Junior Aquarist

THE HARDY EUROPEAN REPTILES AND AMPHIBIANS IN CAPTIVITY (Part 17)

by Andrew Allen

36. The Green Lizard (Lacerta v.viridis)

Description.—This noble lizard can grow to 40 cms. or more in length, though more than two-thirds of this total will be due to the long, graceful tail. Dorsally it is a glorious grass or yellow green, ventrally cream or pale yellow. In the breeding season in both sexes the throat and sides of the head may be a vivid blue. Males can be distinguished from females by the small black spots on the back (the females have larger spots and several yellow or white stripes), by their more massive heads, and by the bulkier root to the tail. Juvenile lizards are light brown in colour, often with pale yellow stripes.

Distribution.—L.viridis is a common lacertid of Central and Southern Europe, including Spain, Italy, the Balkans, South-West Russia, Czechoslovakia, Austria, Switzerland, parts of Germany, Belgium France and the Channel Islands. It frequents most dry and sunny localities within this great range.

Breeding Habits.—Courtship and display are colourful and vigorous. The female lays up to twenty eggs in an excavation in the ground.

Care in Captivity.—If suitably treated these beautiful and intelligent lizards should live for many years, and be a perpetual joy to their owners. But if sufficient attention is not devoted to them their condition will deteriorate drastically, and they will become drab and sorry creatures.

They can be accommodated indoors, but I do not recommend the practice. An indoor vivarium should be very spacious indeed, and totally escape-proof. It should be placed in the sun, and given supplementary heat and light. Abundant hiding places should be provided, plus a small water bowl, branches for climbing, flat stones for sunning, and appropriate arrangements of carefully chosen plants. In these conditions the inhabitants could do tolerably well, but they are unlikely to live as long, or as healthily, as in

freer outdoor vivaria. Among other disadvantages hibernation poses considerable problems. Overwintering is the simple solution, convenient for the vivarium-owner, but it reduces the life-span of the lizards and may disrupt their reproductive cycles. The alternative is to pack the lizards safely away into a box crammed with dry straw and leaves. The box should be placed in a cool outhouse for the winter, and checked regularly as spring approaches. When the lizards awake they can be transferred back to their summer home, and given an immediate drink and early feed.

It is much fairer to give these large and athletic creatures the running space that only an outdoor vivarium can provide. A spacious reptiliary is ideal in Southern England, but might not give sufficient protection from the weather in Northern climes. It should have high walls and a wide, smooth overhang. Green lizards are escape-artists supreme, so the defences must be maintained in good order, and grasses or bushes should not be allowed to grow too close to the outer walls. A hibernating chamber, or some deep caves or piles of soft soil, should be provided for winter shelter, and the vivarium should have maximum exposure to the sun and protection from the wind.

A greenhouse provides an admirable alternative, and is much preferable where harsh climates prevail. Ventilation must be good, aspect must be to the South, and shelter from excessive heat is imperative. Luxuriant foliage can be established (as long as the atmosphere is kept dry), and the entire arrangement can be aesthetically most pleasing. In either greenhouse or reptiliary these lizards should prosper royally, enjoying conditions very similar to their home habitats.

Variety is the key to successfully feeding L.viridis. On a restricted diet these lizards will soon become bored, and their health suffer in consequence. The

range of possible offerings is very wide, and they are voracious feeders, so that a monotonous bill of fare is inexcusable. Almost any palatable small invertebrate will be taken, with spiders and mealworms the firm favourites. Many small land vertebrates are potential prey, whilst minced meat may be accepted—though it should only be offered if live foods are totally unavailable. Most Green lizards have a sweet tooth, and will relish some demerara sugar or a little honey. Fruit is consumed with enthusiasm, and grapes, oranges (both with the pips removed!), apples, bananas and plums are all much appreciated.

Because of its hearty appetite the Green lizard should not be housed with smaller animals. Baby newts, frogs and toads, medium-sized lizards, small Slow-worms and juvenile snakes would all be in peril. For the opposite reason, adult snakes and Eyed lizards should be avoided, as they are very capable of making a meal of *L.viridis*. At the current price of Green lizards this is not at all desirable! But these restrictions still leave us with quite a lengthy list of potential companions, among which we may note land tortoises, water tortoises and terrapins, adult Slowworms, Schreiber's lizard, Crested and Marbled newts, Fire salamanders, and most adult frogs and toads.

This brief guide can scarcely do justice to such an engaging animal. Perhaps the most beautiful and colourful of the European Reptilia, it is lively and diurnal, longer-lived than its smaller cousins, and readily and rapidly tamed. For those who can give it ample space and a place in the sun, it is an unbeatable species. Those who cannot, should go to Southern Europe and watch and study it on its home ground. This is far more rewarding than confining a few colourless and depressed individuals in some cramped, uninspiring indoor vivarium.

There are a number of sub-species of which it is worth mentioning L.v.chloronata from Calabria and Sicily, L.v.citrovittata from the Cyclades, L.v.fejervaryi from Apulia and Campagna, and L.v.meridionalis from South-East Europe. A closely related species is the large Dalmation lizard, Lacerta trilineata. It demands similar conditions, but is somewhat less

trustworthy in the community vivarium, and should

be housed with larger companions.

37. The Sand Lizard (Lacerta agilis agilis)

Description.—Lengths of 25 cms may be attained, the tail being comparatively short. The body is stout, the tail thick, and the head blunt. Colour is very variable, with brown or grey predominating dorsally, there being a vertebral band featuring black-brown spots with white centres. The flanks of the female are grey-brown, but may be a muted or vivid green in the male. Ventrally the male is yellow or green, females cream or yellow, sometimes liberally sprinkled

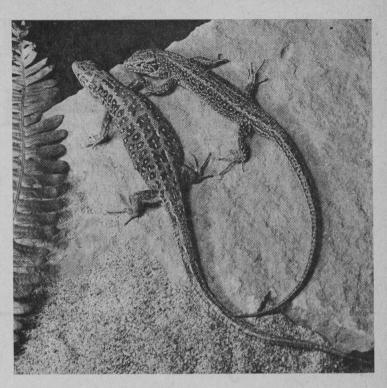


Photo Sand Lizards

Robert Bustard

with black. The most colourful males may fleetingly be confused with the larger, brighter Green lizard. Distribution.—L. agilis has a fairly wide range in Central Europe, from the Alps Northwards. It may be found in Central Russia, Northern Yugoslavia, Hungary, Germany, Switzerland, France, Belgium, Holland, South Scandinavia and England. It favours dry, sunny areas where vegetation is sparse, and is the characteristic lizard of the steppes. Dunes, heaths, field borders, hedgerows and gardens are all frequented, and it occurs to altitudes exceeding a thousand metres in the mountains.

Breeding Habits.—In June or July the female lays up to fifteen eggs in soft soil, sand, or beneath superficial rocks and roots.

Care in Captivity.—Essentially the Sand Lizard requires similar treatment and conditions to L. viridis. Being much less active it fares better indoors, for it is far less likely to chafe in a small vivarium of perhaps ten square feet floor area. In such a vivarium there should be only one male, but it could be housed with two or three females.

Though I have kept this species indoors with fair success, it nonetheless does far better in an outdoor vivarium. A reptiliary is again ideal, and will not need to be so carefully guarded, for the Sand lizard, belying its scientific name, is far from agile and only a poor climber. It is probably the least mobile of the European lacertids. A very well ventilated greenhouse will do equally nicely. It will take a similar range of food to the Green lizard, though both its appetite and its cubic capacity are considerably smaller. In the

community vivarium it is a much more inoffensive beast, not to be trusted with Slow-worms or young lizards, but otherwise an exemplary inmate. It can be slotted into a great variety of communities of medium sized Reptiles and Amphibians, and will cause very little trouble indeed. The Sand lizard is comparatively intelligent, whilst its sedate movements will contrast pleasurably with the quicksilver activity of the other lacertids.

Unfortunately *L. agilis* is now on the very verge of extinction in this country, and faring poorly in some other parts of Europe. Stringent and intelligent conservation measures will be necessary to save it here; major steps in this direction are being taken by the British Herpetological Society via its Conservation Committee. Their efforts are obstructed by irresponsible amateur herpetologists and unscrupulous collec-

tors who take this species from endangered sites. So please don't collect any specimens yourself, for there is no locality in England where the species is sufficiently abundant to survive any depletion. In the present situation it is certainly best to refrain from keeping the Sand lizard altogether. Collecting is only one of the threats that imperils its status, probably not the major one. But it is up to us to ensure that this particular threat is eliminated entirely, thus helping to protect this beautiful member of our native herpetofauna.

Among its sub-species are L. a. boemica from the Caucasus, L. a. chersonensis from parts of Russia and Rumania, and L. a. exigua from Central Russia.

The next article will deal with Schrieber's lizard and the magnificent Eyed lizard, largest of the hardy lacertids.

THE JEWEL DAMSEL FISH

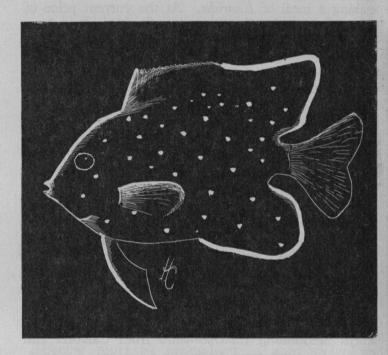
by Huw Collingbourne

As with many other marine creatures, the name, Jewel Damsel is applied to more than one variety of fish. Certainly, I have seen at least two different colour varieties with this name, and possibly two different species. While the basic body colour may vary between deep blue and brown, (and the deep blue in colour are reckoned to change to a brown hue with age) they have in common a very remarkable design of many small highly luminous green or blue spots flecking the body surface.

In any case, according to the reference books, the Jewel Fish is listed as *Microspathodon chrysurus*.

I have kept a Jewel Fish in a large tropical marine aquarium and I found it to be very aggressive and it was very demanding over its territorial rights. Unlike a damsel fish of another species which is content to take a small piece of coral or rock for its territory, the Jewel Fish commandeered several large pieces of coral and more than half of the entire base area of the aquarium, and this it defended with great fervour.

Very soon the other fish in the aquarium, (including two Humbug Damsels and a Picasso Triggerfish) learned to respect the Jewel Fish's self-proclaimed territorial rights, and, indeed, had any of them neglected to show the proper respect for these unseen boundaries, the Jewel Fish would have shown no sympathy and it is certainly not of passive enough nature to allow any infringement by anything, no matter how much larger than itself.



The Jewel can be somewhat ill mannered outside its territory, however, and shows little regard for the territories of lesser creatures.

In small aquaria, I would imagine that this fish would be an impossible neighbour for less capable species, and even in a very expansive setting, it is a merciless bully to small fish and will persistently attack fish with long flowing fins. And when food is introduced into the water, it is almost invariably the first to snap it up and on the rare occasions when it is not first, it wastes no time in snapping up any morsels protruding from the mouths of others.

So, in conclusion, I think it goes without saying that a Jewel Damsel, though very beautiful, cannot be kept successfully with any but the most robust of fishes. However, in the right circumstances, it is an amazing fish to keep and observe and grows remarkably quickly when fed on fresh or dried foods.