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An evaluation of the effectiveness of great crested newt *Triturus cristatus* mitigation projects in England, 1990 - 2001

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Introduction

The great crested newt *Triturus cristatus* is strictly protected by law. The species frequently occurs on land threatened by development, and if development proceeds a mitigation plan is normally implemented. Typically, such mitigation involves the capture and exclusion of newts, and their removal to areas that have been subject to habitat creation, enhancement or restoration. To date there has been little in depth analysis of the results of such work.

What was done

A questionnaire survey of consultants involved in mitigation projects from 1990-2001 was conducted. This examined the type of development, degree of impact, pre- and post-development survey, mitigation measures employed, and problems encountered.

Results and conclusions

A total of 153 questionnaires were distributed, yielding information on 72 mitigation projects. There has been a steady increase in the number of licences issued for great crested newt mitigation from less than 10 per year in the early 1990s to over 80 per year by 2000. A relatively small number of consultants have carried out most mitigation work on great crested newts. The proportion of in-situ mitigation projects has increased relative to the number of projects involving ex-situ translocation of newts in recent years. Most projects lasted longer than one year at an average estimated cost of £15,000-£20,000 per project. Building developments were the commonest type of development requiring mitigation. Great crested newts were often overlooked in the planning process and were rarely considered as part of wider Environmental Impact Assessments. Most predevelopment surveys that were commissioned were started less than six months prior to the mitigation work commencing.

A range of methods was used to catch newts for mitigation, and the average number of newts translocated per project has declined in recent years. This is probably because (1) an increasing number of smaller newt populations are being identified and accounted for within mitigation work; and (2) more projects are focusing on in-situ population management that makes large-scale translocations unnecessary. The number of newts translocated was positively related to the area destroyed by development; the number of capture methods used; capture effort and overall project effort. Less than

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half of all projects had any post development monitoring. Moreover, it is difficult to determine what proportions of the actual populations were actually captured or whether these became part of a sustainable populations at the receptor sites.

Most receptor sites were on the periphery - or immediately adjacent to - the development site and had some degree of connectivity to other areas of potential newt habitat. The number of new ponds created compensated for the number of known great crested newt ponds destroyed, but did not compensate for the total number of ponds lost. Newly created ponds were generally smaller than those lost to development, so the total surface area of water lost to development created was less than the total surface area of great crested newt ponds lost. Of the ponds that were retained as part of mitigation, less than half underwent any management or enhancement. Overall, slightly less than one-third of the great crested newt terrestrial habitat within the development area was destroyed. However, at least 75% of potential great crested newt habitat was affected in over 30% of projects.

No post-development monitoring was carried out in 36% of projects. Where post development monitoring was carried out it continued for up to five seasons, with most projects carrying out monitoring for up to two years. Adult newts were observed to be present at 87% of the sites surveyed one year after the development with evidence of breeding confirmed at 56% of sites. Many respondents to the questionnaire requested more streamlined processing of licence applications, improved guidance for mitigation activities, and better training of personnel charged with providing advice and decisions on mitigation procedures.

English Nature's viewpoint

This report is a detailed examination of the issues surrounding great crested newt mitigation. The results demonstrate some interesting trends, some welcome - notably the trend for developments to incorporate in situ (as opposed to ex situ) mitigation - and some worrying - for instance the lack of post-development monitoring data at most sites. The study was limited to reporting on questionnaire data based on reports and recollections by consultants, and the results demonstrate a clear need to undertake further field-based research in order to ascertain the impact of development and mitigation on newt populations. Recent changes to licensing arrangements and production of good practice should help to remedy some of the problems raised in this report, but further action by English Nature, planners, developers and consultants will also be required to ensure that development impacts are more soundly addressed.

Selected references

ENGLISH NATURE. 2001. *Great crested newt mitigation guidelines*. Version: August 2001. Peterborough: English Nature.

Further information

For the full report or other publications on this subject, please contact the Enquiry Service on 01733 455100/101/102 or email enquiries@english-nature.org.uk

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