

FROGS AND COLLECTION IN CORNWALL

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INTRODUCTION

Smith (1953) estimated the demand for frogs (*Rana temporaria*) by British laboratories to be about 150,000 p.a. By 1970, the requirement had probably changed little with the largest dealer in Britain supplying about 85,000 p.a. (Cooke, 1972). While most of the frogs were collected in Southern Ireland, many originated from Cornwall. In addition, as many as 100,000 p.a. might have been collected by schools for their own use (Kelly and Wray, 1971). Since then, dissection of the frog has been more or less eliminated from school examination syllabuses (Cockrane and Dockerty, 1984), and the overall demand has fallen considerably. Under the Wildlife and Countryside Act, 1981, dealers must now be licensed by DoE and must send in returns at six-monthly intervals stating how many frogs have been sold. Returns for 1983 stand at a total for UK dealers of 59,700 of which 14,200 originated from Cornwall and 42,800 from Southern Ireland. For 1984, these figures were 59,700, 14,700 and 27,900 respectively. While not all dealers are licensed or are making return, these figures are consistent with a reduction in demand.

Although the Cornish frog population has had to withstand the brunt of collection on the British mainland, there was no indication of any overall impact on population levels either up to 1970 (Cooke, 1972) or during the 1970s (Cooke and Scorgie, 1983). Indeed, the Cornish frog population appears to have changed little in recent decades, unlike most populations elsewhere in Britain. Nevertheless, the DoE statistics have confirmed that Cornwall remains a 'hotspot' for frog collection and there has been concern expressed by Cornish people about the activities of the collectors. A possible complicating factor is that increases due to the creation of garden ponds may have compensated for losses in traditional field sites because of collection or other influences, and so masked any effects. The aims of this enquiry were to attempt to determine (1) whether significant changes had occurred in the Cornish frog population during the early 1980s and (2) whether population in any particular localities might be at risk from collection.

METHODS

Questionnaires were distributed during the spring of 1985 to about 50 individuals and schools who had helped with the previous enquiries of Cooke (1972) and Cooke and Scorgie (1983).

The questionnaires asked for information on local changes and specifically asked for details about collection.

In addition, Jim Wright, recorder of amphibians and reptiles for the Cornwall Trust for Nature Conservation, appealed through the media for information on numbers of frogs seen in 1985.

RESULTS

A total of 14 correspondents volunteered information via the questionnaires for the following areas: Bodmin, Launceston, Liskeard (2), Lizard, Newquay, Porthleven, Redruth, St Ives, St Stephen, Saltash, Torpoint, Truro, Upton Cross. Comments on population fluctuations during the early 1980s could be summarised as follows:

No change or no general trend	6
Already extinct locally	1
Increase	3
Decrease	4

The reports of increases included one of a recovery following a decline in the 1970s and one of a population being introduced into a school pond. From this information, there seemed to have been no marked trends. Several of the correspondents were aware of the prosecutions and of the advertisements for frogs in local newspapers, but only one provided new information. This concerned an episode at Tremboath near Stithians (Truro), where collectors were twice caught with frogs on private land and reported to the RSPCA.

The appeal by CTNC resulted in information from about 40 localities. Long term decreases were reported from Lowertown (Helston) and Luxulyan (St Austell). Recent decreases were mentioned for Devoran (Truro), Nanstallon (Bodmin) and St Martin-by-Looe, while decreases specifically in 1985 were recorded for Porthleven, Cheesring (Liskeard), College Woods (Penryn), Tolvadden Downs (Camborne) and Clowance (Camborne). Only from a garden pond in Carharrack (Redruth) was there a report of more frogs in 1985.

DISCUSSION

From the various reports received, it seems that while there have been some decreases in frog numbers in the wider countryside in Cornwall, these have been more or less offset by gains in garden ponds. No evidence was received that collection has had any observable impact on frog populations.

The questionnaire enquiry on changes in areas revealed little recent change, whereas the survey of specific sites or localities in 1985 indicated several decreases. Individual discrete populations are likely to be prone to greater fluctuations from year to year than are populations spread through an area and observed over half a decade. 1985 was evidently a bad year for frogs in a number of localities. One reason for this may be death of frogs trapped under the ice during the early spring of 1985. Such mortality is known to have occurred in Cornwall (J. Wright, pers. comm.) and quite widely in England generally, but it is possible that collection might also have been involved to some extent. Certainly there is some local concern that, despite the long-term trend towards less collection, the increased publicity recently has attracted more people to attempt to make a quick and easy profit. Additionally, many frogs that are collected evidently do not survive long enough to be sold and therefore do not appear in the DoE statistics. The situation requires further monitoring. Accordingly, NCC and CTNC are discussing with the Education Authority a schools project for 1986.

ACKNOWLEDGMENTS

I am very grateful to everyone who has helped, especially Jim Wright.

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