

Oak Quarry Household Waste Recycling Centre (HWRC) Eco-enhancement Project

Oak Quarry HWRC, Forest of Dean

Kier Services

BIG Challenge 2015 submission category: Small scale permanent

Project overview

Kier Environmental Services division operate household waste recycling centres (HWRCs) and waste transfer stations (WTSS) throughout the UK.

Sites such as these don't immediately represent an obvious choice for wildlife but Oak Quarry HWRC in the Forest of Dean is ideally located to capitalise on a highly diverse range of local ecology.

The HWRC is located in a rural enclave within an Area of Outstanding Natural Beauty (AONB) and nestles within a former quarry which is surrounded by mixed woodland.

Over the last 12 months, the dedicated site team of one Supervisor and three operatives have embraced an eco-initiative to enhance the biodiversity of the site and its margins by using and upcycling materials already on site to encourage and develop a mosaic of habitats.

Moreover, the site team have generated several best practice initiatives and



Photo: Oak Quarry signage

established a working environment which is personable and one which conveys ecological benefit.

What were the biodiversity conditions on site, prior to the enhancement?

Due to the site's location, bio-diversity near the margins and within the surrounding land prior to ecological improvement was estimated to be good. However, the diversity and number species that use the HWRC parcel of land was largely unknown and unqualified.

Were there any specific conditions that led to you carrying out this work?

Following internal environmental training delivered by Kier Services Environmental Manager of which ecology was a main unit, the site team began exploring options of encouraging those species from the surrounding land onto the margins and parcels of land within the HWRC.

Oak staff are keen to develop areas within the site as viable habitat and with the availability of materials that could be readily employed and the HWRC's location it has not only perpetuated their ecological interest but yielded ecological benefit for the site.

What were the biodiversity measures taken?

The staff at Oak HWRC have developed a mosaic of habitats on 80% of the margins of the site.

Waste carpet tiles and pre-cut waste felt squares are being used on the southerly facing grassy banks to support a natural area of scree, which has encouraged herpetiles such as slow worms (a local BAP priority species) newts and common lizards, and a wild seed grass mix has been sown in areas of bare soil to support uncut verges and natural scrub around the site to attract a wealth of different pollinators including bees, butterflies and moths.

The mixed woodland which surrounds the site has a highly diverse under storey that in turn provides habitat for an array of species including wild boar and fallow deer, several of which have been recorded on the margins of the HWRC. Bird and bat boxes (following the RSPB and Bat Conservation Trust guidelines) have been made out of untreated waste timber and installed in several trees bordering the site.

The upcycling of materials on site has also extended into site signage where



Photo: Oak Quarry deer

operatives have used a 'softer' environmental approach to such signage by reusing waste wood and carving information onto the sign to create a more aesthetic and personable feature.

The success of the ecological enhancements developed at Oak HWRC are quantifiable as site staff are recording the types of species noted, their frequency and location on site with the intension of feeding this information into the local environmental records centre.

At site level, this information will be used to determine a 2015 baseline so that comparisons can be made in future years while it will also present an indication of net ecological gain thereafter.

The results thus far at Oak have been very positive and the innovative practices developed at Oak HWRC are to be replicated in a phased programme across Kier's HWRC portfolio.

How would you best describe the project?

An enhancement.

Further information

The Oak HWRC team have given up their own time to develop a series of different habitats on site and increase the numbers and types of species that use those habitats.

In undertaking this initiative, the team have gone beyond the remit of their normal day to day duties by upcycling and reusing materials that would normally be part of the waste stream.

The rewards for such innovation have been increased biodiversity within and around the site and continued and growing interest in the natural environment.

What was your personal motivation for carrying out the enhancement?

My motivation for undertaking and developing this project was to promote and expand the interest and knowledge of a group of operatives that were already keen naturalists.

The outcome of which, has been a series of innovations that have positively changed the appearance of the site and subsequently conveyed ecological benefit.



Photo: Oak Quarry bat box