

Care Cards

Chuckwallas



The chuckwalla (*Sauromalus obesus*) is the largest non-venomous lizard in the United States. With a snout to vent length of 8 inches and an overall length of 15 inches it is second in size only to the Gila monster. The name chuckwalla comes from the word chacahuala which is the Spanish name for the lizard. Chuckwallas are heavy-bodied yet flattened lizards, found in the southwestern region of the United States usually in rocky areas. Their scientific name actually means fat, flat lizard. Two things characterize the Chuckwalla: loose skin in folds along the lizard's neck and sides, and a broad tail with a blunt tip. They have a rough granular skin, which provides them with additional grip within rock crevices. When threatened, the lizard inflates its body by ingesting air thus allowing for an even tighter grip within the crevice.

Chuckwallas have a reputation for being difficult to maintain in captivity. Most herpetologists feel that juveniles adapt more quickly to captivity than adults. Due to their rapid rate of growth and overall adult size, an enclosure four feet by two feet minimum will be needed to house a juvenile. Adults will require much larger enclosures, some utilizing small rooms. Males should not be housed together, however, you can have a pair of females with an adult male. When housed in small groups, care must be taken to insure an adequate amount of living area for the females to establish their own

territory. A minimum of seven feet of cage space is needed when housing a group of chuckwallas.

Because of their rock dwelling nature, cage furniture is a must. Rock shelves will provide basking sites while the crevices they create will provide a hiding area. Some owners have secured the rocks with either glue or epoxy. The advantage of this is to prevent the strong lizard from destroying the landscape; the disadvantage is the inability to thoroughly clean the structure during regular maintenance. Chuckwallas need full-spectrum, ultraviolet lighting to prevent metabolic bone disease. They will also benefit from direct, unfiltered sunlight. Substrate items commonly used with these lizards include: crushed walnut, river rock, gravel and lava rock. Because of the weight of cage substrate and furniture, the enclosure needs strong and secure flooring. Daytime temperatures should be between 88 and 95 degrees Fahrenheit with a basking site nearing 100 degrees Fahrenheit. Nighttime temperatures should drop between 70 to 75 degrees Fahrenheit. The light cycle should be 14 hours daylight from March to September and 11 hours from October to February.

The nutritional requirements for chuckwallas are similar to those for iguanas. The majority of the daily ration should consist of fresh plant material. Readily accepted vegetables such as mustard greens, collard greens, turnip greens, kale, carrots, squash, and green beans should make up the majority of the reptile's diet. A small amount of fruit such as cactus apples, various berries and bananas can be offered. Chuckwallas will also consume flowers such as dandelion, hibiscus and roses. Juveniles may also be offered some animal protein in the form of crickets or waxworms once a week; however, adults should only be fed plant material. A high quality vitamin and mineral supplement should be added to the food twice a week for juveniles and once a



week for adults. Juveniles should be fed daily to help assure proper growth and development. Adult chuckwallas can be maintained on every other day feeding with the exception being gravid females, which should be fed daily.

Chuckwallas have been bred in captivity. Most herpetoculturists recommend a cooling period of six to ten weeks prior to breeding. The cooling period usually occurs between November and February. By March the animals should be readily eating again and their enclosures returned to a normal temperature and photoperiod. Breeding male chuckwallas are very aggressive and straightforward. Males will head-bob, chase and lick the females during courtship. During active copulation, the male will hold the female by the back of the head or neck until finished.

Female chuckwallas will readily show signs of being gravid. Physical changes such as fattening of the tail base and an increased girth in the abdominal

region will be noted. An increased feeding desire will also be observed in gravid females.

A nest box filled with moistened sand or peat moss should be placed within the enclosure a few weeks after copulation. Both male and female chuckwallas will inspect the box prior to its acceptance for oviposition. Eggs are deposited approximately four weeks following breeding. The female will enter the box and eventually exit much smaller.

The nest box should be retrieved and the eggs carefully uncovered and weighed prior to their placement for incubation. The eggs should be incubated in a mixture of vermiculite and water at a ratio of one part water to one part vermiculite by weight. The eggs should be buried 2/3 in the mixture. The incubation temperature should be maintained at 86 degrees Fahrenheit. The enclosure should be opened for a few minutes daily to evaluate the moisture level and to allow for air exchange. The eggs will hatch in about four months.

Within a few days of hatching, the juveniles will begin feeding. At this time they should be fed a small amount of fecal material from a healthy adult. This will help develop a functional gastrointestinal microflora for proper digestion within the hatchling. If the juveniles are placed within the adult's enclosure prior to the inoculation, they can be observed readily ingesting fecal material along with their other food items. Juveniles can be housed with adults as long as the food items are prepared in an appropriate size for their ingestion. Juveniles should be given a vitamin/mineral supplement on a daily basis. Additionally, juveniles should not undergo a cooling down period like the adults.

References:

- 1) Blair, David; Chuckwallas; Reptiles Magazine, February 1994; p16-22.
- 2) Gaulden, Robert; Lizards in Black: Chuckwallas of South Mountain Park; Reptiles Magazine, November 1998; p44-50.
- 3) Couch, Julie; Captive Breeding the North American Chuckwalla, *Sauromalus obesus*; The Vivarium, Volume 9, Number 5; p 34-35 & 52-53.

