



Zoo, Avian, Aquatic and Unusual Pets
Veterinary Consultancy

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Terrapin Care Guide

This is a general overview on terrapin care. Please use this as a guide to aid you but note that further information on your species should always be carried out. It is imperative that the correct set up/husbandry requirements are met in order for your terrapin to thrive.

Note on the name: In the USA the term turtle is used to describe any aquatic chelonian. In the UK and most of Europe the term turtle is usually used for chelonians whom live in marine, salt water environments. The term terrapin is used for our fresh water chelonians that will spend more time out of water, i.e when basking.

Note on owning terrapins in the UK:

There are strict rules on owning listed invasive non-native animals in the UK. This includes: '*Terrapins - all subspecies including red-eared slider, yellow-bellied slider, Cumberland slider and common slider.*' Terrapins were listed as a concern from 3rd August 2016. If you owned your terrapin before this date then you are permitted to keep your terrapin as a companion animal as long as you follow strict rules. Please look at the information on the government website to ensure you comply with these rules:

<https://www.gov.uk/guidance/invasive-non-native-alien-animal-species-rules-in-england-and-wales>

Housing:

Terrapins need to be housed in a large secure tank or aquarium. Larger species may live in a secure outdoor pond with access to appropriate heating and lighting.

We will discuss the indoor set up for housing a terrapin. A glass tank is the most popular option to house your terrapin in. Choose a glass tank that is specifically designed to hold water. Glass vivarium's or tanks for land dwelling reptiles are made of thinner glass which will crack under the pressure of water. Remember, your tank will also need to contain rocks for basking areas and possibly plants, as well as the water weight so ensure you choose a tank that can hold all of this. As a rough guide a tank with a glass thickness of 6-10mm that is designed to hold fish should be suitable.

Try to provide your terrapin with as large a tank as possible. The minimum recommend size of tank should be based on the terrapin's size as an adult. To determine the length and width of the tank measure the length of the terrapin's plastron (the bottom part of the shell). For the length of the tank ensure it is at least 8 times the length of the



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plastron and for the width of the tank ensure it is at least 4 times the length of the plastron. This is seen in text as 8 x 4 PL.

For the height or water depth of the tank there must be sufficient water for the terrapin to swim freely and lie fully submerged. It is recommend that at least half of the water in the tank is greater than 4 x the carapace (top half of the shell) height. For example, *'for an enclosure with a 100 x 30cm (3' x 1'), then at least half of this area should be of a greater depth than 4 times the turtle's carapace height, e.g. 50 x 30cm (18" x 12") of the full water area.'*(FBH, 2022)

Please ask if you are unsure. Further information can be found here:

- FBH (Federation of British Herpetologists), 2022. *Code of practice for recommended minimum enclosure sizes for reptiles.* (Online) Available at: <https://www.thefbh.org/news>

Position your tank somewhere that will be able to support it's weight, away from drafts and away from a window. Sunlight could increase the temperature of the tank and make it difficult to obtain the correct thermal gradient for your terrapin. It could also cause an overgrowth of algae in your tank which will affect the water quality and therefore the health of your terrapin.

Within the tank you must provide a basking area for your terrapin to absorb heat and UV rays out of the water. As a minimum this must be large enough for your terrapin to easily turn around. There are a few options of basking areas. These include a floating platform, which is popular as they do not take up too much space and your terrapin can swim underneath it however, you must ensure your terrapin cannot get trapped by it. Alternatively a basking platform can be attached above the tank. This also allows for more swimming space but ensure you can easily detach the platform for cleaning.

Always ensure a ramp is provided for your terrapin to get to it's basking area, this makes it easier for them to get to the platform and many terrapins enjoy being half submerged when basking.

Heating:

Terrapins are ectothermic meaning they require an external heat source to warm their bodies up to carry out normal metabolic processes.



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Both the water and the basking area should be of the correct temperature for your terrapin.

Water temperature:

To maintain a constant water temperature an aquarium heater can be used. This should be controlled by a thermostat. Place the temperature probe at the opposite end of the heater to avoid any false readings.

The water temperature for *Trachemys scripta* (subspecies: Red-eared slider, yellow-bellied slider and Cumberland slider): 22-25 °C

Basking area:

A basking heat lamp, a ceramic bulb that does not emit light should be placed at one end of the basking area. This will create a focal 'hot spot'. Allowing your terrapin to bask underneath the heat source to get to their preferred temperature. They can then move away to a cooler spot on the basking area to ensure they do not over heat. This allows your terrapin to maintain their preferred temperature as they can place themselves in different areas of the basking spot throughout the day. A thermostat should be used with the heat lamp to ensure the correct temperature is maintained.

Regular temperature monitoring of both the water and the basking area should take place. Ensure you use a thermometer that is precise and easy to read. It is recommended that you have a thermometer that can alert you to any changes in temperature. This way you can act quickly to avoid any problems to your terrapins health.

The basking temperature for *Trachemys scripta* (subspecies: Red-eared slider, yellow-bellied slider and Cumberland slider): 30-35 °C

UV Lighting:

One part of UV is called UVB. The benefits of UVB include maintaining the correct vitamin D3 and calcium levels, supporting the immune system and maintaining circadian rhythm.

We recommend the use of a strip UV light of 12% above the tank, with a reflector to ensure all the UV rays are focused downward onto your terrapin. The height at which to place the UV light will depend on the size of your turtle, the size of your tank and the make or strength of the UV light.



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Have a look at the following website to determine at which height you should place your UV light: <https://arcadiarep1stg.wpengine.com/lighting/partial-baskers/>

Please also have a look at the following website for further information: <http://www.uvguide.co.uk/whatreptilesneed.htm>

Overtime the UVB output decreases, despite looking like the light is still on. Therefore the light should be changed regularly, depending on manufacturers guidelines. Alternatively use a UV Index meter reader. This can be used to regularly check the UV levels. The UV index should range from 3.0-5.0 in the basking area to 0 in a shaded area.

All lamps should also be controlled by a timer and be on for 12 hours in the day and off for 12 hours at night.

Humidity:

High humidity in the basking area can prevent your terrapins shells from fully drying off which can lead to a build up of micro organisms that can cause shell rot. This is particularly a problem when your terrapin may be shedding as water can become trapped between the scale layers, meaning bacteria can easily build up.

A hygrometer is used to measure the humidity and should be placed over the basking area.

The humidity range for *Trachemys scripta* (subspecies: Red-eared slider, yellow-bellied slider and Cumberland slider): 70-80%

Water filtration:

A water filter will help you to keep the water clean which is essential for the health and welfare of your terrapin. The type of filter you use will depend on the size of your tank, number of terrapins and how messy your terrapins can be.

When choosing your filter find one that is easy to maintain and allows you to adjust the flow rates easily. This means you can monitor the levels of water filtering through it.

Having a filter is not a replacement for regular cleaning and maintenance. Ensure you are removing any debris from the bottom of the tank daily and cleaning any rocks, hides etc that have a build-up of algae weekly. Carry out partial water changes every few weeks to keep ammonia levels low.

Water maintenance:



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You must monitor the water quality in your terrapins tank daily. This includes checking the temperature, pH levels and salinity (the build up of dissolved salt in the water).

pH levels should range from 6.5-8 and many devices are now available to measure this ranging from a hand held device to a digital screen with a probe attached.

Salinity should be kept low <12 psu (practical salinity unit) and again many devices are now available to measure these (Williard et,al, 2019).

Further information on salinity can be found here:

Williard, A S, Harden, L A, Jones, T T and Miday, S R (2019). Effects of temperature and salinity on body fluid dynamics and metabolism in the estuarine diamondback terrapin (*Malaclemys terrapin*) Available at:

<https://journals.biologists.com/jeb/article/222/10/jeb202390/33935/Effects-of-temperature-and-salinity-on-body-fluid>

Cage enrichment:

Suitable substrate should be placed at the bottom of your terrapins tank to provide your turtle with a more realistic and natural environment. It is also more aesthetically pleasing for you, the owner. Suitable substrates include aquarium gravel, sand and pebbles. Ensure it is a substrate you can replace and clean easily.

On top the substrate large rocks and logs can be used for them to swim around or on top off. Ensure that are made from non-toxic materials and have been cleaned thoroughly before adding them to your terrapins enclosure.

Hides or caves should be used to allow your terrapin somewhere to go to feel safe and secure. Ideas for these include terracotta plant pots, large plastic boxes weighed down with rocks or large pieces of wood. Ensure your terrapin can not get trapped in any hides you decide to use.

Plants can also be added to your terrapins tank as enrichment. Providing your terrapin with a more naturalistic environment. Be sure to choose aquatic plants that can survive in shallower water with minimal light exposure. Plants can help reduce algae build up as they are competing for carbon dioxide and plants can help filtrate the water by removing the build up of compounds such as ammonia and nitrates.

Bare in mind that some terrapins will like to dig up plants and or tear up the foliage meaning additional cleaning.

A few suitable plants include: Hornwort, Moneywort, Java fern, Java moss and Anacharsis.



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Diet:

A high quality dried terrapin diet can be provided along with defrosted fresh water fish and live invertebrate foods. Terrapins will feed in the water.

Ensure the fish is at room temperature before feeding otherwise it could make your terrapin unwell.

Live invertebrate food includes, shrimps, blood worms, earth worms and locusts.

For an adult terrapin feed every two days and offer as much food as it can eat in five-ten minutes. This ensures your terrapin will not over eat and become obese a common problem with terrapins, leading to major health concerns. We recommend weekly weighing of your turtle to ensure they do not become obese but equally not losing weight from an unseen illness.

Ensure to use a net to clean and remove any uneaten food from the water after feeding.

Live, safe plants can also be fed upon and should be encouraged to provide enrichment. Just be aware this can become messy and require extra cleaning.

We do not recommend keeping terrapins with live fish as they will likely over feed on them if small enough or chase and cause stress to larger fish.

Supplements:

Supplements provide the essential vitamins and minerals that your terrapin may not be able to get from a captive diet. We recommend the use of Calci-dust or Nutrabal which can be sprinkled onto food before feeding, providing they are not immediately going into the water ie. When hand-feeding your terrapin using forceps/or tongs. Alternatively, all live food should be gut loaded. Gut loading is where the animal is fed high calcium supplements before being fed to your terrapin.

The use of a cuttlefish bone can also be used as a natural way to provide calcium and also some enrichment.

Companions:

Be aware of the rules for owning a listed animal (see above) which includes not breeding your animal. Unless your terrapin is spayed or castrated they must be kept in same sex groups. Fighting will occur if they are not provided with enough space and enough basking areas to bask separately. Ensure all terrapins are eating



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adequately and check them regularly for any bites or wounds that may be caused from fighting.

Medical conditions we most commonly see:

Many cases are connected to poor husbandry. Try to meet all their husbandry needs to avoid a vet visit. Conditions we may see are:

- Endoparasites (worms or protozoa): This is why we ask you to bring a faeces sample in when coming to your appointment. This is something we can easily rule out at the clinic if we have a fresh sample to check.
- Shell rot
- Respiratory issues
- Obesity leading to other conditions

Insurance:

Unfortunately, we can never predict what may happen to our terrapins, so we highly recommend getting pet insurance. A monthly fee can give you peace of mind knowing your pet is covered for the best treatment should anything happen. There are many insurance companies available, so we advise contacting each of them to find a policy that is right for you. We advise a policy that will cover your terrapin for its whole lifetime, for chronic illnesses and for the maximum amount that is available. If this is not possible then covering your terrapin for as much as you can afford will give you peace of mind should an accident or emergency occur.