## NOTES ON THE CAPTIVE BREEDING OF THE DESERT ROSY BOA (LICHANURA TRIVIRGATA GRACIA)

## ALAN M. GRANGER

1 Parker Street, Macclesfield, Cheshire

There are three subspecies of the rosy boa: the coastal rosy boa (Lichanura trivirgata roseofusca) which occurs in the foothills on the coastal side of the mountain ranges of southern California from Los Angeles and San Bernardino counties to northern Baja California; the desert rosy boa (Lichanura trivirgata gracia) is found in the desert regions of south east California and south west Arizona; and the Mexican rosy boa (Lichanura trivirgata trivirgata) is found from southern Arizona (Organ Pipe Cactus National Monument) to Guaymas, Sonora, Mexico.

I obtained a pair of desert rosy boas (L. trivirgata gracia) in March 1979. They bred in 1981. At the time of mating the female measured approximately 26 inches and the male 24 inches. They were kept together, and were not separated prior to mating.

The vivarium in which the snakes are kept measures 36" x 15". It is made of wood, with a sliding glass front. There is a fixed hide box on the outside end of the vivarium, with access to the main vivarium by means of a hole bored in the end wall. The hide box has a sliding door through which it can be inspected and cleaned from the outside. At the opposite end to the hide box is a 5-8 watt night light bulb.

There are two branches for climbing (which they like to do) and a few pieces of cork oak bark on the floor under which the boas like to hide, as well as using the hide box. Wood shavings are used as a substrate and a small water bowl is always in the vivarium.

The rosy boas usually eat two half-grown dead mice each about every ten days. They can (and sometimes do) take adult mice but seem to prefer half-grown ones.

My reptile room is heated and controlled by thermostats. From the end of November until the end of February the boas were kept at a temperature of 75°F during the day and dropped to 70°F at night, with a photoperiod of 10 hours light and 14 hours dark. From the beginning of March the light period is increased by one half-hour weekly until a 16 hour daily light period is reached. This is maintained until the end of November. During this period the temperature is gradually increased to 85°F daytime and dropped to 80°F at night.

The first sexual activity was noticed on 4.7.81 when the male was seen pursuing the female around the vivarium. The female did not respond. During the next six days the same activity (in varying degrees) was seen but there was still no response from the female.

On the evening of 11.7.81, when I went to check them, the female was lying quietly with the male lying alongside using his spurs rapidly on the rear of her body to stimulate her. The female eventually raised her tail, moved it over to the right, and allowed the male to bring his cloaca to hers and copulation then took place. They remained in this position for almost forty minutes. This may not have been the first mating but was the first one I observed, although sexual activity and mating was seen several times afterwards until 20.7.81.

The female was offered food but refused to eat until 15.8.81 when she ate one half-grown dead mouse and had a long drink of water. When I thought the female was gravid I removed the male from the vivarium. She was offered one half-grown mouse on: 22.8.81, refused; 13.9.81, eaten; 23.9.81, refused. Shed skin complete on 2.10.81. She was offered one half-grown mouse on: 3.10.81, refused; 20.10.81, eaten; 26.10.81, eaten. She was now looking quite plump towards the rear and not offered anymore food. She gave birth to four healthy babies on 22.11.81 and had a long drink of water after the event. If the female conceived on the first mating I witnessed, the gestation period was 134 days.

On the 24.11.81 she first ate again, taking two half-grown mice.

The young measured 11" to 12" in length at birth and were more brightly coloured, with stripes more distinct, than the parents.

The babies were removed from the vivarium on the day they were born and each one placed in a small vivarium on its own. The 'vivs' are numbered 1 to 4 so that an accurate record can be kept of feeding, sloughing, growth, etc. Paper towels are used as substrate, cork bark for hiding; there is a small water pot, and a small rough stone to assist shedding.

Baby No. 1. Ate one 5 day old dead mouse on the 23.11.81 (day after birth) and first sloughed on 8.12.81, complete.

Baby No. 2. First sloughed, complete, on 4.12.81 and ate first meal (3 dead pink mice) on 6.12.81.

Baby No. 3. Shed skin complete on 3.12.81 and again on 14.1.82 but could not be induced to feed until 5.2.82 (75 days after birth) when it ate 1 dead pink mouse.

Baby No. 4. Sloughed complete on 4.12.81 and ate first meal (4 dead pink mice) on 12.12.81.

All babies have since fed regularly and are growing fast.

At the beginning of March baby no. 3 was having trouble trying to slough, so was placed in a glass toffee jar ( $\frac{1}{8}$ " diameter air holes in screw on lid) with one inch of water at snake room temperature, and left to soak for 12 hours. The skin came off completely.

The babies were very aggressive at first and would strike at the slightest movement but have since quietened down considerably.

I believe that this successful breeding of the Rosy Boa is the first time that the species has been bred in captivity in Britain.