

# Crested Gecko CARE SHEET



Crested geckos, *Correlophus ciliatus*, originate from hot, humid forests in New Caledonia. The biology of captive geckos is the same as those in the wild, so their environment should reflect their natural habitat as much as possible to meet their complex welfare needs. These include the need for a suitable environment, a healthy diet; to be housed in appropriate groups; to allow normal behaviour and that they are protected from harm. This is only a basic guide, so do your own research before getting a crested gecko.

# **Biology**

The crested gecko was once thought to be extinct in the wild until 1994 when a tropical storm uncovered a small population on IIe de Pins, a small island in the Pacific Ocean which is part of New Caledonia. A number of the geckos were taken into captivity to be studied. As such, all crested geckos kept in the UK are now captive bred.

New Caledonia is a group of islands with areas of thick jungle. Crested geckos are arboreal, meaning that they live off the ground, in branches. This species will eat both fruit and insects and may also eat small mammals and amphibians in the wild. Crested geckos have adapted to a life of high heat and humidity and are crepuscular (active at dusk and dawn), hiding away from predators during the day. This species can change its colour - when it gets darker, this is called 'firing up'.

There are likely to be many crested geckos or 'cresties' needing homes from the RSPCA, so visit the website:

## www.rspca.org.uk/findapet

# ENVIRONMENT

The vivarium must be secure to prevent escape and free from hazards that might cause injury. Good ventilation is essential to prevent bacterial infections.

Crested geckos need a tall vivarium. An adult requires a 45cm wide by 60 cm tall and 45cm deep enclosure at minimum. Hatchling geckos are more secretive, so you may need to start with a smaller vivarium and increase the size as the gecko grows. Glass vivaria are preferred over wood because of the high humidity level required.

The vivarium should be positioned away from draughts, heat and direct sunlight, which can affect your temperature control.

#### Temperature

Reptiles are 'ectothermic' meaning they use their environment to warm up and cool down, so you need to create a 'thermogradient'. This means positioning the heat source at one side of the vivarium while leaving the other part cool so that the gecko can move around to regulate its temperature. The bigger the enclosure, the easier it is to maintain a wide thermal gradient.

To create a 'basking zone', position a heat lamp at one end of the enclosure pointing downwards. This must be guarded or placed on a mesh lid to prevent injury to the gecko. A thermostat, a simple device that regulates the temperature, must be used with all heat sources. Thermostats prevent the temperature from getting dangerously hot and they also save electricity.

#### LIFESPAN

15 - 20 years in captivity

## SIZE

Up to around 8 inches including the tail

#### TEMPERATURE

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Hot end: 26 - 28°C Cool end: 20 - 24°C

#### HUMIDITY

40 - 50% with boosts to 70%

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Adjust the thermostat temperature and manually check with a digital thermometer that the basking zone reaches 26 to 28°C. The coolest part of the vivarium should be 22 to 25°C and the temperature can safely drop to 18 to 20°C at night. You may need a night-time source of heat, so use a non light-emitting heat source, such as a ceramic heater or a heat mat with the appropriate thermostat, set to 18°C to create a nighttime temperature drop. For ceramic heaters, you will need a dimming or 'pulse proportional' thermostat. For heat mats, you need an on/off heat mat, with the probe placed directly on the mat.

Thermostats are not always accurate so fit one digital thermometer at the basking zone and another at the cool end and then check these temperatures every day, adjusting the equipment accordingly.

## **Humidity**

The correct humidity is essential for healthy skin shedding. A hygrometer allows you to measure the humidity inside the vivarium. You should create humidity boosts up to 60 to 80%, by spraying the vivarium with clean water. The enclosure should dry out in between misting. Ensure that the substrate does not get waterlogged as this can create a breeding ground for bacteria, which can cause skin or respiratory infections.

# Light

Reptiles use natural daylight to set their day and night patterns. Sunlight contains visible light and ultraviolet (UV). Part of UV is called UVa, essential for reptile vision and to stimulate their appetite. Another important part is UVb, which allows reptiles to make vitamin  $D_3$  in their body, vital for them to store and use calcium.



UVB decreases with distance so create a 'photogradient', from light to shade, by fitting your light source at the top of the vivarium so the bottom part is cooler and more shaded. Use a medium output, 5 to 7% UVb lamp. UVb output decreases over time, so the lamp must be replaced according to the instructions.

A normal light-dark cycle is needed so you must turn off all lights at night. Both the lights and day-time heat lamp can be controlled with a simple plug-in timer; 12 hours on, 12 hours off.

# Cleaning

Poorly maintained enclosures can become dirty quickly and pose a health risk to you and your pet. Animal waste should be 'spot cleaned' as soon as it appears. Once a month, use a reptile-safe disinfectant, available from pet shops, to fully clean the vivarium walls, glass and decorations, then rinse off well. Be careful as reptiles can carry *Salmonella*. Wash your hands after cleaning or handling to reduce the spread infection.

# DIET

## Water

Some geckos prefer to drink water droplets in the vivarium but you must provide a dish of clean, fresh water at all times. Sometimes the gecko will foul the water, when it must be changed as quickly as possible.

# Feeding

Cresties need to a varied diet of different mashed fruits and live invertebrates with appropriate supplements. Supplements provide the essential vitamins and minerals that are not available in captivity. Safe fruits include blueberries, pears, papaya, strawberries and mango. Never feed citrus fruits or banana, as they prevent the uptake of calcium.

You can also use good brands of 'crested gecko diet' (CGD) as a supplementary food source. They contain a balance of vitamins and minerals but they should not be used exclusively. Look at the ingredients and do not use those containing wheat, rice or bran as these are not suitable foods for crested geckos. CGD comes as powder form and needs to be mixed with water before feeding. Remove this food daily as it turns sour quickly.

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To ensure that you are providing variety, you can provide different foods on a three-week rotation. For example, feed fresh fruit with supplement mixed in for one week, then livefood for the next, followed by crested gecko diet and then start the cycle again.

Crested geckos also enjoy hunting live bugs, such as small dubia cockroaches, 'calciworms' and crickets. When feeding livefood, ensure that the gecko does not accidentally swallow lots of substrate as this could cause a serious stomach blockage, called impaction. You can feed in a separate enclosure to prevent this happening. Remove uneaten bugs during the day, as they can bite the gecko when it is sleeping.

It is important to keep the bugs healthy for their own welfare and so that they will be nutritious for your reptile. This is called 'gut loading'. Provide fresh plants known to be safe for reptiles as well as dry cereal foods.

You can also provide a dish of plain calcium powder in the vivarium. Supplements can be over-provided so always follow the instructions. With a well set-up UV system, you will not need to add vitamin  $D_3$  to the diet.

Regular weighing is important to ensure that your gecko is gaining weight steadily when growing and maintaining it once fully grown.

# **BEHAVIOUR**

# Enrichment

It is important to provide opportunities for natural behaviour in captivity, called 'enrichment'. Cresties are active at night, have the ability to cling to branches and are good at jumping. You will need to provide branches or vines to allow them to do this. Safe wood such as fruit tree or grapevine branches should be used. Crested geckos will typically hide during the day so provide half coconut shells or cork bark tubes for this.



# Bringing your gecko home

Always set up the vivarium and run it for a week before introducing your gecko. This will allow time for you to adjust the heating and lighting and play around with your decoration without disturbing the animal. Carefully place the gecko in the vivarium, close the door securely and turn the lights off to reduce stress until the following morning. It is best not to handle for the first week. Instead, allow time for your gecko to become used to its environment and find its food and preferred hiding places.

Feeding live insects also provides enrichment because it encourages natural hunting behaviours

# Substrate

Substrate is the name for the floor covering in the vivarium. Ideal substrates for crested geckos are those that hold humidity, such as coconut fibre 'coir' or specially mixed soil substrate covered with a layer of moss or leaves. The ideal enclosure will contain tall, broad plants, creating variation in light and shade.

# COMPANY

It is best to keep these geckos singly and you must not keep males with others permanently. You might be able to keep females together, providing there are enough basking, hiding and eating areas for each individual. If you are going to house geckos together, keep watch for any signs of aggression including chasing, squeaking, tail shaking or biting. If they display these behaviours you must separate them immediately.

## Handling

Crested geckos can become used to handling once they have settled in. The gecko should be allowed to climb onto your hand of its own free will. Never grasp the tail as it can be dropped, which is stressful and leads to the loss of vital fat reserves. Unlike other geckos, cresties cannot regrow their tails once dropped

It is important that geckos are not handled for so long that their core temperature drops. Around 10 minutes at a time is a safe period for this, depending on the temperature outside of the vivarium.

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# HEALTH & WELFARE

# Shedding

Reptiles have to regularly shed their skin and geckos shed in large pieces. There is no rule as to how often this will happen but it will be more frequent when the lizard is young and growing. Crested geckos may eat their shed skin and this is normal.

Poor shedding can lead to the loss of toes, which will greatly affect their mobility. If your gecko has a good diet, good hydration and the correct humidity then this should not be an issue. If you notice any stuck on skin from a recent shed, place the gecko in shallow, tepid water then gently rub it off. Do not try to pull it off as you can damage the new skin underneath. If your gecko has lots of problems shedding, seek a reptile vet's help.

# **Diseases & concerns**

A healthy crested gecko has clear, bright eyes and pupils that react to changes in light. The skin should be smooth and without blisters. A healthy gecko will not have any kinks in the tail or spine.

You should register with a specialist reptile vet in your area so your gecko can have treatments as necessary.

Look out for abnormal droppings or weight loss as these can be signs of parasites. Crested geckos can suffer loss of 'stickiness' in their toe pads if the humidity is too low or if it has some nutritional deficiency.



#### Transport

If you need to transport your gecko, it is important that it is done safely. Choose a suitable carrier; they can be transported in ventilated plastic containers with soft, absorbent paper. For babies you can use one of the plastic tubs used for livefood. Avoid extremes of temperature; the addition of a heat pack may be required but make sure this will not over-heat. Keep transit time to a minimum to reduce stress.

The main issues that affect captive reptiles are nutritional diseases and imbalances. Metabolic bone disorder or 'MBD' is a term used to describe many types of vitamin and mineral deficiency. It often involves a lack of available calcium due to a deficiency of vitamin  $D_3$  due to poor diet or lack of UVb lighting. Symptoms in crested geckos include swellings or a misshapen leg, mouth or spine. MBD is difficult to treat and requires urgent veterinary attention. If caught too late, the lizard can have permanent deformities and it can be fatal.

As mentioned before, impaction is a potential problem for captive reptiles if they swallow non-natural substrates that they cannot digest. It can also occur if the animal has a nutritional deficiency, leading them to actively eat non-food items. For this reason it is essential that the heating and lighting systems are tested to be working correctly at all times and that a nutritious diet is provided so that the gecko is healthy.

Another problem is floppy tail syndrome. This is where there is inadequate space for climbing. The gecko then sleeps upside down on the glass and the tail may bend over and can become damaged.

It is essential that you take time to research the diseases of crested geckos further. If you do get a gecko, monitor its health daily and see your reptile vet urgently if you have any of the concerns above.

# This care sheet is a basic guide only. Further information must be sought before you decide to take responsibility for any exotic pet. Find more information on our website: www.rspca.org.uk/exotics

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