Water

Water should be provided at all times. However, this can be messy as tortoises tend to urinate and defecate in water bowls. Make sure to change and clean the water bowl daily. Also bathe or soak your tortoise for 10-15 minutes 2-3 times a week.

Supplements

Calcium supplementation without vitamin D3 or phosphorus should be dusted on fresh vegetables and greens whenever fresh food is offered. A multivitamin can be dusted on vegetables and greens once every 2 weeks.

Hibernation

Russian tortoises are a species that hibernates naturally. See the ARAV brochure on Chelonian Hibernation for basic information, and consult with an experienced reptile veterinarian before attempting or allowing your tortoise to hibernate. Hibernating your tortoise if he or she is ill can prove to be fatal to your tortoise.

Tips for a Happy, Healthy Animal

- Take a newly purchased Russian tortoise to an experienced reptile veterinarian for a wellness examination that includes a fresh fecal examination.
- Quarantine any newly acquired reptiles in a separate area of the house for at least 90 days.
- Make sure any furnishings in the enclosure are clean and free from insects and parasites.
- Limit stress, Russian tortoises housed in groups can be stressful.
 Also limit handling tortoises.
- Provide natural sunlight when possible.
- Ensure your Russian tortoise is protected from predators.
- Consult an experienced reptile veterinarian before attempting or allowing hibernation.

It is Important to Avoid

- Purchasing a wild caught tortoise.
- Housing together with other individuals or other reptile species.
- Dangers in the enclosure that can cause injury (such as sharp edges or unsecured furnishing that can fall on your animal).
- Free or unsupervised roaming of the house or outdoors.
- Exposure to dogs, cats, or other animals that may harm your animal.
- Over handling and unsupervised handling by inexperienced people and small children.
- Allowing the enclosure to get too hot, too cold, and too damp.

Common Disorders

- Obesity
- Malnutrition
- Nutritional secondary hyperparathyroidism (NSHP), commonly known as metabolic bone disease.
- Respiratory infections
- Wounds and burns
- Dehydration
- Intestinal parasites

Additional Reading:

Reptiles Magazine Article: "Russian Tortoise Care Sheet."Tyler Stewart (http://www.reptilesmagazine.com/Care-Sheets/Russian-Tortoise/).

Tortoises: A Beginner's Guide to Tortoise Care. (2009) Andrew Highfield and Nadine Highfield.

Russian Tortoises (Complete Herp Care). (2006) E. J. Pirog.

Pet Owner's Guide to the Tortoise. (2003) Simon J. Girling.

Russian Tortoise as Pets. Russian Tortoises: Facts and Information. (2014) George Hoppendale.

http://www.tortoisetrust.org/

https://www.tortoisetrust.org/articles/russiantort.htm

http://www.tortoisetrust.org/articles/newhibernation.html

http://reptileuv.com/

http://www.uvguide.co.uk/

Regular visits to your reptile veterinarian should be scheduled to check for parasites and other early signs of disease and to promote a long satisfying relationship with your Russian Tortoise. For help in finding a reptile/amphibian veterinarian in your area, contact the Association of Reptile and Amphibian V eterinarians (www.ARAV.org) or contact the American Board of Veterinary Practitioners (www.ABVP.com/diplomate)

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HOW TO KEEP YOUR RUSSIAN TORTOISE HEALTHY, HAPPY AND SAFE!

COMPANION REPTILE CARE SERIES



NATURAL HISTORY

Russian tortoises (Testudo [Agrionemys] horsfieldii) naturally occur from eastern Iran and east through central Asia to parts of China and Russia. Russian tortoises are also commonly known as Horsfield's, four-toed, steppe, Central Asian, or Afghan tortoise They tend to inhabit dry open landscapes with sparse vegetation. They are often found in areas with a nearby source of water where grasses and vegetation can be relatively abundant. Natural habitats tend to be at elevations of 5.000 to 8.000 feet.

This is a relatively small species of tortoise with males typically growing to 5-6 inches (12-15 cm) in length, and females typically growing to 7-8 inches (17-20 cm) in length. This slow-growing species is considered fullgrown at 20 to 30 years of age and can live 40 to 60+ years in captivity.

Russian tortoises originate from regions with extreme weather. In their natural habitat, they are active for 3-5 months out of the year. They have adapted to dig burrows to escape the extreme weather. They are inactive for 1-2 months to escape the extreme heat of summers and will hibernate in late fall to escape the very cold winters. In captivity, they can be active for most or all of the year.

What to Expect from My Animal

The small size of Russian tortoises, their relatively simple husbandry needs, and their hardy nature make them an ideal beginner tortoise. Russian tortoises tend to be very personable and very inquisitive by nature. Not all individuals enjoy being petted, but most will tolerate it, especially while being fed. This species is not aggressive, but they can bite fingers if they anticipate food or out of curiosity.

Is My Animal Male or Female?

Russian tortoises under 4-5 inches (5-10 cm) long can be difficult to sex externally. Males have a longer and thicker tail with a longer slit-like cloacal opening that extends almost to the tip of the tail. Females have a shorter and wider tail with a smaller asterisk-like cloacal opening that is closer to the base of the tail. Adult males possess a pointed spur-like scale at the tip of the tail. The tail of an adult male will extend to the lower thigh when retracted into the shell. Sexual maturity is reached at 10 years of age and females tend to reach reproductive size at 6 inches (15 cm) in length.

Housing and Substrate:

Adult Russian tortoises need adequate space to accommodate their active nature. Enclosures 5x5 ft (1.5x1.5 m) is the minimum space needed to house 1 or 2 adult Russian tortoises. Outdoor housing is suitable in places where temperatures and weather conditions permit. It is very important that your tortoise is protected from predators and prevented from escaping. Make sure the substrate and housing does not stay damp and make sure it cannot flood. If plants are in the outdoor enclosure, make sure they are safe for your tortoise to eat. For indoor housing, a custom enclosure such as a tortoise table or large livestock feeding trough can be used. Acceptable substrate for indoor housing can be cypress mulch or coconut fiber/husk, shredded aspen, or recycled newspaper bedding. Clean soil can be used as a substrate, but it can be

WHAT YOUR VETERINARIAN LOOKS FOR IN A HEALTHY

RUSSIAN TORTOISE

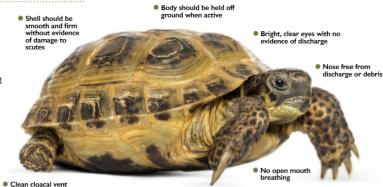
Vital Statistics: Body length

Males: 5-6 inches (12-15 cm) is typical. Can reach up to 7-8 inches (17-20 cm). Females: 6-8 inches (15-20 cm) is typical. Can reach up to 10-12 inches (25-30 cm).

Males: 400-1000 grams Females: 500-1500 grams

Age of sexual maturity About 10 years

Males: 40-60+ years Females: 40-60+ years



Legs should be well muscled



NOTE: Most, if not all, reptiles and amphibians carry Salmonella bacteria in their intestinal tract and intermittently or continuously shed these bacteria in their feces, so they are unsuitable pets for very young children and those with compromised immune systems. Good hygiene must always be practiced around all reptiles and amphibians, including Russian tortoises. For more information, please see the handout, Salmonella Information for Reptile Owners at http://arav.org/salmonella-bacteria-reptiles.



very hard to maintain indoors and can pose a risk for gastrointestinal impaction if it is ingested. Paver stones and flat rocks with a mildly rough surface can be used for basking sites and feeding areas as they can help with the natural wearing down of the nails and beaks.

Temperature and Humidity Requirements

The hot end of the enclosure should be maintained at 85-95° Fahrenheit (30-35° Celsius) and the cool end of the enclosure should be maintained at 70-75° Fahrenheit (21-24° Celsius). Nighttime temperatures should not drop below 60° Fahrenheit (16° Celsius), Humidity should be maintained between 30-50%, Juveniles should be maintained closer to 50% humidity. Enclosures can be misted once to twice daily to maintain humidity. Utilize a digital thermometer and hygrometer to monitor and adjust the temperature and humidity as needed.

Lighting Requirements

Russian tortoises require UVA and UVB lighting for 12-14 hours daily. Natural sunlight is best, but if you are housing your tortoise indoors, provide a high-quality UV bulb. UV lights have a decreasing output over time. Replace your UV light as determined by monitoring UVB output with an accurate UVB meter. Alternatively, replace your bulb every 6 months if UVB testing is not performed. It is important that there is an area in the enclosure where your tortoise can avoid UV lighting if it chooses to.

Russian tortoises should be fed a herbivorous diet in captivity. They are grazers, so fresh leafy grass hay such as timothy hay should be provided at all times. Fresh dark leafy greens and vegetables should be offered every 2-3 days for adults and daily for juveniles. Good options for greens include spring mix, escarole, endive, and dandelion. Kale, mustard greens, and collard greens can be fed occasionally. Small amounts of vegetables such as bell peppers, squash, and carrots can be added to the greens. Russian tortoises should not be fed fruits. Commercial tortoise diets can be provided as a supplement but should not be the main part of the diet. Compressed grass hay pellets are the most beneficial type of pellet, and may be soaked to make a slurry and mixed with greens to increase the fiber content of the salad. Remember that variety is key for a healthy diet.