**Brief Introduction:**
The Jackson's chameleon is a common species in the pet trade due to their unique appearance. This medium sized species is native to the mountainous regions of Kenya, Uganda and northern Tanzania. There is also a large feral population well established on the Hawaiian Islands after a small group was released in the 1970s. Though smaller and less colorful than other common species they are easily recognized by the male's three prominent horns, which give them a prehistoric look. As a montane species (native to higher altitudes) Jackson's have more unique heat, humidity and supplementation requirements than more tropical species. Interestingly Jackson's do not lay eggs but instead give birth to live young!

**Difficulty:** Chameleons in general are not beginner animals but this species is considered intermediate rather than beginner. They have additional husbandry requirements that can be difficult for people unfamiliar with general chameleon care.

**Behavior:**
Like most chameleon species Jackson’s chameleons are tree-dwelling reptiles that are active only during the day. Contrary to popular belief, chameleons don’t change color in a direct attempt to match their background. Their color changes are influenced most by their state of health, emotions or level of stress, and the process of thermoregulation. They are territorial and do not tolerate the presence of other chameleons in close proximity, despite the myth that Jackson's can be housed communally. Like other chameleons they are a pet that is more for observation and should not be handled regularly.

**Lifespan:** With proper husbandry Jackson's chameleons can live 3-6 years on average.

**Identification:**
Male Jackson's chameleons can be differentiated from females by the three prominent horns on their head. T. xantholophus females do not have horns, or have only one very small one at the tip of the nose.

**Cage Size:**
In general when housing chameleons, bigger is better. Jackson’s chameleons are highly territorial and easily stressed by the presence of other chameleons, even of their own species. Multiple Jackson's chameleons should never be kept in the same cage (even mating pairs). Cages should be furnished with many plants and climbing branches to provide opportunities for exercise and plenty of places for hiding. Substrate (mulch, soil, etc.) should not be used in chameleon cages.

*Screen cage (length x width x height):*
16x16x30” (40x40x76cm) - Juveniles
18x18x36” (45x45x90cm) - Adult minimum

**Temperature:**
Reptiles need a warm place to bask (80-85 degrees) on one side of the cage in order digest food and nutrients properly. The other side of the cage should be cooler (70-75 degrees) so they don't overheat. A thermometer should be placed at both ends of the cage to accurately measure temperatures. Your turtle will utilize different temperature zones throughout the day depending on its metabolism and needs. Lights should be on for 10-12 hours each day and then total darkness at night. Night temperatures can safely drop to 50 degrees so a night time heat source is not necessary.

**Humidity & Hydration:**
Humidity is an important aspect of chameleon husbandry. Jacksons chameleons require levels around 60-80%, which can be achieved by several misting sessions a day over all areas of the cage, cool mist humidifier, or timer-controlled misting system. This raises relative humidity as well as stimulates your chameleon to want to drink. Water can be provided by means of a dripper (not a waterfall or water bowl). The dripper should be placed on top of the
longer than the width of your chameleon's head. Chameleons should be fed in the first half of the day to give them time to bask and digest their food properly. Inadequate dietary calcium leads to metabolic bone disease, a very serious illness. Commercially available gutloads usually aren't properly balanced or sufficient for good nutrition.

Feeding:
Chameleons are insectivores meaning they should only be fed live insects. Great feeder insects include crickets, silkworms, hornworms, butterworms, dubia roaches and superworms. Waxworms and mealworms are high in fat content and harder to digest so should only be used on occasion. The rule of thumb is not to feed insects that are longer than the width of your chameleon's head. Chameleons should be fed in the first half of the day to give them time to bask and digest their food properly. Inadequate dietary calcium leads to metabolic bone disease, a very serious illness. Commercially available gutloads usually aren't properly balanced or sufficient for good nutrition.

Neonates: as many small crickets as they can eat in 10 minutes
Juveniles: 10-12 small or medium crickets daily
Adults over 12 months of age: 6-8 medium-large crickets every other day

Gutloading:
Gutloading is the process of feeding crickets, superworms, and/or dubia roaches a nutritious diet so they can ultimately provide your reptile with the proper nutrients it requires as it would in nature. Supplementing with a calcium and multivitamin powder is important, but not sufficient alone.

Creating a well-rounded gutload at home can seem daunting but can actually be fairly inexpensive and easy to make! Each time you go to the store get one or two staple vegetables on the list, then rotate them for something else next time. Make sure you wash all produce to eliminate pesticide residues and cut off the peel of fruits and vegetables as they have waxes and pesticides you can't wash off. The time from feeding insects, to your reptile eating those insects, should be 6-24 hours, and gutloading must be done before every feeding to be successful.

<table>
<thead>
<tr>
<th>Staple Ingredients (Highest in calcium and other nutrients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collard Greens</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Good Ingredients (Use as supplements to staples listed above)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweet Potato</td>
</tr>
</tbody>
</table>

Commercial gutloads: Repashy Superload, Cricket Crack, Super Chow

Avoid These Ingredients (Low in calcium and/or high in phosphorus, oxalates, goitrogens)
- Idaho potatoes, cabbage, iceberg lettuce, spinach, broccoli, tomatoes, corn, grains, beans, bread, cereal, meat, eggs, dog food, cat food, fish food, canned or dried insects, vertebrates (pinkies, lizards). While convenient, some commercially available gutloads (Farms Orange Cubes, Fluker Farms High Calcium Cricket Diet, Nature Zone Cricket Bites) are low in calcium, imbalanced and/or insufficient for good nutrition.
Supplementation:
Calcium and other vitamins are very important to your chameleon's health. Feeder insects should be lightly dusted with powdered supplement before being fed to your chameleon. As a montane species (native to higher altitudes) Jackson's have decreased supplementation requirements compared to tropical species due to metabolism differences. Use calcium (without D3 or phosphorus) twice a week, a multivitamin once a month, and calcium with D3 once a month.

Egg Laying & Breeding
Interestingly Jackson's chameleons do not lay eggs but are viviparous (give birth to live young) after a 6-9 month gestation! Since they do not lay eggs a laying bin does not need to be provided. They can however drop "slugs", which are the membranes and yolk around an egg was never fertilized. A single breeding may produce several clutches from the same pairing due to sperm retention by the female. A few weeks before givingbirth the female will usually have decreased appetite or stop eating and become restless. Average clutch size is 7-30 young. The young are born amongst leaves and branches wrapped in a membrane that they need to break open once born. Neonates should be immediately removed from the cage with the mother as predation on the young has been known to occur. The males are born with small nubs where their horns will grow in the future. Babies reach sexual maturity at about 9 months of age.

For more information on Lighting, Cage Setup, Nutrition, Humidity, Health and other questions visit http://www.chameleonforums.com/care/chameleons/