

The Dry Drayton environment and change

Geology and soils

The parish of Dry Drayton, situated about 6 miles NNW of Cambridge, lies mostly upon gault clay overlying chalk, which is itself overlaid by boulder clay in the south and on the higher ground in the north of the parish. The former extent of the parish was 2421 acres, but in 1966 350 acres in the north-west corner were taken out by the Bar Hill development, with another 7 acres being added between 1982-85.

The land slopes steadily upward towards the south from only 15 m (50') near the A14 to over 65 m (200') by the southern parish border by the A428. There are two streams within the parish: Caldwell (Callow) Brook, named in 1418 (but probably earlier, by the 1320s) and Dam Brook in the west, recorded in 1331. These streams carved out valleys each side of a central ridge, on which the village stands.

Land use and change

The parish is mainly devoted to arable farming, with the majority of this land belonging to Scotland and Rectory Farms. Formerly this farmland was cultivated on a triennial rotation until enclosure in 1808-11. Before enclosure, the parish land comprised three large fields : Long Field, Stone Field and Callow Field, each being about 600 acres in size. The village lay in the centre where the three fields met. In 1794 there were about 1000 sheep in the village, with cows and horses also being kept on the common. Enclosure was an event which significantly changed village life (and almost certainly its wildlife) at that time, since it affected almost the whole of Dry Drayton parish. Land ownership was now divided into a larger number of plots, with smallholdings (up to three acres) in the village centre and larger plots outside this. Today, nearly 90% of the field boundaries in the parish are the same as at enclosure, although many hedgerows marking these boundaries have been removed in the late 20th century. The wheel is thus going almost full circle, with today's very large arable fields being somewhat reminiscent of the open field system before enclosure.

The landscape changes of Dry Drayton over the past 250 years can be followed on old maps and aerial photographs. The oldest map I have been able to trace is the hand-coloured one of 1740, surveyed by John Davis for the Duke of Bedford's estate (which is kept in Cambridge University Library), which shows just the centre part of the village with the names of the fields (e.g. Kitchen Close Piece, Horrage Leys, Mill Brow Close) and roads. Some of the open fields are divided into strips. The most remarkable feature is the long double row of trees from the south towards the manor house on The Park, perhaps a grand avenue.

There is a pre-enclosure map (not dated) in the County Record Office at Shire Hall, Cambridge. This shows some of the fields already divided into small parcels or 'inclosures' and allotments, with the names of the proprietors, the land sizes and whether they were copyhold (Crowland or Coventry) or freehold, together with land rights and tithes. Roads (widths 30-40 feet), buildings, footways, bridleways, streams and ponds are shown, but it is hard to get an idea of the how the natural landscape might have looked at that time. Besides the two large buildings on The Park there is the adjacent long rectangular pond, and small woodland blocks to the south-west and south-east of the church. There is a curious water feature shown in the area of what is now Bar Hill, consisting of an irregular branched pattern, but quite unlike a duck decoy, for example. No woodland is featured on the southern boundary of the parish against the Cambridge to St Neot's road as the map pre-dates the planting of Whitepits Plantation.

An 'inclosure map' of 1811, also in the County Record Office, shows the centre of the village fully divided now into small inclosures and allotments, again with land tenure names. According to this map, John Haggerston and the Reverend Samuel Smith were the major landowners at the time. Roads, footpaths, streams, boundaries and buildings are all shown and there are the two copses to the south-west and south-east of the church still marked, together with another

woodland block on what are now fields at Duck End Farm. Apart from this and the aforementioned curious water feature, there are relatively little natural features shown and there are no other woodland plantings as yet.

The village 'closes' covered 220 acres of the central part of the parish in 1810. In the north of the village beyond Long Lane these closes occupied former open field furlongs and would have comprised old pasture, now all but disappeared due to modern development. The Park, in the centre of the village and formerly the site of the old manor house demolished in 1817, has been used as grazing land since the last century. It is covered by a series of earthworks from the days of the manor and its gardens and a rectangular moated site, a hollow way and ridge and furrow systems can be traced.

The most valuable map of the parish in terms of historical landscape detail is the Ordnance Survey map of 1887 (surveyed in 1886), as this depicts the parish shortly after the time of Walker's book. It is at a scale of 25" to the mile (1:2500) and, as a result, shows all the trees and individual buildings. Many trees line both sides of Scotland Road and there are trees around many of the field boundaries too. More trees are shown to the south of the church (Lord's Spring, Rook Grove), as well as the new plantations (e.g. Newroad Plantation, Fishpond Plantation, Blackthorn Spinney). The Rectory grounds are well-wooded with both coniferous and deciduous trees and there are numerous other trees in the village centre, especially along Long Lane and Butcher's Lane. Smaller fields are the feature here, with small 'closes' shown along the north side of Pettitts Lane, and larger fields towards the outer parts of the parish. All the land parcel numbers and sizes are given, usually corresponding to the fields themselves, ranging in size from just over one acre to more than 54 acres in extent. A number of ponds are clearly visible.

The Ordnance Survey map of 1926, based on the 1886 map with revisions, is also at the 1:2500 scale but has less natural detail. For example the trees along the roads or field edges are omitted, but there are now two new large orchard areas shown on Chivers' land adjacent to Madingley Road and to the south of this. The hand-coloured 1950 OS land use map captures the parish just before the era of agricultural intensification. The patchwork of smaller fields is still present and several orchards are shown. Lord's Spring and Rook Grove are still there but the latter had become a scattering of trees by this time. The wooded area around the old rectory, Icehouse Grove and Sheepfold Spinney appear much as they are today and there are still a number of field ponds.

There are aerial photographs of the village centre taken in the summers of 1947 and 1949, showing a field of view about 1.5 km² (about 1 square mile). The earlier one has better definition, but both depict the network of small fields, the old line of the main road with its seven bends, hedgerows and orchards, including a large orchard to the west of The Plantation. Large elm trees are standing in the field to the south of the church and along Scotland Road. What is now one large field on the south side of Pettitts Lane was formerly five small fields on the 1949 photo. In fact up until about this time the land in and immediately surrounding the village was permanent pasture, much of it divided into small enclosures. John Hacker recalls the village sitting in the middle of an oasis of permanent grassland covering almost 300 acres, the only cultivated land being in the cottage gardens and allotments. In his collection of writings 'Dry Drayton Remembered', John vividly describes *'the meadowlands with their tall and overgrown hedgerows, usually interspersed with forest trees, provided shade and shelter, not only for farm animals, but for the whole kingdom of nature, which flourished in harmony with man's rustic husbandry. These small closes were veritable sun-traps, each a secluded paradise in which flowers flourished in variety and profusion, amongst mole-hills and ant-heaps. Bees, butterflies and myriads of their insect cousins sang and danced, lived and died. Birds and animals relaxed and basked in the tranquillity of high summer, recovering from the demands of parenthood. All enjoyed feasting in the season of plenty; this autumn abundance was so bountiful that it spilled over into the winter in sufficient quantity to attract seed- and fruit-eating migrants to replace the insect-eating visitors of the summer. Agriculture lived on close harmony with nature before the calculated ruthless application of modern technology'*.

Another aerial photograph taken in August 1962 covers a similar land area to those of the earlier aerial views and shows Scotland Road, Rectory Farm, High Street and the top of the drift. There is no Cotton's Field development as yet and there are fewer houses along the High Street. The wooded area around the Coach House, old rectory and Icehouse Grove shows well and the striping of old pasture (probably ridge and furrow) at Derrymore House grounds is clearly visible in the early evening sunshine, there being long shadows slanting to the east in the photo. Just to the west of the old rectory the three smaller fields, few isolated trees and dividing hedgerows of the 1949 view have now become one large field without trees by the time of the 1962 photograph. A new pylon line now marches across the fields. Such changes, all too easily forgotten in human lifetimes, can remind us of a landscape now lost. Looking down into these early aerial photos is like a window into the past.

In 1999 a series of coloured aerial photographs of the village were taken from a helicopter. Some views give the impression of dwellings nestling in among the trees, the whole village hemmed in by the large surrounding 'prairie' fields. Deep woodland cover still surrounds the vicinity of the old rectory. The old grassland mosaics of The Park and horse pasture adjacent to Long Lane contrast starkly with the bright green cultivated grassland nearer the houses and dark striped post-harvest arable fields in the surrounding countryside. Hedgerows appear very sparse. The built-up area of Bar Hill glowers on the horizon in many views. Today's Dry Drayton landscape looks well-tamed and lived-in.

Crops cultivated today include barley, wheat and sugar beet. These harbour little wildlife. In the 19th century and earlier part of the 20th century the orchards would have been home to a range of insects and birds which are very dependent on old fruit trees and their associated grassy swards. Mostly these are now virtually gone, with very few attractive old apple and pear trees left forgotten in corners of the village. The last sizeable modern commercial orchard owned by Chivers was grubbed out in 1999.

Human population

The human population has grown fairly steadily, with minor fluctuations, since 1086 when there were 52 inhabitants in Dry Drayton, to 122 in 1676, 376 in 1800, 323 in 1901 and 886 in 1981. The population has remained fairly stable over the last 20 years. In 1810 there were 36 houses, including six farmhouses, but by 1981 this had risen to 205 dwellings.

Part of The Park was excavated by Mike Sekulla in the late 1970s and the archaeological results are recorded in the Cambridge Antiquarian Society Proceedings. Among the human artefacts discovered were oyster, cockle, mussel and whelk shells, testifying somewhat to the dietary habits of the former manor occupants, plus a number of seeds of crops and wildflowers. Two of the latter are interesting in that the plants are not now present in the area : *Echium vulgare* (Viper's Bugloss) and *Lolium temulentum* (Darnel, a rare species of grass).

Trees and plantations

No ancient woodland survives in the parish, but there are a few 19th century plantations, which totalled 58 acres in 1905. These also included Carlisle Wood (31 acres) established by 1900 on the SE border but cleared in the 1920s. The remaining parts of these plantations comprise places such as part of Icehouse Grove, adjacent to Derrymore House, The Plantation connecting the northern part of the village to Bar Hill, Top Plantation on the boundary of Scotland Farm with Childerley parish and Whitepits Plantation against the A428 road. Many of these are important refuges for wildlife as they provide oases of shelter in an otherwise very open arable landscape.

At the time of Walker in the last part of the 19th century the trees were chiefly oak, ash, lime, elm, poplar and willow. In the Rectory grounds there were a great variety of cultivated plants and shrubs and this area was well-known at the time for its walnuts and roses. Walker mentions several Scotch and spruce firs in Blackthorn Spinney and a great deal of privet there. The area known as 'Three Corners' consisted mainly of larch. There were some ancient hawthorns of

large dimensions in the last field adjoining Scotland Farm at that time. He noted that, on the whole, there had been an increase of copse and cover compared with the time of the previous generation. Spinneys (which was the name Walker used for the plantations) totalled 10 in number on the rector's glebe in 1876. Some of these were named after the trees of which they were comprised : Oak, Ash and Larch Plantings, Home and Icehouse Spinneys, The Three Corners (also containing a large fish pond) and Blackthorn Spinney. The last was the largest in extent, at 11 acres and even at that time was a noted cover for foxes, being well-known to the Cambridgeshire hunt. Walker records that seven species of orchid grew in one or other of these spinneys, which were mostly planted within the previous 30 years (i.e. since about the 1840s).

We have no really old trees in the parish now and the former elms which were such a feature up until the 1960s are now nearly all gone, victims of Dutch Elm disease. Surviving examples at the time of writing include a line of elms at Duck End Farm, a fine specimen to the south of the church and some ancient trunks along Long Lane. The last remains of the fallen elm avenue leading up to The Park (which appears on the Duke of Bedford's estate map of 1740) lie in the rough grassland with old sheds alongside the road to Madingley just past the church. There are also some fine large specimens of Field Maples in the grounds of Derrymore House plus one in Long Lane, with some good specimen trees of various species in the central part of the village, which date from the 19th century. A number of sizeable oaks, (though no really old examples) grace The Plantation and there are some old pollard ash trees in the hedge on the boundary with Madingley parish.

Ponds

Walker describes eight ponds in various parts of the glebe, those in the centre '*united by a water course fringed by willows for a considerable distance*' and another 12 (at least) in the village. He cites Maddle Pond at the bottom of the drift in the direction of Lolworth, which would be somewhere in the vicinity of the pond at the Bar Hill nature reserve today, being the lowest point of land. Here two members of the Baptist chapel were baptised by immersion on 10th May 1874 '*a very cold Sunday, the unusual spectacle drawing a large concourse of people from the neighbouring villages*'.

There were over 40 ponds of various sizes in the parish on the OS map of 1926, many being created by the digging of clay for building purposes and they played an important part in the life of the village, providing sources of water before wells or piped water became available.

Today there are two ponds on the Park, one of which always contains water and has the remains of a retaining wall on the west side. The other is seasonally wet, but both are important aquatic habitats, with some interesting associated plants. There are a number of ponds that have been excavated in recent times on people's property, the largest of which is on Ruth and Bob Edwards' land at Duck End Farm, adjacent to Madingley Road, as well as some longer surviving examples at the Coach House and Solway. A large pond also survives behind the house at Scotland Farm.

Hedgerows

Hedgerows are important wildlife habitats, but in the main are much changed from their former status. Today's management of hedgerows is not conducive to the welfare of wildlife since they are either flail mown from tractors as a matter of expediency, being reduced to a mass of shattered twigs a metre or two in height, or are totally neglected, when they begin to lose their vigour after some time and begin to die off in parts leaving gaps. The better examples of hedgerows of some wildlife value today are along the lane from the end of High Street towards The Plantation and on parts of Madingley Road, plus along some of the footpaths (e.g. Long Lane).

Previous ecological surveys

In addition to the information on the wildlife of the late 19th century parish in the Reverend Walker's book, there have been one or two more recent ecological surveys conducted in parts of the parish. For example, two landscape and wildlife surveys were carried out at Scotland Farm, in 1973 and 1986, and the county Wildlife Trust surveyed areas of potential wildlife value as part of its Phase 1 habitat survey of the county in the early 1990s.

The 1973 Scotland Farm survey by the Cambridgeshire and Isle of Ely Naturalist's Trust (CAMBIENT, now The Wildlife Trust for Cambridgeshire, Bedfordshire and Northamptonshire) recorded over 180 species of plant, including such gems as Round-leaved Fluellen, Common Spotted Orchid, Corn Gromwell, Restharrow, Dewberry, Sanicle, Alsike Clover, three poppy species and four species of *Veronica*. Some of these plants were survivors of old arable cultivation systems, in the days before clean seed stocks were usual. Four ponds were present on the farm at this time, although only one was rich in wildlife, containing Water Crowfoot, Floating Pondweed and Horned Pondweed, with Purging Buckthorn on its edge. There were 12 species of mammal (all single records except Brown Rat) and a total of 49 bird species were found, including occasional Corn Bunting, Marsh Tit, Redpoll, Turtle Dove and Tree Sparrow.

A later ecological survey of Scotland Farm was undertaken in July 1986 by Marcial Echenique and Partners Ltd for a proposal at that time to develop the farm for housing and recreation, in order to minimise any detrimental effects and maximise the conservation and amenity opportunities of the development. The recorded area of the farm then was 650 acres. From this survey we learn that the grass tracksides leading north to Callow Brook contained Pepper Saxifrage and Sulphur Clover. There were five species of willow along Callow Brook (White Willow, Sallow, Fen Sallow, Crack Willow and Almond Willow), plus at least one hybrid. Whitepits Plantation, mostly of planted oaks, with some birch, sweet chestnut and beech, also contained hazel, wild privet, hawthorn, sallow and elder. Flora within the wood included Wood Sedge, Wood Avens, Sanicle and Bluebells. Although only nine butterfly species were recorded at that time, since the survey was conducted over just two days, the report's authors stated that the total area of the farm could probably support 17 species from the nature of the habitats present. Signs or direct sightings of seven mammals were made and there was evidence of amphibians and fish in two ponds. Bird species at the time of this survey totalled 34, with notable records including Sparrowhawk, Turtle Dove, Tawny Owl, Skylark, Whitethroat, Yellowhammer and Corn Bunting. Advice and recommendations were given for the retention and enhancement of the farm's natural features.

In 1992 the Wildlife Trust surveyed a number of sites in the parish which they deemed of potential value to wildlife, when they were conducting the county Phase 1 survey of habitats in order to draw up conservation plans and priorities for the future. The sites surveyed were :

Duck End Farm	Craft's Hill Farm
The Park	Land at the school
Field adjacent to Cotton's Field	Honey Hill
Long Lane	Allotments at Pettitts Close
Southernwood	Solway
Rectory Farm	Scotland Farm
Icehouse Grove	Nature reserve at Bar Hill
Set-aside arable land near the church	The Plantation
Pond at A14 slip road	

Many of these sites are covered by the wildlife accounts and species lists in the later chapters. Earlier surveys were also made by the Wildlife Trust at Blackthorn Spinney on 23.8.1969, Whitepits Plantation (no date), Fishpond Plantation and one or two other places of possible wildlife interest. At the time of this survey, Whitepits Plantation, at the extreme southern edge of the parish adjacent to the Cambridge-Bedford road (now A428), was described as appearing possibly of semi-natural origin. It is a former elm wood, with oak and ash now dominant.

Although it has received little management over the years and has relatively poor ground flora, the survey listed 42 flowering plants.