

# **Russian Tortoise** (Testudo horsfieldii) Care Dayna Willems, DVM

# **Brief Description**

The Russian Tortoise is a popular pet due to its small size and interactive personality. Native to central Asia, almost all available Russian Tortoises are wild caught as young adults (10-20 years old) and then imported for sale in the US. Unfortunately after being taken from the wild tortoises often have trouble adapting to captivity and die premature deaths from inadequate care. When scared tortoises will withdraw their body into their shell and their armored front legs will protect their head. The shell is living tissue and should never be pierced or painted. Adult size is 6-10" on average.



#### Sexina

The males will have longer tails the females and once mature the plastron (bottom part of the shell) will be concave and a longer, more pointed tail with a longer distance between vent and tail tip than the stubby tail of females where the vent is closer to the shell.

# Lifespan

With proper care the average expected lifespan is 40-80 years on average.

# Caging

Tortoises need large enclosures and should be in a 40 gallon tank or larger. An outdoor enclosure safe from predators or escape attempts is very beneficial when weather permits. Large containers such as Rubbermaid storage boxes or livestock troughs can also be used for enclosures successfully and inexpensively. There should be one or two things for your tortoise to hide under - fake cave, half log (least favorite option), half buried clay pot, etc. Outdoor pens will need to be secure to keep tortoises in and predators (especially dogs) out.

#### Substrate

Tortoises should be able to make shallow burrows in the substrate so a mixture of several of the following is best: organic soil, coco coir, peat moss, sphagnum moss, dead leaves. Cypress mulch can be used successfully although it typically quite dry and dusty. Avoid cedar/pine/aspen mulches, sand, carefresh bedding, alfalfa pellets, and sand. Live plants can be planted directly in the substrate or kept in pots to provide cover and enrichment for your turtle.

## **Lighting and Temperature**

Reptiles are ectotherms (cold-blooded), meaning they need to absorb heat from their environment to regulate their own body heat since they cannot produce it. They need a warm place to bask (85-90 degrees) on one side of the cage in order digest food and nutrients properly. The other side of the cage should be cooler (70-75 degrees) so they don't overheat. A thermometer should be placed at both ends of the cage to accurately measure temperatures. Your turtle will utilize different temperature zones throughout the day depending on its metabolism and needs. Lights should be on for 10-12 hours each day and then total darkness at night. Night temperatures can safely drop to 60 degrees so a night time heat source is not necessary.

UVB lighting is one of the most critical parts of reptile husbandry. Turtles and tortoises must have UVB light to survive and a lack of UVB will lead to Metabolic Bone Disease, severe deformation, and death. UVB can be given through unfiltered sunlight (UVB does not penetrate glass or plastic well) or through commercially available fluorescent UVB bulbs. After about 6 months of use most bulbs will stop emitting adequate levels of UVB, even though they are still shining, so it's important to change the bulb every 6 months. Only a single UVB bulb is needed per cage. Nothing beats natural sunlight so if your turtle can get real sunlight in a protected area this is always preferred.

Some suggested brands: Zoomed Reptisun 10.0, Exoterra UVB 100 or 200, Arcadia 12%. "Full Spectrum Lighting" does not mean it has UVB. Look for UVB listed specifically on retail packaging before buying.

# Humidity

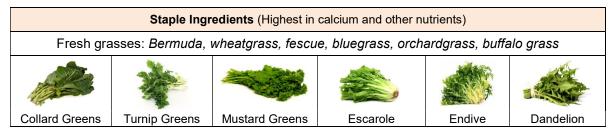
Humidity in the enclosure should be 50-60%. This should be measured by a hygrometer.

#### Hibernation

Russian Tortoises do hibernate in their natural environments but in captivity it is a debated topic. Since most Russian Tortoises are kept indoors they are often not hibernated due to the risks. If kept indoors and warm temperatures are maintained hibernation is not necessary.

#### Food

Tortoises are herbivores and need a variety of high quality vegetables and grasses. Grasses ideally should be the mainstay of your tortoise's diet and can be grown in the enclosure itself or in shallow dishes (like pie plates) and then offered to your tortoise to graze on. Fruit and a few Mazuri tortoise pellets (soaked in water until mushy) can be offered once or twice a week in addition to vegetables as treats. Uneaten food should be removed after 24 hours. The following is a short list of commonly used food.





Avoid These Ingredients (Low in calcium and/or high in phosphorus, oxalates, goitrogens)

Cabbage, iceberg lettuce, spinach, broccoli, tomatoes, corn, grains, beans, bread, cereal, meat, eggs, dog food, cat food, fish food, vertebrates (pinkies, lizards).

### Supplementation

A powdered calcium supplement (without phosphorus) should be used lightly sprinkled over the food 1-2 times weekly. A multivitamin can be used less frequently (once or twice a month) if desired but with good nutrition this is not always necessary. A piece of cuttlebone in the enclosure will provide calcium and keep the beak short.

#### Water

A shallow water dish at least as big as your tortoise with fresh water must be available at all times. It should be stable, so it cannot be spilled, and it should be easy to climb in and out of from all sides. The dishes used under potted plants are excellent for water dishes and inexpensive. Tortoises enjoy full body soakings but often defecate in their water so it needs to be cleaned often.

**Examples of good indoor enclosures:** 



