## Care Cards

## **Frilled Dragons**





The frilled dragon, *Chlamydosaurus kingii*, is one of the most fascinating animals in the world. At first site the enlarged umbrella-like structure around their neck, along with the gaping mouth full of teeth, would seem like an aggressive stance. In reality the opposite is actually true. When frightened, the lizards use this as a defense mechanism. In the past these impressive reptiles could only be observed either in the Australian outback or at a zoo. Today they are readily imported into the country and some hobbyists have even successfully bred the lizards in captivity.

At rest, frilled dragons are rather dull creatures. Their plain color and average size makes them an average looking reptile at best. The folded frill will extend from the base of the head past the shoulders. Some experts feel the folded frill resembles leaves and is therefore used as camouflage. Once stimulated, their appearance as well as their demeanor changes. The frilling response is usually accompanies by a series of open-mouthed lunges. Often the lizards will rear up on their hind legs and charge at their opponent.

Frilled dragons are a large arboreal lizard found in northern Australia and southern New Guinea. Although only one species is recognized, variances in color, size and overall scale pattern will differ based on geographical location. In nature, frilled dragons prefer a eucalyptus tree forest. Males can reach a total length of near 3 feet with over 2/3 of that length being the tail alone. Adults

will reach full size in 2-3 years and they may live up to 10 years in captivity. Frilled dragons have muscular limbs with long toes and claws for climbing. The frill apparatus is supported by hyoid cartilage and is covered with large keeled scales. In some species, the female's frill will actually be larger than the male's.

Healthy frilled dragons will be alert and active. They should hold their head up above the ground and their abdomen should be plump. Newborn and newly acquired dragons should be thoroughly examined for mites. Often they can be found on the corners of the mouth and on the underside of the frill. Snout abrasions occur frequently in new dragons as they try to adjust to their new environment.

Frilled dragons naturally inhabit dry forest regions where their vision allows them to hunt as well as avoid predators. Newly acquired dragons should be housed in quiet areas away from other animals they might regard as predators. Even birds housed in the same room could cause stress. Stressed lizards will cling tightly to branches and attempt to hide behind them. Stress will affect the reptiles feeding, digestion, immune system, and overall health.

Frilled dragons are highly active lizards that love to climb. Although juveniles may be raised in 50 to 100 gallon aquariums, adults should be kept in custom cages. An average cage should be at least 6 feet high and 3-4 feet wide as well as long. Because frilled dragons exhibit high levels of activity, cage furniture should be sturdy and easily cleaned. Many owners will use simple newspaper as a substrate item, while others will items such as sand, coconut mulch, or crushed walnut. Multiple levels of branches, both vertical and horizontal, should be provided. The branches should be at least as wide as the lizard for comfort during basking. Although live plants make an attractive addition to the enclosure, most frilled dragons will readily shred them on a daily basis.

Artificial plants will provide a functional and aesthetically pleasing addition to the enclosure.

A large container such as a cat litter pan or storage container will make a good water bowl. A large rock or some type of anchoring device should be placed inside the container to prevent the lizard from tipping the bowl. Frilled dragons will often defecate in their water bowls; therefore daily cleaning is mandatory. Some lizards will not drink from standing water and will take in their water from moisture as it accumulates on leaves or rock surfaces. These lizards should have their cage as well as themselves misted on a daily basis. Misting will also help keep the enclosure humidity around 70%.

Daytime cage temperature should be between 85-90 degrees Fahrenheit. Nighttime temperature should be between 75-80 degrees Fahrenheit. A basking site should have a temperature between 95-100 degrees Fahrenheit. A full-spectrum ultraviolet light should be used; however, whenever possible the lizard should be offered direct, unfiltered sunlight.

Frilled dragons are hearty eaters. All ages should be fed small daily meals instead of large meals less frequently. Frilled dragons will eat a variety of items such as insects, arthropods, other reptiles, small rodents, fish, shrimp and even canned reptile food. Some reports also state frilled dragons will eat a variety of dark-green, leafy vegetables and other vegetables as well as various fruits. Neonates and juveniles should be given a high-quality vitamin/mineral supplement daily. Adults should receive supplementation twice per week.

Frilled dragons are difficult to sex as juveniles. Some herpetologists have tried theories such as head width and tail thickness to try to differentiate males from females. Once the lizard clears one foot in body length, the hemipene bulges at the base of the tail can identify the males. As adults, male frilled dragons are larger in general than females. Adult males should not be housed together.

Frilled dragons should go through a cool down or hibernation period of 2 to 3 months prior to breeding; this is usually started around August or

September. Following the post-hibernation warming period, courtship will occur. Male frilled dragons will display and fight during the mating season. The displays are a combination of partial to fully erect frills, head bobbing, tail whipping and occasionally arm waving. Males should be separated but may be placed in close proximity to each other to help stimulate interest in breeding. Females will head bow and slowly approach the male for breeding. A large open ground area should be provided within the enclosure for courtship and breeding.

Following breeding, the female's abdomen will become noticeably distended as the eggs develop. Prior to egg deposition the females feeding will decrease and sometimes diminish totally. A container filled with a moist peat moss and potting soil mixture, or moist sand, should be provided for her. Gravid females will lay their eggs six to eight weeks after breeding. The clutch will be deposited in the mixture over a one-hour time frame. Females will nest in the morning, laying 1 to 3 clutches per season, approximately 3 to 8 weeks apart, with the clutch size will ranging from 8 to 20 eggs.

The eggs should be incubated in a 50:50 mixture by weight of water and vermiculite and maintained between 83-86 degrees Fahrenheit. Hatching usually occurs 80-90 days later. New hatchlings will start to feed within 48 hours. By four months of age, the juveniles should be separated, as fighting, especially during feeding, will occur.

Frilled dragons are one of the most unique reptiles maintained in captivity today. Although many hobbyists will purchase these lizards as an impulse buy, they are not intended for the novice herper. It should be kept in mind; the frill is a defense response to any threatening stimulus. Maintaining any animal in a state of constant stress is not healthy; therefore, anyone owning a frilled dragon should allow them to express themselves naturally and not try to make the reptile a sideshow for their friends.

