

SUCCESSFUL KEEPING AND BREEDING *PODARCIS PITYUSENSIS* IN INDOOR VIVARIA

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Podarcis pityusensis is a medium sized wall lizard which comes from the Balearic islands. The lizards form an interesting example of increased size in island dwelling lizards and are also a very good species to breed in a fairly straight forward way.

The males AND females are very territorial and in small vivaria (eg. less than 60cm by 90cm) will kill opponents of the same sex. They have to be kept in different sex pairs. The males tend to have larger heads than females and have femoral pores on the undersurface of the hind legs. Both sexes in my experience are equally colourful, though the males may be slightly more gaudy when breeding. Males are bigger than male *Podarcis muralis* and I remember being amazed at their size for a wall lizard when my four adults arrived.

Of the four I obtained one male was mainly brown with a bright green back, reticulated with a longitudinally striped pattern and a row of blue scales along the sides. He was 8cm from nose tip to the base of the tail. One female was very similar in colour with a much smaller head and shorter body length. The other male was the same size as the male mentioned above but cobalt blue all over, though his ventral surface was a paler blue. the female I put with him was similar to him but more greeny. Both females' striping on the back was much more definite than the males. All were very attractive lizards even though the females had regrown tails. Some have suggested that regeneration of tails precludes breeding - it hasn't with mine. I can't say if it has affected clutch size or frequency but I usually get three or four clutches each year. Of the original four I gave one male away in 1992 when "his" female was killed by another female when I tried to keep her with another pair.

Vivarium:

I have kept one pair in a 30cm by 90cm aquaria and another pair in a similar sized home made contiboard vivaria which are both 45cm high, well ventilated and heated at one end by a 60-100W tungsten light set on a dimmer and time switch for approximately 10 hours per day from January to October. I also supply a UV light near to the basking area. I use a 15W tube for this but I think a 20W would be better. By not keeping the aquarium near a window the vivaria never get overheated, since they are well ventilated and I turn the dimmer down for the tungsten light if it looks like it might get too hot. *The important factor* is keeping a temperature difference between the hot spot and the other part of the vivarium so that there is always a refuge from the heat - this means that the bulb(s) must be placed at one end, NOT in the middle. When I go away for holidays I feed the lizards especially well for the previous two weeks and then turn the lights off completely, checking that there is sufficient water in a bowl for them. I have at times been away for over 2 weeks always coming back to healthy lizards. In the winter of course the lights are already off. A full bowl of water, small so that they cannot drown and the humidity is kept low, is always provided as they drink at least once per day.

I use vermiculite for flooring, having tried other things such as cat litter, hortag granules and bark. Vermiculite is light, cheap and hygienic. I have not had any problems with it sticking to the food as the lizards seem quite good at getting it off if it sticks. This variety of lizard seems very nervous and if lots of hides are given, then they are rarely seen. I keep them with minimal hides so that their condition, especially the state of the female if she is gravid, can be easily observed. By providing a thin layer of vermiculite they can cover themselves up if they get too nervous. I have found that a) Not providing hides and b) Frequently watching them reduces their nervousness significantly – b) is probably the most important factor.

Feeding:

I feed the lizards on maggots (which I pierce with a pin or sharp scissors as they have an almost impenetrable cuticle and this allows digestive enzymes entry), flies when they hatch, mealworms (also normally pierced), crickets, spiders from the garden, worms and occasionally “sweepings” from bramble bushes in a nearby wood which tend to be mainly spiders. Often I cover the food with cuttle fish dust created by scraping the soft part of the cuttle fish bone into a plastic bag and then shake up the food in the bag. The lizards have survived and thrived with attractive colours and frequent egg layings for 4 years on this fare so far. The water in the Poole area is very hard which may help with calcium levels.

Breeding:

The stimuli for breeding are a) having a period in the dark and at a temperature of around 12-15 degrees C (I keep the lizards in an unheated room) b) giving the lizards an increasing length of time in the light c) having well fed individuals.

I tend to turn the lights off completely from late-ish October until early January. Then, over a period of two weeks, I turn the lights back increasing the time the light is on until it is about ten hours per day. The lizards feed very little during the dark winter period, but turning the lights back on soon stimulates eating. Very quickly they mate. Mating is a rough affair with the male swelling the underside of his throat, waving his tail from side to side and chasing the female until she acquiesces. The female starts to increase in girth very quickly afterwards and her appetite increases rapidly. After a month or so she looks like she will burst. For most of the time I place a small container, about 5cm deep filled with damp vermiculite, into the vivarium. It often has to be refilled and moistened as both sexes love digging and burying themselves. The female will lay approximately 3-5 eggs (occasionally more) in the container if the rest of the vivarium is kept dry – if a container isn't provided she lays her eggs anywhere and they dry out and die.

Incubation:

I take the container out, and expose the eggs without moving them so that I can check them and see progress and put it into a plastic bag which I put into a small aquarium with a 60W light bulb set into a lid and connected to a thermo-stat at 28 degrees C. The bag is opened every day to allow new air to enter. The eggs swell significantly if fertile and healthy. The incubation period is approximately 6 weeks.

While the eggs are incubating I put another lot of vermiculite into a container and back in the vivarium. I have had up to 4 clutches in a year, the last clutch often only being 2-3 eggs.

The eggs are not as successful as in nature, but my hatching rate with this regime is about 60-75% and the female has kept plump and very healthy. Unfortunately the adults cannibalise the young – I lost a clutch of 4 babies when a female escaped and got into their open “creche” container – the babies tails left behind.

Raising the young:

The young are quite big (about baby sand lizard size with longer tail ie. 7cm or so including the tail) and very easy to care for. I put them into a tall bowl with UV light suspended about 6cm off the ground (again vermiculite). I feed them on sweepings from the aforementioned bramble bushes. They grow extremely rapidly and get blues and green colours after a few months. They are brown at hatching with bluish tails.

Other notes:

The lizards have to be kept in small vivaria in pairs so I have had to give away a number of young and also let some clutches of eggs be laid with nowhere to be laid – they then dry out and die. Keeping the male and female apart is a possibility but it increases the number of vivaria needed – I have kept it down to 2 (except when raising the young when it can increase to 4 – the young live together happily until their first spring when they start to fight). The females do not seem to suffer a lack of condition if well fed (the figure of 60-75% hatching and survival is for those I incubated under the UV regime – the first year I had them I didn't have UV light and no eggs hatched).

I have kept 5 of the “babies” from 1991 outside in the summer of 1992 in a 6 feet by 4 feet vivarium – made from perspex sheets. The bases have been pushed 6 inches into the ground and the top covered by green garden netting. The lizards thrived and have produced very attractive colours, again blues and greens. I let them overwinter, providing a perspex sheet over their main rocky retreat. All 5 have survived the wintering and look healthy, though the smallest one is a bit thin. The colony is 1 male and 4 females. They seem to co-exist outside much better than inside, due to the larger space and the large number of hiding places. I have found that I can sit outside near them and observe them with little difficulty despite their nervousness. The babies are not very nervous but get more so as time proceeds. As implied above I suspect that there is a direct correlation between the amount of effort I spend on them especially watching and how tame they become. Some even accept food from my fingers when used to me. The winter was very mild so I am not sure how well outside survival would occur if the winter was harder. The lizards may have laid eggs last year but the temperature is not sufficient for them to hatch and I didn't look for any to incubate inside due to not having the space or time. I sold three to a petshop last year but they did not sell very easily.

I also overwintered the green adult pair over the winter of 1991-2 successfully.

The colours of the offspring range from adult like to brown (two never did get any colours). One egg which failed to hatch when opened contained a “Siamese twin” joined at the body.

I recommend these lizards for first time keepers, but I suspect that the new regulations will make this species inaccessible to the novice.