BSAVA CLIENT INFORMATION LEAFLET

Reptile series

BSAVA Factsheet for Owners:

Terrapins

This factsheet has been prepared to help you understand the care requirements of terrapins. It is essential to note that, due to their status as an invasive species, it is illegal to obtain red- or yellow-eared sliders in the UK or EU. Therefore, this factsheet has been created for those who already have slider terrapins in their care. It is important to familiarize yourself with the care needs of your terrapin so that you are aware of their requirements, such as for housing, nutrition, handling, routine and veterinary care. Whilst this factsheet details a broad range of information, please speak to your vet if you have any further questions.

Terrapins comprise various species of semi-aquatic turtle that live in fresh or brackish water. Pond terrapins can also be called 'sliders' and the most commonly kept terrapin is the 'red-eared slider' (*Trachemys scripta elegans*) with a lifespan of around 30 years old.

Housing

Size

As a minimum, terrapins require an enclosure where they can swim fully submerged below the surface of the water without touching the bottom or sides of the enclosure. Ideally, a tank should contain 80 litres of water for every 5 cm of shell length (thus, a terrapin with a 20 cm long shell needs 320 litres of water). The depth of the water should be 1.5 to 2 times the length of an adult terrapin's shell. There should be adequate space for terrapins to climb out of the water and move about on dry land. The space above the water needs to be large enough so that a temperature gradient can be created; a heat lamp should be placed at one end to create a basking spot, and there should be space away from the basking spot where terrapins can move to that is cooler. It is a good idea to house young terrapins in an enclosure that will be large enough for them when they reach their adult size (around 25 cm when fully grown). The enclosure should be made from secure, watertight, easy-to-clean material – a glass tank is ideal. A temporary holding enclosure made of the same material will also be needed to place animals in whilst the main enclosure is being fully cleaned. Terrapins are best kept individually.

Heating and lighting

Terrapins require UVA and UVB lighting to aid in the absorption of calcium in their diet and to synthesize vitamin D3. A UVB (e.g. mercury vapour) lamp should be fitted so that two-thirds of the tank has strong UV lighting and one-third has a lower light exposure. The lamp should



be turned off at night to simulate natural lighting and temperatures. A ratio of 12 hours of light during the day and 12 hours with the light off at night is ideal.

The lamp should provide a basking zone of between 30 and 35°C, controlled by a thermostat. If multiple animals of the same sex are to be housed within the same enclosure, you will need to provide multiple basking spots, as terrapins become aggressive toward one another if they have to compete for resources. Digital thermometers should be placed in the basking spot and the cooler area of the enclosure so that temperatures can be checked daily. The lamp should be placed the correct distance away from the animal and protected by a guard to prevent burns. A Solarmeter® can be useful to measure the UV intensity within the enclosure; terrapins, being partial or open sun baskers, require a UVI (ultraviolet index) gradient between 0 (full shade) and 7.4 (basking spot) across the enclosure.

The temperature of the water will need to be controlled using an aquarium heater, with an inbuilt thermostat and guard. Water temperatures will differ depending on the terrapin's age, with higher temperatures required for hatchlings and yearlings (around 25°C) and cooler temperatures for adults (around 22°C). A waterproof thermometer can be used to monitor water temperature.

BRITISH SMALL ANIMAL VETERINARY ASSOCIATION
Woodrow House, 1 Telford Way, Waterwells Business Park, Quedgeley, Gloucester GL2 2AB
Copyright © BSAVA 2024 • Last updated: February 2024 • www.bsavalibrary.com/cil

Humidity

Good ventilation of terrapin enclosures is essential to reduce the risk of health problems associated with high humidity. Therefore, a cover that does not hold in water vapour, such as mesh, is ideal. Glass lids that are usually used with fish tanks are not ideal, as they can lead to increased levels of humidity in areas above water in the tank.

Substrate

Substrate is the material used to cover the floor of your pet's vivarium. A substrate on the base of the tank, below the water, should be used to prevent terrapins from shredding the sealant. Fine sand can be used, but gravel should be avoided as this can be eaten and cause a blockage in the digestive tract. A mixture of sand, soil and large smooth pebbles can be used in dry areas. All substrates should be cleaned regularly.

Furnishings

Terrapins should have an area of their enclosure where they can hide and feel secure. Rocks or ceramic pots can be securely placed beneath the water both for your terrapin to explore and hide between. There should be a gentle slope for ease of access to the water. Basking areas should be easy to access and should be rock, slate or wood. No organic material should be used in the enclosure without first being thoroughly disinfected, to ensure that no pathogens are introduced from the outside environment.

Maintaining water quality

If given the opportunity, terrapins will eat and drink from the water in their tank, as well as defecate in it. For this reason, it is essential to maintain the water quality (keeping the water clean, as well as the right balance of bacterial flora). There are a number of things that should be done in order to ensure the correct water quality:

- A quality water filter needs to be set up and secured in a place where it cannot be dislodged
- Any faeces, substrate debris and uneaten food should be removed daily using a net
- Once a week, around 25% of the water should be changed to dilute waste products in the water



- Add a dechlorinating product to any water that is added to remove unwanted chlorine
- Squeeze the filter sponge into the new water in order to retain the beneficial bacteria
- Use water testing kits to check water quality often (i.e. that water is low in ammonia and nitrate)
- Once a month, terrapins should be placed in a holding aquarium whilst a full clean of the enclosure is done
- Enclosure surfaces and furnishings should be scrubbed with a reptile-friendly cleaner and then rinsed.

Feeding

In the wild, terrapins eat a varied, omnivorous diet. It is important that terrapins kept as pets also have a varied diet of terrapin food, fish, insects and plant material. It should be noted that terrapins will drink the water they swim in, so additional water bowls are not needed, but keeping the water clean is essential (see above). It is often recommended to feed terrapins in a separate tank, or area of water, so as not to pollute the main body of water.

Commercial feeds

Quality dried terrapin foods are available to feed alongside fish, insects and plant material. These are available as both pellets and food sticks but should not be the only food provided, so do not have to be fed every day. Pellets can be placed directly into the water; only as many as the terrapin can eat within 5 minutes should be fed (a good guide is a small handful about the same size as the terrapin's head).

Frozen foods

Frozen terrapin food can be purchased that comes in blister packs. These packs contain a mixture of frozen fish, seafood and algae. They should be thoroughly defrosted at room temperature before being added to the water in the terrapin's enclosure. Only the amount that your pet can eat within 5 minutes should be fed. (Note: terrapins should not be kept with live fish as they will chase or kill them.)

Plant material

Terrapins should be fed leafy greens and aquatic plants such as dandelion, water cress and pond weed, as well as fruit and vegetables such as carrots, apples, pears, squash and green beans). Any uneaten food should be removed at the end of the day to avoid spoilage. Ensure that any plants added to the enclosure are non-toxic and safe for your terrapins to eat.

Insects

Live insects such as mealworms, locusts and crickets can be fed occasionally. These should be no larger than the terrapin's head, and any uneaten insects should be removed from the enclosure at the end of the day. Live river shrimp and blood worms can also be given in the water.

Supplements

Insects should be fed a vitamin supplement that will be received by your terrapin when they eat them (powders that are used to dust insects for other reptiles can be washed off if they enter the water). Plant material can be lightly dusted with a reptile supplement powder, but avoid

BRITISH SMALL ANIMAL VETERINARY ASSOCIATION
Woodrow House, 1 Telford Way, Waterwells Business Park, Quedgeley, Gloucester GL2 2AB
Copyright © BSAVA 2024 • Last updated: February 2024 • www.bsavalibrary.com/cil

overprovision. A cuttlefish bone can also be added to the enclosure for terrapins to chew on as enrichment but are not a good source of biologically available calcium. A supplement that contains vitamin A (as terrapins cannot manufacture this in their bodies), vitamin D and vitamin E, as well as calcium, will keep terrapins in the best health.

Life stage feeding

Young, growing terrapins will have a higher calcium requirement than mature animals. This requirement can be met by ensuring a slightly higher dusting of calcium supplement is included in the diet. Ensure that insects and any vegetable pieces are small enough for consumption. Juvenile terrapins will eat more live food for growth, whereas adult terrapins should be fed a higher proportion of plant matter to prevent obesity.

Terrapins can become obese if over-fed (a sign of this is fat deposits at the base of their legs, where the leg meets the shell). It is a good idea to regularly weigh your terrapin so that you monitor their weight and health. If you are concerned about obesity, reduce the amount of protein your terrapin receives in their diet and consider talking to a vet who specializes in reptiles.

Handling

Terrapins should be handled with care and respect. Terrapins do not benefit from regular handling, and this should be avoided unless necessary. When you need to pick them up, such as for weighing, health checks or transportation, hold them firmly with two hands, positioned on either side of the shell. Terrapins will wriggle, so be sure to hold them securely (this is especially important if they are wet).

Ideally, young children should not handle terrapins, and handling should occur away from any other pets. Always ensure that your hands are clean before picking up your pet, and that hands are washed well after any handling. If your terrapin needs to be transported, such as to the vet, ensure that this is done safely. Terrapins can be carried in a ventilated plastic or secure cardboard container lined with damp paper. The container should be kept warm, such as with a hot water bottle placed on the outside of the container. Keep the time your pet is in transit to a minimum to reduce stress or excess changes in temperature.

Older pets

Depending on the species, terrapins can live for around 30 years, so owning these animals requires many years of responsibility. It is important to pay attention the changing needs of senior terrapins, to ensure that their later years are happy and healthy.

Feeding

The feeding of older terrapins should not be much different from other life stages. However, as animals age they may eat less, so monitoring your pet's weight and condition is important. Fattier insects, such as mealworms, should not be fed as often. Older terrapins may require vegetables to be grated and larger leaves to be torn up if they find chewing more difficult. An older terrapin's calcium requirements will not be as high as at other life stages, so avoid overprovision of calcium supplements.

Environment

A stress-free environment is even more important for senior reptiles. Older animals are more susceptible to stress, so ensure there are no factors that could cause any pain or discomfort. Make everything in their enclosure easily navigable, both above and beneath the water. It is important to make sure that access to and from the water is easy; a shallower incline for entry and exit should be provided, should your terrapin need it as they age. Basking temperatures should be kept high to ensure an optimal core temperature. When required, handling times should be kept to a minimum for older terrapins, and handling by inexperienced or young people should be avoided, as senior bodies will be more fragile.

Veterinary checks

As terrapins age, they may become more prone to health problems that require medical attention. It is important to have a check up with a vet, particularly a vet who specializes in reptiles. If you notice any concerning changes in your pet's behaviour, appearance or eating habits, it is advisable to have your pet seen by a vet who can identify whether any changes to their care needs or medical treatment is required.

How to medicate

Medication will likely be administered directly by your vet. Your vet will advise on how to administer any medication at home. A common health concern in terrapins is eye problems due to a lack of vitamin A. Vitamin A eye drops are available, which can be applied as drops directly, or using a cotton bud. Eye drops may also be prescribed by your vet if your terrapin's eyes become irritated. Speak to your vet to discuss administering eye drops. It is important to monitor your pet's response to the medication and inform your vet if you have any concerns. Follow any storage and disposal instructions that come with any medication.

Shedding

Terrapins will shed their skin, including the skin around their legs, neck and head, as well as individual plates on their shell. It is important that terrapins have plenty of access to dry space in order to help them shed, including rough surfaces to aid the process. This process should happen without intervention, but if your terrapin sheds constantly, or seems to have difficulty shedding all of their skin, speak to your vet.

Parasite control

You can reduce the risk of your pet getting internal or external parasites in several ways:

- Submit a faecal sample to your vet for a parasite check when first taking on responsibility for your pet
- Ensure no organic material is introduced to the enclosure without being thoroughly disinfected first
- Thoroughly defrost any frozen food and do not keep thawed food standing out before feeding
- Remove any uneaten food at the end of each day
- Keep water free from food debris and faeces and ensure water changes are performed regularly

➥

BRITISH SMALL ANIMAL VETERINARY ASSOCIATION
Woodrow House, 1 Telford Way, Waterwells Business Park, Quedgeley, Gloucester GL2 2AB
Copyright © BSAVA 2024 • Last updated: February 2024 • www.bsavalibrary.com/cil

- Feed terrapins in a separate tank or area of water to avoid polluting the main body of water
- Routinely disinfect the enclosure and contents with a pet-safe disinfectant
- Ensure your hands, and those of others, are clean before handling your pet
- Monitor the external appearance of your pet regularly for external parasites.

If you do notice anything that is of concern, speak to your vet and ensure that your pet has a check-up.

Calcium deficiencies

Captive reptiles can suffer from a common disease called metabolic bone disease (MBD), which describes a range of nutritional illnesses, often due to a lack of UVB lighting. This results in a vitamin D3 deficiency, which prevents reptiles from absorbing calcium in food. Clinical signs include lethargy, muscle weakness, swollen or bowing of the legs, abnormal beak or shell growth and softening of the jaw. It is therefore essential that your pet receives the correct lighting, nutrition and supplementation to avoid MBD, and careful research should be done to ensure the health and wellbeing of your pet. Speak to your vet for advice or if you have any concerns.



What is an emergency?

There are several signs that may indicate that your terrapin requires medical attention from a vet. It is very important that you are familiar with your animal's normal behaviour, to have the best indication of when this changes and when they may not be well.

If you notice any of the following signs, seek veterinary advice:

- Loss of appetite and weight loss: if your terrapin suddenly stops eating and shows a significant decrease in weight and/or body condition this may indicate a health problem
- Swollen eyes or ears: any swelling or irritation of the eyelids or swelling behind the eyes at the side of the head (ears) can be an indication of vitamin A deficiency and will require veterinary attention
- Respiratory distress: signs of respiratory distress include open mouth breathing, wheezing or gurgling noises or bubbling in the mouth. This could be indicative of a respiratory infection or a respiratory condition (often from bacteria in an unclean environment)
- Abnormal faeces: any significant changes in the appearance or frequency of droppings could be a sign of internal parasites or other underlying health condition
- Shell problems: red spots or slime on the shell, or continuous flaking of the shell, as well as a bad odour can be an indication of shell rot, caused by injury or an unclean habitat.

Further information

This leaflet is purely a guide for the basic care and welfare of terrapins. It is essential to research any animal species thoroughly before committing to their ownership and care. Always speak to a veterinary professional if you have any questions or concerns.

BRITISH SMALL ANIMAL VETERINARY ASSOCIATION
Woodrow House, 1 Telford Way, Waterwells Business Park, Quedgeley, Gloucester GL2 2AB
Copyright © BSAVA 2024 • Last updated: February 2024 • www.bsavalibrary.com/cil