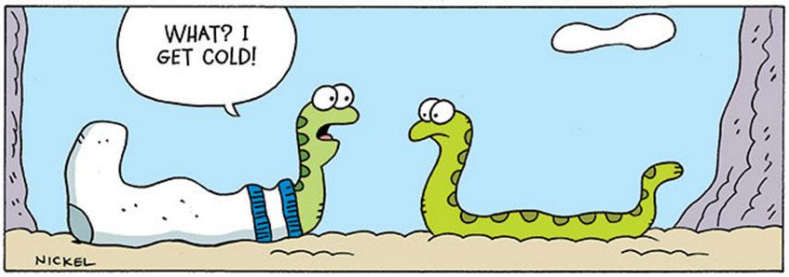

It's Cold Out There! Cold Weather Tips For Your Pet Herps

By Eric Roscoe

One significant aspect that can often influence and affect our ability to keep pet reptile, amphibian, and even invertebrate species (such as tarantulas, scorpions, and insects), as well as the ways pet owners and enthusiasts may be able to keep them, is certainly the weather and yearly climate. In many northern states, such as Minnesota, Wisconsin, and Michigan, as well as even other states and areas that may occasionally see snow and/or cooler temperatures, being prepared in dealing with these sometimes harsh temperatures during certain times of the year may need to become a part of life if one chooses or needs to live in such areas. Unlike us and other mammals which are often pets (such as dogs and cats), reptiles, amphibians, and invertebrates are **ecothermic** animals, or more precisely, **poikilothermic,** meaning they possess differing physiology such that they are (for the most part with a few slight exceptions), unable to control or regulate their internal body temperatures, and instead do so based on their ambient or external environment. In contrast, animals that can, such as most birds and mammals, are known as **endothermic**. Even so, many species of exotic mammals and other animals that are not ectothermic still have specific temperature, humidity, and other environmental requirements as well for which much of this article can apply to as well.

Reptiles and amphibians have a wide variety of habits and thermoregulatory behaviors which they may use to seek out and maintain their preferred optimal temperatures, such as basking, burrowing into substrate, and otherwise seeking cooler or warmer areas. Although some reptile and amphibian species are more hardy and cold tolerant than others, and may have even evolved methods for coping with cold temperatures (such as how some species of frogs and other amphibians, as well as even some turtles freeze the water in their cells to act as a natural anti-freeze), even in these cases, these animals have evolved and developed these strategies gradually and over long periods of time in order to be able to do

so and still cannot thermoregulate effectively if exposed to sudden or abrupt changes in temperatures. While there may be widespread information on cold weather tips for dog and cat (and other mammal) owners, there still remain relatively few of the needed articles and other resources for the same regarding pet reptiles and amphibians, and even for exotic pets in general. This article will present important cold weather tips, information, and considerations to keep in mind for all of our scaly friends whether travelling with/transporting them, or keeping them at home.

Tips for Travelling/Transportation

- Generally speaking, avoid travelling with or transporting these animals whenever possible during cold weather, particularly if it is considered dangerous or there are wind chill, winter weather, or other cold weather related travel advisories have been issued or are in effect. ***If one must travel with or transport animals during cold weather for any reason, the following tips and information below should absolutely be considered!***

-It is also oftentimes a viable recommendation to postpone or find other, alternative travel or transportation dates/arrangements whenever possible for until when temperatures and weather conditions improve again. Always use one's best judgement if the weather conditions or forecast appear/sound as though they will be inclement. Don't risk jeopardizing the animal's or your own health and safety beyond the normal risks if it can wait until later or be re-scheduled. These things should always be more important.

- At a bare minimum, a secure, well insulated Styrofoam or other plastic container should be used. Any animals housed within them should be properly secured in a snake bag, deli-cup, or other container as to prevent escape, as with any travel or transportation situation.

-It is strongly recommended that additional heating and insulation be used during any times during cold weather travel. Twenty four to seventy two (24-72) hour or greater heating packs, hand warmers, and other similar artificial heating devices can be purchased inexpensively commercially or at most local department stores. Portable battery powered heaters may also work in many cases. Other forms of additional insulation that can be considered can also include blankets, towels, duct, masking, and other types of tapes.

-NEVER leave any animal in an unheated vehicle or other area during cold or dangerous weather! In general, it should be a top priority to return home safely with the animal as soon as possible while avoiding any unnecessary stops or delays.

Tips for at Home

- There are also several winter and cold weather tips that can also be considered for keeping your herps at home. Species, room and enclosure temperatures, cage/enclosure location in the household, the type of enclosure used and their materials, type and manner of heating and lighting devices, and other husbandry aspects can also all influence the ability to keep these animals during periods of cold weather.

- The room that any animals are housed or maintained in itself can often greatly affect how these animals may be kept during cold weather. Larger rooms (and enclosures likewise) such as living rooms and other open spaces and "commons" areas can often be more difficult to adequately heat. If one is looking to heat an entire room, or otherwise provide additional heating beyond what may be provided to the enclosure(s), a humidifier or space heater can potentially be used depending on the size of the room.

- The location in the household of where any animals and/or enclosures are kept is another factor to consider. Whenever possible, it may be recommended to either avoid placing enclosures in front of or near any external doorways/entryways, windows, or other areas where there may be cool air or drafts coming in, or to take additional measures in heating or insulating them if they are or must be placed in these locations.

- It is also recommended that ambient room and enclosure temperatures and humidity/thermal gradients within each enclosure be more closely monitored, especially during periods of colder weather. This can typically be done by using many of a number of quality, commercially available thermometers/thermostat, dimmers, humidifiers, and other lighting and heating timers. Specific product recommendations can also be given upon further request.

-During the wintertime, or periods of cold weather, the ambient humidity throughout the household or within certain areas may also become low, which can often case ecdysis (shedding), dehydration, and

other husbandry and health related issues. Providing the correct type of enclosure, substrate, water, or other methods of hydration can often help with these issues. Providing a large enough water bowl or dish, other opportunities for soaking, regular or increased misting and fogging (either manually or through a number of products available), or even providing a humid hide consisting of a substrate that retains humidity well such as cypress mulch, sphagnum or peat moss, or dampened paper towels can raise and maintain hydration and humidity, but conditions must be cleaned and monitored more closely to prevent the growth of mold and other fungal and bacterial growth.

- The type of enclosure used and its materials are another important consideration, particularly during cold weather. Wire, screen, or mesh enclosures, and enclosures with such tops or lids can lose heat and humidity more quickly/readily unless either they are placed in suitable locations in the household or additional modifications are made to them. Many of the wood/wood based, plastic, glass, or injection molded fiberglass terrariums and enclosures manufactured specifically for housing snakes (and other many other reptiles) are often better at retaining heat and humidity.

-The enclosures, as well as the rooms or other areas of the household in which they are maintained should also still have or be adequately ventilated as well. Use caution with or avoid using some forms of artificial heating such as candles, propane, or other gas stoves and heaters, especially if they are used in or around enclosures or other areas in which animals may be kept. Fumes from some of these devices can be toxic or irritating to pets, including reptiles and amphibians, which especially can be sensitive to such effects due to their moist and permeable skins. Likewise, take care to reduce or prevent possible carbon monoxide poisoning (which can certainly affect animals as well) by installing a quality carbon monoxide detector, and by practicing common sense procedures.

- Many different heating and lighting options and devices are available for providing heat, humidity, and proper lighting for reptiles and amphibians. These can include, but are not limited to UTHs (under tank heating devices, or heating pads), ceramic and radiant heat emitters, red/black light night bulbs, incandescent bulbs, submersible water heaters for aquatic species, battery powered heaters, and UV-A/UV-B and fluorescent lighting (although these typically do not generate much heat but still can provide other proper elements to husbandry). Each type of device has a different means of heating a space or enclosure, and their wattages, output, and other characteristics should be selected as to be able to best provide for the specific species' temperature, lighting, and heating requirements and

enclosure size, type, and specifications. Still use caution as to not overheat any enclosures and animals, as this can lead to other husbandry problems, and can even be fatal to the animal.

-It may not hurt to even consider additional insulation to any enclosures and terrariums at home if it is needed. Many different materials can be considered to use for supplemental insulation, including, but certainly not limited to blankets and towels, Styrofoam, cork panels, polyethylene, polystyrene, foil fiberglass, and other types of home insulation products and materials.

-One may also consider brumating their reptiles or amphibians during periods of colder weather. Brumation is a state many herps may enter that entails a period of suspended animation and lessened activity/lethargy, but differs from true hibernation seen in many mammals. Many species of reptiles and amphibians in their natural ranges utilize **hibernaculums** , which are specific locations that run beneath the frostline where these animals may spend during periods of cold and inclement weather, and can include burrows, rock crevices and fissures, caves, leaf litter and debris. The length of time these animals may brumate often varies depending on many factors and climatic variables including changes in their seasonal and barometric pressures. In captivity, brumation can be induced and manipulated for many species, particularly prior to breeding or reproduction, but requires careful and significant knowledge and experience in doing so depending on the species, and many other factors.

- Unfortunately, the ability to maintain and overwinter animals outdoors is often limited by the respective state's and/or region's climate. While some animals may be able to be brumated outdoors using natural or heated artificial, or manmade burrows or other refugia in relatively mild climates, if nightly temperatures reach or drop below 40 degrees F for all or parts of the year, animals will need to be alternatively moved and housed indoors during these times. Some species, such as large tortoises, most crocodilians, and aquatic turtles require large amounts of space, and can be difficult to house, accommodate, or overwinter indoors, particularly in colder northern states. This oftentimes limits their overall suitability as a pet species for most individuals in these states or regions. Any animal that is housed or overwintered in large, indoor spaces or is otherwise allowed to freely roam outside of an enclosure indoors should still be closely watched and accommodations made for that animal as to prevent potential injury and/or health related implications (such as accessing food or other materials which may be toxic to pets/animals, potential stairway and uneven surface hazards, getting into electrical cables or wiring, or becoming lost and unaccounted for, etc). Further details and specific

information about overwintering certain reptiles indoors can be provided upon request.

-Always be sure to check on and monitor your animal's progress and overall activities, particularly during the wintertime/periods of cold weather, but do not become overly alarmed or concerned if some changes or decreases in their appetite or activity do occur. Even animals that are captive-born or that are in captivity can still sense the seasonal and barometric pressure changes around them, and will behave accordingly. This is very common and natural, even with captive animals. Ensure that they remain active and alert/responsive, and are maintaining appropriate body weights. Take note of and watch for any substantial changes or abnormalities in the animal's overall body weight, coloration, feces, or appearance to ensure that any health issues which may be truly serious develops. If an animal falls below its preferred/optimal temperature range, or becomes too cold, slowly and gradually raise their temperatures again rather than abruptly, as doing this can shock or disrupt their physiological systems.

-If one is ever unsure or uncertain of anything when It comes to transporting, travelling, or maintaining these animals during periods of cold and inclement weather, please also consider consulting with your veterinarian, area herpetological society, reptile/exotic pet specialty store, or other knowledgeable and reputable sources for information.

-Cold weather related emergencies and power outages are covered in further detail in another article titled "Emergency Preparedness for Herps!" This article is also available upon request as well.