



Guide to Caring for Mediterranean Tortoises

Natural History

- Mediterranean tortoises are native to arid regions in Mediterranean Europe, Africa, and parts of the Middle East. They practice brumation (or hibernation) in the wild.
- Most species are herbivorous, eating predominantly plant material
- Commonly kept species include: Egyptian tortoise, Russian tortoise, Hermann's tortoise, Greek tortoise, and the Marginated tortoise
- These species are long lived. They can live well into their 50s, and possibly to 100 years old with proper care

Enclosure

- Provide tortoises with the largest habitat that spaces allows. Pens should measure at least 12 square feet (24 square feet for larger species, such as the Marginated tortoise)
- Avoid clear walls. Tortoises will attempt to move through or over any barrier they can see through
- Outdoor enclosures are ideal when environmental conditions allow.
 - These enclosures should be well-drained, and encourage foraging on grasses and broadleaf plants.
 - Pens should have access to both sunny and shaded areas.
 - Pens should provide protection against predators, such as dogs/foxes/rats/birds. A screened cover is recommended.
 - Pens should prevent escape, as these species can dig and burrow, as well as climb
- Indoor enclosures should be available during cooler temperatures or when outdoor enclosures are not feasible
 - An open top enclosure than can be easily disinfected is ideal
 - Glass tanks are not recommended, as they do not have adequate ventilation
- Provide multiple shelter options in different areas of the enclosure

Substrate

Suitable substrate options include: hay pellets, large bark chips, hemp, newspaper, shredded paper, reptile carpet, or peat or soil mixtures (sterilized topsoil, coconut earth). Substrates should be deep enough to allow for burrowing.

Lighting

- A full spectrum ultraviolet UVB light source (such as ReptiSun) is required for 10-12 hours each day. Maintain UVB lights within 30-36 cm of the animal. UV rays cannot pass through glass or plastic so avoid any covering between the bulb and the tortoise.
- UV bulbs should be replaced every 6 months (even if the light is not burned out).
- Most UVB bulbs do not produce much heat, so a heat lamp should also be provided for basking. White lights should not be used at night as tortoises need darkness for proper sleep. Additional nighttime heat, if needed, can be provided with ceramic heat emitters (preferred) or under-tank heat mats (may cause thermal burns).

Humidity

Humidity requirements are species specific; desert species require much lower humidity levels. Most commonly kept species need a humidity level between 40-60%. Juvenile tortoise may require higher humidity to prevent shell pyramiding. A humidity box should be provided. A dark, plastic container with a cut entrance containing moistened paper towels or sphagnum moss will suffice. A hygrometer (humidity gauge) will help you to monitor humidity.

Temperature

Levels can be monitored by thermometers placed at both the cool and hot ends of the enclosure.

- Daytime maintain between 78-86°F (26-30°C)
- Basking spot keep at 85-90°F (30-33°C)
- Night temperatures should fall no lower than 64°F (18°C)

Maintenance

- The enclosure should be spot checked for feces daily. Remove and replace soiled and wet portions of the substrate to prevent bacterial and fungal growth. Change the substrate and disinfect the enclosure with dilute soap or dilute bleach solution on a regular basis and rinse thoroughly. Always wash your hands before and after cleaning the enclosure and accessories.

Water

- Keep a shallow bowl of fresh water available for drinking and bathing. Change the water daily.
- Adults require a 10–20-minute soak in shallow, warm water once weekly. Hatchlings should be soaked daily.

Mediterranean Tortoise Diet

The bulk of the diet should be rich in vegetable fiber, such as grasses and dark leafy greens. Place food on tiles or in dishes to prevent accidental ingestion of substrate along with food items

- Greens (70-80% of the diet): grasses and weeds, collards, romaine, kale, red/green leaf lettuce, endive, mustard greens, escarole, etc.
 - Tortoises should be allowed to graze on pesticide/herbicide free grasses and weeds whenever possible
 - Hay (timothy, orchard grass) is a good source of fiber and should be offered daily
- Complete pelleted diets (20-30% of the diet): Any commercial dried or pelleted tortoise diet offered should be fibrous and the primary ingredient should be grass hay. Pellets may be softened in water before offering.
 - Brands include: Rep-cal, Mazuri, Zoo Med, Flukers, and Zilla
- Other Vegetables: orange and yellow vegetables, such as sweet potato, carrots, and squash, are high in beta-carotene and should be offered 1-2 times weekly

Supplements

- Tortoises on a well-balanced diet that are consuming commercial pellets may not require additional supplementation
- If necessary use a calcium supplement 1-2x weekly for adults, and 3-4x weekly for juveniles
- A multivitamin with vitamin A (no D3) should be given every other week

Common Medical Conditions

We recommend having all tortoises examined annually for wellness examinations. If there are any medical concerns that should arise, please schedule an appointment to have your pet evaluated by a veterinarian. Below is a list of some commonly encountered medical conditions in Mediterranean tortoises.

- Herpes virus (tortoise specific, not transmitted to humans)
- Upper respiratory tract disease, often caused by *Mycoplasma*
- Nutritional secondary hyperparathyroidism (metabolic bone disease)
- Pyramiding (abnormal development of the shell)
- Hepatic lipidosis (fatty liver) due to excessive feeding, lack of exercise, or lack of hibernation/natural fasting
- Hypovitaminosis A (low vitamin A)
- Renal disease
- Urinary bladder stones
- Cloacal prolapse

Safety

Please remember that all pets may bite or scratch and could transmit disease to humans. Because all tortoises are potential carriers of infectious diseases (such as Salmonella), always wash hands before and after handling and/or cleaning the habitat to prevent potential spread of diseases.