

# Steppe Runner

*Eremias arguta*



**LIFE SPAN:** steppe runners are relatively new to the pet trade but it is thought that they can live up to 10 years in captivity **AVERAGE ADULT SIZE:** up to 6 inches

**CAGE TEMPS:** Warm side – 78-82 °F  
Basking – 100 °F  
Cool side – 75-80 °F

**CAGE HUMIDITY:** low

\* If temp falls below 75 at night, may need supplemental infrared or ceramic heat.

**WILD HISTORY:** Steppe runners are from the grassland steppe regions of Romania, Ukraine and Russia. Steppe regions are temperate grasslands that are warm in the summer, but winters can be long and cold. Much is still to be learned about the steppe runner, but most grassland lizards are active in the summer and spend the winter underground. Most steppe runners available in the pet trade are captive bred animals, as they breed readily in captivity.

**PHYSICAL CHARACTERISTICS:** Steppe runners are diurnal (active during the daytime) lizards. They have slim bodies with smooth scales. They are tan to brown in color with darker brown, round spots on the back with a white dot inside the spot. Steppe runners have a short snout and relatively short legs with long toes. Steppe runners can release their tails if they feel threatened and if grabbed by the tail. This is a self-defense maneuver for escaping predators.

**NORMAL BEHAVIOR & INTERACTION:** Steppe runners are calm, gregarious and usually non-aggressive; they are very curious and like to explore in and out of cage. While smaller lizards like these are generally skittish, shy and difficult to hold, the steppe runner is personable and interactive. They will eat from and sit comfortably in your hand.

**NOTE:** DO NOT house steppe runners with other species due to the differences in care, temperatures, and the fact that some species can be highly stressed in the presence of other species. Each species may also harbor different parasites/protozoans/bacteria (even a healthy reptile harbors a small amount at all times), which may make each other ill.

Housing **male steppe runners** together will create a dominant/submissive hierarchy and will result in one lizard becoming stressed to the point of illness, anorexia, and possibly death. Male runners also tend to be extremely aggressive toward one another and will fight, often to the death of one.

**Female steppe runners** may be housed together IF there is ample space and food for each lizard.

**Males and females** – one male runner may be housed with several females IF there is ample space and food for each lizard.

**FEEDING:** Insectivores - live prey.

Protein sources such as: gut-loaded crickets, mealworms, butterworms, silkworms, superworms and wax worms dusted with a supplement should make up the steppe runner diet.

## **LIGHTNING BUGS MUST NEVER BE FED. THEY ARE POISONOUS.**

Wild caught insects should never be fed, since they can carry disease. All insects should be gut loaded (fed a nutritious diet about 24-hours before being offered to your lizard – see our cricket care sheet).

Be careful to feed the proper size prey for your runner's size. A good rule of thumb is that a cricket should never be larger than the distance between the lizard's eyes, or the distance from its eyes to its nose.

When feeding larger insects to your pet, try to make sure the insects have recently molted, as an insect with a large, hard exoskeleton is difficult to digest and may cause impactions.

Feed as many insects as your lizard will eat in 3-5 minutes. Uneaten insects should be removed from the cage.

Some lizard owners find it easier and safer to feed their pet in a separate enclosure, free of bedding and furniture, this way you can be sure your lizard eats all its insects, the prey cannot hide and the lizard will not pick up any bedding when grabbing prey and mistakenly ingest it along with the prey (which can cause impactions).

**SUPPLEMENTS:** Dust food with calcium supplement and vitamin supplements. As a rule, a growing juvenile's food (and a pregnant/gravid female's) should be dusted more often than an adult's. Follow your veterinarian's instructions for applying supplements to avoid over-supplementing food.

Our veterinarian recommends dusting insects with a good quality calcium supplement fortified with vitamin D3, 2-3 times a week. (Avoid using a calcium supplement with added phosphorous, unless specifically directed by your veterinarian, since this can promote kidney disease.)

Always consult your veterinarian for specific directions on supplementing your pet's food, since there are many variables that go into determining the best supplementation regimen for each animal.

**WATER:** A large bowl of clean fresh chlorine-free water must always be available. Place it on the cool side of your lizard's enclosure. Change it daily, or as needed, as your pet will most likely bathe in it as well. Lizards will often defecate in their water bowl, as the water seems to have a laxative effect on lizards! All water given to lizards for drinking, as well as water used for misting, soaking or bathing must be 100% free of chlorine and heavy metals. (Not all home water filtration systems remove 100% of the chlorine and heavy metals from tap water). We recommend that you use unflavored bottled drinking water or bottled natural spring water; never untreated tap water. If tap water is used, you should treat it with a de-chlorinating treatment. De-chlorinator is available in the pet store fish department. If you do not want to chemically de-chlorinate the water, you can leave an open container of tap water out for at least 24 hours. Do not use distilled water, which can cause severe medical problems, since it lacks minerals that are essential to important body functions. If only tap water can be used, at least de-chlorinate the water.

A daily misting or two with chlorine-free water will also be appreciated. However, care should be taken not to allow the enclosure to become damp. Also, do not mist less than two hours before turning the heat lamps off for the day, as the droplets may not have time to dry and may contribute to respiratory disease.

**SHEDDING:** Unlike snakes, lizards shed their skin in patches, not all in one piece. Your pet may become an overall dull color, and the skin over the eyelids may 'pop' at a certain point and make your lizard look like a bug-eyed bullfrog. Do not peel off the skin if it is not ready to come off. This can be dangerous and painful.

Most lizard species will shed every 4-6 weeks. If the enclosure environment is ideal, the keeper often has no idea that their pet has shed, as it will happen more quickly and the lizard will often eat its own shed skin.

In the wild, lizards have a much easier time with their sheds, as they are generally in a more naturally humid environment and have access to pools or bodies of water in which they can soak at will. Even lizards from arid areas find humid places to go during the shedding process, such as cold, moist burrows under the sand or caves.

The shedding process happens when the lizard's body begins to grow a new layer of skin; that new layer begins to separate from the old and a very thin layer of fluid forms between the two layers. If your pet's enclosure is too dry, this fluid layer will not form properly, making it difficult for your lizard to shed properly.

To create more humidity, the entire tank can be lightly spray misted twice a day during shedding time. Spray once in the morning and once later in the day. Make sure the later spray dries completely before lights go off for the night, as the droplets may not have time to dry and may contribute to respiratory disease.

Some lizards may also benefit from a 'moist box' during shedding time. This can be a Tupperware-like container (with the cover on) containing a bed of moist reptile terrarium moss. The container should be big enough for the entire lizard to be inside with an entry door cut in the side just large enough for the lizard to come and go at will. Keep the moss moist but not watery, and place the box on the heating pad in the tank.

If your lizard still has a hard time getting the shed completely off its toes, tail or head; help him by spraying the area with water and gently massaging the skin until it peels off.

If the retained shed is severe and cannot be removed easily, see your exotic veterinarian.

**SOAKING:** Lizards can benefit greatly from a good deep-water soak at least once a week. A Tupperware container makes a good lizard bathtub. Fill the container deep enough so the entire lizard's body can be submerged under water, but the head can be out of water. The water should be nice and warm (about 68-70 degrees). Soak your lizard for about a half hour at a time. This is especially helpful during a bad shed or when your lizard might be a bit constipated.

**RECOMMENDED SUPPLIES:**

20 L (20x13) aquarium or breeder tank or larger.	Small light dome and 100 watt basking bulb
Under tank heater – placed under same side of tank as basking light	Temperature / humidity gauge – do not stick to side of tank
Dry hide house	Shredded aspen bedding/reptile carpet/newspaper
Large water bowl – big enough to soak in	Flat rocks for climbing and basking
UVB light and housing	Steppe runner book

**HOUSING & ENVIRONMENT:** Lizards are ectothermic, or cold-blooded, which means they are dependent on the temperature of their immediate environment to regulate their body temperature. Therefore, we must create an environment with heat gradients – warm on one end and cool on the other. With this set-up, your pet can go to either end depending on whether he needs to be warmer or cooler.

Steppe runners are terrestrial and therefore live mainly on the ground. They enjoy hiding in rocky outcrops and will enjoy flat rocks to climb and bask on. Be sure to secure your rocks carefully so they do not fall on and hurt your lizard.

**ENCLOSURE SIZE:** The enclosure should be a solid glass sided tank long enough to create the two separate temperature gradients (warm and cool); a steppe lizard tank should be at least 20 gallons or larger for an adult.

**IT IS NOT TRUE THAT A LIZARD WILL ONLY GROW AS LARGE AS ITS ENCLOSURE ALLOWS!!**

**COVER:** Make sure the cage has an escape-proof metal mesh top. It should fit snugly onto the tank and have strong clips locking it on. It is important that the top is METAL mesh, as you will place the heat lamp directly on top of this cover.

**HEAT PAD:** Reptile heat pads can be adhered directly onto the underside of the glass bottom of the tank. Stick it directly on the glass on one of the very far ends of the tank (opposite the water dish). For safety reasons, make sure to attach the rubber feet (contained in the box) at all four corners of the underside of the tank. This will allow air to circulate underneath the tank and prevent the heat from being trapped under the tank. Leave the heat pad ON 24 hours a day.

Heat pads specifically manufactured for reptiles are safe to leave on 24 hours a day (which should be done for these enclosures). DO NOT use reptile heat rocks. They heat unevenly and have caused severe thermal burns in reptiles. A human-grade heat pad may be used on the low to medium setting. Do be sure to allow for proper ventilation for safety reasons. \*\*\*Be sure to purchase a heat pad without automatic shut-off, which are still available.

**HEAT LAMP:** Place the heat dome with the basking bulb on top of the cage directly over where the reptile heat pad has been placed on the underside of one end of the tank. The heat lamp should be turned on in the morning, and off at night. (See “Day/Night Light Cycles” below).

Follow directions carefully with all products – READ THE INSTRUCTION SHEET!!

Always choose fixtures with ceramic sockets and be careful to choose the socket that is properly rated for the wattage bulb that you will be using. Do not place the fixtures by dry wood or flammable fabrics.

All heaters should be placed out of the reach of children and all pets – including cats and dogs.

Be very careful to make sure that your caged pet cannot reach and touch the heating device in its own cage. A thermal burn to the face or body can be painful and life threatening.

**BASKING AREA:** A warmer basking area matching the temperature listed at the top of this care sheet must be established on the warm side of the cage. This area is directly under the basking bulb and will be higher in the cage for arboreal species. The basking area should be the warmest area in the enclosure. Maintaining the proper temperature in this spot is extremely important to the health of your pet.

**UVB LIGHT:** Exposure to UVB (ultraviolet B) light is critical in allowing an animal to synthesize vitamin D3 in their skin and metabolize calcium in their body.

If an animal is not exposed to an adequate level of UVB light, it will gradually develop physical problems from the result of mineral deficiencies such as low blood calcium (hypocalcaemia), soft eggs (females), stunted growth and metabolic bone disorder, which can be fatal if left untreated. In addition, recent studies have linked sub-optimal vitamin D levels with poor immune system function.

All day-active (diurnal) indoor reptiles, amphibians, birds and hermit crabs should be allowed self-selected exposure to UVB lighting for up to 8-12 hours a day. This means they should be able to bask in the light but also get away if desired, much as they might in the wild. Many twilight-active (crepuscular) and night-active (nocturnal) species do get some exposure to the sun and may also benefit from low levels of UVB, which helps regulate their photoperiod and vitamin D levels as well.

Please see our additional “UVB Lighting for Companion Birds and Reptiles” for specific instructions for your particular pet and the UVB bulb that we recommend for him or her.

**HIDE HOUSE:** Place a hide house inside the cage directly over where you have positioned the heat pad, and directly under the heat lamp above.

**WATER BOWL:** The large water crock can be placed on the opposite end of the cage, along with another hide house, if desired.

**SUBSTRATE:** Shredded aspen bedding is recommended for steppe runners. It will not cause impactions in the lizard if it is ingested by mistake *and* it is easy to clean – daily spot cleaning becomes easy by just removing the soiled portion of aspen.

Newspaper, paper towels can also be used.

If “reptile carpeting” is used, it **MUST** be kept extremely clean. The carpeting can foster the growth of bacteria and fungus, which can in turn be very dangerous to your pet. If you insist on using the carpet, purchase two so you can interchange them regularly.

**BRANCHES & PLANTS:** Steppe runners are terrestrial lizards and do not generally climb, branches and plants are not necessary, but can be included for decoration.

**TEMPERATURES:** Cage temperatures should be monitored daily and kept at the temperatures listed at the top of this page. Use your reptile thermometer to check the temperatures in different places in the cage regularly to make sure they continually match the listed proper temperatures.

\* If the room temperature falls below 75 degrees at night, a supplemental infrared or ceramic heat fixture may be necessary. (These fixtures do not emit a light spectrum that is visible to the skink, so it will not disturb him at night, but they **WILL** provide the necessary supplemental heat.)

If your lizard does not receive the proper heat at the proper temperatures, he may become sick with issues such as respiratory disease and may stop eating, as runners have a hard time digesting their food without proper heat.

**DAY/NIGHT LIGHT CYCLES AND HEATING:** All lizards must have distinct day and night periods in their enclosure to maintain their biological rhythms. Runners need 8-12 hours of daytime and 8-12 hours of nighttime. However, as the daylight hours change seasonally outside, daylight hours inside the tank should reflect the same.

**The day period must be light, and the night period must be dark.**

A timer should be used to set day/night periods.

**HABITAT MAINTENANCE:** Daily maintenance should consist of spot cleaning by removing soiled substrate, cleaning water bowl thoroughly and wiping glass clean.

The entire tank should be cleaned thoroughly at least once every month with:

- A mild dishwashing liquid in warm water (make a weak dilution),  
THEN
- Vinegar & water (1:8)
- OR bleach and warm water (1:32)
- Cage “furniture” should also be scrubbed clean with the same dilution.
- **RINSE OFF ALL SOAP AND BLEACH THOROUGHLY WITH PLAIN WATER BEFORE RE-INTRODUCING YOUR PET TO ITS ENCLOSURE!!**
- **NEVER MIX VINEGAR AND BLEACH – IT CREATES A TOXIC SOLUTION**
- **NOTE:** water used for cleaning does not need to be de-chlorinated, as your pet will not be drinking it or bathing in it.

**GROOMING & HYGIENE:** To reduce the risk of contracting and spreading salmonella poisoning, all handlers should wash their hands after handling any lizard.

**SIGNS OF A HEALTHY ANIMAL:** smooth, even body; no traces of mites (small, reddish brown spots around nostrils, near ears and eyes); clear, bright eyes; rounded, full body; strong, even, smooth jaw line; fat, rounded tail, regular record of healthy feeding and defecating schedule.

It is very important to keep a journal for each animal that records feeding, refusing, defecation, shedding, unusual behavior, changes in behavior and dates of bulb changes. This will help your veterinarian trouble-shoot any health issues.

We recommend physical exams every year or two years with an exotic pet veterinarian for pet reptiles and amphibians. If your vet sees your pet regularly, many common conditions that afflict pet reptiles and amphibians can be caught and treated early. If not caught early enough or if left untreated, many of these conditions can become far worse if not fatal.

**SIGNS OF ILLNESS:** Irregular scales; small reddish brown spots (mites) around mouth, eye area, ear area; irregular jaw line, ‘dents’ in mouth with (or without) cottage cheese-like material (mouth rot); cloudy eyes or dull colored body when not in a shed; thinned body; irregular feeding and defecating habits. Limp, thin body, lethargy, sunken eyes, pinkish patches or spots on belly or sides; obvious bite marks or wounds from cage mate or prey. Red, fluid filled patches may indicate thermal burns.

**SOME COMMON PROBLEMS INCLUDE:**

<b>HEALTH ISSUE:</b>	<b>SYMPTOMS:</b>	<b>TREATMENT:</b>
GI parasites i.e.: flagellates, motile protozoa	Loss of appetite, weight loss, abnormal stools	See an EXOTIC vet for analysis of specific parasite and medicinal treatment.
Shedding problems – loss of toes as shed skin gets constricted around toes	Random pieces of shed stuck to body, usually tail, face & toes	See an EXOTIC vet for treatment of current problem. Optimize enclosure heat and humidity.
Calcium imbalances, Metabolic Bone Disease	Failure to grow, fractures easily, tremors, lethargy	See supplement section above and separate gut-loading sheet. See an EXOTIC vet for treatment and support for current issues.
Trauma	Outward signs of biting, tearing, stress, aggression	Adjust enclosure occupants. Avoid caging males together, overcrowding, mixed species. Always the possibility of just clashing personalities.

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