

Quarrying in depth

Restoration



Much of the land needed for quarrying is in reality only borrowed - and the quarrying industry works hard to ensure that the loan is repaid with interest.

Key points

- Many quarries are returned to agricultural use, often of a higher standard than previously
- Quarries also offer opportunities for change to new uses such as leisure facilities, wildlife habitats, water parks and golf courses
- Some 180 Sites of Special Scientific Interest (SSSIs) have aggregate extraction as their origin
- Some former quarries are used for development, thus preserving greenfield sites that may otherwise be developed
- The quarrying industry is one of the major contributors to new tree planting in the UK



Restoring quarries can mean much more than the chance to return the land to its former state - it can also provide a rare opportunity for beneficial change. Many sites needed for quarrying are in reality only borrowed and, more often than not, the loan is repaid with interest! That may involve returning land to agriculture at a higher quality, or it may mean creating new environments that benefit wildlife and the community.

Extraction of minerals is a temporary land use that may last no longer than a decade for sand and gravel and perhaps 40 years for a rock quarry. Restoration is usually progressive and may involve a return to a previous use. Alternatively, it may offer a unique opportunity for change to a whole new use that benefits the community. Such schemes range from wildlife reserves to country parks.

Sand and gravel quarry restoration

Restoration achievements by the UK's sand and gravel operators are among the finest in the world. Many sites are returned to agriculture, with landscape and wildlife features incorporated into the schemes. Careful soil handling and husbandry, improved drainage and removal of steep slopes, mean that crop yields may be higher than previously. The progressive nature of this type of

quarrying allows restoration to follow closely behind extraction, with land returned to farming within a couple of years.

Quarrying sometimes offers the chance to make truly imaginative use of restored land. The industry has created numerous wildlife reserves, golf courses, amenity lakes and sports pitches. Sites have also provided ideal locations for housing and commercial and industrial use. Some of the more prominent projects include the Holme Pierrepont National Watersports Centre in Nottinghamshire, the Cotswold Water Park and the Thorpe Park leisure attraction in Surrey.

Rock quarry restoration

Rock quarries are usually much deeper and longer term than their sand and gravel counterparts and thus offer very different restoration challenges. Deeper working of the same area means opportunities for progressive restoration are often more limited.

Modern quarry design ensures that substantial landscape screening is carried out around the periphery of sites. The upper 'benches' can also be treated and planted at an early stage as they become available, so reducing the visual impact.

When operations have finished, a rock quarry can have much to offer in its final restoration, with forestry, nature conservation, water-based leisure activities, country parks and various forms of built development being common among end uses.

Restoration awards

The Quarry Products Association operates a restoration awards scheme as an incentive to its members to achieve the highest standards of excellence in restoring sites.

Set up more than 30 years ago, it has made awards to sites across the whole country. The

top annual award is the coveted Cooper-Heyman Cup, a prize that is only given for exceptional achievement. The cup, engraved with the words "Do paint the meadows with delight" from Shakespeare's Love's Labours Lost, has so far been awarded to projects as diverse as a nature reserve in Northumberland and a golf course in Essex.

The industry also regularly receives both national and local awards from other organisations in recognition of the high standard of its restoration. These have included awards from the Civic Trust and the Royal Town Planning Institute.

Tree planting

The quarrying industry is one of the major contributors to tree planting in the UK. It is estimated that QPA members have planted around two million trees over a five year period and this rate is set to increase in the future. Restoration of quarries often provides the opportunity to reinstate traditional landscapes that have been lost through changes in agricultural policy. Hedgerow and woodland planting are now common features of restoration schemes.

Case studies

Clee Hill

When Hanson Aggregates was granted permission to extract both hardstone and coal from Clee Hill Quarry near Ludlow, it was a unique opportunity to reinstate a large area of historical mineral workings, including the reshaping of a previously damaged skyline within the South Shropshire Hills Area of Outstanding Natural Beauty.

The quarry occupies a visually prominent position, with long and short distance views of the site. The area within and around the quarry has been considerably disturbed by a variety of minerals being extracted over eight centuries.

Hanson took advantage of the removal of some five million cubic metres of overburden arising from its coaling operation to restore

the land and reshape critical areas of the skyline. A five-year aftercare programme was implemented and a managed sheep-grazing programme introduced.

Hanson won the QPA's Cooper-Heyman Cup in 1998 and a Civic Trust Award in 1999 for the contribution that restoration at Clee Hill has made to the landscape.



Scorton

Mineral extraction at Tarmac's Scorton Quarry near Catterick in North Yorkshire began in 1968, and is scheduled to continue until 2003. Restoration started in 1978 and is progressive.

The restored area covers 100 hectares of the 190-hectare site. The main part of the restored site is a series of lakes designed for wildfowl. The surrounding area is also becoming a thriving site for wildlife.

A recent survey recorded badgers, foxes, roe deer and some 106 species of bird living within the woodland sections of the site. Other restored parts of the quarry have been returned to agricultural uses and the final end use of the lake is also expected to include an element of recreational activity.

The site won a QPA Restoration Award for its positive promotion of a wildlife habitat.



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Further information

- www.qpa.org/env_res.htm

Contact

The Quarry Products Association welcomes comments and requests for further information about the industry's work. To find out more about QPA policies and activities contact Elizabeth Clements, Jerry McLaughlin or Hazel Parsons.



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