



MEDITERRANEAN TORTOISE HIBERNATION PLAN

- 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 about 4 months, however, Horsfield's can hibernate up to 6 months as they originate from Russia and their winters are often long and African Spur Thighs often only hibernate 1-2 months but sometimes not at all as their climate is often 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 as shell deformities (pyramiding).
- Hibernating is important for reproductive cycles and females prevented from hibernating are more prone to follicular stasis (prevention of egg release causing 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.
 - 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.
 - 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.
- A domestic larder 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 7°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 (4 months – adult Horsfield tortoises)

- Start November – awake March
- Stop food 1 month before (Early October)
- Bath every 2-3 days
- 2 weeks before (middle October) reduce UV light (reduce from 12 hours to 8 hours for 5 days then 6 hours for 5 days then stop)
- 2 weeks before (middle October) 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 to have an empty gut but a full bladder

Hibernation plan (3 months – other adult tortoises)

- Start December – awake March
- Stop food 1 month before (Early November)
- Bath every 2-3 days
- 2 weeks before (middle November) reduce UV light (reduce from 12 hours to 8 hours for 5 days then 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 to 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 will be discuss if needs to be woken up

Waking up from hibernation

- Bring out from the fridge and place into 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
- If they have not eaten in the first few days, please contact us

OCTOBER HIBERNATION

Monday 1st	Tuesday 2nd	Wednesday 3rd	Thursday 4th	Friday 5th	Saturday 6th	Sunday 7th
Stop Food Bath Weight =		Bath		Bath		Bath
Monday 8th	Tuesday 9th	Wednesday 10th	Thursday 11th	Friday 12th	Saturday 13th	Sunday 14th
Weight =	Bath		Bath		Bath	
Monday 15th	Tuesday 16th	Wednesday 17th	Thursday 18th	Friday 19th	Saturday 20th	Sunday 21st
Reduce UV to 8 hours Turn off heating in room Weight =	Bath			Bath	Reduce UV to 6 hours Reduce heat to 13°C day and 8°C night	
Monday 22nd	Tuesday 23rd	Wednesday 24th	Thursday 25th	Friday 26th	Saturday 27th	Sunday 28th
Bath Weight =			Stop UV Turn off heat Bath			Weight = Place into box in fridge

NOVEMBER HIBERATION

Thursday 1st	Friday 2nd	Saturday 3rd	Sunday 4th	Monday 5th	Tuesday 6th	Wednesday 7th
Stop Food Bath Weight =		Bath		Bath		Bath
Thursday 8th	Friday 9th	Saturday 10th	Sunday 11th	Monday 12th	Tuesday 13th	Wednesday 14th
Weight =	Bath		Bath		Bath	
Thursday 15th	Friday 16th	Saturday 17th	Sunday 18th	Monday 19th	Tuesday 20th	Wednesday 21st
Reduce UV to 8 hours Turn off heating in room Weight =	Bath			Bath	Reduce UV to 6 hours Reduce heat to 13°C day and 8°C night	
Thursday 22nd	Friday 23rd	Saturday 24th	Sunday 25th	Monday 26th	Tuesday 27th	Wednesday 28th
Bath Weight =			Stop UV Turn off heat Bath			Weight = Place into box in fridge

WEEKLY WEIGHTS DURING HIBERNATION

DATE	WEIGHT	% WEIGHTLOSS
START:		