

Captive Care of the Boa Constrictor



Client Handout from the Journal of Herpetological Medicine and Surgery, Vol. 11, No. 2, 2001

Husbandry

Boas should be housed individually, except during breeding attempts. Enclosures for juvenile boas should be at least 61 cm (24 in) long and 38 to 61 cm (15 to 24 in) high. Adult boas should be housed in enclosures at least 1.8 m (6ft) long, 61 cm (24 in) wide, and at least 61 cm (24 in) high. Larger cages provide better opportunities for establishing a proper thermal gradient.

Newspaper or butcher paper is the preferred substrate since it is inexpensive and easy to change when it becomes soiled. Each also has the added benefit of allowing direct visualization of the feces and urates. Artificial turf, mulches, and various wood shavings may also be used, but lack some of beneficial qualities of newspaper. Mulches and wood shavings may inadvertently be ingested while feeding.

Dilute bleach water (1:30) is a useful disinfectant for cages and artificial turfs. All organic matter needs to be washed away prior to using the dilute bleach. The bleach solution should be left on for ten minutes before washing off.

Providing the proper thermal gradient is critical to the well being of the snake. The preferred optimal temperature zone during the day is between 27-29°C (80-85°F), with a basking spot up to 35°C (95°F). Nighttime lows can be between 21-27°C (70-80°F). Thermostatically controlled fiberglass heat mats are an excellent way to provide the proper thermal environment. The mats are mounted ventrally and should be no longer than 25-30% of the surface area of the cage. Flexwatt® and plumbing heat tape may also be used, however both require some wiring and should be assembled with a rheostat.

Humidity is also important to enable normal ecdysis (shedding) and respiratory function. Relative humidity should be least 50 to 70%. Hide boxes that contain moistened sphagnum moss are an excellent way to provide an area of locally increased humidity.

Generally, boas should be fed pretty items no larger than their girth at midbody. Juvenile boas should be fed the appropriate sized rodent(s) weekly. As boas reach adulthood, it is acceptable to decrease the feeding interval to every ten to fourteen days. Adult boas can be maintained on either adult rats or appropriately sized rabbits. Either frozen and thawed (warmed to body temperature) or freshly killed prey is recommended. The prey should be humanely euthanized using acceptable methods. Frozen prey should be used within six months of freezing.



Reproduction

Sexing boas can easily be accomplished by probing. Juvenile boas may be sexed also by manual eversion "popping" of the hemipenis. Either technique should be performed by an experienced person or reptile veterinarian, since poor technique may result in injury. Generally females probe a distance of two to four subcaudal scales and male boas probe eight or more. Male boas have larger cloacal spurs and thicker tails than females. Sexual maturity occurs between three and five years of age, if appropriately fed and maintained.

Boa breeders begin cycling in either November or December. Boas are not fed for two weeks prior to cooing. The temperature is gradually

decreased to 21-24°C (70-75°F). Some breeders keep the snakes during this period at their preferred daytime high temperature, but drop the nighttime low to 21-24°C (70-75°F). It is possible to utilize a combination of these two techniques. Monitor the snakes carefully for evidence of respiratory disease. Respiratory infection is most likely if the snakes are not provided a basking spot in their preferred temperature range for at least part of the day and, because of this, the first technique is not recommended. Depending upon the breeder, males are introduced to females either at the beginning of, during, or after cycling. Active courtship precedes copulation. Gravid females require access to adequate basking temperatures for proper fetal development. Litter sizes range from 6 to 64, with 25 being typical.

Medical Problems

Good husbandry is the best way to prevent many problems. Boas should be quarantined for at least three to six months before being added to an established collection.

Respiratory tract disease is very common in captive boas. Difficulty breathing, discharges from the mouth, and wheezing are common signs associated with respiratory tract disease.

Vomiting/regurgitating is a common sign of many problems. Inadequate temperature, excessive feeding, and handling after feeding are common causes. There are many medical causes for vomiting/regurgitating and an able reptile veterinarian should be sought.

Snake mites are very common external parasites. The mites may cause significant disease and distress to the infested snake. Inclusion body disease (IBD) is one of the most significant diseases affecting boas today. It is thought to be caused by a retrovirus. Snakes affected by IBD may have neurologic signs, regurgitation, pneumonia, various cancers, and other disorders. Currently no therapy is available for affected snakes and euthanasia is recommended to prevent transmission to other snakes.

Other common signs of problems include loss of appetite, loose stools, difficulty shedding, and lumps/bumps. A competent reptile veterinarian should be sought out to diagnose and treat any of the disorders that may affect your boa.

Speak with your reptile veterinarian about Salmonella and what measures are recommended to limit the risk of transmission to people.

