Anolis trinitatis (St. Vincent Anole)

Family: Polychrotidae (Anoles and Tree Lizards)

Order: Squamata (Lizards and Snakes)

Class: Reptilia (Reptiles)



Fig. 1. St. Vincent Anole, Anolis trinitatis.

[http://www.karibische-anolis.de/Anolis-trinitatis.htm, downloaded 23 March 2015]

TRAITS. Anolis trinitatis is a medium-sized anole (Anolis lizard), length from snout to vent (entire body excluding tail) 77mm in adult males and 57mm in females. The colour of A. trinitatis varies with sex. Males are bright green or blue-green shading to blue or blue-grey (Fig. 1) with the venter and lower part of its jaw being bright yellow, orbital area (around eye) bright blue to blue-grey or a dark black, cheek is either a buttery yellow or has a green wash. Females are a duller green, with a faint pale flank stripe present, often with mottled or herringbone middorsal pattern, small dewlap, not distinctively coloured (Fig. 2).

DISTRIBUTION. Anolis trinitatis is native to St Vincent and the Grenadines where it is widespread in all terrestrial habitats. A. trinitatis is also found in Trinidad where it is an invasive species in San Fernando and surroundings, St. Augustine and Port of Spain (Hailey et al., 2009)

HABITAT AND ACTIVITY. In St. Vincent and the Grenadines *Anolis trinitatis* is found in littoral, managed terrestrial and natural and semi-natural terrestrial environments; up to at least 900m above sea level and most live among trees. They are found where vertical structures are present, in open areas and in partly isolated situations and habitat edges. *A. trinitatis* adapts well to human-modified situations. However in Trinidad *A. trinitatis* showed restrictions to disturbed and suburban habitats. Hence a wider habitat use is seen in St. Vincent than in Trinidad (Hailey et al., 2009). *A. trinitatis* is active year round; there is also no hibernation or aestivating. Perching above ground is seldom more than 3m; larger individuals are found higher in vegetation and on larger diameter perches (Hailey, 2014). The mean height of each perch was found to be from 1.1-1.7 m, higher when the introduced species *A. sagrei* are nearby on St Vincent (Treglia et al., 2008).

FOOD AND FEEDING. The amount of *Anolis trinitatis* individuals is declining in several areas in Trinidad, which may be as a result of decreasing vegetation cover in urban gardens (Hailey, 2014). Their food source is insects and other small arthropods of all life stages. *A. trinitatis* is a visual predator, that monitors small territories of 1-2 square meters for small invertebrates, while making little or no use of its tongue; roughly 0.39 in males and 0.33 in females tongue extrusions per 30 minutes were recorded (Hailey, 2014).

POPULATION ECOLOGY. Anolis trinitatis are found in tropical rainforest climate and in tropical monsoon climates. A. trinitatis seems to have a balanced sex ratio, and population density can be as high as 27,923 per ha on St Vincent (Hailey, 2014) where A. trinitatis was the most abundant reptile species. However the population density is lower in Trinidad, which may be as a result of bird predation. A. trinitatis is found where vertical structures a found, often in open areas, or at partly insolated situations and habitat edges (Hailey, 2014). Its presence has been reducing in several areas of Trinidad, mostly because of decreasing vegetation coverage in urban gardens (Hailey et al., 2009). Blood samples from 79 A. trinitatis examined from four different areas on St Vincent showed 13% infection with lizard malaria. There is no specific information on the longevity of Anolis trinitatis. However for a medium-sized anole, there is a life expectancy of approximately two years (Hailey, 2014).

REPRODUCTION. Female anoles lay a clutch of a single egg, at intervals of 1-2 weeks in productive habitats. *A. trinitatis* breed year round on both islands (St Vincent and Trinidad), with a seasonal variation in fat bodies of males but not females (Hailey, 2014). The eggs are 6.5 x 9.0 mm and hatch in 50-60 days at 25-28°C, with hatchlings of about 18 mm snout-vent length.

BEHAVIOUR. On St Vincent A. trinitatis is preyed on by A. griseus (another anole which is larger) and Corallus cookii (tree boa). The kiskadee which is a tyrant flycatcher, Pitangus sulphuratus was brought from Trinidad to Bermuda in 1957 to control anoles introduced to the area, specifically A. grahami (Hailey, 2014). This bird is common in suburban habitats also occupied by A. trinitatis in Trinidad, and seemingly plays a role in controlling the introduced population, thus reduces the density below that of St Vincent (Hailey, 2014).

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Fig. 2. Female Anolis trinitatis.

[http://www.saumfinger.de/anolis trinitatis.html, downloaded 28 April 2015]

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