



evolution reptiles

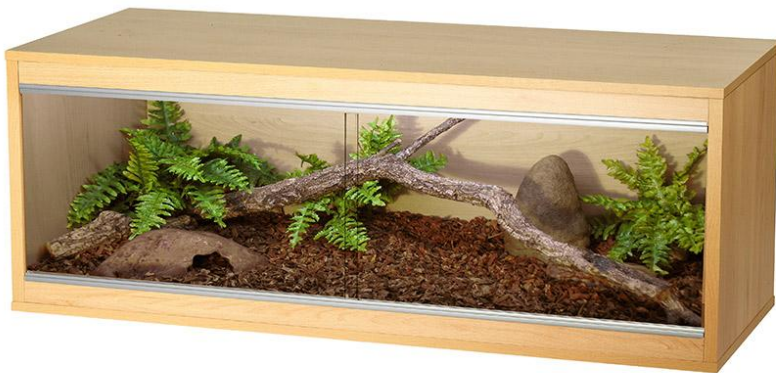
Newsletter May 2017

Crested Geckos and our guide to decorating your vivarium.



Decorating your vivarium

In front of you sits a pristine vivarium. It's got the relevant heating and lighting equipment installed, and everything works. What next?



Next we get to turn this wooden (or glass) box into a home for our new pet. Obviously, what you choose will depend on the animal that's going to live in this habitat, but there are some general guidelines that apply to every enclosure.

So we're going to make the assumption that you have done your research, and you know the sort of conditions that your pet's ancestors would have called home.

Step One:

What is it that we're trying to achieve? Obviously, a comfortable home for your pet. But before you start, take a few minutes to consider what overall effect you are trying to achieve. Is the vivarium in your living room, or a bedroom? Have you got a large collection, and the focus is to be on ease of maintenance?



Step Two:

Substrate. Species appropriate - obviously - it's worth taking a bit of time to get this right. The only way to *absolutely guarantee* that your pet will never ingest substrate is to not provide any; for arboreal animals that rarely come to the ground (I'm thinking mostly of chameleons here) this can work. For the others, the benefits usually far outweigh the risks, especially when you get your temperatures and UV parameters correct.

Take into account if your pet likes to burrow, or scratch around in the substrate to find food, or (like some skinks) actually swim in sand to hide and hunt.



Step Three:

Structure. These are the items that will shape and support the environment - rocks and larger branches. If you use rocks, arrange them on the base of the vivarium *before* you add the substrate; this stops your pet from digging underneath the rock and dropping it on its own head. Branches need to be secured so that climbing and/or digging activity won't dislodge them.

Larger branches can provide a pleasing aesthetic to the vivarium; raised at one end, slope them down to the ground at the other to not only give your pet a basking area, but lead the eye from one side of the vivarium to the other.

Step Four:

Hides. These can range from shaped resin structures - including hides designed to hold damp moss to aid shedding - to piles of flat cork bark, or coconut shells. Younger animals will always appreciate more hides, and if they can squeeze into a small space they'll feel that bit more secure. Most lizards are happy that if they can't see you then you can't see them, so as long as they can get out of your eyeline they're happy.

Others will hollow out the substrate from beneath a flat piece of decor, so be careful if you're using rocks.



Step Five:

Decorations. Not just for looks, the lighter decorations around the vivarium fulfil several purposes. They act as extra cover, climbing frames and hiding places for prey items; don't underestimate the amount of environmental enrichment you can provide with careful placement of these lighter items.

A word of caution. It's always tempting to use the fake foliage available in discount stores to decorate your pet's home, but they were never designed for this purpose. They have never been tested for safety, and although lizards don't chew like a puppy would, they are still at risk from ingesting parts that could be jagged or sharp, or toxic.

Step Six: Bowls. Despite the fact that many of our pets originated from arid areas of the world, you should always, always provide a source of fresh clean water. The size and placement of the bowl is up to you, but do consider that a large water bowl in the warm end may raise humidity, and a light bowl is easy to tip over. Snakes often like to soak in their water bowl when they are shedding, and the size of the bowl should be chosen with this in mind.

Some animals appear to take an evil delight in filling their water bowls with substrate and making a terrible mess, but please don't be tempted to take the bowl away from them. Check your temperatures (they might be trying to cool off), and if they are fine then just accept that making a mess is helping them to fulfil a natural behaviour.

Any animal that eats salad will appreciate an arrangement that keeps its food off the floor; flat bowls are available, although some people like to use flat slates. A bowl has a slight advantage in that it's slightly harder for the animal to push its food all over the floor.



Step Seven: Placement. Lay out the decor, assemble it and stand back. Use a critical eye; if you saw this arrangement in someone else's home, what would you think of it? If your reaction would be 'Yes, I really like that!' then you have achieved your objective. Take this time before your pet is put into its new home to really look at the habitat you have provided; a little time spent now may well save you a lot of time and fuss rearranging things later.

Step Eight: Put your pet in its new home, watch it explore - and enjoy!



Crested gecko, *Correlophus ciliatus*

These charming little geckos literally came back from the dead in 1994, and have gone on to become one of the most widely kept gecko species in the world, easily as popular as that long time favourite, the leopard gecko.

They are native to New Caledonia, a small group of islands North of New Zealand. They are found on the main island of Grand Terre, and small colonies have also been discovered on the Isle of Pines, just off the coast.

First described in 1866 by [Alphone Guichenot](#), the crested gecko had long been considered extinct. However, in 1994 a tropical storm revealed that they had been lurking in the trees all along - and several biologists exported a few specimens for study and breeding before New Caledonia stopped issuing export permits for them. They are also known as Guichenot's giant gecko and eyelash gecko due to the crests over their eyes and down their back.

Despite being arboreal (living in trees), they tend to be found lower down than the canopy, under three metres. It is cooler down here, and certainly in captivity the crested gecko does not do well at higher temperatures. They also avoid the trunks of the trees, staying further out on the ends of branches to avoid being eaten by larger geckos. (The largest living gecko in the world, *Rhacodactylus leachianus*, is rather partial to a snack of crested gecko!)

Crested geckos are omnivores, feeding on a mixture of overripe fruit, insects, and nectar; it's entirely possible that they play a role in pollinating plants in their native range, although unfortunately there has been very little research done to confirm this. They appear to prefer plant based foods to insects, although they can be very proficient hunters when they want to be.

Like many species of gecko, the crestie can shed its tail in order to escape predators, a process known as [autotomy](#). Unlike many other species, however, the tail does not grow back once lost. Almost all the individuals found in the wild are missing their tails, and it was apparently initially thought to be a tailless species of gecko; however, when they began to breed in captivity, it was discovered that this is not the case. One theory as to why they don't grow their tails back is that the original tail has a little gripping pad of [setae](#) on the end of it - the same as the toes have - and the complexity of regrowing this structure is not worth the investment in energy.

They are not a noisy species, although they can make barking or hissing noises; they seem to use these to warn off potential predators, although if baby cresties hatch in the terrarium they have a specific release call which makes their parents drop them. (This is an observation by one of our customers who has bred them, so if you have ever observed anything similar in your own geckos we would love to hear about it!)



Because they prefer a lower background temperature and fairly high humidity these geckos thrive in glass terrariums. The fact that they are quite happy to live on a diet of powdered food makes them an excellent choice for someone who does not want to go to the hassle of keeping feeder insects, although they do grow faster when they have some insects when they are growing. That said, some of the newer powdered foods do have a higher protein content from insects, so they would be more than sufficient.

They can be surprisingly long lived; some of the animals originally collected in 1994 were still alive in 2013, in the collection of one of the biologists who discovered them.

Despite the fact that they are primarily active at night and spend the day resting in heavy leaf cover, they do appear to benefit greatly from some UV light in their terrarium. If provided with a good varied diet, appropriate supplements and UV light they can make a trouble free, easily maintained pet.

Bioactive systems are particularly suitable for this species, with the added advantage that they can forage on the arthropods that act as clean up crew in the terrarium. Woodlice also make an excellent food, as they are very high in calcium! In a setup like this, a group of crested geckos will breed freely - so if you don't want to be finding new homes for babies, then either keep several females and no male, or just a single animal.

Easily kept, not needing live insects for food, gentle and long lived - what more could one ask for in a reptile pet?





Next Month - Bio-Active

If you've been following our articles or blog, you will have heard us use the term 'bio-active' - usually followed by 'but that's too large a subject to go into here'. So we thought it was about time that we went into more detail about this exciting, naturalistic way of keeping reptiles and amphibians that's finally seeing a lot more popularity - and rightly so!