GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Anolis cristatellus***

Anolis cristatellus **System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Reptilia		Polychrotidae

Common name greater Antillean anole (English), common Puerto Rican anole (English), Puerto Rican crested lizard (English), Virgin Islands crested anole (English), crested anole (English)

Synonym
Ptychonotus (Istiocercus) cristatellus , Fitzinger, 1843
Xiphosurus cristatellus , O'Shauhnessy, 1875
Anolis lindeni , Ruthven, 1912
Anolis cozumelae ,Smith, 1939
Anolis cristatellus , Dum&#65533;ril & Bibron, 1837

Similar species

Summary *Anolis cristatellus* or the crested anole, is native to Puerto Rico and the Virgin Islands and is best distinguished by the high crests on the middle of the back and on the base of the tail. It has most likely been dispersed unintentionally over long distances to its introduced range. Its aggressiveness and high fecundity makes *A. cristatellus* a strong competitor capable of displacing native anole lizard species or forcing them to use different parts of their natural habitat.

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Species Description
Anolis cristatellus is a robust, grayish brown lizard with a snout to vent length of 70 - 76 mm in fully adult males and 39 - 56 mm in sexually mature females with the tail averaging about 1.7 times the snout to vent length (Fitch *et al.* 1989). The most distinctive trait of this species is the presence of high crests on the middle of the back and on the base of the tail giving *A. cristatellus* a \"dragon-like\" appearance; some populations however have weakly developed or absent crests (Fitch *et al.*, 1989).

Notes
Two subspecies are recognised *Anolis cristatellus cristatellus* Dumeril & Bibron 1837 and *Anolis cristatellus wileyae* Grant 1931 (Reptiles Database 2010).

Habitat Description
Anolis cristatellus occupies a wide range of habitat conditions and while its preferred body temperature was found to be 29.6 C, it has shown high versatility in its thermoregulation (Fitch *et al.*, 1989).

Reproduction
The generation time for *Anolis cristatellus* is approximately 12 months, with females producing eggs every 2 weeks during the rainy season, producing up to 6 viable offspring under isolated laboratory conditions (J. Eales, pers. obs., in Eales *et al.*, 2008). A captive laid egg was found to hatch after 61 days of incubation, however it is thought that temperatures in nature would be higher and therefore result in a faster development time (Fitch *et al.*, 1989).

Nutrition
Anolis cristatellus primarily feeds on invertebrates, but has been recorded feeding on fruit, (Lazell & Perry, 1997; in Owen & Perry, 2005), *Sphaerodactylus* geckos (Schwartz & Henderson, 1991; in Owen & Perry, 2005) and juvenile conspecifics (Perry, unpublished data; in Owen & Perry, 2005). On Tortola, *A. cristatellus* was observed feeding on a *Hemidactylus mabouia* (Owen & Perry, 2005).

General Impacts
In its introduced range, *Anolis cristatellus* appears to interact competitively with other lizard species, capable of completely displacing or forcing them to use different parts of their natural habitat (Salzburg *et al.*, 1984; Fitch *et al.*, 1989; Malhotra *et al.*, 2007). *A. cristatellus* may also predate on hatchings and out-produce native species due to a shorter generation time and a higher egg laying frequency (Fitch *et al.*, 1989).

Management Info
Biological control: On Guana Island, British Virgin Islands, *Anolis cristatellus* is preyed upon by the pearly-eyed thrasher, (*Margarops fuscatus*), a falconiform raptor (Lu, 2009). It is also preyed upon by the snake, *Alsophis portoricensis* and the Indian mongoose, (see *Herpestes javanicus* (Lu, 2009).

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:

Pubblication date: 2010-07-07

ALIEN RANGE

[2] COSTA RICA
[1] DOMINICAN REPUBLIC
[1] DOMINICA
[1] UNITED STATES

Red List assessed species 1: LC = 1;

Anolis oculatus **LC**

BIBLIOGRAPHY
13 references found for **Anolis cristatellus**

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
Ackley, Jeffrey W.; Muelleman, Peter J.; Carter, Ruth E.; Henderson, Robert W.; Powell, Robert, 2009. A rapid assessment of herpetofaunal diversity in variously altered habitats on Dominica. Applied Herpetology. 6(2, Sp. Iss. SI). 2009. 171-184.
Brach V., 1977. Notes on the Introduced Population of *Anolis cristatellus* in South Florida. Copeia, Vol. 1977, No. 1 (Mar. 16, 1977), pp. 184-185
Eales, J.; Thorpe, R. S.; Malhotra, A., 2008. Weak founder effect signal in a recent introduction of Caribbean Anolis. Molecular Ecology. 17(6). MAR 2008. 1416-1426

Fitch, H. S.; Henderson, R. V.; Guarisco, H., 1989. Aspects of the ecology of an introduced Anole *Anolis cristatellus* in the Dominican Republic. Amphibia-Reptilia 10(3) 1989. 307-320.
Integrated Taxonomic Information System (ITIS), 2010. *Ctenonotus cristatellus* (Dum&#65533;ril and Bibron, 1837)
Summary: Available from: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=564580 [Accessed 2 July 2010]
Lazell, James; Perry, Gad, 1997. *Anolis cristatellus wileyae* (Virgin Islands crested anole). Frugivory. Herpetological Review. 28(3). 1997. 150.
Lu, Wenhua, 2009. *Anolis cristatellus* (Crested Anole). Avian predation. Herpetological Review. 40(2). JUN 2009. 219-220.
Malhotra, Anita; Thorpe, Roger S.; Hypolite, Eric; James, Arlington, 2007. A report on the status of the herpetofauna of the Commonwealth of Dominica, West Indies. Applied Herpetology 4(2). 2007. 177-194.
Owen, Jennifer; Perry, Gad, 2005. *Anolis cristatellus wileyae* (Virgin Islands Crested Anole). Saurophagy. Herpetological Review. 36(4). DEC 2005. 444-445.
Reptiles Database, 2010. *Anolis cristatellus* Dumeril & Bibron, 1837
Summary: Available from: http://reptile-database.reptarium.cz/species.php?genus=Anolis&species=cristatellus [Accessed September 8 2010]
Salzburg, Mark A., 1984. *Anolis sagrei* and *Anolis cristatellus* in Southern Florida: A Case Study in Interspecific Competition