

## SPADEFOOT TOADS IN SOUTH WALES: A PROVISIONAL REPORT

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On April 24 this year, whilst taking part in the Nature Conservancy Council Amphibian Survey, I discovered five clumps of spawn at a site not far from Cardiff. The egg masses consisted of 15cm continuous ribbons of embryos measuring 2mm, lacking obvious pigmentation and loosely folded into bands of eight or nine eggs enclosed within a jelly envelope. The spawn was loosely wrapped around submerged branches above a concrete base adjoining two overflow channels in 15cms. of water.

The site location consists of two man-made freshwater ponds situated within deciduous woodland and surrounded by arable pasture. The spawn was found in the lower of the two ponds which is approximately 150 metres long by 30 metres wide and attaining a maximum depth of about 3 metres. The ponds are situated on red sandstone and are firm bottomed.

Using the key provided for European anuran spawn in Arnold, Burton and Ovenden (1978), the egg masses were identified as those of *Pelobates* spp., the spadefoot toads, though there were certain dissimilarities with the spawn description of *P. fuscus* ssp. given by Andreone (1984). A small amount of spawn was taken for captive rearing to enable identification to species level, however this died within 24 hours. On revisiting the site on 29 April, all five spawn masses were found to be dead, the embryos having reached a developmental stage resembling number 19 in the life tables prepared by Gosner (1960) but with a large yolk. The cause of death was not apparent. The ponds are visited by weekend anglers and stocked with tench, pike, perch, roach, rudd, eel and carp. In early May the herbicide Reglone (Diquat dibromide) was added to control duckweed by which time the *Pelobate* sp. spawn had already died. Larvae of *Bufo bufo* were still present. Possibly a sudden drop in temperature after a particularly warm April may have been the pertinent mortality factor.

As far as I am aware spadefoot toads have never been recorded in Great Britain, Lever (1977) makes no mention of them and at a more local level neither does Wisniewski (1984). As yet, further visits to the site have failed to reveal the presence of adult spadefoots. The chances of finding the animals outside the breeding season are minimal, especially as population numbers are presumably small. Next spring I hope to be able to identify conclusively the species concerned and attempt to assess population size, provided that any animals survive until then.

I would be interested to hear from readers who know of cases of *Pelobates* spp. breeding in the U.K., or who have knowledge of the breeding biology of these animals.

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