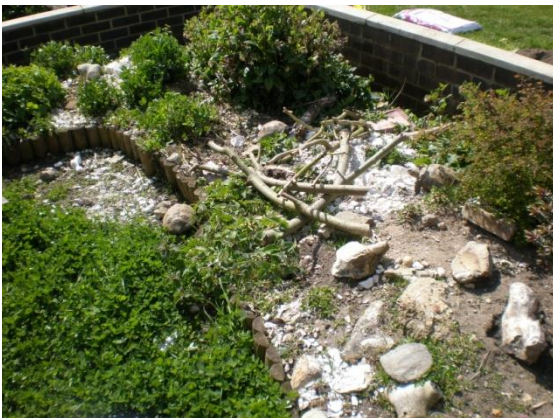


HORSFIELD TORTOISE – CARESHEET BEGINNERS GUIDE

Introduction : The horsfield tortoise or Central Asian Steppe Tortoise naturally inhabits dry hillside slopes from Russia through Afghanistan, Pakistan, India to China. This small tortoise seldom reaching more than 10cm in length is very well adapted to a dry arid habitat. Although very closely related to Mediterranean species, horsfield tortoises are very different and should be carefully managed as more intolerant to wet weather. Horsfields are small, dorsally compressed with an almost spherical carapace. Another common name for this species is the "four clawed" tortoise since it only has four claws on each foot. This species is very diverse in colour, most however are a tan brown to olive green colour with darker brown to black areoles. Some specimens are very dark in colour and are chocolate brown to black, and yellow or golden ones are regularly encountered. This variation in colour is most probably encountered as a result of climate and altitude through the animals' range. At lower altitudes day time temperatures are higher and animals are therefore paler in colour; since they absorb less heat they can be active for longer periods. At higher altitudes temperatures are somewhat lower. Darker specimens absorb more heat and are active sooner and for longer. Climatic extremes result in abbreviated periods of annual activity, in some cases this can be less than three months with long periods of estivation and hibernation. In much of central Asia estivation starts in May when vegetation becomes harder to find. In some areas estivation extends into hibernation this means the tortoise remains inactive for three quarters of the year or more spending much of their time below ground either in disused rodent burrows or in burrows of their own making. Their dorsally compressed shells and round shape make them ideal for Subterranean life. These tortoises are great diggers and care must be taken when designing and Constructing an enclosure to prevent escape.



Feeding

Horsfield tortoises are strictly herbivores and require a diet rich in fibre to thrive in captivity. In the wild they do not feed on grass and typically forage on plants toxic to grazing animals, thus avoiding competition with them. In captivity care must be taken not to over feed, Wild flowers and fibrous weeds of as many different varieties as possible should make up the bulk of their diet, mixed with moistened Pre-Alpin cobs to help make up the shortfall in fibre and a dusting of a suitable calcium supplement. Fruit should never be feed to this species as this can cause digestive upset and makes them more prone to parasitic infection. A good diet we have found includes: Dandelion (leaves and flowers but do not use these as a sole source of nutrition, remember its variety that's the key to a good diet), sow thistle, plantain, clover, bramble, rose petals, hawk weeds, the list is endless! A good calcium supplement such as Nutrobal and calcium carbonate powder are added to their diet daily. Water is always available in small shallow trays just big enough for them to get into. These are changed and cleaned daily. Horsfields can also be soaked in shallow water once or twice a week.

Housing: Horsfields should be treated more like a tropical species and must have access to a large heated area, and good access to outdoors in suitable weather. They are very tolerant of temperature but not very tolerant of damp. In fact this species above all others will quickly develop pneumonia and severe respiratory infections if not protected from damp conditions.

Indoor housing: I would suggest for one to two specimens to use a large open top container. The Hagen goldfish_tub purchased from most good aquatic centres is ideal - approximately 45-50cm

long, 30cm wide and about 20cm deep. Provide a deep slightly damp substrate of loamy top soil and play pit sand (about 25% sand and 75% topsoil). This should be at least as deep as the tortoises to allow for natural borrowing activity. Place a few pieces of flat rock (slate) and a few up turned terracotta plant pots for hiding in. Provide a shallow tray water. Heating can easily be provided by suspending a 100-150 watt active UVB spot lamp above the end of the container. Hanging bulbs 20-30cm above the container should give you a good basking site temperature of at least 35C. Heating need only be given for 12 hours a day. Horsfields should be allowed to cool to room temperature at night. In an average house night time heating would never be necessary for healthy horsfields. UVB lighting is essential for these tortoises when kept indoors. Healthy shell and bone development depends on it. Fluorescent UVB lamps can be used but hang no more than 10-12 cm above the tortoises for maximum benefit and these must be replaced every 6-9 months. Fluorescents will need to be used alongside white spot lamps to provide basking facilities.



Outdoor housing: This should be as large as possible with good access to a dry shelter. Pens must be constructed out of tough material. We recommend the perimeter be constructed from concrete blocks with deep footings approx. 15-18cm deep. Build pens in well drained areas and always in full sun positions. Small greenhouses and coldframes make ideal dry shelters since they remain warm and bright even on cooler days. Make this environment as interesting as possible for them. Plant a few hardy nontoxic plants in the pen for cover. We use lavender, honeysuckle and wild plants such as dandelion and bramble. The inside of a greenhouse or coldframe should be dug over with topsoil and sand to provide areas to burrow and for nesting. Shallow trays of clean water should always be provided.

Hibernation: These animals need to hibernate and you should only prevent those in poor health from hibernating. As mentioned earlier, in their natural range Horsfields are only active for short periods of time, in some cases as little as 3-4 months. Their summers are very hot and they must aestivate (pass the hot periods in a dormant or torpid state), winters are very cold and they must hibernate. Healthy horsfields put weight on very easily and can grow very quickly. These are adaptations to living in an environment where you only get a chance to feed and grow during a short window of opportunity each year. In captivity these tortoises are active for much of the year and are generally feeding throughout. The vast majority of horsfields in captivity are overweight and much bigger at a younger age than would be possible in the wild. We are only just beginning to understand the potential damage caused by this. Hibernation is a break then giving these animals a rest period which will slow their growth and over-development. They should be hibernated at the same time as the related Mediterranean species. Horsfields must always be hibernated in dry conditions.

Health problems: These little tortoises can be remarkably tough and very hardy with correct conditions. They are somewhat prone to eye infections and should be checked regularly for this. Care must be taken to protect them from damp conditions. With a small amount of thought and care, Horsfield tortoises will live long and happy lives in captivity and bring a lot of joy to those who keep them.