

MICROFILM DIVIDER

OMB/RECORDS MANAGEMENT DIVISION
SFN 2053 (2/85) 5M



ROLL NUMBER

DESCRIPTION

1326

2005 HOUSE POLITICAL SUBDIVISIONS

HB 1326

2005 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. HB 1326

House Political Subdivisions Committee

Conference Committee

Hearing Date January 20, 2005

Tape Number	Side A	Side B	Meter #
1		x	45.8 to end
2	x		0.1 to 24.4

Committee Clerk Signature



Minutes: **Rep. Devlin, Chairman** opened the hearing on HB 1326, A bill for an Act to create and enact a new section to chapter 36-01 of the North Dakota Century Code, relating to the possession of live venomous reptiles; and to provide a penalty.

Rep. Sitte representing District 35 and prime sponsor for HB 1326 testified as to the basis for the bill and its intent. A copy of her testimony is attached.

End of tape (52.2)

Tape 2 side A

Rep. Sitte (cont'd 0.3)

Rep. Ekstrom (1.6) There are folks who have snakes to milk them for their venom to create anti-venom -- it may not be an item in North Dakota but may we should add some clarity to the bill in this regard.

Rep. Sitte : I did talk to State Veterinarian, Susan Kellar and we kind of think that would go into the area of research but if the committee thinks that should be clarified that would be fine.

Rep. Ekstrom (2.3) You talk about the release of venomous snakes and the State does have venomous snakes --- I know some really wild cowboys out there like to round them up and then subsequently let them go --- its a weird sport -- how do we address that?

Rep. Sitte : That is a new one on me -- I did hear of cowboys who do round them up, play with for a while and then fry them up for supper. I don't believe that we can permit or allow people to collect and release -- I don't see any reason to release them back into the wild. Dr. Kellar said hat those who collect those snake perform a public service.

Rep. Ekstrom : (3.3 0 The rattlers do have a place in nature -- they are a part of the Eco-system and they do keep small vertebrates in check.

Rep. Koppelman (3.8) Is there any way to de-fang a venomous snake to make it a safe pet?

Rep. Sitte : I will defer that to Terry Lincoln from the Bismarck. Rep. Herbal, Vice Chairman is here. Rep. Herbal, Vice Chairman helped collect these as Rep. Herbal, Vice Chairman aided the Bismarck Police in capturing the snakes mention in my testimony. He helped in drafting this bill and helped with the distinction between a venomous and poisonous snake.

Rep. Kaldor (4.5) I agree with the intent of your bill but I do think after listening to Rep. Ekstrom, the bill may be enforceable in ways that not be intended. It does relate to possession of a live venomous reptile and there may people in the field, hunters, Game and fish personnel, etc.

Rep. Sitte : I have not heard of hunters and others going out to hunt and then also collect rattle snakes. I have had conversations with Rep. Froelich who live in the western area of the state -- Rep. Herbal, Vice Chairman is familiar with annual snake fries. Talking with Dr. Kellar she could think of a reason why this bill should not be in place.

Rep. Zaiser (6.1) What would you think if in Section 1 number 1 change to " with the intend to release or with the intent to retain"?

Rep. Sitte : There would have to be time limit included.

Sen. Dever representing District 32 and a sponsor of HB 1326 spoke in support of passage.

Rep. Herbal, Vice Chairman also related his experience with the "venomous snake" in Bismarck. There was plenty of stupidity going around in that case as to the owners of these snake saying they lived with 1 1/2 blocks of a hospital but if bitten they would not have lived long enough to get there. Further the hospital did not have the proper anti-venom the closest being in Rapid City.

Rep. Koppelman (9.0) What do other states do in this regard?

Sen Dever : I do not but if they do not I would rather take the lead.

Rep. Zaiser (9.9) Do we have laws on the books regarding dangerous big cats, etc -- maybe this is somewhat related and should be included in this.

Rep. Koppelman (10.2) We do those laws.

Rep. Sitte : Research did uncover laws in 7 or 8 other states.

Rep Aarsvold appeared only to say Rep. Herbal, Vice Chairman supported the bill.

Terry Lincoln : The Bismarck experience is not isolated -- couple of years ago Minot had some individuals who had six black mambos they said they were milking for venom but never proved they were. Mr. Lincoln relayed his conversations and experience with other zoos, the Reptile Gardens in South Dakota and people around the country with whom they deal all the time. Mr. Lincoln sees a strong need for the bill. As for other states 5 limited permits; 11 states require permits; 10 states ban them totally.

Rep. Wrangham (16.0) Is there any easy way to distinguish between a venomous and a poisonous snake and where does the rattle snake fall?

Terry Lincoln : The easiest is that venomous reptile is one that is going to bite or chew -- poisonous is something that is poisonous through the skin.

Rep. Ekstrom (16.7) In practicality , if a black mambo or something like that that likes it warm outside and they got loose would they survive?

Terry Lincoln . The day that these guys were doing this in Bismarck the temperature was about sixty five degrees --- most reptiles need about 80 to 85 degrees to survive. They wouldn't survive unless they got into someone's basement.

Carol Two Eagles : Speaking for herself and her experiences related the neurological and pathological effects of various venom's. She pointed out that mollusks which are poisonous as well as some amphibians are also poisonous or toxic. She was in support of the bill.

Vivian Schafer : Representing the Children's Caucus also appeared in support of the bill.

Rep.Devlin, Chairman closed the hearing on HB 1326 when not further testimony was forthcoming. (24.2).

Tape 3 Side B

Rep. Kaldor (44.3) moved a 'Do Pass' motion for HB 1326. **Rep. Ekstrom** seconded the motion. On a roll call vote the motion carried **10 ayes 0 Nays 2 absent. Rep. Wrangham was designated to carry HB 1326 on the floor. End of record (50.4) .**

Date: *January 20, 2005*
Roll Call Vote:

2005 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. *HB 1326*

House POLITICAL SUBDIVISIONS

Committee

Check here for Conference Committee

Legislative Council Amendment Number

Action Taken

Do Pass

Motion Made By

Kaldor

Seconded By

Ekstrom

Representatives
Rep. Devlin, Chairman
Rep. Herbel, Vice Chairman
Rep. Dietrich
Rep. Johnson
Rep. Koppelman
Rep. Kretschmar
Rep. Maragos
Rep. Pietsch
Rep. Wrangham

Yes No
✓
✓
✓
✓
✓
✓
A
✓
✓

Representatives
Rep. Ekstrom
Rep. Kaldor
Rep. Zaiser

Yes No
✓
✓
A

Total (Yes) *10* No *0*

Absent *2*

Floor Assignment *Rep. Wrangham*

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE (410)
January 21, 2005 8:30 a.m.

Module No: HR-14-0832
Carrier: Wrangham
Insert LC: . Title: .

REPORT OF STANDING COMMITTEE

HB 1326: Political Subdivisions Committee (Rep. Devlin, Chairman) recommends DO PASS (10 YEAS, 0 NAYS, 2 ABSENT AND NOT VOTING). HB 1326 was placed on the Eleventh order on the calendar.

2005 SENATE POLITICAL SUBDIVISIONS

HB 1326

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. HB 1326

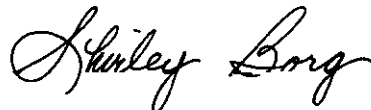
Senate Political Subdivisions Committee

Conference Committee

Hearing Date March 3, 2005

Tape Number	Side A	Side B	Meter #
1	X		5649 - End
1		X	0 - 2155

Committee Clerk Signature



Minutes:

Chairman Cook opened the hearing on HB 1326 relating to the possession of live venomous reptiles. Five members present and one absent.

Representative Margaret Sitte, District 35, Bismarck, ND introduced HB 1326. (Attachment # 1, also A B C D information on snakes attached)

Representative Ole Aarsvold, District 20, cosponsor, testified in support of HB1326. It is not unusual to read a new account telling of the dangerous creature either released by the owner or escaping and inflicting fear and injury and occasionally even death on someone. This bill establishes a reasonable procedure by which a person can own and maintain a venomous reptile. A person must claim and defend an education purpose for having a reptile. In addition evidence of a secure housing and the ability to care for the reptile must be demonstrated. The state veterinarian would establish a criteria and issue a permit to keep such a creature. Often times we hear about people flushing venomous snakes down the toilet to get rid of them only to have those

creatures appear in someone else's toilet. Such an event would be very catastrophic in someone's mind. I would hope the committee would act favorably on HB 1326. I think this is a reasonable step and protects the health and welfare of the general public.

Senator Triplett : What are we going to do about the people that are out there that already have these reptiles? Are they expected to donate them to zoos or is there any compensation for people that have them?

Rep. Sitte: We don't have any provisions for them but I don't see compensation.

Terry Lincoln, Zoo Director, Dakota Zoo, Bismarck, ND testified in support of HB 1326. I was involved with the snake issue in July this past summer. The Bismarck Police Department called and said they had some snakes that they thought were dangerous. They were looking for four venomous snakes in this apartment. As I arrived they had identified the Mamba, and there was a big rattle snake that was six feet long and was huge. They couldn't find this Cobra but right inside the apartment there was a little ten gallon aquarium with a simple little mess lid on top of it and that was the cobra. These cobra's can cause blindness if they spit and you get venom in your eye. For the protection of local authorities, Bismarck Police Department, Ambulance people and EMS workers I think this bill is definitely necessary. This issue is serious as anti venom is not always available so if bitten it can cause death. I have had the pleasure of sitting on the Non Traditional Advisory Livestock Council for the board of animal health. We met with the state veterinarian and we are drafting a set of guide lines for educational or research places that are authorized to have these reptiles for their own protection and for the protection of the public as well.

Chairman Cook: Who else will be involved with writing these guide lines?

Terry Lincoln: A committee set by the state veterinarian. The Non Traditional Livestock Council has done a lot of this back ground work and we have also involved Terry Phillips from the Reptile Gardens of South Dakota. He has one hundred forty three mambas at their facility and these guys no what they are doing and they keep the anti venom and that sort of thing. They have been involved in legislation in eleven different states.

Senator Triplett: Do you believe that we may be in a situation where there is not a single venomous reptile in the state of North Dakota that would not qualify for an educational snake at the moment?

Terry Lincoln: I don't know of any.

Lois Hartman, Executive Director, North Dakota Firefighters Association, testified in support of HB 1326. On behalf of emergency services we support this bill, mostly as a common sense thing. Ninety seven percent of our fire service in North Dakota is volunteers and these people are not volunteering there time to enter into a potentially deadly situation with snakes.

Testimony opposed to HB 1326.

Alexandra Deufel, Assistant Professor of Biology, Researcher at Minot State University, opposed HB 1326. (See attachment # 2)

Chairman Cook: Do you have any written protocol that you have to follow right now regarding how you handle snakes?

Alexandra Deufel: I posted protocol near the snake facilities just in case something happens as to were to go, who to call and what to do. The reactions to venom are very different, so doctors should treat that very carefully and I have talked to the emergency room and told them to not give

anti venom for just anything for that species because you can have all kind of problems if it is not appropriate.

Chairman Cook: Did the University have to pursue any type of permit before venomous snakes could be brought into Minot.?

Alexandra Deufel: No, they do not have anything like that in place because up to now no one was getting federal funding but we just recently put protocol in place and it is not on the books as yet.

Senator Gary Lee: What are you researching?

Alexandra Deufel: My research is involved with the kinetics of the jaw apparatus. It is mostly research that relates to the behavior of the animal.

No further testimony for or against HB 1326.

Chairman Cook closed the hearing on HB 1326.

2005 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. HB 1326

Senate Political Subdivisions Committee

Conference Committee

Hearing Date March 10, 2005

Tape Number	Side A	Side B	Meter #
1		X	1550 - 1919

Committee Clerk Signature



Minutes:

Chairman Cook opened the discuss on HB 1326 which is the venomous snake bill. All members (6) present.

Senator Triplett had an amendment which would be under section 1, line 8 to delete the period and after the word reptile add " as defined by the state veterinarian". The state veterinarian would then be able to define what a venomous reptile is.

Senator Triplett moved the amendment on HB1326.

Senator Fairfield seconded the motion.

Discussion:

Senator Triplett: My reason for this if that after some of the testimony we heard and the conversation I had with the biologist from Minot State afterwards convinced me that the concept of venomous is a technical matter because there are some reptiles that are venomous but not dangerous.

Page 2

Senate Political Subdivisions Committee

Bill/Resolution Number HB 1326

Hearing Date March 10, 2005

Senator Dever: One of the concerns I have is from time to time we change state veterinarians.

Should the definition be more permanent than that?.

Chairman Cook: We always have a state veterinarian.

Senator Triplett: It would be more like a rule making process. It would be established and remain the same.

Roll call vote: Yes 6 No 0 Absent 0

Chairman Cook: We have before us HB 1326 as Amended.

Senator Triplett moved a Do Pass as Amended.

Senator Hacker seconded the motion.

Roll call vote: Yes 6 No 0 Absent 0

Carrier: **Senator Triplett**

50139.0401
Title.0500

Adopted by the Political Subdivisions
Committee

March 10, 2005

JEB
3-10-05

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1326

Page 1, line 8, after "reptile" insert ", as defined by the state veterinarian"

Renumber accordingly

Date: 3-10-05
Roll Call Vote #: 1

2005 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. HB 1326

Senate Political Subdivisions

Committee

Check here for Conference Committee

Legislative Council Amendment Number

Action Taken *Amendment moved*

Motion Made By *Senator Triplett* Seconded By *Senator Fairfield*

Senators	Yes	No	Senators	Yes	No
Senator Dwight Cook, Chairman	X				
Senator Nicholas P. Hacker, VC	X				
Senator Dick Dever	X				
Senator Gary A. Lee	X				
Senator April Fairfield	X				
Senator Constance Triplett	X				

Total Yes 6 No 0

Absent

Floor Assignment

If the vote is on an amendment, briefly indicate intent: *Amendment passed*

Date: 3-10-05
Roll Call Vote #: 2

2005 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. HB 1326

Senate Political Subdivisions Committee

Check here for Conference Committee

Legislative Council Amendment Number

Action Taken Do Pass 25 Amended

Motion Made By Senator Triplett Seconded By Senator Hacker

Senators	Yes	No	Senators	Yes	No
Senator Dwight Cook, Chairman	X				
Senator Nicholas P. Hacker, VC	X				
Senator Dick Dever	X				
Senator Gary A. Lee	X				
Senator April Fairfield	X				
Senator Constance Triplett	X				

Total Yes 6 No 0

Absent

Floor Assignment Senator Triplett

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE (410)
March 10, 2005 4:45 p.m.

Module No: SR-44-4704
Carrier: Triplett
Insert LC: 50139.0401 Title: .0500

REPORT OF STANDING COMMITTEE

HB 1326: Political Subdivisions Committee (Sen. Cook, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (6 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). HB 1326 was placed on the Sixth order on the calendar.

Page 1, line 8, after "reptile" insert ", as defined by the state veterinarian"

Renumber accordingly

2005 TESTIMONY

HB 1326

House Bill 1326 relating to venomous snakes
Testimony of Representative Margaret Sitte,
January 20, 2005

*Same
Given to
Senate*

Mister Chairman and members of the committee, I am Representative Margaret Sitte, from District 35 in central Bismarck, and I am sponsor of House Bill 1326, a bill that would ban the possession of venomous reptiles in North Dakota.

Last July snake stories slithered throughout the local newspapers, across the airwaves, and over the television stations as Bismarck residents learned of four venomous snakes that had been kept in an apartment building in the center of the city. Local police and the Dakota Zoo Director Terry Lincoln removed an East African green mamba, a death adder, and an albino monocle cobra from the residence.

A constituent who had served in Vietnam requested this bill. The man said he had seen firsthand what these snakes do to people, and he firmly believed that no one should be allowed to possess them in North Dakota.

Attached are some information sheets that I gathered from the internet:

Appendix A: background on the green mamba and the death adder,

Appendix B: background on cobras,

Appendix C: background on the availability of venomous snakes on the internet,

Appendix D: a website posting from a former venomous snake owner.

Looking at the bill, Subsection 1 says that people may not possess a live venomous reptile without a permit.

Subsection 2 allows the state veterinarian to issue a permit for the possession of a live venomous reptile only if the applicant demonstrates an educational purpose and the ability to care for and handle the reptile. Educational purposes include research, displays at schools and institutions of higher education, wildlife preserves, and zoos.

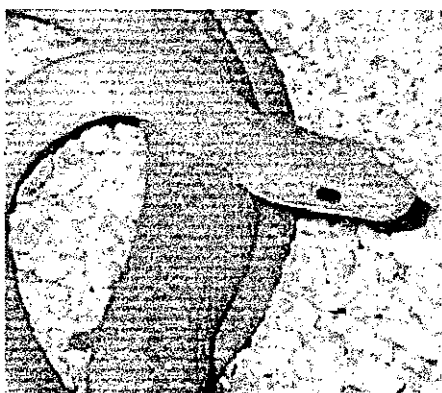
Subsection 3 prohibits people from releasing any venomous reptile in the state.

Subsection 4 creates a penalty of a class B misdemeanor.

Our Golden Retriever Teddy, who is nearly 15 years old, will tell you I love pets as much as anyone. These venomous snakes, however, present a hazard to the health of North Dakota citizens and belong only in trained hands. I urge you to support this bill.

The Green Mamba is a beautiful snake. It has a sharp green color, the color of tropical vines or leaves. Contrary to its beauty, this snake packs a powerful venom. This whitish venom affects the victim's nervous system, mostly the part that controls the victim's heart and breathing. The Green Mamba is about 4 to 7 feet long. This graceful snake catches its prey (mostly birds and lizards) by waiting quietly for something to come near it, and then darts out and snatches it up. If a bird flies too close, the Green Mamba catches the bird in less than a second. When predator comes near it, the Green Mamba darts away at the extraordinary rate of 7 miles per hour, twice the speed of any North American snake. It will lay from 10 to 15 eggs and lives in East Africa from Kenya to Zimbabwe.

Mambas belong to a group of venomous snakes called elapids. This short fanged group of snakes includes the Coral Snake of North America and the Cobras. The green Mamba is difficult to see in green foliage as its fishnet markings closely resemble the foliage of its habitat. The mamba is the dreaded snake species of Africa. Treat it with great respect. It is considered one of the most dangerous snakes known. Not only is it highly venomous but it is aggressive and its victim has little chance to escape from a bite. Its venom is highly neurotoxic.



The death adder is one of the most venomous of the Australian snakes. There are three species of death adder in Australia. They look very similar and one or other species are found over most of mainland Australia. Death adders grow to about 50-60 cms. They do not retreat if humans approach.

Death adders are greyish or brown, with darker stripes across their body. The tip of the tail is usually black in southern Australia and white in the north. They have unusually long poison fangs for snakes of their size.

Death adder's food is insect-eating native birds and animals. The snake hides in leaf litter or loose sand. It wiggles its thin tail like a grub to attract prey. This means death adders cannot easily survive major changes to their habitat.



Cobra (snake), common name for certain members of a family of venomous snakes, known for their intimidating behavior and deadly bite. Cobras are recognized by the hoods that they flare when angry or disturbed; the hoods are created by the elongate ribs that extend the loose skin of the neck behind the cobras' heads. These reptiles are found throughout the Philippines, southern Asia, and Africa.

The king cobra is the world's longest venomous snake. It averages 3.7 m (12 ft) in length but is known to grow to 5.5 m (18 ft). It is olive or brown in color, with bronze eyes; some individuals are banded. It is found in the Philippines, Malaysia, southern China, Myanmar (formerly known as Burma), India, Thailand, and the Malay Peninsula. It eats primarily other snakes. The other cobra of Asia is known variously as the common, Asian, Indian, or spectacled cobra (due to the eyeglass-shaped pattern on its skin). It seldom reaches a length of more than 1.8 m (6 ft). The hood of the common cobra is, proportionately, much larger than that of the king cobra and is usually yellow to brown, with a black-and-white spectacle pattern on top and two black and white spots on the lower surface. This snake causes many deaths each year in India, where it is regarded with religious awe and is seldom killed. The common cobra is frequently used by snake charmers. It ranges from the eastern shore of the Caspian Sea to China and Malaysia.

The venom of cobras often contains a powerful neurotoxin and acts on the nervous system. With effective serum more available, however, the high death rate from cobra bites in some areas of Asia has decreased. Cobra venom has been used for many years in medical research because it has an enzyme, lecithinase, that dissolves cell walls as well as membranes surrounding viruses.

World Wild Web

The blue Lear's macaw, a type of parrot with striking indigo plumage, is one of the rarest animals in the world; an estimated 150 remain in the wild, most of them living in a single canyon in northeastern Brazil. Capturing or selling the birds is strictly illegal under Brazilian law and inter-national wildlife treaties. Yet an enterprising collector can acquire a Lear's macaw through the same system that puts out-of-print books and antique table linens at the fingertips of collectors worldwide—a growing online network of specialized chat rooms, auctions, and retail sites.

An ad for a blue macaw (asking price: \$60,000) was one of some 5,000 listings on the Internet for rare and endangered animals from Brazil discovered by Renctas, a Brazilian organization that monitors the illegal wildlife trade. In a recent study, the group concluded that the Internet has revolutionized the international traffic in rare and endangered creatures like the Satanic leaf-tailed gecko, the albino monocle cobra, and the Komodo dragon. "It was like being in some kind of animal supermarket," Renctas' director, Dener Giovanini, recalls. "We never imagined that the trade on the Internet would be as serious as this."

Giovanini says the Web has boosted demand for illegal animals and changed the way traffickers do business: Some, he notes, place specific orders with their procurers based on requests from online customers. Because deals initiated over the Internet are often consummated via phone and fax, the group was not able to pinpoint how much money is spent each year on online animal trafficking. According to the international police agency Interpol, the worldwide trade in rare creatures is worth \$5 billion a year.

"Traffickers realize that by selling their products in cyberspace not only do they reach a lot more people, but they don't come under any one country's jurisdiction," says Crawford Allan, global enforcement officer for the watchdog group traffic International. "Because of this, they can escape prosecution even if their crimes have been detected."

Ernest Mayer, chief of special operations for the U.S. Fish and Wildlife Service, says he is particularly concerned about the Web's potential to attract new sellers and buyers, sometimes turning casual collectors into international smugglers. After prodding from the agency, the online auction giant eBay issued warnings against selling rare animals and animal parts, but federal agents still find users posting offers for everything from eagle feathers to a frozen tiger cub.

For enforcement agencies, there is one upside to the Internet trade: If buyers and sellers can prowl the Web for their quarry, so can investigators. One recent Fish and Wildlife case involved a trio of reptile enthusiasts in Arizona and Australia who met in a chat room and proceeded to exchange snakes packaged in cookie tins and potato-chip bags. The Arizona collectors were caught when they offered some of their Australian reptiles for sale in the chat room, which happened to be monitored by an informant. "They didn't try to hide things at all," says federal agent Kathryn Looney. "They even included a phone number on the bottom of the ad."

Venomoids..... *Venomless*

Being a lifelong venomous reptile enthusiast, I am acutely aware of the controversy that surrounds the keeping and making of venomoid snakes. There are many different ways to argue for or against this practice. For a well written article on them go to _____ and read it. I have had and sold venomoids, although for a short period of time, so my below opinion is based on personal experience with the snakes themselves and the people who contacted me wanting to buy them.

For me, personally, I don't like venomoids. I also don't believe that a venomoid snake is a "good" way to get prepared for keeping the real thing. It is not really a moral or ethical issue, but rather to me it seems as a very real threat to the serious venomous keeping community. I am not saying that everyone who has or does own one is incompetent. I do believe, though, that venomoids attract a different type of individual to the keeping of altered hot snakes.....which often leads to the eventual purchase of a "hot" snake. Based on my experiences in this business the people who wanted venomoids were for the most part either very new to herpetoculture or were looking for a thrill without having any mature understanding of venomous snakes. On a couple of RARE occasions legitimate nature centers and reptile parks wanted this type of altered animal due solely for insurance reasons. The perceived threat of this fast growing trend is that many irresponsible or inexperienced people who take the first "easy" step into venomous by getting a venomoid will become a liability for us all down the road. There are many analogies that I could use to make my point but I am digressing.....

The keeping of venomous snakes is a serious commitment that is most unsuitable for the vast majority of herp lovers out there. The fact a venomous snake is in fact venomous and dangerous tends to weed out the "wannabes" jumping on this hot herp keeping explosion.....just the way it should be. The sudden rise of venomoids has changed this pseudo natural selection process, and in my opinion this is a bad thing. Need I even mention the fact that quite a few of those people selling and advertising venomoids cannot correctly identify or spell even the commonest species! The last thing this hobby needs is for someone with their pet venomoid Albino Monocle Cobra to go out in their backyard to show it off to their neighbors only to end up on the 6 o'clock news with the headlines reading "Deadly Cobra Terrorizes Neighborhood".....can't you just see more legislation on the horizon? Well, I have certainly rambled on enough about this. I know that some of you reading this will get irate for me sharing my opinions where others of you will most likely be ecstatic that I no longer participate in this practice.

For those of you who still insist on wanting to purchase a venomoid, I ask you to ask yourself **WHY?**

Hau mitakuyapi. Hello my relatives. For the record, my name is Carol Two Eagle, & I am testifying in support of HB 1326, but I am asking for an amendment to change the language of this bills to include the terms "import, cause to be imported, or possess any kind of venomous animal" and to increase the severity of the penalty for violating this law, once it is passed and signed by the governor.

Venomous animals of any kind take lives. They take the lives of all sorts of animals, human and not. Their venom exists specifically to kill efficiently and reliably; since snakes & other venomous animals generally have no other means to capture their prey. Venomous animals other than snakes include the Gila monster, which is a lizard of the desert Southwest, and various kinds of ocean shellfish, such as Cones, which can be kept in saltwater aquariums. The venom of Cones is very similar to the venom of cobras, *AS IS THE VENOM OF SOME FISH.*

These animals are extremely dangerous; they do not "tame" or become domesticated; their behavior cannot be predicted even by experts; and they are very difficult to restrain or keep caged, even by experts. In short, they are not "pets". There is nothing cute, cuddly, fluffy, or fuzzy about them. Importing or possessing venomous animals is conduct regardless of life, and the penalty for violating the prohibition set out in HB 1326 should reflect that.

I have some experience in this area – I spent 9.5 years in heart research after I graduated from university with a B.S. in chemistry, as both a technician and a candidate working on a Masters degree.

In the project where I put in the most time, we worked with spitting cobra venom and beef heart tissue. We used the spitting cobra venom to process the beef heart and separate the mitochondria from the rest of the nerve tissue, as part of a project to study the function and activities of the nervous system of the heart.

Usually, the spitting cobra venom came to us in powdered form in small glass bottles – with a bright red warning label that read: "WARNING! Addition of water to this powder restores full potency as if fresh from the Spitting Cobra! Keep skin covered! Keep food away! DO NOT INGEST BY ANY MEANS!"

In another part of the project, we worked with powdered Cone venom. It had a similar warning. You know how difficult it is to get most manufacturers to put warning labels on their products.

In the course of my participation in this project, I was told I had to take a course in handling venomous snakes. Since one of my "gifts" is that snakes come to me, I was not anxious to take this course. But it was a requirement of my job, so I did learn to handle venomous snakes. The details of what I learned there would likely give you nightmares – they did me.

I have attached a short article from the Newsletter of the Colorado Herpetological Society of February, 2001 on snake venom. I will read just a small part of this article into the record, if I may.

Two general types of toxins are known (in snake venom) – neurotoxins and hemotoxins. Neurotoxins act on the nervous system, and travel preferentially up the nerves of the body, rather than through the blood. Hemotoxins act on the proteins of the body, including hemoglobin, which carries oxygen throughout the body, in the blood. Neurotoxins kill by causing heart failure & suffocation; while hemotoxins attack the circulatory and muscular systems, causing horrendous scarring, gangrene, permanent loss of motor skills, and sometimes amputation of limbs. Some venomous animals have both types of toxins in their venoms.

Among the enzymes so far identified in venoms are: **cholinesterase**, which attacks the nervous system and destroys muscle control. **Amino acid oxidase**, which plays a part in triggering other enzymes. **Hyaluronidase**, which causes other enzymes to be more rapidly absorbed by the victim. **Proteinase**, which breaks down proteins, causing extensive scarring & muscle damage in humans. **Adenosine Triphosphatase**, which breaks down ATP (Adenosine TriPhosphate) & causes shock in the victim. **Phosphodiesterase**, which causes a rapid drop in blood pressure in victims, as well as other cardiac symptoms.

From just this little bit of information, it is easy to see that having venomous animals is strictly for professionals, and even then, there are considerable risks involved.

I ask you then to amend HB 1326 to include the terms "import, cause to be imported, or possess any kind of venomous animal" and to increase the severity of the penalty for violating this law from a Class B misdemeanor to something much more severe, in keeping with the risks of these animals' venoms. Keep in mind that while North Dakota has terribly cold winters, it also has well-insulated and heated buildings, which plenty of nooks and crannies where such animals could shelter through the winter, and come out in the summer, breed, and establish a problem where we had none before.

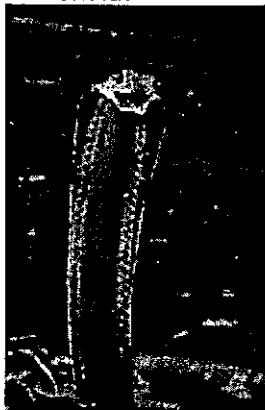
Thank you for hearing me in a good way now. Mitakuye oiasin.

— FOR THOSE WHO THINK THAT SUCH DANGEROUS ANIMALS ARE INCAPABLE OF SURVIVING OUR WINTERS, I NOTE THAT COBRAS SURVIVE AT SNOW LINE IN THE HIMALAYAS, & RATTLESNAKES SURVIVE N.D. WINTERS — & OUR BUILDINGS ARE WELL-HEATED & FULL OF NOOKS & CRANNIES THAT MAKE FINE DENS.

Snakebite

Multimedia

Media file 1: Snakebite. King cobra (*Ophiophagus hannah*), a dangerous Asian elapid and longest of the venomous snakes at around 4 m (13 ft). Photograph by Joe McDonald.



AGGRESSIVE
WHEN PROVOKED.

Media type: Photo

Media file 2: Snakebite. Black mamba (*Dendraspis polylepis*), an extremely fast, large, and dangerous African elapid. Photograph by Joe McDonald.



AGGRESSIVE
AT ALL TIMES.
A "STEP-~~d~~-A-HALF" SNAKE.

Media type: Photo

Media file 3: Snakebite. Coral snake (*Micrurus fulvius*), a shy American elapid that accounts for only about 1% of venomous snakebites in the United States. Recognize it by this catch phrase: "Red on yellow, kill a fellow."
Photograph by Joe McDonald.



Small and
shy - most bites
on toes, fingertips,
& small children

Media type: Photo

Media file 4: Snakebite. Milk snake (*Lampropeltis triangulum*), a harmless mimic of the coral snake. "Red on black, venom lack," although this old saying becomes unreliable south of the United States. Photograph by Joe McDonald.



Media type: Photo

Media file 5: Snakebite. Western diamondback rattlesnake (*Crotalus atrox*), an American pit viper, with rattle vibrating. This is one of the most dangerous snakes of North America. Photograph by Joe McDonald.

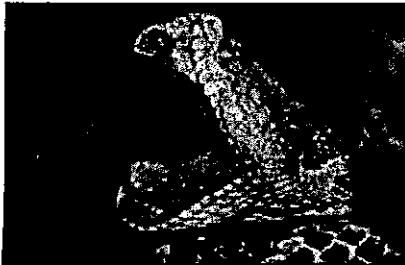
Bad-tempered
at best of times



Media type: Photo

Media file 6: Snakebite. Timber rattlesnake (*Crotalus horridus*), American pit viper, caught yawning after a big meal. Photograph by Joe McDonald.

Deadly & aggressive.
NOTE: HINGED UPPER 1/2
OF HEAD, THE BETTER
TO FIT FANGS TO PREY.



Media type: Photo

Media file 7: Snakebite. Cottonmouth or water

moccasin (*Agkistrodon piscivorus*), American pit viper usually found in or near water. Photograph by Joe McDonald.



Will go after you.

Media type: Photo

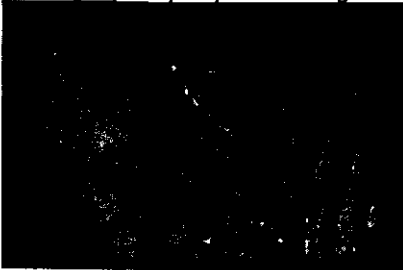
Media file 8: Snakebite. Northern copperhead (*Agkistrodon contortrix*), an American pit viper. Bites by this species tend to be less severe than rattlesnake or water moccasin bites but still require urgent medical attention. Photograph by Joe McDonald.



Sleepy disposition but if they decide to bite.....

Media type: Photo

Media file 9: Spitting cobra bite. Many elapid bites result in little local swelling, but the spitting cobras are known for the amount of swelling and tissue damage they can cause. Photograph by Clyde Peeling.



Snappish temperaments, easily riled, hard to handle - AGGRESSIVE.

Media type: Photo

Media file 10: Western diamondback rattlesnake (*Crotalus atrox*) bite. Rattlesnake bites can cause severe swelling, pain, and permanent tissue damage. Photograph by Clyde Peeling.

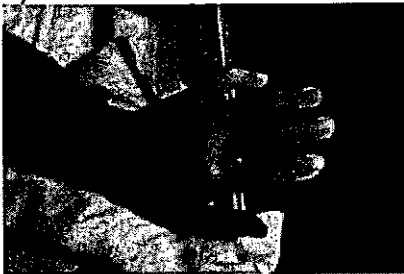


Bad-tempered at the best of times.

Media type: Photo

Media file 11: Copperhead (*Agkistrodon contortrix*) bite. These bites usually result in local pain and swelling but usually have less

tissue loss than rattlesnake bites. Photograph by Tom Diaz.



Media type: Photo

Media file 12: Timber rattlesnake (*Crotalus horridus*) bite. Pit viper bites can cause a leakage of blood cells out of the blood vessels, even on parts of the body away from the bite site. Note the significant bruising of the upper forearm and arm. Photograph by Clyde Peeling.



Media type: Photo

← BITE ON THIS VICTIM
WAS NOT ON THIS ARM -



The Cold Blooded News
The Newsletter of the Colorado Herpetological Society
Volume 28, Number 3; March, 2001

Snake Venom: The Pain and Potential of Poison by Ed Ferrer
Reprinted from The Monitor, the Newsletter of the Hoosier Herpetological Society, Vol.12,
No.2, February 2001.

Snake venom is one of the most amazing and unique adaptations of animal evolution. Venomous serpents have developed one of the most effective and efficient weapon systems of the animal kingdom. What is snake venom and how does it work? Venom is a prey-immobilizing substance in snakes that is used secondarily as a defense system. Venom is not composed of a single substance, but is a toxic saliva consisting of a complex mixture of chemicals called enzymes.

Almost all venoms are composed of approximately 90% proteins. Two general types of toxins are known, neurotoxins and hemotoxins.

Neurotoxic venom attacks the victim's central nervous system and usually result in heart failure and/or breathing difficulties. Cobras, mambas, sea snakes, kraits and coral snakes are examples of snakes that contain mainly neurotoxic venom.

Hemotoxic venom attacks the circulatory system and muscle tissue causing excessive scarring, gangrene, permanent disuse of motor skills, and sometimes leads to amputation of the affected area. The Viperidae family such as rattlesnakes, copperheads, and cottonmouths are good examples of snakes that employ mostly hemotoxic venom. Some snakes contain venom that contains combinations of both neurotoxins and hemotoxins.

There are approximately 20 types of toxic enzymes found in snake poisons throughout the world known to man. Although no venomous snake has all of these toxins, most snakes employ between six to twelve of these enzymes in their venom. Each of these enzymes has its own special function. Some aid in the digestive process, while others specialize in paralyzing the prey. Scientists believe they have identified the following chemicals from snake venom and the specific purpose of each as follows:

cholinesterase; attacks the nervous system, relaxing muscles to the point where the victim has very little control.

amino acid oxidase; plays a part in digestion and the triggering of other enzymes, (is responsible for venom's characteristic light yellowish coloring.)

hyaluronidase; causes other enzymes to be absorbed more rapidly by the victim.

proteinase; plays a large part in the digestive process, breaking down tissues at an accelerated rate. (causes extensive tissue damage in human victims)

adenosine triphosphatase; believed to be one of the central agents resulting in the shock of the victim and immobilizing smaller prey. (probably present in most snakes.)

phosphodiesterase; accounts for the negative cardiac reactions in victims, most notably a rapid drop in blood pressure.

These are only a few of the enzymes found in the chemistry of snake venom known today. Other enzymes have been isolated and identified but their purpose is still largely a mystery to science.

Now that you probably feel that you have just taken a crash course in organic chemistry, you probably want to know if science has made any progress in finding within this new-found knowledge of venom any benefits for humans. Although the danger of snake venom to humans has been well documented, mankind also benefits from increased research of snake venom. The most obvious benefit to man is the snake venom's role in producing "antivenom" (also known as "antivenin") to help counteract the effects of snake bites. The most well-known method of producing antivenom is a technique referred to by many as the "horse serum" method. Venom is injected into the horse, slowly increasing the amount as the horse builds up antibodies to the venom. Blood is then taken from the animal and the serum containing the antibodies is then separated. Unfortunately about one-third of all recipients have allergic reactions to horse serum. Standard procedure calls for a test for serum sensitivity before giving antivenom to patients. Although certain "polyvalent" antivenoms can be utilized for certain "groups" of snakes, usually each type of snake has its own specific antivenom.

Besides the obvious benefits of snake venom to produce antivenom, have there been any other breakthroughs in medical research? There have been many early results from research that gives promise on many medical fronts. In France, an enzyme derived from copperhead venom may hold an answer to treatment for breast cancer. Ingredients from the venom of a Malayan pit viper has shown promise in breaking blood clots that would be very beneficial in treating stroke victims. Enzymes from cobra venom may hold the keys to finding cures for Parkinson's disease and Alzheimer's disease. Some viper venom seems to hold the secrets to curing osteoporosis and promoting tumor reduction. Several venom extracts have shown possibilities that could lead to the production of anticoagulants that would be helpful in treating heart disease. Proteins from certain rattlesnakes has produced blood pressure medicine. Ingredients from the red-necked spitting cobra has provided clues to breaking down cell membranes that would provide treatment for leukemia and cancer. It is obvious that these very complex enzymes derived from snake venom could produce potentially huge medical benefits for mankind. Besides protecting these unique creatures as part of a responsible effort to preserve our natural heritage, it seems increasingly clear that protecting venomous snakes is in our own best medical and health interest.

References:

- Venomous Snakes of the World*. 1995, W. P. Mara
Venomous Reptiles of North America. 1992, Carl H. Ernst
Conversation with Jim Harrison, Kentucky Reptile Zoo, Slade, Kentucky

Dear Senators,

As a professor in the Department of Biology at Minot State University I am concerned with **HB 1326** relating to the **possession of live venomous reptiles**.

I would like you to consider that **this bill is unnecessary and should not be passed**.

- The bill was introduced in reaction to an isolated event. Possession of venomous snakes is not a problem in ND.
- This bill will not stop the kind of people that were involved in this event. People who make pipe bombs are not likely to obey such a law.
- The law is unnecessary for the few professionals in the state who research/teach with venomous snakes. It will be a burden on those people and the state veterinarian.
- This is not one of the laws we need to pass to serve the public good.

Sincerely,

Alexandra Deufel, Ph.D.
Assistant Professor of Biology
Minot State University

Proposed Amendments to HB 1326

Page 1, line 8, after "reptile" insert ", as defined by the state veterinarian"

Renumber accordingly