

## " Group including Eyed Lizards Green" Lizard

### Distribution:

The Lacertids are typical lizards with a large distribution centering from Europe and ranging into Africa and Asia. The familiar sight of these lizards basking on stone walls in Southern Europe is an indication of their success in these areas. The family contains about 180 species. The Green Lizards, *Lacerta viridis* and *Lacerta bilineata* are a beautiful grass green and grouped into what is broadly described as the Green Lizard Complex. The Caucasian Green lizard, *Lacerta strigata* is another species that ranges through Eastern Europe into Central Asia. The Balkan Green Lizards *L. trilineata* and *L. media* are an extremely varied generally larger Green lizard, which is probably in a poor taxonomic status at present. Several species, have been formed from what was once a part of the *trilineata* group. It also contains many subspecies which some recognise and others don't. The main related species are *L. media* from Eastern Europe and Asia, with numerous subspecies and *L. pamphylica*, an endemic from the coast of Western Turkey, a hot spot for this group. Green Lizards, (*bilineata/viridis*) have 2 or 4 narrow light stripes on the dorsal surface, whereas the Balkan species have three or five. This is often more obvious in juveniles or sub-adults. The Eyed Lizard, *Timon lepidus* is the largest of the group at 75 to 80cm and easily recognised by the eye markings along the flanks. *Lacerta schreiberi*, a species where females tend to be marked with brown blotches on a pale brown or green base, with males generally green with small black spots. *L. viridis* and *L. schreiberi* tend to favour situations where there is often some moisture. The smaller Lacertas more commonly seen in captivity are *Psammodromus hispanicus* and *P. algiris*, the Sand Racers and the Wall Lizards *Podarcis muralis* and *L. sicula* from mainland Europe as well as *P. lilfordi* and *P. pityusensis* of the Balearics. The latter and its numerous subspecies are particularly varied and colourful. Unfortunately the island forms are only available occasionally as captive bred young as they are fully protected by the Spanish Government.

### Housing:

Housing inside. This best accomplished in a wooden or glass vivarium with a sliding glass door at the front. For a small trio of wall lizards a minimum size would be 18x10x10 inches, larger species of the green lizard complex need more like 30x15x15 inches for a pair. A side panel ideally needs to be 75% vented in wire or plastic mesh one end and 25% at the top end of the other. The purpose of this is to give a movement of air. The heat bulb when placed at the 25% mesh end will draw cool air towards itself and while heating it, allowing it to pass out through the mesh. Thus avoiding a lethal build up of heat. Using the heat source in this way will create a thermal gradient. For Ultra Violet light a Reptilite or other fluorescent tube can be used. In the last few years more useful bulbs have been produced with a higher level of UVB output. Active UVB in 100w and 160w and the new Arcadia D3, 23w compact UVB. Although they are expensive they should in theory avoid the need to use D3 supplements and fluorescent tubes. Combining natural synthesis of D3 with a good heat source. When suspended above the substrate, providing a substitute sunlight they should be positioned no further than 12 inches away to be most effective. Care should be taken to make sure animals cannot get close enough to cause skin burns. Depending on the room temperature ordinary heat or spotlights should be between 25W and 100W. Aim for a temperature reading of 40C directly under the bulb on a basking rock, dropping to 20,25C at the far end. The heat and light source can be

turned off completely at night assuming the room is frost proof and stays above 10°C. Substrate can be silver sand with a few large rocks. The rocks will need to be placed directly on the base of the cage before the sand is added in order to stop lizards digging under the rock and getting crushed or trapped in some way. Both situations may result in the death of the lizard. Sand has the advantage that it is easy to sieve out the faeces when dry, low cost to replace and can be sterilised if necessary. A plastic or polypropylene box with an access hole cut in the top half filled with damp sand and peat covered by a layer of moss will provide an area to hide and lay eggs. This area will need spraying fairly often to remain moist and assist in skin shedding.

Housing outside. This can be in the commercially available glass or plastic cold frames, open-air reptiliaries with walls of brick, concrete paving slabs, corrugated PVC or one of the newer polycarbonate materials used widely in conservatories. It is wise to build an overhang around the top to stop lizards getting out. Ground should be dug out inside the enclosure to a depth of 2 feet and filled with large pieces of rock and builders rubble leaving plenty of nooks and crannies below ground, over this can be placed a layer of dead leaves or bracken, then soil and if heavy clay plenty of gravel and sand will need to be added to lighten it up. The site should be south facing for maximum sun and well drained to avoid lizards drowning in hibernation. If the local climate is such that glass is needed to warm up the environment on warm days a facility should be available to replace some of the glass panes with fine mesh allowing direct U.V. rays to enter and at the same time avoiding overheating. Plants such as ivy, heathers, festuca grass, thyme, sedum and sempervivum are just a few of the suitable plants that can be grown in this mediterranean micro habitat. A small pool can be added to this set up if room allows.

Heating and Lighting:

SEE COMMENTS UNDER HOUSING AND REPRODUCTION SECTIONS

Hibernation:

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Food and Water:

Diet consists of as many different insects as possible. Locusts, crickets giant mealworms and waxmoth larvae can be purchased from specialist shops or mail order, while during the summer months many insects can be collected by sweeping the hedgerows with a robust nylon mesh net. All manner of insects and spiders will be found which can be placed in a polythene bag until they are released into the cage or enclosure. Woodlice can be placed in outdoor enclosures where they will breed, especially if a few old logs are left around for them. Lizards in outdoor units will need more food presented to them, owing to the fact that lots of the crickets etc will crawl away and hide before they are eaten. The insect food will need to be fed a calcium rich diet before they are fed to the lizards as many insects bought commercially may not have been fed anything for some time therefore being of little food value. Vitamin D3 must also be provided on food for lizards that are under glass or inside. There are many suitable supplements available such as Repton, Vionate and Nekton multivitamin powders. These can be mixed with calcium carbonate 50/50 and dusted on the insects by placing them in a bag or small plastic aquaria and shaking them together. Cuttlefish bone or ground eggshell can also be offered in a small dish. Females will often help themselves to this,

particularly when egg laying. Water must be available at all times. This is especially true when housing inside and during periods of high temperatures.

#### Reproduction:

Most Lacertas will not breed unless they are allowed to have a winter rest of reduced light and temperature. This may be a full hibernation outside in the hibernaculum suggested or in an unheated but frost proof shed packed in dry leaves or shredded paper. Another alternative would be to place them in a fridge in a plastic ventilated box with leaves or moss at 5 to 8°C. The fridge door must be opened regularly to allow an air change over. On emerging from this rest period of from one to three months the lizards will begin to get sexually active as the weather gets warmer and the days get longer. Much chasing and biting will ensue, males biting females on their flanks and necks, eventually holding the female down by the neck while positioning the underside of its tail under the female's tail. As the ventral areas meet the male inserts one of his hemipenes and fertilisation takes place. The female will now begin to increase in size. It will not be long now until the female is ready to lay her eggs. On depositing her eggs she will look extremely thin with loose folds of skin along her sides. The eggs must be found quickly and placed in an incubator before they dry out. The eggs should be placed in damp vermiculite. Place vermiculite in a suitable sized plastic box with one or two small holes for air exchange add water and drain off excess immediately. To be precise water and vermiculite should be of equal weight. Place the eggs half buried in the medium, if eggs are stuck together leave them like this and bury the whole mass about 3/4 deep. Temperature range can be from 26 to 29°C. Incubation can range from 40 to 90 days depending on species. Young when born should be placed in a vivarium with a water dish and plenty of hiding places. Feeding must be daily if the juveniles are not to lose weight. Providing lots of small insects are offered growth will be fast. Attention must be given to providing sufficient calcium and D3 or U.V.B to promote strong bone growth and development. Calcium must be available whether under sunlight or artificial light. Lacertas are not the easiest group of lizards to reproduce regularly but with patience are a very rewarding and colourful family.