

## *Boa constrictor imperator*

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Reptilia	Squamata	Boidae

**Common name** common boa constrictor (English, Puerto Rico), common northern boa (English), central American boa (English), Colombian boa (English), Colombian redbellied boa (English), boa (Spanish), boa constrictora (Spanish), boa colombiana (Spanish)

**Synonym** *Boa constrictor imperator*, Daudin, 1803  
*Boa imperator*, Daudin, 1803  
*Boa eques*, Eydoux & Souleyet, 1842  
*Boa imperator*, Dumeril & Bibron, 1844  
*Boa eques*, Dumeril & Bibron, 1844  
*Boa constrictor ithsmica*, Garman, 1883  
*Boa diviniloquax mexicana*, Jan, 1863  
*Boa imperator*, Boulenger, 1893  
*Boa mexicana*, Boulenger, 1893  
*Boa constrictor imperator*, Forcart, 1951  
*Boa constrictor imperator*, Stimson, 1969  
*Constrictor constrictor imperator*, Ihering, 1911  
*Constrictor constrictor sigma*, Smith, 1943

**Similar species** *Boa constrictor amarali*, *Boa constrictor constrictor*, *Boa constrictor longicauda*, *Boa constrictor melanogaster*, *Boa constrictor mexicana*, *Boa constrictor nebulosa*, *Boa constrictor occidentalis*, *Boa constrictor orophias*, *Boa constrictor ortonii*, *Boa constrictor sabogae*

**Summary** The common *Boa constrictor imperator* is a top nocturnal predator that kills its prey by constriction. Although it prefers small mammals such as rodents and bats, it also eats birds, amphibians, lizards, iguanas, and other snakes. It may thrive in forested areas, savannahs, cultivated sites, and suburbs. It exhibits both terrestrial and arboreal habits. It may enter caves to catch bats on flight. This species represents a threat to humans, particularly small children. It may affect agricultural activities. For example, causing damage to chicken farms. It threatens native species of amphibians, birds, lizards, snakes, and bats. It may even outcompete the two native boa species: the Puerto Rican boa *Epicrates inornatus* and the Mona Island boa *Epicrates monensis*, which are smaller in size than the common boa constrictor.



[view this species on IUCN Red List](https://www.iucnredlist.org/species/1439)

## Species Description

While neonates range from 18-22 inches long, adult Boa may measure more than 30 feet. Adult females are larger than adult males. *Boa constrictor imperator* is ranked as one of the largest species of snake in the world due to its maximum growth potential being between 4 and 5 meters in length. Naturally, they show a characteristic pattern of some 30 brown or reddish dorsal patches or "saddles" on a lighter background, although the pet industry have developed a variety of "morphs" with a number of different colorations and patterns, including albinos. Some individuals have prominent dark markings on the tail. This subspecies also includes a number of isolated dwarf populations which are also being exploited by the pet trade. They differ in appearance depending on whether they live on mainland or island. Island boas tend to have longer, more narrow heads occupying large eyes. In addition, island males have considerably longer tails than those of the mainland boas (Boback, 2005; Quick *et al*, 2005).

## Notes

It is a CITES Appendix II species.

## Lifecycle Stages

Most specimens in captivity live about 10 years, but 40-year old specimens have been recorded. Males reach sexual maturity at their third month of age, but females must reach three years before they can breed successfully. Being ovoviviparous, they produce 20-50 live hatchlings after a 110-150 days gestation period (Reed, 2005).

## Uses

The international pet trade has turned the common boa constrictor, including its dwarf varieties, into a valuable merchandise. It has developed various morphs with different colors and patterns which are assigned high prices. In its native range it is sometimes collected to make folk medicines (Reed, 2005).

## Habitat Description

Various populations of this subspecies occupy a wide variety of habitats: desert, tropical forest, savannah, and small tropical islands, both continental and oceanic, from sea level to moderate elevations. Human presence have forced them to adapt to live in cultivated sites, and even in suburbs. They exhibit both terrestrial and arboreal habits, and they enter and establish themselves in caves in pursuit of bats (Romero-Najera *et al*, 2007; Quick *et al*, 2005; Garza, 1995-2008).

## Reproduction

Sexual and ovoviviparous. Females can breed at their third year of age, and then can produce 20-50 live hatchlings after a 110-150 days gestation period. The maximum litter size is recorded as being 60 hatchlings after one gestation period. Neonates lead independent lives from birth (Reed, 2005; Areste & Cebrian, 2003).

## Nutrition

*Boa constrictor imperator* is strictly a carnivore, however, the range of fauna consumed is diverse. Diet includes birds, bats, reptiles, and mammals ranging in size depending on the size of the *B. constrictor imperator* (Quick *et al*, 2005; Reed, 2005).

## General Impacts

Common boas are considered a threat to endemic vertebrates and carnivores that can be consumed once *Boa constrictor imperator* reaches adult size. It is feared that they may outcompete the smaller native boas: the 'Near Threatened (NT)' Puerto Rican boa (see [Epicrates inornatus in IUCN Red List of Threatened Species](#)), the Mona Island boa *Epicrates monensis monensis* and the Virgin Island tree boa *Epicrates monensis granti*.

Boas are also a threat to humans, specifically to small children, pets and small farm animals.

The increase in world trade of reptiles in the past 10 years could pose problems due to the ticks that many of them carry, which could pass diseases to domesticated livestock populations (Burridge & Simmons, 2003; Cuarón *et al*, 2004).

## Management Info

**Preventative measures:** Risk Assessment models for assessing the risk that exotic vertebrates could establish in Australia have been further explored by the Western Australia Department of Agriculture & Food (DAFWA) to confirm that they reasonably predict public safety, establishment and pest risks across a full range of exotic species and risk levels.

The [Risk assessment for the Boa \(\*Boa constrictor\*\)](#), has been assigned a VPC Threat Category of **EXTREME**. Mammals and birds were assessed for the pest risk they pose if introduced to Australia, by calculating Vertebrate Pests Committee (VPC) Threat Categories. These categories incorporate risk of establishing populations in the wild, risk of causing public harm, and risk of becoming a pest (eg causing agricultural damage, competing with native fauna, etc). The 7-factor Australian Bird and Mammal Model was used for these assessments.

## Pathway

*Boa constrictor imperator* is frequently introduced by domestic trade as they are extremely common exotic pets. During the years 1989 through 2000, 115,131 *Boa constrictor* individuals were recorded as imported into the United States (Reed, 2005).

**Principal source:** [The Reptile Database, 2007. \*Boa constrictor\* Linnaeus, 1758 . JCVI](#)

; Reed, Robert N., 2005. An Ecological Risk Assessment of Nonnative Boas and Pythons as Potentially Invasive Species in the United States. *Risk Analysis*, Vol. 25, No. 3, 2005;

Quick, John, S; Howard K. Reinert; Eric R. De Cuba & R. Andrew Odum., 2005. Recent Occurrence and Dietary Habits of *Boa constrictor* on Aruba, Dutch West Indies. *Journal of Herpetology*, Vol. 39, No. 2, pp. 304-307, 2005; Martínez-Morales, Miguel Angel & Alfredo D. Cuarón., 1999. *Boa constrictor*, an introduced predator threatening the endemic fauna on Cozumel Island, Mexico. *Biodiversity and Conservation* 8: 957-963, 1999.

**Compiler:** National Biological Information Infrastructure (NBII), Felix A. Grana Raffucci, Technical Advisor, Puerto Rico Department of Natural & Environmental Resources & IUCN SSC Invasive Species Specialist Group (ISSG)

**Review:** Expert review underway: Alfredo D. Cuarón PhD President SACBÉ - Servicios Ambientales, Conservación Biológica y Educación Mexico

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## ALIEN RANGE

[1] ARUBA

[1] PUERTO RICO

[1] UNITED STATES

[1] MEXICO

[1] SOUTH EAST ASIA

**Red List assessed species 1: CR = 1;**

[Toxostoma guttatum](#) CR

## BIBLIOGRAPHY

### 22 references found for *Boa constrictor imperator*

#### Management information

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[Massam, Marion and Win Kirkpatrick, Peter Mawson, Norm Press, Tony Bennell and Neil Hamilton., Revised 2007. Importing and keeping introduced mammals, birds, reptiles and amphibians in Western Australia. Bulletin 4604 ISSN 1448-0352 February 2004. Department of Agriculture. Government of Western Australia.](#)

**Summary:** Available from: <http://www.agric.wa.gov.au/content/AAP/OL/BULLETIN4604.PDF> [Accessed 1 September 2008]

[Massam M, Kirkpatrick W and Page A., 2010. Assessment and prioritisation of risk for forty introduced animal species. Invasive Animals Cooperative Research Centre, Canberra.](#)

**Summary:** This report documents work contributing to a project commissioned by the Invasive Animals Cooperative Research Centre to validate and refine risk assessment models used in decisions to import and manage introduced vertebrate species. The intent of the project was to: a) increase predictive accuracy, scientific validation and adoption of risk assessment models for the import and keeping of exotic vertebrates, and b) reduce the risk of new vertebrate pests establishing introduced populations in Australia.

Available from: [http://www.feral.org.au/wp-content/uploads/2010/08/DAFWA\\_RA\\_060510.pdf](http://www.feral.org.au/wp-content/uploads/2010/08/DAFWA_RA_060510.pdf) [Accessed 16 March 2011]

[Page, Amanda; Win Kirkpatrick and Marion Massam, July 2008, Stoat \(\*Mustela erminea\*\) risk assessment for Australia. Department of Agriculture and Food, Western Australia.](#)

**Summary:** Models for assessing the risk that exotic vertebrates could establish in Australia have been developed for mammals, birds (Bomford 2003; Bomford 2006, 2008), reptiles and amphibians (Bomford 2006, 2008; Bomford *et al.* 2005). These Risk Assessment models have been further explored by Western Australia Department of Agriculture & Food (DAFWA) to confirm that they reasonably predict public safety, establishment and pest risks across a full range of exotic species and risk levels. Mammals and birds were assessed for the pest risk they pose if introduced to Australia, by calculating Vertebrate Pests Committee (VPC) Threat Categories. These categories incorporate risk of establishing populations in the wild, risk of causing public harm, and risk of becoming a pest (eg causing agricultural damage, competing with native fauna, etc). The 7-factor Australian Bird and Mammal Model was used for these assessments.

[Pyrón R. A, Burbrink F. T, Guirher T. J., 2008. Claims of Potential Expansion throughout the U.S. by Invasive Python Species Are Contradicted by Ecological Niche Models. PLoS ONE 3\(8\): e2931. doi:10.1371/journal.pone.0002931](#)

**Summary:** Available from: <http://www.plosone.org/article/info:doi/10.1371%2Fjournal.pone.0002931> [Accessed 1 September 2008]

Reed, Robert N., 2005. An Ecological Risk Assessment of Nonnative Boas and Pythons as Potentially Invasive Species in the United States. Risk Analysis, Vol. 25, No. 3, 2005

#### General information

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**Summary:** Text containing information about the many species of snakes around the world. Information includes description, habitat, behavior, reproduction, status, and distribution.

[Boback, Scott., 2005. Natural History and Conservation of Island Boas \(\*Boa constrictor\*\) in Belize. Copeia, 2005\(4\), pp. 879-884](#)

**Summary:** Available from: <http://www.salmonboa.com/pdf/Island%20Boas.pdf> [Accessed 1 September 2008]

Burridge, M.J & L.A. Simmons., 2003. Exotic ticks introduced into the United States on imported reptiles from 1962 to 2001 and their potential roles in international dissemination of diseases. Veterinary Parasitology 113 (2003) 289-320

Cuarón, A. D., M. A. Martínez-Morales, K. W. McFadden, D. Valenzuela, and M. E. Gompper. 2004. The status of dwarf carnivores on Cozumel Island, Mexico. Biodiversity and Conservation 13:317-331

[Curry, Robert, L., 2008. Threats to the Cozumel Thrasher](#)

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**Summary:** Available from: <http://nationalzoo.si.edu/Animals/ReptilesAmphibians/Facts/FactSheets/Boaconstrictor.cfm> (Accessed 4 September 2008)

[Global Biodiversity Information Facility \(GBIF\). 2008. Species: \*Boa constrictor\* LINNAEUS 1758](#)

**Summary:** Available from: <http://data.gbif.org/species/13494384/> [Accessed 15 June 2010]

[ITIS \(Integrated Taxonomic Information System\). 2008. Online Database \*Boa constrictor\* Linnaeus, 1758](#)

**Summary:** An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from: [http://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=209569](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=209569) [Accessed 1 September 2008]

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**Summary:** Available from: <http://reptile-database.reptarium.cz/species.php?genus=Boa&species=constrictor> [Accessed 8 September 2010]  
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