



**Captive Bred Specialties*

Mediterranean Tortoises (Russian, Marginated, Greek, and Hermann's)

(*Testudo/Agrionemys horsfieldii*), (*Testudo/Agrionemys marginata*), (*Testudo graeca*), and (*Testudo/Agrionemys hermanni*)

Small and Suitable

All of the *Testudo/Agrionemys* genus of tortoises are relatively small to medium sized tortoises with a yellowish or brown carapace (upper shell) with large, dark patches on each scute. Head, limbs, and skin is usually tan, pale yellowish, to light brown. Species in the *Testudo/Agrionemys* genus of tortoises can be distinguished from one another in a variety of ways, including, but not limited to differing size and spatial arrangement of head scales, scales on their front limbs, divided vs. undivided carapaces over/near their tails, and the presence/absence of noticeable spurs on each thigh. All tortoises are mainly terrestrial (land dwelling) and are characterized by highly domed shells and large, elephantine like feet. Due to their small and manageable size, most of these European species of tortoise species are perhaps among the most suitable choices for those interested in a pet turtle or tortoise. These tortoises, if given the proper care, can still live for 50 to 70 years and require long term care and commitment, however.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia

Order: Testudines

Suborder: Cryptodira

Superfamily: Testudinoidea

Family: Testudinidae

Genus: *Testudo* or *Agrionemys*

Species: *Testudo/Agrionemys spp.**

**Taxonomy subject to change and revision.*

Lifespan and Longevity

These tortoises, if given the proper care, can attain longevity for 50 to 70 years and require long term care and commitment.

Distribution and Habitat (and Species)

The **Hermann's Tortoise** (*Testudo/Agrionemys hermanni*) is native to much of Southern Europe. The **Russian Tortoise** (*Testudo/Agrionemys horsfieldii*) ranges from the Middle East, through southern Asia, and into Russia. Both of these tortoises occur in the grasslands, steppes, and savannahs within this range. Care for the **Marginated Tortoise** (*Testudo marginata*) is largely similar. Marginated tortoises are the largest of the European tortoise species, reaching up to 10 to 14 inches in carapace length and weighing as much as 10 to 12 lbs. Marginated tortoises earn their common name from their oblong carapaces with flattened, slightly upturned saw like rear marginal scutes and scalation. The **Spur Thighed, or Greek Tortoise** (*Testudo/Agrionemys graeca*) is also widely distributed over northern Africa, southern to south central Europe, and into southwestern Asia.

Origin/History

Testudo graeca Linnaeus, 1758; *Testudo horsfieldii* Gray, 1844; *Testudo hermanni* Gmelin, 1789; *Testudo marginata* Schoepff, 1789.

Russian tortoises, perhaps the smallest and most widely kept of this *Testudo/Agrionemys* complex of Mediterranean tortoises, was first imported into the U.S. sometime during the 1970's. Since their initial imports, tens of thousands of these small tortoises continue to be farmed and imported into the U.S. annually. Depending on the subspecies, these tortoises have become readily available as pets. Some forms such as the Ibera Greek and the golden Greek have been produced well under captive conditions in more recent decades, and healthy hatchlings can be found at reptile expos, pet stores, online dealers and private breeders. Keepers are strongly advised to refrain from buying still freshly imported *Testudo* spp. from the wild, as these specimens are brought over in large quantities and are typically harbor parasites and other illnesses.

Experience Level Required

Novice/Beginner to Intermediate/Moderate (depending on species).

Size

Adult sizes of these tortoises typically ranges from 5 to 8 inches upper shell length in males, and 7 to 11 inches for females. The marginated tortoise is the largest of the European tortoise species, reaching up to 10 to 14 inches carapace length and weighing as much as 10 to 12 lbs.

Housing and Enclosure

Enclosure System: Primarily Terrestrial. Provide a secure and escape proof enclosure. If housed indoors, a 4 foot by 2 foot minimum plastic or glass terrarium or other enclosure can be used, and are lightweight and easy to clean. Substrates that enable burrowing such as a mix of fine aspen chips, organic bark, or coconut fiber substrates are acceptable substrates to use for these small tortoises. Outdoor pens can work during the warmer months in temperate to sub-tropical climates, and can provide ample access to natural sunlight. Outdoor pens must have a perimeter at least 8 to 9 inches deep and at least 12 inches high. Be sure the enclosure is adequately sealed to prevent access by outdoor predators. Although they derive much of their water from their food, it is best to provide a shallow water dish or pan within the enclosure, which should be changed every several days or if fouled. Soaking your tortoise at least weekly in lukewarm water can also serve as added hydration. Providing an artificially heated hide box if housed in outdoor enclosures can provide for added safety and security for these tortoises.

Temperature, Lighting, and Humidity

Providing the correct amounts of UVA/UVB overhead incandescent and florescent lighting, and calcium-to-phosphorus ratios is essential for ensuring the health and overall well-being of these small tortoises in captivity. Without UVA/UVB, or adequate amounts of it, they can be susceptible to the abnormal bone and shell growth and development known as Metabolic Bone Disease (MBD), and other health and development maladies. Pyramiding of the scutes and shell can also occur due to poor or improper diet, lighting, or heating. Always be sure to spot clean the enclosure for urates, feces, or uneaten food at least twice per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months. These small tortoises require a thermal gradient using a ceramic or radiant heat emitter, UTH (or under tank heating pad), and UVA/UVB overhead lighting. Ambient and cool end temperatures should be within 70 to 75 degrees F and the basking area from 90 to 95 degrees F. Also be sure to maintain a light cycle of 12 to 14 hours per day, and monitor temperatures with a quality thermometer. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well. These small tortoises should ideally be maintained at, or around relative humidity levels of anywhere from 30 to 60%, although this may vary and depend on the exact species or subspecies.

Feeding, Diet, and Nutrition

Primarily Herbivorous; In the wild, these tortoises are herbivores, and will graze upon a variety of grasses, flowers, and other plant matter. In captivity, these small tortoises can be given a mixed and varied assortment of chopped up greens and vegetables daily or as otherwise directed. Avoid spinach, citric fruits, Iceberg lettuce, and other acidic or otherwise nutritionally poor food items. More food items to avoid include most grain products, and dog and cat foods. Many flowers, dandelions, hibiscus, turnip, kale, mustard, and collard greens are also suitable choices. Ensure that all food intended for food for herbivorous to omnivorous animals is chemical, pesticide and herbicide free. Many of these are readily available in any grocer's market. Several commercially available herbivore and veggie mix diets are also available which can be used. Food items given should be sprayed with additional calcium and vitamin D3 supplementation 1 to 2 times weekly or as otherwise directed for optimal health and development. This is in order to prevent Metabolic Bone Disease (MBD), shell pyramiding, and other shell and bone growth and nutritional deficiencies and maladies. Their feeding frequency can also often depend on the age, size, and overall health of your animal. Use care as to not overfeed turtles or tortoises, as obesity and other health related issues can become an issue. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

Most small to mid-sized turtle and tortoise species that are not aggressive or prone to biting can be picked up and handled either by placing both hands along both sides of the shell, or from the rear of the carapace with the thumb on the carapace and index through pinky fingers on the plastron to reduce the chances of being kicked, scratched, or nipped when they are threatened. Although most species of chelonians are not outwardly aggressive, defensive, or dangerous, they can become stressed as a result of over-handling, however, and some species, and even individual animals can be shyer than others. These are some considerations to keep in mind when handling any chelonian species.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

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Disclaimer: Note that the information provided in these, or any care sheets, are not intended to be all-exhaustive, and further research and care should always be sought and provided when it comes to any species one may prospectively be interested in. These care sheets are also not intended to serve as substitutes for professional veterinary medical care and husbandry should any animal require it. Always seek proper and professional veterinary care for any animal should the need arise, and be prepared ahead of time for any and all husbandry costs and expenses that may occur with any animal beyond the initial purchase. Any animal owned is ultimately a matter of personal/individual care and responsibility. We cannot make any claims or guarantees regarding any information in this care sheet therein. This care sheet may be reprinted or redistributed only in its entirety.

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