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Chilabothrus gracilis, Hispaniola Boa

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Reptilia	Squamata	Boidae

Scientific Name: Chilabothrus gracilis Fischer, 1888

Synonym(s):

• Epicrates gracilis (Fischer, 1888)

Common Name(s):

• English: Hispaniola Boa

Taxonomic Source(s):

Uetz, P., Freed, P. and Hošek, J. (eds). 2021. The Reptile Database. Available at: http://www.reptile-database.org. (Accessed: 1 June 2021).

Assessment Information

Red List Category & Criteria: Near Threatened A2c; B2b(iii) ver 3.1

Year Published: 2021

Date Assessed: July 21, 2015

Justification:

Although this species has historically been recorded from a relatively wide area of Haiti, it has not been recorded in extensive surveys of this island over the past 35 years and if it survives here has apparently undergone extreme declines in the Haitian portion of its range, and while still recorded in the Dominican Republic - where the largest portion of its range occurs - it is considered to be rare, to occur as a severely fragmented population, and at risk from ongoing habitat loss. Presuming it survives at all historical localities - which is, however, not thought to be the case - it has an extent of occurrence of well over 100,000 km², and so does not qualify for a threatened listing based on its distribution and its area of occupancy is unclear. The major period of decline is unknown, and is likely to have been prior to three generations ago although generation length is unclear. The species is consequently listed as Near Threatened on the basis that it is thought to be close to but does not qualify for a threatened listing applying criteria A and B2, with the strong caveat that this assessment is based on the best presentlyavailable data and that future research, including data on area of occupancy or on rates of ongoing decline, may reveal that this species warrants listing in a more threatened category. Although the species is found in a number of protected areas, enforcement of protected status is often not effective. Quantifying declines is, however, likely to be difficult given how little data there is, especially as most recent reports are anecdotal. Better protected area management is needed in order to ensure the survival of this and other forest-dwelling species on Hispaniola.

Geographic Range

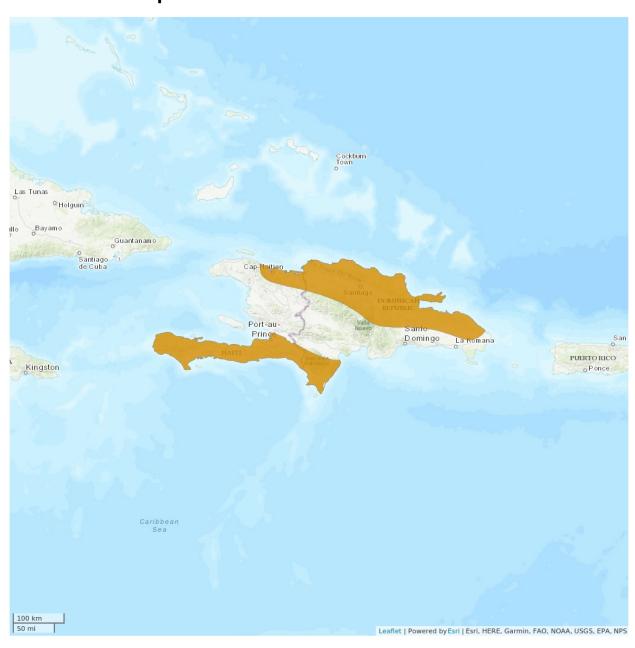
Range Description:

This species is endemic to Hispaniola, occurring north of the Plaine de Cul de Sac-Valle de Neiba and on Tiburón Peninsula east to Port-au-Prince and Jacmel. Also found on several satellite islands (Henderson and Powell 2009). It is found from near sea level to 21 m asl (M. Landestoy and S. Incháustegui pers. comm. 2015).

Country Occurrence:

Native, Extant (resident): Dominican Republic; Haiti

Distribution Map





Compiled by:

Center for Biodiversity, Temple University 2015





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Population

It is an uncommon species. S.B Hedges (pers. comm. 2016) reports that it has not been recorded in Haiti at least during the last 35 years of surveys by this worker. In the Dominican Republic it is more widespread but harder to find than the related *Chilabothrus fordii* (M. Landestoy pers. comm. 2016). Overall it is still considered locally common in the Dominican Republic and found with some regularity (R.G. Reynolds unpubl. data), although most records are unpublished or anecdotal (R.G. Reynolds pers. comm. 2018) and its occurrence appears to be highly localized (M. Landestoy pers. comm. 2018).

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

This species is found in lowland deciduous woods, frequently adjacent to bodies of water, and edge situations. It is a nocturnal and arboreal species that feeds mainly on anoles. It has viviparous reproduction (Henderson and Powell 2009).

Systems: Terrestrial

Use and Trade

Between 2000–18, 20 live specimens (sourced wild) were imported by the USA from Haiti, plus four wild captured specimens that were exported by the Dominican Republic to the USA for scientific purposes (https://trade.cites.org).

Threats (see Appendix for additional information)

This species is at least locally threatened by habitat loss due to agriculture expansion, charcoal production, wood harvesting, and tourism development. Haiti reportedly retains less than 1% of its native vegetation cover (Williams 2011), and satellite imagery indicates that remaining habitat is still being lost (S.B. Hedges pers. comm. 2018). It is consequently highly likely that if the species survives in Haiti it has undergone extreme declines. Habitat conversion is ongoing both within and outside protected areas in the Dominican Republic (Sangermano *et al.* 2015), and here as well remaining subpopulations are likely to be fragmentary. The introduced small Asian mongoose, which has been implicated in severe declines and extinctions in other diurnal, terrestrial reptiles throughout the Caribbean and is presumed to be the major threat to the related *Chilabothrus gracilis* (S.B. Hedges pers. comm. 2016), is presumably a major threat to this species.

Conservation Actions (see Appendix for additional information)

There are no known species-specific conservation measures in place for this species. Further research into its distribution, abundance, and population trends should be carried out in order to identify whether any major threats are affecting this species. It is found in several protected areas, however, effective protected area management is needed to ensure the survival of this and other species on Hispaniola. Sangermano *et al.* (2015) found that the protected area network in the Dominican Republic was not effective at preserving key habitat for amphibians, and the same is presumed to be the case for reptiles (S.B. Hedges pers. comm. 2018). It is listed in CITES Appendix II (as *Epicrates gracilis*).

Credits

Assessor(s): Henderson, R.W., Inchaustegui, S. & Landestoy, M.

Reviewer(s): Auliya, M.

Partner(s) and

NatureServe

Institution(s):

Authority/Authorities: IUCN SSC Boa and Python Specialist Group

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Powell, R. and Henderson, R.W. 2012. Island lists of West Indian amphibians and reptiles. *Bulletin of the Florida Museum of Natural History* 51(2): 85-166.

Sangermano, F., Bol, L., Galvis, P., Gullison, R.E., Hardner, J. and Ross, G.S. 2015. Habitat suitability and protection status of four species of amphibians in the Dominican Republic. *Applied Geography* 63: 55–65.

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External Resources

For <u>Supplementary Material</u>, and for <u>Images and External Links to Additional Information</u>, please see the Red List website.

Appendix

Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.5. Forest - Subtropical/Tropical Dry	-	Suitable	-
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	-	Suitable	-

Use and Trade

(http://www.iucnredlist.org/technical-documents/classification-schemes)

End Use	Local	National	International
Research	No	No	Yes

Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score	
1. Residential & commercial development -> 1.3. Tourism & recreation areas	Ongoing	-	-	Low impact: 3	
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion			
		1. Ecosystem	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.2. Small-holder farming	Ongoing	-	-	Low impact: 3	
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion			
		1. Ecosystem	stem degradation		
5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.3. Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	-	-	Low impact: 3	
	Stresses:	 Ecosystem stresses -> 1.1. Ecosystem convers Ecosystem stresses -> 1.2. Ecosystem degrada 		stem conversion	
				stem degradation	
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.2. Named species (Herpestes auropunctatus)	Ongoing	Whole (>90%) Unknown	Unknown	
	Stresses:	2. Species Str	2. Species Stresses -> 2.1. Species mortality		

Conservation Actions in Place

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Action in Place

In-place land/water protection

Occurs in at least one protected area: Yes

In-place education

Included in international legislation: Yes

Subject to any international management / trade controls: Yes

Conservation Actions Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Action Needed

2. Land/water management -> 2.1. Site/area management

Research Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Research Needed

1. Research -> 1.2. Population size, distribution & trends

Additional Data Fields

Distribution

Estimated extent of occurrence (EOO) (km²): 106323

Continuing decline in extent of occurrence (EOO): No

Extreme fluctuations in the number of locations: No

Lower elevation limit (m): 0

Upper elevation limit (m): 21

Habitats and Ecology

Continuing decline in area, extent and/or quality of habitat: Yes

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