

Species: Red-footed Tortoise

Geochelone carbonaria

Description: Red-footed tortoises are tropical rain forest tortoises whose range covers most of tropical South America. There are several regional variants, with some large adults having a straight carapace length (SCL) of up to 16"-17" (these larger red-foots



usually inhabit the tropical forests of southern Brazil, in the Pantanal range). There are possibly several sub-varieties of red-foots that will one day be separated into sub-species, and the most commonly recognised of these is the cherry-headed red-foot, or dwarf red-foot, whose SCL rarely exceeds 12" (10" being the average).

Are Red-foot tortoises for you?

Red-foots do make extremely good pets, being very friendly,

medium to largish animals as adults (4-8 kg). As with other tortoises in the UK, it is far better to buy from a genuine UK breeder. Unfortunately, red-foots don't require paperwork (article 10 certificates), so proving they are genuine UK-bred is difficult unless you choose a breeder from one of the recommended lists, such as the TPG recommended breeders list, or know of other people who can give reference to a reputable breeder. Never buy from a pet store even if the store owner assures you they are captive bred, as this can mean that they were bred in a captive farmed situation in their homeland where true captive breeding is not always genuine, and animals are often gathered from the wild. Imported red-foots often arrive in appalling conditions, are severely dehydrated, and full of internal parasites. Wild gathered and captive farmed red-foots mixed together often carry hexamita parva, an internal protozoa that infects the renal region, causing death in many imports, so it is important to take great care when purchasing a red-footed tortoise and buy genuine captive UK-bred only.

General Husbandry Requirements: Red-foots aren't really that difficult to house and are probably far easier to maintain in a captive environment than most Mediterranean tortoises. Firstly, depending on age, these tortoises can be housed in a variety of enclosures: table enclosures, vivariums, and under-bed storage units. **Red-foots are a species which do <u>NOT</u> hibernate.**

General Housing:

Red-foots come from tropical rain forests where the relative humidity is very high (in the region of 70% - 80+ %), something that is far easier to control in a enclosed space than in an open topped table or storage tub. Red-foots don't require the same ventilated air movement that Mediterranean species require, as they come from the stagnant rain forest floor. Table-top enclosures have more floor space available than a vivarium enclosure or storage container.



Hatchling Care: Red-foot babies thrive in good well-ventilated vivariums (unlike their Mediterranean cousins). The general care is the same as that of juveniles and adults, but with the addition of a few precautionary measures.

Hatchlings are very small and do become very quickly dehydrated. To prevent this hatchlings will benefit from being soaked daily in baths of lukewarm water. The water should be shallow enough so that the tortoises can easily keep their head above the surface. It should come up to the chin or where the top meets the bottom shell and the bath should last some 20 minutes.

A hatchling tortoise will very quickly lose its core body heat, and if it is unable to get back under a heat source to replenish this it could very quickly perish. Hatchlings are also very vulnerable to predation and for all these reasons it is recommended that they only spend time outdoors when there is someone around to observe them and able to bring them back indoors immediately when conditions dictate. Whilst outdoors it is recommended that they are housed in a secure enclosure with a mesh lid to protect them from predators such as foxes, large birds and dogs.

Housing Juveniles: Indoors - Red-foot juveniles also thrive in good well-ventilated vivariums (unlike their Mediterranean cousins). A large slate tile or flat rock makes the ideal platform for tortoises to feed from as it helps prevent the ingress of the substrate material which would undoubtedly occur if tortoises were fed from the floor of the enclosure. Provision for a number of hides should be provided; these can be placed in different areas around the vivarium/table top, giving tortoises a choice of where they sleep and hide.

Outdoors – a safe and secure area for juvenile red-foots is required. This can be achieved by sectioning off part of the garden to make a small enclosure. Within the

confines of this, an indoor area that has some form of heating controlled by a thermostat will need to be provided. This is essential as the weather can change so quickly and juvenile red-foots will need this area to maintain the body temperature and to provide protection from the elements. A reptile humidifier should also be provided. The keeper should ensure all electric cabling is weather resistant and installed by a qualified electrician.



Housing Adults: Adult animals can be housed in large table enclosures

once they have outgrown their vivarium enclosure, and a table enclosure 7'x7' will house a trio happily through the winter months.

Outdoor access is important through the summer months. Adult red-foots will also require a heated indoor area generally provided by using something like a large insulated garden shed. They must have access to these at all times, providing them with



a safe warm place to sleep at night and also protecting them from any sudden changes in the weather.

Substrates: For basic substrates it is best to replicate as near a natural form as possible. For example, a variety of forest barks can often be seen available on the market; but avoid any that are pine based (as the resin that is present can cause severe skin irritation) and also beech chips (which can produce huge amounts of fungal spores that can cause respiratory problems). Topsoil is also good, and combined with forest bark it makes a good floor medium, which also helps to hold a humidity level far easier than just bark itself. Hides should be given in several areas, and bark arches are always a favourite.

N.B. Hemp has sharp particles which can easily cause serious damage to tortoises and it can sometimes prove to be fatal especially if ingested and as such is not recommended for use as a substrate.

Heating and Lighting: Red-foots need a good all round ambient temperature in the region of 30°C-32°C (86°F-88°F), and a night time d rop to around 25°C (77°F) is tolerated well. It is important to keep humidity in the region of 70%-80%, as this helps keep their huge eyes clean and their skin supple. Red-foots cannot cope with dry conditions, and if denied humidity they will dehydrate quite quickly: their nares become dry causing them to wheeze, and they get ear and eye problems quite quickly. Some keepers use a heated room heated with an oil radiator, but ceramic heat emitters (CHEs) run through a thermostat for adults are useful. Heating pads can be fixed to the outer underside of enclosures, but they should not be fixed internally as they can become very warm if a tortoise lies on one for a long period and can cause plastron burns. Heating sources should always be run through a thermostat.

Red-foots don't enjoy or need powerful lighting (the more powerful mercury vapour bulbs like T-Rex and Powersun combined lights can be dangerous to the delicate eyes of very small and hatchling animals), but once their first year has passed and they are through to adulthood, they then seem to be more tolerant. Many prefer to use a 5.0 UVB strip bulb for young animals, moving to 100W T-Rex combined lights after 9-12 months of age. It is also preferable to heat the ambient air temp rather than use strong spotlights, as most red-foots do not take to prolonged basking, but rely instead on the air temperatures to maintain their body heat.

Feeding and Dietary Supplementation: Here again much controversial advice can be gathered regarding the diet of the red-footed tortoise in captivity. These tortoises have a much faster digestive tract than Mediterranean tortoises, so the weedy high-fibre diet that is important to Meds is not as good for red-foots, as little nutrient can be extracted because the food passes though too quickly. Red-footed tortoises tolerate fruit more readily in their diet, as they are able to break down and utilise the sugary content which would kill many other species with slower digestive tracts.

A good dietary management for red-foots should contain **70% greens**, weeds being preferred as they have good calcium/phosphorus content. Salad greens can be mixed in also, including watercress, romaine lettuce, lambs lettuce and some collard greens. **30% of the diet can contain a variety of fruits.** It is advisable to use fruits low in sugar, such as blackberries, raspberries and other such soft fruits. Papaya is also good



as it is very digestible and fibrous with a low sugar count. Red-foots accept all fruits in limited amounts, but try not to feed too much banana as it is high in phosphorus and fats, as is avocado. Mushrooms are very much appreciated, as are courgettes and boiled sweet potato.

Red-foots <u>DO</u> require animal protein in their diet, and animals denied this can have locomotion problems as adults. The best form of protein is hydrated cat or dog meal, but chicken breast can be offered, as well as snails and other small invertebrates. Protein feeds should only be offered in **small amounts weekly or fortnightly** and a small amount is all that is needed: for a hatchling one or two small hydrated biscuits is enough; adults require a tablespoonful once weekly.

Water: Red-foots need an ample supply of water, as they drink huge amounts daily and often enjoy sitting in a good sized water container.

Mineral and Vitamin Supplements

UVB levels in the tortoise's natural habitat are vastly higher than anything we experience in the UK, so its food must be lightly dusted with a vitamin and mineral supplement which contains vitamin D3 and calcium, such as Nutrobal.

Hatchling and Juvenile tortoises

In Northern climates a mineral and vitamin supplement such as Nutrobal or Reptavite should be offered to all growing tortoises on a daily basis for the first 3-4 years of life and after this it can be offered three times a week. This should be lightly sprinkled on the tortoise's food.

NB. That if the tortoise is kept outside of the UK, where the climate is similar to its natural habitat, and it is maintained outside where it can synthesise its D3 requirements from the UVB component of solar radiation, then the frequency of additional supplementation of D3 can be reduced.

Adult tortoises

Mineral and vitamin supplementation for adult tortoises in the form of Arkvits or Nutrobal can be lightly sprinkled daily on to the food.

Tortoises of all ages

In addition all tortoises, whatever their age, will benefit by some calcium supplementation in the form of limestone flour (or another form of pure calcium carbonate) and this can be sprinkled lightly on to the daily feed. Limestone flour is available from most equestrian stockists and is recommended due to its high calcium content and the fact that it is easily digested.

Cuttlefish, which contains calcium, should be made available at all times, and although it is not as easily digested as limestone flour, it is a good way of keeping the beak trimmed. Cuttlefish is often more readily accepted by red-foots than some other species.

When providing mineral and vitamin supplementation it is important that the manufacturer's instructions be followed to avoid the possibility of over dosing.