

## CASE EXAMPLE 2

Site Name:	Various.
Location:	Cornwall.
Mineral Operator:	English China Clays International.
Local Biodiversity Action Plan:	Cornwall Biodiversity Initiative (Volume 1 Audit published June 1997).
Natural Area:	Cornish Killas and Granites.
Site Description:	ECCI operates a number of china clay quarries within Cornwall.
Initiative:	<p>Following an invitation to attend the initial meeting of the Steering Group set up by Cornwall County Council to progress the Local BAP, ECCI were included to represent industrial interest on the BAP Working Party. This Working Party, which also included representatives from English Nature, MAFF, Cornwall Wildlife Trust and others, took over the steering of the plan which was progressed by a project officer reporting to the group.</p> <p>ECCI's involvement in the LBAP was an extension of good and well established working relationships with statutory and non-statutory specialist groups throughout Cornwall. This has included a long term involvement in the Heathland Regeneration Project with English Nature which has involved the development of heathland regeneration as a restoration tool for clay quarries and pits. The Company has championed the concept of the industry in Cornwall as an important tool for the creation of amenity and nature conservation interest and actively promotes the development of national and local biodiversity objectives within the framework of ecological enhancement.</p>
Costs	<ul style="list-style-type: none"><li>● ECCI made a financial contribution of about £2,000 to the costs of preparing the LBAP.</li><li>● Additional costs have included staff time in attending working party meetings etc.</li></ul>
Benefits:	These have included the further development of good working relationships with statutory and non-statutory agencies which, as one of the largest employers in the county, the company pursues irrespective of specific initiatives or proposals.
Contact:	English China Clays International - Colin Grigg (Telephone number 01726 74482).

Contribution to  
Biodiversity:

This example illustrates how a mineral company can take an active part in the development of a Local BAP. The China Clay industry seeks to promote itself as a vehicle for habitat creation within Cornwall.

### CASE EXAMPLE 3

Site Name:	Torr Limestone Quarry
Location:	Frome, Somerset
Mineral Operator:	Foster Yeoman Ltd
Local Biodiversity Action Plan:	Mendip Biodiversity Action Plan (published 1995)
Natural Area:	Mendip Hills
Site Description:	Limestone Quarry covering a total area of 150 acres close to Asham Wood SSSI (case study 9). The site was acquired as an active quarry by Foster Yeoman in the 1950s.
Initiative:	150 acres of landscaping and habitat creation have been undertaken at this site. Using a consultant, surveys and site audits were carried out prior to habitat creation initiatives. Habitats created include limestone grassland and woodland. Species of interest include a colony of Grizzled Skipper butterflies which is monitored by the Somerset Wildlife Trust. In developing the site particular attention has been paid to the LBAP and a strong working relationship built up with English Nature. The Company has tried to use plant material of local provenance but may have to consider establishing their own tree nursery for woodland planting.
Costs:	<ul style="list-style-type: none"><li>● Current budget approximately £50,000 for woodland planting, fencing etc.</li><li>● Unquantified costs include more expensive profiling work on quarry faces to enhance biodiversity interest.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>● Value of good local partnership could make a difference in obtaining permission to expand at other sites.</li><li>● Promoting the message that within the Mendips the quarrying industry is a valuable tool in increasing biodiversity.</li></ul>
Contacts:	Foster Yeoman Ltd - Hugh Lucas - Land and Planning Manager (Telephone number 01373 451001)
Contribution to Biodiversity:	<ul style="list-style-type: none"><li>● Limestone Grassland is a priority habitat under the UK BAP.</li><li>● This site demonstrates the development of good local partnerships and here particular attention has been paid to the LBAP. The company's interest in local provenance plant material is also relevant, since the mineral industry could have a role in promoting and supporting the supply of such material, making local nurseries commercially viable.</li></ul>

#### **CASE EXAMPLE 4**

Site Name:	Vallis Vale
Location:	Mendip, Somerset
Mineral Operator:	ARC
Local Biodiversity Action Plan:	Mendip Biodiversity Action Plan (published 1995)
Natural Area:	Mendip Hills
Site Description:	A redundant limestone quarry which has been designated as a Geological SSSI. The site was created through quarrying which ceased in the 1920's.
Initiative:	The site is host to part of a colony of Greater Horseshoe Bat which use a fissure in a rock face, and proposed as a SAC. It has been developed as an interpretation/educational centre emphasising the geological and human archaeology interest.
Costs:	<ul style="list-style-type: none"><li>● Few additional costs of having bat roost present.</li><li>● Ongoing costs of interpretation centre/full time study centre with staff and preparation of educational material for the National Curriculum.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>● The presence of the roost adds to the visitors'/study interest at Vallis Vale.</li></ul>
Contacts:	ARC John Dutson - Estates Manager - (Telephone number 01373 452515) ARC David Weeks Public Affairs Manager - (Telephone number 01373 463211)
Contribution to Biodiversity:	<ul style="list-style-type: none"><li>● The Greater Horseshoe Bat is a Short List UK Biodiversity Species for which an Action Plan has been prepared which identifies potential SACs.</li><li>● This site represents an example of an opportunity for a mineral company to become involved in a national BAP Action Plan.</li></ul>

## CASE EXAMPLE 5

Site Name:	Cow Lane Sand and Gravel Pit
Location:	Godmanchester, Cambridgeshire
Mineral Operator:	Redland Aggregates Ltd
Local Biodiversity Action Plan:	Action for Wildlife in East Anglia (published June 1996)
Natural Area:	The Fens
Site Description:	This is a 250 acre site in the River Ouse valley which is made up of a complex of lakes ranging in size from 2 to 40 acres. The lakes support a wide range of wetland bird species. An active sand and gravel quarry site during the 1960s, extraction at this site will cease early in 1998.
Initiative	The quarry has already been subject to extensive restoration to agricultural and recreational uses with the majority of the site given over to nature conservation. Of particular interest are the reedbeds and marginal aquatic habitats. The site is managed through a Management Group including representatives of Huntingdon District Council Countryside Section, the Environment Agency, the Cambridgeshire and Bedfordshire Wildlife Trust and English Nature. Initiatives of particularly biodiversity interest include habitat creation to encourage breeding of the Scarce Chaser Dragonfly. Although having no formal designation, the site may be of potential SSSI standard due to its wetland and wildfowl interest, and has areas of lake margins where management of osier beds is being undertaken.
Costs:	<ul style="list-style-type: none"><li>● The site has been subject to progressive restoration, and management costs vary depending on flooding.</li><li>● Osier management can cost up to £5,000 p.a.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>● The benefits include a good working relationship with the local authority and conservation agencies.</li><li>● Redland use the site to demonstrate that the mineral extraction industry can be a valuable force for habitat creation.</li><li>● Student groups are shown around the site and promotional literature has been prepared.</li><li>● The site also demonstrates how subtleties of landform and lake edge design included within restoration schemes can enhance biodiversity.</li></ul>
Contacts:	Redland Aggregates Ltd - Ron Foster-Divisional Restoration Manager (Telephone number 01530 242151)

Contribution to  
Biodiversity:

- The Scarce Chaser Dragonfly is identified as a Long List UK Biodiversity Species.
- A number of waterfowl species present are also included on the UK BAP Long List.
- The interest at this site has been developed throughout the restoration phases, demonstrating that the promotion of biodiversity and nature conservation objectives in general can be ongoing, ensuring that a valuable resource is in existence once operations cease.

## CASE EXAMPLE 6

Site Name:	Rammamere Heath and Sandy Heath
Location:	Leighton Buzzard and Sandy, Bedfordshire
Mineral Operator:	Redland Aggregates Ltd
Local Biodiversity Action Plan:	Bedfordshire Biodiversity Action Plan (in preparation - expected publication end 1998)
Natural Area:	Bedfordshire Greensand Ridge
Site Description:	<p>Rammamere Heath comprises an area of remnant heathland and ancient woodland and is notified as an SSSI. The woodland Kings Wood, part of which is owned by Redland, is also a NNR.</p> <p>Sandy Heath has been operational since the 1960s, and restoration began on parts of the site in 1973.</p>
Initiative:	<p>Conservation work at Rammamere on the heathland areas includes an on-going programme of bracken and scrub clearance as well as measures to prevent birch encroachment. Heather regeneration is promoted through surface scarification and other methods. Redland holds planning permission to extract reserves below the heath but has never worked the heath nor has any plans to do so. Site management is carried out under a site Management Plan and is overseen by a Management Group including representation from English Nature and the Cambridgeshire and Bedfordshire Wildlife Trust.</p> <p>At Sandy Heath the restoration proposals were revised in the 1980s. An originally flat plateau area is now being re-formed into a deep valley with interlocking spurs creating a new and radical landform. Heathland regeneration on the slopes has involved a number of large trial plots using transplants grown from <i>Calluna vulgaris</i> seed from the Rammamere site, as well as heather litter and direct seeding. The heathland restoration work has already doubled the area of heathland in Bedfordshire and proposals currently in place will double this again over the next 15-20 years. The two sites are also linked through the interchange of experience in restoration techniques. Future initiatives include investigating the soil pH associated with successful heathland establishment at Rammamere to aid establishment at Sandy. Work at Sandy has involved close liaison with English Nature, the RSPB (whose headquarters adjoin the site), the Cambridgeshire and Bedfordshire Wildlife Trust and Bedfordshire County Council.</p>

The Greensand Project is currently preparing Biodiversity Action Plans for habitats within the Greensand Ridge Natural Area including Heathland, Acid Grassland and Sandy Heath. The work at Rammamere is an important component of this and site specific targets will be set within the Plan. In addition material from Rammamere is being used in restoration work at the nearby Sandy Heath Quarry where proposals will double the heathland habitat within the Greensand Ridge.

Costs:

- Redland spend approximately £8,000 - £10,000 per year on site management at Rammamere which is carried out by the Company.
- In addition a visitor centre is run by the Cambridgeshire and Bedfordshire Wildlife Trust on the site which focuses on recreational as well as nature conservation interest.
- The restoration work at Sandy is progressive. The additional operating costs of the reprofiling work are difficult to isolate.
- Heathland monitoring work at Sandy costs £2,500 - £3,000 p.a., and fencing against rabbits can cost up to £5,000 - £6,000 over a three or four year period.

Benefits:

- Both site provide valuable PR for Redland locally and nationally, and are used by student groups.
- As with other Redland sites, the initiatives here demonstrate the Company's commitment to nature conservation and its contribution to the progression of heathland restoration techniques. Rammamere is a non-active site that has never been worked by the Company and is particularly valuable in this regard.

Contact:

Redland Aggregates: Ron Foster -Divisional Restoration Manager  
(Telephone number 01530 242151)  
Greensand Project: Richard Woolnough  
(Telephone number 01582 481 851)

Contribution to Biodiversity:

- Heathland is a priority habitat identified in the UK BAP
- In addition to the specific habitat and species this site provides a particularly strong example of good working partnership between a mineral company and local conservation groups. Heathland restoration work on the site is led by the manpower and financial commitment provided by Redland.
- Large areas of birch clearance have resulted in the re-appearance of woodlark and nightjar, both UK BAP Middle List species and the close links with the nearby Sandy Heath Quarry enhance the biodiversity contribution of this site.



## CASE EXAMPLE 7

Site Name:	Marshside Sand Works
Location:	Southport, Lancashire
Mineral Operator:	William Rainford (Holdings) Ltd
Local Biodiversity Action Plan:	Audit of North West England (to be published at the end of 1998)
Natural Area:	Urban Mersey Basin
Site Description:	A long-standing active sand quarry adjacent to the Ribble NNR.
Initiative:	<p>The site lies adjacent to the Ribble NNR and the RSPB's Marshside Marsh Reserve and has been subject to extensive habitat creation including saline/brackish lagoons – a priority habitat under the UK BAP. The site provides a particularly good example of successful local partnerships. The company recently assisted with the construction of a new bird hide on the RSPB reserve which overlooks freshwater lagoons on the quarry site. The site already attracts a great deal of public interest. William Rainford are currently carrying out extensive monitoring work on the saline/brackish lagoons and bird interest in support of an Environmental Statement for proposed extension to their planning permission. This has included close liaison with English Nature and funding of a sedimentation study of the Ribble Estuary (SSSI, SPA/ Ramsar site) the largest such study ever carried out here.</p>
Costs:	<ul style="list-style-type: none"><li>● Contribution to the bird hide included the provision of electricity and totalled approximately £4,000.</li><li>● Electricity running costs are ongoing.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>● These include good local public relations and good working relationships with both English Nature and the RSPB.</li><li>● Good PR will contribute to the proposed extension plans.</li><li>● The company is keen to promote the contribution that the sand industry can make to Nature Conservation/Biodiversity.</li></ul>
Contact:	William Rainford (Holdings) Ltd - Gwilym T Jones (Telephone number 0151 525 5991)

Contribution to  
Biodiversity:

- Saline lagoons are a priority habitat under the UK BAP.
- Wildfowl and wader species present are UK Long List species.
- The site provides an excellent example of the development of good working partnerships with local people and conservation agencies. It also demonstrates the importance of such links in the development of future mining opportunities.

## CASE EXAMPLE 8

Site Name:	Westbury Quarry
Location:	Westbury-sub-Mendip, Somerset
Mineral Operator:	Pioneer Concrete
Local Biodiversity Action Plan:	Mendip Biodiversity Action Plan (published 1995)
Natural Area:	Mendip Hills
Site Description:	<p>The Westbury Quarry site is believed to have been used as a source of limestone for at least 100 years. The existing processing plant was installed in 1966-67 and is still active at a low level. The unworked area within the site is made up of a grassland, scrub and woodland including an area of herb rich limestone grassland designated as a County Wildlife Site by the Somerset Wildlife Trust. The quarry falls within the Mendips Area of Outstanding Natural Beauty (AONB).</p>
Initiative:	<p>The Quarry is designated as a geological SSSI as well as a County Wildlife Site for its calcareous grassland. It falls within the Prime Biodiversity Area of the Mendip Scarp identified in the Mendip BAP (1995). In 1995 Pioneer obtained a Countryside Stewardship agreement over 13.9 ha including the quarry and adjacent grassland. Work within the agreement includes restoration of narrow grassland paddocks, management of limestone grassland and repair and restoration of drystone walls. The site is also available for educational access under the Scheme.</p> <p>Future initiatives include proposals to work with Butterfly Conservation to introduce the Large Blue Butterfly at the site (a UK Short List BAP species).</p>
Costs:	<ul style="list-style-type: none"><li>● Ongoing costs have been incurred.</li><li>● The Stewardship Scheme provides funding for the area of the Scheme.</li><li>● Manpower costs are unquantifiable but primarily involve meetings and liaison with conservation groups.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>● Benefits are primarily PR based. The company has good liaison with local schools and has prepared promotional literature for the site.</li><li>● The good work by Pioneer at this site has been used in support of their successful application for extraction at a nearby site.</li></ul>
Contacts:	Pioneer - Simon Lumkin (Telephone number 01275 392471)

Contribution to  
Biodiversity:

- The site falls within a Prime Biodiversity Area identified in the local BAP.
- The Action Plan for the Large Blue butterfly identifies targets for re-establishment at suitable sites. The initiative at Westbury presents an opportunity for a mineral company to take an active part in a national biodiversity species action plan.
- This site demonstrates good partnership as well as the promotion of local and national biodiversity. The inclusion of conservation grant funding demonstrates how mineral operators can receive financial assistance for their nature conservation work.
- The spin off benefit in terms of good local relationships are valuable and the Company is actively promoting the education message that mineral companies have an important role to play in biodiversity.

## CASE EXAMPLE 9

Site Name:	Asham Wood, Whatley Quarry
Location:	Whatley, Mendips, Somerset
Mineral Operator:	ARC
Local Biodiversity Action Plan:	Mendip Biodiversity Action Plan (published 1995)
Natural Area:	Mendip Hills
Site Description:	The ancient semi-natural woodland is designated as an SSSI which covers 140 ha and was originally acquired in the mid 1980's with the adjacent Asham Quarry. ARC have since surrendered their right to work the woodland area.
Initiative:	ARC are in the process of the largest coppice regeneration project in Somerset developed in conjunction with English Nature. Ongoing management includes fencing against deer (with funding from English Nature), deer management, tree felling, ride clearance etc. 33 acres are leased to the Somerset Wildlife Trust who manage the woodland as a reserve and undertake their own coppice management programme.
Costs:	<ul style="list-style-type: none"><li>● Management costs are offset against the sale of timber and timber products such as Thatching Spars and through the sporting let.</li><li>● By managing the woodland as a commercial landowner, nature conservation costs are included within broader land management costs, for instance ARC has a company forester who undertakes elements of work and full time land agent responsible for a number of land holdings.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>● ARC promotes its image as a responsible landowner. The company runs the East Mendip Study Centre at Whatley, although Asham Wood is not used for school visits, etc. at present.</li><li>● The company seeks to generate an income from its landownings while being aware of the Nature Conservation/Biodiversity benefits.</li><li>● Asham Quarry within the site is being retained for disposal of overburden from the nearby quarry at West Down.</li></ul>
Contacts:	ARC - John Dutson Estates Manager (Telephone number 01373 452515) (ARC - David Weeks - Public Affairs Manager (Telephone number 01373 463211)

Contribution to  
Biodiversity:

- As an SSSI, Asham Wood represents one of the finest examples of ancient semi-natural woodland in the Mendips. The ongoing management of such an important site by a Mineral Operator fulfils criteria in both the UK and local BAPs. Such a flagship site offers considerable promotional potential for the minerals industry as a whole as well as demonstrating partnership and monitoring initiatives.

## CASE EXAMPLE 10

Site Name:	Mells Park Conference Centre
Location:	Mells, Mendips, Somerset
Mineral Operator:	ARC
Local Biodiversity Action Plan:	Mendips Biodiversity Action Plan (published 1995)
Natural Area:	Mendip Hills
Site Description:	Mells Park is a site of approximately 136 ha. It includes The Park House, designed by Lutyens, which is used as a conference centre by ARC. The house is surrounded by parkland, including an area of wood pasture, which has been registered by English Heritage as a Park and Garden of Special Historic Interest.
Initiative:	Lowland Wood Pasture and Parkland is a priority habitat in the UK BAP. Although recognised for its historic landscape interest, this habitat has been the subject of ecological survey and is maintained through ongoing site management.
Costs:	<ul style="list-style-type: none"><li>● Included with land management costs of the Parkland and Gardens.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>● Public relation benefits</li><li>● The high quality location has a number of benefits in terms of raising the company profile and its contribution to national heritage is also advantageous.</li></ul>
Contacts:	ARC - John Dutson Estate Manager (Telephone number 01373 452515) ARC - David Weeks - Public Affairs Manager (Telephone number 01373 463211)
Contribution to Biodiversity:	<ul style="list-style-type: none"><li>● Lowland Wood Pasture and Parkland is a priority habitat under the UK BAP.</li><li>● This site provides an example of a mineral operator managing habitats for their biodiversity outside active working areas.</li></ul>

## CASE EXAMPLE 11

Site Name:	Amwell
Location:	Ware, Hertfordshire
Mineral Operator:	St. Albans Sand and Gravel
Local Biodiversity Action Plan:	50 year vision for the Wildlife and Natural Habitats (consultation document published June 1997, final report due the end of 1997).
Natural Area:	London Basin
Site Description:	This is an active complex of sand and gravel quarries working at a low level and with reserves for 2-4 years. Restoration of much of the site is ongoing. Proposals included the creation of an 108 acre wildlife reserve, begun in 1983. The site falls within the Lee Valley Regional Park.
Initiative:	<p>Although restoration was originally aimed at landscape and recreational use, this was altered, with the support of the local mineral planning authority, to a predominantly nature conservation interest through the establishment of a Steering Group including a local ecologist and the mineral company. The site, which forms a series of lakes and wetlands, has concentrated on the creation of reedbeds (a priority habitat under the UK BAP) and is particularly keen to encourage breeding bittern (a Short List UK BAP species) a bird that is already a winter visitor. The site recently received funding from Land Fill tax for the reedbed work which will tie in directly with the Species Action Plan for the Bittern. Site management is overseen by the conservation officer of the Hertfordshire and Middlesex Wildlife Trust who is also a Steering Group member. The site has won a number of industry awards including SAGA's Cooper Heyman Cup in 1986.</p> <p>Otters were released on the site in conjunction with the Otter Trust and have subsequently bred successfully there.</p>
Costs:	<ul style="list-style-type: none"><li>● Difficult to quantify the exact amount. Up to £5,000 per year depending on the levels of maintenance required.</li><li>● Recently £20,000 was received from Land Fill tax funds through the Hertfordshire Groundwork Trust which will go towards site management projects.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>● The Company benefits from excellent local relationships with residents, conservation groups and the mineral planning authority.</li><li>● Although there is no formal visitor centre, groups are taken around the site and promotional literature has been produced.</li></ul>



## CASE EXAMPLE 12

Site Name:	Linbrook Lake
Location:	Ringwood, Hampshire
Mineral Operator:	BFI Limited
Local Biodiversity Action Plan:	Hampshire Biodiversity Action Plan (Volume 1 in preparation)
Natural Area:	New Forest
Site Description:	Formerly a sand and gravel quarry the site covers approximately 73 acres and was worked from 1976 to 1988. Restoration work was subsequently carried out by BFI.
Initiative:	The lakes make up part of a series of lakes which form the Avon Valley (Bickerton to Christchurch) SSSI. The SSSI is also a proposed SPA/Ramsar site. The site itself is particularly important for its population of wintering Gadwall and other wildfowl (Long List BAP species) and also holds areas of Reedbed (UK BAP priority habitat). The lake is wardened by the Ringwood and District Angling Club who hold a licence to fish on the lake but little active management is currently carried out there. In 1996 the site was awarded the Cooper Heyman Cup for the restoration achieved.
Costs:	<ul style="list-style-type: none"><li>• The site has minimal ongoing costs now that restoration is complete.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>• Primarily PR benefits particularly associated with the site designation and awards.</li></ul>
Contacts:	BFI Limited - Robert Le Clerc (Telephone number 01932 353477)
Contribution to Biodiversity:	<ul style="list-style-type: none"><li>• Reedbeds are priority Habitat under the UK BAP.</li><li>• A number of wildfowl and wader species are included on the Long List in the UK BAP.</li><li>• This site represents an example where the Company is contributing to biodiversity without incurring any high costs. A number of opportunities exist here to enhance biodiversity particularly in relation to the Reedbed habitats.</li></ul>

### CASE EXAMPLES 13

Site Name:	Mason Cement Works
Location:	Ipswich, Suffolk
Mineral Operator:	Blue Circle Industries Ltd
Local Biodiversity Action Plan:	Biodiversity: An Action Plan for Suffolk (publication planned for mid-1998)
Natural Area:	Suffolk Coast and Heaths
Site Description:	Cement works where Blue Circle quarry clay and chalk seams. Sand is present as inter-burden between the two layers over 90% of which is removed as waste.
Initiative:	Exposed sand banks are colonised by nesting sand martin. This has been occurring for at least the past 15 years of operation. To avoid disturbing the birds the removal of the sand by contractors is programmed to avoid the nesting period with work held off from the first signs of nesting until after young have fledged. The sand banks are left <i>in situ</i> for the nesting period.
Costs:	<ul style="list-style-type: none"><li>• No costs to the quarry identified other than organising work schedules around birds.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>• "Peace of mind!"</li><li>• No publicity opportunities are made.</li></ul>
Contacts:	Blue Circle Industries Ltd - Colin Forester - Quarry Manager (Telephone number 01473 835235)
Contribution to Biodiversity:	<ul style="list-style-type: none"><li>• Sand martins are as Long List UK BAP Species.</li><li>• This site provides a particularly interesting example of how biodiversity objectives can be achieved in the course of normal operation without any large costs to the company involved.</li><li>• This site has also developed area of lagoons and works with local conservationists from the Gipping Valley Project who carry out monthly bird counts on the lagoons and also record the sand martins. (In 1996 the sand martins nested in a non-active face for the first time).</li></ul>

## CASE EXAMPLE 14

Site Name:	Hope Cement Works
Location:	Peak Park, Derbyshire
Mineral Operator:	Blue Circle Industries Ltd
Local Biodiversity Action Plan:	Mid-Derbyshire Local Biodiversity Action Plan - Part One (June 1997)
Natural Area:	White Peak
Site Description:	Cement works and adjacent land within the Peaks National Park.
Initiative:	Survey work of the surrounding area by an ecologist from English Nature identified an area of Blue Circle's land holdings as valuable river valley grassland. Subsequently the Company was approached by the Peak Park over drawing up a Management Plan under the National Park's Farm Conservation Scheme with the Company's tenant farmer, which was finalised very recently. The Management Agreement lasts for ten years and provides grant payment to the tenant farmer to manage the meadowlands appropriately. The land included is two areas of high quality meadowland with additional small areas of marshland and wet grassland. Although this initiative is valuable, it is noted that following the Company's initial concerns over entering a lengthy Management Agreement an additional clause has been added to the effect that the Agreement can be terminated at any time that Blue Circle wish to reclaim their land, subject to the Company obtaining the necessary planning consents.
Costs:	No identifiable ongoing costs to the Company.
Benefits:	The Company has supported a Peak Park initiative.
Contacts:	Blue Circle Industries Ltd - Colin Forester (Quarrying Manager) Peak Park Farm and Countryside Service - Jane Chapman
Contribution to Biodiversity:	<ul style="list-style-type: none"><li>● This provides an example of a non-active site where partnerships have contributed to maintaining biodiversity.</li><li>● The Company incur no costs and still receive rent for the land involved but is supporting short-term, the biodiversity objectives in the National Park.</li></ul>

## CASE EXAMPLE 15

Site Name:	East Gate Quarry
Location:	Weardale Cement Works, County Durham
Mineral Operator:	Blue Circle Industries Ltd
Local Biodiversity Action Plan:	The Durham Biodiversity Action Plan (Introductory Guide published May 1997)
Natural Area:	North Pennines
Site Description:	The site comprises an active hillside limestone quarry in the North Pennines that is undergoing ongoing restoration. The site holds Geological SSSI Fairy Holes Caves, the largest wet cave with glacial sediments.
Initiative:	The original restoration consents involved restoration to low grade agricultural land, however, over the course of the restoration phases opportunities to develop and expand ecological interest have been identified by site staff, using the support of a consultant. Particular areas of interest include the establishment of shallow water bodies rare in the area, to attract wintering wildfowl and geese, as well as an area of Limestone Pavement. Species present include grey partridge (Short List BAP species). The Company has been assisted in their ongoing project by a sympathetic mineral planning department in Durham County Council as well as liaison with the local wildlife trust. Restoration is ongoing.
Costs:	<ul style="list-style-type: none"><li>● The actual cost of restoration required go part of the way towards financing the nature conservation work of approx. £10,000 to £15,000p.a. for the last ten years, at least 50% of which has been used to comply with planning requirements.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>● The commitment of the site manager has raised the profile of the nature conservation opportunities on this site.</li><li>● There are benefits in the good working partnerships established with local people and conservation groups, with opportunities to make more of the site as it develops further.</li></ul>
Contacts:	Blue Circle Industries Ltd - Dr Eric Dack (Quarrying Manager) (Telephone number: 01388 517288)

Contribution to  
Biodiversity:

- Grey partridge is a Short List BAP species for which an Action Plan has been prepared.
- This site demonstrates how restoration proposals and consents can be subtly altered to enhance biodiversity in a number of important areas where the interest and commitment exists within a company or site.
- The site offers a huge potential for developing a number of biodiversity objectives.

## CASE EXAMPLE 16

Site Name:	Mount Sorrel Quarry
Location:	Charnwood, Leicestershire
Mineral Operator:	Redland Aggregates Ltd
Local Biodiversity Action Plan:	Leicestershire and Rutland Biodiversity Action Plan (due to be published at the end of 1997)
Natural Area:	Charnwood
Site Description:	Granite had been extracted from the site on a small scale for over 100 years, with large scale quarrying beginning in the mid-1960s. It is now the largest granite quarry in Europe, surrounded by Buddon Wood SSSI.
Initiative:	Restoration proposals involving relocation of an area of overburden to ground adjacent to the surrounding SSSI were altered to enable restoration of heathland and acid woodland, and begun in 1994. Heathland is a declining habitat in Leicestershire and the scheme involved use of soil from existing soil banks, withholding any top soil and, in places, adding fine granite chippings. Still at the early stages of establishment, the restoration was undertaken in conjunction with the Leicestershire and Rutland Trust for Nature Conservation who propose highlighting the project as the first initiative under the (soon to be published) local BAP. This work is not the final restoration scheme but a form of mitigation for the quarrying work being carried out at the site.
Costs:	<ul style="list-style-type: none"><li>• The additional costs were not much higher than conventional restoration. However the costs of ongoing management and monitoring are still unquantified, as the programme for monitoring is being established with interested parties.</li></ul>
Benefits:	<ul style="list-style-type: none"><li>• The potential PR benefits of the scheme being promoted by the Trust will enhance Redland's reputation for responsible and innovative restoration of their sites. The scope is illustrated for working closely with Wildlife Trusts.</li><li>• In addition the experimental nature of the work could provide valuable tools for the future restoration work elsewhere.</li></ul>
Contact:	Redland Aggregate Ltd:- Ron Foster- Restoration Manager (Telephone number: 01530 242151) Leicester & Rutland Trust for Nature Conservation:- Michael Jeeves (Telephone number: 011625 53904)

Contribution to  
Biodiversity:

- Heathland is a priority habitat under the UK BAP.
- Proposals by the local Trust to publicise the heathland restoration scheme here under the local BAP will provide an excellent example of mineral companies working to achieve local Biodiversity objectives and targets.

## V RECOMMENDED OBJECTIVES AND ACTIONS

Our recommendations on how the minerals industries can most effectively help implement the UK Biodiversity Action Plan are based upon on the analysis in this report and on the case examples we have studied.

We have made five broadly-based recommendations and then expanded upon the practical aspects of putting them into effect. They are presented in tabular form over two pages. In accordance with the Brief we have included an indication of the timescales over which we suggest that progress should be made in putting the recommendations into effect, the partners likely to be involved, and the responsibilities of the industry.

The recommendations go beyond this in two respects. First, we see English Nature's contribution as so important a partner for the industry that we have identified specific actions for English Nature to take on each set of recommendations. Second, we have distinguished the strategic industry-wide role of the minerals industries from the actions which individual companies should take. The latter division of the recommendations is more thorough here than elsewhere in the report.

Whilst our main recommendations are presented in this broad-brush way, other parts of the report do provide more detailed advice on the scope for implementing specific aspects of biodiversity. Appendix 2 contains a wealth of practical advice, and Part III offers numerous avenues which the minerals industries and individual companies may find the opportunity to explore.

In addition, there are two specific issues recommended for action in the text. These are not for implementation by the minerals industries, but their implementation by others would enable the minerals industry to contribute more to biodiversity:

- The Natural Area profiles for those areas more heavily worked for minerals should be revised to provide more detailed advice on the part which mineral companies can play to nurture local qualities distinctive to each Area.
- The authors of Local BAPs should pay more attention to the potential role of the minerals industries.



Recommendation	Industry Action	Company Action	EN Action	Timescale	Other partners
<p>1. Provide formal basis for promotion of biodiversity across the minerals industry.</p>	<ul style="list-style-type: none"> <li>● Establish a body dedicated to the promotion of biodiversity, possibly as a Biodiversity Working Group (BWG) of the QPA/SAMSA or CBI Minerals Committee, involving English Nature as the only outside organisation.</li> <li>● BWG to participate in future Species &amp; Habitat Action Plan preparation /revision.</li> </ul>	<ul style="list-style-type: none"> <li>● Optimise communication within the company between management and staff on biodiversity opportunities, and ensure site personnel are fully briefed.</li> </ul>	<ul style="list-style-type: none"> <li>● Send representative to sit on BWG.</li> <li>● Advise on development of biodiversity initiatives.</li> </ul>	<p>18 months</p>	<ul style="list-style-type: none"> <li>● UK Biodiversity Group</li> </ul>
<p>2. Promote understanding of concept of biodiversity and national and local initiatives throughout the industry and beyond.</p>	<ul style="list-style-type: none"> <li>● Place articles in journals.</li> <li>● Arrange conferences/seminars</li> <li>● BWG to oversee/co-ordinate initiatives &amp; monitor targets.</li> <li>● BWG to publish newsletter.</li> <li>● Establish clearing house facility to pool best practice information and experience.</li> <li>● Offer the experience of the minerals industry to assist biodiversity promotion in other industries.</li> <li>● Arrange practical biodiversity training days and site visits (developing the Minerals Forum approach).</li> </ul>	<ul style="list-style-type: none"> <li>● Speakers from case examples at Conferences</li> <li>● Raise biodiversity issues with local liaison groups.</li> <li>● Encourage the personal enthusiasm of members of staff for wildlife to flourish.</li> <li>● Hold open days, conduct guided tours and offer research opportunities for students.</li> <li>● Send staff to training events.</li> </ul>	<ul style="list-style-type: none"> <li>● Provide conference/ seminar speakers.</li> <li>● Contribute to news-letter/journals</li> <li>● Increase awareness within agency of potential industry contribution.</li> </ul>	<p>6-12 months</p>	<ul style="list-style-type: none"> <li>● Local Wildlife Trust</li> <li>● LBAPs</li> <li>● Local authorities</li> <li>● Local organisations</li> </ul>
<p>3. Develop strategic industry approach to "Championing" species (and perhaps habitats) for which Action Plans have been prepared.</p>	<ul style="list-style-type: none"> <li>● Develop case examples identified in report at strategic level.</li> <li>● Co-ordinate strategic PR initiative.</li> <li>● Identify further examples through industry questionnaire.</li> </ul>	<ul style="list-style-type: none"> <li>● Develop case examples identified in report and similar opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>● Assist strategic and company initiatives using local teams /Species Recovery where appropriate.</li> <li>● Provide specialist assistance where appropriate.</li> </ul>	<p>End of 1999</p>	<ul style="list-style-type: none"> <li>● Local Wildlife Trusts</li> <li>● Plantlife</li> <li>● Butterfly Conservation</li> <li>● RSPB etc.</li> </ul>

Recommendation	Industry Action	Company Action	EN Action	Timescale	Partners
<p>4. Carry out site/company biodiversity audits to identify the available resource: on active sites, restored sites, other land holdings, and land in the vicinity of landholdings; act on the findings.</p>	<ul style="list-style-type: none"> <li>• Encourage industry-wide audits through press/BWG newsletter</li> <li>• Develop National Audit Scheme</li> <li>• National Audit Award</li> <li>• Promote good practice examples.</li> <li>• Run national conference on 'The mineral company's contribution to biodiversity'</li> <li>• Establish database of local provenance nurseries.</li> </ul>	<ul style="list-style-type: none"> <li>• Set up programme of site audits for portfolio of sites.</li> <li>• Incorporate audits into restoration procedure/ development planning, and include in mineral site reviews if appropriate.</li> <li>• Include biodiversity within Environmental Policy, EAs and EMS.</li> <li>• Programme audits on a regular basis to monitor trends and achievements.</li> <li>• Make long term plans for evolving habitats to achieve biodiversity levels desired in each period. Link to site award schemes.</li> </ul>	<ul style="list-style-type: none"> <li>• Support National Audit Scheme.</li> <li>• Provide local advice on company/ site basis on case examples.</li> <li>• Provide biodiversity advice and input to industry award schemes</li> </ul>	By 2001	<ul style="list-style-type: none"> <li>• Local Wildlife Trusts</li> <li>• Local Authorities</li> <li>• Environmental Consultants</li> </ul>
<p>5. Become more involved with LBAPs, LEAPS and LA21 initiatives; identify priorities for action.</p>	<ul style="list-style-type: none"> <li>• Disseminate information on LBAP process/contacts etc.</li> <li>• Search for potential partners in action for biodiversity - ensure cross-linkages between representation or input to LBAPs and related LA21s, LEAPs</li> <li>• Capitalise on official recognition of industry and commerce as 'key player' in the BAP process</li> </ul>	<ul style="list-style-type: none"> <li>• Contact Local Authority/ Wildlife Trust re LBAP etc.</li> <li>• Arrange meeting/site visit</li> <li>• Use RSNC database provided on LBAP progress</li> <li>• Find out what LBAP covers</li> <li>• Offer representatives to Industry group/LBAP group</li> <li>• Contribute data on wildlife on company landholdings to conservation bodies' biological databases.</li> </ul>	<ul style="list-style-type: none"> <li>• Local team input where appropriate.</li> </ul>	6-12 months	<ul style="list-style-type: none"> <li>• LBAP co-ordinator</li> </ul>

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