

## MEDITERRANEAN TORTOISE CARE

There are several commonly kept tortoise species from the Mediterranean and nearby areas.

- The Hermann's tortoise comes from southern Europe.
- The Horsfield's tortoise comes from Eastern Europe and Central Asia.
- Spur-thighed tortoises may come from southern Europe, Central Asia or North Africa depending on the subspecies. Not all subspecies will hibernate so it is important to know which type you have, and if you have any uncertainties we recommend that your tortoise should be examined by an experienced tortoise vet. For example Spur-thighed tortoises from Southern Turkey, Tunisia and Libya and other North African variants, known do not usually hibernate.

All these tortoises have similar husbandry requirements, so the following care sheet will outline basic care of any of these species with any major differences noted. Different species should never be mixed due to the risk of disease transmission.

### HOUSING

- Mediterranean tortoises should ideally be kept in well-ventilated open-top enclosures such as a floor pen or tortoise table. The enclosure needs to have solid sides to prevent escape and be easy to clean. Many are made out of wood or plastic. As large an area as possible should be provided, but as the size increases extra basking sites will need to be provided.
- Hides are required to provide some security. Artificial plants, cardboard boxes, plant pots, logs or commercially available hides can be used. They should be placed both at the warm and cooler ends of the enclosure.
- There are a number of commercially available substrates available for tortoises including many soil / sand mixes. Care should be taken not to feed your tortoise directly on the substrate to avoid accidental ingestion and blockages (especially with wood chip or sand based substrates). Newspaper or paper towels are easy to maintain and can work well in the short-term. However, they do not allow for natural behaviours so for longer term housing, it is worth considering more natural substrate types.
- The enclosure should be cleaned out at least once a week with a suitable disinfectant and spot cleaned daily to help prevent disease.

### TEMPERATURES AND HUMIDITY

- Reptiles depend on external heat sources to regulate their body temperature, so supplementary heating is required to create a temperature range (**see separate handout on heating for reptiles**).

- Typically a spot area is created using a light emitting spot bulb, providing a basking temperature of ~35°C. This should be kept on for a minimum of 12 hours a day and switched off at night. The cool end should be maintained at ~20-25°C.
- Background heat can be provided with room heating, a heat mat (on the back wall), a tubular heater or a ceramic bulb so that the overnight temperature does not drop below 18-20°C.
- Heat sources should ideally be regulated with a thermostat and temperatures should be measured with a separate digital maximum/minimum thermometer. During the cold winter months careful checking is required to ensure the heat sources are keeping the enclosure sufficiently warm.
- Humidity should be checked with a hygrometer and kept low-moderate depending on the species. Horsfield's tortoises can cope better with extremes of temperature but do not tolerate damp conditions well.

## **LIGHTING**

- Mediterranean tortoises need daily exposure to full spectrum lighting (including UV-b light).
- Various UV lamps are available (**see separate handout on lighting for reptiles**), but for tortoises a lamp with a high output (e.g. 10-12%) should be used to mimic the strong sunlight of their wild environment.
- These can be mercury vapour lamps which give out heat as well as light or a separate UV-b bulb to ensure that a larger area of the enclosure is covered with light. Care should be taken using mercury vapour bulbs in a small enclosure as temperatures may become too high and it can be difficult to maintain a wide range.
- Lamps should be kept on for ~ 12 hours per day and at an appropriate distance from the tortoise as recommended by the manufacturer.
- All lamps should be changed at least as frequently as manufacturer's instructions or checked regularly for their UV output.
- Tortoises will also really benefit from natural UV light and time outside during the summer months in a secure set up can be invaluable for their health and welfare (see **Outdoor tortoise keeping handout**).

## **WHAT TO FEED**

- In the wild, tortoises will predominantly feed on the wild plants commonly thought of as weeds in the UK. In captivity, weeds should therefore make up the majority (>70%) of the diet, with a mix of vegetables and salad being offered if these are not available. Fruit should be avoided due to the high sugar content.
- Suitable weeds include sow thistles, dandelions, milk thistles, plantains, chickweed, dock and bindweed. Other plants and flowers such as sedum, hibiscus, nasturtium and honeysuckle are also suitable. Any plants fed should be free of any pesticides or fertilizer. For further information on wild food types see [www.thetortoisetable.org.uk](http://www.thetortoisetable.org.uk)
- Supplementation is important, particularly with supermarket bought foods. We recommend alternating dusting with a calcium supplement (e.g. Calcidust) and a combined vitamin/mineral supplement (e.g. Nutrobal).
- Water should always be available and a container is required which will allow the tortoise to submerge completely. This should be changed daily. Bathing is also to be encouraged and twice a week the tortoise should be placed in a shallow bath of warm water (usually a cat litter tray suffices).

## **COMPANIONS**

- Tortoises do not appear to benefit from the company of others, although animals can be maintained in single-sex groups if space allows. Care should be taken to ensure multiple hides, basking spots and feeding stations are provided if more than one individual is kept together.

## **SALMONELLA**

- All reptiles can potentially carry Salmonella (see **Salmonella handout**)
- However it is rarely a cause of illness in reptiles and treatment is not required.
- It can be transmitted to people (especially young children or those who are immuno-compromised) so good hygiene after handling the reptile is important. Generally washing your hands in soap is sufficient. There are commercially available disinfectants that can be used as an alternative.

## **ANNUAL HEALTH CHECKS**

We recommend annual health checks every year for pet tortoises as medical problems are more easily treated if detected at an early stage – **you can register for automatic reminders**

## **INSURANCE**

We highly recommend that you take out a pet insurance policy. For a monthly fee your pet can receive the best treatment at an affordable cost. There is normally an excess to pay for each condition then after that costs are covered up to a set limit. Once you have the policy, please provide us with a copy of your insurance details. There are a lot of different companies and policies available and we suggest you contact a number of them for information- we have a leaflet advising what to look out for. Our advice is to choose a policy which provides cover for chronic illness for the life of your pet. If this policy is too much for you then the best cover you can afford will provide piece of mind in an accident or emergency.

For further information on tortoise care, see [www.tortoisetrust.org](http://www.tortoisetrust.org) and [www.britishchelonigroup.org.uk](http://www.britishchelonigroup.org.uk)