

Uromastyx

Genus *Uromastyx*



SPECIES: There are six species (*U. aegyptius*, *U. ornatus*, *U. ocellatus*, *U. acanthinurus*, *U. hardwicki*, and *U. benti*) which are occasionally available in the United States. The other seven species are seldom, if ever, imported

LIFE SPAN: at least 10-15 years, possibly up to 35 years with proper care

AVERAGE SIZE: 10-36 inches, depending on species

CAGE TEMPS: Warm side – 90-95 °F
Basking – 110-120 °F
Cool side – 80-90 °F

CAGE HUMIDITY: Very Low (desert dweller)

* If temp falls below 60° at night, may need supplemental infrared or ceramic heat for night-time

WILD HISTORY: Uromastyx can be found ranging from northwestern India throughout southwestern Asia and the Arabian Peninsula to the Sahara desert in Africa.

Much is still unknown about the uromastyx species, but their natural habitat is generally extremely dry, hot desert. These regions drop sharply in temperature at night, so it is important to replicate this drop for the lizard in captivity.

NORMAL BEHAVIOR & INTERACTION: Very social & engaging – generally very gregarious.

Uromastyx handle well once they have been tamed.

In the wild, males become territorial and can engage in ritualized dominance struggles. Females may also have trouble getting along. For this reason, it is easiest for the pet owner to keep only one per enclosure.

Housing **male uromastyx** 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 uromastyx also tend to be extremely aggressive toward one another and will fight, sometimes to the death.

Female uromastyx may be housed together IF there is ample space and food for each lizard. Two to three uros may live happily in a 75-gallon tank.

Males and females should NOT be housed together, as the male uromastyx will continually try to mate with the female, leaving the female exhausted, aggravated, and stressed. The female may stop eating and become extremely ill.

NOTE: DO NOT uromastyx with other species due to the differences in environment, 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.

FEEDING: Uromastyx are herbivorous lizards and must receive the proper greens, grains and seeds in order to stay healthy. Uros require a uniquely specific diet as described below. They should be fed a variety of the following daily.

GRAINS AND SEED: Choose legumes such as lentils (red or green), millet, sesame seeds and split peas. Larger beans and seeds can be ground with a small coffee grinder. Your lizard will not be able to digest larger beans and seeds properly and may suffer an impaction if he or she eats something too large.

Dry, bagged bean mixes that are sold for soup making can also be used; however, do be sure to grind these mixes down as some of the beans can be quite large.

PROTEIN: Feeding your uromastyx protein such as crickets or mealworms can cause health problems such as gout, kidney and liver disease. Also, the exoskeletons of most insects are very difficult for the uros to digest. Some uro keepers feed insects regularly, but they often cause more trouble than they're worth.

GREENS: Packaged "spring mix" generally contains the proper greens for your uromastyx. Spring mixes will include some or all of the following: baby lettuces, red & green shades of romaine, loose leaf lettuce like oak leaf, lollo rosso, and

tango, chard or beet greens, mizuna, arugula, rocket, frisée or endive, radicchio, and sometimes spinach. In addition to spring mix, you can also offer: dandelion, endive, bok choy, mustard greens, grated yellow squash, and collard greens. Be sure to wash all produce thoroughly and chop into bite sized pieces.

FLOWERS: Hibiscus, dandelion blooms, marshmallow blooms, squash blossoms, rose petals and nasturtiums. Bee pollen granules are also a great addition to the diet – in moderation.

NOTE: Uromastyx are relatively new in the pet trade, and opinions regarding feeding and care can still differ greatly from specialist to specialist. Some keepers feed an even greater variety of vegetables, and some stick to the basic list as outlined above.

These lizards would not encounter corn or squash in their natural environment, but *would* encounter weeds and grains containing nutrients similar to corn and squash and the other food items listed above.

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 reptile to shed properly.

If your lizard 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.

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: Uromastyx metabolically manufacture water in their own bodies, as they would have little exposure to water sources in their native regions. In addition to this self-made water, they also receive water from the greens they eat every day.

Most uromastyx specialists advise against keeping water in a uromastyx enclosure. Many species of uromastyx are known to have aspirated on small amounts of water.

Soaking sessions a few times a week under your supervision will allow your lizard to drink water if he or she desires.

SOAKING: All lizards can benefit greatly from a good deep-water soak at least once a week. A plastic tub makes a good reptile 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:

40 – 100 gallon reptile tank with very secure mesh top with clips. (20 L (20x13) tank is acceptable for babies.)	Lg. dome and 100 watt bulb for 40 gal (36x18 tank) Lg. dome and 150 watt bulb for 75 gal (48x18 tank) (dome and 75 watt basking bulb for 20x13 baby tank)
Under tank heater – placed under same side of tank as basking light	Temperature / humidity gauge – do not stick to side of tank
At least one dry hide house	Shredded aspen bedding, newspaper or paper towels for the bottom of the tank

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.

ENCLOSURE SIZE: The enclosure should be a solid glass sided tank long enough to create the two separate temperature gradients (warm and cool); a uromastyx tank should be at least 30-40 gallons or larger for an adult and at least 20L for a baby.

IT IS NOT TRUE THAT A REPTILE WILL ONLY GROW AS LARGE AS ITS ENCLOSURE!!

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.)

NOTE!! : 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.

BEDDING: We recommend a shredded aspen bedding since it will not cause impactions 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.

Although many uromastyx caregivers may recommend millet as the perfect bedding, we strongly recommend against it. Many uromastyx visit the exotic vets for treatment for ingested feces, which were inadvertently eaten along with the millet bedding.

Sand is also strongly recommended against, as it can cause impactions when eaten by the lizard. Uromastyx do not like sand anyway, and actually avoid it in their natural habitat.

CAGE “FURNITURE”: Cage furnishings should be kept to a minimum. Live plants will most likely get eaten. Large, heavy rocks are dangerous, as your lizard will try to burrow under them and may be crushed under the rock’s weight. Uromastyx are not known to climb, so branches are not necessary unless they are creating a canopy for hiding. If creating a canopy, be sure the lizards have good direct access to both the heat and UVB lamps for basking purposes.

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 60 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 lizard, 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 along with UVB light, he may become sick with issues such as respiratory disease or MBD and may stop eating, as lizards have a hard time digesting their food without proper heat and light.

Additionally, because the uromastyx requires temperatures that are so hot, more than one basking/ceramic emitter may be necessary to reach the proper temperatures.

DAY/NIGHT LIGHT CYCLES AND HEATING: All lizards must have distinct day and night periods in their enclosure to maintain their biological rhythms. Uromastyx 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 skin; 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; 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 lizards, reptiles and amphibians. If your vet sees your pet regularly, many common conditions that afflict pet lizards, 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 skin; small reddish brown spots (mites) around mouth, eye area, ear area; irregular jaw line, ‘dents’ in mouth with (or without) cottage cheese-like material (stomatitis); cloudy eyes or dull colored body when not in a shed; dark patches on body; thinned body; irregular feeding and defecating habits. Also, limp, lethargic; sunken eyes; obvious bite marks or wounds from cage mate or prey. Red, fluid filled patches may indicate thermal burns.

SOME COMMON PROBLEMS INCLUDE:

HEALTH ISSUE:	SYMPTOMS:	TREATMENT:
Calcium/phosphorus imbalance; MBD	Failure to grow, weakness, limb deformities and fractures, seizures	See exotic pet veterinarian, ensure optimal diet with proper calcium supplementation and UV light
Intestinal parasites (coccidia and pinworms are common)	Failure to grow, loss of appetite, abnormal stools	See exotic pet veterinarian (fecal parasite evaluation and appropriate medication)
Egg binding in females	Abdominal enlargement, decreased appetite, difficulty defecating	See an exotic pet veterinarian immediately.

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