



Horsfield Tortoise (*Testudo horsfieldii*) Care Sheet

'The Russian Tortoise'

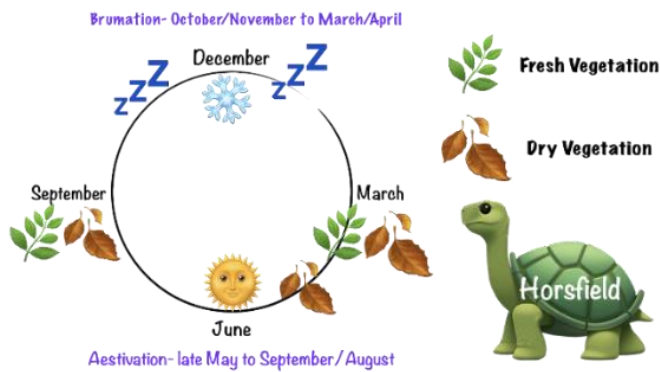


Important information to know before taking on a Horsfield Tortoise

- 🐢 Grows to around 10 cm in length
- 🐢 Solitary animals- do not need to have other tortoises for company
- 🐢 Very good diggers and climbers – must have secure enclosures
- 🐢 Naturally they are very slow growers
- 🐢 In captivity they are very prone to excessive growth rates and obesity which is extremely damaging to their health- this can be seen as wider pale areas on their shells and/or abnormal flaring/curling of the carapace
- 🐢 Can live up to 100 years and over in some cases

About the Horsfield Tortoise

- 🐢 Has 4 claws on each foot
- 🐢 Comes from 'tropical temperate' environments in Russia, Afghanistan, Pakistan, India and China
- 🐢 Long-lived, like many of our tortoise species. Reported ages include individuals >100-120 years old.
- 🐢 Huge variation in appearance – can be confused with similar-looking Hermann's tortoise. However, most have larger area of dark pigmentation on plastron (bottom of shell) than Hermann's tortoises.



How to care for your Horsfield Tortoise

🐢 HEATING:

- The basking area should be around 32-34 °C
 - a 100W or higher halogen or incandescent bulb, that is thermostatically controlled, would be best for 12 hours a day (except around Brumation- see notes)
 - Bulb wattage requirement is dependent on environment being covered, so adapt to your specific environment, and check basking spot-temperatures regularly.
- The cool end and ambient room temperature should be 22-24 °C during the day.
- Overnight can be allowed to go down
 - In the wild temperatures can drop significantly, however in captivity we currently do not recommend temperatures dropping below approximately 16C.
 - A ceramic heat bulb or a radiant heat panel, connected to a dimming/pulse-proportional thermostat, can help. Cages should be considered around the bulbs.
- Humidity should be approximately 70% for babies and juveniles – use a hygrometer to measure this

We do not recommend heat mats or pads, or heat rocks. This is due to poor heat production and risk of burns from these sources.

🐢 ULTRAVIOLET LIGHTING:

- UV light from the sun is best but this is not consistent in the UK- an alternative UV light source should be provided
 - UVB strip bulbs are preferred, combination or point bulbs provide inadequate coverage and UVB provision other than directly underneath them. Bulbs should be the correct power and percentage for your Horsfield, please check the brand specific recommendations, or ask us for help!
 - Change regularly- check with brand of bulb
 - Or measure with an appropriate solarimeter
 - The visual light can outlast the UVB provision.

Commented [H11]: Annex B, not A, therefore not required legally.

Commented [H12R1]: NB Hermanns are Annex A

- Provide for 12 hours a day (except around Brumation- see notes)

🐢 EXTRA CARE:

- Brumation:
 - Tortoises are ectothermic (cold-blooded). They don't 'hibernate' like mammals but instead have a period of dormancy over the colder months. Unlike mammals- it is not a true state of sleep, but a rest time to reduce burning of calories.
 - The first trigger for this is a drop in temperature overnight.
 - This species usually starts wind down in October/ November and will wake up March/ April. However, our prolonged winters in the UK can lead to excessive hibernation lengths in this species.
 - See Brumation information sheet for more details
- Aestivating:
 - This is a summer dormancy when the weather is too hot and the food is sparse.
 - Usually around June to August time.
 - Activity is reduced.

🐢 HOUSING/ENCLOSURE:

- Avoid vivariums, unless specific indications, as its difficult to get conditions correct and they often have poor ventilation
- Glass enclosures are very stressful for tortoises
- Tortoise tables work well (6ft x 4ft is good for juvenile/ adults) babies need a smaller enclosure so they don't get overwhelmed
- They should not be kept outside all year round in the UK, but an outside enclosure would be beneficial in the warmer parts of the year.
 - Polytunnels or cold frames can work
well: <https://www.tortoisetrust.com/post/the-climate-frame-terrarium-updated>
 - They should be protected from predators
 - UVB and heating provisions are still required.
- They love to dig and burrow so ideally provide a 30cm pit- the bottom filled with gravel to allow good drainage and the top a fine sandy soil for burrowing
- Provide plants to graze from (www.tortoisetrust.com):
 - Spirea
 - Hosta
 - Knockout rose
 - Hibiscus
 - Fountain grass
 - Maiden grass
 - Sedum
 - Yarrow
 - Mediterranean heather
 - The www.thetortisetable.org.uk has lots of information of what to feed
- A fine sand/ soil mix will mimic their natural substrate best- but they can eat sand and get possible impactions, particularly if the mix is wrong.

- Avoid any chemically treated or fertilised soils/sands.
- Sieve any mixes before introducing, to check no foreign bodies are in the mix.
- They like to climb too!
- Provide areas to climb (mounds), rocks/ bits of wood, areas to dig in and hides

🐢 FEEDING:

- Diets should be high fibre, low protein, no carbohydrates or fruit
- Pelleted diets are available, however often are highly calorific, so fresher forage is preferable
 - AGROBS/ Pre-Alpin Testudo range: <https://www.agrobs.de/en/tortoises/> (hydrate them)
 - Mazuri Tortoise diet (www.mazuri.com) (hydrate them)
- Highly cyclic in the wild- more lush vegetation in the spring and more dry vegetation in the summer, like grass hay
 - Cyclic diet requirements due to seasonal fluctuations in the wild
 - After Brumation they emerge in early spring (end of March)
 - A mix of fresh greens and dried vegetation should be offered
 - As the temperature increases towards summer the vegetation becomes drier
 - Around June time there is little food and the temperature is hot- aestivation occurs
 - Early August/ September the rains come and activity resumes with more fresh vegetation
 - As the temperature starts to drop Brumation begins in October/ November
 - Timing and duration of feeding day-to-day depends on how they can maintain body temperature. For example, they may feed in the morning and again in the evening if it's very hot in the middle of the day, or not feed until lunch time once the day has warmed up
- Wider variation to allow self-selection to mimic more natural grazing
- Typically consume 1-4% of their body weight in food/ day
- Check out www.thetortoisetable.org.uk for feeding suggestions and traffic-light system of what to feed and when
- Plant tortoise seed mixes can help make foraging easier
- Vitamin and mineral supplements
 - Tortoises need calcium sources and Vitamin D in their diet
 - You can add chalk blocks/ cuttle fish bones to the enclosure, however this provides only calcium
 - Vetarks Nutrobal (or similar) provides Vitamin D and Calcium, it should be alternated with a purely calcium mix (e.g. Calcidust) in a healthy individual.
 - Vitamin A should be available in many leafy green diets/appropriate forage. Therefore, supplementation is usually only indicated if inadequate levels in the diet available.
- Feeding off a tile/ slate will reduce any substrate ingestion
- A large/ shallow dish that the tortoise can drink from is important- ideally an adult tortoise can bathe itself as well
- 15 minute soaks 3-4 x week to help with hydration

HEALTH:

Tortoises are susceptible to a variety of illnesses which will need the advice of a veterinary surgeon, Runny nose, mouth rot and parasite infestation are infectious and require isolation.

1. Discharge from the nostrils and watery eyes can be due to rhinitis, sinusitis or runny nose syndrome. The symptoms may progress from upper respiratory tract disease to pneumonia in the lungs. Can be related to dietary deficiencies, and/or bacterial and viral diseases.
 2. Stomatitis (often referred to as mouth rot) is often seen post brumation. It appears as a general inflammation or caseous (cheesy) material attached to the tongue, mouth and throat. The infectious agents behind this can be varied, therefore bringing your tortoise to the vet is of paramount importance.
 3. Osteodystrophy (soft shell) can result from a combination of calcium deficiency, Vitamin D deficiency, incorrect lighting and excessive protein in the diet.
 4. Diarrhoea is a sign of ill health, husbandry problems, a dietary imbalance or parasites. Check for undigested food, mucus or worms in faeces.
 5. Blindness or disorientation after hibernation can be caused by frost damage. The tortoise shuffles in circles and does not feed.
 6. Predator-related injuries – very common in outdoor housed tortoise, secondary to rat bites, equally it isn't uncommon for dogs to mistake tortoises for toys and cause significant damage.
- Yearly check-ups by your vet are advisable (can do worm counts at this time), check-ups every 6 months are even better.
 - Keep a record of date and weight (even in brumation).