

And snakes might fly!

As a dedicated reptile enthusiast, unusual species have always appealed to John Courtney-Smith. But little did he anticipate the impact that a little-known Asian species of snake would have on him.

The ornate flying snake (*Chrysopelea ornata*) gets its name from its ability to glide from tree to tree or down from a tree to the ground as a way of escaping danger. It does this by spreading its ribs open and forming a U-shape out of its body. This acts rather like a parachute, slowing the snake's descent – although it actually creates the illusion of flight. It is highly effective too – whereas the flying lizard (*Draco draco*) can cover a maximum distance of about 30m (100ft), these snakes can travel as far as 100m (328ft) in this fashion.

However, under normal circumstances, this species is almost totally arboreal and rarely comes to the ground. The brilliant yellow colouration of the ornate flying snake is broken by its black markings which provide very effective camouflage in its tree-top habitat. It is also sometimes described as the golden flying snake and the gold and black tree snake, on account of its colouration. Flying snakes inhabit a wide area extending from India to southern China via Malaysia and Indonesia. Although they are common through their range, they are not often kept and have acquired a reputation for being nervous and reluctant to feed.

There are basically two distinctive subspecies – the ornate flying snake itself, and the race known as the paradise flying snake (*C. o. paradisi*). The main difference between them is that the latter has characteristic red and blue flecking along the flanks and certainly does seem more nervous. I have met up with a colleague who lives near a park in Asia where these flying snakes are common, and yet he says that they are very rarely seen. A wildlife documentary on television also showed just how hard these snakes are to catch!

Housing and care

I have not encountered any difficulties keeping this species, but it is essential to have a tall vivarium, which can be planted out to resemble the snake's tree-top environment. It needs to include branches as well as providing both hiding places and shady areas. I prefer a wooden design, which

retains heat and humidity well. I use aspen on the floor of the vivarium but sterilised orchid bark would also be suitable.

Flying snakes are diurnal and very active when the vivarium lights are on. I use a low wattage heat mat under thermostatic control creating a temperature gradient of 21-27°C (70-80°F) and a compact fluorescent lamp which emits UVA and 2 per cent UVB. The reason for lighting snakes with UVA is really to activate their colour vision. I believe this is very important for diurnal species that naturally "see" in the UVA spectrum.

As daytime predators, these snakes are obviously exposed to sunlight, either directly or through reflections from broad leaves, so a UVB lamp will help with Vitamin D absorption. I spray the vivarium each day to maintain the relative humidity, which reflects the heavy periods of rain that occur in their natural habitat. Although water is freely available, I have yet to see my snake drink from a

bowl, since it prefers to consume water from the leaves after I have sprayed the vivarium.

It is important as with all reptiles to ensure a clean living space, so I spot-clean the vivarium regularly and give the unit a proper clean-out at least once a month, using a safe disinfectant. The only tricky part is catching and handling the snake safely. Soft

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tongs or a snake hook will be essential. Tail the snake whilst guiding the head away from your hands with the hook, straight into a silk or cotton snake bag and tie the top securely. This will then provide a safe, stress-free place to keep the snake while you carry out essential maintenance within the vivarium.

From my research, it would seem that flying snakes are opportune feeders in



the wild and will prey on a wide range of small mammals, birds, eggs, lizards and invertebrates. I have had great success with using defrosted pinkies dipped in a vitamin powder once a week. Feeding is easy. I hold the small mouse in some tongs and wave it in front of the snake. It then usually strikes and swallows, in what is an amazingly quick process from start to finish. I also, of course, offer a range of other foods, including rat pups, quail eggs and anything else I can get that may be appropriate.

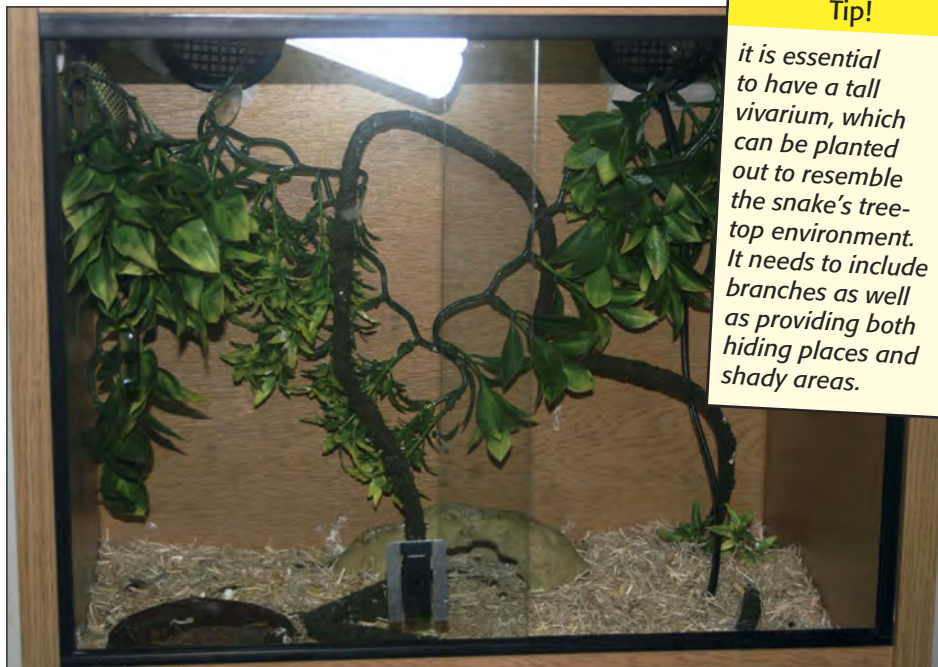
Ornate flying snakes are very seldom bred in captivity but they generally produce clutches of 8-11 eggs. The young hatch out in full colour, and typically measure 15-20cm (6-8in), whereas a full-grown adult will be 1-1.5m (3-5ft) in length. I am not sure why breeding results are so poor, but I would suggest that the restricted availability of these snakes makes it difficult for enthusiasts to obtain adult breeding pairs and then perhaps a reluctance of some keepers to use UV lighting with these snakes may not help either.

A rear-fanged species

Flying snakes are venomous! Being rear-fanged means they have grooved fangs, which are modified teeth, located at the back of the mouth. This type of venom may serve as an aid to the digestion of certain prey such as frogs, rather than paralyzing or killing as with vipers for example. The flying snake's venom is generally not regarded as dangerous to most people, but clearly, it is very important to avoid being bitten. This is not just for the obvious reason that it is an unpleasant experience, but also because it could also damage the snake's delicate teeth.

Reactions to the venom are very varied, but none has been especially serious. Most people complain of a burning sensation lasting a few hours at the point of the bite. Others have described how their whole limb feels on fire for a time. Having said that, if you are allergic to bee stings for example, then it is better to avoid these snakes and other mildly venomous animals, in case of any adverse reaction.

Being rear-fanged means that these beautiful snakes need to get a good grip in order to transfer their venom properly. If the



Tip!

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snake has been striking at you in its vivarium, let it settle down first before attempting to invade its space again. It will be stressed and its mouth could be full of venom, with any resulting bite delivering much more of this fluid under these circumstances.

I treat my flying snake just as I would a more venomous snake. I use tongs for feeding and cleaning purposes, and as always, make sure the vivarium is kept closed and locked. I prefer the JBL magnetic locks as they do not force a crack between the two panes of glass like cabinet locks do.

Behaviour

After having had my flying snake for just a week, it shed its skin, and became even more attractive, although I would not have noticed that it was about to do so if the eye caps had not blued over. The body of the snake remained as bright as ever, and nor did it lose its appetite. As with most colubrids, shedding commenced with the snake rubbing its face and neck against the decor of the vivarium until the skin began to pull away. The whole process was finished in less than an hour with a clean, full shed having occurred.

My flying snake sheds approximately every 4-6 weeks and has now grown considerably in length but has retained the proportionately

slim build of such snakes. It will spend time basking and hiding at times through the day. I have set a timer for my lighting so the lamps turn off in the early afternoon just to drop the temperature slightly and give the snake a period of rest. My thinking behind this, based on what I've discovered, is that these snakes are often exposed to a period of rain during the afternoon in the native environment, and so they would be used to a darker conditions at this stage.

Flying snakes are very active and alert by nature, being very quick and ready to jump from the branches if disturbed. As a result, I keep the vivarium doors shut as much as possible while I am attending to their needs. Otherwise, the snake might escape through the opening. When aggravated, its first reaction is to strike, bending its body into the classic 'S' shape. This is why I use tongs as far as possible when attending to its needs.

In conclusion, I feel that the flying snake is a perfect example of a display animal, able to charm its keeper and also provides a good introduction to the fascinating world of venomous snakes. But this species is only suitable for experienced keepers, and if you are starting out, do not be tempted. Begin instead with a corn snake, for example, and build up your knowledge and expertise first. ■

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