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HIBERNATING REPTILES

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As the days get shorter and temperatures fade from their peak of summer, it becomes time for many temperate reptiles to hibernate. This is a particularly dangerous time for reptiles for many enter hibernation never to return. In the wild hibernation is a cause of significant mortality. In captivity many reptiles seem to breed better with hibernation and if done correctly mortality is rare.

Which reptiles should hibernate? First of all, only reptiles adapted to hibernating (i.e. temperate reptiles) should be hibernated. Do not attempt to hibernate tropical reptiles! Within one species some populations may hibernate while others from warmer climes may not. When in doubt, as to whether or not to hibernate a reptile, it is always safer to skip hibernation. As far as is known, reptiles do not require hibernation for individual survival.

Some temperate reptiles will do fine if kept warm and on long photoperiods through the winter. For example, some box turtles exposed to shorter day lengths and cooler environmental temperatures become less active and cease eating. They don't need to hibernate in captivity but their senses are telling them it's time to do so. If they are moved to rooms without windows and put on artificial photoperiods of 12 to 14 hours daily and kept 70 to 80°F they may become more active and regain their appetite. If not, they will eventually stop eating altogether and slowly starve. Other species such as milksnakes and king snakes may refuse food no matter what one does and are better off hibernating.

Another important factor is the health of the reptile. Reptiles should be in good weight and health prior to hibernation. Reptiles that are sick, recovering from illness, or underweight (such as the box turtle that hasn't eaten for several months), should not be hibernated. If you are unsure about the health of your reptile have your veterinarian check it. If there is any doubt about the health of the reptile or its ability to withstand hibernation, forego hibernation!

After deciding which animals are ready for hibernation, select an area for hibernation. Ideally one wants a draft free dry area with little light that can be kept between 45 to 60°F for several months. Temperatures much below this can kill, freezing is, of course, fatal. A basement, garage, back porch, north or east facing closet or window can all provide cool enough areas. Temperatures in the 60's are too warm, instead of hibernating the reptile will metabolize its body fat and slowly starve. Use a minimum-maximum thermometer to check temperatures for a week or two before your reptile is exposed to them. Monitor temperature throughout hibernation as well, as cold or warm periods can drastically alter the hibernaculum.

How long reptiles should be hibernated? In general 3 to 4 months is sufficient but a lot depends on local conditions and the animal itself. Any reptile that starts to shed during hibernation should be warmed up and allowed to shed, then it can re-enter hibernation. Any reptile that becomes ill during hibernation should immediately be warmed.

Pneumonia is especially common during hibernation so check every few weeks, if signs of respiratory illness develop (excess mucous in mouth, gurgling breath sounds, and nasal discharge) warm the reptile up to 80°F and see your vet as soon as possible.

How does one prepare a reptile for hibernation? Since the metabolism of reptiles slows down with decreased temperatures any food left in their gastrointestinal tract will not digest. Food should be withheld one to two weeks prior to commencement of cooling, but the reptile should still be kept warm (75 to 85°F) so it can finish

digesting any food left in the digestive tract. Smaller reptiles with higher metabolisms will need less time than larger reptiles that have slower metabolisms and generally eat larger meals. After fasting heat sources should be turned off to allow the reptile to adjust to room temperature (60 to 75°F) for one to two weeks. After this it can be placed in the cold area (45 to 60°F) for the hibernation period.

Reptiles should have water throughout hibernation. Clean the cage if it becomes dirty. The reptile should be minimally active during hibernation. A snake, lizard or turtle that paces about the cage is probably a little too warm or perhaps ill. Most snakes and lizards can be moved to smaller quarters, such as a plastic shoe or sweater box with a hide box and whatever substrate works best for you.

Box turtles and desert tortoises are much more difficult. A large box, crate or cooler can be set up with dirt or peat moss and sand on the bottom and shredded newspaper, dried leaves or hay on top. The turtles will burrow into the substrate and should remain inactive. Make sure the hibernaculum isn't resting directly on cold cement. Soak turtles in lukewarm water once or twice a month for a few hours then return them to their winter quarters.

Let's look at the typical reptile that is hibernated, such as a colubrid. This is a hypothetical example individuals may find their own schedule occurring earlier or later. All through spring, summer and early fall the snake is well fed so that by fall it is in good weight and health. It is fed as much as it will eat in August and early September then food is withheld in late September but it is still kept 75 to 85°F. In the first 2 weeks of October heat sources are discontinued and the snake remains at room temperature, 60 to 75°F. It is moved into the hibernaculum where temperatures range from 45 to 60°F from the last 2 weeks of October until the mid-February. It is then warmed to 75 to 85°F for a few days and fed a small meal. Within 2 weeks it has progressed up to regularly sized meals. Hibernation is not without risk, but if done correctly, your reptile should emerge in spring ready for breeding. Remember hibernation is only for healthy reptiles!