

# Care Sheet for the High-Casqued Chameleon *Trioceros hoehnelii*



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Legend	Sub-legend	Description	
Taxonomy	Taxon	<i>Trioceros hoehnelii</i>	
	Common Names	Kenyan High Casqued Chameleon, Von Höhnel's Chameleon, Helmeted Chameleon (English) Kimbu, Kembu (Kikuyu) Kinyonga (Kiswahili) Ikanyafu (Lugishu)	
	Original name	<i>Chamaeleon hoehnelii</i>	
	Author	Steindachner 1891	
	Original description	Anz. Akad. Wiss. Wien, 28: 141 / S. Ber. Akad. Wiss. Wien, math.- naturw. Kl, Abt. I, 190: 309, pl. 1, figs. 1 – 1 A.	
	Natural Location	Leikipia (6000 ft. alt.), Kenya	
	Typus	NMW 23380	
	Taxonomy	This species was named in honor of East African explorer, Ludwig von Höhnel, of Austrian origin. Its systematics remained quite stable since its description. The in the same paper as <i>C. hoehnelii</i> described <i>Chamaeleo lekkipiensis</i> and <i>Chamaeleon bitaeniatus bergeri</i> Steinfeld, 1912 are considered synonyms. The only described subspecies is <i>Trioceros hoehnelii altaealgonis</i> described as <i>Chamaeleon bitaeniatus altaealgonis</i> by Loveridge in 1935 is by some authors considered a synonym but it may well represent a separate subspecies due to the differences in coloration and geographical as well as altitudinal isolation. Individual populations differ from each slightly by coloration (yellow-head, black-eyed, blue head and others) and size. It is well possible that they represent species in statu nascendi. Therefore, knowing the location where the animals for captive purposes come from and not interbreeding the individual populations is to be recommended to retain the genetic purity. Superficially similar appearance to two recently described species, <i>Trioceros narraioca</i> and <i>T. nyiri</i> - both having low gular crests and differing genetically in a substantial way. Member of the genus <i>Trioceros</i> .	

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Life Space	Range	Its distribution lies in Kenyan Highlands roughly within a triangle defined by Nairobi in the S, Mt. Kenya in the N and Mt. Elgon in the East. On Mt. Elgon it reaches the Ugandan territory including Western foothills of it. It was introduced in Mabira forest (S Uganda) for the purpose of wild harvesting.
	Altitude	1400 to above 3000m a.s.l.; up to 4000m a.s.l. on Mt. Elgon, Uganda
	Macro-habitat	Montane forest zone, farmland
	Micro-habitat	Forest edge, shrubs, cultural plants
	Perching Height	50cm to several meters high, typically 1-3m
	Daily Activity	Whole day in the bush or on its edge, morning and late afternoon 1-2 hour basking on a sun exposed branch, sleeping in the middle of bushes, in case of rain hiding in the middle of bushes
	IUCN Status	Least Concern. Though, this is for the species level. The isolation of the subspecies may warrant full species status and a reassessment of threat level.
	Conservation	Well protected within several national parks (Mt. Kenya, Mt. Elgon, Aberdares) and forest reserves. Tolerant to agriculture; thrives even in heavily modified landscape and in urban areas.
CITES	CITES Ap. II	
Climate	Climate Type	Equatorial tropical montane climate
	Dry seasons	December to March and June to October
	Rainy seasons	March to May and November to December
	Temperature	Day: Up to 90°F (32°C) with 72-77°F (22-25°C) in the shade Night: 50 - 60°F (10-16°C)
	Humidity	Up to 100% at night all year long, below 50% (to below 30% in dry season) at daytime

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Legend	Sub-legend	Description
Life Cycle	Parity	Viviparous - live-bearing
	Gestation period	5-6 months
	Clutch size	3-22 (average around 10)
	Size at birth	Approx. 1.4in
	Maturity reached	at 9-12 months, earliest at 6
	Mating period	All year around with peak of the births in rainy seasons
	Longevity	2-3 years in the wild, in the captivity 5-6, up to 9 years
Morphology	General	A typical chameleon of small size, equipped with all typical chameleon features like chameleodactylous feet, long prehensile tail, independently moving eyes in lid turrets, skin capable of color change. The head with typical rough crests consisting of heavily enlarged warty or pointed scales. Head wears a typical high rounded casque, a knob-like false rostral horn and a very high gular crest consisting of enlarged conical scales. Possessing a temporal gland used for prey luring and anti-predatory mechanisms.
	Size	Males up to 7.6in (20cm) total length; females up to 7.3in (19cm);
	Sexual dimorphism	Males possess higher casques, bigger rostral horns and higher gular crests, their scallation is more rugous and heterogeneous. Males have a swollen tail base

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Legend	Sub-legend	Description
Health issues	Internal parasites	Roundworms, Tapeworms, Flukes Treatment: Consult veterinarian
	RI (Respiratory infection)	Symptoms: heavy breathing, visible ribs, gaping, sitting with head up, bubbles in throat Cause: Arises often in captivity. Often as a result of too high humidity at daytime combined with high temperatures Treatment: Antibiotics to be prescribed by a veterinarian
	TGI (Temporal Gland infection)	Symptoms: Swollen temporal gland area Cause: Arises rarely in captivity, but is often a result of too high humidity at daytime combined with high temperatures Treatment: Antibiotics to be prescribed by a veterinarian
	Mouthrot (Stomatitis; Gingivitis ulcerosa)	Symptoms: white cheese-like deposits along the jaws, swollen jaws Cause: Arises often in captivity as a result of injuries to jaws and mucous in combination with husbandry issues Treatment: Antibiotics to be prescribed by a veterinarian
	MBD (Metabolic Bone Disease)	Symptoms: casque and head deformities, rubber jaw, broken bones of extremities, fractures of ribs Cause: A captive condition resulting from an imbalance of vitamin D3 supplementation, lack of Calcium + magnesium in food and/or insufficient UVB exposure Treatment: proper diet and UVB exposure. In heavy cases - veterinarian assistance
	Obesity	Symptoms: Heavy body, inactivity, swollen cheeks and casques, puffy extremities Behavior: Picky eating, slower moving, puffy belly resting on or overflying branch Cause: Overfeeding Treatment: reduce diet
	Edema (Oedema)	Symptoms: Swelling or puffiness especially around the neck region Cause: imbalance in vitamins Treatment: reduce supplementation
	Eye infections	Symptoms: Swollen turrets or their parts, closed eyes, eye opening blocked by transparent or milky pus Cause: Under/overdose of vitamins or physical trauma Treatment: Antibiotics to be prescribed by a veterinarian

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Legend	Sub-legend	Description
Caging	Caging type	Individual caging is recommended Cohabiting of adults not recommended Cohabiting of young juveniles up to 2 months of age possible in densely planted cages with close observation If kept individually, visual contact of at least 3m from each other stimulates a natural interaction
	Cage conditions	Day Temperatures: 68-72°F (20-23°C) with basking spot up to 83°F/ 28°C Night Temperatures: under 59° (15°C) and lower in acclimated animals Humidity levels: nighttime up to 100% towards morning, daytime under 50% UVI: 5-7 at basking spot
	Cage size	Min 18" x 18" x 36" or greater for both sexes; 24" x 24" x 48" or larger preferred
	Cage type	Full screen cage or Glass terrariums with ventilation
	Cage interior	Dense foliage from live plants with extensive network of thin natural branches Freely exposed horizontal branch for basking in safe distance (head and body length from the heat source) A thick diagonal rough barked branch in the lower part of cage for birthing
	Lighting	Light bulb white light = 12 hours per day Heat bulb white light (not red) = according to surrounding temperatures Linear UVB bulb = 12 hours per day Nighttime: No heat/light source - including blue and red bulbs!
	Water management	Fog (ultra-sonic humidifier) at night (from 1AM till dawn) Morning Mister: Short misting session (2 minutes) 30 minutes before lights go ON; Purpose is to create a layer of dew on leaves for chameleon to find when it wakes up. Afternoon Rain Shower: During rainy season simulate rain shower by switching off heat lamps for 30 minutes and then run misters a couple minutes; Do not bring heat lamp back on for 30 minutes after shower is over Evening Misting: Wait until all lights are off and chameleon has settled in. Run mister for two minutes to raise humidity Dripper: best in the morning hours and into afternoon Use cool or ambient temperature water. Do NOT heat or warm water. Do NOT "bathe" or "soak" your chameleon. Provide dense plant cover so chameleon can choose to get in or out of misting action.

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Legend	Sub-legend	Description
Feeding in captivity	Food	<p>General rule: diet as variable as possible</p> <p>Overfeeding risk: Usually not an issue, but possible. Consult "Obesity" in health section for symptoms.</p> <p>Food items size: preferable smaller size; 1/4 inch or smaller</p> <p>To feed: flies, crickets, roaches, superworms, hornworms, fly larvae, wax worms and wax moths, silkworms and silk moths</p> <p>Food to consider: wild bees, small snails</p>
	Supplements	<p>Indoor:</p> <p>Calcium without D3: each meal</p> <p>Pollen: each meal</p> <p>Multivitamin mix: biweekly</p> <p>Calcium with D3: biweekly</p> <p>Outdoor:</p> <p>Calcium without D3: each meal</p> <p>Pollen: each meal</p> <p>Multivitamin mix: biweekly</p>
	Hydration	<p>Hydration is to be facilitated by combination of night fogging, morning and evening misting and daytime dripping.</p> <p>Urates to be assessed and in case of deviations, hydration methods to be adjusted</p>

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