67 in (170 cm) TL and weighs 25 - 28 lbs (11.3 - 12.7 kg). He is also quite comfortable in the company of humans (some might use the term "tame"). A future article will discuss some of the factors I feel were important in his "transformation" from an aggressive little beast into the agreeable monitor he is today.

[4] Care must be taken to avoid introduction of disease when using live food, especially crustaceans which serve as host to a variety of parasites.

Male *V. niloticus ornatus*, approx. age 9 -10 yrs., 67 in. (170 cm) TL, 28 in (71 cm)SVL phto by naclerio

Inquiries & Membership

One-year membership in Varanix:
USA: $12
Foreign: 15 $US

Members receive Varanews, published every even-numbered month.

- Varanews is offered free to zoos. In return, we ask you share your experience and knowledge with other readers.
- Newsletter exchanges are considered.

Address all written inquiries & memberships to:

Varanix
8726D S. Sepulveda Bl. #243
Los Angeles, CA 90045 USA

Messages may be sent via modem:

- CompuServe: user ID: 71320,721
- Internet: gjn@triple-i.com
  71320,721@compuserve.com

Tel. (310) 768-8669

[Personal responses are often not possible. Best efforts will be made to respond to calls of an urgent medical nature. Questions of a general nature are answered in Varanews.]

Back Issues (some may only be available as photocopies)

Num. 0: $1.50; Vol(num) 1(1) - 1(8), 2(1) - 2(6), 3(1) - current: $2 each

When writing to Varanix . . .

Letters to Varanix often contain information of general interest to Varanews readership. When writing, please indicate if you do **not** want to be quoted or have your correspondence reprinted in part or otherwise. (The author will always be contacted prior to publication of questionable or controversial topics.)

Submissions for Publication

Please indicate any special conditions of publication, such as withholding mention of name or crediting a person/publication.

Editorial

- Submission in electronic form preferred on PC or Mac diskettes. Most data format accepted, including Word, WordPerfect, ASCII. Typed or handwritten submissions are, of course, most welcome.
- Submissions may be in English, French or German.
- Translations of non-English articles must be accompanied by a copy of the original work, including bibliography.

Graphics

Hand-drawn graphics:	up to 11x17 inches
Computer-generated:	EPS, TIFF, ...
Photos:	up to 11 x 17 in.
Slides:	35 mm color and b&w

Species Resource Panel

These individuals have volunteered to field specie-specific questions. In the case of a panel member returning a phone call, you are asked to pay for the call.

- Savannah (*exanthematicus*), White-throated (*albigularis*)
  Mark Bayless, 1406 Holly St., Berkeley, CA 94703
- Dumeril (*dumerilii*)
  Mike Fost, Zoo Atlanta, Reptile Dept, 800 Cherokee Ave. SE
  Atlanta, GA 30315-1440 (404) 624-5618 (daytime EST)
- Nile (*niloticus*)
  Greg Naclerio, <Varanix address to left>
- Yellow (*flavescens*)
  Ennis Berker, 9603 Woodlawn Dr., Portage MI 49002
- Mangrove (*indicus*); tegus
  Joel Shaner, 110 Long Pine Dr., Madison Hts., VA 24572
- Timor (*timorensis*)
  Scott Stahl, DVM, 4001 Legato Rd., Fairfax, VA 22033 (703) 591-3304

Monitor Rescue Program (MRP)

This volunteer-sponsored program was established to place unwanted monitors in the permanent homes of experienced varanophiles. For a copy of the program description, send a legal-size SASE to Varanix, attn: Monitor Rescue Program.

All other questions should be directed to the MRP Administrator:

Wanda Olson (408) 274 9020, (408) 274 2555
4099 Timberline Dr.
San Jose CA 95121

What you read in these pages . . .

Articles appearing in Varanews represent the opinions and experiences of the respective authors. Though best efforts are made to insure accuracy of contents, the reader must recognize that the majority of available information is based on individual personal experiences and therefore difficult to verify.

The reader is well-advised to evaluate everything heard and read, regardless of the source. Consult as many references as possible and never attempt any husbandry technique that is unfamiliar or you are not confident you are capable of performing. ***This is especially true of medical procedures or when safety (monitor, personal and public) is involved.*** If you read something in these pages you do not understand, question, or can add to, you are urged to respond for the benefit of other readers.

When reprinting parts of Varanews . . .

When submitting part of Varanews for reprint in another publication, please include a copy of this page.

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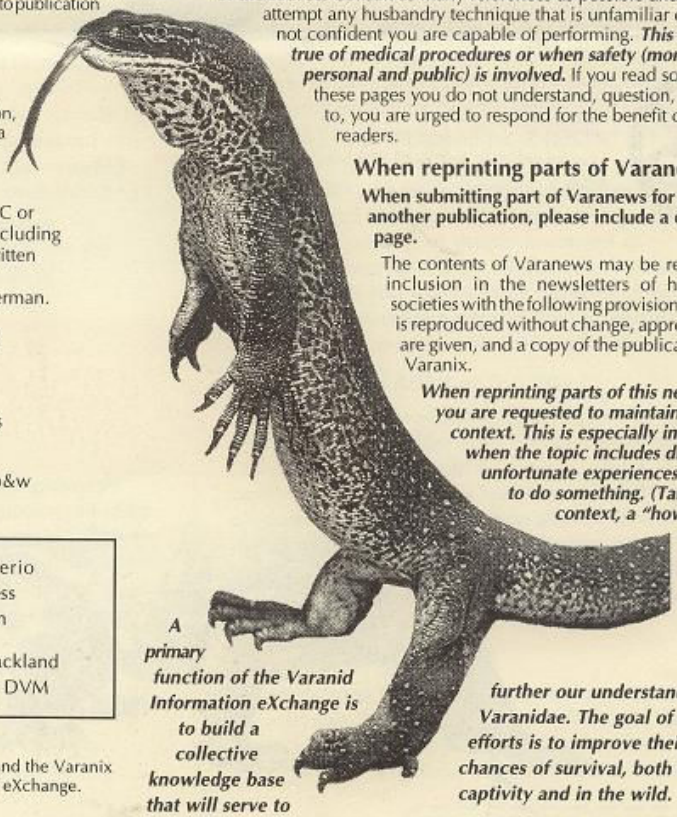

A primary function of the Varanid Information eXchange is to build a collective knowledge base that will serve to further our understanding of Varanidae. The goal of these efforts is to improve their chances of survival, both in captivity and in the wild.

Ads / Notices

Short line ads are free and must relate to the audience of this newsletter. They will be included as space allows. Varanix is not responsible for the quality of merchandise advertised and reserves the right to refuse any ad deemed inappropriate. You are encouraged to inform Varanix of your satisfaction/dissatisfaction with a product or service. Your comments will remain confidential.

Coffee Mugs: One side is original Varanix logo in black & green. The other has the species text piece shown below. $5.95 per cup. S&H: Add $3.50 for the first cup; $1.50 for each additional cup (US & Canada only). Allow 3 weeks for delivery.

komodoensismertensiprasinusvariusexanthematicuspanoptes
rudicollisindicusglauertisalvadoriikordensismitchelli
acanthurusprimordiusdumerilliiflavescensrosenbergi
timorensisbrevicaudagigantеusglebopalmaspenceri
albiguariscaudolineatusniloticusolivaceusgriseus
tristiskingorumsemiremexgouldiisalvatoreremiusgilleni
karlschmidtiocellatusnebulosusustorribengalensispunctatus

§ PUBLICATIONS §

Write or call for a free booklist from the following vendors unless otherwise noted.

The Guide to Keeping Monitors. $5.99. The Reptile News Press, 17603 E. Tennessee Dr., Aurora, CO 80017. (303) 751-6923.

"This is a nice booklet for those new to the hobby and should reduce early mortality of captive monitors." [Mark Miller, Varanews 2(2)]

Herpetological Booksellers, P.O. Box 1906, Palm City, FL 34990-1906.

Mertensiella #2: Advances in Monitor Research This collection of papers (in English) by monitor research experts was presented at the First World Conference on Monitors in 1989. Price: $25 (includes surface mail); add $10 for air mail.
Wolfgang Bischoff, Museum Alex. Koenig, Adenauerallе 150-164, 5300 Bonn 1, Germany.

Herpetology Books - Paul Gritis, 1731 W. Market #12, Bethehem, PA 18018 USA (215) 867-9723

Serpent's Tale. Natural History Books & Supplies. Eric Thiss. 464 Second St. Excelsior, MN 55331. (612) 470-5008

§ ANACONDA TO ZOOXANTHELLA §

I'm working on a study of the African monitors *V. exanthematicus* & *V. albigularis* to improve husbandry techniques. Mark Bayless (address, page 7)

I'm studying varanid reproduction and would like info on breeding projects, esp. pre-courtship environmental conditions, courtship rituals, clutch size & egg incubation. Chris Nelling, 10 Criswell Ave., Mercersburg, PA 17236

HerpNet is an electronic forum for anyone with an interest in reptiles/amphibians. Participants include professional & amateur herpetologists, veterinarians, etc. HerpNet can be accessed at any modem speed. (215) 464-3562. Settings: N-8-1-F

Membership renewal is due if the mailing label says:

EXPIRES **3(5)**

Please note that renewals are tracked by the Volume(Issue) of Varanews and not by date. Also, no other reminders are sent due to the time and expense involved in doing so.

I would like to communicate with anyone who has experience with spiny-tail monitors, *V. acanthurus*. Neal Egge, P.O. Box 653, Kenai, AK 99611.

I am interested in Information on *V. dumerilior V. rudicollis*. Mike Fost, Zoo Atlanta Reptile House, 800 Cherokee Ave., SE, Atlanta GA 30315-1440. (404) 987-393

Blue Ridge Herp Soc., P.O. Box 727, Brookneal VA 24528.

§ WANTED §

Captive hatched and/or raised varanids, preferably hatchling to sub-adult. Wish list includes: *griseus, flavescens, bengalensis, albigularis* and most Australian varanids. Jim O'Dell. (602) 649-1399.

Hatchling or juvenile Asiatic water monitors, *V. salvator*. Captive-born preferred. Michael Pate. (502) 899-1900

Preserved specimens of *V. indicus, V. jobiensis* & similar Australasian taxa for detailed systematic study. Locality data desired, but not essential. Put your freezer zoo to good use! Varanid Research, Young Forest Company, 1201 Geraldine Way #1, Belmont, CA 94002.

Adult female Burundi or ornate Nile *(V. n. ornatus)*. Dan (407) 631-9004.

V. karlschmidti. Zach Hill 1036 S. 11th Lincoln, NE 68508

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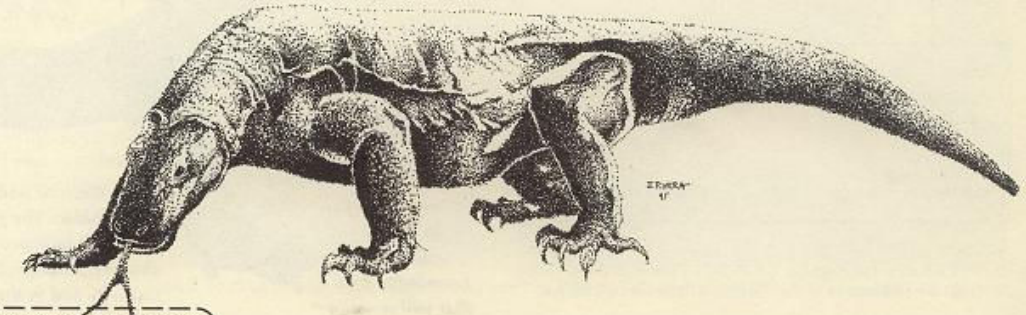

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