## Introduction

Upwood Meadows consists of three small fields, Helen's Close, 2.04 hectares (5.05 acres) Bentley Meadow, 2.11 hectares (5.23 acres) and Little Bentley Meadow, 1.70 hectares (4.21 acres). Together, the area is 5.9 hectares (14.5 acres) in extent. They lie on a badly drained calcareous clay soil derived from the boulder clay. They have an outstandingly rich and diverse flora. This type of pasture was once widespread in the Midland clay region but has almost disappeared as a result of ploughing and herbicide applications, so that the few remaining areas are of the highest importance. The opportunity to purchase the site arose in 1977, the vendor being guaranteed the grazing rights until his death as part of the deal. The Wildlife Trust purchased Upwood Meadows in 1977 and on April 1st entered into a nature reserve agreement with the Nature Conservancy Council, giving the site National Nature Reserve status. The formal declaration of the site as a National Nature Reserve was made in April 1980.

## History

Like most other grassland sites in Britain, documentary evidence for Upwood Meadows is scant and fragmentary, and we have to rely on field evidence, as well as documentary sources, to reconstruct its past. We are fortunate that Upwood, like many other parishes in Huntingdonshire, belonged to the powerful Abbey of Ramsey. The Abbot and monks liked to keep an eye on their properties and at intervals of time had inventories made of their land holdings, rents, and customs, which were recorded in the Abbey's documents.

In September 1252 an Inquisition was held in Upwood and Great Raveley which gives a detailed description of the ownership and state of the land in these (and other) parishes. Among the holdings belonging to the Abbot of Ramsey, one Ranulphin, is included "a little furlong in Benetimede". The noted authority on the Ramsey Abbey Cartulary, Professor J.A. Raftis has suggested that the 13th century "Benetimede" is the name given to the same piece of land known as Bentley Meadow from the early 18th century onwards, which today forms part of Upwood Meadows.

What was the land-use of Upwood meadows at the time of the 13th century inquisition? Was it arable or grassland? We have no direct means of answering this question. We know from the Cartulary and from numerous field remains today, that the open fields of Upwood were once extensive, taking in land which even today is wet and not suited to arable cultivation. All three fields, which make up Upwood Meadows, contain clear evidence of broad-rig ridge and furrow ploughing. Two of the fields have since been further cultivated and the ridge and furrow partly destroyed. In Bentley Meadow, which contains the greatest richness of flowering plants, there is clear evidence of the "reversed S" type of ridge and furrow cultivation. Following years of debate, it is now widely accepted that these curved plough strips were formed by eight oxen yoked in pairs. To plough a straight furrow would need a wide headland on which to turn. This would result in a large amount of wasteland. To overcome this the plough strips or "lands" curved at their ends so that the whole team of oxen would continue to pull their weight until the plough reached the end of the furrow. The oxen could then walk out onto the narrow headland at right-angles to the general alignment of the strips. When this was completed the front oxen could be led round to re-enter the land. Continually turning the soil the same has created the ridges (and hence furrows), partly to improve the drainage, partly as a means of delimiting the individual strips in the open fields. In Bentley Meadow the ridges are mostly 10metres apart (two pole widths), and show all the classical features of oxen team ploughing.

As ox teams were not used extensively after the 16th century, the ridges we see today were clearly formed before then, and, although we cannot be certain, it seems likely that they were formed at a time when the population was expanding and arable land was in demand. The most likely time for their formation was before the arrival of the Black Death (circa 1349). Following the series of plagues which made up the Black Death, the population in Huntingdonshire fell between a third and a half, and it seems likely that the poorest arable land was then abandoned, to become "fallen down" or self-sown grassland. Was the northern part of Bentley Meadow, which is flat and may never have been ploughed, the seed source for the previously arable land which today is so rich in species? We are unlikely to obtain clear answers to these questions, but the size and shape of the ridges is clear evidence that no subsequent ploughing has taken place and that these fossilised field systems are indeed ancient.

The next reliable documentary source regarding the state of Upwood Meadows appears in 1711. The estate of John Blimston was being claimed by his wife and includes "four acres called Bentley Meadow". At a similar court in 1757 John Hanger had died and his relative Mary Young applied for possession of his property. Among his holdings were "three closes of pasture land, one called Corner Close, one Bentley Meadow and one Nostall. This provides clear evidence that, in 1757, part of Upwood Meadows was grassland. In 1789 with the death of a customary tenant, the tenancy was surrendered and among the list of holdings was "also all that one messuage with a pightle and one pasture called Bent or Bentley Meadow". In 1839 the Tithe Award map shows all of the present day Upwood Meadows as grassland. The Enclosure Award of 1853 shows the area as grassland with the following details in the Award document.

Owner	Nos.	Acres	Roods	Perches
Robert Wright Bentley Meadow	1088	3	0	35
Little Bentley Meadow	1089	0	3	16
Edward Fellows Bentley Meadow	1090	4	3	36
Helens Close	1132	4	0	13

The use of the same name, Bentley Meadow, to include two adjacent pieces of land (Nos. 1088 and 1089) is confusing and may mean that the Hawthorn hedge which separates the two areas now called Bentley Meadow and Little Bentley Meadow is of 19th century origin, the whole area being known previously as Bentley Meadow.

In 1919, Lt. Col. A. Mowbray sold Upwood Estate by auction. Lot 7 included "three useful enclosures of accommodation grassland being numbers 88, 89 and part 34 on the plan, extending to some 13 acres, 3 roods and 32 perches". Numbers 88 and 89 were let to Mr Kidman on a yearly tenancy, of £16 per annum. The evidence from the sale of the estate and from verbal accounts of elderly inhabitants of Upwood village, it is clear that the present nature reserve was used as rough grazing from the turn of 20th century to the present time. Because of its low-lying situation, and because it was in the ownership of small farmers, some of whom lived at a distance from the site, it escaped reclamation by ploughing.