

A ChameleonAcademy.com
Publication

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.

SCAN ME



Natural History

For detailed information visit https://chameleonacademy.com/jacksons-chameleon



Newborn Male



Juvenile Male



Adult Male



Newborn Female



Juvenile Female



Adult Female

Natural History

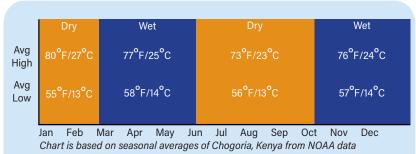
Range

Eastern Slopes & Nyambeni Range Mt. Kenya, Kenya

Elevation 2300 - 6000 ft, 700 - 1850 m



Seasons



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.



Sub-Species Notes



Naturalization in Hawaii, USA

The Yellow-Crested Jackson's Chameleon created a feral population from three dozen individals 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 beeding 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.



Cage Set-up

Indoor Cage Size

Retail

Minimum 2' x 2' x 4' 36" x 18" x 36" 3' x 2' x 4'

Custom Build

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.

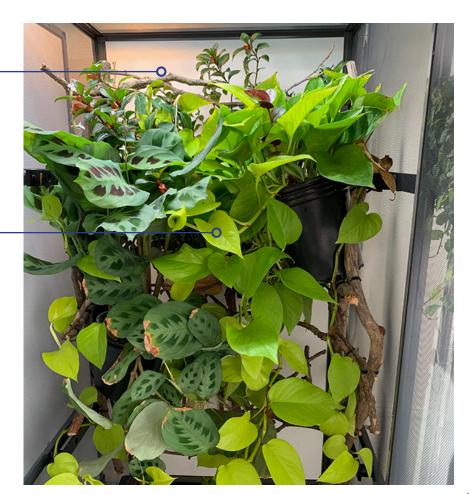




open area for basking

Densely planted middle layer for security and sleeping

Lower area can be left clear for ease of cleaning





Care Parameters

Temperature

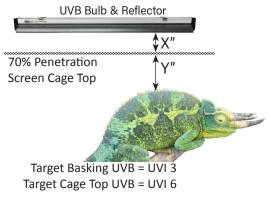
DayTime 72 -76°F / 22-24°C NightTime 50-65°F /10-18°C Basking 80-85°F /26-29°C

Humidity

DayTime 40% - 50% RH1 NightTime 80% to 100% RH²

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

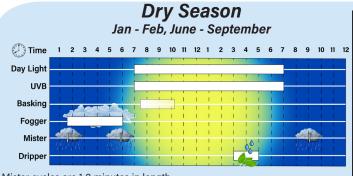
UVB



Technology	Bulb Strength	Χ	Υ	
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



Mister cycles are 1-2 minutes in length

Wet Season March - May, October - December 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 Day Light Basking Fogge Dripper

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

Basking: Keep basking lamp on for the amount of time it takes for chameleon to warm up. It may be turned off for the warm afternoon. 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 unhygenic. 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

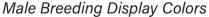
Safe cricket size





Mating & Giving Birth







xantholophus mating



Non-receptive female

Jackson's Chameleon Mating Notes

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

You are encouraged to breed the Kenyan bloodlines for the healthiest

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 ovaand 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



Baby Care



Densely planted screen cage



Plastic Bin



Vented Glass Terrarium

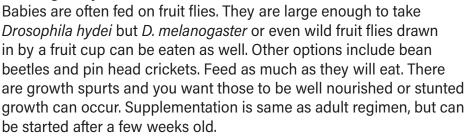


Professional Breeding

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 pastic 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 effective airflow. Check for a screen top and vents under the door.







Fruit Flies are perfect baby food

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.



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



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 offhusbandry than other chameleons it is best practice to raise them for four months before sending them to new homes.



Ideal minimum size to rehome



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 Repiratory 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 insincts 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 stressul 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 sensitivty 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.



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 im-

mune 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 vitmains (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 im-

mune 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.