

**Rhodes Veterinary Surgery**  
95 Queens park parade  
Northampton

01604 712070

## **Hibernating Tortoises**



Not all species of tortoises hibernate, though in the UK the most commonly kept 'Mediterranean' species do. This includes the species: *Testudo graeca*, *Testudo hermanni*, *Testudo marginata* and *T. horsfieldii*. In the wild, these tortoises hibernate for only a month or two, but in this country hibernation may last for several months. Many problems can occur during this period including death or fatal illnesses so appropriate care before, during and after hibernation is very important.

In order to survive hibernation in good condition, tortoises need to have built up sufficient a reserve of body fat, which in turn stores vitamins and water. If these reserves run out too soon then the animal's body will begin to use up the fat contained within the muscles and internal organs, leading ultimately to death.

The best way to check if your tortoise is fit to hibernate is to have your pet examined by your veterinary surgeon in a 'pre-hibernation check'. The vet will weigh and measure your tortoise, examine its eyes, nose, ears and look inside its mouth for signs of disease, and assess the level of stored fat. If your tortoise is underweight, or in the first few years of its life, over-wintering it in a heated vivarium is safer option than hibernation. Please contact for further information on the heat/light requirements for this.

Provided your tortoise is up to weight and no other abnormalities can be detected, then you can start to prepare your tortoise for hibernation.

Very many tortoises die each year because owners attempt to hibernate them whilst they still contain undigested food matter in their intestines. It is natural for tortoises to gradually reduce their food intake as the autumn approaches, but it takes a full 2-4 weeks for the food last consumed to pass completely through the gut. So the first thing to do is wait 2-4 weeks from the last meal. During this time water and even water bathing should be offered to ensure good hydration during hibernation, if a tortoise urinates as you are moving them to hibernate, stop, bathe and re-offer water before hibernating the following day.

Having decided if and when to hibernate your tortoise, the next question is 'how?' Firstly, if your tortoise has safely hibernated for years before naturally by burrowing in the garden there is no need to vary from this routine, though there are 4 main disadvantages to consider from this method 1) Flood risk, 2) Health inspections

throughout hibernation are practically impossible 3) They may be at risk from frost damage and 4) There is always a risk of attack by foxes, badgers or rodents.

Alternatively, a more controlled, superior method is to place your tortoise inside a small cardboard box, ideally allowing for a couple of inches of insulation material all around – shredded paper is ideal – straw should be avoided as it can harbour mould spores. Next place this box inside a larger wooden or more substantial cardboard box. Again the inside of this should be lined with shredded paper or polystyrene chips. The double box system allows a hibernating tortoise some movement, without the risk of moving to the edge of the box, where it could easily freeze.

Where to place your hibernation box depends on the temperature. The critical temperatures are a maximum of 10 °C (50 °F) and a minimum of 0-2 °C (32 °F). Too hot and your tortoise will use up its body reserves too quickly and become weak and possibly die, too cold and can result in blindness as the eyes quite literally freeze solid, and brain damage. The easiest way to check temperatures is to obtain a maximum-minimum reading thermometer from any garden or DIY shop, and check it regularly. An ideal temperature for hibernation is 5 °C - so if you have an old fridge this is perfect! Wherever you decide to place your hibernation box, make sure that your tortoise will not be at risk from rodents.

Once you've got your tortoise successfully into hibernation, the next thing to do is check it at regular intervals. Most healthy adult tortoises lose 1% of their body weight each month during hibernation, so weighing monthly, recording the weight and calculating as a percent is vital.

There are 3 main reasons you should wake your tortoise up early from its hibernation:

- If the monthly weight loss is greater than 1% or any other health problems are noted on exam.
- If, when checking your hibernating tortoise, you notice that it has urinated. The reserves of urine in the bladder are important to maintain hydration throughout hibernation.
- The temperature has exceeded 10°C/your tortoise is showing signs of being awake.

If you would like further information about your tortoise's health and hibernation, please feel free to contact the practice.