Sub type 3a

Open Farmland and Pavements

Location

This sub type is found along the coast of Morecambe Bay south of Ulverston and west of Grange. Inland they are found around Farleton Knott and between Kendal and Levens. The sub type continues into the national park around Grange and Kendal and is classified as Type C – Coastal Limestone in the Lake District National Park Landscape Character Assessment. There is no sub type in the national park.

Key Characteristics

- Steep scarp limestone slopes, limestone pavement or other rocky outcrops
- Grazed land with stone wall field boundaries
- Rough pasture as open common or fell in higher areas
- Sporadic scrub and woodland on steep scarp slopes
- · Stately homes and parklands in lower areas
- Extensive open and uninterrupted views from high ground

Physical character

This sub type is found on Lower Carboniferous limestone with calcareous brown soils. The landscape has steep scarp slopes, exposed limestone pavement or other rough rocky outcrops. It has similar characteristics to other limestone landscape types, but its coastal associations provide additional distinctiveness. Around the coast these are open, rolling limestone hills rising to between 130m and 230m. Inland the coastal limestone form distinctive scarp and rocky skyline features and rise to around 280m. The sub type contrasts sharply with adjacent lower lying coastal areas.

Land cover and land use

Both along the coast and inland most of the land is improved and semi improved grazing. There is a distinctive and sometimes historic pattern of fields which are strongly defined by a matrix of limestone walls and hedges at lower levels.

There are pockets of scrub, including juniper scrub, and deciduous woodlands associate with both pasture fields and limestone pavement. There are extensive plantations on Hutton Roof as well as extensive areas of bare rock with scrub developing around the edges. Some attractive semi-natural woodland and pavements form distinctive features around Hampsfield Fell, Eggerslack Wood and Curwen near Clawthorpe.

Settlements are generally small and dispersed, with the main settlement being the Victorian seaside town of Grange over Sands. Holme Park Quarry is a significant man made feature in this sub type and can be prominent in views, mainly from the west. Pylons provide some limited vertical features in the landscape.

Ecology

The ecological habitats of this landscape are almost entirely determined by the underlying limestone geology. Where the rock outcrops open limestone pavements support a range of characteristic and rare species, including dark red helleborine, limestone fern, rigid buckler-fern, angular Solomon's seal and lily-of-the-valley.

Pavements also support a number of rare invertebrates, such as the narrow-mouthed whorl-snail. Thin soils over limestone support limestone grassland, including the nationally scarce blue moor-grass grassland type. This grassland supports a range of uncommon plants, including spiked speedwell and is important for a variety of uncommon and rare butterflies, including northern brown crops, high-brown fritillary, pearl-bordered

fritillary, Duke of Burgundy fritillary and small blue. The woods of this landscape are of the upland mixed ash wood type and support a rich flora and fauna including dormouse, mezereon and yew. Juniper scrub is also characteristic of this landscape.

Historic and cultural character

Areas within this sub-type are rich in Neolithic remains, many artefacts such as bracelets and axe heads have been found. Several sacred sites are present. A stone circle exists at Birkrigg Common.

The settlement pattern is nucleated, but mainly became so in the 19th century. The field pattern is mixed but characterised by dry-stone walls with features including bee boles. Many of the farm buildings are traditional and limestone built. There is much evidence of quarrying and numerous lime kilns. Stately homes with parklands are a characteristic. Archaeological remains include evidence of past iron working. Iron Age and Romano-British settlement sites are characterised by well preserved extant earthworks. Medieval stone buildings occur sporadically. The remains of former quarrying occur throughout.

Perceptual character

A larger scale more open landscape than other coastal limestone landscapes. The farmed areas have a managed feel due to the improved pasture and neat stone walls displaying the underlying geology. These contrast with the rougher semi improved pasture. The dramatic limestone pavements provide shelter to many plants and species but have a wilder unmanaged feel to them. This is a rare and unusual landscape which is varied and interesting due to the range of limestone features and the strong sense of history derived from pre-historic features and medieval enclosure patterns. There are large expansive views from higher parts of the landscape. The undeveloped nature and uninterrupted views to the Lakeland Fells, Yorkshire Dales and across the coastal plain and mosses to Morecambe Bay provide a feeling of openness and exposure to the elements and seasons and the dramatic skyline above and seascape below.

Sensitive characteristics or features

The high ecological value of wooded pavements, outcrops and limestone grassland are sensitive to changes in land management practices. The small dispersed settlement pattern could be sensitive to unsympathetic village expansion. Prehistoric features, medieval enclosure patterns, the strong matrix of limestone walls and hedges and limekilns are sensitive to changes in land management practices. The openness in higher parts and long uninterrupted views to the Lakeland Fells and across Morecambe Bay are sensitive to large scale and infrastructure development.

Vision

The high scenic quality of these limestone hills will be conserved and enhanced. Development proposals will respect the open unspoilt tops and commons and will avoid causing disruption in the lower-scale patterns of farmland, woods and villages. There will be support for the maintenance of key components such as the historic pattern of small fields, stone walls and hedges in the lower areas. Limestone pavements, calcareous grasslands and ancient semi-natural woodlands are important components and will be conserved and enhanced through positive measures and management practices will improve in relation to grazing levels and recreation.

Changes in the Landscape

Over the next 10 - 20 years this landscape could be subject to the following changes or issues:

Management Practices

- Agricultural improvements including fertiliser application and reduction in grazing have reduced species diversity in limestone grasslands and led to the invasion of scrub.
- Pressure to extend quarries could further influence distinctive characteristics. In the past the removal of limestone pavement badly damaged an irreplaceable landscape feature and wildlife habitat. However, this now enjoys protection through Limestone Pavement Orders.

 Changes to the sheep farming economy could result in changes in management practices leading to either intensification or abandonment.

Development

- As part of the Government's response to Climate
 Change there could be interest in the development
 of large scale wind turbines in the higher and more
 exposed parts. These could erode the open character
 of the area and affect the settings of national
 landscape designations.
- The attractiveness and proximity to major towns has resulted in pressures to expand the historic villages; this may continue in order to support housing and economic growth.
- Planned and incremental expansion of villages and towns could result in a loss of vernacular character, the small dispersed settlement pattern, and a proliferation of settlement fringe development. This could erode the distinctive character of the area.

Access and Recreation

- Over the next decade, the planned implementation of enhanced access to the whole of the English coast could result in some disturbance to wildlife in sensitive locations at certain times of the year.
- Coastal access will be improved to support the coastal open access programme. Space will be needed to allow the route to shift in this dynamic area and in response to any future coastal erosion.
- An increase in visitor numbers and the roll out of coastal access could result in additional recreational pressures. If this is the case, it may need to be better managed to maintain paths in a good condition and enhance local landscape features.

Guidelines

Natural Features

 Manage limestone pavement and species rich grassland to improve their biological diversity including controlled light grazing, appropriate control of scrub and bracken and discouragement of fertiliser use and control of poor woodland management on the limestone pavements to reduce damage. Established stands of dwarf shrubs such as juniper should be protected and natural regeneration encouraged.

- Manage public access to limit disturbance to wildlife and sensitive habitats and improve awareness of natural features.
- Reinforce existing woods by appropriate management including traditional coppice working, natural regeneration, restocking and exclusion of stock.
- Conserve and manage scrub where it relates to characteristic vegetation patterns and provides valuable wildlife habitats. This may include rotational cutting to encourage a diverse structure or development to restore relic ancient semi-natural woodland.

Cultural Features

- Discourage field enlargement and introduction of fences to replace or gap-up walls and hedgerows.
- Restore and manage limestone walls and hedgerows using traditional methods.
- Protect selected features including remnant medieval 'strip fields' around villages.

Development

- Preserve the distinct historic forms of settlements and intimate relationship to the scale and form of the landscape.
- Protect uncluttered skylines and key views to and from the area from large-scale energy infrastructure developments such as large scale wind turbines, pylons or telecommunications masts.
- Resist expansion of quarries where these will produce prominent scars or destroy irreplaceable features and habitats.
- Ensure quarries have high quality restoration schemes that support the expansion of semi-natural habitats.
- Ensure new developments respect the scale, traditional form and materials of villages and do not infill important open spaces such as orchards and gardens integral to their character.
- Enhance settlements through sensitive environmental improvements to village greens, ponds, lakes and other features.

Access and Recreation

 Support the roll out of coastal access and encourage sensitively sited coastal access and recreational infrastructure. Coastal access footpaths, areas and facilities should be improved and developed to be compatible with the undeveloped and natural character of this sub type.

- In line with the Marine and Coastal Access Act consideration should be given to routing coastal access footpaths along appropriate sea defence structures.
- In areas where coastal access will introduce new routes, appropriate access management may be needed in sensitive locations at certain times of the year to minimise disturbance to wildlife.
- Manage public footpaths through better waymarking, improved gates and gaps and appropriate surfaces and better interpretation, whilst retaining the open and comparatively wild character of the landscape.
- Preserve the distinct historic forms of settlements and intimate relationship to the scale and form of the landscape.