

GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: Anolis leachii

Anolis leachii System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Reptilia		Polychrotidae

Common name Warwick lizard (English), Antiguan anole (English), panther anole (English),

Barbuda Bank tree anole (English)

Synonym Anolis leachii , Boulenger, 1885

Anolis bimaculatus leachi , Lazell, 1972 Anolis leachi , Burnell & Hedges, 1990 Anolis leachi , Powell & Henderson, 2001

Similar species

Summary The Barbuda Bank tree anole, *Anolis leachii* was accidently introduced to

Bermuda along with the Barbados anole (<u>A. extremus</u>) probably in the early

1940's. In Bermuda, A. leachii successfully competes with the longer

established and also introduced Graham's anole (*Norops grahami*), altering its microhabitat distribution. Introduced anole lizards including *A. leachii* (but mainly *N. grahami*) on Bermuda were shown to predate heavily on beetle species introduced for the biological control of introduced scale insects.



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Species Description

Anolis leachii is a large anole with a mean snout to vent length of 102 mm for males (Losos, 1996).

Notes

Anolis leachii is one of three introduced anole species present on Bermuda, along with Graham's anole (see <u>Norops grahami</u>) and the Barbados anole (see <u>A. extremus</u>) (Wingate, 1965). The effects of these lizards, particularly *N. grahami* led to the introduction of the great kiskadee (see <u>Pitangus sulphuratus</u>) as a biocontrol agent in 1957. However, this biocontrol attempt was a failure, with *P. sulphuratus* playing a significant role in the population declines of native insect, bird and reptile species on Bermuda (Cheesman & Clubbe, 2007; Davenport *et al.*, 2008).

Nutrition

The diet of *Anolis leachii* is similar and widely overlaping with that of *Norops grahami* (Wingate, 1965). Simmonds (1958) found the following insects in order of abundance from a stomach content analysis of 57 individuals: Hymenoptera, mainly *Iridomyrmex*; Diptera, various species, particularly *Hippelates*; Coleoptera, various species particularly *Lindorus* (Coccinalledae); Lepidoptera, various species, adults and larvae; Orthoptera, Periplaneta (Blattidae). Insects of the orders Coleoptera, Diptera, and Hymenoptera were nearly all of species larger than taken by *N. grahami* and the proportion of cockroaches eaten was much larger (Simmonds, 1958).



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General Impacts

Anolis leachii affects the microhabitat distribution of the also introduced *Norops grahami* on Bermuda through competition, forcing *N. grahamii* to use lower (Schoener, 1975) or peripheral (Losos, 1996) perches. Both species, but especially *N. grahami* were shown to predate heavily on beneficial insect species such as the Coccinellidids *Cryptolaemus montrouzieri* and *Chilocorus cacti* introduced to control scale insects such as the long-tailed mealybug *Pseudococcus adonidum* (Simmonds, 1958).

Pathway

Most likely capable of dispersal as a stowaway on cargo ships (Wingate, 1965).

Principal source:

Compiler: IUCN SSC Invasive Species Specialist Group (ISSG) with support from the Overseas Territories Environmental Programme (OTEP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment

Review:

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ALIEN RANGE [1] BERMUDA

BIBLIOGRAPHY

11 references found for Anolis leachii

Managment information

Horn, Scott; Hanula, James L. 2006. Burlap bands as a sampling technique for green anoles (*Anolis carolinensis*) and other reptiles commonly found on tree boles. Herpetological Review. 37(4). DEC 2006. 427-428

Summary: Available from: http://www.srs.fs.usda.gov/pubs/ja/ja_horn011.pdf [Accessed 2 July 2010]

IUCN/SSC Invasive Species Specialist Group (ISSG)., 2010. A Compilation of Information Sources for Conservation Managers.

Summary: This compilation of information sources can be sorted on keywords for example: Baits & Lures, Non Target Species, Eradication, Monitoring, Risk Assessment, Weeds, Herbicides etc. This compilation is at present in Excel format, this will be web-enabled as a searchable database shortly. This version of the database has been developed by the IUCN SSC ISSG as part of an Overseas Territories Environmental Programme funded project XOT603 in partnership with the Cayman Islands Government - Department of Environment. The compilation is a work under progress, the ISSG will manage, maintain and enhance the database with current and newly published information, reports, journal articles etc.

General information

Bacon, Jamie P., Jennifer A. Gray; Lisa Kitson, 2006. Status and conservation of the reptiles and amphibians of the Bermuda islands. Applied Herpetology. 3: 323-344

Bennett, Fred B. & I. W. Hughes, 1959. Biological Control of Insect Pests in Bermuda. Commonwealth Agricultural Bureaux, 1959. Global Biodiversity Information Facility (GBIF), 2010. Species: Anolis leachii Burnell & Hedges 1990

Summary: Available from: http://us.mirror.gbif.org/species/13507091 [Accessed 22 June 2010]

Losos, Jonathan B., 1996. Dynamics of Range Expansion by Three Introduced Species of *Anolis* Lizards on Bermuda. Journal of Herpetology, Vol. 30, No. 2 (Jun., 1996), pp. 204-210

Macedonia, Joseph M. and David L. Clark, 2003. Headbob Display Structure in the Naturalized *Anolis* Lizards of Bermuda: Sex, Context, and Population Effects. Journal of Herpetology, Vol. 37, No. 2, pp. 266 276, 2003

Reptiles Database, 2010. *Anolis leachii* Dumeril & Bibron, 1837

Summary: Available from: http://reptile-database.reptarium.cz/species.php?genus=Anolis&species=leachii [Accessed September 8 2010] Schoener T. W., 1975. Presence and absence of habitat shift in some widespread lizard species. Ecol Mon 45:233-258 Strong, D., B. Leatherman, and B.H. Brattstrom. 1993. Two new methods for catching small fast lizards. Herpetological Review 24:22 23. Wingate, David B., 1965. Terrestrial Herpetofauna of Bermuda. Herpetologica, Vol. 21, No. 3 (Sep. 24, 1965), pp. 202-218