GREAT CRESTED NEWT MITIGATION SCHEME: Laneside Quarry, Kirkheaton, Huddersfield

Introduction

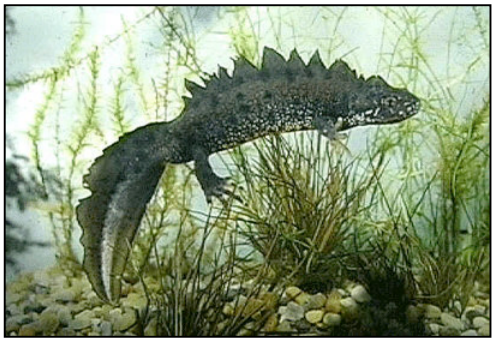
Laneside Quarry is a large (22.5 hectares) shale and sandstone quarry on the eastern side of Kirkheaton, West Yorkshire. Quarrying and brickwork operations ceased at the site in the 1990s and permission has since been obtained by The Casey Group to use for the site for landfill.

In 2002, Great Crested Newts (*Triturus cristatus*) were detected in two large ponds and several smaller pools on the bed of the quarry. The Great Crested Newt receives full protection under European and UK wildlife legislation.

Description and Status of Great Crested Newts

The Great Crested Newt is the UK's largest newt and can reach a length of up to 170mm. Great Crested Newts can be distinguished from the other two British species of newts by their size (Great Crested Newts are larger and much darker than other species). In the breeding season the male Great Crested Newts have a jagged crest along their back which is separated from a smoother crest along the tail.

Adult male Great Crested Newt



Great Crested Newts have suffered and major decline in Britain over the last century this is thought to be as a result of the loss of natural breeding sites (marl pit ponds), drainage of wetlands, silting up of ponds, fragmentation of habitats as a result of development and the loss of habitats such as grasslands and woodlands used by newts for hibernation and shelter.

Local and national surveys have estimated rates of colony loss in England at between 0.5% and 4% a year during the 1960's to 1990's; this is equivalent to the loss of 40,000 breeding ponds in 30 years (English Nature 2001).

Importance of the Laneside Quarry Great Crested Newt Colony

Throughout 2003 and 2004 ERAP Ltd carried out surveys of the ponds and habitats at Laneside Quarry.

It was estimated that the site supports over 10,000 Great Crested Newts (as well as Smooth Newt, Common Frog and Common Toad). Prior to the detection of the Great Crested Newts in 2002 there were no known records of Great Crested Newts in this area.

Natural England Licence

In order to carry out any landfill works at the site it was necessary to clear the working area of Great Crested Newts to ensure no newts will be killed or injured. The clearance of a site of Great Crested Newts and the destruction of their habitats including breeding ponds and terrestrial habitats used for shelter and feeding can only be carried out under a licence granted by Natural England. A

licence will only be issued once Natural England is satisfied that the mitigation and habitat creation proposals will conserve and protect the local population of newts and that there is no satisfactory alternative.

In July 2005, the ERAP Ltd and The Casey Group was granted an appropriate Natural England licence and the mitigation works at the Laneside Quarry site commenced.

Mitigation Works

The granted licence is supported by a detailed Method Statement which describes the timetable of works and all stages of the clearance of the site of Great Crested Newts, the creation of new habitat outside the area proposed for landfill and the restoration of the site at the end of the landfill operations.

An essential part of the proposed mitigation developed by ERAP Ltd was to ensure that at no point during the activities any Great Crested Newts became isolated from suitable breeding habitat, food or shelter. It is essential that "*the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range*". To address this criterion it was important to arrange the site into phases to ensure that there is no net loss of breeding ponds at any time during the scheme and all ponds lost would be replaced by at least two ponds.

For this reason, the site was divided into 4 phases. The clearance of newts from each phase was prioritised dependent on the order of the proposed land-filling.

Clearance of a site of Great Crested Newts involves the installation of newt exclusion fencing with pitfall traps. The newts reach the fencelines and are directed towards the pitfall traps (buckets sunk to ground level). The pitfall traps are emptied by an ecologist from ERAP Ltd on a daily basis during the spring and summer and all captured amphibians are carefully moved to suitable habitats outside the newt exclusion fencing.

Photograph of newt exclusion fencing

In 2005, Phase 1B (the route of the access road into the quarry) was surrounded in amphibian fencing and cleared of Great Crested Newts. In 2006 the remainder of Phase 1B was surrounded in newt fencing and cleared of Great Crested Newts (and other amphibians). Works have progressed on a 'rolling programme' throughout 2007, 2008 and 2009.

This programme of installation of newt fencing and pitfall traps and the clearance of newts will continue until the whole of the landfill area is declared clear of Great Crested Newts and no newts will be at risk from harm. The programme of clearance of newts will run in parallel with proposed habitat creation around the margins of the site. Habitat creation will involve the excavation of at least 28 new newt breeding ponds, seeding of grassland, scrub planting and the creation of numerous hibernacula (turf covered piles of rubble with many cracks and crevices which newts shelter beneath).

Photograph of a hibernaculum

Another essential part of the proposed mitigation is to ensure that the on-going programme of works is carried out at a suitable rate to ensure that the areas of newly created newt habitats including ponds, grassland, scrub, piles of rocks and hibernacula have been permitted to establish for a long enough period before any newts are translocated to the area.

In addition, as areas of the site are land-filled and restored the newt exclusion fencing configuration will be altered so more habitat becomes available to the newt population but the newts are still separated from the activities in the operational landfill area.

Programme of Works

The programme of works will continue until at least 2013. After this time it will be necessary to continue surveys of all created ponds to monitor the newt population until 2017. It is also necessary to implement a management and maintenance plan to ensure all created and restored habitats are maintained in a favourable condition for Great Crested Newts (and other amphibians and wildlife).

ERAP Ltd (December 2009)