

## Crested Gecko (*Rhacodactylus ciliatus*) Caresheet



### **Crested Gecko Taxonomy**

**Kingdom:** Animalia  
**Phylum:** Chordata  
**Class:** Reptilia  
**Order:** Squamata  
**Suborder:** Sauria  
**Family:** Gekkonidae  
**Genus:** *Rhacodactylus*  
**Species:** *R. ciliatus*

### **Distribution**

I believe that to best understand the captive needs of any animal, a good understanding of their natural habitat needs to be understood. The genus *Rhacodactylus* is found on New Caledonia, which is an area in the southwest Pacific. This area is east of Australia, and composed of a main island (Grand Terre), and several smaller islands, including the Isles of Pines. *Rhacodactylus ciliatus*, more commonly known as the crested gecko, "the eyelash gecko", or "the barking gecko", are found on the Southern Portion of Grand Terre and The Isle of Pines. Unfortunately, collection data was never acquired during the early imports and locales of the different morphs is now near impossible. The lack of records by breeders and hobbyists also contributes to this.

New Caledonia is within the tropics. Rainfall is very seasonal and the climate is best described as hot and humid. New Caledonia produces three seasons; the cool season, the warm season, and the transition season/period. The cool season, which will be referred to later, spans for a total of four months and consists of less rainfall and cooler temperatures. The warm season spans for a total of six months and consists of large amounts of rainfall and warmer temperatures associated with tropical cyclones. The transition period is a three month period of little rainfall and high winds associated with the trade winds (mobot.org1).

The information below was recorded on Weatherbase.org and taken from Noumea, New Caledonia, located in the Southern region and at an elevation of 230 feet above sea level. It is a close representation of a natural habitat that crested geckos can be found in. All temperatures are in degrees Fahrenheit and precipitation is recorded in inches. Each listing represents an average for each month. Also note that New Caledonia is in the Southern Hemisphere and the seasons are opposite of ours. It would be much easier for a hobbyist in the states to emulate their warm season during our summer, not during November to March.

### **Description**

Crested geckos are unique in appearance. They are bred for several different color morphs and patterns. These can include tans, oranges, reds, a few very dark ones, as well as patterns such as, tiger stripes and black spotted. Crested geckos, like many other species of gecko, can climb vertical surfaces. (Pending the surface material.) This is because of the spatula tipped setae on the geckos footpad. Each foot of a gecko that can climb vertical surfaces contains almost 500,000 Setae. Each setae is tipped with 100 - 1,000 spatulae. This massive infrastructure of fine setae/spatulae creates an interaction with van der Waals forces allowing them the ability to bond with solid surfaces. It is also notable that geckos have double jointed toes. The double joint allows them to remove their foot from the surface in which they are climbing by lifting their toes from the tip inward. Another notable feature of the crested gecko are their big, pretty eyes, with what seems to be eyelashes. They clean and moisten their eyes by licking them. Their skin is covered with fine scales making them look and feel silky.

### **Lifespan**

A healthy crested gecko can live to be 10-15 yrs old, sometimes longer.

### **Size**

Hatchlings start at 3 inches and emerge into large adults ranging from 8-10 inches.

### **Enclosure**

A 20-gallon (or equivalent) is the recommended minimum size enclosure for a pair of adults. A 20 long, standing on end to make it tall, also works. Height is important since cresties are semi-arboreal and like to climb. They are great glass climbers, so a secure lid is a must. Tank furniture can include, logs, plants, hides, cork bark, and PVC tubing. Live plants such as Ficus and Pothos will help with humidity, add a natural look, and aid in creating more hiding spots and security for the geckos.

### **Substrate**

Some keepers use bed-a-beast, peat moss, sphagnum moss and cypress mulch, or they use a mixture of a few. The easiest to clean and totally safe substrate would be paper towels. This is the suggested substrate for hatchlings.

### **Heating -Lighting - Humidity**

The daytime heating for a crested gecko should fall between 72 - 80 degrees. Shooting for a temperature between 76-78 degrees is ideal on the warm end. For many enthusiasts, no supplemental heating devices are required. If you do require supplemental heating, an under tank heater on one end of the tank or a low watt light bulb can be used to reach desired temps if required. (Cresties are an arboreal species and spend a vast amount of time off the ground. Overhead heating devices are preferred over under tank heaters.)

Avoid exceeding temperatures beyond 80 degrees. These animals come from a cooler climate and excessive heat stresses them greatly.

Night time temperatures can be allowed to drop to the mid 60's, though this isn't required as a necessity unless you are cooling them for breeding. If you are using an air conditioner or central air and the temperatures are dropping lower than 62 degrees, you can use red nocturnal lights to create a slight rise in the temps.

Like most reptiles, a photoperiod of 12 hours of light and 12 hours of darkness is preferred. During the summer months, the daytime photoperiod can be extended to 14 hours if you wish.

Cresties do well in moderate humidity. Moderate should not be misconstrued for "wet". A consistent humidity level of around 65-75% is adequate. (Allowing the substrate to dry out between mistings is recommended.) A large water bowl and regular mistings can help achieve this.

Crested geckos are nocturnal thus they require no special lighting. UVB lights can be used to simulate daylight but is not necessary for them to absorb calcium or Vitamin D-3.

### **Behavior and Temperament**

Crested geckos are easy to handle and very seldom bite. They can be flighty, so use caution and pay attention when handling. Be careful not to drop or handle your gecko roughly, this can stress them and cause the crested to drop his tail (this is a common defense behavior too) and it will not regenerate.

### **Diet**

Crested geckos are omnivores. Their natural food items are fruit, insects and nectars. In captivity, many of us feed [The Crested Gecko Diet](#) manufactured by T-Rex (formulated by Allen Repashy) and supplement with insects that have been gutloaded and dusted with calcium. Crickets should be the staple insect and should be no larger than the space between the eyes. Gutloading the crickets prior to feeding is essential, as your crested gecko will be eating whatever it is your crickets have in them. The better the diet your crickets are receiving, the better the diet your crestie is receiving.

**Note:** It's important to not use calcium with D3 on the crickets if also feeding a regular CGD diet as the D3 is already present enough in the CGD. The additional D3 dusting will have adverse effects.

I offer crickets typically 3 times per weeks and offer the CGD daily. When I offer the crickets, I normally toss in one at a time, in the evening, and the average cricket feeding consists of 2 or 3. I also wait a few minutes between tossing the crickets in to see if he is interested. Some days he has no desire to chase them down and other days he will pounce from wherever he is and lunge at them.

The occasional waxworm and butterworm also adds some variety to their diet and I have used them several times. When I offer worms, I like to use a 2" deep plastic container that I can sit on the bottom of the enclosure, in the far right corner. This allows the worms to move about without them being able to hide. Two or 3 small waxworms or butterworms will be the typical offering. Mealworms are not part of my cresties diet.

### **Water**

A shallow water dish with clean water should be offered at all times. Misting should be done 1-3 times a day, or as needed. Mist all plants and the sides of the tank. Cresties will often be seen licking the water droplets from these areas.

### **Sexing**

Determining the sex can be difficult at an early age. It is best to sex them around 5-6 months as it may be possible to sex accurately at this age. (As the gecko matures, it will become much easier to define the physical characteristics used for visual sexing.) The males hemipenal bulges will be noticeable at the base of the tail whereas a female will not have this bulge. Preeanal are another indicator of the sex and become apparent as the crested gecko matures and grows. Males will have these pores and will be noticeable as they develop.

### **Breeding**

Crested geckos should be at least 35-40 grams before breeding is attempted. Cooling is also suggested prior to breeding, and helps induce the breeding behavior. This is done by dropping the temperatures to the upper 60's and turning off any heat sources. Continue to offer them food twice a week, although they may not eat. Cooling should last 6-8 weeks.

After this time, begin increasing the temperatures, gradually, back to normal. At this point, a male and female can be placed together and a regular feeding schedule should begin again. Once breeding takes place, the female will deposit 2 white, soft eggs every 3-6 weeks. Normally, the older the breeder, the more clutches she will lay. You can estimate that 8-10 clutches during the breeding season will be deposited. Eggs should be removed no later than 24 hours after being deposited, so moist hides should be checked daily.

Eggs should be placed in deli cups with 2-3 small holes and 1-2 inches of moistened vermiculite and/or perlite. Make sure you squeeze out any excess water. Eggs can be half buried or placed in an indentation in the substrate. Place the eggs at least 1/2" apart to allow for growth/expansion. Eggs should be incubated at 74-78 degrees and will hatch in 65-80 days.