

## ON *EUPROCTUS PLATYCEPHALUS*

A. W. READ

3 Selby Close, Beckton, London, E6 4SN

*Euproctus platycephalus* has recently been included on the critically endangered list. The reasons that have been given for the decline have been many and varied but appear to be speculative. It has been well established for a very long time now that in the Pyrenees *Euproctus asper* does not occur where trout are present in the same streams. Nothing else appears to have such a dramatic effect on the local distribution of *Euproctus asper*. Similarly it would be expected that *Euproctus platycephalus* would not survive where trout are present.

Trout are now present in at least some of the Sardinian mountain streams. Have local Sardinians recently taken to the introduction of trout for fishing purposes? The structure of the Sardinian river system is such that a few very long rivers are fed by a large number of smaller tributaries. Trout present in any of these tributaries will have easy access to the other streams via the main river and could spread quite quickly. Adult *Euproctus platycephalus* are quite large and produce noxious skin secretions, both of which give them some protection against predators, but *Euproctus* tadpoles have no such protection. A population of *Euproctus* which has been subjected to predation by trout would show a distribution of individual sizes skewed towards the larger sizes as the tadpoles and smaller individuals are moved from the population. Any study of the size of individuals in a population subject to predation by trout should show this skewed form. Unless the trout are removed such a population would age and eventually become extinct when the oldest individuals die.

Under the international agreements and conventions alien species are to be kept out of participating territories. Trout do not belong in these streams. The *Euproctus* have evolved over many millions of years in an ancient relationship with the streams of Sardinia into a unique species quite different from the other *Euproctus*. These streams belong to the *Euproctus* and should not be given over to trout which have not evolved there. It would be a disgrace if they were allowed to become extinct because of the introduction by man of some alien fish. Only the removal of these predatory fish from all the Sardinian streams will guarantee the long-term survival of the *Euproctus*. The creation of the new national park will do nothing to protect them. On the contrary, it is likely to have an adverse effect in that officials may claim that action has been taken to protect the *Euproctus* when in fact it has not. The responsible authorities may be reminded of their international obligations not to introduce alien species into their territory.