

Location & Access

OS: 130 • GR: TF 000 150 • 4.00ha (10.00 acres) • Freehold 1985 Habitat type: Grassland

The reserve consists of a small meadow and restored limestone grassland on the east side of the minor road from Holywell to Pickworth close to the county boundary. Access is via a broad track at a wooden gate.

Description & Management

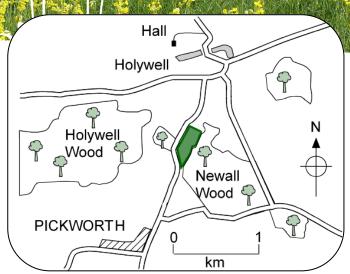
Restoration of this ancient grassland site has been a major project. Flowers typical of limestone grassland and butterflies are beginning to return.

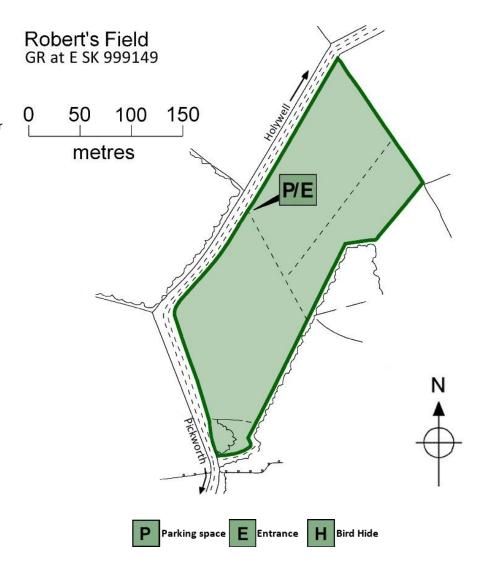
The Trust has had a 1-acre meadow reserve here, under a management agreement with the Forestry Commission, since 1985. The remainder of the site, which was formerly limestone grassland, was planted with conifers in the 1960s despite its SSSI status and the Trust's efforts to save it. The remaining portion of a long lease was purchased from the Forestry Commission in 1991.

Robert's Field was once the finest butterfly site in Lincolnshire, with at least four species now extinct in the county. The surviving grassland retains many characteristic limestone plants, including pyramidal orchid, clustered bellflower, autumn gentian and rockrose. There are still a few of the grassland butterflies and it is a noted inland site for the green hairstreak.

The Trust embarked on a plan to restore Roberts's Field to limestone grassland in 1994. The conifer trees were felled and the roots dug up and burnt. The ground was levelled and reseeded with hay seeds from local limestone grassland.

Current grassland management comprises of a mixture of hay cutting and sheep grazing. Many of the butterfly species that were present in the 1950s have now returned.





History

The area was designated as a Site of Special Scientific Interest (SSSI) in 1951. Letters written in the 1950s and kept in the Trust's archive tell the tale of the desperate attempts to prevent the afforestation that destroyed much of the original grassland area. So, what was it like then, and why was it so important to try and save it?

In July 1955 Miss Julia Laptain, writing on behalf of The Nature Conservancy (now Natural England) wrote: "This 10 acres of scrubland is probably the last remaining piece of unkempt, calcicolous grassland in southern Lincolnshire (and Rutland). Its loss would seem to be irreparable as it is a very definite habitat type and offers as much to entomologists as to botanists."

In August 1956 Ted Smith, then Honorary Secretary of the Trust, described it as a piece of "rough calcareous grassland adjacent to oak-ash woodland, a type of habitat now extremely rare in Lincolnshire." He goes on to say: "No fewer than 25 species of butterflies have been recorded and it is probable that at least half a dozen others occur. Those already recorded include the chequered, dingy and grizzled skippers, brown argus, Duke of Burgundy, green hairstreak, pearl-bordered and silverwashed fritillaries and marbled white."

By this time chequered skipper and marbled white were already becoming scarce in Lincolnshire. Chequered skipper, pearl-bordered and silverwashed fritillaries are now extinct in Lincolnshire. Marbled white and Duke of Burgundy butterflies are now extremely rare in Lincolnshire.

But, in common with many other wildlife rich areas of grassland, most of the site was eventually ploughed and converted to woodland. It was planted with oaks in 1957, but when these failed they were replaced by Scot's Pine in 1963. The small remnant of grassland that was retained gradually lost most of its rich butterfly fauna, the last Duke of Burgundy and chequered skippers were recorded in 1959, the last marbled white and silver-washed fritillaries being recorded in 1972, for instance. The site was

denotified as a SSSI in 1987, having lost most of its wildlife value. However, the remnant of grassland did retain much of its botanical interest, and kept alive the Trust's connection with the site.

Restoration

The reserve was entered into the government funded Countryside Stewardship Scheme (CSS) in 1994. This 10 year scheme part funded the restoration of the grassland and hedges.

The grassland restoration was carried out in two phases. Starting in January 1994 the first phase involved felling the 2,200 pines from the 3.3 acre plantation below the remnant of 'old' grassland, in the northeastern half of the reserve. Tree roots were excavated and the site power harrowed to prepare a seed bed. In July grass cut from the 'old' meadow was spread over the top part of the cleared area. Hay from other nearby sites was spread over the lower parts of the area. Germination resulting from seed dropped from the hay was variable. The 'old' meadow was cut again in July 1995 and hay spread over the still bare lower part of the meadow. By September 1995 it was clear that the restoration process was well under way.

The process was repeated for the phase 2 area, the 4 acre to the south-west of the site. The 2,730 pines were felled in February 1996. A rather late hay cut taken in August from a nearby meadow gave a very poor result. So poor in fact that the whole area was sprayed with herbicide in May 1997, and we started again. This time hay was cut from the phase 1 and old meadows in July 1997 and spread over the field, which by then had been power harrowed. The result second time around was very good and by the September a good coverage of grasses had been achieved.

The restoration process concentrated on getting a good coverage of grasses. But, by using hay as a seed source many wildflower species were also sown. Initially the grasses grew vigorously, but by taking an annual hay cut some of the vigour can be reduced. Yellow rattle (Rhinanthus minor) is semi-

parasitic on the roots of grasses, so also helps reduce their vigour. The orchids take a few years to get established, but now the restored grassland areas are rich in wildflower species, including 5 species of orchid.

Hedge restoration

The north-east boundary hedge was planted during the winter of 95/96. Laying the roadside started in the winter of 1995 and was completed during the winter of 1997/1998.

The restoration process could not have been done without the funding from the CSS, but most of the work was done by local volunteers. Between 1994 – 1997 volunteers clocked up around 2,000 hours work on the reserve. The Trust would like to thank them and local farmers who gave their time and lent machinery so we could carry out the work.

In 2004, the CSS agreement was extended for another 10 years, and under that scheme laying the roadside hedge for a second time was completed in 2012.

Current grassland management comprises of a mixture of hay cutting and sheep grazing. The ultimate goal is to move to sheep grazing alone. This will allow for scrub to develop, and perhaps also allow the return of some of the butterfly species that were present in the 1950s.