NEST AND LAYBIN

GOLDEN RULE

Enable the smooth egg laying process through simulating the natural conditions in the wild, so that the female can lay its eggs in a stress–free, protected and safe environment in a compacted and moist natural substrate of the required depth and temperature.

When the chameleon females of the oviparous species come to the end of the gravidity, they need to dig a tunnel in soil to lay their eggs. Many keepers and even sites and groups recommend a very deep (10–12in) and spacy lay–bin filled with loose and soft substrate (dirt, dirt/sand mixture, coconut soil) to allow the females to dig easily. However, it is not necessary and even not adviseable for the following reasons.

1 No female of the commonly kept species digs so deep in the wild, so, it is unnatural. They dig surprizingly shallow nests: Panthers only about 3in (7cm), *Chamaeleo calyptratus* 5in (12–15)cm. They dig till they get to roots or firm layer. Then they stop, lay the eggs, cover them with the excavated material and leave forever. Some species like *Furcifer verrucosus* and *Furcifer antimena* might dig deeper, as in their environment it might take longer to get to the favorable moist soil layer. They can disappear for several days in the tunnel to appear back on surface after the egg deposition. Some species do not dig at all, like some *Brookesia* species, hiding the eggs just under a leaf or *Archaius tigris,* which is known to lay their eggs between the stem and leaf base of palms or even pineapples.

2 The risk of collapsing the tunnel is the bigger, the deeper the substrate is. Females have been reported in captivity to have died in a collapsed tunnel and not only one life is then wasted, but many. And, for nothing.

3 Digging too deep exhausts the female unnecessarily and can cause discomfort, exhaustion, egg binding or even death.

4 Chameleons hatch from eggs very small and graceful, and burying the clutch too deep would be their death sentence, as they would not be able to dig a tunnel up and escape.

SO, WHAT TO DO? The best recommendation is to prepare a lay–bin with the following parameters.

SIZE
About 10 by 10 by 5–10in (25 by 25 by 12-25cm) (widths by height).

STERILITY
Bake or microwave prior to use.

TEMPERATURE
Keep same temperature as ambient. For some species (e.g. *Furcifer lateralis*) do not keep it too cold (might cause refusal to lay the eggs), in others, the high temperature of the substrate can motivate females to dig even deeper.

QUALITY
Moist (not dry, not wet).
Compacted (not soft, not loose).

PLACE
Back corner of the cage.
On the floor.
In shade.

SUBSTRATE
Sand.
Mixture of sand and soil.
Soil.
Eventually coconut soil.
Never use perlite nor vermiculite, they can cause health problems for the female if ingested, inhaled and getting into eyes.

LAYER
Keep it shallow, 4–5in (10–12cm) maximum.

DISTURBANCE
Limit to minimum.
Better even cover the cage for privacy.

VARIATION
The lay site preferences are differing based in female size, locality, species and individual preference. Good knowledge of the original biotope and detailed observation of the female's behavior is a key to success. All rules are not to be taken as dogma, but should be subject to adjustment.

DISORDERS: The failure to provide acceptable lay site for the female can lead to serious problems.

EGG DROPPING
The hormonal levels can push the female to drop the eggs from the branches or while crawling on the bottom.

EGG RETENTION
If a female is not able to lay the eggs proper way, it may keep the eggs which then can die and cause sepsis or being mummified, causing health problems and sterility. This situation is a call for a VET. It is sometimes possible to induce the egglaying using oxytocine or a surgery is necessary to remove the eggs and save the female and sometimes even the eggs.

ALTERNATIVES

BUCKET
Some breeders prefer to move a female ready to lay eggs into a bucket with relatively high layer of substrate.

ONE GALLON JAR
It has been reported that for some species even a glass jar of about 1 gallon volume does the service.

PLANT POT
Some species readily accept plant pots as the laying sites for their eggs.