

## THE CARE AND BREEDING OF COMMON BRITISH REPTILES AND AMPHIBIANS - PART V, THE VIVIPAROUS LIZARD (*LACERTA VIVIPARA*)

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### INTRODUCTION

This attractive little lizard is the most widespread and abundant British reptile and can still be casually encountered in most areas of Britain. However, as with all our native herpetofauna its status has declined drastically since the end of World War II and the decline is accelerating due mainly to urbanisation and environmental degradation brought about by more efficient farming methods.

### DESCRIPTION, DISTRIBUTION AND HABITAT

The viviparous lizard attains an overall length of 15-16cm. There is little difference in size between the two sexes. The body is moderately slender, the head rather short and flat. The neck and tail are thick but relatively short; the legs also are comparatively short.

Colour and pattern is very variable, being greyish, greenish or reddish-brown on top, with the back slightly lighter in colour than the sides. There is usually a stripe along the back which is often incomplete. There are often a number of light streaks and sometimes scattered light or dark spots or ocelli (eye spots) usually better developed in males. The sides have a dark band and are frequently speckled with yellowish or black spots. The underside is yellow or greyish in females; in males it varies from golden-yellow to orange or even red, spotted with black. Young specimens are very dark, almost black with a bronze hue.

The viviparous lizard is very widespread, occurring in most parts of Europe including Arctic Scandinavia, Northern Spain, North Italy, South Yugoslavia and Bulgaria. It also occurs through much of North Asia through to the Pacific Coast but is absent from the Mediterranean Area. In Britain it is the only reptile to be found in Ireland.

It is essentially a ground-dwelling species although it will occasionally climb in vegetation. A humid environment is favoured. Typical haunts are among tussocks of grass or dense herbaceous plants. It can be found at altitudes of up to 3,000 metres; in the south of its range it is mostly montane and confined to moist places, alpine meadows, banks of ditches, marshes and the edges of damp woods. Elsewhere it occurs in woodland glades, field margins, heaths, bogs, grasslands, sand-dunes, sea cliffs and man-made habitats such as hedge banks, disused quarries and the embankments of railways or motorways.

### CARE IN CAPTIVITY

#### ACCOMMODATION

An aquarium tank or garden cold-frame can be used to house viviparous lizards outdoors but the former has many disadvantages as permanent accommodation for lizards. If left uncovered outdoors it will rapidly flood during prolonged rainfall and the inmates will also be at the mercy of predators such as cats or birds. If covered and left in the sun the interior may become intolerably hot with disastrous consequences. Problems will also arise during the winter when the lizards wish to hibernate. Unless the tank is insulated, has a good depth of soil on the base and can be kept in an unheated but frostproof building for the duration of winter it is most unlikely that they will survive.

By contrast a cold-frame makes an excellent home for small lacertids although the initial expense is rather high. An aluminium framed type can be assembled easily and has the advantage of putty-free dry joints. The smooth sides of glass and aluminium minimises the chance of escape.

The frame is best stood upon concrete blocks or breeze blocks which were first cemented onto a permanent foundation. The blocks are then rendered over with cement to seal any gaps around the base of the frame and to improve the finished appearance. After the cement has dried out completely soil is filled to the level of the frame's base. A light sandy soil or peat/sand/loam mixture is ideal for drainage and to facilitate burrowing down for hibernation in the winter.

In my own cold-frame, measuring 120cm x 75cm x 60cm, I have arranged large pieces of bark as basking sites which are surrounded by clumps of heath grass, heather and dwarf hebe plants to provide a suitable micro-habitat. I have included a small shallow pond 30cm x 25cm x 15cm using an off-cut from a butyl pond liner. The sides are gently sloping and the grass has been allowed to trail into the water to lessen the risk of drowning should the lizards enter the water. The pond provides humidity and drinking water although small lizards prefer to lap the dew from grass blades.

The great advantage of a cold-frame is that the glass protects the lizards from chilling winds (which they detest) while allowing the entry of light. During summer the top of the frame can be opened or removed altogether and replaced with a sheet of wire mesh to keep out predators. This will allow the entry of sunlight thereby reducing or obviating the need for vitamin D3 supplement.

## FEEDING

Mealworms, woodlice, crickets, earthworms and spiders will all be accepted readily. I also periodically tip in the results of hedge-beating or grass-sweeping to provide more variety. A further source of food is the slugs and non-hairy caterpillars which infest lettuce and cabbage plants.

Viviparous lizards quickly become confiding in captivity once they have familiarised themselves with the topography of their new surroundings. Mine soon came to associate my presence with an imminent meal, racing towards my outstretched hand to look for the mealworms I hand-fed them and to test my fingers for edibility!

They will allow themselves to be gently handled but this should not be attempted until they have become tame enough to clamber onto the arm without taking fright. If handled roughly or grabbed at suddenly they may well resort to shedding their tail. This is a defence mechanism designed to baffle predators by creating a diversion. The severed tail writhes and twists conspicuously while the former owner escapes unnoticed. A new tail eventually grows but never to the same length as the original one.

Vitamin D3 powder can be given as a supplement, very sparingly dusted onto their food, but if the top of the frame is removed this is not really necessary. The same applies to calcium which can be given in the form of crushed eggshell or powdered cuttlefish bone.

## BREEDING

This should take place automatically in the type of accommodation described above; mating occurs during April or May with the females becoming progressively stouter until one day in July or August 4-10 fully formed young are produced. The babies at birth measure between 37 and 47mm overall, being almost black in colouration. From

the outset they are able to fend for themselves but because of their tiny size I always remove the gravid females to a smaller vivarium furnished in similar manner to the cold-frame where they can give birth unmolested by the males and small amphibians which share the cold-frame.

When the young have been born I return the mothers to the cold-frame in order to feed the young intensively so that rapid growth is attained before hibernation. At first they will accept aphids, fruit-flies and other similar sized invertebrates. Later they can be given small mealworms, baby crickets and small caterpillars. I usually end up with more young lizards than I can cope with and the surplus ones are released along a railway cutting nearby which already supports colonies of viviparous lizards. I have experienced no success in releasing young or adult viviparous lizards in our garden or small open copse, both of which appear suitable. I suspect they were preyed upon by marauding cats or magpies.

#### HIBERNATION

Towards the end of October viviparous lizards will gradually lose interest in food even though outside temperatures may still be quite high. Some time during November they will disappear, burrowing under the grass tussocks or under the pieces of bark to re-emerge in early or late March depending on the mildness or severity of the weather. Within a week or so of emergence the skin is sloughed and interest is shown in food again.

#### CONCLUSION

The viviparous lizard is a very hardy, lively and intelligent little creature which thrives in captivity, breeding regularly when given favourable conditions. It is undemanding in its requirements and will live in amity with other similar sized lizards or small amphibians, such as *Bombina variegata*, *B. orientalis* or *Alytes obstetricans*.

The next article will deal with our only other relatively common British lizard, the slow-worm or blind-worm (*Anguis fragilis*).

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