

**Care Sheet for the  
Machakos Hills Jackson's Chameleon  
*Trioceros jacksonii ssp***



**By Petr Necas & Bill Strand**

Legend	Sub-legend	Description
Taxonomy	Taxon	<i>Trioceros jacksonii ssp</i>
	Common Names	Machakos Hills Jackson's Chameleon (English) Rainbow Jackson's Chameleon (English) Kenyan Jackson's Chameleon (English) "True" Jackson's Chameleon (English) <i>Trioceros Jacksonii Willigensis</i> (Latin)-Not an approved scientific name
	Original name	<i>Trioceros jacksonii</i>
	Author	BOULENGER 1896
	Original description	Not yet described
	Type Locality	Machakos Hills and Ol Donyo Sabuk, Kenya
	Typus	Not Designated Yet
	Taxonomy	Undescribed form (subspecies or species) within the <i>Trioceros jacksonii</i> superspecies, identified and clearly different from all the other forms, waiting for its formal description. In trade known as <i>Trioceros jacksonii willegensis</i> , but this name (referring to the man who first introduced this form to captivity, Alex Van Willegen from The Netherlands), is invalid, as not formed correctly and not described scientifically. Until official description, this form has to remain under the nominotypic subspecies. Member of the genus <i>Trioceros</i>
Life Space	Range	Kenya (Machakos Hills and Ol Donyo Sabuk),
	Altitude	1700-2000m a.s.l.
	Macro-habitat	Montane forest, farmland
	Micro-habitat	Forest edge, shrubs, living fences, agricultural plants (Mainly Coffee)
	Perching Height	0-12m above ground
	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 due to widespread occurrence and tolerance of habitat modification
	Conservation	Formally protected by the Kenyan Law and the northern population protected within Ol Donyo Sabuk National Park
	CITES	CITES Ap. II

<b>Legend</b>	<b>Sub-legend</b>	<b>Description</b>
<b>Climate</b>	<b>Climate Type</b>	Equatorial tropical montane climate
	<b>Dry seasons</b>	December to March and June to September
	<b>Rainy seasons</b>	March to May and October to December
	<b>Temperature</b>	Day: Up to 90°F (32°C) with 72-77°F (22-25°C) in the shade Night: 50 - 60°F (10-16°C)
	<b>Humidity</b>	Up to 100 % at night all year long, below 50% (to below 30% in dry season) at daytime
<b>Life Cycle</b>	<b>Parity</b>	Viviparous – live-bearing
	<b>Gestation period</b>	6-7 months
	<b>Clutch size</b>	7-51
	<b>Size at birth</b>	Approx. 2in
	<b>Maturity reached</b>	at 9-12 months
	<b>Mating period</b>	All year around with peak of the births in rainy seasons
	<b>Longevity</b>	2-3 years in the wild, in the captivity 5-6, up to 9 years
<b>Morphology</b>	<b>General</b>	A typical chameleon of middle size, equipped with all typical chameleon features like zygodactylous feet, prehensile tail, independently moving eyes in lid turrets, long prehensile tail, skin capable of color change, The head with typical rough crests consisting of heavily enlarged warty or pointed scales. Possessing a temporal gland used for prey luring and anti-predatory mechanisms.
	<b>Size</b>	Males usually 10-12” (26-31cm), females up to 10” (26cm)
	<b>Sexual dimorphism</b>	Males: 3 cranial true horns in males (one rostral, 2 preorbital). When excited, lime yellow longitudinal streak over the flank, with light blue casque and light blue tail. Males have a swollen tail base Females: Either with one rostral short horn and tiny conical scales on the analogous place of the base of male preorbital horns, or three short fully developed horns. Typically uniformly brown or green or with diverse patterns of brown, maroon, gray to black.

<b>Legend</b>	<b>Sub-legend</b>	<b>Description</b>
<b>Health issues</b>	<b>Internal parasites</b>	Roundworms Tapeworms Flukes Treatment: Consult veterinarian
	<b>RI (Respiratory infection)</b>	Symptoms: heavy breathing, visible ribs, gaping, sitting with head up, bubbles in throat Cause: arise often in captivity as a result of too high humidity at daytime combined with high temperatures Treatment: Antibiotics to be prescribed by a veterinarian
	<b>TGI (Temporal Gland infection)</b>	Symptoms: Swollen temporal gland area Cause: arise rarely in captivity as a result of too high humidity at daytime combined with high temperatures Treatment: Antibiotics to be prescribed by a veterinarian
	<b>Mouthrot (Stomatitis; Gingivitis ulcerosa)</b>	Symptoms: white cheese-like deposits along the jaws, swollen jaws Cause: arise often in captivity as a result of injuries of jaws and mucous in combination with husbandry issues Treatment: Antibiotics to be prescribed by a veterinarian
	<b>MBD (Metabolic Bone Disease)</b>	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
	<b>Obesity</b>	Symptoms: Heavy body, inactivity, swollen cheeks and casques, puffy extremities Behavior: Picky eating, slower moving, puffy belly resting on or overflowing branch Cause: Overfeeding Treatment: reduce diet
	<b>Edema (Oedema)</b>	Symptoms: Swelling or puffiness especially around the neck region Cause: imbalance in vitamins Treatment: reduce supplementation
	<b>Eye infections</b>	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

<b>Legend</b>	<b>Sub-legend</b>	<b>Description</b>
<b>Caging</b>	<b>Caging type</b>	<p><b>Individual</b>  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 simulates a natural interaction</p>
	<b>Cage conditions</b>	<p>Day Temperatures: 68-72°F (20-23°C) with basking spot up to 83°F/ 28°C,  Night Temperatures: under 50-59° (15°C) and lower in acclimated animals  Humidity levels: nighttime up to 100% towards morning, daytime under 50%  UVI: 5-7 at basking spot</p>
	<b>Cage size</b>	24 x 24 x 48in or greater for both sexes
	<b>Cage type</b>	Full screen cage or Glass terrariums with ventilation
	<b>Cage interior</b>	<p>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</p>
	<b>Lighting</b>	<p>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!</p>
	<b>Water management</b>	<p>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  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.</p>

Legend	Sub-legend	Description
<b>Feeding in captivity</b>	<b>Food</b>	<p><b>General rule:</b> as variable as possible</p> <p><b>Overfeeding risk:</b> Usually not an issue, but possible. Consult “Obesity” in health section for symptoms.</p> <p><b>Food items size:</b> preferable smaller size under 1/2 inch</p> <p><b>To feed:</b> flies, crickets, roaches, superworms, hornworms, fly larvae, wax worms and wax moths, silkworms and silk moths</p> <p><b>Food to consider:</b> wild bees, small snails</p>
	<b>Supplements</b>	<p><b>Indoor:</b></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><b>Outdoor:</b></p> <p>Calcium without D3: each meal</p> <p>Pollen: each meal</p> <p>Multivitamin mix: biweekly</p>
	<b>Hydration</b>	<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>