

REPTILE & AMPHIBIAN NEWS

The Wood Turtle:

An Uncertain Future in Nova Scotia

by John Gilhen, Nova Scotia Museum of Natural History, Tom Herman, Acadia University, Centre for Wildlife and Conservation Biology, & Neil Meister, Herpetoculturist, Amateur Herpetologist

Introduction

All four of the turtle species that occur in Nova Scotia reach the northeastern limits of their range here. Climate and specific habitat greatly affect their distribution in the province.

The Common Snapping Turtle and Eastern Painted Turtle are widely distributed in ponds, lakes and streams on the mainland. They are most common from Halifax and Hants Counties southwest to Yarmouth County, occur locally in sheltered valleys in the northeastern mainland, but are absent on Cape Breton Island. Although habitat exists on Cape Breton Island, the number of warm days necessary for incubation of eggs in the nest is insufficient for them to reproduce successfully.

The Blanding's turtle is restricted to the Kejimikujik National Park area in southwestern Nova Scotia. People who study amphibians and reptiles (herpetologists) refer to this turtle as a post glacial relic. About three to five thousand years ago, when the climate was much warmer here, Blanding's Turtles were probably more widespread. As the climate gradually cooled to present day temperatures, successful nesting

was only possible in the area around Kejimikujik Lake, the warmest part of Nova Scotia.

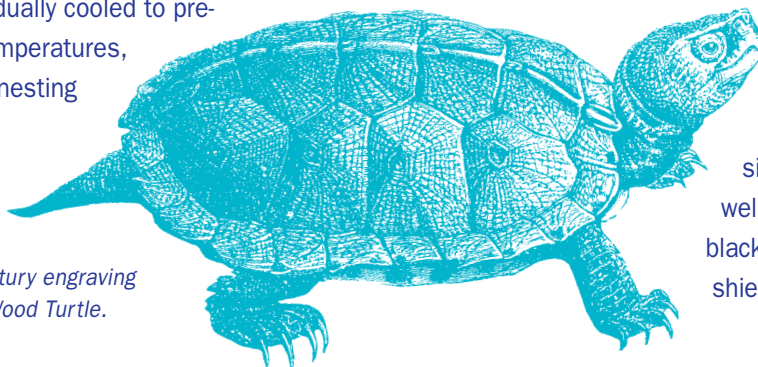
The status of the Blanding's Turtle population at Kejimikujik National Park is listed as "threatened" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Although the population is small, it occurs primarily within a protected landscape, in which land used is controlled. The species is protected within the park by federal statute and outside the park by provincial legislation (Nova Scotia Wildlife Act, 1990).

The situation for the Wood Turtle is much different. In Nova Scotia these turtle occurs primarily in working rather than protected landscapes, where forestry and agriculture prevail. It lives mostly in the northeastern mainland, where there is suitable habitat. Elsewhere in North America, this turtle is threatened or endangered throughout much of its range.

What A Wood Turtle Looks Like

In some areas the Wood Turtle is commonly called "red legs", because the back of the legs vary from bright orange to red in colour. The head, top and sides of the neck and tail, as well as the front of the legs, are black. The pyramid-like raised shields of the top of the shell

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19th Century engraving
of a Wood Turtle.

(carapace) are brown with yellow and black streaks. The bottom of the shell (plastron) is yellow with an irregular black blotch on the outside corner of each plate (scute). The female's plastron is flat, while the male's is prominently concave.

Adult male wood turtles are generally larger than adult females. They have a larger (broader) head and a longer and thicker tail. Carapace length of males ranges from approximately 7 3/4 to 8 1/2 inches (19.7 to 21.6 cm) while that of females ranges from approximately 6 1/2 to 7 3/4 inches (16.5 to 19.7 cm).

Where do Wood Turtles Live

Wood turtles live in slow-moving meandering interval streams. In winter they hibernate underwater, alongside rocks and deadwood, on the sloping river bottom. In spring, when wood turtles first emerge from their hibernating sites, they spend several hours each afternoon basking in the sun on the firm-mud river bank. By evening, they retreat back to the water to spend the night. This habit of basking on mud-banks has earned the species the name "mud turtle". During summer, wood turtles may venture some distance from water, spending the day foraging for food on land.

What Wood Turtles Eat

Wood turtles are omnivorous and in summer forage for plants (such as horsetails), berries, earthworms, slugs, snails and insects along the river bank and roadside and in meadows and hayfields.

Where do Wood Turtles Nest

In mid to late June female wood turtles usually dig a nest in a sandy-gravel bank on a bend in the river, where they deposit 8 to 10 leathery ellipsoidal eggs. However, they also nest in artificial sites such as gravel road banks, gravel pits and gardens, and are often seen crossing roads to reach these sites. Since most artificial sites are much farther from the stream than natural sites, the hatchlings have less chance of migrating to aquatic nurseries, without being killed by predators or automobiles.

Why Wood Turtles Are Threatened

Degradation of the wood turtle's habitat, particularly in valleys with prime agricultural land, is a major problem. Disturbance of nesting beaches by livestock and by construction of cribbing to stabilize riverbanks has probably reduced nesting success substantially. A population that once thrived on the lower Nictaux River in the Annapolis Valley has declined to the point that few individuals have been seen in recent years.

The wood turtle is seriously threatened by the removal of adults, for pets, from their native streams or as they cross roads. These turtles are held captive for a time and either escape or are released, often many kilometres from their original native habitat. Most probably wander about for the rest of their lives, and are lost from the breeding population.

It takes approximately 15 years for a wood turtle to reach maturity and breed. Although individuals may live for more than 30 years, the chance of a hatchling living long enough to reach adult life is very slim. Therefore every adult turtle is important in maintaining a stable population.

Predators, particularly Raccoons, dig up and eat the eggs in none of every ten nests. They also consume many of the small soft-shelled hatchlings in the shallow waters that serve as nurseries. Although adult turtles must also cope with predators (it is not uncommon to find them with one or two limbs chewed off by predators such as otters), relatively few probably succumb.

This lifestyle of high risk childhood and adolescence and low risk adulthood has suited turtles for tens of millions of years. It is only recently that we have intervened to change the rules.

What Can I Do To Help Wood turtles


In 1983 the three authors formed "Turtle Watch", a committee to study the status of the wood turtles in Nova Scotia. We would be grateful if anyone who finds a wood turtle wandering about in town or city could contact one of us. The displaced turtle will be examined by a veterinarian before being relocated in its natural habitat, where it can resume a productive natural life.

In the spring of 1994 we will be distributing questionnaires through local fish and wildlife, naturalist and outdoor recreation groups to seek information from the Public about the status of wood turtles in areas where they are known to have occurred in the past. If you would like to receive a questionnaire directly, or wish to become involved in some other way, please contact us at:

Turtle Watch

c/o Centre for Wildlife and Conservation Biology
Acadia University
Wolfville, N.S. BOP 1X0
(Ph) 542-2201 Ext.1469; (Fax) 542-3466

We will also be locating educational posters about the life and plight of wood turtles along streams where they live.

We ask that all anglers, campers, canoeists and hikers leave the wood turtles along the wild streams and adjacent landscapes where they belong 



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Send address changes to the above address.

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The opinions, observations and views expressed by individual authors in this publication are not necessarily shared by the Nova Scotia Herpetoculture Society.

Announcements:

Sat, June 18, 1994: NSHS meeting at Nova Scotia Museum of Natural History, 1747 Summer St, Hfx. Time: 7:30 pm-10:00 pm.

Sat, August 20, 1994: NSHS meeting at Nova Scotia Museum of Natural History, 1747 Summer St, Hfx. Time: 7:30 pm-10:00 pm.

RepTrade

For Sale: 108 gallon tank with rod iron stand. Tank is 6 ft. long. Was used for iguanas. Has **no** cracks but has never had water in it. Would have to be resiliconed if wanted to be used for water. Also has home-made screen top on it. Great for Iguanas or large snake. Tank and stand is worth \$1500.00 new, asking \$500.00. Tank is in storage, so please, serious inquiries only. Please call 443-2495 after 6 pm, ask for Jane. **WARNING, VERY LARGE AND VERY HEAVY!**

For Sale: 8' female Boa constrictor and 50 gal. aquarium with stand. \$350 for all. Call 443-8370 (Chuck).

For Sale: Male/female pair of Leopard Geckos, proven breeders. \$200 for the pair. Call 443-8370 (Chuck).

For Sale: 1 female Gold-dust day gecko *Phelsuma Laticauda*-\$30, captive-bred madagascar day geckos (*Phelsuma madagascariensis grandis* x *P.m. kochi*)-\$35 to \$45 ea. Call Neil at 455-1950 after 6 p.m. or leave message.

Wanted: Stainless-steel snake probes, preferably set of 3 at reasonable price (\$30-\$40). Please call Jane at 443-2495.

Wanted: Milksnakes and Kingsnakes, in pairs preferably. If you're looking to sell at a reasonable price, please call Jane at 443-2495 after 6 pm. (Healthy snakes only.)

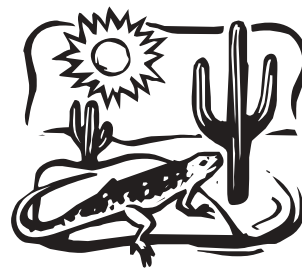
Wanted:

- Eastern box turtles (adults or juveniles)
 - female Giant day geckos *Phelsuma madagascariensis grandis*
 - male Standing's day gecko *Phelsuma standingi*
- Call Neil at 455-1950 after 6 p.m. or leave a message.

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

*NSHS c/o Neil Meister
3001 Olivet Street, Apt. 407
Halifax, Nova Scotia
B3L 3Z9*

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.



Feeding Insect-Eating Herps

by Ray Staszko

MOST PEOPLE who begin collecting and keeping pet herptiles start out with animals which feed mainly or entirely on live insects. This includes most species of lizards, as well as frogs and toads.

On the surface, feeding these animals seems deceptively simple. All you have to do is obtain live insects and drop them into the cage, right? In winter, when outdoor insects are gone, the local pet stores keep a steady supply of crickets and mealworms. What could be simpler?

Unfortunately insect-eating reptiles and other herps often don't do well in captivity after the first few weeks. For a while everything seems fine, but then, often rather suddenly, their health starts to deteriorate.

There are several reasons for this. To begin with, even if an animal can survive on a diet of 100% insects, all insects are not created equally. Unfortunately, the insects that are easiest to breed and obtain through pet stores are not ideal choices. Both crickets and mealworms are hard-shelled insects, and a steady diet of too much of their shells can cause a problem. In nature, the animals would catch a variety of insects, including hard and soft shelled varieties. For example, toads in the wild consume large quantities of mosquitoes. It is very hard to go from a diet of mosquitoes to a diet of mealworms without experiencing digestive problems.

Another problem is that these insects are often nutritionally unbalanced, with high ratios of phosphorus to calcium, leading to metabolic bone disease (see my article in the previous issue of this newsletter). This is partly due to their nature, but mainly due to the poor diet these insects often receive in captivity.

There are several ways to correct these problems. I will list a few practical suggestions.

1. Go out of your way to obtain insects other than mealworms and crickets whenever you can—such as throughout the summer months. Good additions are flies, moths and caterpillars. Earthworms are good for frogs and toads, but should not be fed to lizards that come from arid environments.
2. When using mealworms, try to avoid the hard shell problem by keeping a large enough colony so that you can always find several “white worms.” These are mealworms which have just shed their shells and have soft bodies for a few days until new shells harden.

3. Enrich your insects with powdered reptile vitamin supplements. The easiest way to do this is “shake and bake” style. Put a small amount of powdered reptile vitamin in a plastic bag. Insert a few insects, shake them around, then feed them immediately to your pets. Keep the bag and the excess vitamin for next time. Avoid excessive vitamin use, as this can cause other problems.
4. Enrich mealworms and crickets naturally by improving their diet for a couple of weeks before using them as food. During this time feed the insects fresh vegetables and fruits enriched with vitamin powder.

Once you have done everything you can to enrich and improve the diet of your insect eating herps, remember one other important point. Small herps have the same basic needs as larger ones. This means that to do well they need hot blocks to warm their bellies, full spectrum lighting, controlled humidity, and clean cages of ample size. They also need periodic deworming, with great care taken not to overdose (dilute the deworming medicine for the very small animals, for whom even one drop is too much). Sometimes small lizards are brought by customers with limited budgets. They can't see the sense in buying a hundred dollar's worth of accessories for a lizard that only cost them \$20 or less in the first place. To people who think that way, I would pose the following question: what's the sense in spending \$20 on something and end up throwing it in the garbage pail in a few weeks?

If you're going to do something, why not do it right? To me, that should be the herpetoculturist's basic motto 

Scales of Justice

Introduction by Neil Meister, acting President, NSHS

THE FOLLOWING LETTER and by-law explain Halifax City's regulations regarding reptiles. This law is partly a result of lobbying by interested herpers who wrote and phoned City Council to express their point of view and fears of an overly restricting law such as the one adopted by the city of Dartmouth. Judging by the result, we were successful and all those involved, including City Council and staff, deserve a pat on the back and thanks from the herp community. This crisis helped to prompt the establishment of our society.

I will print the Dartmouth by-law in a future issue. I am very interested in hearing from anyone with knowledge of existing herp by-laws in other parts of this province or Atlantic Canada. The NSHS will offer all the assistance it can to prevent unfair laws from being passed in this province. Contact us if you have a legal problem.

Committee of the Whole
23 March 1992
2:00 p.m.

To: Her Worship the Mayor and Members of City Council
From: Wayne Anstey, Q.C., City Solicitor
Date: 12 March 1992
Regulation of Reptiles

During the summer of 1991, Deputy Mayor Stone brought to the attention of City Council a problem which some residents of the City were having with people walking around the City carrying boa constrictors or other large snakes.

As a result of the issue raised by the Deputy Mayor and letters received by the City on both sides of the issue, City staff carried out a survey of other cities in Canada to obtain information about alternative approaches to the problem, which has disclosed solutions ranging from outright ban on the owning of snakes to the prohibition of having snakes on streets or other public places.

City staff have received a number of letters from responsible snake owners who have urged that they not be punished for the actions of irresponsible owners. These owners recognize that snakes are a source of fear for some and that it is not unreasonable to place legal limits on the ability of the irresponsible owners to "parade" their snakes in public. They have asked that they be allowed to keep their animals within the privacy of

their own homes, where they do not constitute a public nuisance.

Attached as Appendix "A" to this report is a draft Ordinance *which would make it an offense for snake owners to have their snake in any public place, including any street, sidewalk or park or on any private property without consent of the owner of the property unless the snake is concealed from view in an escape-proof container.*

IT IS THEREFORE RECOMMENDED THAT City Council approve in principle the form of ordinance attached as Appendix "A" and direct City staff to arrange for the introduction of the said Ordinance for First Reading.

Respectfully submitted,
Wayne Anstey, Q.C.
City Solicitor

Appendix "A"
ORDINANCE NUMBER
Respecting
THE REGULATION OF REPTILES

BE IT ENACTED by the Council of the City of Halifax, under the authority of Section 354 (1) of the Halifax City Charter 1963, as follows:

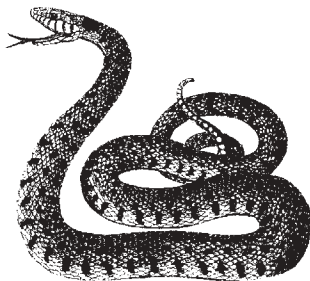
1. This Ordinance shall be known as Ordinance No. _____ and may be cited as the "Reptiles Ordinance".
2. In this Ordinance:
 - (a) "Owner" means any person owning or possessing or having apparent care and control over any snake or reptile.
3. (1) For the purposes of this Ordinance, a snake or reptile shall be deemed to be at large when the snake or reptile is in any public place, including any street, sidewalk or park, or on any private property without the consent of the owner or occupant of that property, whether or not the snake or reptile is in the possession or control of or being carried by any person.
 - (2) No owner of a snake or reptile shall cause, permit or suffer that snake or reptile to be at large within the City of Halifax.
 - (3) Subsection (2) shall not apply if the snake or reptile is concealed from view in an escape-proof container.

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4. (1) For violation of any provision of this Ordinance, the owner of the snake or reptile shall be guilty of an offense and shall be liable to a penalty of not more than Five Hundred Dollars (\$500.00) and, in default of payment, to imprisonment for a term not exceeding (10) days.

(2) A person who is alleged to have violated this Ordinance and is given a notice of the alleged violation, may pay a penalty in the amount of \$50.00 to the Chief of Police at the Halifax Police Department provided that said payment is made within a period of fourteen days following the day on which the alleged violation was committed and where the notice so provides for payment in thus manner, and such payment shall be in full satisfaction, releasing and discharging all penalties and imprisonments incurred by the person for such violation.

THE NSHS SUPPORTS THIS LAW and the principle behind it. Although the fear of pet snakes is irrational and seems ridiculous to most of us, it is real. There is already enough prejudice against reptiles; Intentionally or unintentionally frightening people who do not understand these animals can only make matters worse 🐍



Interested in writing an article or starting a column about your experiences or specialty?

We need submissions to make this newsletter work. Articles on local species would be especially appreciated. Send submissions to:

NSHS c/o Neil Meister
3001 Olivet Street, Apt. 407
Halifax, Nova Scotia
B3L 3Z9

Reptales

by Neil A. Meister

SO FAR, THIS COLUMN is only a heading and an idea. The heading is self explanatory, but the idea needs some clarification:

Most of us are too busy, or too absent-minded, to write a regular column, but we occasionally have anecdotes about our pets or experiences to share with our peers that would only take a few minutes to jot down. The idea for this column is that *anyone* can write it. If you have time to write only once a year, great! If you feel like writing something every month, even better! If you're nervous about writing, this your chance to get some practice! Just send me your stories with a brief line or two about yourself and I will compile whatever I receive in the following issue 🐍

VITA-LITE

FULL-SPECTRUM NATURAL LIGHT FOR YOUR HERPS

Vitalites are the most proven source of indoor full-spectrum lighting for herps. They emit UVA, which has physiological and psychological benefits, and UVB which helps some herps synthesize calcium. Vita-Lite's high Colour rendering index (CRI) brings out the natural colours of captive herps.

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24" power-twist.....	\$26.34
36"	\$26.34
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48" power-twist.....	\$28.75

Discounts available on orders of \$100 or more. Prices do not include PST. Vita-lites come with a free replacement warranty for 2 years from the date of purchase.

To order, call Neil Meister at 455-1950 after 6 pm or leave message.

(Note: UVB output deteriorates after one year. Many other lamps, such as those designed for aquarium plants and coral, deteriorate after six months. Some broad spectrum incandescent lamps have a high CRI but do not emit UVB.)

What's New!

by Jane S.

HI THERE REPTILE FANS! I would like to start a new column covering such things as what's new, what's going on, and who's doing what!

For instance, have you picked up the new *Reptiles* magazine yet? If not, it's a must for any reptile owner. (Hint: *Petsville*, Scotia Square carries them!) Also another good magazine is the *Vivarium* which is a little expensive but good reading. You can find it at the *Daily Grind* on Spring Garden Rd. or at the *Paperchase* on Blowers St. It's cost is about \$10.00 including the tax.

Something new! *Zoo-Med* has finally arrived, *Petsville*, Scotia Square and *Pets Unlimited* now carry *Zoo-Med* products. This is a new line of reptile supplies, from posters to hot rocks to natural-looking hiding spots. Prices are reasonable.

If anyone is interested in getting our own reptile & amphibian show going, let me know. July or August would be a good time. Any help would be greatly appreciated.

The NSHS is planning some sort of social get-together for the summer. This will probably be a barbeque or picnic. We will be contacting anyone who has submitted a survey form or membership application.

If anyone has something new to tell, or to share please let me know. This is my first column on what's new and what's going on. I'd love to have any suggestions.

See you next time,
Jane S.

Want to receive *Reptile and Amphibian News NS?*

It's easy, just become a member of the *Nova Scotia Herpetoculture Society*, the newsletter comes free with your membership (which is currently \$10⁰⁰ annually), plus you get a nifty membership card!

Handy, Helpful, Herp Tips

by Jane S.

Most reptile owners know it's not a good idea to have to travel with their reptile in the cold weather. Sometimes it is necessary. If you are going on a short trip, I find the best answer is to put the animal in a pillow case and tuck her/him inside your warm jacket close under your arm. This is a very warm part of your body and is ideal because reptiles cannot produce body heat for themselves, you must produce it for them. A cotton pillow case allows air for them to breathe.

If you're going on a longer trip, I find using a styrofoam cooler and a hot water bottle with the right temperature water works well. This will keep the heat in and the water bottle will act like a temporary hot rock. Don't forget to poke holes in the cooler.

For more information on transporting herps, see How to properly Transport Your Animals in the last issue.—Ed.

Snake owners: Hate those water dishes that spill over? Try using a container like a small margarine tub. Cut a small hole in the lid of the plastic container and fill it with water. This will stop spills, but allows the snake to crawl in when it needs water.

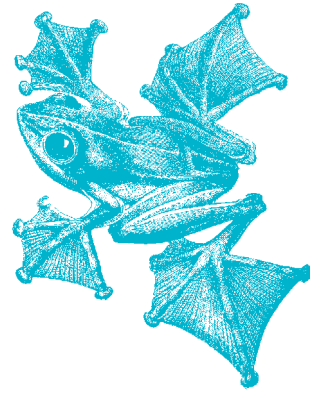
An easy way to get rid of mites is to rub vegetable oil over your reptile's body, this will get in between the scales and suffocate the mites.

This treatment may not be suitable for herps with delicate toe pads, such as geckos or anoles as the oil can get into the pads and destroy their adhesive abilities. This is very stressful to an animal that is used to walking up walls and across ceilings!—Ed.

It's always better to feed your snake a couple of smaller prey items than to feed them one that is too large. Large prey can damage the rib cage of the snake if it is handled and could take a lot longer to digest. Two smaller size prey would be more easily digested and less damaging for the insides of the snake.

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:



NSHS c/o Neil Meister
3001 Olivet Street, Apt. 407
Halifax, Nova Scotia
B3L 3Z9

Name: _____

Address: _____

Phone: _____

Interests: _____

What do you expect from a herpetological society?

Please feel free to make suggestions:



PETSVILLE

PETSVILLE would like to congratulate the Nova Scotia Herpetoculture Society and welcome all new members.

PETSVILLE Scotia Square carries a large variety of reptile supplies and reptile food and feeders.

PETSVILLE Scotia Square would like to welcome all new members of the NSHS by giving all new members with the new membership cards an extra **10% off** regular priced reptile supplies (not including sale items or live food). All you have to do is show our staff your membership card and get an extra **10% off!!**

This applies to only our PETSVILLE Scotia Square location.

PETSVILLE CARES ABOUT YOUR REPTILE