

Welcome to the Species Care Series Presented by the Alaska Herpetological Society

We hope you enjoy this free educational class! Presentations will be held on the first Saturday of each month from October through May. There is a live video of this presentation on the Facebook page, and the slides will be available to view from the website afterwards.



Are you looking to improve care of exotic pets in Alaska? Join Us and support more events!
How to become a member?

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AHS Species Care Series presents- Crested Gecko (*Correlophus ciliatus*)



Crested geckos are the most common in the pet trade, but several other popular geckos have the same habitat and care!



Crested Gecko (*Correlophus ciliatus*)



- Crested geckos are native to New Caledonia, specifically on Grande Terre and Isle of Pines
- Found in tropical rainforest habitat, among the trees and vines
- Medium sized gecko with adults averaging 6-8" long
- 15-20 year lifespan when cared for properly
- Crepuscular- most active around dawn and dusk



- Cresties commonly drop their tails; tail loss has no negative impact
- Originally discovered in 1866 and thought to have gone extinct in the 1890s. Rediscovered in 1994.



Gargoyle Gecko (*Rhacodactylus auriculatus*)



- Adults average 6-8" long
- 15-20 year lifespan with proper care
- Originating from New Caledonia, islands of Grande Terre and Isle of Pines



Gargoyle geckos have the same care requirements as crested geckos

Leachianus Gecko (*Rhacodactylus leachianus*)



- Adults average 9-17" long depending on the locality
- 20-30 year lifespan with proper care
- Originating through most of the various islands of New Caledonia
- The localized wild populations, called localities, all have different identifying traits.



Leachies have the same care as crested geckos, with the exception of enclosure size.

36"L x 18"W x 36"H for smaller localities

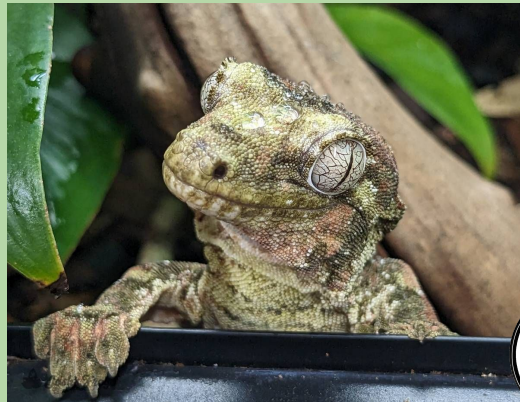
48"L x 24"W x 48"H for larger localities.



Chahoua Gecko (*Mniarogekko chahoua*)



- Adults average 10-12" long
- 15-20 year lifespan with proper care
- Originating from New Caledonia Isle of Pines and localities in the northern and southern tips of Grande Terre
- Chahouas are known for being the calmest and most docile of the New Caledonia geckos



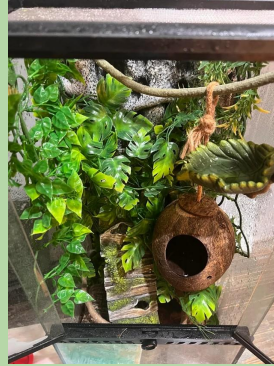
Chahoua have the same care as crested geckos except the enclosure size- 36"L x 18"W x 36"H is recommended

Enclosure Sizes



Hatchling crested gecko-

- A 6qt shoe box tote for fresh hatched babies
- 6"L x 6"W x 8"H for hatchlings that are eating well



Juvenile/sub adult crested gecko-

- 12"L x 12"W x 18"H



Adult crested geckos-

- 18"L x 18"W x 36"H
- larger for active adults!



Enclosure Types



Because of the relatively easy-to-achieve care requirements types of enclosures such as glass, PVC, or other materials are mostly a personal preference. Some things to consider about the enclosure are:

- Front opening. Being arboreal, a tall enclosure is required. A front opening enclosure will make access much easier.
- Screen top or closed/covered top. With higher humidity levels required, a solid top(no screen on top) is best. Screen tops can be covered with HVAC tape, cut-to-fit plexiglass, or other non-porous material to capture humidity.
- Waterproof. The enclosure must be waterproof to hold up to constant high humidity, wet substrate, and enclosure misting.



Temperatures and Heating Elements

In most cases, the daytime basking temperature can be achieved with a daylight LED or the UVB bulb. Extra heat supplement is rarely required and temperatures in excess will cause harm.



Daytime ambient temperature of 70-75°F degrees
Daytime basking temperature of 82-85°F degrees
Nighttime ambient temperature of 65-72°F degrees



In cases where the ambient temperature is consistently under 65°F, low wattage bulbs with a thermostat can be utilized. Bulbs that product light can be used during the day, and ceramic bulbs can be used at night. Red bulbs should not be used- reptiles CAN see the red color and it will throw off their circadian rhythm.

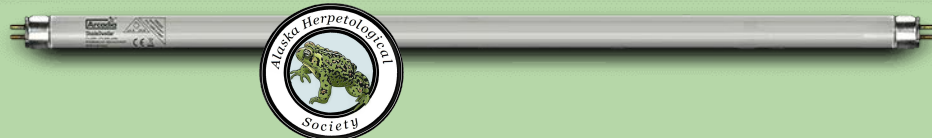
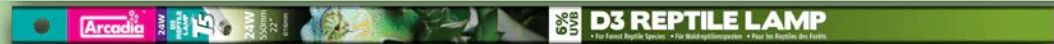


Lighting and UVB

Imitating a day and night cycle is always recommended. A simple LED light on a 12 hour timer is all that is needed. Size and wattage of the light will be based on if the enclosure has live plants or not.



Because crested geckos are Crepuscular and eat a well balanced pre-made diet, UVB has proved not required. However, it is always good to give your animal the option of UVB. A T8 ZooMed ReptiSun 5.0 or T8 Arcadia D3 + Forest 6%, or other similar shade/forest dwelling options can be used.



Humidity

Crested geckos need relatively high humidity of 60 to 80%.

Humidity will naturally lower during the warmth of the day and raise when it cools down at night.



To mimic this daily rise and fall of humidity, spray down the enclosure in the morning and at night with spring or tap water; it is not recommended to use distilled water because the minerals in the water is beneficial to the geckos.

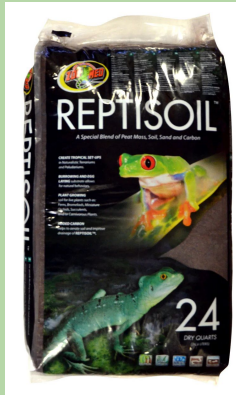


There are automatic fogger systems available- fog is not advisable for New Caledonia geckos. These geckos hide out in trees and bushes where fog does not stay, but instead it clings to the plants in water droplets. In addition, without regular cleaning these systems can get clogged with mineral buildup can harbor dangerous bacteria and disperse that through the enclosure when it turns on.

Substrate

To aid with humidity, a moisture-retaining substrate mix is needed. There are pre-made options, or you can mixing your own.

- 60% organic topsoil, 40% coconut fiber
- ZooMed Reptisoil
- Lugarti Natural Reptile Bedding



Cypress mulch
or coconut
husk chips can
also be used.



Adding leaf litter would help create a more natural environment and make your gecko more comfortable



Enclosure Clutter

To keep your gecko feeling safe and happy, your enclosure should have 70-80% coverage with clutter. Be sure to make use space horizontal space at all levels of the enclosure- you can mount perches high up!



- Lots of perches, branches, elevated horizontal items. Cork branches, man-made perches/bridges, PVC poles, natural branches
- Cork flat, rounds and branches- antibacterial/antimicrobial properties make is a great material to use
- Plants- fake and real
- Magnetic and suction-cup mounted ledges
- 3D printed hides, perch holders, dish holders, ledges, and more!



Unsafe Items

Crested geckos and other New Caledonia geckos are fairly easy to care for. Here are a few things to avoid and why to avoid them-



- Hammocks- limbs can fall through the netting in hammocks and get caught. This can lead to injured limbs or even limb-loss
- Resinous woods such as pine, spruce, ect. The oils and saps produced in these woods are toxic
- Reptile carpet or other porous liners that replace substrate harbor dangerous bacteria and are impossible to adequately clean
- Spiny plants- some real and fake plants can have sharp spines that could puncture a geckos' skin



- Waterfalls and large water features- arboreal geckos cannot swim!
- Colored bulbs, large wattage bulbs, and heat mats- colored bulbs interfere with the natural circadian rhythm. These also typically get too hot for crested geckos, and heat mats do the same



Feeding

Crested geckos are omnivores. In the wild they eat fruit and insects. In captivity, there are well balanced nutritionally-complete powder(CGD- crested gecko diet) that turns into a smoothie when water is added.

Hatchling and juveniles(0-12 months)

- CGD daily
- Insects 1-2 times per week

Adults(over 12 months)

- CGD every 2 to 3 days
- Insects once weekly



Best crested gecko diet powders:

- Pangea
- Repashy
- Blue River Diets
- Gecko Pro
- Leapin' Leachie

Each brand has a variety of different flavors. It's a good idea to rotate through the formulas to give a well varied diet. Because CGD is nutritionally complete and additional supplements should not be mixed in. Insects can be dusted with calcium, however.

Best insects:

- Crickets
- Dubia roaches
- Red runner roaches
- Darkling beetles
- Snails
- Grasshoppers



Bioactive Overview

Bioactive enclosures are contained ecosystems that sustain themselves and require minimal maintenance and no full cleanouts. These enclosures can take a lot of time to establish the plants and clean-up crew(CuC) before being able to add your gecko. If preferred, you can choose to use fake plants instead of live plants.



Substrate should be a mix of:

- 40% organic topsoil
- 40% coconut fiber
- 20% play sand
- Small amount of horticultural charcoal
- Top the substrate with leaf litter



Most tropical houseplants are safe, here are some specific safe plants:

- Pothos
- Tradescantia
- Sansevieria
- African violets
- Bromeliads
- Dracaena
- Spider plant
- Philodendrons
- Ferns
- And more!

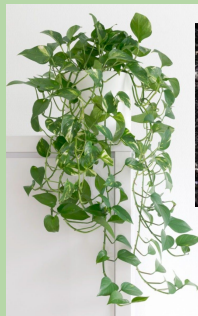
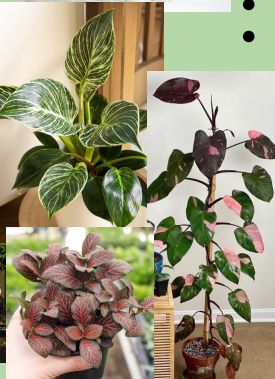
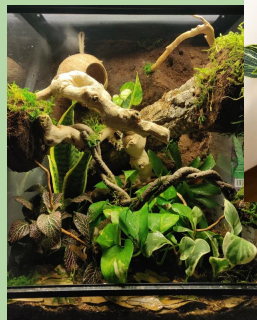


Photo Credit: Nature of Things

Clean-up Crew:

- Isopods
- Springtails
- Mealworms
- Dermestid beetles
- Buffalo beetles



Shopping List for an Adult Crested Gecko

Enclosure	\$100-400 for a new glass enclosure	\$200-400 for new PVC enclosure
Heat & Light	Bulbs start around \$20+ea, domes \$10-20ea LED light \$20+	RHP \$50-120. UVB Fixture and bulb \$100. Solar Meter \$265+
Temp & Humidity Controls	Digital thermo/hygrometer \$5-20+ea Manual IR Temp Gun \$20-40 Basic Thermostat \$20-50	High-end proportional thermostat starts at \$120+
Substrate & Clutter	1-2 packages of substrate needed- expect \$20-35 per package of premade Hides, logs, branches, rocks, foliage, ect. Expect \$10+ each item and totalling over \$150	
Misc	Water dish, spray bottle, feeding tongs, \$50+ for all	



Temperament and Handling

Crested geckos are known for their docile temperament, but they can be jumpy and/or skittish.

Unlike some of the other New Caledonia geckos, cresties are unlikely to bite. Even if they do, the bites can be startling but don't hurt.



Skittish cresties can usually become more accustomed to handling with short and frequent handling sessions. Never grab your gecko's tail. Your gecko may be less flighty with a gentle scooping motion to pick them up vs grabbing from above. Stay patient and gentle with your gecko. Some specific ways to handle your gecko are:

- Hand walking: Let your gecko walk onto your hand, then place your other hand in front of it to give it a place to go.
- Treadmilling: While your gecko is on one hand, place your other hand in a cup shape in front of it. When your gecko leaps, switch hands.



Common Illnesses and Issues

Metabolic Bone Disease is caused by a deficiency in calcium and vitamin D3, which can lead to weak, rubbery bones that can't support the gecko's weight. Feed a quality CGD and dust insects with calcium or calcium+D3 to avoid.



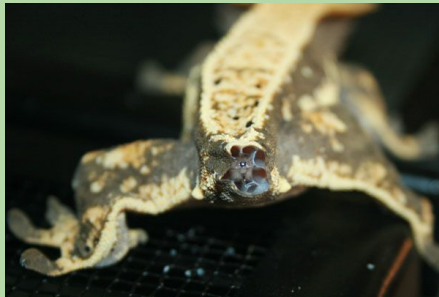
Obesity is caused by over feeding. If your gecko starts getting to chunky, decrease the portion size of CGD to start with. Long term obesity will shorten your gecko's lifespan.



When in doubt, consult the vet!



Floppy tail syndrome is caused by weak muscles in the tail, typically from a lack of variety of surfaces textures for your gecko. While not harmful, avoid this by giving your gecko a variety of perches and hiding areas.



Crested geckos commonly drop their tails- sometimes for seemingly no reason. Keep the tail nub clean and it will close up and heal on its own.



Geckos should always be housed alone- cohabitation risks severe injury, fighting, competition for food, spread of disease, and other issues.



Alaska Rescue Stats

Jonathan's Reptiles took in 64 surrenders in 2022.

77% of those 64 surrenders had health concerns.

Of those with health concerns, 53% were surrendered in poor condition, 18% in moderately poor condition, and 29% in extremely poor condition.

30% of the surrenders in extremely poor condition passed within hours or days of being surrendered.

The most significant stat is that 90% of the reptiles surrendered had health concerns directly related to improper husbandry.

Reason for Surrender	#	Health of Surrender	#	Husbandry Related?	
No longer able to care	22	Good	15	Yes	44
Health concerns	15	Fair	9	No	5
Surrendered from AC	10	Poor	26		
Moving/Living situation	7	Extremely Poor	14		
Lost interest	5				
Found	4				
Temperament	1				



Some of the health concerns of surrenders include

- 20 were malnourished or starving.
- 12 had dehydration and/or stuck shed.
- 7 were missing all or part of a limb.
- 6 had mouth rot/stomatitis
- 4 had respiratory infections.



Emergency Preparedness

Loss of power is a factor for Alaska that you **have** to be prepared, and to be able to evacuate your pet in these situations. You cannot just put a reptile in a bin and take them outside when temps fall below safe levels- under 40°F. They need to be put into something with heat and that will hold heat for them.

An emergency kit consists of a few key items:

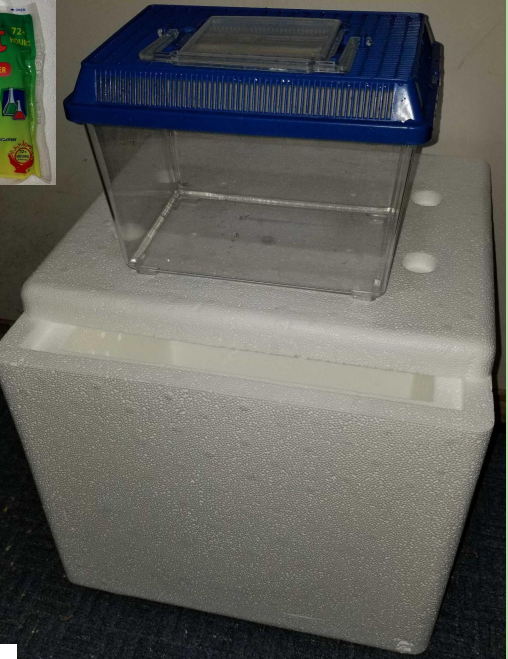
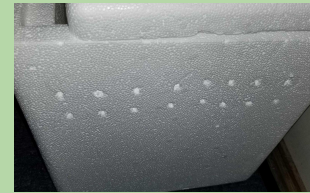
- Insulated container such as a styrofoam box or even a cooler
- A reptile-safe heat pack
- A digital thermometer with a probe to monitor temps without having to open the container
- Any inner container such as a kitter keeper, small tote, or pillow case

Some other items to consider adding to an emergency kit are:

- Critical Care, formula depending on your animals
- Syringes
- Povidone-Iodine (like Betadine)
- Gauze, swabs, and cotton balls
- Stainless steel tweezers
- Saline Solution
- Vetericyn Plus
- Canned or Vac-sealed bugs for feeding, do not use freeze-dried



If you are able to heat water, you can use a warm water bottle instead of heat packs and conserve your heat packs for a time when they are the only option.



HotHands brand heat packs and other brands meant for people are NOT reptile safe! These get FAR too hot and will overheat and/or burn your reptile.



Questions?

We hope you enjoyed this presentation on helping your pet thrive under your care!



If you have ideas on how we can improve, please let us know! Public feedback is very important.



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