

County: Lancashire **Site Name:** Thrang End and
Yealand Hall
Allotment

District: Lancaster

Status: Site of Special Scientific Interest (SSSI) notified under Section
28 of the Wildlife and Countryside Act, 1981.

Local Planning Authority: Lancaster City Council

National Grid Reference: SD 490763 **Area:** 49.137 (ha) 122.913 (ac)

Ordnance Survey Sheet 1:50 000 97 **1:10 000** SD 47 NE

Date Notified (Under 1949 Act): 1979 **Date of Last Revision:** –

Date Notified (Under 1981 Act): 1987 **Date of Last Revision:** 1987

Other Information:

1. This site lies within the Arnside-Silverdale AONB.
2. The site boundary has been revised by partial deletion on renotification.

Description and Reasons for Notification:

This site, situated 3 km north-east of Silverdale in the Arnside–Silverdale Area of Outstanding Natural Beauty, contains the largest area of limestone pavement, a nationally rare rock formation, in Lancashire. A wide range of habitats, including calcareous and acidic grasslands, bracken, heather, hawthorn and hazel scrub and woodland, is provided by the varying degrees of dissection and tree cover of the pavement, and the presence of both base-rich soils and areas of deeper, more acidic glacial drift. Over 200 plant species have been recorded, including a number of species with a restricted distribution, and Yealand Hall Allotment is an important locality for butterflies with several uncommon species being present.

The limestone pavement is divided by tongues of glacial drift into several gently sloping sections running approximately north–south. Water has eroded its surface into a series of blocks (clints) separated by channels (grikes), which provide a sheltered environment for many plant species. These include lily-of-the-valley *Convallaria majalis*, mountain melick *Melica nutans* and the notable species blue moor-grass *Sesleria albicans*, spring cinquefoil *Potentilla tabernaemontani* and spring sandwort *Minuartia verna*. Ferns grow particularly well in the grikes, including three uncommon species: southern polypody *Polypodium cambricum*, limestone fern *Gymnocarpium robertianum* and rigid buckler-fern *Dryopteris villarii*. The grikes on the southern pavement are shallow, with broad, flat clints contrasting with the deeper and narrow grikes in the northern section. Some removal

of the stone has taken place in the past, particularly at Thrang End, resulting in damage to approximately a third of the pavement. Trees and shrubs such as ash, yew, buckthorn *Rhamnus catharticus* and wych elm also occur on the pavement, giving way in places to hazel and hawthorn scrub.

On and between the sections of pavement where the soil is thin and base-rich a calcareous grassland has developed which is dominated by the nationally scarce blue moor-grass. Elsewhere, where the soil is thicker but still base-rich red fescue *Festuca rubra*, crested dog's-tail *Cynosurus cristatus*, sweet vernal-grass *Anthoxanthum odoratum* and quaking grass *Briza media* are the characteristic grasses. This grassland has been semi-improved in places but supports a great diversity of species including moonwort *Botrychium lunaria*, lesser butterfly-orchid *Platanthera bifolia*, autumn lady's-tresses *Spiranthes spiralis* and field gentian *Gentianella campestris*, all uncommon species in Lancashire. Where pockets of glacial drift have given rise to deeper, more acidic soils areas of acidic grassland, heather, bracken and hawthorn scrub are found. The scrub, dense in places, extends onto the pavement and is a particularly common habitat in Yealand Hall Allotment, providing cover for mammals and birds including lesser whitethroat and tree pipit.

This site is also noted for its importance to butterflies with over 20 species having been recorded including the rare or locally uncommon holly blue, purple hairstreak, Duke of Burgundy fritillary, high brown fritillary and large and small pearl-bordered fritillaries.