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## **Accommodation**

## **Indoor Housing**

Horsfield and Mediterranean tortoises are best suited to a tortoise table set-up. Tortoise tables allow excellent air flow and a low humidity level; which is ideal for these breeds.

The recommended layout of the tortoise table is to have the basking lamp at one end, creating a hotspot of around 30/35dc. This allows a temperature gradient and in turn allows the tortoise to regulate its body temperature. The background temperature should be 20/25dc; this can easily be achieved by a centrally heated room.

- → A UVB/A lamp should be attached as close to the basking lamp as possible. (Unless you are using a mercury vapour combination bulb)
- → A water dish should be left in at all times and topped up daily.
- → The size of the tortoises table will vary depending on the size of the tortoise;
  - ♦ Under 5 years minimum: 30 x 18 x 6 inches
  - ♦ Over 5 years minimum: 4ft x 2ft x 10 inches

Please note, these sizes are approximates only, and are the minimum size that is required for tortoises of that age.

Once the tortoise has settled in, you can add hides and plants to the enclosure. Adding these items beforehand can make the settling in period stressful for your tortoise. Do not place plants or hides close to the basking lamp as the tortoise may climb and fall onto its back. If you find the tortoise tipped over, turn to the correct position and place it in a warm bath to allow the tortoise to rehydrate itself.

## Other Indoor Housing (Not recommended for Mediterranean and Russian breeds)

Vivariums or "fish tanks" are best suited to tropical breeds such as Redfoot / Yellowfoots. This type of housing provides high heat and humidity which is perfect for tropical breeds of tortoise as these tortoises must have the same temperature day and night.

We do not recommend these types of housing for Mediterranean or Russian tortoises as the high heat and humid conditions can cause issues such as respiratory infections and shell rot.

### **Outdoor Housing**

Before building an outdoor enclosure consider dividing your garden into sections and deciding what each section may offer. It is imperative that the tortoise has adequate shade/shelter from the elements. The best place for the outdoor run/house is in an area with as much all day sun as possible, with well-drained soil. Tortoises love to dig and bury, so a sand and soil mix is an excellent substrate. Hides, a water dish, and other features such as wooden bridges and edible plants can be added to the enclosure.

Tortoises do, however, have predators such as large birds, foxes and other pets. This means that no matter what style of outdoor accommodation you choose, you need to ensure that a wire mesh lid is fitted for the safety of your tortoise.

## **Tortoise Lighting**

## Basking

Tortoises are cold blooded reptiles so they must have access to heat. For the Mediterranean and Russian breeds, the optimum basking spot should be 30/35dc and the cool area should be around 20/25dc. This temperature gradient allows the tortoise to regulate its own body temperature. Ideally the basking lamps should be on for around 8-10 hours a day.

\*Always turn off all lighting overnight!\*

### UV

UV is a necessity for any tortoise.UV lamps allow the tortoise to create vitamin D3 which helps prevent the tortoise from getting Metabolic Bone Disease.

There are three different types of UV lamps / bulbs:

- → Combination (UV and Basking effective life 12 months)
- → UV Compact (UV only effective life 6-12 months)
- → Strip (UV only effective life 3 months)

We would recommend either the compact or the combination as they are the most efficient and best value for money.

## Bedding/Substrate

There are numerous substrates available that are suitable for tortoises.

The following is a list of the beddings that we provide, all are totally organic, and are free from any chemicals or toxins making them safe for your tortoise:

- → Kritters Crumble is made from coconut husk (coir)
- → Grass pellets are made from compressed grass pressed into pellets.
- → Aspen is a natural, odourless, dust free and absorbent product.

For a young tortoise the depth of the bedding should be at least 2 inches, but as the tortoise gets older you should increase the depth of the bedding to allow the tortoise to be able to dig and bury.

Some adults prefer a sand and soil mix (50/50 play sand and soil). Soil based substrate can be difficult to maintain indoors due to the moisture but can create a natural outdoor space. Moist substrate coupled with high heat from the basking lamp can create a high humid environment, which is not recommended for Mediterranean and Russian breeds as high humidity can cause problems such as respiratory infections and shell rot.

## Water

Fresh water must always be available for your tortoise. There are beliefs that tortoises receive their water content from their food, this is not so, they require a water dish to drink from when they feel the need. Another way to ensure your tortoise is properly hydrated is to give the tortoise a shallow bath with warm water. Tortoises absorb a small amount of water via their tail whilst in the bath, so bathe your tortoise daily, especially during the summer months.

## Feeding

A growing tortoise needs the correct amount of food, water, calcium, UVB/A, vitamins and minerals in order to produce healthy bones. Calcium is a key ingredient for bone formation. UVB/A allows the tortoise to manufacture Vitamin D3 naturally but in order for this to happen the tortoise needs calcium to complete the process.

The best diet is a varied one, you should never offer the same type of food every day for a prolonged period of time, as the tortoise will be missing out on vital vitamins and minerals.

We recommend feeding the same amount as the size of its body, and food should be offered 5 out of 7 days.

Vitamin / calcium supplements such as Reptavite or Nutrobal can be sprinkled onto the tortoise's food 2-3 times a week. Another source of high calcium is cuttlefish bone, which can be broken up and placed into the enclosure for the tortoise to eat as and when they deem it necessary. Cuttlefish bones can also help keep the tortoise's beak from overgrowing.

The diet should be appropriate to the breed of the tortoise. As a tortoise owner, you should aim for slow growth.

For years, captive bred tortoises had always displayed thick, spongy bone formation or pyramid shaped scutes, thick dark keratin layers, spinal deformations and walking difficulties as a result of owners feeding up to two or three times the amount of food the tortoise actually required. Tortoises are grazers; they thrive when they are allowed to feed naturally on wild growing weeds and flowers. They should be allowed controlled inactivity periods and discouraged from eating 365 days a year.

## Feeding List

The following is a list of wild plants and cultivated plants which can be used to form the basis of a good natural and balanced diet. When picking these plants be sure to wash them under water as this helps to get rid of any pollution, and prevents the spreading of worms passed by bird droppings.

Examples of foods safe to feed on a regular basis;

- → Coleus
- → Geranium
- → Red Valerian
- → Dead Nettle
- → Cat's Ears
- → Sow Thistle
- → Hawk Bits
- → Viola
- → Calendula
- → Lavatera
- → Plantain (the weed)
- → Pansies
- → Hibiscus
- → Musk Mallow
- → Malope Mallow
- → Mulberry
- → Prickly Pear

The following food examples should only be given in moderation. Only **one** item from this list should be fed at a time, in conjunction with the safe to feed list:

- → Dandelion
- → Clover
- → Grapevine
- → Rose Leaves and Petals
- → Cosmos
- → Basil
- → Herb Robert

**Never** offer food which contain high levels of protein (peas, beans, bananas) or have extremely negative calcium to phosphorus balance (Cabbage).

Never offer your tortoise any fruit as this can lead to Colic and other dietary complications.

<sup>\*\*</sup>Both feeding lists are based on searches using The Tortoise Table's Plant Database app, we highly recommend downloading the app and using it when searching for weeds and flowers to feed your tortoise\*\*

## Hibernation

# DO NOT HIBERNATE YOUR TORTOISE WITHIN THE FIRST 12 MONTHS OF OWNERSHIP, REGARDLESS OF AGE!

The breeds of tortoise that hibernate do so for health reasons. Irregular hibernation will adversely affect the tortoise's health and lifespan. Most Mediterranean breeds are biologically set to hibernate for a period of time; it is unnatural for tortoises to be awake and eating 365 days a year.

You cannot trick Mother Nature without consequences; if your tortoise is awake every winter, the increased food intake can lead to abnormal growth and in turn cause Metabolic Bone Disease, lumpy shells and sometimes even kidney and bladder stones.

The positives of hibernation far outweigh the negatives!

#### Dos and Don'ts of Hibernation

#### Do;

- → Make a chart for your tortoise's toilet habits. You do not want to see a poo for at least 7 days before hibernation
- → Keep a thermometer in the fridge to ensure the temperature always stays between 2 and 5 degrees celsius
- → Worm your tortoise at least a month before the wind down
- → Only use soil in your inner plastic box. DO NOT use hay or straw. Soil is the only thing that will regulate your tortoises body temperature
- → Put air holes in all boxes

#### Don't;

- → Hibernate your tortoise until you have owned it for 12 months (wait for the following winter)
- → Assume your tortoise is hibernating if it is asleep inside it's nice warm house. They need a certain temperature to hibernate and room temperature is far too warm
- → Feed your tortoise prior to hibernation (see wind down process for more information)
- → Hibernate an ill tortoise

## Step 1 - Preparing Boxes and the Fridge

Fridge hibernation is the most controlled method and the safest. It is important to have everything ready before your tortoise finishes the wind down.

Before winding down your tortoise, ensure that your fridge sits at a steady temperature between 2 and 5 degrees celsius. Small fluctuations are of no concern so long as they stay within this parameter. You will need a thermometer in the fridge throughout your tortoise's hibernation.

To begin with you will need a plastic tub, big enough for the tortoise to turn around in, and a cardboard box. Make sure there is enough room in the cardboard box to put your plastic box in and still have space around the plastic box. Make sure all boxes have air holes in them.

Once your tortoise's wind down is complete you need to fill your plastic tub half way with top soil. This then goes in the cardboard box surrounded by shredded paper. Close all boxes up with an elastic band and place your tortoise in the fridge.

## Step 2 - The Wind Down

Wind down timescales:

- → 14 20 days for tortoises ages between 1-3 years
- → 21 28 days for tortoises older than 4 years

These timescales must be followed according to your tortoise's age, not how long you have had the tortoise.

These timescales are for the starvation period This is the amount of time that you **will not** offer your tortoise any food at all. During this time, you should give your tortoise a warm bath for 10-20 minutes **every day** and reduce your lamp time by an hour each day. By the last week of the wind down, you should not be turning your lamp on at all.

Once you are certain your tortoise has not done a poo for **7 consecutive days**, you can follow the boxing up instructions and start your hibernation.

Note: it is not the end of the world if your tortoise poos in the last 7 days. You just need to extend the wind down time, bath your tortoise twice a day and make sure the tortoise is in a cool room.

Regular pooing after the complete wind down time can indicate that your tortoise is eating the substrate. If you see this occurring or have your suspicions it is happening, you should remove ALL substrate from the tortoise table.

## Step 3 - Hibernation

Hibernation only occurs when the temperature is between 2 and 5 degrees celsius. Noise will not wake your tortoise from hibernation.

We aim for all tortoises to be awake by the start of April, however it can be earlier for shorter hibernations. Aim to hibernate your tortoise through the coldest winter months, rather than Autumn.

Hibernation timescales:

1st Year = 3 weeks

2nd Year = 6 weeks

3rd Year = 10 Weeks

4th Year = 16 weeks

5th Year and over = 22 weeks (these timescales can often be too long with our warmer Winters, so use your own judgement here)

This timescale is to be followed not by age, but by how many consecutive hibernations your tortoise has had since you became its owner. Do not assume an older tortoise that is said to be healthy can hibernate without monitoring the tortoise's health yourself for 12 months.

#### \*\*Do not hibernate any tortoise that you have not owned for 12 months or longer.\*\*

These hibernation guidelines should only be followed as guidelines, not fact. If your temperatures fluctuate too much, you can abandon hibernation, take them through the waking up procedure and put your tortoise back under its lamp.

Please ensure that your fridge is opened regularly for air flow.

Always check your thermometer's minimum and maximum temperatures to ensure there is no chance of your tortoise waking up.

A tortoise will wake up from hibernation if the temperature rises above 7 degrees celsius and will die if it drops below 0.

If your tortoise wakes from hibernation, it should be brought out, taken through the waking up procedure and then put back under its lamp and resume normal routines. Tortoises only have the energy to wake up from hibernation once, putting them back into hibernation can be fatal.

## Step 4 - Waking Up

When it comes to waking up, you'll be very excited to see your shelled friend again, but this needs to be a slow process.

Firstly, bring your tortoise out of the fridge. You can open the box if you can't wait to check on your little one, but your tortoise does need to be left in its box at room temperature for the first 30 minutes, to acclimatise.

Once your tortoise has started to wake up a little, it's time for their bath. Remember, we are bringing their temperature slowly, so just a lukewarm bath for now.

After 10-15 minutes in the bath, it is time to put your tortoise back in its tortoise table, with its lamp/s on.

You can start offering food as soon as you like, but remember, it is a big change for the digestive tract, so offer small amounts and dont be concerned if your tortoise doesn't want to eat within the first couple of days.

If your tortoise hasn't eaten within seven days of waking up after hibernation we suggest you seek advice from a reptile vet.

## IMPORTANT INFORMATION

### Tortoise Tables;

- → are for indoor use only; do not place outside or in moist/damp conditions
- → are designed for Mediterranean, African and Russian tortoises
- → should be placed on a stable flat surface to ensure they cannot be pulled or tipped over
- → should not be exposed to room temperatures over 25dc
- → are not toys. Keep out of reach of children, unless under adult supervision. Keep out of reach of all other pets and animals

## Basking/UV Lamps should;

- → never be left on for more than 10 hours a day
- → never be left on overnight
- → be an adequate distance (height) above the bedding
- → always be switched off and allowed to cool before handling
- → not be used if you notice any damage to the mains cable, plug, bulb or the lamp holder
- → never be directed/angled to a position where the lamp is within 20cm of the walls of the tortoise table

### Do;

- → Use water or a mild detergent to clean out the tortoise table. Never use flammable, corrosive or abrasive cleaning products
- → Use a 3amp fuse if you ever need to replace the fuse in the plug. Consult a qualified electrician for advice is necessary
- → Replace UV bulbs with like for like specifications
- → Remove damp bedding and replace with new bedding

## Don't;

- → Place the water bowl directly under the lamp
- → Place any objects or materials which are flammable or likely to melt in the tortoise table
- → Install any misters / foggers or any products likely to cause humidity, damp or condensation within the tortoise table
- → Use hay or straw as a substrate

## **FAQs**

### **General Care**

#### → Does my tortoise need water?

Yes, fresh water should be supplied daily and left in the run, indoor and outdoor. Regular bathing also helps to keep your tortoise hydrated, but should not be a replacement for the water dish

#### → How often should I bathe my tortoise?

Young tortoises (under 1 year) must be bathed daily. However, there is no harm in continuing this practice into adulthood, especially during extreme weather, overwintering, heatwaves, etc.

#### → Why should I bath my tortoise?

Not all tortoises will take themselves into their water bowl for a drink, so it is important to keep control of your tortoise's hydration, to ensure perfect health.

#### → What should I feed my tortoise?

A tortoise's natural diet consists of weeds and flowers. It is important, where possible, to feed as natural a diet as possible. You can find our edible food list in our care booklet, as well as using the plant database; thetortoisetable.org.uk

#### → How much and how often should I feed my tortoise?

As a general rule, you should offer an amount of food equivalent to the size of your tortoise's shell. They should be fed once a day, 5 days a week. The 2 stave days can be implemented at any time, in any order. This allows the slow-working digestive system to catch up, removing the tortoise's need for a self starvation period in the summer.

# → I can't find any weeds or flowers in my garden (winter), what can I feed until Spring?

Preparation for winter feeding should start in autumn, this will give adequate time for your indoor flowers to grow, ready for feeding. Alternatively, there are a few bits you can buy at the supermarket, but this can only be temporary whilst your flowers are growing.

## → I see pellet food advertised for Mediterranean tortoises, can I feed this instead of weeds?

No, pellets are unnatural, high in protein, sugars and preservatives, just like feeding a child a complete chocolate diet forever. They also contain ingredients that are addictive, which prevent the tortoise from ever going back to a natural diet (without going through a detox).

#### → How often should I put vitamin/calcium powder on my tortoise's food?

As most vitamin powder contains calcium, please always ensure that you only use one or the other as part of a varied diet. Whichever you choose, it is recommended to sprinkle a light dusting onto food 2-3 times per week.

#### → Do I need to worm my tortoise?

Like cats and dogs, it is important to worm your tortoise as a preventative. We recommend doing this at the end of Autumn/start or Winter and again at the start of spring (after a hibernation as well). It is a simple process that can be done by a vet or using a worming powder from pet shops/online.

#### → How often should my tortoise go to the toilet?

As with all animals and people, timing and consistency of your tortoise's toilet habits will vary depending on what they are eating and how much.

You may see your tortoise crete "white goo" occasionally, if your tortoise is well hydrated, it will be a yogurt consistency and is a perfectly natural bodily function that can sometimes range from yellow to grey.

#### → Will I catch salmonella from my tortoise?

Tortoises carry the same strain of salmonella as cats and dogs. This strain is only present in the animal's poo. Those who practice good hygiene and wash their hands after handling their pets, pet bedding and cleaning up after their animal, will not catch salmonella.

Children must be supervised and taught very early, the importance of washing hands before and after handling any pet.

#### → My combination bulb has blown, how long will my tortoise survive without it?

Tortoises go all winter with little to no UV in the wild, as long as your tortoise is kept warm, it will survive a couple of weeks if you need time to source another. We recommend keeping a spare combination bulb for emergencies, but a spot bulb will suffice until you source a replacement.

#### → What do I do if I find my tortoise on its back?

The main thing here is not to panic. Although it can seem like your tortoise cannot right itself, there are many tortoises that can. If you find your tortoise on its back close to or under the lamp and you are unsure of how long it has been that way, we recommend putting it in a warm bath. Dehydration is our main concern in this instance with young tortoises.

If you see your tortoise turn over, try not to turn them back right away, fluff up some bedding or move something close to it, so it can push off and attempt to right itself.

For very young tortoises, try to keep the bedding fluffed, so the tortoise tips at an angle and not directly on it's back, this way it'll be easier to right itself. Avoid putting things like bridges directly under the lamp, where a tortoise could tip or fall and be exposed under the lamp for a long period.

#### → Turtles and Tortoises: What's the difference?

The main and most important difference that, from experience, many do not know is sink or swim. Tortoises can't swim, though they can hold their breath for a long deep drink, they will sink in water and eventually drown.

If you want to go into more differences, turtles have webbed feet, more amphibious skin (rather than scales) and require access to both land and water deep enough to swim in.

Tortoises, as strictly land animals, only require a water bowl to drink out of and we recommend a daily bath no deeper than under the chin.

## **Indoor Housing**

#### → Should I build my tortoise a humid hide (damp moss, misted daily)?

This is a new fad going around that just doesn't make sense. If your tortoise cannot live in a high humidity vivarium, why would it need a humid area in its lovely airy tortoise table? Tortoises do not like cold, damp areas or high humidity. High humidity is the main cause of respiratory infection and accelerated growth, which in turn results in MBD (Metabolic Bone Disease)

#### → Which is best for my tortoise, tortoise table or vivarium?

Vivariums are only suitable for tropical species such as Red-Foot and Yellow-Foot tortoises who originate from hot, humid areas. Most other species need low humidity and lots of air, making the tortoise table a better option.

#### → Does my tortoise need a night light and/or heat mat?

There is no sun to provide heat and light at night in the wild, therefore, it is not necessary in captivity.

With heat mats, they are generally recommended to be placed in the bedroom, this is your tortoises cool spot to escape the heat and cool down, it should never be heated. Combination and/or spot bulbs provide enough heat for the roaming area, leaving heat mats another unnecessary product.

#### → How far from my tortoise should my combination lamp be?

It is important to check the recommendation on the box of your bulb as distance varies on the wattage. You must also own a thermometer to ensure the height is correct and providing a heat of 32-35 degrees celsius, with the thermometer resting on top of the bedding/substrate.

#### → What are my options when it comes to bedding?

There are a number of bedding/substrate available for tortoises. We personally very much like to use dry bedding, such as Aspen (a soft shredded wood based substrate), Kritters Crumble (a less soil based version of coconut husk) and Pellet bedding (compressed grass pellets). These options are organic, tortoise friendly and leave less dust than soil based products.

#### → Where is the best place to put my tortoise table, when I get it home?

Your tortoise table needs to be situated in a room that is lived in, to ensure the ambient room temperature is around 22-25 degrees during the day. Ideally away from windows, doors or general draughts.

Be aware that households with pets and small children, as well as having a mesh lid for the table, should also seek a higher area to place the tortoise table that is out of reach.

#### → How long and when should my lighting be on?

Your combination lighting (or separate UV and spot light) should be on for 8-10 hours during the day. It should never be left on at night, nor should it contradict natural daylight, unless overwintering.

#### → What do I need to know about using a mercury vapour combination bulb/lamp?

Mercury vapour bulbs, although they have a long lifespan, can seem quite temperamental. Knocks, tilts and loosening of the bulb/lamp can cause the bulb to flicker or cut out. Your lamp needs to be suspended vertically, with the bulb screwed in tight. Tightening regularly will help avoid cutting out in the middle of the day (only tighten your bulb when it is switched off and cooled down).

If your bulb is flickering, it can seem like wiggling the wires is connected to the flickering in your bulb and seems to "fix" the issue. However, all you are doing is damaging your lamp. The bulb will flocker when the gases are unbalanced, as a result of any kind of knock, tilting or loosening of the lamp. It is pure coincidence that moving the wire settles the gases and your bulb stops flickering. This is all down to the movement of the bulb itself.

Your lamp will not switch on instantly after being switched off. Mercury vapour bulbs contain a small amount of gas, which needs to have cooled completely for the bulb to work. Always allow 20 minutes for your bulb to cool down, before attempting to switch it back on.

Reptile lamps are equipped with a failsafe, this means that sometimes when your lamp blows, the net bulb you put in may not work. This is unlikely a fault with your lamp, but the failsafe, which blows the fuse to prevent any serious incidents. Check your lamp with a household bulb before putting a new mercury vapour bulb in and then change the fuse if necessary. If you are blowing multiple bulbs, we recommend investing in a surge protector. You may think surges do not affect you, due to your tortoise lamp being the only electrical in the house affected, however, this is down to the sensitive nature of reptile lighting, they will feel a surge a lot more than your household bulbs, as they are built for heat rather than light and have higher failsafe sensitivity.

## **Outdoor Housing**

#### → Can my tortoise go outside unsupervised?

No, tortoises, regardless of size, should either be supervised or in a wooden run with a mesh top to protect from predators.

Birds of all sizes will try to pick up a tortoise, and often succeed.

#### → Can my tortoise stay outside at night?

No, the natural nighttime temperature your tortoise would experience in the wild is very high compared to our rubbish summers and cool nights. It will be too cold, causing your tortoise to feel the need to dig.

There is also a higher risk of predators at night, foxes, cats, owls, rats and even dogs.

#### → How will I know when it is warm enough to put my tortoise outside?

T-shirt weather is tortoise weather. If it is warm enough for you to sit outside comfortably, without a jacket (sun and shade), it is warm enough for your tortoise.

# → Why can't I find a tortoise that can live outside all year round, like my parents/grandparents tortoise?

We know a lot more now than we did back then. There are no tortoises that originate from this country, because we do not have the correct climate to suit any species. Therefore, we should not be keeping our tortoises outdoors all year round.

Remember, just because they're alive doesn't mean they're healthy.

## Certificates, Licensing and Microchipping

#### → Does my tortoise need a licence?

Certain species do require an Article 10 Certificate. Some of the species that require a certificate are Hermanns, Marginated and all sub-species of Spur-Thigh. It is the responsibility of the seller to apply for the certificate, so you do not have to worry about getting one before buying a tortoise.

#### → How do I know if my tortoise is microchipped?

On the article 10 certificate under the hatch date, there will be a long number, this is your tortoise's microchip number.

#### → Do I need to register my microchip?

Your tortoise's microchip is likely to be a blank microchip. It may not be registered to the breeder, the shop,, or yourself. In that care you will need to register your microchip on Pet Registry UK with your own name, address and contact details.