

Brumation

Background:

In nature many animals go into brumation/hibernation etc. when it gets colder.

This also includes leos. When temperatures get colder during fall and winter they naturally get less active and the metabolism gets slower.

This should also be possible when the leo is kept in captivity. It's not only good to try and mimic their natural surroundings as much as possible but it also helps the leo to stay healthy. And what's interesting for breeders is, that brumation also helps with the breeding behaviour. Not only do females, that aren't „allowed“ to go into brumation, later into mating season but are also more likely to have issues with the eggs (eggs can be so instable that they break in the incubator), to get eggbound or have babies with malformations/deformity.

How to do it:

Okay so you want to give your leo the opportunity to go in brumation. But how do you do it? First some basics:

- Only healthy leos should go into brumation. The reason is that health issues and especially parasites can cause a lot of harm when the leo goes into brumation. There should be a fecal check around 4 weeks before brumation starts. With a lot of parasites the leo not only needs treatment but also shouldn't go into brumation until s/he is healthy again.

- leos that dropped their tail shouldn't go into brumation until the tail is grown back.

- Females that were used for breeding should be done with laying eggs atleast 6 weeks before brumation and she has to have some fat deposits.

- The intestine needs to be empty! Any residue of food and fecals can ferment inside the leo which in the worst case could kill the leo.

- The leos need a good amount of fat deposits. It's okay if they have a bit more weight on them than you'd normally recommend.

- young leos sometimes want to brumate too. If they show the signs and are well fed and healthy there is no reason to stop them from brumating.

- Ideal would be if you are able to provide a rather quiet and not too much used room with the needed temps and light coming in through a window.

As a keeper you should be able to recognize the signs a leo shows shortly before brumation. The leos lose appetite, are less active and mostly just laying around. Often they use the wetbox more than usual and rarely come out at all.

If you see those signs it's time to get the fecals checked.

There are different ways you can try when it comes to brumation. First thing you have to decide is whether you wait till the leo shows signs of brumation or if you basically start it.

Breeders often choose to manually start the brumation (mostly due to the benefits of brumation when it gets to breeding) while pet-only keepers often wait till the leo gets there itself.

The general rule is: Leos starting brumation is better than the keeper starting it.

A normal brumation is better than a short brumation which is still better than no brumation at all.

-The main difference is that with an artificially started brumation you start by reducing the heat and light and stop feeding after around 2 weeks. While with the other option you wait till the leo stops eating himself.

Okay so now for different ways to brumate. The one used the most (and in my opinion the best) works like this.

1) Preparation

- you need to have plastic tubs that are big enough. Make sure to add holes for air.
- those tubs should have a similar setup compared to a quarantine setup.

2) Initiation

- either wait till the leo stops eating by himself or stop feeding around 1-2 weeks before brumation.
- The heat and light should be reduced over a certain time. Over the time of 2-3 weeks it should be at 0. (for example half an hour less heat/light over the period of 24 days)
- If you use a heat mat you should also slowly cool that down

3) putting the leo in the tubs

- humid hide, water bowl and hides can be used in them. This will also help that the smell of the leo is still there.
- put the leo in their box and make sure to close the lid properly so no leo escapes.
- keep the box in the enclosure for around 1 week before finally putting them in the cold space

4) starting brumation

- put the boxes in the desired room
- slowly decrease the temps to around 12 degrees celcius. It should never fall below 8 degrees celcius and shouldn't go over 15 degrees celcius (because then the metabolism would start working again and the leos would starve)

5) during brumation

- change paper towels, clean the water dish and make sure the humid hide is humid.
- if you want you can use this time to deep clean the enclosure or build something completely new.
- make sure the leo isn't losing any weight.

6) end of brumation

- like step 4 but backwards
- increase temps over a period of 1-2 weeks. When you reach normal room temp of around 20 degrees celcius you can put them back in the enclosure.
- slowly increase the time of heat/lights being on. After 2-3 weeks you should've reached the temps you originally had. If you reached that point you can also start feeding again. Start slow though.

Another way is to let the leos brumate in their enclosure. The issue i see here is that the metabolism won't cool down as much and the leos are more starving than brumating. Some keepers still do it though. If you want to try it you'd first reduce the heating time to 10 instead of 12 hours a day and completely stop feeding them.

After two weeks of constant temps and no food the guts should be „empty“. Then you decrease the time down to 2-6h a day and finally have no heat sources at all. The enclosure should be cooled down to around 14-18 degrees celcius. Some say that this method also won't do harm so if you want you can of course give it a try. Just make sure to have a look on the weight.

Whatever way you choose: It's very important that you don't feed the leo when the temps are that low. It could cause some severe health issues!

It's also very important to keep an eye on the weight and the leo in general so you notice weightloss or other health issues fast. If the leo is losing weight or showing any signs of health issues bring the temps back up and also go see an exotic vet.

Main Sources used:

„Leopardgecko“ by Karsten Griebhammer and Gunther Kohler

<https://www.der-leopardgecko.de/>