



TORTOISE HIBERNATION

Not all tortoises need to be hibernated and attempting to hibernate these species will result in death.

However, the most commonly kept species kept in the UK can be safely hibernated. These species include Hermann's, Horsefield's and the spur-thighed or Greek tortoises.

To hibernate safely the tortoise needs to be completely healthy and hibernating sick animals can result in serious disease or even death during or resulting from hibernation.

Because of this all tortoises should be examined by a veterinarian prior to and upon emerging from hibernation and this should include examining a faecal sample especially pre-hibernation.

PREPARING FOR HIBERNATION

Tortoises should be kept at temperatures in the 25-28C day time and 18-22C night time although higher temperatures can be tolerated lower can not!

Gradually reduce the temperature over the next 4 weeks so that a temperature of 13C is achieved by the end of week 4. (Ideally, we should measure core body temperature but practically environmental temperature is accurate enough)

At the same time start reducing day light length so that by the end of week 4 they are receiving 4 hours a day.

Remove all food and importantly edible bedding at the start of the 4-week period but continue to provide water. Bathe the animals twice daily in water of the same temperature as the temperature at which they are being kept. (ie start with warm water at 25C and finish with 10-13C water. This will remove all toxins and faecal material from the body.

Further lower the temperature to a final 10C at which time the tortoise is ready to hibernate.

HIBERNATION

Animals must be protected from three main dangers during hibernation, freezing ie temperatures below 4C, waking or partial waking due to temperatures rising too high and damage caused by rodents.

The use of a fridge is therefore ideal. Place the tortoise in a box lined with shredded paper and with good ventilation and place in the fridge, keeping the temperature between 4 and 7C. Always use a maximum minimum thermometer to monitor temperature fluctuations.

Open the fridge door at least twice daily to ensure adequate fresh air into the fridge.

A second method is to use a simple hibernaculum made from two boxes ideally of polystyrene.

The smaller box contains the tortoise packed in shredded paper. This is then placed in a larger box with an insulation layer of more shredded paper between the two boxes.

The boxes must contain ventilation holes which can be covered with chicken wire to exclude rodents.

Regular monitoring is another key to successful hibernation.

The maximum and minimum temperature should be checked daily.

The tortoise should be weighed before hibernation (at the end of the 4-week preparation period).

Then examine and weigh the tortoise weekly and weigh it. It should only lose 1% of its body weight per month, if this is greater than 2% it should be woken up immediately and taken to the vet. Also, if the tortoise has urinated, been moving around or has a discharge from its nose the same steps should be taken.

During these checks the tortoise can be picked up, examined and weighed, very slight limb and head movement will be noted.

LENGTH OF HIBERNATION

It is not uncommon for UK based tortoises to be hibernated for 5 months but this is far from ideal and definitely damages their health.

In their native environment, most would hibernate for not much longer than 2-3 months.

I therefore recommend aiming for a 3-month period. This obviously will entail having heating and lighting equipment available as well as a suitable area in which to keep them.

WAKING UP

Outdoor hibernated animals will begin to wake naturally in May. Those hibernated in fridges can obviously be woken as required. Again, see above section for recommended period.

As soon as movement is noted or at the time decided upon the tortoise should be moved to a warmer area and left at room temperature for 4-6 hours. Remove from the box and warm to preferred optimum temperature (26-28C) over 4-6 hours. As soon as fully awake start twice daily luke warm baths until eating and urinating normally.

DANGER SIGNS

If any of the following occur, then seek immediate veterinary help

1. Nasal discharge.
2. Not drinking within 2 days.
3. Not eating within 5 days.
4. Not urinating within 7 days.