Are Common Lizards increasing their range in Scotland?

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TN Gerald Leighton's 'British Lizards' published In 1903, Alex Rodger of Perth Museum is quoted as saying the following about the distribution of the Common Lizard, Zootoca (= Lacerta) vivipara, in Perthshire: 'It is widely distributed throughout the county, but nowhere, I think, very numerous, though one may sometimes see four or five in one day, while hunting the southern slopes of heather-covered hills in sunshine'. On 26th August 1998, monitoring a forest path in Cally Woods, Dunkeld, for Slowworms, a walk that I had taken regularly since 1982, I saw Common Lizards for the first time. Between 14:00 and 15:00 hrs I counted 17; 10 adult females; 3 adult males and 4 juveniles. As these were the first lizards that I had seen in that area, I decided to survey the immediate vicinity, and on 11th September visited Birnham Glen, about two miles south of Cally Woods. I saw 28 lizards on the hill above the glen (7 hatchlings; 4 juveniles and 17 adults, and one isolated hatchling actually on the path at Birnham Station).

DISCUSSION

Although the habitats of Cally Woods and Birnham Hill are almost adjacent, they are different in many ways. The former is a south facing forestry estate on a steep hillside, with patches of felled woodland and gorse-covered heath bordering a path climbing due north. There the lizards are seen basking on discarded logs, dead Gorse bushes and patches of Couch Grass. When I was there the adult females were, for the most part, quite old and comparatively large. The males, on the other hand, were young and small with indistinct markings.

Birnham is quite different; the site where the highest concentration of lizards can be seen is adjacent to a path going in a westerly direction through old mature mixed woodland which faces south. On the north side of the path is a strip of heather and bilberry stands about 100 metres long which catches the sun due to the felling of the larger trees on the south side of the path. The lizards seek the areas with the most Bilberry and shun places covered in Bracken. Unlike those in Cally Woods, many of the male lizards are seasoned old warriors, large in size with proportionally big heads. I suspect the difference in the composition of the populations in the two sites is due to the fact that the one in Cally Woods has only been inhabited by lizards fairly recently. About five years ago the Common Lizard was deemed officially extinct in the county of Fife. In the spring of 2000, a young anthropologist from Dunfermline telephoned the Lothians Amphibian and Reptile Group to say that he had seen lizards only a mile away from Brankston Grange, a site where they were last seen in 1804. He had reported the sighting to a naturalist who told him that there were no longer any reptiles in Fife and that he had probably seen a Palmated Newt in its terrestrial mode. On 30th June I went along with him to the site, and we saw three lizards (and got a distant but clear snapshot of one basking gravid female). The site was a sandy wooded heath due to be open-cast mined for Silica sand the following spring. However, United Glass, the firm which owns it, have fortunately agreed to save the strip of heath inhabited by the lizards.

My own personal experience of lizards in Scotland is equally strange. I moved up to Renfrewshire from the south of England aged 13, in 1944, already an enthusiastic amateur herpetologist, having caught my first Common Lizards in 1940. Our new Scottish home was right in the middle of what looked like suitable reptile country, but I saw nothing and had to assuage my interest by transferring my attention to birds and small mammals which seemed at that time to be very abundant.

Apart from a male lizard seen on the beech at Troon in 1958 and a basking female seen near Dumbarton in the mid sixties, I saw no lizards in Scotland until hillwalking Ben on Lawers in the late seventies, when I found several individuals, torpid with the cold, at 600 metres altitude.

Distribution in 1970
Distribution in 1995

Figure 1. Increase of recorded distribution of Lacerta

Figure 1. Increase of recorded distribution of *Lacerta* (= *Zootoca*) *vivipara* in the Central Lowlands of Scotland between 1970 and 1995.

Finding so many animals in such an inhospitable environment and at such an altitude re-kindled my interest in these elusive little creatures, and for the last quarter of a century I have devoted a considerable amount of time to recording their Scottish habitats. National Records show an increase of lizard sightings from one 10 kilometre square survey done in 1960 to another done in 1995. The accepted reason given for this apparent growth in lizard numbers is that Scotland is a poorly recorded country (Fig.1.) This may be partially the case, but I am inclined to think that for reasons not yet understood, lizard populations are increasing, fluctuating, or changing their distribution range. Do, for instance, the increasingly mild winters allow larger numbers of hatchlings to survive into the next year? Why did my four years domicile in rural Renfrewshire during the 1940s reveal no reptiles when the latest surveys of that area show lizards in every 10 km square? Why does a walk through the Perthshire hills demonstrate on average at least three times as many lizards today as it would have done 97 years ago?

During the last four years I have been visiting parts of Scotland where lizards have never been recorded. More often than not I am rewarded with a sighting. In July 1998 I saw 22 lizards basking along the roadside just outside New Abbey, in Dumfriesshire. In September 1999 I went to Dalwhinnie and Newtonmore, both in Invernesshire. The former demonstrated a large orange coloured male by the railway line at over

300 metres altitude, the latter a juvenile on a woodland bank. I also went to north Mull, just east of Dervaig, where no reptiles have ever been officially recorded. Within a couple of hours I saw five lizards, three Slow-worms and one baby Adder.



Lizard habitat; Sidlaw Hills near Dundee. Photograph by author.



A young female *Z. vivipara* with baby, near Tobermory, Mull. All photographs by author.



Female with youngster from Dunkeld.

I first came to live in Dundee in 1974. Until quite recently the nearest place where I could find lizards was up in the Angus glens. In July 2000 I found them in two places in the Sidlaw Hills within seven miles of the city centre. In the same month a colleague of mine found an adult male under a piece of metal on waste ground next to Dundee's Swallow Hotel. On 4th August 2000, we found 4 adult and 12 baby lizards on a tiny heathery strip of ground at the foot of a road cutting through the Sidlaws between Dundee and Glamis. Last sightings of lizards here was in 1970. This year (2001), we had a polar spring in eastern Scotland, with fresh snow falling on 25th March, and temperatures earlier in the spring of -17 degrees centigrade. My confidence in the belief that Common Lizards were steadily increasing in numbers was considerably shaken. Normally male



An example of a heavily marked gravid female from Yorkshire (consuming grasshopper); her markings are quite different from those in the Scottish Highlands.

lizards are out by 1st March, but this year the first sighting was on 21st June at the road-cutting site, where I saw one baby where previously I had seen sixteen animals. A repeat visit to this site demonstrated the same one solitary youngster. Several visits to Dunkeld revealed nothing and my best site at Birnham was closed due to forestry work. The forestry folk promised me that they would avoid disturbing the lizards! Scottish lizard populations may or may not be increasing, but they certainly are fluctuating.

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