THE SUCCESSFUL KEEPING AND BREEDING OF ANOLIS CAROLINENSIS

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INTRODUCTION

Anolis carolinensis is frequently seen in pet shops which sell reptiles. Anoles are easy to keep and breed, with the added bonus of very interesting, even entertaining, behaviour. They originate from Florida in the U.S.A. and are subtropical in their requirements. Their colour is usually green if conditions are correct and the lizards are not feeling stressed. They will turn brown under other conditions – it is an interesting aspect of their behaviour to see how normal fluctuations in conditions affect them (NOT experimenting on the lizards). Even though there has been a lot of research on anoles there is nothing quite like finding out for yourself.

Males are approximately 15cm long and are larger than females. Males also have larger heads, which seem disproportionately large if you are used to some lizards like lacertids, and slight swellings at the base of the tail near the vent indicating the reproductive organs. When a male spots another male (or a mirror held nearby!) he lowers a relatively large bright pink "dewlap" and bobs his head furiously. Within a minute or two his colour turns dark brown, with angry very dark brown patches behind the eyes. He also erects a small "crest" on his dorsal neck surface. Females also have these dewlaps and will display at males or females; however, their dewlaps are smaller and less pink. The lizards are streamlined, very agile and able to shin up most surfaces, including glass, having adhesive toe pads as well as claws. In many ways they are a "poor-mans" equivalent to day geckos in terms of price and colour, except of course that they are Iguanids (Family Iguanidae), not geckos, and have much more interesting behaviour.

VIVARIUM

There are many possible ways of housing these lizards, below is a diagram of the set-up which I have used this year. I obtained two females and one male in the spring of 1994. Males will display and fight in small vivaria continuously females are not as competitive with each other. It is very important that anoles are very healthy when bought. They must NOT be bony, especially the hips. They are so cheap that veterinary care is not an economic option. I found that they took a few days to settle in and start feeding.

LIGHTING AND HEATING

UV light is essential. I keep UV light on all day all year round.

Summer: 12 hours light (low wattage light bulb and UV light)

Autumn and winter: Reduce time to 8 hours UV light and use a red light bulb which is thermostatically controlled to prevent vivarium from falling below about 15°C. I have found that temperatures below over long periods of night seem to be unappreciated by the lizards and they stop feeding and get out of condition.
Spring: Build up time back to 12 hours and about March/April go to the Summer regime. I reduce the time in the winter to assist next year's breeding cycle but I am not sure if they could be kept all year round at the same photoperiod and still breed. My instincts tell me not.

All these figures are only my experience that there may well be better combinations.

Fig. 1. For adults 1 male/2 females

**FEEDING**

a) Adults
I have fed the adults on crickets, insects and spiders caught by "beating bushes" with a stick with a bowl held beneath (bramble and holly are especially good for this), bluebottles (their favourites) and waxworms. Like many lizards they get fed up with eating the same food all the time. Food should be offered every day during the summer, but their appetite falls off during the autumn and winter but not completely if the temperature is maintained. I shake bought food in powdered cuttle fish bone. UV light is essential for effective breeding. I haven't ever found them interested in anything other than live food, but apparently some people have found they like fruit or even meat if waved in front of them. Personally I see little point in trying to get them to eat food which they will not take readily when there are other foods which they will!

b) Young
Fruit flies at the very start, sweeping from bush beatings as often as possible, baby crickets, small flies, micro-waxworms.
BREEDING

As in most lizards a period of less light and lowered temperatures are probably required, along with good feeding and plenty of calcium, vitamin D and UV light.

This year I found that the lizards mated regularly and that the females were laying one egg every 10-14 days. I provide an area of damp fine grain vermiculite for the purpose of egg laying. The rest of the vivarium is kept dry, except for a daily spray of calcium lactate enriched water. Anoles do not drink out of containers out of preference. Males show off their dewlap and head bob frantically, moving round the female, eventually pinning her down, if she is willing(!), by gripping the skin on the back of the neck – this usually leaves a small scar so you can tell if a female has mated even if you do not see it occurring.

INCUBATION

This is a diagram of my set up which has worked well with eggs of anoles, wall lizards and giant day geckos.

RAISING THE YOUNG

I have kept them in a small aquarium with a home made gauze lid. This keeps them dry enough, allows easy spraying, feeding and observation.
Since I found that the lizards needed to be kept dry most of the time I have had good success. Out of 20 eggs laid this year, 19 hatched successfully, only one failed. It failed early on, going mouldy and had no obvious embryo in so may have been infertile.

The last two eggs hatched out in November and had no incubation for the last three weeks. The room had a maximum temperature of 20°C and a minimum of 15°C. One of these last eggs produced twins.

The most difficult part has been feeding the lizards as it has been quite wet and therefore difficult getting enough wild food. The young seem less keen on crickets than wild food which they really go at. Very quickly the young can eat medium/fairly big sized or just hatched flies (bigger than house flies, smaller than large bluebottles).