

Basic Information Sheet: Boas and Pythons

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Boas and Pythons



Photo credit: 'Dept' by Flickr Creative Common

Natural history

The group of snakes called “boas” consists of over 40 species. Most popular pet boas are New World species, however boas are also found in Africa and Asia. Most boas

live in environments that range from tropical rain forest to dry woodland and scrub forest. Sand boas (*Gongylophis* spp.) may be found in desert and savannah land and Rosy boas (*Lichanura* spp.) live in dry, rocky habitats.

Pythons are found in Africa, Australia, and Asia under conditions that range from rain forest to desert. Some species are primarily ground dwellers, but most can be found in bushes and trees. The larger species are often found near water and are strong swimmers.

Pet boas and pythons may be farm-bred, captive-born, or wild-caught imports. Popular companion snakes include the Boa constrictor (*Boa constrictor imperator*), Rosy boa, and Ball python (*Python regius*). Ball pythons are docile snakes that coil into a tight ball with the head buried within when frightened. Captive-bred ball pythons are much preferred over wild-caught specimens since the latter can fast for long periods and can be stubborn feeders.

In January 2012, the U.S. government banned the importation of snakes and eggs of four species, Burmese python, northern and southern African pythons, and yellow anacondas, in reaction to the python problem in southern Florida.

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Taxonomy

Class: *Reptilia*

Order: *Squamata*

Family: *Pythonidae*-pythons

Family: *Boidae*-boas,
anacondas

Color and size



Photograph by gjofilli. [Click to enlarge.](#)

Boa constrictors usually reach 7-8 feet (2 meters) in captivity, but wild specimens may reach more than 12 ft (4 m).



Peruvian red-tailed boa from petinfospot.com. [Click to enlarge.](#)

Red-tailed boas (*Boa constrictor constrictor*) can reach 6-12 ft (2-4 m)



Image from itsnature.org. [Click to enlarge.](#)

Rosy boas have a blunt tail and smooth scales. The ground color ranges from tan to silver with deep chocolate to orange stripes. Rosy boas are relatively small snakes that rarely exceed 3 ft (0.9 m).

Pythons



Photograph by Brian Gratwicke. [Click to enlarge.](#)

include some of the world's largest snakes. Giant snakes like the Burmese python (*Python molurus bivittatus*) and reticulated python (*Python reticulatus*) can reach 20 feet (6.1 m) or more and are not recommended for casual hobbyists. However the popular ball python (*Python regius*) [shown left] rarely exceeds 5 ft (1.5 m) and is usually about 4 ft (1 m) in length.

Diet

Boas and pythons feed on rodents of appropriate size, primarily mice and rats predominately although gerbils may be preferred by recently imported adult ball pythons. Larger snakes may also be fed rabbits and chickens.

Snakes should be fed every 1-4 weeks depending on the size of the individual. Smaller snakes should be fed more frequently, and larger

snakes less frequently. Pre-killed food is preferable since live prey can inflict serious bites and scratches.

Download the client handout: [Feeding Snakes](#) for more information.

Husbandry

Temperature	Provide a daytime temperature gradient of 80-85°F (27-29°C). At night, the temperature may be reduced to 70-75°F (21-24°C). A winter cool-down or “brumation” is important for captive breeding of some species like the rosy boa.
Humidity/water	Most (BUT NOT ALL) species do well with a relative humidity of 50-70%. Provide a water bowl large enough for the snake to completely immerse its body, and heavy enough that the animal will not tip it over. Provide ball pythons with a “humidity box” or a hiding place filled halfway with damp sphagnum moss. Place the container half on and half off the heat.

Cage size	Snakes up to 4 ft (1.2 m) in length can be maintained in at least a 20-gallon (75 L) aquarium or similar sized cage but ideally the habitat should be as long as the snakes. Larger animals need larger cages. For example, breeders often keep ball pythons in cages (or Sterilite tubs) that are 4 ft long.
Social structure	Boas and pythons are solitary.
Cage furniture	<ul style="list-style-type: none"> • Line the bottom of the cage with newspaper, butcher paper, or paper towels. Aspen bedding provides an excellent substrate. • Provide visual security in the form of a hide box. A secure hide box is particularly important in the shy ball python. The hide box should have a small opening and should be small enough that the snake can feel the

	<p>sides of the contained when it is curled up.</p> <ul style="list-style-type: none"> • Many snakes will use a branch if provided, and smaller species may remain coiled on branches much of the time. • A flat-bottomed, smooth rock should also be present to aid in the shedding process or “ecdysis”.
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Lifespan

Reported life span ranges:

Common boa constrictor: 20+ years

Ball python: 20+ years

Burmese python: 12-20 years

Red-tailed boa: 20+ years

Rosy boa: 15+ years

Anatomy/ physiology

Dermatologic:	<p>The scaled skin is normally shed in one piece in a process called “ecdysis”. Snakes lack movable eyelids. Instead a clear scale called the “spectacle”, which is an embryonic fusion of the eyelids, protects the eyes.</p>
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Cardiopulmonary:	<ul style="list-style-type: none"> • The snake's three-chambered heart is mobile within the ribcage. • Snakes possess incomplete tracheal rings. • Unlike most snakes, boids have two lungs of almost equal size, although the left lung never makes up more than 85% of the right lung size.
Gastrointestinal:	<p>The teeth are arranged in six rows with double rows present in the upper jaw. Snake teeth are shed through life, and are attached to the bone's surface instead of roots.</p>
Urogenital:	<p>Snakes possess a renal portal system. Pythons lay eggs ("oviparous"). Boas bear live young, and are "ovoviviparous". Live young are hatched from eggs within the</p>

	reproductive tract.
Sexual dimorphism:	Both boas and pythons have external or cloacal spurs . These sharp, keratin-covered, bony structures are remnants of the vestigial pelvic girdle. Spurs are better developed in males, and are very small or absent in females. The copulatory organs of the snake are "hemipenes". Hemipenes lie within pouches at the ventral tail base. Probing of the male pouches will be deeper when compared to females.

Restraint

- When handling a snake, take care not to smell like snake food (i.e. rodents or rabbits). Wash your hands thoroughly beforehand.
- Support the head, neck, and body. Make sure the body weight is not borne by the snake's single occipital condyle and the cervical spine.
- A towel is useful for aggressive snakes.

- Never carry a constrictor draped around the neck.
- Another rule of thumb for [safety's sake](#) is to utilize one handler per 3-4 ft (0.9-1.2 m) of snake. Giant constrictors require special precautions to ensure safety of its handlers.

Venipuncture

Tail vessel
Cardiac puncture

Injections

Give intramuscular injections between the scales in the epaxial muscles. Use the cranial half of the body to avoid the renal portal system.

Preventive medicine

- Regular physical examination
- Determine gender
- Fecal parasite testing
- Boid inclusion body disease (IBD) virus
- [Dysecdysis](#), retained spectacles
- [Pneumonia](#)
- [Stomatitis](#)

Important medical conditions

Login to view references

References

Bartlett RD, Bartlett PB, Griswold B, Bartlett RD. Reptiles, Amphibians, and Invertebrates: An Identification and Care Guide, 2nd ed. Hauppauge, NY: Barron's Educational Series; 2010.

De Vosjoli P. The Art of Keeping Snakes. Adv Viv Sys. 2004.

McCurley K. Complete Ball Python, A Comprehensive Guide to Care, Breeding, and Genetic Mutations. ECO/Serpent's Tale. 2006.

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