AN OCCURRENCE OF NEOTENOUS SMOOTH NEWTS (TRITURUS VULGARIS) IN CAMBRIDGESHIRE

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THE SITE

A pond outside the village of Warboys, in Cambridgeshire, contains a small colony of two newt species. Triturus vulgaris and T. cristatus. The predominant species is T. vulgaris, of which about 20 individuals can be seen if the pond is examined at night in the breeding season. About five individuals of T. cristatus can usually be seen.

The pond is a shallow depression in pasture used for grazing horses in the summer, maximum depth estimated at two metres. It is about ten metres long and six metres wide. Much of its surface is covered by a thick growth of Canadian pondweed, with only small areas around the edge uncovered. These areas have a mud bottom.

Newts are seen around the edges of the pond, on the surface of the mud. If disturbed they will move into the weed or bury themselves in the mud.

There is much food for newts in the pond; there are many small invertebrates, in particular water boatmen and various water beetles are very common.

NEOTENOUS NEWTS

In autumn and early spring, large numbers of Smooth Newt larvae can be seen, fully developed, which presumably hibernate and metamorphose in the spring. I have never witnessed this in Crested Newts in Warboys.

Distinct from this are neotenous Smooth Newts, which I observed for the first time in 1989. These do not make up a substantial part of the population; the most seen have been three in one night. They have been seen on six occasions in the spring of 1989, out of about 25 occasions when newts were seen in this pond.

Those neotenous newts seen resemble female Smooth Newts in appearance and size, with no sign of albinism as reported by Smith (1951). They are distinct only in having feathery gills and a wider head, as in larvae. One of these newts was taken to keep in captivity, and a day later laid fertile eggs. A very small quantity of eggs was laid (about 25) which would suggest that egg-laying had already started before capture. These developed into larvae in about two weeks when kept in a warm room. On hatching, these larvae were released into the pond from which they came. Smith stated that neotenous newts 'do not rise to the surface of the water for air', but this specimen did so. This might suggest that the gills were receding, but no sign of their loss could be seen after three weeks in captivity, when the newt was released again.

It has been suggested, by Smith, that neoteny has been favoured in ponds with steep sides from which newts cannot escape. That is not the case in the pond in Warboys, which is just a depression in a grassy area, from which I cannot foresee newts having any trouble escaping.

REFERENCES

Smith, M. (1951): The British Amphibians and Reptiles - New Naturalist 20. Collins, London.