

# Lancaster Herpetological Society

Winter 2008 Newsletter

The Lancaster Herpetological Society is a small club that meets once a month to discuss herps and herp-related issues. The club meets at the North Museum ([www.northmuseum.org](http://www.northmuseum.org), 400 College Ave., Lancaster, PA 17603) on the 3<sup>rd</sup> Friday of every month. Meetings are open to the public, free of charge, and begin at 7pm. Please feel free to attend by entering through the back door (ring bell if locked). The membership requests that all children under the age of 16 be accompanied by an adult. For more information, contact Chad Arment ([lancwildlife@verizon.net](mailto:lancwildlife@verizon.net)).  
*Hope to see you there!*

## Upcoming Events

February is time to renew your LHS Membership by paying the \$10 yearly dues. With the price of nearly everything on the rise, club dues are sure not to stay this affordable for long. Come prepared with cash or check (sorry, no credit cards).

<u>Date</u>	<u>Speaker</u>	<u>Topic</u>
1/18/2008	Billy Brown	Urban Herping
2/15/2008*	Roy Mellot	Gartersnakes
3/21/2008	Tom Vargo	Dart Frogs
4/18/2008	Currently Open Date	Possible Members' Night

**\*Meeting for Board Members at 6PM prior to club meeting in February.**

**Upcoming Havre de Grace Herp Shows:** February 9<sup>th</sup>, March 1<sup>st</sup>, April 12<sup>th</sup>

**Upcoming Hamburg Herp Shows:** February 23<sup>rd</sup>\*\*\*, March 29<sup>th</sup>

**\*\*\* Note:** During the February 23<sup>rd</sup> Hamburg show, the Lancaster Herpetological Society will have an informational display table due to the generosity of the show's organizers. If you want to help with staffing the table, please contact Adam Darrenkamp ([amdarren@comcast.net](mailto:amdarren@comcast.net)).

## Requests

LHS exists solely as a volunteer organization. The club would not survive without the constant and continual input of its members. Until now, the club has largely been perpetuated by the efforts of a few, mainly Adam Darrenkamp and Kathy Tyson. Arranging speakers, organizing field trips, and producing the newsletter take volunteered time. If you have ideas for and are willing to take the lead in arranging speakers or field trips, please contact Chad Arment ([lancwildlife@verizon.net](mailto:lancwildlife@verizon.net)).

If you wish to contribute to the newsletter, please contact Zach Barton ([zbarton@ycstech.org](mailto:zbarton@ycstech.org)). Possible original contributions include: book reviews; species care sheets; notes from a field herping trip; herp news summaries; and opinionated essays. The deadline for the Spring 2008 Newsletter is approaching fast!

**Business Member of Lancaster Herpetological Society:**



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## **Club Happenings**

We held our first elections during the December meeting. Adam Darrenkamp, seeking a reduction of responsibilities and selfless desire to see some new leadership and direction in the club, gladly accepted an elected “demotion” to the office of Vice President. Everyone at the club owes Adam a big thanks for being our President since the club's inception. Indeed, without Adam's initiative, it's hard to see how LHS would have ever started. Thanks Adam!

Chad Arment was unanimously elected President after a rigorous campaign. Unlike many of us, Chad has experience with a prior herp club from his days when he lived in western Ohio. Chad also runs a website, operates an on-demand publishing company, and has edited/authored several books. Chad will be a valuable asset to our club!

Brian Fischer was elected as Secretary, an office he has been effectively filling for the past several months. Also, Kathy Tyson agreed to stay on as our Treasurer, a post she has held since the beginning of the club. Kathy has also been instrumental in arranging the majority of the past speakers for the herp club. Without Kathy's help over the past several years, every meeting would have been Members' Night!

The Officers are aided in their duties to the club by LHS Board Members. The Board is currently composed of: Zach Barton; Jesse Rothacker; Kathy Shenk; Al Spoo; and Norm Tyson. The Board and Officers meet approximately every three months to discuss club issues.

Outgoing Vice President is our esteemed Jack Hubley. Jack also sought to reduce his obligations to the club and allow for some leadership continuity by having Adam fill his position. Jack's name and local celebrity gave the club some early credibility and no doubt aided in securing some speakers. We look forward to Jack's continued participation in the club as a regular member.

## **Naturalistic Terrariums for Ophidians**

by Zach Barton

For years, I didn't keep any captive snakes because I thought you had to keep them in rather Spartan conditions. The thought of keeping a beautiful ophidian on newspaper with a cardboard hide box was distasteful to me. “American” style snake keeping was definitely not for me. Luckily, I encountered a variety of other schools of thought, and decided to try the “European” method for the captive care of snakes. Naturalistic terrariums offer a dynamic environment for the kept snake with a variety of stimulus sources. Additionally, the “European” style can be pleasing to view even when the snake is hiding, and can be the focal point of any room. I keep five naturalistic snake terrariums on a self-made shelving unit in my dining room!

As a general rule, naturalistic terrariums are best for relatively small snakes. Long and/or heavy bodied snakes are not ideal candidates for any caging that includes real or artificial plants. Additionally, naturalistic setups are easier to maintain when the ratio of cage dimensions to snake length is kept relatively high. There are many different formulas available to determine the proper size terrarium for a snake. Here is my own equation:

$$A=(x/2)^2$$

Where x=length of the snake, and A=area of the cage. The formula is intended to set a maximum limit; a smaller snake in a larger cage is always better. For arboreal snakes, a minimum height of 2

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feet is required, though ideally the height should be equal to at least half the length of the snake. I prefer to use this formula because it gives you a method of determining how long of a snake you can keep in a non-rectangular enclosure. Here is a table of commonly available aquariums and the maximum length of snake appropriate for that aquarium:

Aquarium	Dimensions	Maximum Snake Length
10 gallon	20" X 10"	28"
15 gallon	24" X 12"	34"
20 gallon (long)	30" X 12"	38"
55 gallon	48" X 13"	50"

For multiple snake setups, a general rule of thumb is to base the terrarium on the largest animal, and then increase the area by 25% for each additional inhabitant.

As with any snake cage, a naturalistic terrarium needs a source of heat. I prefer to heat snakes both from above and below. I place a heat lamp above the terrarium and a heat mat below it as well. Both heat lamp and heat mat are placed on the same end of the enclosure. I have them on separate timers and set the cycle as follows: six hours of heat lamp only; six hours of both heat lamp and heat mat; six hours of heat mat only; and six hours of no heating. This particular cycle gives the snakes a variety of heat sources and intensity, but it is not absolutely required for a naturalistic terrarium. It is necessary, however, to provide both spatial and temporal thermal gradients. I also like to incorporate some sort of night light for viewing my snakes after dark.

A key component to a naturalistic terrarium is naturalistic substrate. I use varying combinations of the following: play sand; vermiculite; cypress mulch; peat moss; and landscaping stones. Any one of these ingredients is fine by itself, but I find that a mixture of at least two substrates creates a more naturalistic appearance. All of these constituents tend to be dusty, so I thoroughly wash them before adding the substrate to the terrarium. I place the substrate in wet, and the top layer readily dries in my aquariums. Herp literature has many references against keeping snakes on wet substrates, citing that it leads to skin blisters. I have never had a problem though, but it is best to understand all the variables present at your housing location. My terrariums are screen-topped, and relative humidity in my house is always low due to heating and air conditioning systems. If the ventilation of your terrariums are on the sides, and the area of your house where your terrariums are located maintains relatively high humidity levels (like a basement), you might have problems. Provided your terrarium doesn't limit the depth of your substrate, the amount of ground covering needed is largely a matter of personal preference. I usually try to have 2-3 inches of substrate in my terrariums.

Cage furnishings and decorations are the next necessity. All snakes will benefit from one or more hide boxes. I prefer to use cork bark in naturalistic terrariums, but there are many different kinds of faux rock hides on the market. There are also many faux rock water dishes, which I strongly recommend for a naturalistic terrarium. Regardless of type of water dish used, I always partially or totally cover it with a hide. This practice helps to create and maintain a moisture gradient, equally as useful as a thermal gradient. Other good cage furnishings are various pieces of wood and some relatively large rocks. Rocks and wood, along with natural substrate and moisture gradients, will aid snakes in shedding. Take the necessary precautions to ensure that any rocks or wood used in the terrarium don't introduce pests.

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Plants, either artificial or real, are absolutely necessary to complete the appeal of a naturalistic terrarium. I have never used real plants, but undoubtedly live plants will have to be cycled in and out of the cage so that they can recover from the abuse all but the smallest snakes will inflict on the plants. There are several different artificial plants on the market, and it is best to have more than one in any naturalistic terrarium.

The biggest reason many keepers avoid naturalistic terrariums is due to the perceived simple maintenance of traditional cages. I, however, believe that this is a misnomer, and a naturalistic terrarium properly proportioned to its snake requires minimal upkeep. Regardless of which system is adopted, waste still needs removed and water dishes still need cleaned. Natural substrate is more absorbent than any artificial substitute on the market and should minimize the impact of waste on the snake until it can be removed. I also believe that natural substrate minimizes odors, allowing for the placement of terrariums in locations where occasional strong smells would be highly undesirable (like the dining room). Snakes that I have kept on natural substrate do not seem to have that “snake” smell one often encounters when handling a snake. Natural substrate also allows for a moisture gradient, which can be extremely beneficial during shedding. One drawback with natural substrates is it is harder to spot waste, but a diligent keeper will not have a problem noticing new excrement. Lighter colored substrates can also help in identifying waste. An additional concern is impaction of substrate within the snake’s body, but this can be remedied by feeding the snake in a different location. I do feed my snakes in their cage, but try to minimize risk by placing rodents on cork bark or large stones. The snakes do sometimes drag their food through the substrate, but so do wild snakes. I figure incidental amounts of substrate will readily pass through the snake, though I am sure many keepers would be willing to argue with me. I have never had a problem, but I have only been maintaining snakes for five years.

Perhaps the best reason for maintaining a naturalistic terrarium is the chance to observe natural behavior in the snake. Many keepers cannot observe their snakes unless they remove them from their cage, but a display cage allows for minimal intrusions. A naturalistic terrarium offers its inhabitants a dynamic environment with differing textures of wood, rock, plants, and substrate. A properly constructed terrarium will have a variety of visual barricades at differing heights, allowing even large cages to feel secure to the snake. I keep naturalistic terrariums both in my dining room and in the classroom where I teach. Despite the heavy human traffic in both situations (my two year-old likes to play cars and Weebles™ on top of the lowest terrarium), my snakes have thrived. The cage locations allow me excellent and frequent viewing while minimizing the need for physical manipulation of snakes. All parties benefit!

I hope that I have generated interest in the “European” model of snake keeping. Naturalistic terrariums are ideal for garters, kings, milks, corns, rough green snakes, and sand boas. I have maintained kings, milks, garters, sand boas, and juveniles of larger species in naturalistic terrariums. I must admit, however, that my Kenyan sand boa cage was a pretty terrarium that seemed to lack a snake 99% of the time. I couldn’t imagine, though, keeping relatively small snakes any other way. Any other method would be unnatural!