

Anolis wattsi

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Reptilia		Polychrotidae

Common name zandoli (English, St. Lucia), Watt's anole (English)

Synonym *Anolis alter*
Anolis wattsi forresti , Barbour, 1923
Anolis forresti , Barbour, 1923
Anolis wattsi schwartzi , Lazell, 1972
Anolis schwartzi , Burnell & Hedges, 1990

Similar species

Summary Watt's anole, *Anolis wattsi* is a moderate sized lizard native to Antigua and Barbuda. It is widespread on St. Lucia and Trinidad, where it has displaced the native St. Lucia anole *A. luciae* in disturbed and urban habitats. *A. wattsi* is not as yet widespread in natural forest systems. There is concern that if it does it may cause further declines in *A. luciae* numbers on St. Lucia as well as compete with the native *A. chyrsolepis* on Trinidad.



[view this species on IUCN Red List](#)

Species Description

Anolis wattsi is a moderate sized anole, measuring up to 58 mm from snout to tail-base (Daltry, 2009). Colour is variable including tan, brown, grey-brown, olive or blue-green, with or without faint dark bands. The male snout often has an orange hue; males also have a white, yellow or orange dewlap with pale blue or white scales (Daltry, 2009). Females are generally less colourful being rich brown or grey-brown, usually with a pale grey stripe down the spine, often bordered with a darker colour and a white stripe running down the side, continuous with the white throat (Daltry, 2009). They are also smaller, reaching up to 46 mm from snout to tail-base (Daltry, 2009). Males often perch 60 cm above the ground, while females and juveniles are often found lower, frequently at ground level (Daltry, 2009). *A. wattsi* is capable of reaching remarkably high densities with 7,143 / ha reported on Great Bird Island, Antigua (Daltry, 2007) and 7,200 / ha from Anse la Raye, St. Lucia (Daltry, 2009). It is capable of breeding rapidly and is very adaptable, which may assist it in filling vacant, novel territories such as buildings and ornamental grounds (Daltry, 2009).

Notes

Three subspecies of *Anolis wattsi* have been described. *A. w. forresti* Barbour, 1923, *A. w. schwartzi* Lazell, 1972, and *A. w. wattsi* Boulenger, 1894 (Reptiles Database, 2010). A fourth subspecies *A. w. pogus* has since been elevated to full species status, while the status of *A. w. forresti* remains unclear (Powell & Henderson, 2001; in Reptiles Database, 2010). *Anolis wattsi forresti* is endemic to Barbuda with some considering it a separate species (Daltry, 2007).

Habitat Description

Anolis wattsi can often be found on or near buildings, bridges or other man-made structures (Daltry, 2009). They are usually found in lowland areas, but have been reported up to 259 m above sea level at Millet, S. Lucia. (Daltry, 2009).



GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Anolis wattsi*

Reproduction

The female *Anolis wattsi* lays and buries one or two eggs in a shallow nest in the soil (Daltry, 2009).

Nutrition

The diet of *Anolis wattsi* is varied and includes invertebrates such as ants, spiders, crickets, cockroaches, grasshoppers, and insect larvae, usually caught on the ground as well as soft fruits including mangoes (Daltry, 2009). They often perch close to the ground on tree, walls and other vantage points, scanning the ground for prey (Daltry, 2009).

General Impacts

As a rapid breeding, adaptive species which is known to reach high densities, *Anolis wattsi* is capable of displacing native *Anolis* species (Daltry, 2009). Evidence suggesting this was found by Daltry (2009); indications of the displacement of *A. luciae* from urban, suburban and some localized, disturbed, secondary forest sites on St. Lucia.

Other potential threats also include competition with the native *A. chrysolepis* on Trinidad (White & Hailey, 2006), and altering invertebrate populations when present in high densities (Daltry, 2009).

Management Info

Physical control: While eradications may be unfeasible for widespread *Anolis wattsi* invasions on islands such as St. Lucia, Daltry (2009) suggests that hand removal may be successful for local control.

Chemical control: Daltry (2009) states that *Anolis wattsi* is adversely affected by heavy pesticide use on St. Lucia such as those used for agricultural purposes.

Biological control: On St. Lucia, *A. wattsi* is probably preyed upon by mongoose (*Herpestes javanicus*) and other invasive predators, however this has not been enough to significantly impact abundance (Daltry, 2009).

Cultural control: Due to the limitations of current control technologies, the spread of *A. wattsi* is unlikely to be reversed or contained without harming native lizard populations (Daltry, 2009). Daltry (2009) makes several management recommendations for St. Lucia to prevent the spread of *A. wattsi* to other offshore islands. These include: listing *A. wattsi* as Unprotected under the Wildlife Protection Act; monitoring the spread of this species and be vigilant for signs that it is invading mature, natural forests; preventing *A. wattsi* from invading the offshore islands, especially the Maria islands, by screening all boats and baggage; and supporting reptile conservation in other tropical countries by prohibiting, screening and removing anole lizards from exported cargo (Daltry, 2009).

Pathway

Anolis wattsi can be dispersed as a stowaway in shipments for agricultural or horticultural trade (White & Hailey, 2006).

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

Global Invasive Species Database (GISD) 2024. Species profile *Anolis wattsi*. Available from: <https://iucngisd.org/gisd/species.php?sc=1678> [Accessed 29 June 2024]



GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Anolis wattsi*

[1] SAINT LUCIA

[1] TRINIDAD AND TOBAGO

BIBLIOGRAPHY

10 references found for *Anolis wattsi*

Management information

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[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

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