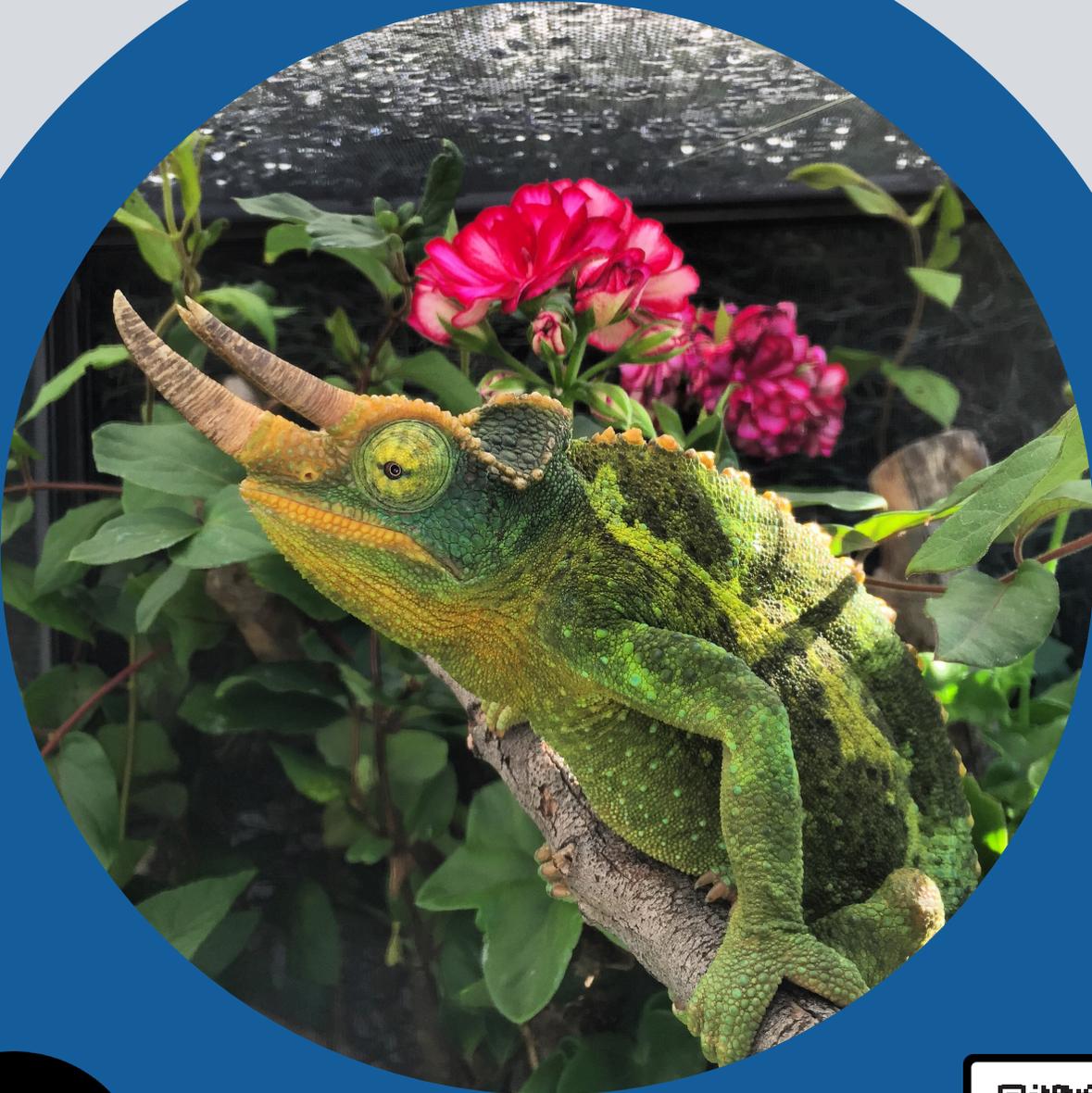


Trioceros jacksonii xantholophus

Yellow-Crested Jackson's Chameleon

Care Guide 2022



*A ChameleonAcademy.com
Publication*



SCAN ME

For a detailed explanation of each section of this Care Summary, and even more information about Jackson's Chameleons, you can scan the QR code to be taken directly to the webpage.



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Natural History

For detailed information visit <https://chameleonacademy.com/the-jacksons-chameleon-trioceros-jacksonii/>



Newborn Male



Juvenile Male



Adult Male



Newborn Female



Juvenile Female



Adult Female

Natural History

Range	Eastern Slopes & Nyambeni Range Mt. Kenya, Kenya
Elevation	2300 - 6000 ft, 700 - 1850 m



Seasons

	Dry		Wet	
Avg High	80°F/27°C	77°F/25°C	73°F/23°C	76°F/24°C
Avg Low	55°F/13°C	58°F/14°C	56°F/13°C	57°F/14°C

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Chart is based on seasonal averages of Chogoria, Kenya from NOAA data

The native habitat on Mt. Kenya is defined by two wet and two dry seasons. Annual temperatures are relatively consistent with dry and cool days with moist and cold nights. Although *T. j. xantholophus* has shown the ability to naturalize around the world, the greatly limited microenvironments of captive conditions demand we align our husbandry with the native range.



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Sub-Species Notes



Naturalization in Hawaii, USA

The Yellow-Crested Jackson's Chameleon created a feral population from three dozen individuals escaped from an import. Although wide variation still exists, the Hawaiian population seems to tend toward having smaller bodies and more horn deviation than the Kenyan population. These traits can be found in both populations, but more so in the Hawaiian group.



Color Variations

Yellow-Crested Jackson's Chameleons start off life in a cryptic brown, black, and white pattern. As they grow into their juvenile colors they can take on a number of hues from reddish to blueish. These colors can be retained into young adulthood. But most often they turn the rich emerald green of the adult coloration upon full maturity. Although there is no reason why a selective breeding program couldn't bring out these traits, none are known to the author as of 2022. Thus be aware that any sales of "high blue" or "high red" will, with very few exceptions, give you a temporary uncommon color.



The pictures shown are reddish and blueish females. Both of these turned into the adult emerald green.



Horns on Females

T. j. xantholophus is the only Jackson's subspecies where the female does not have horns. But there are cases where females grow small, poorly-developed horn nubs. These small horns will not develop like the horns on the males.



Horn Growth

Horns continue to grow for the chameleon's entire life, though it slows at adulthood. Damage to the area of the horn can affect growth and disrupt growth direction. Broken horns will not affect quality of life.



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Yellow-Crested Jackson's Chameleon

Cage Set-up

Indoor Cage Size

Minimum	2' x 2' x 4'
Retail	36" x 18" x 36"
Custom Build	3' x 2' x 4'
	or Greater

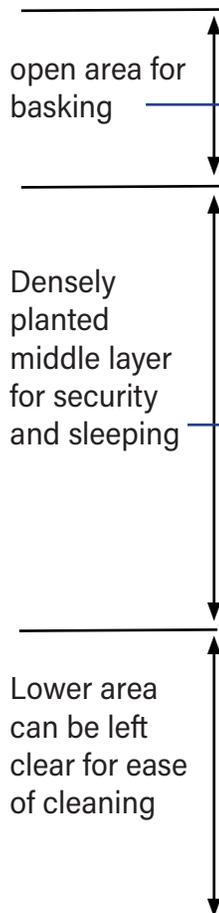
Cohabitation

Jackson's Chameleons should not be kept together. Not in pairs, not females, and not babies. Short term is tolerated, long term is basis for serious health issues.

Cage Set-up

- **Required:** One chameleon per cage
- **Required:** Must have suitable perching area behind plants where chameleon can hide entire body from view and block UVB light from above
- **Ideal:** Place cage so top basking branch is above your head height

For perching, use horizontal branches with a diameter between chameleon feet reaching all the way to half way around.





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Yellow-Crested Jackson's Chameleon

Care Parameters

Temperature

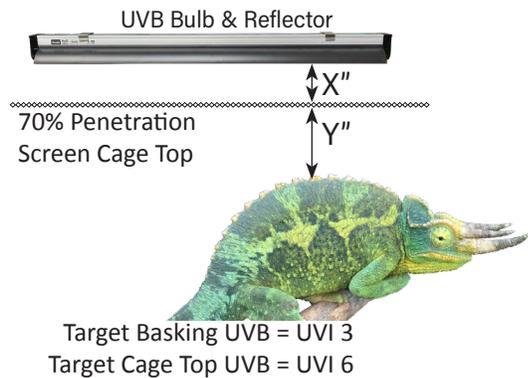
DayTime	72 -76°F / 22-24°C
NightTime	50-65°F /10-18°C
Basking	80-85°F /26-29°C

Humidity

DayTime	40% - 50% RH ¹
NightTime	80% to 100% RH ²

¹Ensure that branches and surfaces dry daily
²Provide air movement to avoid stagnant air

UVB



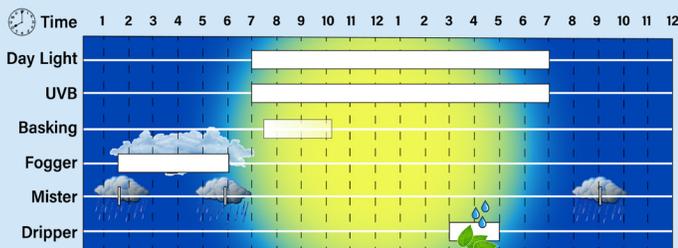
Technology	Bulb Strength	X	Y
T5 HO Linear	5.0 or 6%	2"	4"
T5 HO Linear	10.0 or 12%	6"	6"

- X" + Y" distance is from UVB bulb to back of chameleon through a 70% penetration screen top panel of the cage.
- X" + Y" distance is average compromise over bulb lifetime. Use Solarmeter 6.5 for exact measurements.
- Bulb must have a dedicated reflector for these numbers to be accurate.

Hydration & Lighting

Dry Season

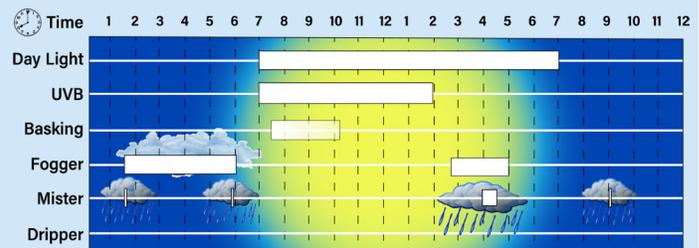
Jan - Feb, June - September



Mister cycles are 1-2 minutes in length

Wet Season

March - May, October - December



Short Mister cycles are 1-2 minutes in length;
 Afternoon rainshower is 5 min or more

Ventilation: Air exchange is critical for health. Adequate ventilation will ensure that our cage surfaces and branches dry out during the day. Constantly wet surfaces are unhygienic. Be especially careful with wet season replication. Gentle fans sucking air from cage and blowing out may be used to aid with hybrid cage drying if needed.

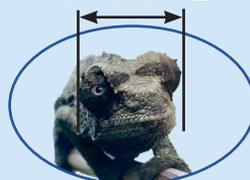
Lighting Upgrade: To more effectively simulate wet season cloud cover, add a weaker "cloud cover" light in parallel with main daylight fixture. Turn off main light with UVB light before afternoon rain shower and leave cloud cover light on until nightfall.

Feeding

Life Stage	Frequency	Quantity (Feeder Units)
Growing or Gravid	Every day	No Limit
Adult	Every other day	3-4 Units

- One Feeder Unit = one "Safe Size" cricket
- Add feeder variety at equivalent volume
- Ex: if "safe size" cricket = 1/2" then 1 feeder unit = 1/2" cricket or 4* 1/4" Crickets or 20 fruit flies

Safe cricket size



Supplementation (REQUIRES UVB)	
Every Feeding	Once per Month
Plain Calcium NO vitamin D3	Multi-Vitamin with up to 10k IU/lb Vit D3
Recommended: add Bee pollen 50/50 mix	100k IU/lb Vit A Examples:



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Mating & Giving Birth



Male Breeding Display Colors



xantholophus mating



Non-receptive female

Jackson's Chameleon Mating Notes

You are encouraged to breed the Kenyan bloodlines for the healthiest genetics and to not mix Kenyan and Hawaiian individuals. Jackson's Chameleons are sexually mature before adult coloration is obtained, but the color change is a good gauge as to when it is healthy to attempt mating. Adult males may get a blue tail and become restless when ready to mate. Bring the female into the male's cage. The male will bob his head and approach the female. A receptive female will stay light colors and allow him to mount her. Once mating is over (about 30 minutes) return her to her cage. A non-receptive female will turn dark colors, gape, and sway back and forth. Remove her and try again in a couple days. During pregnancy give your female ample privacy and as many nutritious feeders as she will eat.



Gravid Female

Reproduction Data

Sexual Maturity	10-12 Months
Reproduction	Live Bearing
Newborns	8-50
Gestation	6-9 months

Note on Gestation:

The female is able to influence when the egg follicles are fertilized and even the length of gestation. This allows her to time giving birth with advantageous seasons. In captivity, time of gestation can be highly variable.



Unfertilized Ova & baby in egg sac

Giving Birth

The female will voraciously eat throughout pregnancy. She often then stops eating for a few days before giving birth. On the day she will be restless and start dropping babies around the cage starting in the morning and will take a few hours. Babies will fall on branches, hit the ground, wake up, and try to disperse. Yellow balls are unfertilized ova and not a concern. Babies are not in danger of being eaten so remove when mother is done giving birth. After birthing, hydrate, provide food, and give privacy for resting. Females store sperm and will produce multiple clutches from one mating. Females may also impregnate themselves years after mating.



Newborn Baby Male



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Baby Care



Densely planted screen cage



Plastic Bin



Glass terrarium



Professional Breeding

Baby Housing

The ideal housing is individually keeping each baby in its own cage. And for planned breeding this is what should be set-up. But Jackson's Chameleons tend to surprise their keepers with babies. For emergency situations a large plastic sweater box with plants can be used. Babies can be kept together for the first few weeks without lasting harm. Put them in a plastic bin with plants and branches while you figure out your next step. Provide plenty of plant cover for the to hide in. Glass terrariums may be used as long as there is airflow.

Feeding Baby Jackson's Chameleons

Babies are often fed on fruit flies. They are large enough to take *Drosophila hydei* but *D. melanogaster* or even wild fruit flies drawn in by a fruit cup can be eaten as well. Other options include bean beetles and pin head crickets. Feed as much as they will eat. There are growth spurts and you want those to be well nourished or stunted growth can occur. Supplementation is same as adult regimen, but can be started after a few weeks old.

Environmental Parameters

Babies may be cared for as adults as far as heat, UVB, and hydration, But you must account for any reduction in cage space. For example, in a small cage, the heat from the daylight bulb may warm the area enough to not need a heat lamp because of the small cage volume.

The "Three Month Die Off"

Many in the community have had their Jackson's Chameleon babies die off unexpectedly at around three months old. This is due to the effects of stress from cohabitation and lack of a nighttime temperature drop building over time until their body gives out.

Rehoming

Males will have horn nubs and can be identified from birth. The older they get the easier it is. Because Jackson's are more sensitive to off-husbandry than other chameleons it is best practice to raise them for four months before sending them to new homes.



Fruit Flies are perfect baby food



Ideal minimum size to rehome



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Top 5 Things That Kill Jackson's Chameleons



High Temperatures

If kept at ambient temperatures in the mid 80sF (30°C) or above Jackson's Chameleons will become increasingly heat stressed. Although they may not die, constant warm temperatures will compromise their immune system and Temporal Gland Infections and Respiratory Infections will become more common. Allow a basking temperature up to 85°F(30°C), but maintain ambient temperatures in the mid 70°sF (23°C)



Cohabitation Stress

Jackson's Chameleons have mild temperaments and do not show stress as dramatically as other species. This lulls keepers into believing they can be kept together. But there is a constant stress in cohabitation which eventually results in illness. Chameleons scatter as babies and, although they have a loose social structure in the wild, our cages are not big enough for them to act out their social instincts properly and results in a constant battle for dominance. **One chameleon per cage.**



Lack of Night Time Temperature Drop

Jackson's Chameleons come from a high elevation and have come to depend on a nighttime drop at night to maintain their health. It has been difficult to quantify exactly how cool they need it or how long of warm nights they can take before they get sick. This absence of hard data leads some to believe the danger is not real and, unfortunately, it is their chameleons that suffer the consequences.



Handling Stress

The mild personality of the Jackson's leads keepers into the false sense that handling their chameleon is fine or even that the chameleon enjoys it. Each chameleon will have a different tolerance level to handling, but this is a stressful activity for them anyways. Additionally, a chameleon falling asleep in your hand or on you is the highest form of stress. It is not "trust" as it would be for a dog. Handling should be done only when necessary.



Supplementation Sensitivity

Jackson's Chameleons have shown a sensitivity to our multivitamin/mineral supplements. The most common reaction to overuse of supplements is edema which manifests as a swelling most often around the neck area. It is unknown exactly what is causing this, but elimination of supplement powders reverses the condition. We suspect fat soluble vitamins, but more experimentation is needed.



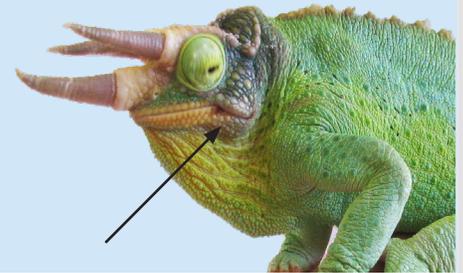
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Medical Summary

High level ID only. Consult with veterinarian for care.

Temporal Gland Infection

Description: Bacterial infection of a specialized gland
Symptoms: Swelling at the junction of the upper and lower jaw
Treatment: Requires antibiotics from vet ASAP
Prevention: Husbandry related. Inadequate husbandry weakens immune system and allows bacteria to flourish unchecked.



Edema

Description: An internal imbalance, probably from supplementation
Symptoms: Swelling. Usually around neck area.
Treatment: Remove multi-vitamin supplementation from diet
Prevention: Edema appears to be linked to over-supplementation and edema slowly goes down over a span of weeks or months after discontinuing use of supplements with fat soluble vitamins (D3, A, etc...)



Bacterial Infection

Description: Immune system is compromised
Symptoms: Swelling in mouth or eyes, or head tilted up
Treatment: Requires antibiotics from vet ASAP
Prevention: Husbandry related. Inadequate husbandry weakens immune system and allows bacteria to flourish unchecked.



Heat Stress

Description: Your chameleon is overheating
Symptoms: Washed out colors, gasping, eyes closed, on floor
Treatment: Spray with water; bring them to a cooler location
Prevention: Maintain ambient temperature around 72-76°F, 22-24°C



Closed Eyes/Internal Distress/Vitamin A Deficiency

Description: Could be respiratory infection, vitamin A deficiency, high parasite load, or other internal damage/distress. Also occurs in high emotional distress.
Symptoms: Eyes are closed during the day
Treatment: Consult vet for accurate diagnosis.
Prevention: Proper husbandry, balanced nutrition and fecal check for parasites





Chameleon Academy

How To Use This Guide

Approved Use of this Care Guide

This care guide is meant for community use. You are welcome to use it, unaltered, on your websites, Facebook groups, or any other application which calls for chameleon care information. You are welcome to print this guide as a customer reference at reptile shows or veterinary offices. Your customer can get their own copy from the QR code on the front cover. If you use Chameleon Academy care information then you may refer any questions you get about the parameters listed here to me. If the question is not answered in my website details then I will answer it personally.

Care Guides are just starting points

A care guide represents the ideal conditions, as we currently understand them, that have worked for the widest number of that chameleon species. This is an average. Your chameleon is an individual in your unique environmental conditions. Therefore, it should be no surprise if something needs to be adjusted as you observe your chameleon's behavior. Does he want the basking bulb on for longer? Does he need more hydration? Use this care sheet only to establish your initial parameters, but then **listen to what your chameleon is telling you!** These parameters are meant to get your started, not to lock you in to certain numbers. Your chameleon is the expert in what chameleons need! But make sure you fully understand the situation before changing the parameter. This is where constant study of chameleon language is imperative for successful long term chameleon keeping.

Further Research Opportunities

Each Chameleon Academy care summary has a website link that will take you to a deeper discussion regarding each parameter. This is the first step to deeper understanding of the parameters. The rest of the website will then provide more context. The Chameleon Academy outreach includes the **Chameleon Academy Podcast** with over 250 episodes interviewing the top keepers, breeders, veterinarians, and scientists in the world. This podcast is available on any major podcast playing app, a dedicated free Chameleon Academy iTunes/Google Play app, and on the <https://ChameleonAcademy.com> website. You may also consult the **Chameleon Academy YouTube channel** for video tutorials.

Conflicting Husbandry Advice

There are diverse experiences in the community and each person can speak only to what they know. Therefore, you will find conflicting advice throughout the community. Your best approach to dealing with these differences is to do your research into the person you trust the most or is directly involved with helping you. The most obvious choice is to follow the advice of the breeder who is helping you with your first chameleon. Do not worry if other people (or even I) say differently. Follow your chosen person until you are comfortable enough with chameleon keeping that you can decide on a different approach.