

# Back to basics with **leopard geckos**



## The move to create **new natural strains**

Most neutral observers would concede that strains of leopard geckos today are not as vigorous as used to be the case, before the creation of colour morphs started to predominate. John Courteney-Smith recently made an unexpected discovery though, which could be the way forward.

I count myself as being a very lucky person. My job takes me around the world looking at and helping to improve the captive care of reptiles. I have been involved in the UK pet trade for over 30 years and have seen things move through cycles, as particular species become popular and then fade away.

Over the last few years, the interest in high-end colour morphs has clearly exploded. Thousands of hobby keepers produce young of all colours and sizes. Whether this is corn snakes, ball pythons, bearded dragons or leopard geckos, our understanding of genetics is increasing month-upon-month and some outstanding colours are being produced, but at what cost?

### What has gone wrong?

In the case of the leopard gecko, I have been worried for quite some time that the gene pool is becoming too weak. Many of the captive-bred animals offered now

are skinny and small in size, susceptible to bacterial and viral infections and of course, the parasitic wasting disease known as cryptosporidiosis.

There are further worries too, surrounding specific morphs, such as the enigma. This is now the subject of a breeder survey, with the aim of gaining a better overall understanding of the neurological problems that can be linked with it, as explained in last month's *Practical Reptile Keeping*. (Email [g.gecko@hotmail.co.uk](mailto:g.gecko@hotmail.co.uk) for more details).

Things have clearly gone wrong. Undoubtedly, part of the problem is that a huge number of leopard geckos have been bred from a proportionately small foundation stock. When breeding of morphs took off, this was where people's interest went, and away from breeding normals. The aim instead was to explore the genetic diversity in this species as far and as fast as possible. The result has almost certainly been a significantly increased level

of inbreeding within existing strains.

The leopard gecko's behaviour has changed too. These lizards are crepuscular in nature. This means that they are most active at dawn and dusk. They inhabit the semi-arid region of central Asia, in parts of Afghanistan, India and Pakistan. Cold night temperatures and blazing days have meant that leopard geckos have developed the ability to absorb UVB through their dark, thin skin in low light and at a fast rate.

Good levels of UVB have been measured up to 15cm (6in) inside a leopard gecko's burrow. This means that it could stay here and assimilate all the beneficial ultra-violet light that it needs, without having to leave the safety of the tunnel. This may be why the predominant colour of a wild leopard gecko's head is mostly black. An animal which uses light in nature to survive must therefore require it in vivarium surroundings too. When you have bloodlines that try to avoid all light, then something has gone fundamentally wrong.