

Red-Eared Slider (*Trachemys scripta elegans*)

Difficulty: Hard

The red-eared slider is an 10-12” long aquatic turtle with marbled dark green and yellow coloration, dark spots on each of the plastron scutes, and most notably, a red stripe behind each eye. Adult females are typically larger than males.

Red-eared sliders are native to the southern and southern central regions of the United States, but it has invasive populations around the globe, making it one of the world’s 100 Most Invasive Species, according to the IUCN. Red-eared sliders are almost entirely aquatic, inhabiting ponds, lakes, swamps, and slow-flowing rivers.

Red-eared sliders typically have a 20-30 year lifespan, but are capable of living longer. They are popular pets in the US, and also one of the most abused reptiles in captivity, often severely neglected and/or illegally released into the wild. Although incredibly hardy and adaptable, red-eared sliders are not easy or inexpensive pets, and individuals considering this species as a pet should take this into consideration.

Shopping List

- Waterland tub, large
- 34” T5 HO forest UVB bulb
- 34-46” T5 HO 6500K fluorescent/LED lamp
- 36” T5 HO fixture with reflector, x2
- 90w PAR38 halogen flood bulbs, x2
- Dual dome heat lamp fixture
- Aquarium heater, rated for 200+ gallons
- Plastic heater cover
- Infrared thermometer
- Digital probe aquarium thermometer
- Light fixture chains (for hanging from ceiling), x6
- Extension cords, as needed
- Canister water filter, rated for 400+ gallons
- Filter media
- Siphon
- Surge protector power strip
- Ground-fault circuit interrupter (GFCI)
- Play sand (for basking area)
- Misc. décor (substrate, live plants, rocks, wood, toys, etc.)
- Turtle pellets
- Cuttlebone
- Soft toothbrush

Housing

Red-eared sliders need an enclosure that is large enough to give them adequate opportunity to thermoregulate, explore, hunt, and generally exercise natural behaviors. The general rule for housing one aquatic turtle is to offer at least 10 gallons of water per inch of shell length. Given that red-eared sliders generally grow to be 10-12” long, you will need at least 100-120 gallons of water.

Considering that red-eared sliders are a primarily aquatic species, this enclosure must be completely watertight and leak-proof. This can be accomplished with an aquarium, stock tank, or pond. Note that ponds (whether indoor or outdoor) are generally superior housing for red-eared sliders compared to aquariums.

Can multiple red-eared sliders be housed in the same enclosure?

Although red-eared sliders are frequently observed in groups in nature, there’s a big difference between living in a giant pond and living in an aquarium — namely, that the turtles have the space to run away from each other as

needed. This isn't possible in most indoor turtle tanks, and often leads to bullying. Fortunately, red-eared sliders seem to do quite well when housed alone, so it's best to keep only one per enclosure.

Lighting & UVB

Red-eared sliders are diurnal, which means that they are most active during the day. This also means that they need exposure to bright light and UVB during the day to maintain good mental and physical health. Light sources should be left on for 12 hours/day.

UVB Lighting

UVB lighting can be tricky, because in order to get the right strength of UVB (measured by UV Index, or UVI), distance must be considered. To provide appropriate UVB to a red-eared slider in a 48" long enclosure, you will need one [34" Arcadia T5 HO 6%](#) or [Zoo Med T5 HO ReptiSun 5.0](#) in a reflective T5 HO fixture. The lamp should be hung from the ceiling to be 13-14" above the basking spot.

(This recommendation is an approximation. It is strongly recommended to use a Solarmeter 6.5 to determine the best placement to achieve a UVI of around 3.0 – 4.0 in the basking area.)

Daylight Lighting

A UVB bulb isn't bright enough to replicate daylight. To get a little closer to this goal, you will need to supplement with a bright, 6500K T5 HO fluorescent or LED lamp, long enough to span half to 3/4 of the enclosure. This is particularly important if you are using live plants, but it is also valuable for supporting your turtle's general wellbeing. The [Arcadia Jungle Dawn LED Bar](#), [Bio Dude Glow & Grow](#), [Bio Dude Solar Grow](#), and the [Vivosun T5 HO 6500K grow bulb](#) are all good choices.

Heating

Humans are *warm-blooded*, which means that our body temperature is regulated automatically. Turtles, however, are *cold-blooded*, which means that they have to move between areas of different temperatures to regulate their body temperature. In the wild, red-eared sliders warm up by climbing out of the water to bask on a sunny rock or log. In captivity, you will need a halogen heat lamp, basking platform, and a water heater.

- **Basking surface temperature:** 95-104°F (35-40°C)
- **Basking air temperature:** 85-90°F (30-32°C)
- **Water temperature:** 74-76°F (23-24°C)

To create a large, evenly-heated basking area, you will need two [90w Zoo Med Repti Tuff Splashproof Halogen Lamps](#) and a [Zoo Med Combo Deep Dome Dual Lamp Fixture](#). Hang the fixture from the ceiling so it is the same distance from the basking platform as the other lamps. If you notice that the basking area is too warm, dial it down with plug-in lamp dimmers. If your basking area is too cool, you will need higher wattage bulbs.

To measure the temperature of the basking area, you will need an infrared thermometer (a.k.a. temperature gun). To measure the temperature of the water, you will need a submersible digital probe thermometer. The [Etekcity 774](#) and [Zacro LCD Digital Aquarium Thermometer](#) are good devices for these jobs.

Indoor ponds should be heated with an aquarium water heater that is rated for the amount of water in the enclosure, such as the [600w Bulk Reef Supply Titanium Heater System](#). Install a plastic cover around the heater to prevent burns from accidental contact.

Water Maintenance

Aside from keeping the water at the right temperature, you also need to keep it clean. This requires excellent filtration and regular water changes, making it one of the most expensive and labor-intensive aspects of red-eared slider care.

You need a canister-style filter that is capable of handling at least 2-3x the amount of water in your enclosure, because turtles are *incredibly* messy animals. So for example, if you have 120 gallons of water, you need at least 240 gallons of filter power — this is NOT an aspect of turtle husbandry to cheap out on! The Large Waterland Tub can hold up to 200 gallons of water, so we recommend the [Fluval FX6 High Performance Aquarium Canister Filter](#) to get the job done.

Filtering alone is not enough. You also need to remove and replace 30% of the water once every 1-2 weeks in order to prevent toxic buildup of compounds like nitrates. This is a lot of water to move, so it's best to use a [Python siphon](#) or even a water pump to help with the process. Don't forget to thoroughly disinfect the area if you drain the water into a bathtub or sink!

Basking Platform

Red-eared sliders need land in their tank, too! This gives them a place to warm up, dry out, and soak up some good old UVB. If you are using a Waterland tub, as is recommended in this care sheet's shopping list, then the good news is that an ample basking area is already included as part of the enclosure. Simply fill the "land" portion with play sand and you'll be good to go! We also recommend embedding a piece of flat stone like flagstone or aquarium slate directly underneath the heat lamp to create the best basking spot possible.

We do not recommend the turtle basking platforms that are popular throughout the hobby and in stores, as they do not allow turtles the opportunity to exercise out of the water. Being only semiaquatic, pond sliders are known to occasionally walk around on land in the water, so it's important to provide that opportunity in captivity as well.

Décor

Decorations play a vital role in your turtle's enclosure as environmental enrichment. These items provide climbing opportunities, hiding places, encourage exercise, stimulate your pet's natural instincts, and help promote overall wellbeing. And, of course, they make the enclosure look nicer!

Substrate, pieces of wood, rocks, underwater hideouts, live plants, and even (compatible) live fish can be sources of enrichment for your turtle. Avoid using gravel or pebbles, as these can be accidentally ingested and make your turtle very sick. If you like the look of rock, use medium to large river rocks instead.

Food

Red-eared sliders are omnivorous, which means that they need to eat a variety of different types of both plant and animal matter in order to get the nutrients that their bodies need. How often red-eared sliders need to eat depends on their life stage:

Red-eared sliders younger than 1 year:

- 50% protein / 50% vegetables
- protein food daily
- vegetable food daily
- turtle pellets every other day

Red-eared sliders older than 1 year:

- 25% protein / 75% vegetables
- protein food 1-2x/week
- vegetable food daily
- turtle pellets 2-3x/week

A portion of protein should be as much as your turtle can eat in 5-10 minutes, a portion of vegetables should be the same size as the turtle's shell, and a portion of pellets should be about the same size as your turtle's head.

The key to providing a healthy, balanced diet for your turtle is VARIETY! Here is a quick list of safe, nutritious foods to get you started:

Protein foods: crickets, earthworms, dubia roaches, freeze-dried shrimp/krill, frozen bloodworms, silkworms, snails, guppies, mollies, platies, mosquito fish

Vegetable foods: collard greens, dandelion greens + flowers, endive, green leaf lettuce, kale, red leaf lettuce, romaine lettuce, raw grated squash, carrots, green beans, raw grated sweet potato

Turtle pellets: Omega One Juvenile Turtle Pellets, Omega One Adult Turtle Sticks, Tetra ReptoMin, Zoo Med Natural Aquatic Turtle Food, Mazuri Aquatic Turtle Diet

Chopped fruit like skinned apple, berries, melon, and papaya can be used as occasional treats.

Supplements

Turtle pellets take most of the role of supplementation in a red-eared slider's diet, but you will also need extra calcium. Calcium powder isn't an option, since red-eared sliders prefer to eat in the water, but you can use a cuttlebone. Providing a cuttlebone in their enclosure fulfills that need and helps prevent calcium deficiency problems such as MBD. Chewing on cuttlebones also helps keep your turtle's beak trimmed!

Depending on the size of your turtle, it may be best to put the cuttlebone into your turtle's tank whole or to chop it into chunks. However, *don't toss the cuttlebone into your red-eared slider's enclosure without removing the hard plastic backing first!*

Expect to replace your turtle's cuttlebone every 1-2 months.

For more information on red-eared slider care, please read the full [ReptiFiles Red-Eared Slider Care Guide!](#)