

Breeding Bosc's monitor

Certain lizards have a reputation for being difficult to breed successfully, and in the case of Bosc's monitors (*Varanus exanthematicus*), some enthusiasts see attempts to do so as being a pointless exercise. Christian Castille takes a different view though, based on his experiences with these varanids.

Despite making brilliant pets as youngsters, when their cuteness makes them very desirable, Bosc's monitors are their own worst enemy. They grow up fast, and then their size and strength often causes problems. These large lizards can easily reach 1.2m (4ft) or more in length, and they are equipped with a painful bite, strong tail and powerful claws!

I understand why there is a view that breeding them should not be encouraged, with large, unwanted individuals often up for sale in classifieds and handed over to rescue centres. The majority of youngsters that are available actually originate as captive-farmed (CF) stock, and prove to be surprisingly hardy, although they can be dehydrated on arrival.

I have kept Bosc's monitors for many years, and breed them annually, and do amazingly well with them. I sell out on every occasion that I put them up for sale, and I do not sell them cheap! The typical retail price for CF individuals as hatchlings is about £35. I sell my captive-bred (CB) specimens for £50 each, and these are actually F2 (second



generation) stock, descended from French-bred adults.

Responsible ownership

Those who buy these lizards from me do not really fall into CB lovers or CF haters. They are simply people who want a high quality Bosc's monitor whose ancestry can be traced back with certainty. A lot of reptile owners actually enjoy knowing when their pet's birthday is, along with its exact age, and that its whole history can be viewed on its paperwork.

The increased price of CB Bosc's over CF ones is not really a significant deterrent to

people who might end up selling them on again, as can happen. It is more a reflection of the work that has gone into breeding them and ensuring that they are healthy.

Serious Bosc's monitor keepers never impulse buy, and most will be on a waiting list for months, having paid a deposit which confirms their seriousness. Many of the problems encountered with these monitors could be avoided easily, by taking two simple steps when it comes to dealing with their owners. ▶

CF vs CB

I'm certainly not against the trade in captive-farmed animals at all, because if you look into the history of how Bosc's were conserved many years ago, then you will see that breeding them in this way has helped to safeguard wild populations from overhunting for their skins. There is a massive trade in African monitors for the leather industry.

It has also allowed people in Africa to benefit directly from their environment, playing an active role in conservation and feeding their families. When it comes to pets though, CF hatchlings are more likely to be suffering from parasites than those which have been captive-bred.

A good diet helps to protect CB animals against parasites.



All lower photos courtesy of the author.



“As with most of my animals, I have my Bosc’s monitors micro-chipped. It is an amazing process, which very few reptile breeders bother to use”

Firstly, I think it is vital that you vet potential buyers, to be sure they appreciate the commitment involved, and secondly, you should also offer a returns policy. I am always willing to take back any Bosc’s monitor that I sell if the owner is unable to carry on looking after it for whatever reason.

Bosc’s are actually pretty easy to breed and they will be popular as lifelong pets if you pick your customers wisely. However, the first thing is that you should be able to prove your babies are CB and not CF.

Now for the most part, if you can photograph the whole process from mating to hatching, then normally the photos will largely serve as your proof. Unfortunately, if like me, you do not have time to stand around gazing into your vivariums or incubators for hours with your camera, then there is a much better way to go about this.

Means of identification

As with most of my animals, I have my Bosc’s monitors micro-chipped. It is an amazing process, which very few reptile breeders bother to use, unless it is compulsory for identification purposes. This is despite the fact that it is so readily available and so cheap.

All my Bosc’s are chipped at a cost of just £6 each, and as part of this package, I get a unique 15-digit code that identifies my animal as belonging to me. Within this code I can detail where it came from, its captive status, its gender and where it lives. This must be done prior to any breeding of course.

Once this has been achieved, and you have your certificates back with the lizard’s details on them, then you are ready to begin making breeder’s papers. These do not have any legal status, and a breeder’s papers are only as true as you are to your word. However, it is possible to check the origins of a particular individual though, by means of blood tests for DNA purposes, tying in with your certificate and the microchip numbers.

I add my own details on this paper along with details about the particular animal, including its date of hatching.

If the new owner then wishes to trace back the young Bosc’s monitor in due course, then he or she can see its parents’ unique numbers that only CB animals will have. In turn, should the buyer breed this monitor in due course, then the original parents can be added to the new offspring’s paperwork, showing them as the grandparents. This creates a very easy method to provide and view family trees, and can be useful in breeding programmes for many reptiles, and not just these monitors.



Young individuals are attractively-patterned.

The basics of breeding

In my experience, breeding these lizards is pretty easy. In fact, I was just eight years old when I got my first pair of Bosc’s monitors to breed successfully! It may seem very obvious, but you need to make sure you have a sexed pair first. This can sometimes be a major hurdle to overcome, as many shops sex them incorrectly.

One of the best ways to distinguish between the sexes is by their colour. Males have an overall golden tone to them, while females are a significantly duller shade of brown. Head and tail sizes provide further means to tell the sexes apart, with snouts of mature males becoming more bulbous with age. Males also tend to be larger than a female of the same age, and will evert their hemipenes fully.

Bosc’s monitors should not really be bred until they at least four years old in

When I have young Bosc’s monitors ready for sale, I put together the breeding documentation, stating the parents’ microchip numbers, along with watermarked photocopied scans of their certificates. Then

my personal opinion. I grow all of mine slowly, and it can take longer in some cases for them to be mature enough to breed. Unfortunately, because sexual maturity in reptiles is usually a measure of their size rather than their age, they can be bred before they are physically mature enough.

These lizards are particular gluttons for food, so they grow fast and can seemingly mature earlier, but this can be a cause of problems, especially for females. They can suffer from reproductive difficulties and can easily become obese, which will then shorten their lifespan.

Preparation

A spacious and humid enclosure is needed for a pair, with a soil and sand mix being best as the substrate. You will need a nesting box for your female as well. It is very important to make sure you have provided the female with sufficient dietary calcium and that she weighs at least 2.5kg (5.5lb).

In terms of conditioning, I reduce the ambient temperature in their quarters by about 10°C (15°F). This method is more commonly used with snakes than lizards, but as a snake breeder first and foremost, I prefer to keep my methods as simple as possible!

Some people also say that a reduced photoperiod is needed, down to a maximum of between 5-7 hours. I have never done this though, and the same goes for spraying to increase the humidity in their quarters. These techniques may be worth trying though, if you are having difficulty persuading a pair to breed successfully.



After 4-6 weeks, you need to gradually raise the temperature again until it is back to normal, and at this stage, you want to place the male in the female's enclosure. Introduce the pair carefully, supervising them closely.

Courtship may begin straightaway, or can take up to three weeks. After the first lock, I leave them together so multiple locks can take place. Locks can last from 1-6 hours. Once a female is gravid, the male will no longer continue to breed with her so he can be removed.

Egg-laying and incubation

Expect her to lay 15-45 eggs around 4 weeks later. Egg-laying can take up to 50 hours to be completed, so check regularly for more eggs. It is also not uncommon for

females to double or even triple-clutch weeks later, confirming that they must be able to store sperm, as they can still produce fertile eggs at this stage without mating again.

You want to remove the eggs as soon as they are laid, transferring them into a incubator. When starting out, it is easiest to use vermiculite as the incubation medium, although personally, I prefer to use a fine grain sand and crushed coconut husk mix. The water to medium ratio is quite varied, depending on the breeder. I prefer four parts of water to five parts of the medium.

Recommended incubation temperature also vary, which as a result means the incubation times differ too. Some people also believe that increasing the temperature towards the end of the incubation process is necessary, but again, I have been repeatedly successful without doing so. I would simply recommend incubating the eggs at 30°C (86°F) for around 5 months. Keep a check on the eggs and do not discard them prematurely.

Rearing

Following the first pipping, you will notice that within 24 hours, all of youngsters will begin to hatch out. They may stay in their eggs for another 36 hours, and if this happens, then I just allow them to come out in their own time.

Once they have hatched, I then hydrate them in a bath of Powerade® (an electrolyte drinker favoured by athletes) just to help to get them off to a flying start. They will then shed within two days of hatching, and immediately afterwards, they will begin to start feeding.

As soon as they have hatched out, the young monitors are completely independent and can be reared without difficulty. This method of breeding Bosc's monitors has worked successfully for me for many years, both breeding them in vivariums in England and also in secure outdoor enclosures in France. ■



Some of Christian's young Bosc's monitors.



Handling is straightforward at a young age.