

# HOLME PARK QUARRY LOCAL NATURE RESERVE

## ANNUAL REPORT APRIL 2010 – MARCH 2011

### Introduction

This is the annual report of the Holme Park Quarry voluntary reserve manager. The aim of the report is to detail the progress of the reserve volunteers towards meeting the objectives in the Management Plan, Reference A.

### The Reserve

Holme Park Quarry Local Nature Reserve is a small (4.8 hectares) reserve located South West of and adjacent to the quarry on land owned by Aggregate Industries UK Ltd. The creation of the LNR stems from the 2000 planning agreement under Section 106 of the Town and Country Planning Act 1990. This states that the land will be held under a local nature reserve agreement with Cumbria County Council for an initial term of 21 years.

The land within the LNR is mapped in detail in Reference A. The land forms part of the ring of low limestone fells that surround the head of Morecambe Bay. The geology of Holme Park Quarry influences the character of the area. The site lies upon beds of limestone of Carboniferous age. The woodland, grassland and the pavement communities reflect this underlying bedrock. The bracken dominated vegetation has probably developed on an overlying deposit of glacial drift which has given rise to the deeper soils and more acidic conditions.

The compartments for management are mapped in detail in Reference A. In general the three compartments are as follows:

- Compartment 1: Woodland on limestone pavement in the east of the reserve
- Compartment 2: Grassland with scrub and bracken in the centre and west of the reserve
- Compartment 3: The planted bund acting as a screen to the quarry along the northern boundary of the reserve

## Management of the Reserve

The reserve is managed by local volunteers under the chairmanship of the Cumbria County Council County Ecologist and with the participation of the Holme Park Quarry Manager. However, the aim of a local nature reserve is that it is managed by the local community to foster public awareness of and interest in the local ecology. The members of the local voluntary team take full responsibility for the management of the reserve but would like to take this opportunity of thanking the County Ecologist and the Quarry Manager for their positive support.

The members of the management team during the period of the report were:

Judy Palmer	The County Ecologist	Chairman
Steve Rigby	Aggregate Industries	Quarry Manager
Dan Jackson	Aggregate Industries	
Roger Bingham	County and District Councillor	
Kath Unsworth	Volunteer	
Ann Dale	Volunteer (CWT Reserves)	
Reg Hesketh	Volunteer (Butterflies)	
Tony Wood	Volunteer (Plants)	
Peter Smith	Volunteer (Reserve Manager)	
Kathryn Smith	Volunteer (Secretary to Committee)	
Holme Community School		
Burton Morewood School		

Activity in the reserve is guided by a detailed Management Plan. The current edition of the Plan covers the period 2007 to 2016. It contains a detailed description of the reserve, the flora and fauna, and the management objectives. The plan is available on the Nature Reserve web-site, Reference C.

A much more enjoyable read, also available on the website, is the Education Pack, Reference B, for use by schools undertaking visits to the reserve. The management team would certainly recommend it to anyone with an interest in the natural science of this beautiful area of England. Unintentionally, it also provides reassurance to adults of the high standards expected of children working at Key Stage 2.

## **Our Aim**

It is our aim that in fifty years time Holme Park Quarry LNR will have an area of wooded limestone pavement and a mosaic of open stands of gorse, bracken and limestone grassland. Stands of gorse will have a ground flora of limestone grassland, whilst areas of bracken will have abundant violets but little grass. At least 20 species of butterfly will regularly be present on the reserve, including High Brown Fritillary, Small Pearl-bordered Fritillary and Dingy Skipper. A good range of bird species will breed in scrub and woodland on the reserve, including Bullfinch, Song Thrush, Spotted Flycatcher, Green Woodpecker and Woodcock. The boundary of the reserve will have been extended to include the triangle of land to the South East corner of the current reserve boundary. The reserve will be regularly visited by school parties, whilst an active group of volunteers will carry our reserve management and record the wildlife present.

## **The Objectives**

The Management Plan lists ten objectives to help ensure that we meet our aim. These are shown in the next paragraph along with the activity and progress towards meeting the objective.

### **Activity and Progress Toward Meeting Objectives**

During the period of the report the following activity and progress towards meeting the ten objectives took place:

#### **Objective 1. To maintain the quality of wooded limestone pavement and other woodland within the reserve**

The spread of non-native species in the reserve was monitored and the general health of all tree species was noted. There was no immediate problem with the spread of non-native species. However, the growth of sycamores would be closely monitored in future. Many of the larger cherry trees had died off. Some hawthorn trees were cut to open up transit routes for butterflies.

#### **Objective 2. To maximize the butterfly and other invertebrate interest of the reserve**

Reg Hesketh has continued to conduct a butterfly transect through the reserve. His reports are available on the web-site. In order to improve the environment for the High Brown Fritillary in particular the bracken is

managed to encourage the growth of violets beneath relatively short and weak bracken stands. This year the bracken was bruised with hand tools in the scrub area in the western part of the reserve (Compartment 2), and cut in the cherry glade in the south of the wooded area (Compartment 1). The work was done earlier this year than last year and the bracken had not become as dense. It is generally assessed that the bruising over several years has reduced the size and density of the bracken stands. A ride was cut through the scrub and hawthorn in Compartment 2 to allow a transit route for butterflies from over the bund to the open areas in the centre of the reserve. The effect of this corridor on butterfly numbers in that area will be assessed during the next season. As reported last year it was intended to remove some of the conifers from the bund (Compartment 3) where these were beginning to shade the bund and reduce the growth of the nectar producing plants which had made this such a butterfly rich area. However, on planning this work it was drawn to our attention that the trees on the bund were part of the original planning agreement and were intended to reduce noise. Accordingly plans to remove the trees have been put into abeyance. However, a great deal of the bramble covering the grass on the bund was removed by hand to encourage continuing flower growth in this area.

**Objective 3. To maintain the area of limestone grassland within the reserve**

The grassland continues to develop in the areas cleared of scrub and where the bracken has been thinned but is in retreat in those areas where the bracken or scrub is particularly dense.

**Objective 4. To maximize the bird interest of the reserve, where compatible with other conservation objectives**

The requirement for a bird survey remains an outstanding aspiration. However a local resident, Steve Matthewman, has volunteered to record bird sightings. It is hoped that his reports will be the start of a continuing survey of birdlife in the reserve. We continue to ask volunteers walking through the reserve to note the birds they identify.

**Objective 5. To take into account the dormouse needs on the reserve as necessary**

No activity this year.

**Objective 6. To maintain the enclosed character of the reserve**

Small amounts of scrub clearance were done. This was primarily to control regrowth of gorse, and to keep paths clear and safe. All this work was undertaken with a view to retaining the closed sightlines of the reserve whilst maintaining corridors for wildlife and visitors.

**Objective 7. To manage the access to the site to facilitate quiet enjoyment of the reserve and to provide an educational resource for local schools**

The Education Pack is available in hard copy and CD format. These have been circulated to local schools and schools which have traditionally visited the quarry and reserve. The pack has been published on the reserve website. Quiet enjoyment of the site has been encouraged by ensuring all activity in the site is carried out with hand tools and prohibiting all vehicle access, unless required by the quarry management. It was decided that in the coming year a photographic competition would be held to celebrate 10 years since the reserve was opened.

**Objective 8. To extend the boundary of the reserve to the south-east to existing fence line**

The objective of extending the boundary of the reserve to include the "dead" triangle of woodland in the south-east corner of the reserve remains an aspiration.

**Objective 9. To provide a safe environment both for those working on and those visiting the reserve**

The reserve is now registered with BTCV and a BTCV insurance policy provides cover for all volunteers working with unpowered hand-tools on the reserve. The membership and insurance premium of £112.50 was paid by Aggregate Industries Ltd.

**Objective 10. To fulfill all legal and other obligations and to maintain all estate assets and boundaries**

A Health and Safety policy for the reserve has been agreed and this is recorded in the Health and Safety File which also maintains records of risk assessments, insurance documentation and incidents reports. The risk

assessments are made available to all volunteers to inform their visits to, and work within, the reserve. School visits received risk assessment advice in the Education Pack and casual visitors should read the advice on the gate notice. A new gate notice with updated information is now displayed.

## **Professional Services**

Timberwolf Associates assisted with activities within the reserve with six man-days of work at £120 per day to a cost of £720 and three man-days at £130 per day to a cost of £390, giving a total cost of £1110. Aggregate Industries Ltd was invoiced for this work.

## **Community Volunteers**

The reserve is run by volunteers with varying degrees of knowledge, skill, and spare time. They are united by an enthusiasm for the project and are supported by a committed County Ecologist who provides the very best professional advice, and a Quarry Manager and deputy with equal enthusiasm for this local project and funding allocated to support the reserve. Volunteers are always required. Whatever your level of knowledge if you are enthusiastic about our local environment then please consider joining the team.

Peter Smith  
Voluntary Reserve Manager

May 2011

## **References:**

- A. Holme Park Quarry LNR Management Plan, dated 22 Oct 07.
- B. Holme Park Quarry LNR Education Pack, Cumbria County Council 100019596. 2005
- C. <http://naturereserve.burtonweb.org.uk>