

- Hermann's (Western and Eastern), Marginated, Spur thigh (Balkan and North African) and Horsfield.
- Tortoises hibernate as the temperatures in their natural environments over the winter drop, they need external heat for all their bodily functions, they do not generate their own heat like mammals do.
- Most of these species hibernate for around 4 (16 weeks) months, however, Horsfield's can hibernate for up to 6 months as they originate from Russia, (long winters) whereas the African Spur Thighs often only hibernate for 1-2 months but sometimes not at all as their climate is warmer.
- Baby and juvenile tortoises are ready to hibernate in their first year, and this is an important part of their health and growth. Tortoises that are prevented from hibernating often grow too quickly and this is seen in shell deformities (pyramiding).
- Hibernating is important for reproductive cycles and females prevented from hibernating are more prone to follicular stasis (failure to produce eggs causes severe illness).
- When not to hibernate:
 - A tortoise needs to be healthy to hibernate.
 - Hibernation slows down all body systems including the immune system, so if they are harbouring any infection they will not be able to fight it when they are hibernating.
 - \circ $\;$ If they have had recent surgery and are still healing hibernation will affect this severely.
 - It is therefore important to get a pre-hibernation vet check before hibernation to try to detect any problems.
 - \circ $\;$ It is advisable to get a faecal test for parasites to make sure they are clear.

Hibernation techniques

- There are several hibernation techniques:
 - Natural outdoors in the soil.
 - Hibernation bunker/box.
 - Shed or greenhouse.
 - Fridge.
- We recommend using a fridge as it is the most accurate way to manage temperatures. This is the method that will be discussed here, if you would like information about the other methods please ask.
- If using our 'Hibernation Hotel' here at Portland Vets we will be using the fridge method.
- A large food fridge is ideal, without the freezer compartment. Do not use your normal food fridge as a lot of tortoises carry Salmonella.
- Turn your fridge on a few weeks in advance so you can measure temperatures and make sure it is working adequately.
- Aim is to keep the temperature between **4 and 6°C**.
- Use a hygrometer to monitor humidity, this needs to be between **50 to 70%** (a small bowl of water at the bottom of the fridge can help maintain this).

• Use a plastic box filled with top soil, place this in the fridge in advance to let the soil reach the correct temperature.

Hibernation plan (3 months adult tortoises)

- Start December awake March
- Stop food 1 month before (Early November) Residents of the 'Hibernation Hotel' will start with us with no food.
- Bath every 2-3 days
- 2 weeks before (middle November) reduce UV light (reduce from 12 hours to 8 hours for 5 days than 6 hours for 5 days then stop)
- 2 weeks before (middle November) gradually reduce daytime ambient temp to 13°C and night time temp to 8°C
- Tortoise should pass faeces and urates in the bath, this should stop in the last week
- Aim is that they have an empty gut but a full bladder
 - **Please ask for a tailored hibernation plan for juvenile tortoises (<3 years)**

During hibernation

- Check on your tortoise daily for the first week then weekly
- Open the door for oxygen exchange for short periods only as this will change the temperature
- Weight weekly must not lose >10% body weight (compared to weight from first day of hibernation)
- Check for urates and faeces if these are passed contact us and we will discuss if needs to be woken up
- These checks are performed by our patient care co-ordinators, veterinary nurses and vets during their stay at the 'Hibernation Hotel'.

Waking up from hibernation

- Bring out from the fridge and place onto tortoise table with heat and UV
- Once awake and moving give a warm bath
- Bath daily for the first few days
- Start to offer food
- Once eating those that have stayed at the 'Hibernation Hotel' can go home
- If they have not eaten in the first few days, please contact us

HIBERNATION HOTEL PRICES

- 1. Wind down and wake up period £200
- 2. Hibernation period £20 per week

NOVEMBER HIBERATION (Step 1)

START – date				
STOP FOOD Bath Weight =				
Weight =				
Reduce UV to 8			Reduce UV to	
hours Turn off heating in room Weight =			6 hours Reduce heat to 13°C day and 8°C night	
Weight =		Stop UV Turn off heat		Weight = Place into box in fridge

WEEKLY WEIGHTS DURING HIBERNATION (Step 2)

DATE	WEIGHT	% WEIGHTLOSS
START:		

*How to calculate percentage weightloss – start weight divided weight today x 100 (should be <10)