

## Waking a Tortoise Up From Hibernation

As a tortoise begins to warm up as temperatures increase to about  $10^{\circ}$  it will start to wake up. Whether the tortoise is allowed to wake up naturally in an outdoor environment or taken from the fridge at the end of a planned hibernation, there are a few 'must do' procedures to follow to ensure a successful 'wake up'. It is important in countries with cooler climates like the UK to provide the tortoise with additional warmth to help it 'get going' properly, and as tortoises are very vulnerable to dehydration when they wake up, whatever size they are, rehydration is an important priority.

When it is decided to wake the tortoise, take the hibernation box into a warm area and leave the lid on. Avoid putting the tortoise in direct sunlight in front of a window, or in front of a radiator: a gradual warm up is far more natural and much less stressful. Movements from inside the box will soon be heard as the tortoise slowly feels the warmer temperature and starts to wake up.

Hatchlings and juveniles don't take too long to wake up, often within 10 minutes of being taken out of the fridge or their hibernation area into a warmer environment, as they have a much smaller body mass which reacts to changes in temperature more quickly than, say, a 4kg adult.

After a period of about an hour remove the tortoise from its box and place it in a warm, bright environment near to its basking lamp. Allow the tortoise to find the heat source and start warming its body up. It is quite a shock to the system to be thrust under a light straight away, so put the tortoise just away from the heat of the basking lamp and let it walk to it when it's ready. This method will also allow the keeper to have a quick visual check of the tortoise's movement to ensure that it can move its legs correctly and therefore move away from the heat when warm enough. Once the tortoise is thoroughly warm, check it over thoroughly and bathe it. The tortoise **MUST** be placed in lukewarm water to allow its system to replenish much needed fluid. Allow approximately 20 minutes, replacing water to maintain a tepid temperature, in which time the tortoise may be observed drinking. Repeat bathing at least twice a day for the first few days.

## Check over the tortoise:

BODY:	Thoroughly check the tortoise for any signs of lumps, swelling, cuts or abrasions or any signs of pinkness just under the shell.
TAIL:	Check for any swelling, discharge or unusual odour.
EYES:	Ensure both eyes are clear and free from any inflammation or discharge.
MOUTH:	Check for any signs of abnormalities, particularly for a coating of a yellowish/white cheese like substance (mouth rot).
NOSE:	Ensure the nasal passages are clear and free from discharge.



**EARS:** Check for the presence of abscesses. The membranes covering the ears should be either fat or concave.

If a young tortoise is wakened due to it urinating whilst hibernating, it must be bathed in warm water **PRIOR** to basking as its hydration levels will be very low compared to a tortoise that hasn't urinated. Put it in a warm bath as soon as it is awake and starts getting active, as it will need to drink as soon as it can. Leave it in the bath for around 20 minutes, changing the water to keep it warm, as necessary.

A tortoise that remains reluctant to find heat could have a problem, so establishing possible problems on waking is important. If the tortoise hasn't urinated allow it to find a heat source and leave it for around 20 - 30 minutes to warm up, and then bathe for approximately 20-30 minutes changing the water as it cools, as necessary. Food can be offered as soon as it has finished bathing: it may eat straight away, or it may take hours.

## Regular bathing should be continued to encourage the tortoise to drink and flush out the system following hibernation.

Generally, all young tortoises should eat within 24 hours of waking from hibernation, so try and offer a favourite food as a first meal. Use a high water content food as part of the tortoise's diet (e.g. cucumber) to assist with rehydration.

All tortoises should start eating within 1 week of waking up from hibernation. If they do not eat within this period then veterinary help should be sought.