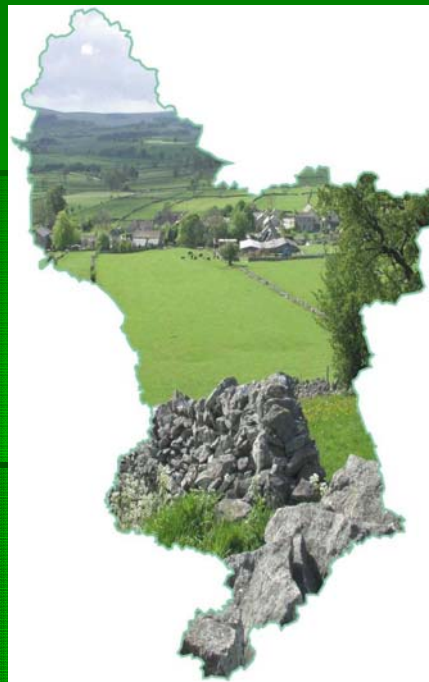


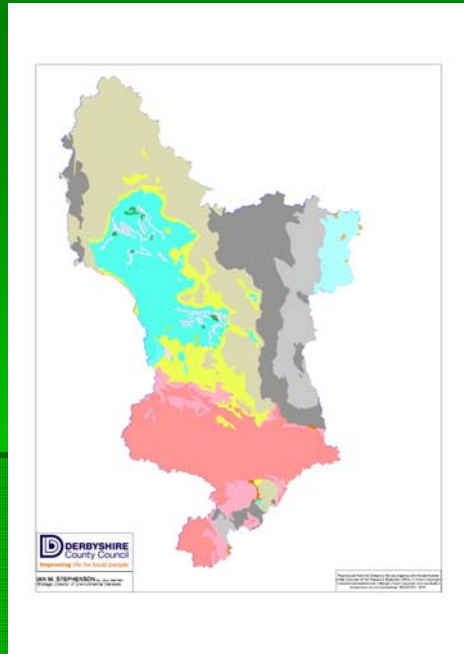
Biodiversity and mineral extraction – the Derbyshire perspective

Tom French
Ecologist
Derbyshire County Council
tom.french@derbyshire.gov.uk



Derbyshire

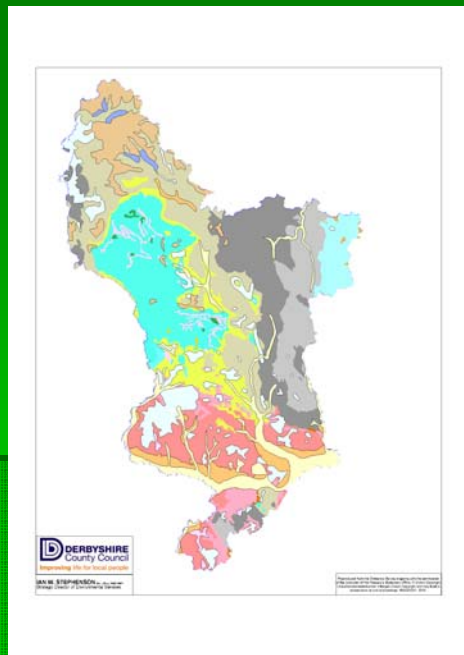




The Geology of Derbyshire - Bedrock

Various...

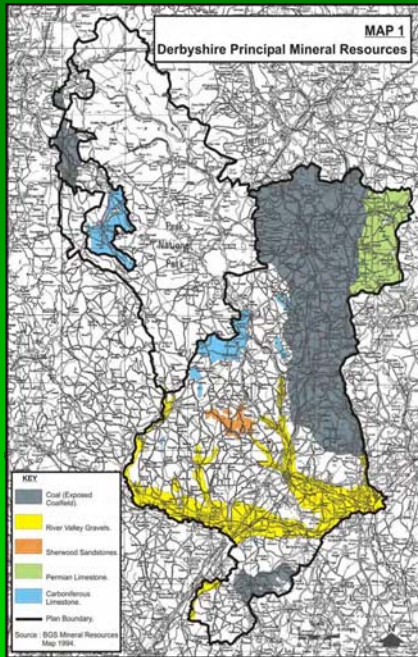
- Limestones
- Coal measures
- Millstone grits
- Sandstones
- Mudstones and siltstones



The Geology of Derbyshire - Superficial

Various...

- Alluviums – clays, silts and sands
- River terrace deposits – sands and gravels
- Tills – glacial deposits
- (Peat)



Mineral extraction in Derbyshire

- Limestone and dolomite
- Sand and gravel
- Coal
- Clay and shale
- Vein minerals – e.g. fluorspar, barytes
- Sandstone and igneous rock
- Ganister, gypsum, silica sand...



Mineral extraction in Derbyshire

- Limestone – 11.6MT/A from Derby and Derbyshire, excluding PDNP – 17% of national production
- Sand and gravel - 1.2MT/A (<2% of national production, locally very significant)
- approximately 1,700 people employed by the minerals industry in Derbyshire (incl. the PDNP)
- c6000 more in related industries?

Habitat creation on minerals sites 2004 – 2010: Woodlands and hedgerows



Between 2004-2010:

- 8.9 Ha of Lowland mixed deciduous woodland (1.78% of LBAP target)
- 11.65 Ha wet woodland



- Around 11 kilometres of new hedgerows planted (20% of LBAP target)

Habitat creation on minerals sites 2004 – 2010: Grasslands



Between 2004-2010:

- Neutral grassland – 6.56 Ha (13.1%)
- Calcareous grassland – 2.8 Ha (11.2%)
- Wet grassland – 12.3Ha (24.5%)
- With much more on the way...

Habitat creation on minerals sites 2004 – 2010: Wetlands



Between 2004-2010, the restoration of minerals sites resulted in the creation of:

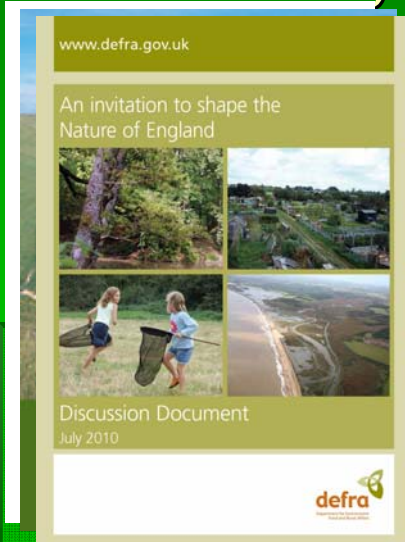
- 9.74 Ha of reedbed (32.5%)
- 11 ponds (36.6%)
- 13 Ha of lakes

Biodiversity, landscape and the LBAP



- Draws on regional landscape characterisation work
- Takes a spatial approach to biodiversity action planning
- Divides the county into action areas, defined by their ecological character
- Provides targets on an area by area basis

Other trends and drivers in biodiversity



- Making space for nature – the Lawton review
 - More
 - Bigger
 - Better managed
 - Better connected
 - Buffered
- Increasing focus on landscape scale delivery
- Forthcoming natural environment white paper

Biodiversity and minerals extraction - summary



- Derbyshire is a diverse county, in terms of geology, landscape and biodiversity
- Mineral extraction is big in Derbyshire, and much is already being done to deliver biodiversity
- Need to maintain the momentum, and ensure ecological benefits are maximised
- Minerals sites can deliver biodiversity in line with current priorities - more, bigger, better connected and buffered habitats
- Biodiversity delivery at the landscape scale
- Delivery of LBAP targets and locally appropriate conservation priorities – the right habitats in the right places – to maximise benefits

