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(Courses, Reptile Accessories For Tortoises & Snakes)

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Leopard Tortoise Care Sheet

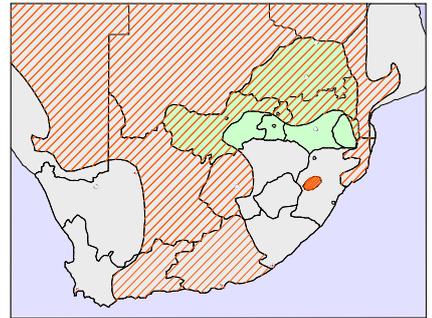
(*Geochelone pardalis* - Land tortoise like a leopard)

Written by Ian Dewsbury
4th revision - March 2004

A bit about them: -

Tortoises are from the **Order: Chelonia**, **Sub-order: Cryptodira**. Cryptodira means "Hidden Neck". All tortoises in this group draw their heads straight back into the shell, "hiding" the neck. The Leopard Tortoise is from the family **Testudinidae**, meaning terrestrial or land tortoises.

When threatened the tortoise draws its head back into the shell and then the front legs in front of the head, exposing the front of the legs. The legs are covered with enlarged "scales" for protection. The **Scutes** ("Scales or Plates" covering the bone or shell) provide colouration, but serve a greater function of insulation. This protects them against sudden temperature fluctuations.



The species prefers a semi-arid, thorny to grassland habitat, but will cope in areas of higher rainfall. Due to this, their range covers most of the sub-continent. Two sub-species occur in South Africa, namely *Geochelone pardalis pardalis* and *Geochelone pardalis babcocki*. *G. p. babcocki* is smaller and far more widespread and occurs from the southern Free State extending Northwards, while *G. p. pardalis* is restricted to the Cape and Northern Cape. Excluding size there is little to differentiate between the species when adults. In males of *Geochelone p. pardalis* the plastron concavity is more prominent (approximately 75% of the plastron) than that of *Geochelone p. babcocki* (approximately a third to half the plastron and more concave than dish shaped). Colouration is also different but not something you can use for definite identification. As hatchlings they can be told apart by markings but this is not 100% guaranteed. Should a hatchling have twin spots to each scute it will be *G. p. pardalis* while one spot is likely to indicate it is *G. p. babcocki*. All of the above is still under debate amongst the scientists, so for the purpose of this document the sub-species will be ignored.

They are large tortoises that can weigh over **30kg** and measure up to **60cm** in length. Males have longer tails and a deep plastron (Bottom of shell) concavity as opposed to the females which have short tails and a flat plastron. Colouration is varied. Generally hatchlings are a light beige with dark rings to scutes and a dot or dots to the centre. As they grow, growth lines appear with dark & light patches, which is the development of their juvenile to adult colouration. Juveniles are usually well coloured, but with age they become more plain brownish.

The neck skin of a leopard tortoise is speckled to a lesser or greater extent. This is the origin of their common name.

Below are diagrams showing the typical shell structure of a tortoises. The Leopard Tortoise is unique in that it does not have a Nuchal. It is the only South African Tortoises that never Has one present.

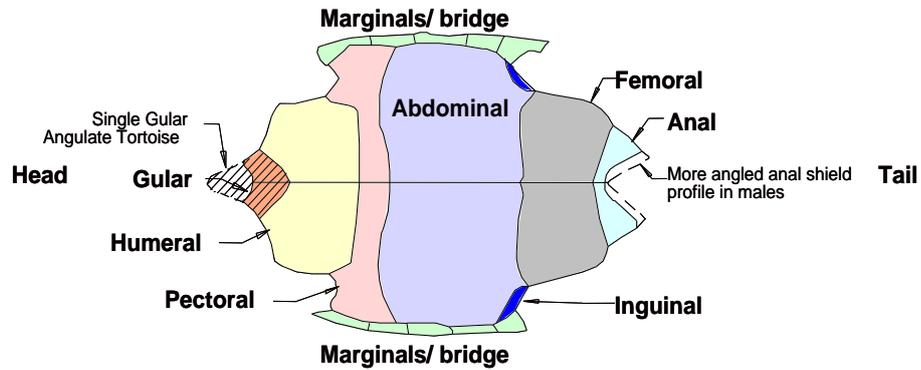


Diagram of the Plastron (Bottom of the Shell)

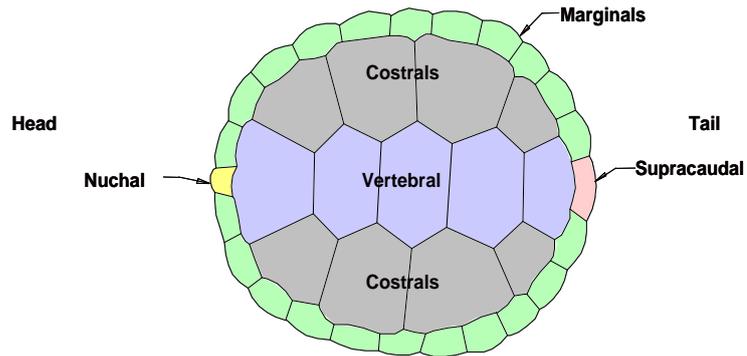


Diagram of the Carapace (Top of Shell)

Captive Habitat:-

A large percentage of the population don't think tortoises require much water. They however do drink large volumes & they also like to bathe. Soaking for hatchlings is very important to keep them hydrated. They absorb the water through their skin. I have relatively large ponds in all my enclosures so that all can bathe when necessary. Remember not to go too deep on your pond for hatchlings and juveniles. **Approximate depth, is to top of the marginals This is cause they are clumsy and topple over easily, often drowning.**

Most of the tortoises (especially small tortoises) that I have received have been bitten by the "pet" dog. **Dogs and tortoises DO NOT mix.** A large dog is quite capable of seriously injuring or killing your tortoises. Even your large leopard tortoise is not safe. I received two badly injured leopard tortoises that were attacked by the "pet" dogs that had grown up with the tortoises. The tortoises below had its right front leg savagely amputated, leading to the poor animals euthanasia. This was also by the "pet" dog. Your "Pet" dog may have shown no interest for years, but it only takes one occasion when you are not there to result in serious or lethal consequences.



Even if the dog doesn't cause any major damage to the tortoise like breaking the shell or puncture wounds and "just" gnaws on the animal, it is still very stressful and just makes your tortoise look terrible. In addition the dog may topple the tortoise over. **If it cannot right itself it will die** in the heat of the day or suffocation. They do not have a diaphragm like we do, so the organs put pressure on the lungs, causing suffocation.

Over and above all of this you can put both your dog & tortoise at risk. Worms can be passed across to each other causing illnesses, but tortoises can also carry salmonella. This may make your dog extremely ill.

**We are privileged to keep tortoises in captivity,
they are not there for a dog or child's amusement/ toy or teething apparatus.**

Leopard Tortoises also have large appetites and are **grazers**. They require about **80%** of their diet to be **grasses** to provide roughage in their system. They may survive in the cruelty of a small cage, sand base and fed an incorrect diet, but they will not thrive and enjoy life. Organ damage can occur through an incorrect "wet" food diet, and this can lead to a slow death.

Unfortunately there are too many cases that we see where this happens, mainly due to ignorance of the animal's requirements or the novelty of having one has worn off and / or the kids aren't interested any more.

Lastly when you do fence off an area for your animal, do not underestimate their power. If they can **see out**, they will keep **pushing to get there**, even if they have to break something to get there. A Leopard Tortoise (*Geochelone pardalis*) about 35-40cm long broke through pool fencing much to the owners delight, and then ate all the flowers to add salt to the wound.

Shade via bushes and trees will also be enjoyed. Although they enjoy the heat, they also like to be able to cool down in the heat of the day. Edible bushes will also be enjoyed greatly.—see *edible plant listing*.

Housing:-

In the beginning they will drive you mad. Wherever you put the hide, they will sleep elsewhere. In time you will find they will settle in a spot. They like it where they can **push up in a corner** for security and I have found they prefer to sleep in hides with an eastern entrance. The hide is there for night time comfort, shade on extremely hot days & during storms.

Due to this it needs to be **dry** and **drain well**. To make your own life easier, make sure it can be **easily cleaned** when soiled. I have a large hide due to having a minimum of 10 Big Leopard Tortoises at any given time. It has a concrete floor and is 2m long, 1.5m deep and 700mm high. This then gets filled with washed hay (reduce seeds etc... that could get blocked in the nostrils), that is **replaced as required**.

Hatchling Care:-

Hatchlings are **demanding children**. Firstly one needs to ensure that their **cage is secure** from escape but also from dogs, cats birds & other predators. Crows and any raptors are capable of eating your newly acquired hatchling. They require very shallow water bowls (about 1-3cm deep) that are in the **shade with stable and smooth access**. Often hatchlings drown falling into badly designed ponds/ bowls. Care must be taken to ensure that the hatchling can't get up or over items that can cause them to land up on their backs. In the heat on their backs, they will die by the time someone returns home. A hide must be provided and some edible plants—see *edible plant listing*.

During heavy **storms or cold weather** they should be **brought in** to alleviate the chances of Pneumonia or other respiratory tract infections.

A rule of thumb is, if YOU need a jersey, keep them inside.

As mentioned below, they need to be checked daily. If possible weigh them a couple of times a week. More than 10% weight loss a week is cause for concern & may indicate ill health. Seek veterinary assistance or contact ourselves. - *Refer to the health checks*.

Adult Care:-

Adults are far easier to contend with. There is very little that is likely to injure them and they also right themselves a lot easier if they do land up on their backs—though this is rare. All that is really required for them is a clean comfortable environment, water, hide, a supplementary diet & a health check. This is mainly to see if there are any injuries (cuts/ abrasions), diarrhoea or R.N.S. (runny nose syndrome- early signs of pneumonia & other respiratory tract infections). All of these are cause for concern and require treatment, especially R.N.S.

Torpority Cycle & after care:-

Firstly *G. pardalis* do not hibernate in the true sense of the word. Hence from here on it is referred to as a **Torpority Cycle**

(a time during which there is a lack of physical activity & mental alertness). During the Torpidity Cycle I line the bottom of the hide with newspaper followed by a layer of straw to keep them off the cold of the bricks. I then chuck a loose bale in over this so they can cover themselves to avoid any moisture settling on them and give them a greater feeling of security. Previously smaller tortoises were only taken out during the warmer days and brought indoors at night or alternatively left indoors in their holding cages. I now have heated hides, so I just have to make sure each night they are in their hides. Adult tortoises seldom move during winter if they have been adequately fed during summer. Weaker, underweight tortoises will come out on warm days and graze. Routine health checks are still to be undertaken but far less frequently. Try not to waken the tortoise too regularly from its slumber.

After this torpidity cycle they require **free access to lots of fresh water**. Generally they will drink large volumes of water in order to hydrate themselves & flush their systems. In addition they will need to replenish their fat levels that have been lost over the winter. Plants and weeds should be plentiful for them. Clover & dandelion will be appreciated, as well as a supplementary diet—see *diet annexure*.

You can give them a wash-down as well, but ensure you choose a **warm day**. Also ensure you dry the neck and limb areas to alleviate any hassles if a sudden cold snap arrives. Whilst doing this remove any ticks or parasites present.

Also check for a runny / blocked nose, as this is generally when we get a lot of tortoises in with respiratory problems. All of which if treated early will not be cause for concern. If left it could cost large amounts of money to treat, or you could lose the animal. Rather seek veterinary assistance or contact ourselves.

Breeding:-

Breeding starts in spring. The male usually butts the female into submission before he mounts her. Mating of leopard tortoises is also a rather noisy affair with him making loud wheezing noises. In the wild copulation for females is not as bigger problem as she may only be mated once or not at all in a season. Unfortunately in captivity this is not the case, and the ladies get pestered continuously. Ideally one needs to be able to split the male into **his own enclosure** to give the females some peace and quiet & **reduce the stress on them**. In addition through continuous mating the male can damage her shell, and either of their cloaca's can be damaged.

After mating she will lay a clutch of eggs each month from January through to March, but can lay 5 or six clutches. I have had a couple of females lay as late as early May. Incubation is very lengthy and even in incubation this can take between 10 & 15 months. In the wild they usually hatch in mid to late summer the following year after rains when the ground is softened.

In the first 3 to 4 years growth is slow, but thereafter they double in weight every year. Sexual maturity is generally reached at around **16 years** of age. They have a potential life span of **around 75 years**, but in captivity this is likely to be longer. My breeder male and one of the females are into their 80's now (2002).

They don't mind being handled now and then, but they prefer to be left alone to do their own thing. Some however do tame fairly well & will approach you. As a rule they **don't want to be played with**.

Health Checks:-

There are 6 easy steps to be taken for a routine check. These should be done every couple of days with hatchlings or at least once a week..

- 1) Check there is **no shell rot** or other **shell damage**.
- 2) Appetite and weight. Leopards have large appetites and eat well. Weight is a good indicator of their health. Anything greater than **10% drop** in weight in a week could indicate **ill health**.
- 3) Eyes. They should be **clear and both open fully**. Should this not be the case and none or one open, it is usually a sign of ill health. **Eyes are great early indicators to your tortoises' health**.
- 4) Nostrils. These need to be **clear of any obstructions**. A runny nose or blowing bubbles is an indication of a respiratory infection. This requires special care and medication. Do not leave it as it can cause the death of your tortoise.
- 5) Defecation. These should be **firm, fibrous and moist**. Should it not be, it may be signs of an incorrect diet or worms. Change the diet to more grasses & roughage before going to your vet.
- 6) Alertness. When they are awake they are **alert and active**. Hatchlings do sleep a lot like most good babies, but when awake are active, alert and eat like little pigs.

**If any of the following are problematic please contact your vet or ourselves.
Any of the above could lead to the death of your tortoise**

Diet:-

Leopard Tortoises require approximately **80% of their diet to be grasses**. Avoid over feeding wet foods as this can cause digestive track illnesses and growth defects. What is fed to the tortoises on a weekly basis is there as a supplement for the betterment of their health. Unfortunately wet foods are fed far too often & too greater quantities which causes diarrhoea (especially lettuce & cabbage), but can cause other major complications.

In juveniles an incorrect diet can cause a calcium metabolism imbalance, which can lead to deformed shells, but worse is the damage to their organs. By over feeding your tortoise a bad supplementary diet you can slowly kill it without knowing it (organ failure), and it may even show signs of growth and weight gain.

Treats are enjoyed though, but **MUST** be fed in moderation. Feeding your tortoise pet foods will be detrimental. A case was treated in Natal where the tortoise had grown so fat it was unable to walk properly and had lesions on it legs from continuous rubbing against its shell. Likewise it places a huge strain on internal organs. In the wild they may eat bones or Hyena faeces in order to get calcium, but not meat. With this in mind it is important to ensure a calcium supplement such as "Calsup" is included in the diet, especially females during the breeding season.

The attached kitchen diet sheet is to be used as a guideline on what you can feed as a supplementary diet. Please note your tortoise may not eat everything mentioned. As a rule feed low protein, high calcium foods to ensure correct growth.

DO NOT FEED COOKED FOOD OR ANY MEAT PRODUCTS INCLUDING TINNED CAT & DOG FOOD.

This can be the end result. Photo's compliments of the British Tortoise Trust - Andy Highfield

Examples of tortoises fed a protein high diet.

Marginated Tortoise American

Box Turtle



Normal



Marginated Tortoise



Assistance:-

Please feel free to contact us should you wish to give us further information regarding tortoises and the care thereof or alternatively should you have any problems with your tortoise.

info@dewsburycrafts.co.za or ian@knutton.co.za
www.dewsburycrafts.co.za

083-630-9339 - 08h00 - 20h00

We will assist where we can or source the answers from those that have the knowledge on your behalf.

Likewise if you know of any tortoises being subjected to inadequate care or abuse, please contact ourselves, so we can get Nature Conservation or ourselves to inspect and possibly save the animal from further abuse or possible death.

Last but certainly not least a big thank you to our sponsors who without their generosity and time none of this would be possible.

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E.R.H.A.—Support in our ventures

Tortoise Trust—Advice, expertise & training

Permits

Please note it is illegal to keep any tortoises without the required permits from the Department of Nature Conservation .

Please leave those in the wild where they belong.

**It is Illegal to remove Tortoises &
other Reptiles from the wild!**

Rather seek captive bred or rehabilitated tortoises that can be placed on permit.