



Supported through Defra's  
Aggregates Levy Sustainability Fund

# Aggregates Levy Sustainability Fund – celebrating success





# Introduction

From the tin mines and clay pits of Cornwall through the Mendips Hills in Somerset and up through our great northern National Parks, the extraction of minerals has had a profound impact on the natural environment, reshaping the landscape and creating new habitats.

Here in England, where land is in huge demand, our challenge is to make sure that business can continue to use natural assets – to build our houses and maintain critical infrastructure – without causing lasting damage to the natural environment.

The Aggregates Levy Sustainability Fund, generously funded by the aggregates industry, does more than that. Over the last three years the Fund has enabled us to distribute over £10.8 million to 194 projects. Importantly it brings together industry, environmentalists and local communities to restore areas affected by extraction – transforming degraded sites, restoring natural habitats so that wildlife can thrive and providing places for people to relax and enjoy.

This document gives a flavour of what can be achieved when all sectors pull together and highlights the huge difference that these projects make both to people's lives and to wildlife.

This close collaboration points the way to the future – together we could deliver all of the UK's 2015 biodiversity targets for habitat recreation and restoration, just by ensuring that quarries are restored with biodiversity in mind.

I hope the Fund and the partnerships that support it will continue for many years – continuing to restore the natural environment and transforming places for people across the country to enjoy.

Dr Helen Phillips  
Chief Executive  
Natural England

# Aggregates Levy Sustainability Fund (ALSF)

The Aggregates Levy came into force in April 2002, introducing a tax levied on primary aggregates (mainly sand, gravel and crushed rock) and intended to bring environmental benefits in areas affected by aggregate extraction. Part of the money raised through the levy has been allocated by HM Treasury to finance the Sustainability Fund. English Nature and The Countryside Agency were identified as major distributing bodies by Defra and both organisations have distributed funds in the form of grants since 2002.

In October 2006 the ALSF Partnership Grant Scheme, previously administered jointly by English Nature and the Countryside Agency passed into Natural England. Natural England works for people, places and nature to conserve and enhance biodiversity, landscapes and wildlife in rural, urban, coastal and marine areas.

Natural England contributes to Theme 1 – Quarries of the ALSF. The purpose of this theme from the perspective of Natural England is to reduce the effects of aggregate extraction on wildlife habitats, species, geology and landscape and to provide access to green space for the health and wellbeing of local populations. The following paragraphs describe the 5 main areas under which Natural England currently awards grant aid.

## **1 Landscape and Nature Conservation**

To provide and promote practical conservation and improvement of the Landscape, Biodiversity and Geodiversity elements of the natural environment by supporting projects which address or prevent damage arising from aggregates extraction in areas of high nature conservation or landscape value or which consolidate the positive effects of aggregate extraction.

## **2 Access & Informal Recreation**

To provide and improve access to the natural environment for populations affected by the extraction of aggregate in their locality.

## **3 Health and Wellbeing**

To address the direct effects that aggregates extraction has on communities thereby improving their health and wellbeing, through building capacity within communities and those organisations providing and delivering benefits to them.

## **4 Education & Understanding**

To provide educational and interpretive opportunities relating to the Landscape, Biodiversity and Geodiversity elements of the natural environment on and near sites affected by aggregates extraction.

## **5 Evidence Gathering**

To provide opportunities to gather evidence in support of 1 to 4 described above. To gather evidence about the effects of aggregate extraction on the natural environment and affected communities and to provide data informing longer term mitigation, management and conservation issues for 1 to 4 above.

A full list of projects grant aided in FY 2009/10 and FY 2010/11 are shown in the appendix included at the rear of this publication. In the following pages there are pen pictures of just 9 of the 92 projects Natural England has awarded grant aid during this period.

**Theme:** Landscape and Nature Conservation  
**Project:** Brockholes Wetlands  
**Applicant:** Lancashire Wildlife Trust (LWT)  
**Grant awarded:** £340,800

## Creating a natural asset for people and wildlife

Lancashire Wildlife Trust had a vision to develop a disused sand and gravel extraction site as a nature conservation area of regional, national and international importance.

LWT purchased the 106 hectare Brockholes site from the aggregate operator after extraction had finished in 2006, to secure its future for nature conservation and public enjoyment.

Over three years, ALSF grants of £340,800 have helped mitigate the effects of extraction by enhancing wetland habitats, improving access and developing a community and education programme.



North east corner



Establishing reedbeds and controlling water levels have had a beneficial impact on biodiversity, providing good wetland habitat for ground nesting birds and invertebrates.

When it opens in 2011, Brockholes Wetlands Nature Reserve will be the hub in a network of north-west England wetland sites, offering an introduction to wildlife in the region and access to other sites.

Located in the heart of Lancashire, just two miles from Preston and close to the M6, the site will attract visitors from far and wide.



Reserve from north

© Lancashire Wildlife Trust



Annotated maps of Brockholes

© Lancashire Wildlife Trust

North West Regional Development funding will secure Brockholes' financial future with the construction of an iconic floating visitor centre. State of the art visitor facilities will include a purpose built classroom enabling 1,000's of children to experience nature in a natural environment.

LWT's successful education and volunteer programme encourages the local community to become involved through practical conservation tasks and guided walks.

The longer-term aim is to develop a 'Friends of Brockholes Group' to assist with the practical running of the site and to advise on community concerns.

Ian Selby, LWT's Brockholes project manager, said: "Natural England's support through Defra's ALSF has been of immense importance to the development of the Brockholes Nature Reserve, by allowing habitat work to be completed in advance of opening and giving us the infrastructure for enhancing public access. It is difficult to overstate the contribution ALSF has made to this landscape in its transition from sand and gravel quarry to public amenity."

**Theme:** Health and Wellbeing  
**Project:** Limestone LinX Project  
**Applicant:** Coxhoe Community Partnership  
**Grant awarded:** £45,000 - 2007/08 – Phase 1  
£74,638 - 2009/10 – Phase 2

## Safer cycling and community wellbeing



© Jack Turton

Tandem (left to right): Ken Bradshaw (Durham County's Limestone Landscape's Officer), Dennis Morgan (County Councillor), Bob Wynn (then Mayor of Durham)

The Coxhoe Community Partnership wanted to improve health and wellbeing in the community by creating a multi-user path alongside the busy A177 in Durham.

By providing safe walking and cycling routes between villages, the Limestone LinX Project now encourages people of all ages to enjoy the benefits of outdoor recreation.

ALSF funding of £45,000 for Phase 1 allowed 1,000 metres of path to be completed in March 2008.

The work involved the creation of a new traffic island to ensure safe crossing of the A177, which is frequently used by aggregate lorries from a local limestone quarry, helping local children travel safely to and from school.

Hedge and tree management and roadside verge planting also improved conditions for enhanced biodiversity.





First ride on new cycle path

Following the success of Phase 1, the partnership received an additional grant in 2009 to extend the route. Agreements with aggregate operators, who own sections of the land, will help create a further six kilometres of cycle path connecting four more villages in Phase 2. The route will encourage the community to explore surrounding countryside by providing a safe and sustainable link to the local nature reserves. Information panels along the route will explain how aggregate extraction has shaped geodiversity and biodiversity in the landscape.

John Hepplewhite of the Limestone LinX Working Group said: “We’re delighted to see the increase in walkers and cyclists using the improved routes, particularly family groups. We look forward to seeing the numbers increase yet again when the installation of Phase 2 is complete.”

The project also shows how successful working relationships between voluntary groups, local authorities and the aggregate industry can bring real benefits to the community.

Barbara Hepplewhite added: “The application process focused our thinking and added value to the plans. Our relationships with local quarry companies are enhanced and we can now appreciate their efforts to compensate for past and present aggregate workings. The ALSF funding has made all of this possible and it will have long-lasting benefits for our communities.”

<b>Theme:</b>	<b>Education &amp; Understanding, Access &amp; Informal Recreation and Landscape &amp; Nature Conservation</b>
<b>Project:</b>	<b>Haughmond Hill Quarry Geodiversity Projects (West Midlands)</b>
<b>Applicant:</b>	<b>Bardon Aggregate (Aggregate Industries) (on behalf of Haughmond Hill Geodiversity Partnership)</b>
<b>Grant awarded:</b>	<b>£38,880</b>

### **Better access and understanding of geodiversity**

A major public geodiversity attraction has been created at a Shropshire quarry, thanks to a successful partnership and ALSF funding.

The Haughmond Hill Quarry Geodiversity Projects are run by Bardon Aggregate (Aggregate Industries) in association with Shropshire County Council, Shropshire Geological Society, Shropshire Wildlife Trust, UK RIGS and the Forestry Commission.

Situated in woodland close to the village of Uffington near Shrewsbury, the quarry produces aggregate from some of the oldest rocks in England. These geodiversity projects have enhanced an existing multi-ability GeoTrail running alongside the quarry, through infrastructure improvements, the design and provision of high quality on-site interpretation and a new viewing platform.

Shropshire is exceptionally rich in geodiversity and the trail includes representative samples of the different rock-types from each of the main geological periods.



Five large interpretation panels (shown above) explore the geological story of the quarry in the local and national landscape context.

The Haughmond Hill Geodiversity Partnership was awarded a grant of £38,880 to support a range of improvements linked to the GeoTrail, including a Geo-Column (large specimens), a Rock Play feature, a Toposcope and a small public information centre and car park.

**Theme:** Access and Informal Recreation  
**Project:** Adrenaline Gateway (North West)  
**Applicant:** Lancashire County Council (LCC)  
**Grant awarded:** £176,000 from 2007 to 2009  
£350,000 for 2009/10 and 2010/11

## Creating an adventure sports capital



© Tim Atkinson

Lancashire County Council received ALSF funding to develop mountain bike trails as part of a long-term Adrenaline Gateway project.

The trails in Lee Quarry, Bacup and the surrounding areas form part of an initiative to transform Pennine Lancashire into the adventure sports capital of the north.

In addition to cycling, there will be a network of facilities for adrenaline sports including water sports, quad-biking and climbing to create an area for outdoor activity and events.

The trials area

The development will provide local employment opportunities and income for Pennine Lancashire, develop the tourism offer and encourage commercial opportunities.

The topography and rugged terrain of the disused gritstone quarry provided an ideal landscape for the creation of mountain bike trails. The first phase in 2007 proved a big hit with residents and mountain bike riders both locally and nationally.





Test ride by *Mountain Bike Rider* magazine

The quality of the trails was recognised with the hosting of round three of the British Mountain Bike Trials Championship in 2008. This success continued with the Singletrack Classic Weekender being held at the quarry in July 2009, with a similar event planned for July 2010.



© Lancashire County Council

Work in progress

To build on this success, Lancashire County Council carried out research to see how these facilities could be further improved to link Lee Quarry to other sites in the area with the aim of providing a network of facilities.

Following this research, further grant funding has been awarded by ALSF to enhance the facilities and provide an additional 13 km of trails to link Lee Quarry via numerous access points from the new trails to nearby Facit and Cragg quarries.

These are expected to be completed by April 2011 and will importantly link with the Pennine Bridleway National Trail.

**Theme:** Landscape and Nature Conservation  
**Project:** Ouse Fen (East of England)  
**Applicant:** Royal Society for the Protection of Birds (RSPB)  
**Grant awarded:** £31,000

### **Nature and industry working together**

The future of a vast working quarry, which produces one million tonnes of sand and gravel each year, has been secured as a nature reserve.

Situated in the Cambridgeshire Fens, once part of one of Europe's great wetland wildernesses, Needingworth Quarry started operation near Huntingdon in 1996.

An ambitious scheme is now underway to restore the quarry to its origins by creating a 700 ha nature reserve, including Britain's biggest reedbed, open meres, wet scrub, grassland and 32 km of new public rights of way.

Ouse Fen – restored landscape





Hanson Aggregates and the RSPB are working together on the project, which involves the phased creation of a wetland nature reserve following the extraction of 28 million tonnes of sand and gravel over the next 30 years.

The vast wetland wilderness will be constructed in phases with 20-40 ha blocks divided by low earth banks.

The RSPB has been awarded ALSF grants of £31,000 over two years for work on the initial phases including the removal of invasive willow saplings, planting extra reeds to encourage quicker colonisation and promoting cattle grazing to maintain the grassland for breeding waders.

The first two wetland blocks have already been created and show the project's potential to create one of the largest and richest birdlife habitats in the UK.

Chris Hudson, the RSPB Warden explains: "The longest established mere, only planted with reeds in 2004, is already attracting a wealth of wildlife. Ducks, geese and swans now busily feed among lush waterside plants while herons and little egrets, brilliant in white, flap from pool to pool in search of a meal.



© Norman Stills

Ouse Fen – before extraction

"In the summer sunshine, myriads of dragonflies bristle over the waters chased by sharp-eyed hobbies with flashing wings. Rare birds like bitterns have been seen on several occasions and it is hoped many will choose to breed here once the work is completed."

While there is currently no public access, the long-term plan is for the nature reserve to provide an educational resource and extensive public access, including footpaths and cycleways.

<b>Theme:</b>	<b>Evidence Gathering and Landscape &amp; Nature Conservation</b>
<b>Project:</b>	<b>River Lamprey Survey (Yorkshire &amp; Humber)</b>
<b>Applicant:</b>	<b>Bellflask Ecological Survey Team (BEST)</b>
<b>Grant awarded:</b>	<b>£54,500 and £29,250</b>

### Conserving a protected species

A project exploring the complex life cycle of a protected fish species in the rivers of North Yorkshire has benefited from ALSF funding.

The River Lamprey Survey is part of the Environment Agency and Natural England’s long-term programme of study, species monitoring and research into the habits and population dynamics of lamprey in the Humber-Ouse river system.



© Natural England/Ian Williamson

Trapping Lamprey in the River Ure which runs through Tarmac’s Ripon Quarry site at East Tanfield, North Yorkshire

Lamprey are primitive-looking eel-like fish with a toothed, sucking mouth. The species has a seven-year life cycle at the end of which adults migrate many miles upstream from the sea to spawn and die. They are protected under the Habitat Directive and are of Local, National and European Biodiversity Action Plan importance.

The research-based projects involved trapping, measuring and tagging both upstream migrating adult lamprey and down migrating juveniles known as ammocoetes and transformers.

The survey work was undertaken adjacent to and downstream of Ripon Quarry (Hanson Aggregates) at East Tanfield, near Ripon in North Yorkshire.



The mouth parts of the lamprey

This sort of work is time-consuming and was carried out at all times of the day or night, during successive seasons, in all weathers and in all states of river flow.

The Bellflask Ecological Survey Team, an independent consultancy recognised as one of the country's leading river ecology specialists, undertook the work with the support of two ALSF grants.

The project also received funding from Hanson Aggregates as part of a positive and supportive working relationship.

Data collected to date have increased understanding of the species and will ultimately help develop a population model to help create a sustainable management and species conservation plan.

The data will also be valuable in protecting the species when it is applied to mineral planning consents for future aggregate extraction at Ripon or other similar settings.

“The Bellflask Ecological Survey Team would like to express deep gratitude to Natural England and Defra for supporting the Lamprey Surveys in the Ouse River System with funding through the Aggregates Levy Sustainability Fund. Very little was known about sea and river lamprey and now, thanks to the ALSF funded research, both species are included as priority species in Biodiversity Action Plans in the UK, the Irish Republic and Europe and our knowledge of the species is much greater.”

**Theme:** Education and Understanding  
**Project:** Stanwick Lakes (East Midlands)  
**Applicant:** Rockingham Forest Trust  
**Grant awarded:** £218,000

### **Creating a year round attraction**

A quarry in Northamptonshire's Nene Valley has been reborn as a 240 ha recreational and conservation facility, with the help of ALSF funding.

After 19 years of extraction, Hanson Aggregates finished quarrying at the site near Stanwick in 2004, but even then planning was well underway for its restoration and transformation.

Managed by the Rockingham Forest Trust, Stanwick Lakes attracts many thousands of visitors for walking, cycling and play throughout the year. It is also a Site of Special Scientific Interest due to the thousands of birds that visit each winter, including the golden plover and several waterfowl species.

Part of Stanwick Lakes has also been included in the proposed Nene Valley Special Protection Area, designed to protect specialised habitats for breeding, feeding, wintering or migrating birds.

The site opened in January 2006 with an infrastructure of paths and adventure play equipment, but visitor facilities were limited to a log cabin, temporary toilets and a mobile refreshment van.

A new £2.2million visitor centre was designed to include a shop and café but funding for the first phase did not stretch to building a proposed education wing, until a grant of £218,000 was provided by ALSF.

Both the visitor centre and education wing have now been constructed using green building technologies.



Opening event for the Discovery Zone

The Discovery Zone provides learning facilities for school groups and weekend visitors, with an interior design that reflects its links to the aggregate industry.

A major focus of the educational provision is how the underlying aggregate has shaped the development of the site, and the rich variety of wildlife that visits Stanwick Lakes.

Rockingham Forest Trust Director Alyson Allfree said: “We are very excited to have opened the new facility at last, and believe it will add to the range of activities which make Stanwick Lakes an all-year-round attraction for visitors and wildlife.”

**Theme:** Education and Understanding, Landscape and Nature Conservation, Access and Informal Recreation.

**Project:** Testwood Lakes (South East)

**Applicant:** Hampshire and Isle of Wight Wildlife Trust (HWT)

**Grant awarded:** £111,230

### **Visitors flock to newly improved site**

Testwood Lakes is a heavily used, publically accessible nature reserve on the western edge of Southampton.

Since large scale gravel extraction finished nearly a decade ago, the site has developed into an area that delivers a multitude of benefits for the Hampshire population.

More than 2,000 children come to Testwood Lakes every year for environmental education – one of the lakes provides emergency water supply and it is heavily used by local residents for informal recreation.

Owned by Southern Water and managed in partnership with the Wildlife Trust, it is also one of the most important wader breeding areas in the Test Valley.

The Testwood Lakes Centre houses a permanent exhibition on water, wildlife and conservation, which is open to schools, community groups and visitors. It includes a classroom for up to 60 children, where the Trust runs an education and training programme.

With the support of an ALSF grant, an upgrade was carried out over two years covering a wide range of improvements to the site including resurfacing 1.5 km of paths that had become difficult and uncomfortable for wheelchair users, as well as building a new boardwalk.





© Hampshire and Isle of Wight Wildlife Trust

The improved sand martin wall

Birdwatchers now benefit from a new hide and improvements to another existing one. A large artificial bank has been created as a habitat for over 150 pairs of sand martins and raised shingle areas provide improved nesting for waders.

Teaching facilities have been improved and new interpretation panels and signs have been installed. The work, which was made possible with over 200 days of help by committed volunteers, now means that Testwood can better serve all its functions.

Jess Pain who managed the project said: "We feel that the improvements made as a result of this funding considerably enhance Testwood Lakes as an educational resource for children of all ages and provides a greatly enhanced experience for informal visitors. We also feel that key species associated with gravel workings such as sand martins will benefit considerably."

**Theme:** Health and Wellbeing  
**Project:** Willow Lantern Pageant 2009 and 2010  
**Applicant:** Cotswold Water Park Society  
**Grant awarded:** £13,480

### Bringing communities together

The pilot Willow Lantern Project helped bring Cotswold communities closer together in 2009, with the support of ALSF funding.

The Cotswold Water Park consists of several settlements fragmented by gravel extraction sites and lagoons. The Willow Lantern Project is the park's only community festival, bringing young people and families together for a pageant and series of workshops.



© Cotswold Water Park Society

Willow man

Organised by the Cotswold Water Park Society, the pageant combines the talent of local artists with the flexible qualities of willow, to engage community groups and schools – especially young people who rarely get to enjoy outdoor creativity.

The willow tree has been worked and nurtured by communities in the Cotswold Water Park for centuries. Artists use willow for basket making, sculpture and shelters, while the pollarded trees make a perfect habitat for wildlife.



Willow heron

The pageant helps people make a direct connection between the fun experience of using local materials creatively and the value of a healthy natural environment.

The workshops – of which there were 56 in 2009 – inform people about the wildlife, history, geology and economy of the Cotswold Water Park. Participants are encouraged to explore the park's ecology and use it as inspiration to create lantern images for the next pageant in February 2010.

The pageant was a big hit with the public, many of whom said it 'must happen again'. Feedback from young people showed that coming together in a creative process helps foster a sense of community wellbeing.

Shannon Hounslow from the Down Ampney Young Women's Group said: "It's a cool event because we're all working together."

Calum McDonald from the Lechlade Youth Group created a 'heron in flight' sculpture. He said: "It's the first time I've done anything like this, so I spent time looking at pictures of birds to come up with the idea. The best thing was working together to get it done."

Thanks to further ALSF funding, the pageant will be bigger and better in 2010, engaging more communities and schools, including groups from the edge of the Cotswold Water Park.

## Front cover photograph

© Natural England/John Morrision



Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings.

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