



## **Yes, You Need a Thermometer!**

*by Maggie Bryant*

Tortoises are cold blooded and can only function properly at the correct temperature. A maximum/minimum thermometer removes all the guesswork.

The temperature at tortoise level is not necessarily the same as at human head height! So place thermometer on the ground.

In the wild, as temperatures rise above 30c (86F) the natural habitat becomes drier and food becomes short. Tortoises have adapted to survive these conditions. They aestivate (sleep, similar to hibernate) until conditions improve. In this way they survive drought and starvation.

Even in this country, when temperatures rise over 30c (86F), it is a signal to tell them that there will be drought and hunger. As the temperature rises they stop feeding and prepare for the 'hot sleep' by digging in to the earth to protect themselves from the heat and dehydration.

30c (86F) is the maximum temperature for a basking lamp, measured at the highest point on the carapace. Ideally aim for a couple of degrees below this.

20c -30c (68-86F) comfortable temperatures for active living.

20c (68F) is the best temperature for the 'cool' end of the indoor pen.

Under 20c (68F), and the tortoise begins to slow down. As temperatures continue to fall, feeding slows and then the gut empties. Nearing 10c (50F), chemical changes for hibernation take place in the body. The tortoise digs in and sleeps.

Under 10c (50F), hibernation begins.

5c (41F) is the optimum temperature for hibernation.

3c (37.4F) is the lowest safe temperature for hibernation.

0c (32F) and soft tissue begins to freeze, resulting in blindness. Serious muscle and intestine damage takes place and eventually death.

Safe hibernation is between 3c (37.4F) and 8c (44.6F).

Overnight in hot countries where tortoises live wild it is often very cool, so in this country no heat (or light) should be given at night. When living outside during the spring/summer if the temperature forecast overnight is below 10c (50F) then the tortoise must be brought in from the garden. Just bringing into the house will be sufficient though.

When living inside try to replicate the sun – heat/uv on in the morning and off just before the light fades so that the tortoise has a natural daylight/sleep cycle.

So if your tortoise stops eating unexpectedly, check the temperatures – it may just be too hot or too cold!!